AGENDA

Regular Meeting

Planning and Zoning Commission

Tuesday, May 21, 2024

6:00 PM, City Hall

4000 Galleria Parkway

Bee Cave, Texas 78738-3104

A quorum of the Bee Cave City Council may be present.

THE CITY OF BEE CAVE COUNCIL MEETINGS ARE AVAILABLE TO ALL PERSONS REGARDLESS OF DISABILITY. IF YOU REQUIRE SPECIAL ASSISTANCE, PLEASE CONTACT THE CITY SECRETARY OFFICE AT (512) 767-6641 AT LEAST 48 HOURS IN ADVANCE OF THE MEETING. THANK YOU.

1. Call meeting to order
2. Roll Call
3. Discuss and consider action on a waiver to section 7.3.2D Impervious Cover of the Unified Development Code for Starbucks located at 14211 W State Highway 71, Bee Cave, Texas.
4. Public hearing, discussion, and possible action on Ordinance No. 535 to allow a specific use permit for the use "Food and Beverage Services (with drive-through)" with an associated Site and NPS Plan located at 14211 W State Highway 71, Bee Cave, Texas.
5. Close Regular Meeting
6. Open Executive Session
7. Close Executive Session
8. Open Regular Meeting
9. Consider action, if any, on Executive Session
10. Adjournment

The Commission may go into closed session at any time when permitted by Chapters 418 or 551, Texas Government Code, or Section 321.3022 of the Texas Tax Code. Before going into closed session a quorum of the Commission must be present, the meeting must be convened as an open meeting pursuant to proper notice, and the presiding officer must announce that a closed session will be held and must identify the sections of Chapter 551 or 418, Texas Government Code, or Section 321.3022 of the Texas Tax Code authorizing the closed session.

Planning and Zoning Commission Meeting
5/21/2024
Agenda Item Transmittal

Agenda Item:	**3.**
Agenda Title:	**Discuss and consider action on a waiver to section 7.3.2D Impervious Cover of the Unified Development Code for Starbucks located at 14211 W State Highway 71, Bee Cave, Texas.**
Commission Action:	**Discuss and Consider Action**
Department:	**City Secretary**
Staff Contact:	**Logan Maurer**

1. INTRODUCTION/PURPOSE

See attached TL.

2. DESCRIPTION/JUSTIFICATION

a) Background

See attached TL.

b) Issues and Analysis

Impervious Cover. The existing impervious cover for the site is approximately 19% and the off-site SH 71 right-of-way is 100% impervious. The site is allowed up to 40% impervious cover and the applicant has proposed rainwater harvesting to achieve an additional 5% impervious cover allowance. However, the proposed site plan exceeds 45% in accordance with our code. As such, as part of the site plan approval, the applicant is requesting a waiver to Section 7.3.2(D) of the Unified Development Code titled Impervious Cover to allow the drive-through and escape lane to be considered a pervious surface by installing a permeable pavement called "Raincrete" (See attached Waiver Request Letter provided by the applicant). Specifically, the waiver requests a 100% credit of 4,625 square feet of permeable pavement to bring the site impervious cover to 45%. This code section only allows a credit of 50% for use of permeable pavement for pedestrian surfaces only. Approval of this waiver would allow 100% credit for permeable pavement in a vehicular area.

In an effort to mitigate for this impervious cover request, the applicant is:

- Capturing and treating in the proposed water quality and detention facility approximately 10,000 square feet of Highway 71 that is currently an untreated area;
- Maintenance requirements as recommended by the manufacturer will be included in the required Water Quality Restrictive Covenant which is recorded with Travis County Public Records; and
- the 4,625 square feet of pervious area shall still be considered an impervious area as it pertains to the

water quality treatment calculations. Should the permeable area ever become clogged, the water quality facility will be appropriately sized to treat this additional area.

Per Section7.3.3.I, the City Council may approve a waiver to one or more provisions of Article 7 if it makes an affirmative finding with regard to the following:
(1) That undue hardships will result from strict compliance with one or more provisions of this section 7.3;
(2) That the purposes of these regulations may be served to a greater extent by an alternative proposal;
(3) The waiver does not have the effect of nullifying the intent and the purpose of these regulations;
(4) Granting the waiver will not be detrimental to the public safety, health or welfare, and will not be injurious to other property or to the owners of other
property, and the waiver will not prevent the orderly development or use of other property in the vicinity;
(5) The conditions upon which the request for a waiver is based are unique to the property for which the waiver is sought, and are not applicable generally to other property;
(6) Because of the particular physical surroundings, shape or topographical conditions of the specific property involved, a particular hardship to the property owner would result, as distinguished from a mere inconvenience, if the strict letter of these regulations is carried out; and
(7) An alternate design will generally achieve the same result or intent as the standards and regulations prescribed in this section 7.3.

Such findings of the City Council, together with the specific facts upon which such findings are based, shall be incorporated into the official minutes of the City Council at which a waiver is considered.

3. FINANCIAL/BUDGET

Amount Requested	Fund/Account No.
Cert. Obligation	GO Funds
Other source	Grant title
Addtl tracking info	

4. TIMELINE CONSIDERATIONS

5. RECOMMENDATION

See attached TL.

ATTACHMENTS:

Description	Type
Transmittal Letter	Executive Summary
Impervious Cover Type Waiver Request	Backup Material
Starbucks Traffic Impact Analysis	Report
Starbucks SUP & Site Plan pt. 1	Site Plan
Starbucks SUP & Site Plan pt. 2	Site Plan

Planning and Zoning Commission Meeting
May 21, 2024
Agenda Item Transmittal

Agenda Title: Public hearing, discussion, and possible action on Ordinance No. 535 to allow a specific use permit for the use "Food and Beverage Services (with drive-through)" with an associated Site and NPS Plan located at 14211 W State Highway 71, Bee Cave, Texas.

Commission Action: Approve or Deny

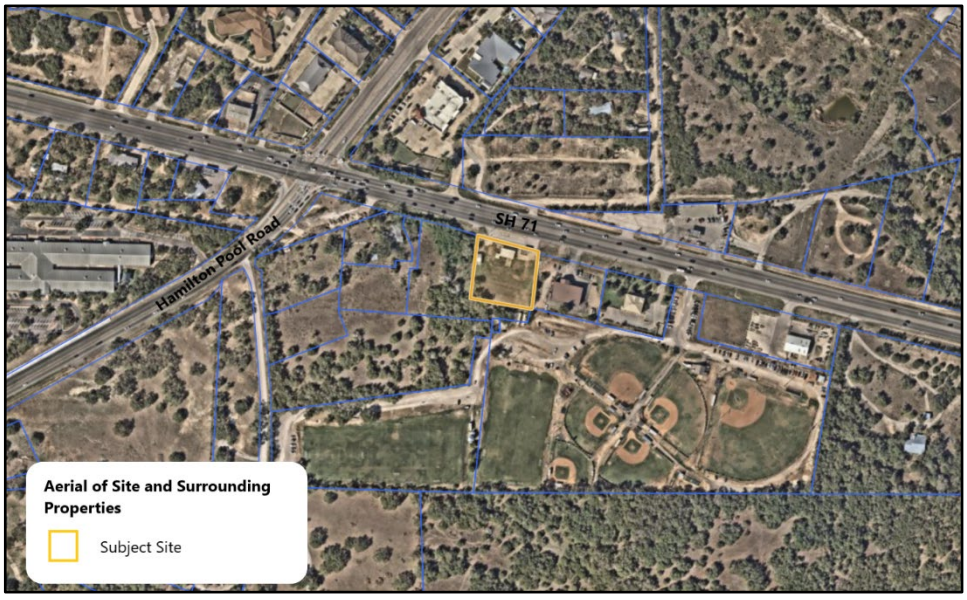
Department: Planning & Development

Staff Contact: Amanda Padilla, Senior Planner and Logan Maurer, Staff Engineer

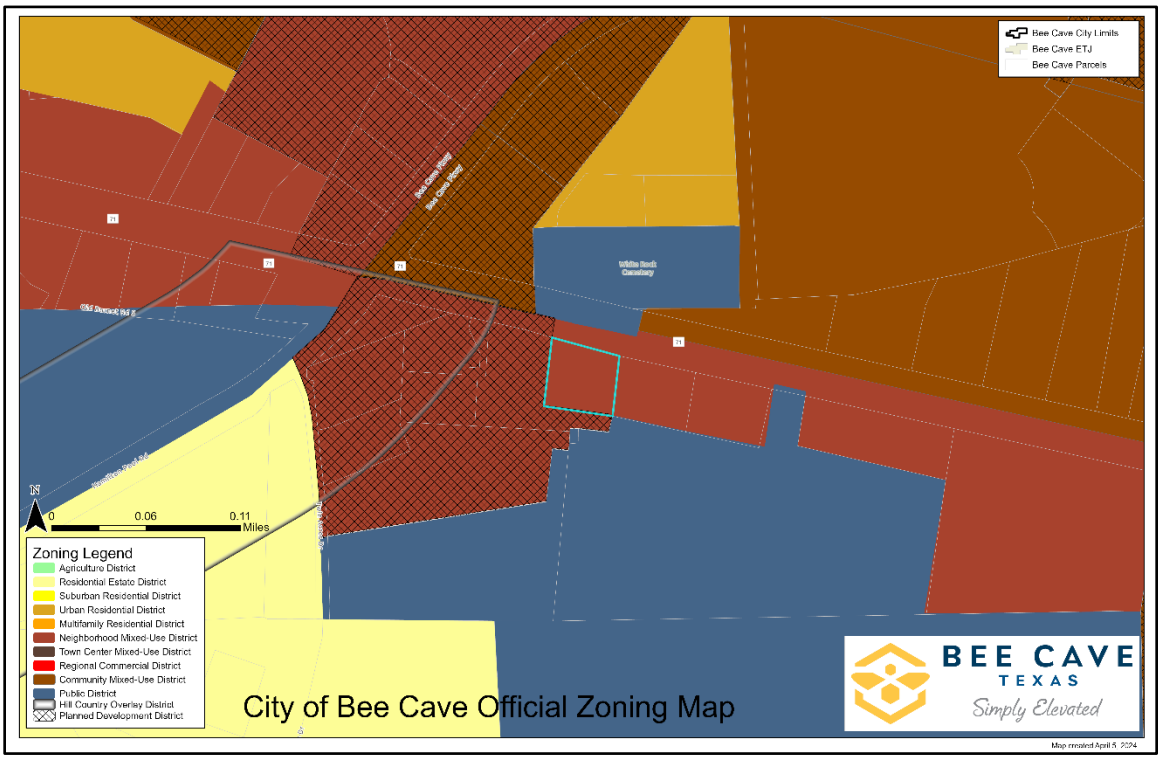
1. INTRODUCTION/PURPOSE

Discuss and possible action on Ordinance No. 535 to allow a specific use permit for the use "Food and Beverage Services (with drive-through)" with an associated Site and NPS Plan located at 14211 W State Highway 71, Bee Cave, Texas.

2. DESCRIPTION/ JUSTIFICATION



The property is located on the south side of State Highway 71 at 14211 W State Highway 71, commonly referred to as the "Yellow Store Gas Station". It is approximately 0.997 acres and is zoned Neighborhood Mixed-Use (MU-N).



In September 2022, the City Council approved the rezoning of the 0.997-acre lot from Residential Estate (R-1) to Neighborhood Mixed-Use (MU-N), which was consistent with the Future Land Use designation of Urban Corridor. Subsequently, in October 2022, the applicant filed a Minor Plat application for the lot, which was administratively approved under Section 2.3.7 of the UDC. Following the approval and recordation of the Minor Plat, the applicant submitted applications for a Specific Use Permit (SUP) and an NPS/Site Plan in accordance with Section 3.5.6.

The Property has requested a Specific Use Permit with an associated Site and NPS plan to establish a Coffee Shop with a drive-through. Per Section 3.3.5 Use Chart of the Unified Development Code, the addition of a drive-through facility necessitates a specific use permit.

Existing Conditions. Currently, the property has an existing building and driveway. The applicant has proposed to remove all existing development (including all existing concrete within SH 71 right-of-way which does not encompass the new driveway entrance) and redevelop the site in accordance with the requirements of the Unified Development Code. The new commercial development will have access from Hwy 71, with a single driveway restricted to right-in and right-out movements.



The properties surrounding the subject tract feature compatible uses, including retail and entertainment establishments. The table below summarizes the uses of the surrounding properties.

Adjacent Properties	Development	Zoning
North (across SH-71)	White Rock Cemetery/ Shell Gas Station, CVS Pharmacy	Public (P)/Community Mixed-Use (MU-C), Planned Development District (PDD)
East	QualTech Automotive, Bean Sprout Pediatrics	Neighborhood Mixed-Use (MU-N)
South	Field of Dreams – Sports Fields	Public (P)
West	Undeveloped property under a PDD	Planned Development District (PDD)



Parking. The UDC requires that a "Restaurant (Drive-through)"/ "Coffee Shop" require 1 parking space per 100 square feet. The building is approximately 2,344 sf, requiring 24 parking spaces. The proposed project contains a patio which requires the property to add an additional 3 parking spaces for a total of 27 parking spaces. The applicant is providing exactly 27 parking spaces.

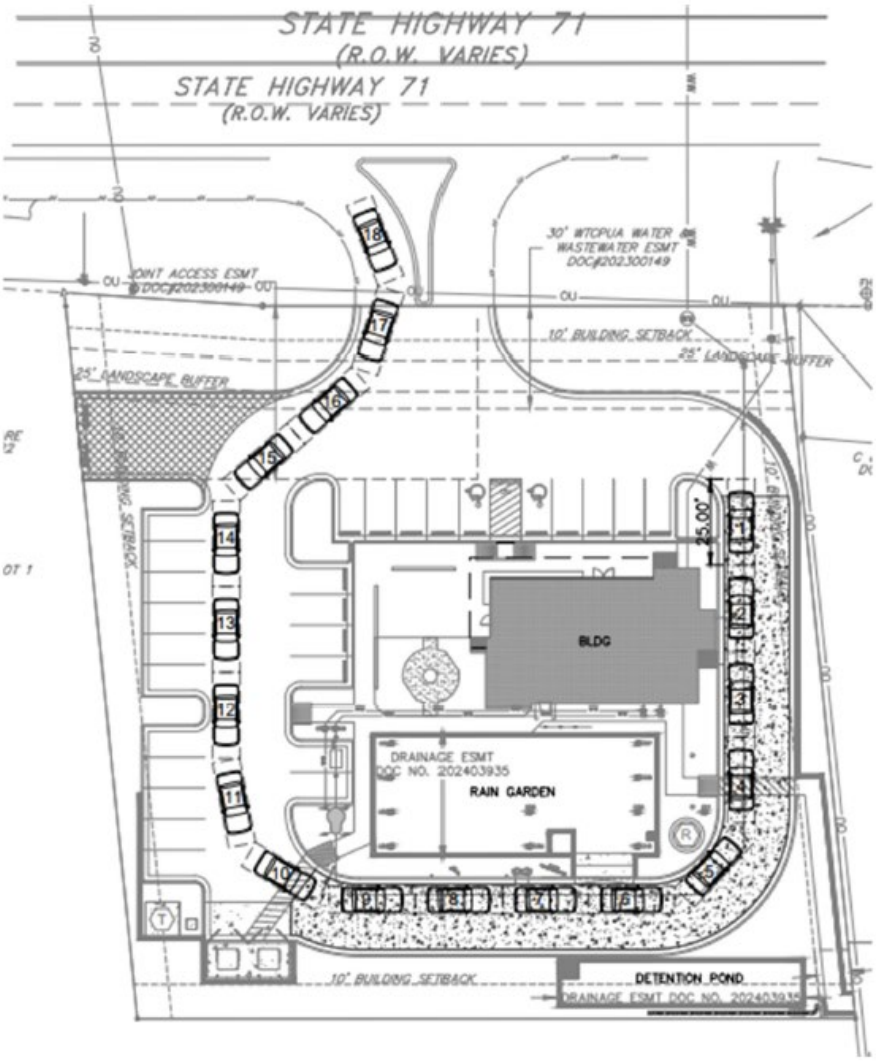
Compatibility. The proposed specific use permit for a "Food and Beverage Service (with drive-through) is a compatible use for the surrounding properties and businesses.

Noise. The property shall comply with the city's noise ordinance. The Surrounding properties are commercial/ entertainment uses and will not be affected by the properties use.

Access and Traffic Circulation. The property has ingress and egress from Highway 71 from one driveway restricted to right-in and right-out. Additionally, a shared access drive shall be constructed to allow future connection with the adjacent lot. It is

expected that the Coffee Shop User will have peak queuing times between 7:00 a.m. and 8:45 a.m., however, the drive through shall maintain an unobstructed 18-car queuing length at all times, as demonstrated in the exhibit attached to the SUP. In the event a new certificate of occupancy is requested for the tenant space, the City may require a new queuing plan, subject to review, that must be approved prior to issuance of a Certificate of Occupancy. *The required queue length was determined by a study of weekday AM peak period (7-8:45am) drive through car queue lengths at two (2) coffee/drive through establishments, Starbucks in Lakeway and Summer Moon at Bella Colinas. The maximum queue length observed was 10 vehicles.*

Figure 8: Queue Stacking Capacity



The TIA was reviewed based off of the UDC requirements, which included evaluation of the SH71 /HPR, SH71/RR620, and BCP/RR620 intersections. After review, it was found that only one intersection (BCP and RR620) was determined to have an impact per code. As a result, a mitigation fee of $5,000 will be provided for future signal timing optimization analysis. See attached Traffic Impact Analysis report for more detailed information.

Lighting Plan. The proposed plan meets the City's standards and requirements. The photometric plan shows no light trespass onto the adjacent properties.

Impervious Cover. The existing impervious cover for the site is approximately 19% and the off-site SH 71 right-of-way is 100% impervious. The site is allowed up to 40% impervious cover and the applicant has proposed rainwater harvesting to achieve an additional 5% impervious cover allowance. However, the proposed site plan exceeds 45% in accordance with our code. As such, as part of the site plan approval, the applicant is requesting a waiver to Section 7.3.2(D) of the Unified Development Code titled Impervious Cover to allow the drive-through and escape lane to be considered a pervious surface by installing a permeable pavement called "Raincrete" (See attached Waiver Request Letter provided by the applicant). Specifically, the waiver requests a 100% credit of 4,625 square feet of permeable pavement to bring the site impervious cover to 45%. This code section only allows a credit of 50% for use of permeable pavement for pedestrian surfaces only. Approval of this waiver would allow 100% credit for permeable pavement in a vehicular area.

In an effort to mitigate for this impervious cover request, the applicant is:
Capturing and treating in the proposed water quality and detention facility approximately 10,000 square feet of Highway 71 that is currently an untreated area.
Maintenance requirements as recommended by the manufacturer will be included in the required Water Quality Restrictive Covenant which is recorded with Travis County Public Records; and the 4,625 square feet of pervious area shall still be considered an impervious area as it pertains to the water quality treatment calculations. Should the permeable area ever become clogged, the water quality facility will be appropriately sized to treat this additional area.

Per Section7.3.3.I, the City Council may approve a waiver to one or more provisions of Article 7 if it makes an affirmative finding with regard to the following:

(1) That undue hardships will result from strict compliance with one or more provisions of this section 7.3;

(2) That the purposes of these regulations may be served to a greater extent by an alternative proposal;

(3) The waiver does not have the effect of nullifying the intent and the purpose of these regulations;

(4) Granting the waiver will not be detrimental to the public safety, health or welfare, and will not be injurious to other property or to the owners of other

property, and the waiver will not prevent the orderly development or use of other property in the vicinity;

(5) The conditions upon which the request for a waiver is based are unique to the property for which the waiver is sought, and are not applicable generally to other property;

(6) Because of the particular physical surroundings, shape or topographical conditions of the specific property involved, a particular hardship to the property owner would result, as distinguished from a mere inconvenience, if the strict letter of these regulations is carried out; and

(7) An alternate design will generally achieve the same result or intent as the standards and regulations prescribed in this section 7.3.

Such findings of the City Council, together with the specific facts upon which such findings are based, shall be incorporated into the official minutes of the City Council at which a waiver is considered.

Drainage, Water Quality Treatment, and Stormwater Detention. The topography of both the off-site right of way and site naturally lends to stormwater draining to the south end of the site. Existing conditions do not have any water quality treatment measures in place. The proposed rain garden and detention pond are sized to treat and handle flow from both the off-site right of way and the proposed site conditions with impervious cover improvements. Notably, the proposed rain garden is sized to treat the amount of runoff that would be generated from an impervious version of the proposed raincrete drive through and escape lane. Additionally, the proposed raincrete section will be maintained as part of an outlined maintenance plan to the site's water quality features through the restrictive covenant.

Tree Preservation and Mitigation. The five existing trees located in the southwest corner of the site will be removed. The proposal meets the mitigation requirements of code.

Landscape Plan and Screening. The proposed landscape plan provides the required amount and diversity of landscaping outlined in the UDC. The applicant was administratively approved for the use of Alternative Plants and to provide alternative compliance for the building's perimeter landscaping.

Trail Easement. A public access easement is provided for the raincrete path which connects the Starbucks property to the adjacent LTYA property. The applicant was also granted relief to the landscape buffer requirement along Hwy 71 per section 3.4.1H.2.(i) and was permitted a 25' landscape buffer at the time of Platting.

Utilities. Water and Wastewater will be provided by the West Travis County Public Utility Agency (WTCPUA). Irrigation lines will be installed. However, a commercial service meter will not be installed by WTCPUA due to current water restrictions.

Building. The proposed one-story building will have a maximum height of 24 feet. The proposed building is in compliance with the City's applicable exterior construction and design requirements. See the attached Ordinance 535 site plan exhibit for materials and appearance.

3. TIMELINE CONSIDERATIONS

None

4. RECOMMENDATION

If the Commission chooses to approve the Specific Use Permit with the associated Site and NPS Plan, staff recommends the following conditions placed within Ordinance 535.

5. FILES

Attached

- Ordinance No. 535
  - Exhibit "A" - Site Plan
  - Exhibit "B" – Queuing Plan
- Waiver Request to Section 7.3.2(D)
- Traffic Impact Analysis (TIA)

MillerGRAY
Consulting. Engineering. Infrastructure.

May 13, 2024

Logan Maurer, EIT
Staff Engineer
City of Bee Cave
4000 Galleria Pkwy
Bee Cave, Texas 78738

Delivered Electronically

Re: **Starbucks Bee Cave – Site Plan Permit**
14211 State HWY 71
Austin, Texas 78738
City of Bee Cave Permit No. 23-786-SNPS
Waiver Request for use of pavement type requirements

Dear Logan,

Please accept this letter as our formal request for a waiver from the pavement type requirements regarding the above-referenced project. The Unified Development Code Section 7.3.3(I)1(i) states that a waiver request must address seven conditions as stipulated below:

1) *That undue hardships will result from strict compliance with one or more provisions of this Section 7.3.*
Response: Applicant's proposal shows calculated capture of 10,013 square feet of land runoff from offsite (coming from ST HWY 71), which would otherwise be untreated. TxDOT has stated that they are unwilling and unable to treat this runoff onto the applicant's site, and this has therefore caused an increase in Water Quality facilities required and proposed on applicant's site and is a significant benefit to the City in water quality treatment. In return, applicant requests a waiver to use of standard pavement and approval of use of pervious pavement for the drive-thru lane and the escape lane, which would equal a total of 4,625 sf of pervious pavement. This brings the total proposed site Impervious Cover to 19,560 (sf), which is 45.0%. Applicant will submit to the City Engineer as part of their Water Quality Maintenance Plan an annual maintenance plan of the pervious pavement in addition to the other WQ features.

2) *That the purposes of these regulations may be served to a greater extent by an alternative proposal.*
Response: These regulations may be served to a greater extent with the removal of the existing decommissioned and unattended gas station and the redevelopment of the site into a higher and better use. There is no stormwater quality control for any of the existing site. The proposed site development includes water quality treatment not only for the site but also for the untreated runoff from TXDOTs Hwy 71.

3) *The waiver does not have the effect of nullifying the intent and the purpose of these regulations.*
Response: The proposed permeable pavement, RainCrete, is a product that is functionally indifferent than regular concrete, and visually almost identical to the standard eye. It is approved by Texas Commission of Environmental Quality (TCEQ), and it is equally as strong,

allowing commercially rated vehicles, such as garbage trucks or firetrucks use with no difference in performance or specs.

4) *Granting the waiver will not be detrimental to the public safety, health or welfare, and will not be injurious to other property or to the owners of other property, and the waiver will not prevent the orderly development or use of other property in the vicinity.*
Response: The property is currently a defunct gas station. The proposed Starbucks site is more compatible with the nearby businesses as well as the adjacent Field of Dreams. It also supports the removal of old underground storage tanks and a building that has asbestos. The approval of this waiver will be a benefit to the public safety, health and welfare of the community. There is no stormwater quality control for any of the existing site. The proposed site development includes water quality treatment not only for the site but also for the untreated runoff from TxDOTs Hwy 71. Furthermore, this development includes a pedestrian connection to the Field of Dreams, which does not currently have on-site concessions.

5) *The conditions upon which the request for a waiver is based are unique to the property for which the waiver is sought, and are not applicable generally to other property.*
Response: This property is unique due to the fact that it is a redevelopment of the defunct gas station site. None of the site is runoff is currently treated to any stormwater quality standard (i.e., there is no water quality facility). The proposed Starbucks site includes a rainwater harvesting tank as well as a rain garden to treat 100% of the impervious cover on the site. This is a dramatic improvement from current conditions.

6) *Because of the particular physical surroundings, shape or topographical conditions of the specific property involved, a particular hardship to the property owner would result, as distinguished from a mere inconvenience, of the strict letter of these regulations is carried out.*
Response: The recent TxDOT ROW acquisition when the site was functioning as a gas station left the site with less than one acre of land. A large portion of the land and parking lot for the gas station site is actually within current TxDOT ROW. This constraint makes the current site geometry non-viable to redevelop, especially when taking into account that it is treating runoff from the adjacent TxDOT land.

7) *An alternate design will generally achieve the same result or intent as the standards and regulations prescribed in this Section 7.3.*
Response: We believe the current site layout as designed is the highest and best use for this property and that it is consistent with the intent of Section 7.3.

Please review this waiver request at your earliest convenience. If you have any questions or need additional information, please contact me at (512) 861-5300 or travis.wilson@miller-gray.com.

Sincerely,

MillerGRAY
TBPE Firm Reg. No. F-16302

J. Travis Wilson, P.E., CFM
Principal

P:|00323 Investcor|001 Starbucks Bee Cave|06_ENG|Documents|Waiver Request - Pavement Type.docx

ORDINANCE NO. 535

AN ORDINANCE APPROVING A SPECIFIC USE PERMIT FOR THE USE "FOOD AND BEVERAGE SERVICES (WITH DRIVE-THROUGH)" WITHIN THE NEIGHBORHOOD MIXED-USE ZONING (MU-N) DISTRICT FOR THE PROPERTY LOCATED AT 14211 WEST STATE HIGHWAY 71, BEE CAVE, TEXAS; DESCRIBED AS LOT 1 OF THE 0.997 ACRES W HWY 71 COMMERCIAL TRACT RECORDED IN DOCUMENT NO. 202300149, OPRTC; PROVIDING FOR CERTAIN CONDITIONS; PROVIDING FOR PENALTY OF A FINE NOT TO EXCEED THE SUM OF TWO THOUSAND DOLLARS ($2,000.00) FOR EACH OFFENSE; PROVIDING FOR FINDINGS OF FACT, SEVERABILITY, EFFECTIVE DATE AND PROPER NOTICE AND MEETING

WHEREAS, an application has been submitted for a specific use permit for the use "Food and Beverage Services (with drive-through) within the Neighborhood Mixed-Use Zoning district for a 0.997-acre lot described as Lot 1 of the 0.997 Acres W Hwy 71 Commercial Tract, as recorded in Document No. 202300149, OPRTC, and which property is located at 14911 W State Highway 71, Bee Cave, Texas (the "Property"); and

WHEREAS, the use of the property for a "Food and Beverage Service (with drive-through) is a specific use permit in the Neighborhood Mixed-Use (MU-N) zoning district; and

WHEREAS, the property owner has submitted a Site Plan depicting the proposed use of the Property as Food and Beverage Services (with drive-through) and the terms and conditions of this Ordinance are sufficient to make this proposed use compatible with other Neighborhood Mixed-Use districts and adjacent property uses in the vicinity; and

WHEREAS, the notice as required by the City's Zoning Ordinance has been published in the official newspaper and given to adjacent property owners; and

WHEREAS, the Planning and Zoning Commission and the City Council has each conducted Public Hearings on the Application for a Specific Use Permit wherein public comment was received and considered on the Application; and

WHEREAS, the City Council finds that the use of the Property as depicted in the Site Plan, Exhibit "A", and in accordance with this Ordinance as Food and Beverage Services (with drive-through) is an appropriate use for the Property.

NOW THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF BEE CAVE, TEXAS:

SECTION 1. Findings of Fact. All of the above premises are hereby found to be true and correct legislative and factual findings of the City and are hereby approved and

incorporated into the body of this Ordinance as if copied in their entirety.

SECTION 2. The City Council finds that the information submitted in the Application for a Specific Use Permit submitted by Applicant meets the requirements of the City of Bee Cave Unified Development Code for the Property and depicted on the Site Plan attached hereto and incorporated herein as Exhibit "A".

SECTION 3. Uses. A Specific Use Permit is hereby granted, subject to the conditions listed in Section 5 herein described, to authorize Food and Beverage Services (with drive-through) uses on the Property as depicted in Exhibit "A" and in conjunction with any other permitted uses authorized in the Neighborhood Mixed-Use Zoning district.

SECTION 4. Site Plan. The Site Plan attached hereto as Exhibit "A" depicting the Food and Beverage Services (with drive-through) uses are all hereby approved contingent upon the property owner meeting the conditions contained within Section 5.

SECTION 5. Specific Use Permit. The City Council hereby approves a Specific Use Permit to the property upon the following terms and conditions:

1. The Property Owner shall not commence development until all necessary permits and approvals are obtained as required by the City of Bee Cave Ordinances.

2. The Specific Use Permit authorizes development of the subject Property only as represented in the Site Plan described in Exhibit "A," attached hereto, and only to the extent authorized herein. If portions of the development of the subject Property requested are not depicted in Exhibit "A", then that portion of development is specifically denied.

3. Any amendments to the Exhibit "A" that involve any of the following will result in a new Specific Use Permit (SUP) being submitted:
    a. An increase in impervious coverage
    b. A change in traffic flow or a change to the drive-through queuing plan
    c. Alterations to the drive-through function or emergency lane function
    d. Any new waiver requests

4. The queuing plan submitted as Exhibit "B" is approved as part of the Specific Use Permit.

5. Due to the close proximity of the Refuse area to the Drive-through queuing lane, the applicant has agreed that Texas Disposal Systems will service the area after the peak hours, or during designated non-peak hours, which are defined as after 10:00 AM on each service day. Should there be any changes to these service hours that

affect the drive-through queuing process, the applicant will be obligated to submit an amended site plan and queuing plan for review.

6. The emergency lane must remain exclusively designated for emergency use and cannot be repurposed for restaurant services or other non-emergency uses.

SECTION. 6. Penalty. That any person, firm or corporation violating any of the provisions of this Ordinance or the Unified Development Code, of the Code of Ordinances, as amended hereby, shall be deemed guilty of a misdemeanor and, upon conviction in the municipal court of the City of Bee Cave, Texas, shall be punished by a fine not to exceed the sum of two thousand dollars ($2,000.00) for each offense, and each and every day of any such violation shall be deemed to constitute a separate offense, in accordance with Section 1.1.14 of the City's Unified Development Code.

SECTION 7. Severability. Should any sentence, paragraph, subdivision, clause, phrase, or section of this Ordinance be adjusted or held to be unconstitutional, illegal, or invalid, the same shall not affect the validity of this Ordinance in whole or any part or provision thereof, other than the part so declared to be invalid, illegal or unconstitutional, and shall not affect the validity of the City's Zoning Ordinance or Map as a whole.

SECTION 8. Proper Notice and Meeting. It is hereby officially found and determined that the meeting at which this Ordinance was adopted was open to the public and that public notice of the time, place and purpose of said meeting was given as required by the Open Meetings Act, Chapter 551 of the Texas Government Code.

SECTION 9. Effective Date. This Ordinance shall take effect immediately from and after its passage and publication as required by law.

PASSED AND APPROVED this _____ day of _____, 2024.

APPROVED:

_____
Kara King, Mayor
City of Bee Cave

ATTEST:

_____

Thomas Hatfield, Interim City Secretary
City of Bee Cave, Texas

[SEAL]

APPROVED AS TO FORM:

_____
City Attorney
Ryan Henry, Law Offices of Ryan Henry, PLLC

EXHIBIT “A”

SITE PLAN

WTCPUA 71-22-016

SITE DEVELOPMENT PLAN AND NPS POLLUTION CONTROL PLAN FOR

STARBUCKS BEE CAVE

14211 STATE HWY 71
BEE CAVE, TEXAS 78738

PROJECT CONTACTS

OWNER:	BEE CAVE HOLDINGS, LLC 3001 RANCH ROAD 620, STE 324 AUSTIN, TX 78738 (512) 750-7272	DEVELOPER:	INVESTCOR DEVELOPMENT 3001 RANCH ROAD 620, STE 324 AUSTIN, TX 78738 (512) 750-7272
ENGINEER:	MILLER GRAY, LLC 7320 N MOPAC EXPY, STE. 203 AUSTIN, TEXAS 78731 (512) 861-5300	ARCHITECT:	ENVIROPLAN ARCHITECTS & PLANNERS 4942 US 290 WEST AUSTIN, TEXAS 78735 (512) 476-0622
SURVEYOR:	SURVTEX LLC 600 W. WHITESTONE BLVD. CEDAR PARK, TEXAS 78613 (512) 249-8875	LANDSCAPE ARCHITECT:	HITCHCOCK DESIGN GROUP 1601 RIO GRANDE STREET, STE 450 AUSTIN, TEXAS 78701 (512) 770-4503
STRUCTURAL ENGINEER:	ATS ENGINEERS, INSPECTORS AND SURVEYORS 4910 HIGHWAY 290 WEST AUSTIN, TEXAS 78735 (512) 328-6995 EXT. 154	LIGHTING DESIGNER:	SPECTRUM LIGHTING 8868 RESEARCH BLVD, STE 104 AUSTIN, TEXAS 78758 (512) 442-0661

ZONING/USE

JURISDICTION:	BEE CAVE
ZONING:	NEIGHBORHOOD MIXED-USE DISTRICT
LAND USE:	COMMERCIAL
ACREAGE:	0.997
TOTAL IMPERVIOUS COVER:	19,560 SF (45%)
BUILDING IMPERVIOUS COVER:	2344 SF (5%)
TRAVIS COUNTY TAX ID TRACT #:	0118770419

LEGAL DESCRIPTION

LOT 1 BLK A OF THE MINOR PLAT OF 0.997 ACRES .564 AC RECORDED IN DOCUMENT 202300149, TRAVIS COUNTY, TEXAS

FUTURE LAND USE

RETAIL COFFEE SHOP

SURVEY

TOPOGRAPHY SURVEY PREPARED BY SURVTEX LLC, DATED 5/16/2022

BENCHMARK

BM1 MAG NAIL WITH ALUMINUM WASHER STAMPED "SURVTEX"
ELEV: 940.14

WATERSHED

WATERSHED: LITTLE BARTON

EDWARDS AQUIFER

THIS PROJECT IS LOCATED WITHIN THE EDWARDS AQUIFER CONTRIBUTING ZONE AS DEFINED BY CITY OF TCEQ.

VARIANCE REQUESTS

1. SECTION 7.3: USE OF PAVEMENT TYPE REQUIREMENTS

NOTES

NO PORTION OF THE SUBJECT PROPERTY IS WITHIN THE 100-YEAR FLOOD PLAIN AS SHOWN ON THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAP (FIRM) NO. 48453C0415J, TRAVIS COUNTY, TEXAS, DATED JANUARY 22, 2020.

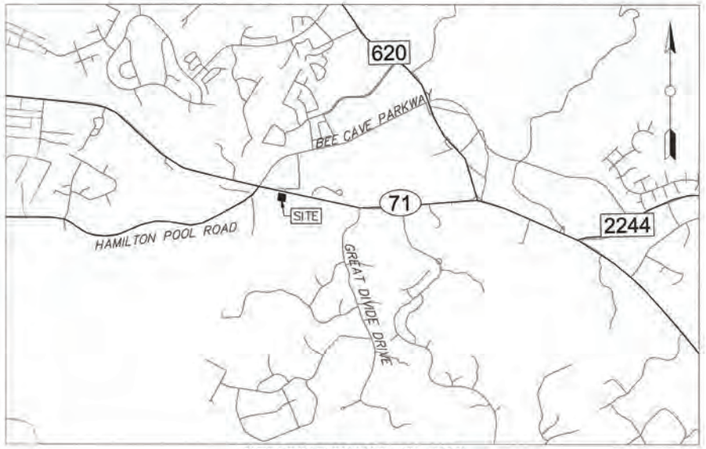
CONSTRUCTION HOURS ARE BETWEEN 7:00 AM TO 7:00 PM

ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE PLANS REMAINS WITH THE ENGINEER WHO PREPARED THEM. IN APPROVING THESE PLANS, THE CITY OF BEE CAVE MUST RELY UPON THE ADEQUACY OF THE WORK OF THE DESIGN ENGINEER.

THIS SITE IS SUBJECT TO A RESTRICTIVE COVENANT AND DRAINAGE EASEMENT RECORDED AS DOCUMENT NO. 202403935 WITH THE TRAVIS COUNTY OFFICE OF PUBLIC RECORDS.

REVISION/CORRECTION

REVISION NO.	DESCRIPTION	SHEETS REVISED	APPROVAL



SITE LOCATION MAP - 1" = 2000'
WTCPUA 71 WATER SYSTEM GRID: I-10
PRESSURE PLANE - 1280 HGL
WTCPUA WASTEWATER SYSTEM GRID: D-5
MAPSCO: 549R & 549V

OFFICIAL DATE OF SUBMISSION: 7/26/23

SUBMITTED BY:

3/15/2024
J. TRAVIS WILSON, P.E. DATE

MillerGRAY
Consulting · Engineering · Infrastructure
TBPELS FIRM REG NO. F-16302

I, J. TRAVIS WILSON, P.E., CERTIFY THAT THESE ENGINEERING DOCUMENTS ARE COMPLETE , ACCURATE AND ADEQUATE FOR THE INTENDED PURPOSES, INCLUDING CONSTRUCTION BUT ARE NOT AUTHORIZED FOR CONSTRUCTION PRIOR TO FORMAL APPROVAL BY THE CITY OF BEE CAVE. THE DRAWINGS, PLANS, AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION COMPLY WITH THE APPLICATION TECHNICAL CODES , RULES, AND REGULATIONS. I DO CERTIFY THAT THE ENGINEERING WORK BEING SUBMITTED HEREIN COMPLIES WITH ALL PROVISIONS OF THE TEXAS ENGINEERING PRACTICE ACT.

RELEASE OF THIS APPLICATION DOES NOT CONSTITUTE A VERIFICATION OF ALL DATA, INFORMATION AND CALCULATIONS SUPPLIED BY THE APPLICANT. THE ENGINEER OF RECORD IS SOLELY RESPONSIBLE FOR THE COMPLETENESS, ACCURACY, AND ADEQUACY OF HIS/HER SUBMITTAL WHETHER OR NOT THE APPLICATION IS REVIEWED FOR CODE COMPLIANCE BY CITY ENGINEERS.

TRAVIS COUNTY ESD NO. 6

DESIGN STANDARDS	2015 IFC WITH LOCAL AMENDMENTS
CONSTRUCTION CLASSIFICATION	VB
OCCUPANCY CLASSIFICATION	A-2
BUILDING AREA	2,344 SF
BUILDING HEIGHT IN FEET	23'-0"
BUILDING HEIGHT IN STORIES	1
HIGH-RISE	NO
AUTOMATIC FIRE SPRINKLER SYSTEM	NO
REQUIRED FIRE FLOW @ 20 PSI	1,500 GPM
AVAILABLE FIRE FLOW @ 20 PSI	1,500 GPM

SHEET INDEX

NO.	TITLE	NO.	TITLE
1	COVER SHEET	22	STANDARD DETAILS 3 OF 10
2	FINAL PLAT SHEET 1 OF 2	23	STANDARD DETAILS 4 OF 10
3	FINAL PLAT SHEET 2 OF 2	24	STANDARD DETAILS 5 OF 10
4	CITY OF BEE CAVE NOTES 1 OF 2	25	STANDARD DETAILS 6 OF 10
5	CITY OF BEE CAVE NOTES 2 OF 2	26	STANDARD DETAILS 7 OF 10
6	WTCPUA NOTES 1 OF 2	27	STANDARD DETAILS 8 OF 10
7	WTCPUA NOTES 2 OF 2	28	STANDARD DETAILS 9 OF 10
8	EXISTING CONDITIONS AND DEMOLITION PLAN	29	STANDARD DETAILS 10 OF 10
9	DETENTION DRAINAGE AREA MAPS	30	RETAINING WALL DETAILS
10	WATER QUALITY DRAINAGE AREA MAPS & CALCS	31	DUMPSTER DETAIL
11	EROSION & SEDIMENTATION CONTROL PLAN	32	FLOOR PLAN
12	SITE & DIMENSION CONTROL PLAN	33	BUILDING ELEVATION VIEWS
13	FIRE CONTROL PLAN	34	ARCHITECTURAL SITE PLAN
14	OVERALL GRADING & STORM DRAIN PLAN	35	ELECTRICAL SITE LIGHTING PHOTOMETRIC PLAN
15	DETENTION POND & RAIN GARDEN PLAN	36	LANDSCAPE GENERAL NOTES
16	DETENTION POND & RAIN GARDEN SECTIONS	37	EXISTING TREE PLAN
17	UTILITY PLAN	38	LANDSCAPE PLAN
18	WWL 'A' PLAN & PROFILE	39	LANDSCAPE PLAN - RAIN GARDEN
19	WL 'A' PLAN & PROFILE	40	PLANTING DETAILS
20	STANDARD DETAILS 1 OF 10	41	PLANTING NOTES & TABLES
21	STANDARD DETAILS 2 OF 10		

PUBLIC WATER & WASTEWATER IMPROVEMENTS - QUANTITIES

1.	12 LF	PIPE, 8-INCH DIA., CL 350 DI	7.	2	12-INCH GATE VALVE
2.	23 LF	PIPE, 2-INCH DIA., HDPE	8.	40 LF	MECHANICAL RESTRAINTS FOR 12-INCH WL
3.	1	8-INCH GATE VALVE	9.	160 LF	16-INCH STEEL ENCASEMENT
4.	1	1.5-INCH WATER METER	10.	1	48"-INCH DIA DROP MH
5.	1	8-INCH X 2-INCH REDUCER	11.	160 LF	PIPE, 8-INCH, DIA., PVC
6.	1	12-INCH X 8-INCH CUT-IN-TEE	12.	1	FIRE HYDRANT ASSEMBLY

CITY OF BEE CAVE APPROVAL DATE

REVIEWED BY:

CITY OF BEE CAVE DATE

Tricia S, Tichenor-Altamirano, PE Digitally signed by Tricia S, Tichenor-Altamirano, PE Date: 2024.03.26 18:39:16-05'00'
WEST TRAVIS COUNTY PUBLIC UTILITY AGENCY DATE

4/1/2024
LAKE TRAVIS FIRE AND RESCUE DATE

23-786-SNPS
CITY OF BEE CAVE SITE AND NPS NUMBER

24-44653
TxDOT DRIVEWAY PERMIT NUMBER

WEST TRAVIS COUNTY PUBLIC UTILITY AGENCY (WTCPUA) NOTES:

PRESSURE PLANE:

1. THE WEST TRAVIS COUNTY PUBLIC UTILITY AGENCY IS THE RETAIL WATER AND WASTEWATER PROVIDER.
2. BUILDING 1: 1.5" METER NO:_____ FOR DOMESTIC PURPOSES ONLY.
3. WTCPUA DOES NOT GUARANTEE FIRE FLOW.
4. A WTCPUA REPRESENTATIVE MUST BE PRESENT AT THE TIME ON CONNECTION TO THE EXISTING SYSTEM.
5. ALL WATER AND WASTEWATER INFRASTRUCTURE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF AUSTIN WATER AND WASTEWATER CONSTRUCTION SPECIFICATIONS AND WITH MATERIALS FROM THE CURRENT APPROVED CITY OF AUSTIN STANDARD PRODUCTS LIST (SPL).
6. WATER FOR LANDSCAPE IRRIGATION WILL NOT BE PROVIDED BY WTCPUA.
   NO. LUE'S FOR DOMESTIC WATER: 6
   NO. LUE'S FOR WASTEWATER: 6

811 Know what's below. Call before you dig.

CAUTION!
IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

FOR CITY USE ONLY:

MillerGRAY
Consulting · Engineering · Infrastructure
7320 N. MoPac Expressway, Suite 203
Austin, Texas 78731
Phone (512) 861-5300
www.miller-gray.com
TBPELS FIRM REG. NO. F-16302

STATE OF TEXAS
J. TRAVIS WILSON
97307
LICENSED PROFESSIONAL ENGINEER
3/15/2024

P:\00323 Investor\001 Starbucks Bee Cave\06_CAD\00323-001cvr.dwg 3/15/2024 2:42 PM

STARBUCKS BEE CAVE
14211 STATE HWY 71, BEE CAVE, TEXAS 78738

COVER SHEET

REVISIONS/CORRECTIONS

NO.	DATE	DESCRIPTION	BY

PROJECT NUMBER 00323-001 | DATE: 3/15/2024 | DESIGNED: KKE | CHECKED: JTW

SHEET NO.
1 OF 41

23-786-SNPS

$75.00

6-29-2023

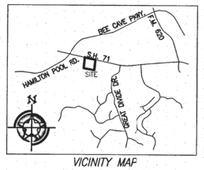
202300149

MINOR PLAT OF
0.997 ACRES W HWY 71 COMMERCIAL TRACT

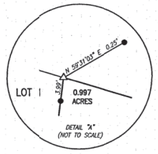


SCALE: 1" = 50'

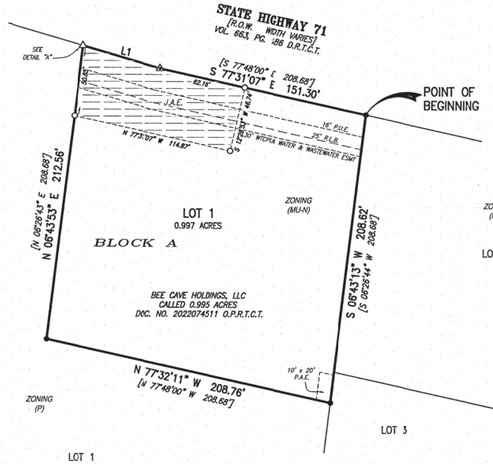
BEARINGS BASED ON THE TEXAS STATE PLANE COORDINATE SYSTEM, NORTH AMERICAN DATUM OF 1983, CENTRAL ZONE.



VICINITY MAP
SCALE: 1" = 2000'



DETAIL "A"
(NOT TO SCALE)



LINE TABLE		
LINE	BEARING	DISTANCE
L1	S 73°42'16" E	57.84'
[L1]	[N 73°59' W]	

LOT AREA TABLE		
BLOCK	LOT	AREA
A	1	0.997 ACRES

LEGEND
UNLESS NOTED OTHERWISE

●	1/2" IRON ROD "OUND
○	1/2" IRON ROD WITH SURVITEX PLASTIC CAP SET
△	CALCULATED POINT
⊕	MAG NAIL WITH METAL WASHER STAMPED "SURVITEX" SET
P.R.T.C.T.	PLAT RECORDS OF TRAVIS COUNTY, TEXAS
R.P.R.T.C.T.	REAL PROPERTY RECORDS OF TRAVIS COUNTY, TEXAS
O.P.R.T.C.T.	OFFICIAL PUBLIC RECORDS OF TRAVIS COUNTY, TEXAS
D.R.T.C.T.	DEED RECORDS OF TRAVIS COUNTY, TEXAS
[ ]	RECORD INFORMATION
R.O.W.	RIGHT-OF-WAY
R.L.B.	ROADWAY LANDSCAPE BUFFER
J.A.E.	JOINT ACCESS EASEMENT
P.A.E.	PEDESTRIAN ACCESS EASEMENT
WTCPUA	WEST TRAVIS COUNTY PUBLIC UTILITY AGENCY

DRAWN BY: A. LOPEZ
CHECKED BY: J.McCOWN
PROJ. NO.: 2022-0027
FILE NAME: 2022-0027_PLAT.DWG
DATE: OCTOBER 17, 2022
SHEET: 1 OF 2

SURVITEX LLC
PROFESSIONAL SURVEYING and MAPPING SERVICES
600 W. Whitestone Blvd.
Cedar Park, Texas 78613
(512) 249-8875
TBPCLS Firm No. 10084600

OWNER
JUSTIN HOBSON
BEE CAVE HOLDINGS, LLC
3001 RANCH ROAD 620 S
SUITE # 324
AUSTIN, TX 78738
512-750-7272

SITE PLAN ENGINEER
MILLER GRAY
7320 NORTH MOPAC EXPRESSWAY
SUITE # 203
AUSTIN, TX 78731
512-861-5300
TBPELS FIRM NO. F-16302

MINOR PLAT ENGINEER
STEVEN M. MINOR
GRAY ENGINEERING INC.
8834 NORTH CAPITAL OF TEXAS HIGHWAY
SUITE # 140
512-452-0371
TBPELS FIRM NO. 2946

811 Know what's below. Call before you dig.

CAUTION!
IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

FOR CITY USE ONLY:

MillerGRAY
Consulting • Engineering • Infrastructure
7320 N. MoPac Expressway, Suite 203
Austin, Texas 78731
Phone (512) 861-5300
www.miller-gray.com
TBPE FIRM REG. NO. F-16302

STATE OF TEXAS
J. TRAVIS WILSON
97307
LICENSED PROFESSIONAL ENGINEER
4/5/2024

P:\00323 Investcor\001 Starbucks Bee Cave\05_CAD\00323-001pl.dwg 4/5/2024 10:12 AM

STARBUCKS BEE CAVE
14211 STATE HWY 71, BEE CAVE, TEXAS 78738

FINAL PLAT
SHEET 1 OF 2

REVISIONS/CORRECTIONS

NO.	DATE	DESCRIPTION	BY

PROJECT NUMBER 00323-001
DATE: 4/5/2024
DESIGNED: KKE
CHECKED: JTW

SHEET NO.
2 OF 41

23-789-SNPS

202300149

MINOR PLAT OF
0.997 ACRES W HWY 71 COMMERCIAL TRACT

LEGAL DESCRIPTION:
BEING A 0.997 ACRE TRACT OF LAND SITUATED IN THE HALL MEDLIN SURVEY NO. 523, ABSTRACT NO. 540, IN TRAVIS COUNTY, TEXAS, AND BEING ALL OF THAT CALLED 0.995 ACRE TRACT CONVEYED TO BEE CAVE HOLDINGS AS RECORDED IN DOCUMENT NUMBER 2022074511, OFFICIAL PUBLIC RECORDS OF TRAVIS COUNTY, TEXAS, SAID 0.997 ACRE TRACT BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

COMMENCING AT A TXDOT TYPE I MONUMENT (CONCRETE OBELISK) FOUND MARKING A POINT OF CURVATURE AT OR NEAR STATION 1399+38.6 IN THE SOUTH RIGHT-OF-WAY LINE OF S.H. 71;

THENCE NORTH 77°31'07" WEST, WITH SAID SOUTH RIGHT-OF-WAY LINE, AT A DISTANCE OF 1839.85 FEET, PASSING A TXDOT TYPE I MONUMENT (CONCRETE OBELISK) FOUND LYING IN SAID SOUTH RIGHT-OF-WAY LINE, AS RECORDED IN VOL. 663, PG. 186 OF THE DEED RECORDS OF TRAVIS COUNTY, TEXAS, AND CONTINUING FOR A TOTAL DISTANCE OF 1938.44 FEET TO A 1/2-INCH IRON ROD FOUND MARKING THE COMMON NORTH CORNER OF SAID 0.995 ACRE TRACT AND OF LOT 1, BEE CAVE – LTYA 71 WEST ADDITION, A SUBDIVISION RECORDED IN VOL. 94, PG. 43, OF THE PLAT RECORDS OF TRAVIS COUNTY, TEXAS, SAID 1/2-INCH IRON ROD ALSO MARKING THE NORTHEAST CORNER AND POINT OF BEGINNING OF THE HEREIN DESCRIBED TRACT;

THENCE SOUTH 06°43'13" WEST, WITH THE COMMON LINE OF SAID 0.995 ACRE TRACT AND SAID LOT 1, AT A DISTANCE OF 186.33 FEET PASSING A 1/2-INCH IRON ROD FOUND MARKING THE COMMON WEST CORNER OF SAID LOT 1 AND LOT 3 OF SAID BEE CAVE – LTYA 71 WEST ADDITION, CONTINUING WITH THE COMMON LINE OF SAID 0.995 ACRE TRACT AND SAID LOT 3, FOR A TOTAL DISTANCE OF 208.62 FEET TO A 1/2-INCH IRON ROD FOUND MARKING THE EASTERLY NORTHEAST CORNER OF LOT 1, BLOCK A, OLD BEE CAVE SQUARE, A SUBDIVISION RECORDED IN DOC. NO. 200900122, O.P.R.T.C.T., SAME BEING THE SOUTHEAST CORNER OF SAID 0.995 ACRE TRACT AND OF THE HEREIN DESCRIBED TRACT;

THENCE NORTH 77°32'11" WEST, DEPARTING FROM SAID LOT 3 WITH THE COMMON LINE OF SAID 0.995 ACRE TRACT AND SAID LOT 1, BLOCK A, FOR A DISTANCE OF 208.76 FEET TO A 1/2-INCH IRON ROD FOUND MARKING THE SOUTHWEST CORNER OF SAID 0.995 ACRE TRACT AND OF THE HEREIN DESCRIBED TRACT, SAME BEING AN ANGLE POINT IN THE EASTERLY LINE OF SAID LOT 1, BLOCK A;

THENCE NORTH 06°43'53" EAST, CONTINUING WITH SAID COMMON LINE FOR A DISTANCE OF 212.56 FEET TO A CALCULATED POINT FOR THE COMMON NORTH CORNER OF SAID 0.995 ACRE TRACT AND SAID LOT 1, BLOCK A, SAME BEING THE NORTHWEST CORNER OF THE HEREIN DESCRIBED TRACT AND LYING IN THE AFORESAID SOUTH RIGHT-OF-WAY LINE, FROM WHICH A 1/2-INCH IRON FOUND LYING IN SAID COMMON LINE BEARS SOUTH 06°43'53" WEST, A DISTANCE OF 3.99 FEET FOR REFERENCE, ALSO FROM WHICH A 1/2-INCH IRON ROD FOUND BEARS NORTH 59°31'03" EAST A DISTANCE OF 0.25 FEET, FOR REFERENCE;

THENCE SOUTH 73°42'6" EAST, DEPARTING FROM SAID LOT 1, BLOCK A, WITH THE COMMON LINE OF SAID 0.995 ACRE TRACT AND SAID SOUTH RIGHT-OF-WAY LINE FOR A DISTANCE OF 57.94 FEET TO A "MAG" NAIL WITH AN ALUMINUM WASHER STAMPED "SURVTEX" SET MARKING AN ANGLE POINT IN SAID COMMON LINE;

THENCE SOUTH 77°31'07" EAST, CONTINUING WITH SAID COMMON LINE FOR A DISTANCE OF 151.30 FEET TO THE POINT OF BEGINNING AND CONTAINING 0.997 ACRES OF LAND, MORE OR LESS.

FLOODPLAIN CERTIFICATION
NO PART OF THE SUBJECT PROPERTY LIES WITHIN A FLOODPLAIN OR FLOOD PRONE AREA OR A FLOOD WAY OF ANY BODY OF WATER PER THE FEDERAL EMERGENCY MANAGEMENT AGENCY RATE MAP, COMMUNITY F.I.R.M. MAP PREPARED FOR TRAVIS COUNTY, DATED EFFECTIVE JANUARY 22, 2020, AS SHOWN ON COMMUNITY PANEL No. 48453C0415J.

6-27-23
STEVEN M. MINOR, P.E. DATE
STATE OF TEXAS NO. 133778
8834 N. CAPITAL OF TX HWY, SUITE 140
AUSTIN, TEXAS 78759
(512) 452-0371

STATE OF TEXAS
STEVEN M. MINOR
133778
LICENSED
PROFESSIONAL ENGINEER
6-27-23

THE STATE OF TEXAS §
COUNTY OF TRAVIS §

KNOW ALL MEN BY THESE PRESENTS
THAT I, JOHN W. McCOWN, DO HEREBY CERTIFY THAT THIS PLAT WAS PREPARED FROM AN ACTUAL ON-THE-GROUND SURVEY OF THE LAND SHOWN HEREON AND THAT THE SURVEY MONUMENTS SHOWN HEREON WERE SET UNDER MY SUPERVISION IN ACCORDANCE WITH THE SUBDIVISION ORDINANCE OF THE CITY OF BEE CAVE, TEXAS.

6-26-23
JOHN W. McCOWN DATE
610 W. WHITESTONE BLVD.
CEDAR PARK, TEXAS 78613
(512) 249-8875

STATE OF TEXAS
JOHN W. McCOWN
5135
REGISTERED
PROFESSIONAL
LAND SURVEYOR

DRAWN BY:	A. LOPEZ
CHECKED BY:	J.McCOWN
PROJ. NO.:	2022-0027
FILE NAME:	2022-0027_PLAT.DWG
DATE:	OCTOBER 17, 2022
SHEET:	2 OF 2

SURVTEX LLC
PROFESSIONAL SURVEYING and MAPPING SERVICES
600 W. Whitestone Blvd.
Cedar Park, Texas 78613
(512) 249-8875
TBPELS Firm No. 10084600

THE STATE OF TEXAS §
COUNTY OF TRAVIS §

KNOW ALL MEN BY THESE PRESENTS
THAT WE, BEE CAVE HOLDINGS, LLC, OWNERS OF A CALLED 0.995 ACRES OF LAND OUT OF THE HALL MEDLIN SURVEY NO. 523, ABSTRACT 540 IN TRAVIS COUNTY, TEXAS RECORDED IN DOCUMENT NUMBER 2022074511, O.P.R.T.C.T. DO HEREBY ADOPT THIS MINOR PLAT AS SHOWN HEREON TO BE KNOWN AS "0.997 ACRES W HWY 71 COMMERCIAL TRACT" AND DO DEDICATE TO THE PUBLIC THE USE ALL NON-VACATED STREETS AND EASEMENTS SHOWN HEREON.

WITNESS MY HAND, THIS THE 27th DAY OF June, 2023 A.D.
BEE CAVE HOLDINGS, LLC

6/27/2023
JUSTIN HOBSON DATE
BEE CAVE HOLDINGS, LLC
3001 RR 620 S, SUITE # 324
AUSTIN, TX. 78738
512-750-7272

THE STATE OF TEXAS §
COUNTY OF TRAVIS §

BEFORE ME, THE UNDERSIGNED AUTHORITY ON THIS DAY PERSONALLY APPEARED JUSTIN HOBSON OF BEE CAVE HOLDINGS, LLC, AS OWNER KNOWN TO ME TO BE THE PERSON WHOSE NAME IS SWORN AND SUBSCRIBED TO THE FOREGOING INSTRUMENT, AND ACKNOWLEDGED TO ME THAT HE EXECUTED THE SAME FOR THE PURPOSE AND CONSIDERATON HEREIN EXPRESSED AND IN THE CAPACITIES THEREIN STATED.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, THIS 27 DAY OF June, 2023 A.D.

Holly Kennemer — Holly Kennemer
NOTARY PUBLIC, STATE OF TEXAS — PRINTED NAME
May 22, 2024
EXPIRATION DATE

HOLLY KENNEMER
NOTARY PUBLIC
STATE OF TEXAS
ID # 1197803-2
My Comm. Expires 05-22-2024

BY: FIRST UNITED BANK & TRUST COMPANY, BENEFICIARY

6/27/23
MARLA SALERNO DATE
FIRST UNITED BANK & TRUST COMPANY, BENEFICIARY
1517 CENTRC PLACE DRIVE, STE 100
DENTON, TX. 76205
940-349-5661

THE STATE OF TEXAS §
COUNTY OF TRAVIS §

BEFORE ME, THE UNDERSIGNED AUTHORITY ON THIS DAY PERSONALLY APPEARED MARLA SALERNO OF THE FIRST UNITED BANK & TRUST COMPANY, KNOWN TO ME TO BE THE PERSON WHOSE NAME IS SWORN AND SUBSCRIBED TO THE FOREGOING INSTRUMENT, AND ACKNOWLEDGED TO ME THAT SHE EXECUTED THE SAME FOR THE PURPOSE AND CONSIDERATION HEREIN EXPRESSED AND IN THE CAPACITIES THEREIN STATED.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, THIS 27 DAY OF June, 2023 A.D.

Holly Kennemer — Holly Kennemer
NOTARY PUBLIC, STATE OF TEXAS — PRINTED NAME
May 22, 2024
EXPIRATION DATE

HOLLY KENNEMER
NOTARY PUBLIC
STATE OF TEXAS
ID # 1197803-2
My Comm. Expires 05-22-2024

CITY CERTIFICATIONS:
I, THE UNDERSIGNED PLANNING & DEVELOPMENT DIRECTOR OF THE CITY OF BEE CAVE, HEREBY CERTIFY THAT THIS SUBDIVISION PLAT CONFORMS TO ALL REQUIREMENTS OF THE SUBDIVISION REGULATION OF THIS CITY AND IS HEREBY AUTHORIZED AND APPROVED FOR RECORDING IN THE PLAT RECORDS OF TRAVIS COUNTY, TEXAS.

Emerson Wier 6/27/23
PLANNING & DEVELOPMENT DIRECTOR DATE

ATTEST:

6/27/23
CITY SECRETARY DATE

THE STATE OF TEXAS §
COUNTY OF TRAVIS §

I, DYANA LIMON-MERCADO, CLERK OF TRAVIS COUNTY, TEXAS DO HEREBY CERTIFY THAT THE FOREGOING INSTRUMENT OF WRITING AND ITS CERTIFICATE OF AUTHENTICATION WAS FILED FOR RECORD IN MY OFFICE ON THE 29 DAY OF June, 2023, AT 7:11 O'CLOCK P.M. AND DULY RECORDED ON THE 29 DAY OF June, 2023 A.D. AT 7:11 O'CLOCK P.M., OFFICIAL PUBLIC RECORDS OF SAID COUNTY AND STATE IN DOCUMENT NO. 202300149

WITNESS MY HAND AND SEAL OF OFFICE OF THE COUNTY CLERK, THIS 29 DAY OF June, 2023 A.D.
DYANA LIMON-MERCADO,
COUNTY CLERK, TRAVIS COUNTY, TEXAS.

BY: K. Johnson
DEPUTY Kimberly Johnson

NOTES:
1. THIS SUBDIVISION IS LOCATED WITHIN THE CITY LIMITS OF BEE CAVE AND IS SUBJECT TO APPLICABLE CITY OF BEE CAVE ORDINANCES.
2. THIS SUBDIVISION IS LOCATED WITHIN THE LITTLE BARTON CREEK WATERSHED.
3. THIS SUBDIVISION IS LOCATED WITHIN THE EDWARDS AQUIFER CONTRIBUTING ZONE.
4. ELECTRIC SERVICE WILL BE PROVIDED TO THE SUBDIVISION BY AUSTIN ENERGY.
5. AUSTIN ENERGY HAS THE RIGHT TO PRUNE AND/OR REMOVE TREES, SHRUBBERY, AND OTHER OBSTRUCTIONS TO THE EXTENT NECESSARY TO KEEP THE EASEMENTS CLEAR. AUSTIN ENERGY WILL PERFORM ALL TREE WORK IN COMPLIANCE WITH THE LAND DEVELOPMENT CODE AND THE CITY OF BEE CAVE OAK WILT REGULATIONS.
6. THE OWNERS OF THIS SUBDIVISION SHALL PROVIDE AUSTIN ENERGY WITH AN EASEMENT AND/OR ACCESS REQUIRED IN ADDITION TO THOSE INDICATED, EXCLUSIVELY FOR THE INSTALLMENT AND ONGOING MAINTENANCE OF FACILITIES FOR IMPROVEMENTS TO THIS SUBDIVISION AND FOR NO OTHER PURPOSE. THESE EASEMENTS AND/OR ACCESS ARE REQUIRED TO PROVIDE ELECTRICAL SERVICE TO THE BUILDING AND WILL NOT BE LOCATED SO AS TO CAUSE THE SITE TO BE OUT OF COMPLIANCE WITH THE LAND DEVELOPMENT CODE.
7. THE OWNER SHALL BE RESPONSIBLE FOR INSTALLATION OF TEMPORARY EROSION CONTROL, REVEGETATION AND TREE PROTECTION. IN ADDITION, THE OWNER SHALL BE RESPONSIBLE FOR ANY INITIAL TREE PRUNING AND TREE REMOVAL THAT IS WITHIN TEN FEET OF THE CENTER LINE OF THE PROPOSED OVERHEAD ELECTRICAL FACILITIES DESIGNED TO PROVIDE ELECTRIC SERVICE TO THIS PROJECT. THE OWNER SHALL INCLUDE AUSTIN ENERGY'S WORK WITHIN THE LIMITS OF CONSTRUCTION FOR THIS PROJECT.
8. THE OWNER OF THE PROPERTY OR HIS/HER ASSIGNS IS RESPONSIBLE FOR MAINTAINING CLEARANCES REQUIRED BY THE NATIONAL ELECTRIC SAFETY CODE, THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (O.S.H.A) REGULATIONS, AUSTIN ENERGY RULES AND REGULATIONS AND STATE LAWS PERTAINING TO CLEARANCES WHEN WORKING IN CLOSE PROXIMITY TO OVERHEAD POWER LINES AND EQUIPMENT. AUSTIN ENERGY WILL NOT RENDER ELECTRIC SERVICES UNLESS REQUIRED CLEARANCES ARE MAINTAINED. ALL COSTS INCURRED BECAUSE OF FAILURE TO COMPLY WITH THE REQUIRED CLEARANCES WILL BE CHARGED TO THE OWNER.
9. WATER AND WASTEWATER WILL BE PROVIDED BY WEST TRAVIS COUNTY PUBLIC UTILITY AGENCY (WTC PUA).
10. NO STRUCTURE IN THIS SUBDIVISION SHALL BE OCCUPIED UNTIL CONNECTED TO AN APPROVED PUBLIC WATER AND WASTEWATER SYSTEM.
11. A SIXTEEN FOOT (16') WIDE PUBLIC UTILITY EASEMENT (P.U.E.) IS DEDICATED FOR USE FOR PUBLIC UTILITIES ADJACENT TO ALL STREET SIDE PROPERTY LINES OF ALL LOTS SHOWN ON THIS PLAT.
12. THE WATER SYSTEM FOR THIS SUBDIVISION SHALL BE DESIGNED TO SUPPLY THE FIRE FLOWS AS REQUIRED BY ORDINANCE 2010-1 ENACTED BY TRAVIS COUNTY EMERGENCY SERVICES DISTRICT NO. 6. PLANS SHALL BE REVIEWED AND APPROVED BY TRAVIS COUNTY EMERGENCY SERVICES DISTRICT NO. 6 FOR CONSTRUCTION OF THE SUBDIVISION IMPROVEMENTS AND SITE DEVELOPMENT OF ALL LOTS, EXCEPT SINGLE FAMILY.
13. IN APPROVING THIS PLAT, THE CITY OF BEE CAVE, TEXAS ASSUMES NO OBLIGATION TO BUILD STREETS OR ROADS SHOWN ON THIS PLAT OR BUILD ANY BRIDGES, CULVERTS OR DRAINAGE STRUCTURES IN CONNECTION THEREWITH, OR PROVIDE ANY TRAFFIC CONTROL DEVICES OR SIGNS IN CONNECTION THEREWITH. THE BUILDING OF ALL STREETS OR ROADS SHOWN ON THIS PLAT, AND ALL BRIDGES, CULVERTS, DRAINAGE STRUCTURES CONSTRUCTED OR IN PLACE IN SUCH STREETS OR ROADS OR IN CONNECTION THEREWITH IS THE RESPONSIBILITY OF THE OWNER AND/OR DEVELOPER OF THE TRACT OF LAND COVERED BY THIS PLAT IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS PRESCRIBED BY THE CITY OF BEE CAVE, TEXAS.
14. THE PROPERTY HAS ACCESS TO AND FROM A DEDICATED PUBLIC ROADWAY.
15. DRAINAGE AND WATER QUALITY EASEMENTS ARE FOR THE PROTECTION OF THE ENVIRONMENT BY IMPROVING THE QUALITY OF STORM WATER RUNOFF FROM DEVELOPED LANDS. THE NATIVE LAND OR MANAGEMENT PRACTICES WITHIN THESE EASEMENTS ARE TO HELP MAINTAIN CLEAN WATER IN CREEKS, RIVERS, AND LAKES. NO STRUCTURE OR IMPROVEMENTS, OTHER THAN NATIVE PLANT ENHANCEMENTS, OR WATER QUALITY CONTROL IMPROVEMENTS IN ACCORDANCE WITH THE NON-POINT SOURCE POLLUTION CONTROL PERMIT FOR THE SUBDIVISION, OR MAINTENANCE TO THE AREAS IN ACCORDANCE WITH THE NON-POINT SOURCE POLLUTION CONTROL PERMIT FOR THE SUBDIVISION MAY BE PLACED OR PERFORMED WITH IN THESE EASEMENTS WITHOUT PRIOR AUTHORIZATION AND APPROVAL IN WRITING FROM THE CITY O' BEE CAVE. THESE EASEMENTS SHALL BE MAINTAINED BY THE OWNER OR ITS APPROVED ASSIGNS IN ACCORDANCE WITH THE MAINTENANCE PLAN OF THE NON-POINT SOURCE POLLUTION CONTROL PERMIT APPLICABLE TO THE LOT. THESE EASEMENTS MAY NOT BE AMENDED OR ALTERED EXCEPT BY EXPRESS WRITTEN AGREEMENT O' THE CITY. PROPERTY OWNER AND/OR HIS/HER ASSIGNS SHALL PROVDE FOR ACCESS TO DRAINAGE EASEMENTS/STORM SEWER EASEMENTS AS MAY BE NECESSARY AND SHALL NOT PROHIBIT ACCESS BY THE CITY OF BEE CAVE FOR INSPECTION OR MAINTENANCE OF SAID EASEMENTS.
16. DEVELOPMENT OF THIS PROPERTY SHALL NOT COMMENCE UNTIL A NON-POINT SOURCE POLLUTION CONTROL PERMIT AS REQUIRED BY THE CITY OF BEE CAVE, TEXAS HAS BEEN ISSUED BY THE CITY OF BEE CAVE, TEXAS.
17. ALL PROPERTY HEREIN IS SUBJECT TO THE CITY OF BEE CAVE NON-POINT SOURCE POLLUTION CONTROL PERMIT FOR THIS SUBDIVISION. SHOULD THE USE OF THIS PROPERTY CHANGE, ALTER, OR AMEND THE USE AS PERMITTED IN THE NON-POINT SOURCE POLLUTION CONTROL PERMIT, THEN AN AMENDED NON-SOURCE POLLUTION CONTROL PERMIT SHALL BE REQUIRED.
18. SELLING A PORTION OF THIS LAND BY METES AND BOUNDS IS A VIOLATION OF THE CITY OF BEE CAVE ORDINANCES AND STATE LAW, AND IS SUBJECT TO FINES AND THE WITHHOLDING OF UTILITIES AND BUILDING PERMITS.
19. NO CONVEYANCE OR SALES OF ANY PORTION OR LOT OF THIS PROPERTY MAY OCCUR UNTIL AFTER THE FINAL PLAT IS RECORDED WITH THE CLERK OF TRAVIS COUNTY, TEXAS.
20. AN INTEGRATED PEST MANAGEMENT PLAN SHALL BE PROVIDED AT THE SITE AND NPS PLAN STATE TO THE CITY OF BEE CAVE.
21. THIS SUBDIVISION IS ZONED MIXED USE NEIGHBORHOOD.
22. ALL DEVELOPMENT SHALL BE IN ACCORDANCE WITH THE CITY OF BEE CAVE SIGN ORDINANCE.
23. THE APPROVAL BY THE CITY O' BEE CAVE OF THIS PLAT SHALL NOT, IN AND OF ITSELF, BE DEEMED TO CONSTITUTE OR IMPLY THE ACCEPTANCE BY THE CITY OF ANY STREET, PUBLIC AREA, EASEMENT OR PARK SHOWN ON THE PLAT.
24. THE OWNER OF LOT 1 OF THE 0.997 ACRES W HWY 71 COMMERCIAL TRACT MINOR PLAT IS RESPONSIBLE FOR MAINTENANCE OF THE JOINT ACCESS EASEMENT.

THE STATE OF TEXAS §
COUNTY OF TRAVIS §

KNOW ALL MEN BY THESE PRESENTS
THAT I, STEVEN M. MINOR, P.E. A LICENSED PROFESSIONAL ENGINEER, LICENSED BY THE STATE OF TEXAS, HEREBY CERTIFY THAT THE PROPER ENGINEERING CONSIDERATION HAVE BEEN GIVEN TO THIS PLAT AND IT MEETS THE REQUIREMENTS OF THE SUBDIVISION ORDINANCE OF THE CITY OF BEE CAVE, TEXAS.

6-27-23
STEVEN M. MINOR, P.E. DATE
STATE OF TEXAS NO. 133778
8834 N. CAPITAL OF TX HWY, SUITE 140
AUSTIN, TEXAS 78759
(512) 452-0371

STATE OF TEXAS
STEVEN M. MINOR
133778
LICENSED
PROFESSIONAL ENGINEER
6-27-23

MillerGRAY
Consulting • Engineering • Infrastructure
7320 N. MoPac Expressway, Suite 203
Austin, Texas 78731
Phone (512) 861-5300
www.miller-gray.com
TBPE FIRM REG. NO. F-16302

P:\00323 Investcor\001 Starbucks Bee Cave\05_CAD\00323-001dt.dwg 4/5/2024 10:12 AM

STATE OF TEXAS
J. TRAVIS WILSON
97307
LICENSED
PROFESSIONAL ENGINEER
4/5/2024

STARBUCKS BEE CAVE
14211 STATE HWY 71, BEE CAVE, TEXAS 78738

FINAL PLAT
SHEET 2 OF 2

REVISIONS/CORRECTIONS

NO.	DATE	DESCRIPTION	BY

811 Know what's below. Call before you dig.

CAUTION!
IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

FOR CITY USE ONLY:

PROJECT NUMBER 00323-001
DATE: 4/5/2024
DESIGNED: KKE
CHECKED: JTW

SHEET NO. 3 OF 41

23-789-SNPS

CITY OF BEE CAVE STANDARD CONSTRUCTION NOTES - ADOPTED JUNE 24, 2022

GENERAL NOTES

1. THE CONTRACTOR SHALL VERIFY ALL DEPTHS AND LOCATIONS OF EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION. ANY DISCREPANCIES WITH CONSTRUCTION PLANS FOUND IN THE FIELD SHALL BE BROUGHT IMMEDIATELY TO THE ATTENTION OF THE ENGINEER.
2. THE CONTRACTOR SHALL CONTACT THE TEXAS EXCAVATION SYSTEM AT 1-800-344-8377 FOR EXISTING UTILITY LOCATIONS 48 HOURS PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES THAT ARE TO BE EXTENDED, TIED TO, CROSSED, OR ALTERED; OR SUBJECT TO DAMAGE/INCONVENIENCE BY THE CONSTRUCTION OPERATIONS.
3. CONTACT THE AUTHORITY HAVING JURISDICTION (WTCPUA/WCID17) FOR EXISTING WATER AND WASTEWATER LOCATIONS 48 HOURS PRIOR TO CONSTRUCTION.
4. ANY CHANGES OR REVISIONS TO THESE PLANS MUST FIRST BE SUBMITTED TO THE CITY BY THE DESIGN ENGINEER FOR REVIEW AND WRITTEN APPROVAL PRIOR TO CONSTRUCTION OF THE REVISION. THE CITY ENGINEER MAY ALLOW FIELD ADJUSTMENTS WITHOUT FORMAL APPROVAL OF A CORRECTION, ON A CASE BY CASE BASIS, WITH THOSE CHANGES TO BE REFLECTED ON THE RECORD DRAWINGS
5. A TRAFFIC CONTROL PLAN, IN ACCORDANCE WITH THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, SHALL BE SUBMITTED TO THE CITY FOR REVIEW AND APPROVAL PRIOR TO ANY PARTIAL OR COMPLETE ROADWAY CLOSURES. TRAFFIC CONTROL PLANS SHALL BE SITE SPECIFIC AND SEALED BY A REGISTERED PROFESSIONAL ENGINEER. LANE CLOSURES ON ARTERIALS AND ANY FULL ROAD CLOSURES REQUIRE MESSAGE BOARDS NOTIFYING THE PUBLIC ONE WEEK PRIOR TO THE CLOSURE.
6. NO WORK IS TO BE PERFORMED BETWEEN THE HOURS OF 7:00 P.M. AND 7:00 A.M PER THE CITY'S NOISE ORDINANCE. REQUESTS FOR EXCEPTIONS TO THE NOISE ORDINANCE MUST BE MADE IN WRITING TO THE CITY MANAGER.
7. CONTACT THE CITY ENGINEERING STAFF (512-767-6675) AT LEAST 4 DAYS PRIOR TO WORK TO SCHEDULE ANY INSPECTIONS ON WEEKENDS OR CITY HOLIDAYS.
8. NO STREET LIGHTS OR SIGNS OF ANY KIND ARE TO BE PLACED WITHIN ANY SIDEWALKS.
9. NO BLASTING IS ALLOWED.
10. ANY EXISTING UTILITIES, PAVEMENT, CURBS, SIDEWALKS, STRUCTURES, TREES, ETC., THAT ARE DAMAGED OR REMOVED SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT NO COST TO THE OWNER.
11. THE CONTRACTOR SHALL GIVE THE CITY OF BEE CAVE 48 HOURS NOTICE BEFORE BEGINNING EACH PHASE OF CONSTRUCTION. CONTACT THE PLANNING & DEVELOPMENT DEPARTMENT AT 512-767-6675.
12. A PRE-CONSTRUCTION CONFERENCE SHALL BE HELD WITH THE CONTRACTOR, DESIGN ENGINEER/PERMIT APPLICANT AND THE CITY OF BEE CAVE REPRESENTATIVES PRIOR TO INSTALLATION OF EROSION/SEDIMENTATION CONTROLS AND TREE PROTECTION MEASURES AND PRIOR TO BEGINNING ANY WORK. THE CONTRACTOR SHALL NOTIFY THE CITY OF BEE CAVE ENGINEERING STAFF AT LEAST THREE (3) DAYS PRIOR TO THE MEETING DATE. FOR PROJECT IN THE ETJ, THE PRE-CONSTRUCTION MEETING MUST BE SCHEDULED THROUGH TRAVIS COUNTY AND COORDINATED WITH THE CITY TO CONDUCT A SIMULTANEOUS CITY/COUNTY PRE-CONSTRUCTION MEETING. THE APPLICANT IS RESPONSIBLE FOR COORDINATING/SCHEDULING ATTENDANCE OF REPRESENTATIVES FROM THE UTILITY AND FIRE AUTHORITY HAVING JURISDICTION.
13. THE CONTRACTOR AND ENGINEER SHALL KEEP ACCURATE RECORDS OF ALL CONSTRUCTION THAT DEVIATES FROM THE PLANS. THE ENGINEER SHALL FURNISH THE CITY OF BEE CAVE
14. ACCURATE "RECORD DRAWINGS" FOLLOWING THE COMPLETION OF ALL CONSTRUCTION. THESE "RECORD DRAWINGS" SHALL MEET THE SATISFACTION OF THE ENGINEERING DEPARTMENTS PRIOR TO FINAL ACCEPTANCE
15. WHEN CONSTRUCTION IS BEING CARRIED OUT WITHIN EASEMENTS, THE CONTRACTOR SHALL CONFINE HIS WORK TO WITHIN THE PERMANENT AND TEMPORARY EASEMENTS. PRIOR TO ACCEPTANCE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL TRASH AND DEBRIS WITHIN THE PERMANENT EASEMENTS AND PROVIDE REVEGETATION IN ACCORDANCE WITH CITY STANDARDS. CLEANUP SHALL BE TO THE SATISFACTION OF THE ENGINEER.
16. CONTRACTOR TO LOCATE, PROTECT, AND MAINTAIN BENCHMARKS, MONUMENTS, CONTROL POINTS AND PROJECT ENGINEERING REFERENCE POINTS. RE-ESTABLISH DISTURBED OR DESTROYED ITEMS BY REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF TEXAS, AT NO ADDITIONAL COST TO OWNER.
17. THE CONTRACTOR SHALL PROTECT ALL EXISTING FENCES. IN THE EVENT THAT A FENCE MUST BE REMOVED, THE CONTRACTOR SHALL REPLACE SAID FENCE OR PORTION THEREOF WITH THE SAME TYPE OF FENCING TO A QUALITY OF EQUAL OR BETTER THAN THE ORIGINAL FENCE.
18. ALL CONSTRUCTION OPERATIONS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH APPLICABLE REGULATIONS OF THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA). OSHA STANDARDS MAY BE PURCHASED FROM THE GOVERNMENT PRINTING OFFICE; INFORMATION AND RELATED REFERENCE MATERIALS MAY BE PURCHASED FROM OSHA, 1033 LA POSADA DR. SUITE 375, AUSTIN, TEXAS 78752-3832.
19. ALL MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THE SCOPE OF THIS CONTRACT WHERE NOT SPECIFICALLY COVERED IN THE PROJECT SPECIFICATIONS SHALL CONFORM TO ALL CITY OF AUSTIN DETAILS AND STANDARD SPECIFICATIONS IN ACCORDANCE WITH THE CITY OF BEE CAVE ENGINEERING TECHNICAL MANUAL.
20. PROJECT SPECIFICATIONS TAKE PRECEDENCE OVER PLANS AND SPECIAL CONDITIONS GOVERN OVER TECHNICAL SPECIFICATIONS.
21. HOT MIX ASPHALTIC CONCRETE PAVEMENT SHALL BE MINIMUM THICKNESS OF 2 INCHES WITH NO RECYCLED ASPHALT SHINGLES CONTENT.
22. CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY QUESTIONS THAT MAY RISE CONCERNING THE INTENT, PLACEMENT, OR LIMITS OF DIMENSIONS OR GRADES NECESSARY FOR THE CONSTRUCTION OF THIS PROJECT.
23. CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ALL PERMITS, TESTS, APPROVALS AND ACCEPTANCES REQUIRED TO COMPLETE CONSTRUCTION OF THIS PROJECT.
24. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COORDINATION BETWEEN HIMSELF AND OTHER CONTRACTORS AND UTILITIES IN THE VICINITY OF THE PROJECT. THIS INCLUDES GAS, WATER, WASTEWATER, ELECTRICAL, TELEPHONE, CABLE TV AND STREET DRAINAGE WORK. ONCE THE CONTRACTOR BECOMES AWARE OF A POSSIBLE CONFLICT, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE ENGINEER WITHIN TWENTY-FOUR (24) HOURS.
25. THE CONTRACTOR MUST OBTAIN A CONSTRUCTION WATER METER FOR ALL WATER USED DURING CONSTRUCTION. A COPY OF THIS PERMIT MUST BE CARRIED AT ALL TIMES BY ALL WHO USE WATER.
26. CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING ROADS AND DRIVES ADJACENT TO AND NEAR THE SITE FREE FROM SOIL, SEDIMENT AND DEBRIS. CONTRACTOR WILL NOT REMOVE SOIL, SEDIMENT OR DEBRIS FROM ANY AREA OR VEHICLE BY MEANS OF WATER. ONLY SHOVELING AND SWEEPING WILL BE ALLOWED. CONTRACTOR WILL BE RESPONSIBLE FOR DUST CONTROL FROM THE SITE.
27. THE CITY OF BEE CAVE SHALL NOT BE PETITIONED FOR ACCEPTANCE UNTIL ALL NECESSARY EASEMENT DOCUMENTS HAVE BEEN SIGNED AND RECORDED.

CITY OF BEE CAVE STANDARD CONSTRUCTION NOTES - ADOPTED JUNE 24, 2022

28. AN ENGINEER'S CONCURRENCE LETTER AND RECORD DRAWINGS SHALL BE SUBMITTED TO THE CITY ENGINEER PRIOR TO CONDUCTING THE FINAL CITY INSPECTION. THE ENGINEER AND CONTRACTOR SHALL VERIFY THAT ALL FINAL REVISIONS AND CHANGES HAVE BEEN MADE TO THE DIGITAL COPY PRIOR TO CITY SUBMITTAL. RECORD CONSTRUCTION DRAWINGS, INCLUDING ROADWAY AND ALL UTILITIES SHALL BE PROVIDED TO THE CITY IN DIGITAL FORMAT AS AUTOCAD ".DWG" FILES, MICROSTATION ".DGN" FILES OR ESRI ".SHP" FILES. LINE WEIGHTS, LINE TYPES AND TEXT SIZE SHALL BE SUCH THAT IF HALF-SIZE PRINTS (11"X17") WERE PRODUCED, THE PLANS WOULD STILL BE LEGIBLE. ALL REQUIRED DIGITAL FILES SHALL CONTAIN A MINIMUM OF TWO CONTROL POINTS REFERENCED TO THE STATE PLANE GRID COORDINATE SYSTEM – TEXAS CENTRAL ZONE (4203), IN US SURVEY FEET AND SHALL INCLUDE ROTATION INFORMATION AND SCALE FACTOR REQUIRED TO REDUCE SURFACE COORDINATES TO GRID COORDINATES IN US SURVEY FEET

STREET AND DRAINAGE NOTES

1. ALL SIDEWALKS SHALL COMPLY WITH THE AMERICANS WITH DISABILITIES ACT. THE CITY OF BEE CAVE HAS NOT REVIEWED THESE PLANS FOR COMPLIANCE WITH THE AMERICANS WITH DISABILITIES ACT, OR ANY OTHER ACCESSIBILITY LEGISLATION, AND DOES NOT WARRANTY OR APPROVE THESE PLANS FOR ANY ACCESSIBILITY STANDARDS.
2. PRIOR TO ACCEPTANCE THE ENGINEER SHALL SUBMIT DOCUMENTATION THAT THE IMPROVEMENTS WERE INSPECTED BY TDLR OR A REGISTERED ACCESSIBLITY SPECIALIST (RAS) AND ARE IN COMPLIANCE WITH THE REQUIREMENTS OF THE TABA.
3. CONTRACTOR SHALL PROVIDE QUALITY TESTING FOR ALL INFRASTRUCTURES TO BE ACCEPTED AND MAINTAINED BY THE CITY OF BEE CAVE AFTER COMPLETION. THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEER AT 512-7697-6675 NO LESS THAN 48 HOURS PRIOR TO ANY TESTING.
4. BACKFILL BEHIND THE CURB SHALL BE COMPACTED TO OBTAIN A MINIMUM OF 95% MAXIMUM DENSITY TO WITHIN 6" OF TOP OF CURB. MATERIAL USED SHALL BE PRIMARILY GRANULAR
5. WITH NO ROCKS LARGER THAN 6" IN THE GREATEST DIMENSION. THE REMAINING 6" SHALL BE CLEAN TOPSOIL FREE FROM ALL CLODS AND SUITABLE FOR SUSTAINING PLANT LIFE
6. A MINIMUM OF 6" OF TOPSOIL SHALL BE PLACED BETWEEN THE CURB AND RIGHT-OF-WAY AND IN ALL DRAINAGE CHANNELS EXCEPT CHANNELS CUT IN STABLE ROCK.
7. DEPTH OF COVER FOR ALL CROSSINGS UNDER PAVEMENT, INCLUDING GAS, ELECTRIC TELEPHONE, CABLE TV, ETC., SHALL BE A MINIMUM OF 36" BELOW SUBGRADE.
8. STREET RIGHT-OF-WAY SHALL BE GRADED AT A SLOPE OF ¼" PER FOOT TOWARD THE CURB UNLESS OTHERWISE INDICATED. HOWEVER, IN NO CASE SHALL THE WIDTH OF RIGHT-OFWAY AT ¼" PER FOOT SLOPE BE LESS THAN 10 FEET UNLESS A SPECIFIC REQUEST FOR AN ALTERNATE GRADING SCHEME IS MADE TO AND ACCEPTED BY THE CITY OF BEE CAVE ENGINEERING STAFF.
9. BARRICADES BUILT TO THE CITY OF BEE CAVE STANDARDS SHALL BE ERECTED ON ALL DEAD-END STREETS AND AS NECESSARY DURING CONSTRUCTION TO MAINTAIN JOB AND PUBLIC SAFETY.
10. ALL REINFORCED CONCRETE PIPE SHALL BE MINIMUM CLASS III OF TONGUE AND GROOVE OR O-RING JOINT DESIGN.
11. THE CONTRACTOR IS TO NOTIFY THE ENGINEERING STAFF 48 HOURS PRIOR TO THE FOLLOWING TESTING: PROOF ROLLING SUB-GRADE AND EVERY LIFT OF ROADWAY EMBANKMENT, IN-PLACE DENSITY TESTING OF EVERY BASE COURSE, AND ASPHALT CORES. ALL OF THIS TESTING MUST BE WITNESSED BY A CITY OF BEE CAVE REPRESENTATIVE UNLESS OTHERWISE INSTRUCTED BY THE CITY ENGINEER.
12. THE CONTRACTOR MUST PROVIDE A PNEUMATIC TRUCK PER TXDOT SPEC FOR PROOF ROLLING.
13. ALL STRIPING, WITH THE EXCEPTION OF STOP BARS, CROSS WALKS, WORDS AND ARROWS, IS TO BE TYPE II (WATER BASED). STOP BARS, CROSS WALKS, WORDS AND ARROWS REQUIRE TYPE I THERMOPLASTIC.
14. MANHOLE FRAMES, COVERS, VALVES, CLEAN-OUTS, ETC. SHALL BE RAISED TO GRADE PRIOR TO FINAL PAVEMENT CONSTRUCTION.
15. CONTRACTOR SHALL NOTIFY THE CITY ENGINEER AT LEAST 48 HOURS PRIOR TO THE INSTALLATION OF ANY DRAINAGE FACILITY WITHIN A DRAINAGE EASEMENT OR STREET ROW.
16. A STOP BAR SHALL BE PLACED AT ALL STOP SIGN LOCATIONS.
17. A MINIMUM OF SEVEN DAYS OF CURE TIME IS REQUIRED FOR HMAC PRIOR TO THE INTRODUCTION OF PUBLIC VEHICULAR TRAFFIC TO ANY STREETS.
18. THE GEOTECHNICAL ENGINEER SHALL INSPECT THE SUBGRADE FOR COMPLIANCE WITH THE DESIGN ASSUMPTIONS MADE DURING PREPARATION OF THE SOILS REPORT. ANY ADJUSTMENTS THAT ARE REQUIRED SHALL BE MADE THROUGH REVISIONS OF THE CONSTRUCTION PLANS.
19. GEOTECHNICAL INVESTIGATION INFORMATION AND PAVEMENT RECOMMENDATIONS WERE PROVIDED BY PSI GEOTECHNICAL (PSI PROJECT NO. 03031690). PAVEMENT RECOMMENDATIONS ARE AS FOLLOWS:

MATERIAL	OPTION 1		OPTION 2	
TRAFFIC TYPE	LIGHT	HEAVY	LIGHT	HEAVY
PORTLAND CEMENT CONCRETE	5"	6 1/2"	5"	6 1/2"
LOW PI MATERIAL (PI<25)	-	-	-	-
LIME STABILIZED SUBGRADE	8"		-	
COMPACTED SUBGRADE	-		8"	

TRENCH SAFETY NOTES

1. TRENCH SAFETY SYSTEMS TO BE UTILIZED FOR THIS PROJECT ARE DESCRIBED IN ITEM 509S "TRENCH SAFETY SYSTEMS" OF THE CITY OF AUSTIN STANDARD SPECIFICATIONS AND SHALL BE IN ACCORDANCE WITH THE LAWS OF THE STATE OF TEXAS AND THE U.S. OCCUPATION SAFETY AND HEALTH ADMINISTRATION REGULATIONS.

GRADING NOTES

1. POSITIVE DRAINAGE SHALL BE MAINTAINED ON ALL SURFACE AREAS WITHIN THE SCOPE OF THIS PROJECT. CONTRACTOR SHOULD TAKE PRECAUTIONS NOT TO ALLOW ANY PONDING OF WATER.
2. THE CONTRACTOR SHALL CONSTRUCT EARTHEN EMBANKMENTS WITH SLOPES NO STEEPER THAN 3:1 AND COMPACT SOIL TO 95% OF MAXIMUM DENSITY IN ACCORDANCE WITH THE CITY OF AUSTIN STANDARD SPECIFICATIONS.
3. AREAS OF SOIL DISTURBANCE ARE LIMITED TO GRADING AND IMPROVEMENTS SHOWN. ALL OTHER AREAS WILL NOT BE DISTURBED.

BENCHMARK NOTES

BM1 MAG NAIL WITH ALUMINUM WASHER STAMPED "SURVTEX"

ELEV : 940.14

APPENDIX E-3: ADOPTED JUNE 28, 2022
CITY OF BEE CAVE STANDARD SEQUENCE OF CONSTRUCTION

A. TEMPORARY EROSION AND SEDIMENTATION CONTROLS ARE TO BE INSTALLED AS INDICATED ON THE APPROVED SITE PLAN OR SUBDIVISION CONSTRUCTION PLAN AND IN ACCORDANCE WITH THE EROSION SEDIMENTATION CONTROL PLAN (ESC) AND STORM WATER POLLUTION PREVENTION PLAN (SWPPP) THAT IS REQUIRED TO BE POSTED ON THE SITE. INSTALL TREE PROTECTION, INITIATE TREE MITIGATION MEASURES AND CONDUCT "PRE - CONSTRUCTION" TREE FERTILIZATION (IF APPLICABLE).

B. THE ENVIRONMENTAL PROJECT MANAGER OR SITE SUPERVISOR MUST CONTACT THE PLANNING & DEVELOPMENT DEPARTMENT AT 512-767-6675, 72 HOURS PRIOR TO THE SCHEDULED DATE OF THE REQUIRED ON-SITE PRECONSTRUCTION MEETING.

C. THE ENVIRONMENTAL PROJECT MANAGER, AND/OR SITE SUPERVISOR, AND/OR DESIGNATED RESPONSIBLE PARTY, AND THE GENERAL CONTRACTOR WILL FOLLOW THE EROSION SEDIMENTATION CONTROL PLAN (ESC) AND 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.

D. 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 MUST CONSIST OF A SUMP PIT OUTLET AND AN EMERGENCY SPILLWAY MEETING THE REQUIREMENTS OF THE DRAINAGE CRITERIA MANUAL AND/OR THE ENVIRONMENTAL CRITERIA MANUAL, AS REQUIRED. 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).

E. TEMPORARY EROSION AND SEDIMENTATION CONTROLS WILL BE INSPECTED AND MAINTAINED IN ACCORDANCE WITH THE EROSION SEDIMENTATION CONTROL PLAN (ESC) AND STORM WATER POLLUTION PREVENTION PLAN (SWPPP) POSTED ON THE SITE.

F. BEGIN SITE CLEARING/CONSTRUCTION (OR DEMOLITION) ACTIVITIES.

G. PERMANENT WATER QUALITY PONDS OR CONTROLS WILL BE CLEANED OUT AND FILTER MEDIA WILL BE INSTALLED PRIORTO/CONCURRENTLY WITH REVEGETATION OF SITE.

H. COMPLETE CONSTRUCTION AND START REVEGETATION OF THE SITE AND INSTALLATION OF LANDSCAPING.

I. UPON COMPLETION OF THE SITE CONSTRUCTION AND REVEGETATION OF A PROJECT SITE, THE DESIGN ENGINEER SHALL SUBMIT AN ENGINEER'S LETTER OF CONCURRENCE BEARING THE ENGINEER'S SEAL, SIGNATURE, AND DATE TO THE CITY ENGINEER INDICATING THAT CONSTRUCTION, INCLUDING REVEGETATION, IS COMPLETE AND IN SUBSTANTIAL COMPLIANCE WITH THE APPROVED PLANS. AFTER RECEIVING THIS LETTER, A FINAL INSPECTION WILL BE SCHEDULED BY THE APPROPRIATE CITY ENGINEERING STAFF.

J. UPON COMPLETION OF LANDSCAPE INSTALLATION OF A PROJECT SITE, THE LANDSCAPE ARCHITECT SHALL SUBMIT A LETTER OF CONCURRENCE TO THE CITY ENGINEER INDICATING THAT THE REQUIRED LANDSCAPING IS COMPLETE AND IN SUBSTANTIAL CONFORMITY WITH THE APPROVED PLANS. AFTER RECEIVING THIS LETTER, A FINAL INSPECTION WILL BE SCHEDULED BY THE APPROPRIATE CITY ENGINEERING STAFF.

K. AFTER A FINAL INSPECTION HAS BEEN CONDUCTED BY THE CITY ENGINEER AND WITH APPROVAL FROM THE CITY ENGINEER,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.

Know what's below. Call before you dig.

CAUTION!
IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

FOR CITY USE ONLY:

MillerGRAY
Consulting • Engineering • Infrastructure
7320 N. MoPac Expressway, Suite 203
Austin, Texas 78731
Phone (512) 861-5300
www.miller-gray.com
TBPE FIRM REG. NO. F-16302

STATE OF TEXAS
J. TRAVIS WILSON
97307
LICENSED PROFESSIONAL ENGINEER
4/5/2024

P:\00323 Investor\001 Starbucks Bee Cave\05_CAD\00323-00 tgns.dwg 4/5/2024 10:12 AM

STARBUCKS BEE CAVE
14211 STATE HWY 71, BEE CAVE, TEXAS 78738

CITY OF BEE CAVE NOTES
1 OF 2

REVISIONS/CORRECTIONS

NO.	DATE	DESCRIPTION	BY

PROJECT NUMBER 00323-001
DATE: 4/5/2024
DESIGNED: KKE
CHECKED: JTW

SHEET NO.
4 OF 41

23-789-SNPS

APPENDIX E-1: ADOPTED JUNE 28, 2022
CITY OF BEE CAVE EROSION CONTROL NOTES

1. THE CONTRACTOR SHALL INSTALL EROSION/SEDIMENTATION CONTROLS, TREE/NATURAL AREA PROTECTIVE FENCING, AND CONDUCT "PRE-CONSTRUCTION" TREE FERTILIZATION (IF APPLICABLE) PRIOR TO ANY SITE PREPARATION WORK (CLEARING, GRUBBING OR EXCAVATION).

2. THE PLACEMENT OF EROSION/SEDIMENTATION CONTROLS SHALL BE IN ACCORDANCE WITH THE ENVIRONMENTAL CRITERIA MANUAL AND THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN. THE BEE CAVE ESC PLAN SHALL BE CONSULTED AND USED AS THE BASIS FOR A TPDES REQUIRED SWPPP. IF A SWPPP IS REQUIRED, IT SHALL BE AVAILABLE FOR REVIEW BY THE CITY OF BEE CAVE ENGINEERING STAFF AT ALL TIMES DURING CONSTRUCTION, INCLUDING AT THE PRE-CONSTRUCTION MEETING. THE CHECKLIST BELOW CONTAINS THE BASIC ELEMENTS THAT SHALL BE REVIEWED FOR PERMIT APPROVAL BY BEE CAVE EV PLAN REVIEWERS AS WELL AS BEE CAVE EV INSPECTORS.

3. THE PLACEMENT OF TREE/NATURAL AREA PROTECTIVE FENCING SHALL BE IN ACCORDANCE WITH THE CITY OF BEE CAVE STANDARD NOTES FOR TREE AND NATURAL AREA PROTECTION AND THE APPROVED GRADING/TREE AND NATURAL AREA PLAN.

4. A PRE-CONSTRUCTION CONFERENCE SHALL BE HELD ON-SITE WITH THE CONTRACTOR, DESIGN ENGINEER/PERMIT APPLICANT AND BEE CAVE ENGINEERING STAFF AFTER INSTALLATION OF THE EROSION/SEDIMENTATION CONTROLS, TREE/NATURAL AREA PROTECTION MEASURES AND "PRE-CONSTRUCTION" TREE FERTILIZATION (IF APPLICABLE) PRIOR TO BEGINNING ANY SITE PREPARATION WORK. THE OWNER OR OWNER'S REPRESENTATIVE SHALL NOTIFY THE PLANNING & DEVELOPMENT DEPARTMENT, 512-757-6675, AT LEAST THREE DAYS PRIOR TO THE MEETING DATE. BEE CAVE APPROVED ESC PLAN AND TPDES SWPPP (IF REQUIRED) SHOULD BE REVIEWED BY THE ENGINEERING STAFF AT THIS TIME.

5. ANY MAJOR VARIATION IN MATERIALS OR LOCATIONS OF CONTROLS OR FENCES FROM THOSE SHOWN ON THE APPROVED PLANS WILL REQUIRE A REVISION AND MUST BE APPROVED BY THE REVIEWING ENGINEER. MAJOR REVISIONS MUST BE APPROVED BY AUTHORIZED BEE CAVE STAFF. MINOR CHANGES TO BE MADE AS FIELD REVISIONS TO THE EROSION AND SEDIMENTATION CONTROL PLAN MAY BE REQUIRED BY THE ENGINEERING STAFF DURING THE COURSE OF CONSTRUCTION TO CORRECT CONTROL INADEQUACIES.

6. THE CONTRACTOR IS REQUIRED TO PROVIDE A CERTIFIED INSPECTOR THAT IS EITHER A LICENSED ENGINEER (OR PERSON DIRECTLY SUPERVISED BY THE LICENSED ENGINEER) OR CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC OR CPESC - IT), CERTIFIED EROSION, SEDIMENT AND STORMWATER - INSPECTOR (CESSWI OR CESSWI - IT) OR CERTIFIED INSPECTOR OF SEDIMENTATION AND EROSION CONTROLS (CISEC OR CISEC - IT) CERTIFICATION TO INSPECT THE CONTROLS AND FENCES AT WEEKLY OR BI-WEEKLY INTERVALS AND AFTER ONE-HALF (½) INCH OR GREATER 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 OR ONE-THIRD (⅓) OF THE INSTALLED HEIGHT OF THE CONTROL WHICHEVER IS LESS.

7. PRIOR TO FINAL ACCEPTANCE BY THE CITY, 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.

8. ALL WORK MUST STOP IF A VOID IN THE ROCK SUBSTRATE IS DISCOVERED WHICH IS; ONE SQUARE FOOT IN TOTAL AREA; BLOWS AIR FROM WITHIN THE SUBSTRATE AND/OR CONSISTENTLY RECEIVES WATER DURING ANY RAIN EVENT. AT THIS TIME IT IS THE RESPONSIBILITY OF THE PROJECT MANAGER TO IMMEDIATELY CONTACT A CITY OF BEE CAVE FOR FURTHER INVESTIGATION. IN ADDITION, IF THE PROJECT SITE IS LOCATED WITHIN THE EDWARDS AQUIFER, THE PROJECT MANAGER MUST NOTIFY THE TRAVIS COUNTY BALCONES CANYONLANDS CONSERVATION PRESERVE (BCCP) BY EMAIL AT BCCP@TRAVISCOUNTYTX.GOV. CONSTRUCTION ACTIVITIES WITHIN 50 FEET OF THE VOID MUST STOP.

9. TEMPORARY AND PERMANENT EROSION CONTROL: ALL DISTURBED AREAS SHALL BE RESTORED AS NOTED BELOW:

   A. ALL DISTURBED AREAS TO BE REVEGETATED ARE REQUIRED TO PLACE A MINIMUM OF SIX (6) INCHES OF TOPSOIL [SEE CITY OF AUSTIN STANDARD SPECIFICATION ITEM NO. 601S.3(A)]. DO NOT ADD TOPSOIL WITHIN THE CRITICAL ROOT ZONE OF EXISTING TREES.

   - TOPSOIL SALVAGED FROM THE EXISTING SITE IS ENCOURAGED FOR USE, BUT IT SHOULD MEET THE STANDARDS SET FORTH IN 601S.

   AN OWNER/ENGINEER MAY PROPOSE USE OF ONSITE SALVAGED TOPSOIL WHICH DOES NOT MEET THE CRITERIA OF CITY OF AUSTIN STANDARD SPECIFICATION 601S BY PROVIDING A SOIL ANALYSIS AND A WRITTEN STATEMENT FROM A QUALIFIED PROFESSIONAL IN SOILS, LANDSCAPE ARCHITECTURE, OR AGRONOMY INDICATING THE ONSITE TOPSOIL WILL PROVIDE AN EQUIVALENT GROWTH MEDIA AND SPECIFYING WHAT, IF ANY, SOIL AMENDMENTS ARE REQUIRED.

   - SOIL AMENDMENTS SHALL BE WORKED INTO THE EXISTING ONSITE TOPSOIL WITH A DISC OR TILLER TO CREATE A WELL-BLENDED MATERIAL.

   THE VEGETATIVE STABILIZATION OF AREAS DISTURBED BY CONSTRUCTION SHALL BE AS FOLLOWS:

TEMPORARY VEGETATIVE STABILIZATION:

A. FROM SEPTEMBER 15 TO MARCH 1, SEEDING SHALL BE WITH OR INCLUDE A COOL SEASON COVER CROP: (WESTERN WHEATGRASS (PASCOPYRUM SMITHII) AT 5.6 POUNDS PER ACRE, OATS (AVENA SATIVA) AT 4.0 POUNDS PER ACRE, CEREAL RYE GRAIN (SECALE CEREALE) AT 45 POUNDS PER ACRE. CONTRACTOR MUST ENSURE THAT ANY SEED APPLICATION REQUIRING A COOL SEASON COVER CROP DOES NOT UTILIZE ANNUAL RYEGRASS (LOLIUM MULTIFLORUM) OR PERENNIAL RYEGRASS (LOLIUM PERENNE). COOL SEASON COVER CROPS ARE NOT PERMANENT EROSION CONTROL.

B. FROM MARCH 2 TO SEPTEMBER 14, SEEDING SHALL BE WITH HULLED BERMUDA AT A RATE OF 45 POUNDS PER ACRE OR A NATIVE PLANT SEED MIX CONFORMING TO ITEM 604S OR 609S.

   1. FERTILIZER USE SHALL FOLLOW THE RECOMMENDATION OF A SOIL TEST. SEE ITEM 606S, FERTILIZER. APPLICATIONS OF FERTILIZER (AND PESTICIDE) ON CITY-OWNED AND MANAGED PROPERTY REQUIRES THE YEARLY SUBMITTAL OF A PESTICIDE AND FERTILIZER APPLICATION RECORD, ALONG WITH A CURRENT COPY OF THE APPLICATOR'S LICENSE. FOR CURRENT COPY OF THE RECORD TEMPLATE CONTACT THE CITY OF AUSTIN'S IPM COORDINATOR.

   2. HYDROMULCH SHALL COMPLY WITH TABLE 2, BELOW.

   3. TEMPORARY EROSION CONTROL SHALL BE ACCEPTABLE WHEN THE GRASS HAS GROWN AT LEAST IH INCHES HIGH WITH A MINIMUM OF 95% TOTAL COVERAGE SO THAT ALL AREAS OF A SITE THAT RELY ON VEGETATION FOR TEMPORARY STABILIZATION ARE UNIFORMLY VEGETATED, AND PROVIDED THERE ARE NO BARE SPOTS LARGER THAN 10 SQUARE FEET.

   4. WHEN REQUIRED, NATIVE PLANT SEEDING SHALL COMPLY WITH REQUIREMENTS OF THE CITY OF AUSTIN ENVIRONMENTAL CRITERIA MANUAL, AND STANDARD SPECIFICATION 604S OR 609S

APPENDIX E-1: ADOPTED JUNE 28, 2022
CITY OF BEE CAVE EROSION CONTROL NOTES

TABLE 1: HYDROMULCHING FOR TEMPORARY VEGETATIVE STABILIZATION

MATERIAL	DESCRIPTION	LONGEVITY	TYPICAL APPLICATIONS	APPLICATION RATES
100% OR ANY BLEND OF WOOD, CELLULOSE, STRAW, AND/OR COTTON PLANT MATERIAL (EXCEPT NO MULCH SHALL EXCEED 30% PAPER)	70% OR GREATER WOOD/STRAW 30% OR LESS PAPER OR NATURAL FIBERS	0-3 MONTHS	MODERATE SLOPES; FROM FLAT TO 3:1	1,500 TO 2,000 LBS PER ACRE

PERMANENT VEGETATIVE STABILIZATION:

A. FROM SEPTEMBER 15 TO MARCH 1, SEEDING IS CONSIDERED TO BE TEMPORARY STABILIZATION ONLY. IF COOL SEASON COVER CROPS EXIST WHERE PERMANENT VEGETATIVE STABILIZATION IS DESIRED, THE GRASSES SHALL BE MOWED TO A HEIGHT OF LESS THAN ONE-HALF (½) INCH AND THE AREA SHALL BE RE-SEEDED IN ACCORDANCE WITH TABLE 2 BELOW. ALTERNATIVELY, THE COOL SEASON COVER CROP CAN BE MIXED WITH BERMUDAGRASS OR NATIVE SEED AND INSTALLED TOGETHER, UNDERSTANDING THAT GERMINATION OF WARM-SEASON SEED TYPICALLY REQUIRES SOIL TEMPERATURES OF 60 TO 70 DEGREES.

B. FROM MARCH 2 TO SEPTEMBER 14, SEEDING SHALL BE WITH HULLED BERMUDA AT A RATE OF 45 POUNDS PER ACRE WITH A PURITY OF 95% AND A MINIMUM PURE LIVE SEED (PLS) OF 0.83. BERMUDA GRASS IS A WARM SEASON GRASS AND IS CONSIDERED PERMANENT EROSION CONTROL. PERMANENT VEGETATIVE STABILIZATION CAN ALSO BE ACCOMPLISHED WITH A NATIVE PLANT SEED MIX CONFORMING TO ITEM 604S OR 609S.

   1. FERTILIZER USE SHALL FOLLOW THE RECOMMENDATION OF A SOIL TEST. SEE ITEM 606S, FERTILIZER. APPLICATIONS OF FERTILIZER (AND PESTICIDE) ON CITY-OWNED AND MANAGED PROPERTY REQUIRES THE YEARLY SUBMITTAL OF A PESTICIDE AND FERTILIZER APPLICATION RECORD, ALONG WITH A CURRENT COPY OF THE APPLICATOR'S LICENSE. FOR CURRENT COPY OF THE RECORD TEMPLATE CONTACT THE CITY OF BEE CAVE ENGINEERING STAFF.

   2. HYDROMULCH SHALL COMPLY WITH TABLE 2, BELOW.

   3. WATER THE SEEDED AREAS IMMEDIATELY AFTER INSTALLATION TO ACHIEVE GERMINATION AND A HEALTHY STAND OF PLANTS THAT CAN ULTIMATELY SURVIVE WITHOUT SUPPLEMENTAL WATER. APPLY THE WATER UNIFORMLY TO THE PLANTED AREAS WITHOUT CAUSING DISPLACEMENT OR EROSION OF THE MATERIALS OR SOIL. MAINTAIN THE SEEDBED IN A MOIST CONDITION FAVORABLE FOR PLANT GROWTH. ALL WATERING SHALL COMPLY WITH CITY CODE, AT RATES AND FREQUENCIES DETERMINED BY A LICENSED IRRIGATOR OR OTHER QUALIFIED PROFESSIONAL, AND AS ALLOWED BY THE WTCPUA/WCID NO. 17 AND CURRENT WATER RESTRICTIONS AND WATER CONSERVATION INITIATIVES.

   4. PERMANENT EROSION CONTROL SHALL BE ACCEPTABLE WHEN THE GRASS HAS GROWN AT LEAST 1½ INCHES HIGH WITH A MINIMUM OF 95 PERCENT FOR THE NON-NATIVE MIX, AND 95 PERCENT COVERAGE FOR THE NATIVE MIX SO THAT ALL AREAS OF A SITE THAT RELY ON VEGETATION FOR STABILITY MUST BE UNIFORMLY VEGETATED, AND PROVIDED THERE ARE NO BARE SPOTS LARGER THAN 10 SQUARE FEET.

   5. WHEN REQUIRED, NATIVE PLANT SEEDING SHALL COMPLY WITH REQUIREMENTS OF THE CITY OF BEE CAVE UDC, ENVIRONMENTAL CRITERIA MANUAL, AND CITY OF AUSTIN ITEMS 604S AND 609S.

TABLE 2: HYDROMULCHING FOR PERMANENT VEGETATIVE STABILIZATION

MATERIAL	DESCRIPTION	LONGEVITY	TYPICAL APPLICATIONS	APPLICATION RATES
BONDED FIBER MATRIX (BFM)	80% ORGANIC DEFIBRATED FIBERS			
10% TACKIFIER	6 MONTHS	ON SLOPES UP TO 2:1 AND EROSIVE SOIL CONDITIONS	2500 TO 4000 LBS PER ACRE (SEE MANUFACTURERS RECOMMENDATIONS)	
FIBER REINFORCED MATRIX (FRM)	65% ORGANIC DEFIBRATED FIBERS 25% REINFORCING FIBERS OR LESS 10% TACKIFIER	UP TO 12 MONTHS	ON SLOPES UP TO 1:1 AND EROSIVE SOIL CONDITIONS	3,000 TO 4,500 LBS PER ACRE (SEE MANUFACTURERS RECOMMENDATIONS)

DEVELOPER INFORMATION:

OWNER: INVESTCOR DEVELOPMENT

PHONE: (512) 750-7272

ADDRESS: 3001 RANCH ROAD 620, STE 324

AUSTIN, TX 78738

OWNER'S REPRESENTATIVE RESPONSIBLE FOR PLAN ALTERATIONS:

MILLER GRAY, LLC

PERSON OR FIRM RESPONSIBLE FOR EROSION/SEDIMENTATION CONTROL MAINTENANCE:

CONTRACTOR

PERSON OR FIRM RESPONSIBLE FOR TREE/NATURAL AREA PROTECTION MAINTENANCE:

CONTRACTOR

THE CONTRACTOR SHALL NOT DISPOSE OF SURPLUS EXCAVATED MATERIAL FROM THE SITE WITHOUT NOTIFYING THE PLANNING AND DEVELOPMENT REVIEW DEPARTMENT AT 974-2278 AT LEAST 48 HOURS PRIOR WITH THE LOCATION AND A COPY OF THE PERMIT ISSUED TO RECEIVE THE MATERIAL.

APPENDIX E-2: ADOPTED JUNE 28, 2022
CITY OF BEE CAVE STANDARD NOTES FOR TREE AND NATURAL AREA PROTECTION

A. ALL TREES AND NATURAL AREAS SHOWN ON PLAN TO BE PRESERVED SHALL BE PROTECTED DURING CONSTRUCTION WITH TEMPORARY FENCING.

B. PROTECTIVE FENCES SHALL BE ERECTED ACCORDING TO CITY OF BEE CAVE STANDARDS FOR TREE PROTECTION.

C. PROTECTIVE FENCES SHALL BE INSTALLED PRIOR TO THE START OF ANY SITE PREPARATION WORK (CLEARING, GRUBBING OR GRADING), AND SHALL BE MAINTAINED THROUGHOUT ALL PHASES OF THE CONSTRUCTION PROJECT.

D. EROSION AND SEDIMENTATION CONTROL BARRIERS SHALL BE INSTALLED OR MAINTAINED IN A MANNER WHICH DOES NOT RESULT IN SOIL BUILD- UP WITHIN TREE DRIP LINES.

E. PROTECTIVE FENCES SHALL SURROUND THE TREES OR GROUP OF TREES, AND WILL BE LOCATED AT THE OUTERMOST LIMIT OF BRANCHES (DRIP LINE), FOR NATURAL AREAS, PROTECTIVE FENCES SHALL FOLLOW THE LIMIT OF CONSTRUCTION LINE, IN ORDER TO PREVENT THE FOLLOWING:

   1. SOIL COMPACTION IN THE ROOT ZONE AREA RESULTING FROM VEHICULAR TRAFFIC OR STORAGE OF EQUIPMENT OR MATERIALS;
   2. ROOT ZONE DISTURBANCES DUE TO GRADE CHANGES (GREATER THAN 6 INCHES CUT OR FILL), OR TRENCHING NOT REVIEWEDAND AUTHORIZED BY THE CITY;
   3. WOUNDS TO EXPOSED ROOTS, TRUNK OR LIMBS BY MECHANICAL EQUIPMENT;
   4. OTHER ACTIVITIES DETRIMENTAL TO TREES SUCH AS CHEMICAL STORAGE, CEMENT TRUCK CLEANING, AND FIRES.

F. EXCEPTIONS TO INSTALLING FENCES AT TREE DRIP LINES MAY BE PERMITTED IN THE FOLLOWING CASES:

   1. WHERE THERE IS TO BE AN APPROVED GRADE CHANGE, IMPERMEABLE PAVING SURFACE, TREE WELL, OR OTHER SUCH SITE DEVELOPMENT, ERECT THE FENCE APPROXIMATELY 2 TO 4 FEET BEYOND THE AREA DISTURBED;
   2. WHERE PERMEABLE PAVING IS TO BE INSTALLED WITHIN A TREE'S DRIP LINE, ERECT THE FENCE AT THE OUTER LIMITS OF THE PERMEABLE PAVING AREA (PRIOR TO SITE GRADING SO THAT THIS AREA IS GRADED SEPARATELY PRIOR TO PAVING INSTALLATION TO MINIMIZED ROOT DAMAGE);
   3. WHERE TREES ARE CLOSE TO PROPOSED BUILDINGS, ERECT THE FENCE TO ALLOW 6 TO 10 FEET OF WORK SPACE BETWEENTHE FENCE AND THE BUILDING;
   4. WHERE THERE ARE SEVERE SPACE CONSTRAINTS DUE TO TRACT SIZE, OR OTHER SPECIAL REQUIREMENTS, CONTACT THE CITYAT 512-767-6675 TO DISCUSS ALTERNATIVES.

   SPECIAL NOTE: FOR THE PROTECTION OF NATURAL AREAS, NO EXCEPTIONS TO INSTALLING FENCES AT THE LIMIT OFCONSTRUCTION LINE WILL BE PERMITTED.

G. WHERE ANY OF THE ABOVE EXCEPTIONS RESULT IN A FENCE BEING CLOSER THAN 4 FEET TO A TREE TRUNK, PROTECT THE TRUNK WITH STRAPPED- ON PLANKING TO A HEIGHT OF 8 FT (OR TO THE LIMITS OF LOWER BRANCHING) IN ADDITION TO THE REDUCED FENCING PROVIDED.

H. TREES APPROVED FOR REMOVAL SHALL BE REMOVED IN A MANNER WHICH DOES NOT IMPACT TREES TO BE PRESERVED.

I. ANY ROOTS EXPOSED BY CONSTRUCTION ACTIVITY SHALL BE PRUNED FLUSH WITH THE SOIL. BACKFILL ROOT AREAS WITH GOOD QUALITY TOP SOIL AS SOON AS POSSIBLE. IF EXPOSED ROOT AREAS ARE NOT BACKFILLED WITHIN 2 DAYS, COVER THEM WITH ORGANIC MATERIAL IN A MANNER WHICH REDUCES SOIL TEMPERATURE AND MINIMIZES WATER LOSS DUE TO EVAPORATION.

J. ANY TRENCHING REQUIRED FOR THE INSTALLATION OF LANDSCAPE IRRIGATION SHALL BE PLACED AS FAR FROM EXISTING TREE TRUNKS AS POSSIBLE.

K. NO LANDSCAPE TOPSOIL DRESSING GREATER THAN 4 INCHES SHALL BE PERMITTED WITHIN THE DRIP LINE OF TREES. NO SOIL ISPERMITTED ON THE ROOT FLARE OF ANY TREE.

L. PRUNING TO PROVIDE CLEARANCE FOR STRUCTURES, VEHICULAR TRAFFIC AND EQUIPMENT SHALL TAKE PLACE BEFORE DAMAGEOCCURS (RIPPING OF BRANCHES, ETC.).

M. ALL FINISHED PRUNING SHALL BE DONE ACCORDING TO RECOGNIZED, APPROVED STANDARDS OF THE INDUSTRY (REFERENCE THENATIONAL ARBORIST ASSOCIATION PRUNING STANDARDS FOR SHADE TREES AVAILABLE ON REQUEST FROM THE CITY ARBORIST).

N. DEVIATIONS FROM THE ABOVE NOTES MAY BE CONSIDERED ORDINANCE VIOLATIONS IF THERE IS SUBSTANTIAL NON-COMPLIANCE OR IF A TREE SUSTAINS DAMAGE AS A RESULT.

811 Know what's below. Call before you dig.

CAUTION!
IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

FOR CITY USE ONLY:

MillerGRAY
Consulting • Engineering • Infrastructure
7320 N. MoPac Expressway, Suite 203
Austin, Texas 78731
Phone (512) 861-5300
www.miller-gray.com
TBPE FIRM REG. NO. F-16302

STATE OF TEXAS
J. TRAVIS WILSON
97307
LICENSED PROFESSIONAL ENGINEER
4/5/2024

P:\00323 Investcor\001 Starbucks Bee Cave\05_CAD\00323-00 tgns.dwg 4/5/2024 10:12 AM

STARBUCKS BEE CAVE
14211 STATE HWY 71, BEE CAVE, TEXAS 78738

CITY OF BEE CAVE NOTES
2 OF 2

REVISIONS/CORRECTIONS

NO.	DATE	DESCRIPTION	BY

PROJECT NUMBER 00323-001
DATE: 4/5/2024
DESIGNED: KKE
CHECKED: JTW

SHEET NO.
5 OF 41

23-789-SNPS

SPOILS MANAGEMENT AND DISPOSAL NOTES (WTCPUA) - REVISED MAY 25, 2020

1. TEMPORARY HOLDING SITES AS NECESSARY TO STOCKPILE EXCAVATED SOILS, EMBEDMENT MATERIAL, AND/OR PIPING AND APPURTENANCES MAY BE LOCATED WITHIN THE LIMITS OF CONSTRUCTION AS SHOWN ON THE PLANS.
2. NO PERMANENT SPOILS DISPOSAL SHALL BE ALLOWED ON-SITE, UNLESS APPROVED BY THE OWNER AND GOVERNING AUTHORITY.
3. ALL SPOILS MATERIALS SHALL BE DISPOSED OF BY THE CONTRACTOR AT AN APPROVED SPOIL DISPOSAL SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND SECURING A PERMIT FOR THE SITE; AND SHALL NOTIFY THE OWNER AND/OR ENGINEER AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO DISPOSAL OF ANY SPOILS MATERIAL.

EROSION/ SEDIMENTATION CONTROL NOTES (WTCPUA)

REFER TO CITY OF BEE CAVE EROSION/SEDIMENTATION NOTES ON SHEET 5

STANDARD TREE PROTECTION NOTES (WTCPUA)

REFER TO CITY OF BEE CAVE EROSION/SEDIMENTATION NOTES ON SHEET 5

HOURS OF CONSTRUCTION (WTCPUA)
REVISED MAY 25, 2020

1. NO WORK SHALL BE DONE BETWEEN THE HOURS OF 8:00 P.M. AND 6:00 A.M; NOR ON SUNDAYS OR LEGAL HOLIDAYS WITHOUT THE WRITTEN PERMISSION OF THE WTCPUA IN EACH CASE, EXCEPT SUCH WORK AS MAY BE NECESSARY FOR THE PROPER CARE, MAINTENANCE AND PROTECTION OF THE WORK ALREADY DONE OR IN THE CASE OF AN EMERGENCY.

LIMITS OF CONSTRUCTION NOTES (WTCPUA)
REVISED MAY 25, 2020

1. THE LIMITS OF CONSTRUCTION SHALL BE BOUNDED BY THE RIGHT OF WAY LINE OR PERMANENT/ TEMPORARY EASEMENT LIMITS SHOWN ON THE PLANS. LIMITS OF CONSTRUCTION MAY BE FURTHER RESTRICTED BY PLACEMENT OF SILT FENCE, TREE PROTECTION FENCING, OR OTHER APPURTENANCES AS SHOWN ON THE PLANS.
2. LIMITS OF CONSTRUCTION SHALL BE CLEARLY DELINEATED BY THE CONTRACTOR BY INSTALLING SILT FENCE, ORANGE TENSAR FENCING (4 - FOOT ROLL TIED TO 6 FOOT POSTS SET AT 10 FOOT INTERVALS) OR OTHER BARRIERS AS APPROVED BY THE ENGINEER. ALL TEMPORARY BARRIERS SHALL BE REMOVED AT THE END OF THE PROJECT.
3. ANY AREAS OUTSIDE THE LIMITS OF CONSTRUCTION DISTURBED BY THE CONTRACTOR SHALL IMMEDIATELY BE RESTORED TO PRECONSTRUCTION CONDITION.

SANITARY FACILITIES (WTCPUA) - REVISED MAY 25, 2020

1. PROVISIONS SHALL BE MADE FOR NECESSARY SANITARY CONVENIENCES FOR THE USE OF LABORERS ON THE WORK. THE FACILITIES MUST BE PROPERLY SECLUDED FROM PUBLIC OBSERVATION AND SHALL BE INSTALLED AND MAINTAINED BY THE CONTRACTOR.

PROTECTION OF BORE PITS (WTCPUA)
REVISED MAY 25, 2020

1. INSTALL BARRIER FENCING (TENSAR ORANGE FENCING OR CHAIN LINK FENCING) TO SURROUND THE BORE PITS. BARRIER FENCING SHALL REMAIN IN PLACE AT ALL TIMES WHILE THE BORE PIT IS OPEN. CONTRACTOR SHALL BE RESPONSIBLE FOR SECURITY AND SAFETY AT THE BORE PITS.

HORIZONTAL CONTROLS (WTCPUA)
REVISED MAY 25, 2020

1. ALL LINE WORK SHALL BE STAKED PRIOR TO CONSTRUCTION WITH SEALED CUT SHEETS PROVIDED TO THE WTCPUA INSPECTOR PRIOR TO CONSTRUCTION.

CONSTRUCTION SEQUENCING

REFER TO CITY OF BEE CAVE EROSION/SEDIMENTATION NOTES ON SHEET 5

TRAFFIC CONTROL NOTES (WTCPUA) - REVISED MAY 25, 2020

1. PLANS SHALL INDICATE RESPONSIBLE AGENT FOR TRAFFIC CONTROL (ENGINEER OR CONTRACTOR).
2. CONTRACTOR SHALL MAINTAIN REASONABLE LOCAL VEHICULAR TRAFFIC THROUGHOUT CONSTRUCTION OPERATIONS.
3. CONTRACTOR SHALL PROVIDE SIGNS, BARRICADES, FLAGGERS, AND OTHER MEASURES AS REQUIRED TO ALLOW FOR VEHICULAR AND PEDESTRIAN TRAFFIC TO PROCEED SAFELY WITH MINIMUM INCONVENIENCE.
4. SIGNS, BARRICADES, FLAGGERS, AND RELATED WORK SHALL BE IN ACCORDANCE WITH THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND WITH THE REQUIREMENTS OF THE GOVERNING CITY/COUNTY.
5. FOR ANY ACTIVITY WITHIN TXDOT RIGHT-OF-WAY, PROJECT MUST HA', E A TXDOT PERMIT. A COPY OF THE TXDOT PERMIT SHALL BE PROVIDED TO THE WTCPUA PRIOR TO CONSTRUCTION.

SWPPP NOTES (WTCPUA)
REVISED MAY 25, 2020

THIS PROJECT IS SUBJECT TO THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY'S (TCEQ) TEXAS POLLUTION DISCHARGE ELIMINATION SYSTEM (TPDES) GENERAL PERMIT TXR150000 FOR CONSTRUCTION ACTIVITIES. THE GENERAL PERMIT REQUIRES THE PREPARATION OF A STORM WATER POLLUTION PREVENTION PLAN (SWPPP), WHICH HAS BEEN PROVIDED BY THE OWNER FOR USE BY THE CONTRACTOR. THE OWNER SHALL PROVIDE THE OWNER'S NOTICE OF INTENT (NOI) AND NOTICE OF TERMINATION (N0T) TO THE TCEQ. THE CONTRACTOR'S RESPONSIBILITIES ARE AS FOLLOWS:

1. MAINTAIN A COPY OF THE SWPPP AND A SET OF CONSTRUCTION PLANS WITH THE TEMPORARY EROSION ANDSEDIMENT CONTROL PLAN AT THE WORK SITE AT ALL TIMES.
2. FILE A NOTICE OF INTENT (NOI) AND APPLICABLE PAYMENT TO THE TCEQ AT LEAST 2 DAYS PRIOR TO SITE DISTURBANCE.
3. POST A COPY OF THE OWNER'S AND CONTRACTOR'S NOI FORMS AT THE WORK SITE.
4. SIGN THE CERTIFICATION AND OBTAIN A SIGNED CERTIFICATION STATEMENT FROM ALL SUBCONTRACTORS RESPONSIBLE FOR IMPLEMENTING THE EROSION AND SEDIMENT CONTROL MEASURES WHICH INDICATES THAT THE CONTRACTOR AND SUBCONTRACTOR UNDERSTANDS THE PERMIT REQUIREMENTS (FORMS ARE IN THE SWPPP)
5. FOLLOW AND COMPLY WITH ALL ASPECTS OF THE TPDES GENERAL PERMIT NO. TXR150000. THIS INCLUDES BUT IS NOT LIMITED TO FIELD INSPECTIONS AND REPORT, MAINTAINING AND REPAIRING EROSION CONTROLS AND UPDATING EROSION CONTROLS AND UPDATING EROSION CONTROL PLAN SHEETS BASED ON FIELD CHANGES AND MODIFICATIONS.
6. FILE A COPY OF THE CONTRACTOR'S NOTICE OF TERMINATION (NOT) WITH THE TCEQ ONCE THEWORK IS COMPLETED IN ACCORDANCE WITH THE TPDES GENERAL PERMIT NO TXR.150000 AND HAS BEEN ACCEPTED BY THE OWNER.

WATER & WASTEWATER GENERAL CONSTRUCTION NOTES (WTCPUA)
REVISED MAY 25, 2020

1. ALL CONSTRUCTION OPERATIONS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH APPLICABLE STATESTATUTES AND U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION REGULATIONS (O.S.H.A.).COPIES OF O.S.H.A. STANDARDS MAY BE PURCHASED FROM THE U.S. GOVERNMENT PRINTING OFFICE.INFORMATION AND RELATED REFERENCE MATERIALS MAY BE OBTAINED FROM O.S.H.A. AUSTIN AREAOFFICE - LA COSTA GREEN BLDG 1033, LA POSADA DR, SUITE 375, AUSTIN, TEXAS 78752-3832, 512-374-0271.
2. THE ATTENTION OF THE CONTRACTOR IS DIRECTED TO THE CITY OF AUSTIN STANDARD SPECIFICATIONSAND TO THE STATE LAW, (VERNON'S ANNOTATED TEXAS STATUTES, ARTICLE 1436 ©) AND THE NEEDFOR EFFECTIVE PRECAUTIONARY MEASURES WHEN OPERATING IN THE VICINITY OF ELECTRICAL LINES. THECONTRACTOR IS RESPONSIBLE FOR ALL SAFETY REQUIREMENTS, AND FOR COORDINATION OF ALL WORK WITHTHE APPROPRIATE ELECTRIC UTILITY COMPANY.
3. THE CONTRACTOR SHALL CONTACT THE ONE-CALL BOARD OF TEXAS AT 811 OR 1-800-545-6005 FOREXISTING UTILITY LOCATIONS PRIOR TO ANY EXCAVATION. THE LOCATION AND TYPE OF UTILITIES ANDUNDERGROUND FACILITIES SHOWN ON THESE PLANS ARE NOT GUARANTEED TO BE ACCURATE OR ALL-INCLUSIVE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE AND PROTECT ALL EXISTING UTILITIES. THECONTRACTOR SHALL VERIFY ALL DEPTHS AND LOCATIONS OF EXISTING UTILITIES PRIOR TO ANYCONSTRUCTION. IN ADDITIONAL TO NORMAL PRECAUTIONS WHEN EXCAVATING, USE EXTRA CAUTIONWHEN EXCAVATING WITHIN 25 FEET OF ANY UTILITIES SHOWN ON THE PLANS.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COORDINATION BETWEEN HIMSELF AND OTHERCONTRACTORS AND UTILITIES IN THE VICINITY OF THE PROJECT. THIS INCLUDES ALL WATER, WASTEWATER,GAS, ELECTRICAL, TELEPHONE, CABLE TELEVISION, AND STREET AND DRAINAGE WORK. ONCE THECONTRACTOR BECOMES AWARE OF A POSSIBLE CONFLICT, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFYTHE ENGINEER AND WTCPUA INSPECTOR WITHIN TWENTY-FOUR (24) HOURS.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DISPOSING OF ALL SPOIL MATERIAL FROM THE CONSTRUCTION SITE. ALL SPOILS MATERIAL SHALL BE DISPOSED OF BY THE CONTRACTOR AT AN APPROVED SPOIL SITE.THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND SECURING A PERMIT FOR THE SITE. THE CONTRACTOR SHALL NOTIFY THE WTCPUA INSPECTOR AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO DISPOSAL OF THE MATERIAL. NO SPOILS ARE TO REMAIN OVERNIGHT IN THE FLOODPLAIN.
6. NO BLASTING OR BURNING WILL BE ALLOWED.
7. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR, AT HIS EXPENSE, ALL UTILITIES, PAVEMENT,CURB, FENCES OR ANY OTHER ITEMS DAMAGED DURING CONSTRUCTION REGARDLESS OF WHETHER THESE ITEMS ARE SHOWN ON THE CONSTRUCTION PLANS.
8. WHENEVER EXISTING UTILITIES, INDICATED OR NOT ON PLANS, PRESENT OBSTRUCTIONS TO GRADE AND/OR ALIGNMENT OF PROPOSED PIPE, CONTRACTOR IS TO IMMEDIATELY NOTIFY THE ENGINEER WHO WILL DETERMINE IF EXISTING IMPROVEMENTS ARE TO BE RELOCATED OR IF THE GRADE AND/OR ALIGNMENT OF PROPOSED PIPE IS TO BE CHANGED.
9. DUST PREVENTION SHALL BE PROVIDED BY THE CONTRACTOR AT HIS OWN EXPENSE. DUST CONTROL SHALL INCLUDE SPRAYING OF WATER ON ALL DISTURBED AREAS, SPOIL PILES, OR HAUL MATERIALS ASSOCIATED WITH THE PROJECT OR OTHER METHODS APPROVED BY THE WTCPUA.
10. CLEANUP - UPON COMPLETION AND BEFORE MAKING APPLICATION FOR ACCEPTANCE OF THE WORK, THE CONTRACTOR SHALL CLEAN ALL STREETS AND ALL GROUND OCCUPIED BY HIM IN CONNECTION WITH THE WORK OF ALL RUBBISH, EXCESS MATERIALS, EXCESS EXCAVATED MATERIALS, TEMPORARY STRUCTURES AND EQUIPMENT. ALL PARTS OF THE WORK SHALL BE LEFT IN A NEAT AND PRESENTABLE CONDITION SATISFACTORY TO THE WTCPUA AND OTHER GOVERNMENTAL BODIES HAVING JURISDICTION PRIOR TO SUBMITTAL OF THE FINAL PAYMENT.
11. THE CONTRACTOR SHALL MAINTAIN ACCESS TO BUSINESSES AND RESIDENCES AT ALL TIMES. THE CONTRACTOR SHALL COORDINATE WITH PROPERTY OWNERS TO MINIMIZE DISRUPTION OF DELIVERIES, PARKING, AND OTHER ACTIVITIES.
12. DEWATERING, IF NECESSARY, SHALL BE CONSIDERED INCIDENTAL TO THE WORK AND SHALL NOT CONSTITUTE ABASIS FOR ADDITIONAL PAYMENT.
13. THE MINIMUM DEPTH OF COVER FROM TOP OF PIPE TO FINISHED GRADE FOR ALL WATER LINES SHALL BE FOUR FEET. INSTALL LINES TO AVOID HIGH POINTS.
14. CONCRETE SHALL BE CLASS 'A' WITH A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 3,000 PSI, UNLESS OTHERWISE NOTED. '
15. REINFORCING STEEL SHALL BE ASTM A 615M, GRADE 60 UNLESS OTHERWISE NOTED.
16. ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE PLANS REMAINS WITH THE ENGINEER WHO PREPARED THEM. IN REVIEWING THESE PLANS, THE WTCPUA MUST RELY ON THE ADEQUACY OF THE DESIGN ENGINEER. APPROVAL OF THESE PLANS BY THE WTCPUA DOES NOT RELEASE THE DESIGN ENGINEER OFTHESE RESPONSIBILITIES.

WTCPUA CONTACT INFORMATION

FACILITIES OWNER: WEST TRAVIS COUNTY PUA

13215 BEE CAVE PARKWAY, BUILDING B, SUITE 110

BEE CAVE, TEXAS 78738

(512) 263-0100

JRIECHERS@WTCPUA.ORG

LAND OWNER INFORMATION: BEE CAVE HOLDINGS, LLC

3001 RANCH ROAD 620, STE 324

AUSTIN, TEXAS 78738

(512) 750-7272

OWNER'S REPRESENTATIVE RESPONSIBLE FOR PLAN ALTERATIONS:

MILLER GRAY, LLC (512) 861-5300

MAINTENANCE: PERSON OR FIRM RESPONSIBLE FOR EROSION/SEDIMENTATION CONTROL:

CONTRACTOR

PERSON OR FIRM RESPONSIBLE FOR TREE/NATURAL AREA PROTECTION:

CONTRACTOR

Know what's **below.** **Call** before you dig.

CAUTION!

IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

FOR CITY USE ONLY:

MillerGRAY
Consulting • Engineering • Infrastructure
7320 N. MoPac Expressway, Suite 203
Austin, Texas 78731
Phone (512) 861-5300
www.miller-gray.com
TBPE FIRM REG. NO. F-16302

STATE OF TEXAS
J. TRAVIS WILSON
97307
LICENSED PROFESSIONAL ENGINEER
4/5/2024

P:\00323 Investor\001 Starbucks Bee Cave\05_CAD\00323-00 tgns.dwg 4/5/2024 10:12 AM

STARBUCKS BEE CAVE
14211 STATE HWY 71, BEE CAVE, TEXAS 78738

WTCPUA NOTES
1 OF 2

REVISIONS/CORRECTIONS

NO.	DATE	DESCRIPTION	BY

PROJECT NUMBER 00323-001
DATE: 4/5/2024
DESIGNED: KKE
CHECKED: JTW

SHEET NO.
6 OF 41

23-789-SNPS

TCEQ WATER DISTRIBUTION SYSTEM
GENERAL CONSTRUCTION NOTES - REVISED FEBRUARY 2019 OR LATEST VERSION

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 SYSTEMS30 TEXAS ADMINISTRATIVE CODE (TAC) CHAPTER 290 SUBCHAPTER D. WHEN CONFLICTS ARE NOTED WITH LOCAL STANDARDS, THE MORE STRINGENT REQUIREMENT SHALL BE APPLIED. AT A MINIMUM, CONSTRUCTION FOR PUBLIC WATER SYSTEMS MUST ALWAYS MEET TCEQ'S "RULES AND REGULATIONS FOR PUBLIC WATER SYSTEMS."
2. 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 [§290.44(A)(1)].
3. 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 [§290.44(A)(2)].
4. 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 [§290.44(A)(3)].
5. ALL WATER LINE CROSSINGS OF WASTEWATER MAINS SHALL BE PERPENDICULAR [§290.44(E)(4)(B)].
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 [§290.44(A)(4)].
7. THE MAXIMUM ALLOWABLE LEAD CONTENT OF PIPES, PIPE FITTINGS, PLUMBING FITTINGS, AND FIXTURES IS0.25 PERCENT [§290.44(B)].
8. THE CONTRACTOR SHALL INSTALL APPROPRIATE AIR RELEASE DEVICES WITH VENT OPENINGS TO THE ATMOSPHERE COVERED WITH 16-MESH OR FINER, CORROSION RESISTANT SCREENING MATERIAL OR AN ACCEPTABLE EQUIVALENT [§290.44(D)(1)].
9. THE CONTRACTOR SHALL NOT PLACE THE PIPE IN WATER OR WHERE IT CAN BE FLOODED WITH WATER OR SEWAGE DURING ITS STORAGE OR INSTALLATION [§290.44(F)(1)].
10. WHEN WATERLINES ARE LAID UNDER ANY FLOWING OR INTERMITTENT STREAM OR SEMI-PERMANENT BODY OF WATER THE WATERLINE 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 [§290.44(F)(2)].
11. 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;

$$Q = \frac{LD\sqrt{P}}{148{,}000}$$

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 IN (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;

$$L = \frac{SD\sqrt{P}}{148{,}000}$$

Q = 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 IN (PSI).

12. THE CONTRACTOR SHALL MAINTAIN A MINIMUM SEPARATION DISTANCE IN ALL DIRECTIONS OF NINE FEET BETWEEN THE PROPOSED WATERLINE AND WASTEWATER COLLECTION FACILITIES INCLUDING MANHOLES. 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 §290.44(E)(1)-(4).
13. 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 [§290.44(E)(5)].
14. 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 [§290.44(E)(6)].
15. 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 [§290.44(E)(7)].
16. WATERLINES SHALL NOT BE INSTALLED CLOSER THAN TEN FEET TO SEPTIC TANK DRAIN FIELDS [§290.44(E)(8)].
17. THE CONTRACTOR SHALL DISINFECT THE NEW WATERLINES IN ACCORDANCE WITH AWWA STANDARD C-651-14 OR MOST RECENT, 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 WATERLINE WILL BE REQUIRED OR AT THE NEXT AVAILABLE SAMPLING POINT BEYOND 1,000 FEET AS DESIGNATED BY THE DESIGN ENGINEER [§290.44(F)(3)].
18. DE-CHLORINATION OF DISINFECTING WATER SHALL BE IN STRICT ACCORDANCE WITH CURRENT AWWA STANDARD C655-09 OR MOST RECENT.

WATER AND WASTEWATER UTILITY NOTES (WTCPUA)
REVISED MAY 25, 2020

1. WEST TRAVIS COUNTY PUA IS THE WATER AND / OR WASTEWATER SERVICE PROVIDER FOR THIS PROJECT.A PRE-CONSTRUCTION MEETING WITH THE WTCPUA SHALL BE HELD PRIOR TO COMMENCEMENT OF CONSTRUCTION TO SCHEDULE INSPECTION OF INSTALLATION OF WATER/WASTEWATER FACILITIES. WATER FACILITIES WILL BE INSPECTED UP TO, AND INCLUDING, THE WATER METER AND/OR FIRE HYDRANTS. THE CONTACT NUMBER FOR WTCPUA IS (512) 263- 0100.
2. THE CITY OF AUSTIN STANDARD SPECIFICATIONS AND STANDARD DETAILS CURRENT AT THE TIME OF CONSTRUCTION SHALL GOVERN MATERIALS AND METHODS USED TO PERFORM THIS WORK. CITY OF AUSTIN SPECIFICATIONS AND STANDARD DETAILS ARE AVAILABLE AT HTTPS://LIBRARY.MUNICODE.COM/TX/AUSTIN/CODES/
3. CONTRACTOR SHALL OBTAIN ALL APPROVALS AND PERMITS, INCLUDING BUT NOT LIMITED TO STREET/DRIVEWAY CUT AND UTILITY CUT PERMITS FROM THE APPROPRIATE GOVERNMENTAL AGENCY BEFORE BEGINNING CONSTRUCTION WITHIN THE RIGHT-OF-WAY OF A PUBLIC STREET OR ALLEY.
4. THE WTCPUA SHALL BE CONTACTED AT (512) 263-0100 AT LEAST 48 HOURS BEFORE CONNECTING TO THEIR EXISTING WATER AND/OR WASTEWATER FACILITIES.
5. THE CONTRACTOR SHALL CONTACT THE AUSTIN AREA "ONE CALL" SYSTEM AT 811 OR 1-800-545-6005 FOR EXISTING UTILITY LOCATIONS PRIOR TO ANY EXCAVATION. IN ADVANCE OF CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITIES TO BE EXTENDED, TIED TO, OR ALTERED, OR SUBJECT TO DAMAGE/INCONVENIENCE BY THE CONSTRUCTION OPERATIONS.
6. NO OTHER UTILITY SERVICE/APPURTENANCES SHALL BE PLACED NEAR THE PROPERTY LINE, OR OTHER ASSIGNED LOCATION DESIGNATED FOR WATER AND WASTEWATER UTILITY SERVICE THAT WOULD INTERFERE WITH THE WATER AND/OR WASTEWATER SERVICES.
8. WHERE WATER LINES AND 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). ANY DEVIATION THESE STANDARDS SHALL REQUIRE A VARIANCE APPROVED BY TCEQ BEFORE SUBMITTING PIPING ASSIGNMENTS TO THE WTCPUA.
9. THE CITY OF AUSTIN SPECIFICATION ITEM 509S WILL BE REQUIRED AS A MINIMUM TRENCH SAFETY MEASURE. CONTRACT DOCUMENTS, WHICH INCLUDE A TRENCH SAFETY PLAN SIGNED AND SEALED BY A TEXAS PROFESSIONAL ENGINEER AND A PAY ITEM FOR TRENCH SAFETY MEASURES, IN COMPLIANCE WITH OSHA, STATE, COUNTY, AND CITY REQUIREMENTS BEFORE BEGINNING WORK ON THE PROJECT.
10. ALL MATERIAL TESTS, INCLUDING SOIL DENSITY TESTS AND RELATED SOIL ANALYSIS, SHALL BE ACCOMPLISHED BY AN INDEPENDENT LABORATORY FUNDED BY THE OWNER IN ACCORDANCE WITH CITY OF AUSTIN STANDARD SPECIFICATION ITEM 1804S.4.
11. CONNECTIONS TO EXISTING WTCPUA WATER LINES SHALL BE MADE BY CUT-IN TEES IN ACCORDANCE WITH CITY OF AUSTIN STANDARD SPECIFICATION ITEM 510.3(24). ISOLATION VALVES SHALL BE INSTALLED ON THE ENDS OF THE CUT-IN TEE, AS NECESSARY. A SHUT-OUT VALVE PLAN SHALL BE PROVIDED SHOWING THE LOCATION OF EXISTING GATE VALVES IN THE VICINITY OF THE CONNECTION. THE SHUT-OUT PLAN SHALL IDENTIFY ALL AFFECTED PROPERTY OWNERS. CONTRACTOR SHALL PERFORM ALL WORK AND SHALL FURNISH ALL MATERIALS, INCLUDING DRAINING AND CUTTING INTO EXISTING PIPING AND CONNECTING A NEW PIPELINE OR OTHER EXTENSION INTO THE EXISTING PRESSURE PIPING, FORMING AN ADDITION TO THE POTABLE WATER TRANSMISSION AND DISTRIBUTION NETWORK AND PERFORMING NECESSARY SHUTOFFS. CONTRACTOR SHALL SCHEDULE ALL SUCH CONNECTIONS IN ADVANCE AND SUCH SCHEDULE SHALL BE APPROVED BY THE WTCPUA BEFORE BEGINNING THE WORK. AT LEAST 48 HOURS-NOTICE SHALL BE GIVEN TO THE WTCPUA PRIOR TO MAKING THE CONNECTION, AND A REPRESENTATIVE FROM THE WTCPUA SHALL BE PRESENT WHEN THE CONNECTION IS MADE. PRESSURE TAPS MAY BE APPROVED ON A CASE-BY-CASE BASIS. "SIZE ON SIZE" TAPS WILL NOT BE PERMITTED. WHEN APPROVED, ANY TAPS SHALL BE MADE BY USE OF AND APPROVED FULL CIRCLE, GASKETED CAST IRON OR DUCTILE IRON TAPPING SLEEVE. CONCRETE BLOCKING SHALL BE PLACED BEHIND AND UNDER ALL TAP SLEEVES PRIOR TO MAKING THE PRESSURE TAP AND THE USE OF PRECAST BLOCKS MAY BE USED TO HOLD THE TAP IN ITS CORRECTION POSITION PRIOR TO BLOCKING. THE BLOCKING BEHIND AND UNDER THE TAP SHALL HAVE A MINIMUM OF 24 HOURS CURING TIME BEFORE THE VALVE CAN BE REOPENED FOR SERVICE FROM THAT TAP. THE CONTRACTOR SHALL NOTIFY THE WTCPUA INSPECTOR A MINIMUM OF SEVENTY-TWO (72) HOURS IN ADVANCE FOR THE WTCPUA TO NOTIFY THE AFFECTED CUSTOMERS. THE WTCPUA SHALL BE PRESENT WHILE ALL WORK IS PERFORMED TO MAKE THE CONNECTION.
12. THRUST RESTRAINT SHALL BE BY METAL THRUST RESTRAINTS IN ACCORDANCE WITH CITY OF AUSTIN STANDARD SPECIFICATION ITEM 510.3(22).
13. FIRE HYDRANTS SHALL BE SET IN ACCORDANCE WITH CITY OF STANDARD SPECIFICATION ITEM 51LS.3 E ANDSHALL BE APPROVED FIRE DEPARTMENT OR OTHER APPROPRIATE PARTY PRIOR TO INSTALLATION. FIREHYDRANTS ON MAINS UNDER CONSTRUCTION SHALL BE SECURELY WRAPPED WITH A POLY WRAP BAG ANDTAPED INTO PLACE. THE POLY WRAP WILL BE REMOVED WHEN THE MAINS ARE ACCEPTED AND PLACED INSERVICE. FIRE HYDRANTS THAT ARE TO BE USED AS DRAIN HYDRANTS SHALL BE PAINTED SILVER W/ BLUE CAPSPRIOR TO ACCEPTANCE. WHERE STORZ ADAPTORS ARE REQUIRED (HAYS COUNTY), FIRE HYDRANTS SHALL BEMANUFACTURED WITH INTEGRAL STORZ ADAPTORS.
14. WATER LINE TESTING AND STERILIZATION SHALL BE PERFORMED IN ACCORDANCE WITH CITY OF AUSTIN STANDARD SPECIFICATION ITEM 510.3(29) AND/OR TCEQ RULES.
15. TEST PRESSURE FOR 2-HOUR TEST SHALL BE AT 175 PSI AT THE LOWEST POINT IN THE LINE.

NOTE:
PRIOR TO PRESSURE TESTING, CONTRACTOR SHALL VERIFY THAT THRUST BLOCKING AND/OR THRUST RESTRAINT BACK TO AND INCLUDING THE VALVE AGAINST WHICH THE PRESSURE TEST SHALL BE PERFORMED, HAS BEEN INSTALLED TO AT LEAST THE SPECIFICATIONS OF THIS PROJECT. FAILURE TO VERIFY THAT THRUST BLOCKING AND/OR THRUST RESTRAINT IN THE EXISTING LINE MEETS OR EXCEEDS THE SPECIFICATIONS OF THIS PROJECT MAY RESULT IN SERIOUS DAMAGE TO THE EXISTING WATERLINE.

16. WATER LINES SHALL BE FILLED WITH WATER AND ALL AIR EXPELLED AT LEAST 24 HOURS BEFORE TESTING. ALL SERVICE LATERALS AND DRAIN VALVE LEADS, WITH THE HYDRANT VALVES CLOSED AND NOZZLE CAPS OPEN SHALL BE INCLUDED IN THE TESTS.
17. CONTRACTOR SHALL SUBMIT A DISINFECTION AND FLUSHING PLAN IN ACCORDANCE WITH AWWA STANDARDS TO THE WTCPUA FOR APPROVAL. REQUIRED FLUSHING VOLUMES, FLUSHING SCHEDULE, AND METHOD OF DISPOSAL OF FLUSH WATER SHALL BE IN ACCORDANCE WITH THE APPROVED PLAN.
18. GATE VALVES SHALL BE RESILIENT SEATED GATE VALVES CONFORMING TO AWWA C509, WITH A MINIMUM RATED WORKING PRESSURE OF 250 PSIG.
19. FORCE MAIN TESTING SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY OF AUSTIN STANDARD SPECIFICATION ITEM 510.3(27) AND/OR TCEQ RULES.
20. GRAVITY SANITARY SEWER MAIN TESTING SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY OF AUSTIN STANDARD SPECIFICATION ITEMS 510.3(26) AND/OR TCEQ RULES. IN ADDITION, ALL GRAVITY SANITARY SEWER MAINS SHALL BE TELEVISED PRIOR TO ACCEPTANCE BY WTCPUA. DIGITAL FILES (VIA CD-ROM) CLEARLY SHOWING TELEVISED RECORDING SHALL BE SUBMITTED TO THE ENGINEER OF RECORD FOLLOWING INSPECTION.
21. LOCATOR 'FINDER' WIRE - ALL NON -METALLIC WATER LINES SHALL HAVE A FINDER WIRE LOCATED ABOVETHE PIPE. THE WIRE SHALL BE POLY-INSULATED NO. 10 SOLID COPPER AND WILL TERMINATE AT EACHISOLATION VALVE SUCH THAT IT IS ACCESSIBLE FROM THE VALVE BOX.

WATER AND WASTEWATER UTILITY NOTES (WTCPUA)
REVISED MAY 25, 2020

22. LOCATOR 'FINDER' WIRE - ALL NON-METALLIC WASTEWATER LINES SHALL HAVE A FINDER WIRE LOCATED ABOVETHE PIPE. THE WIRE SHALL BE POLY-INSULATED NO. 10 SOLID COPPER AND WILL TERMINATE AT READILYACCESSIBLE LOCATIONS THROUGHOUT THE COLLECTION SYSTEM.
23. ALL VALVE RISERS SHALL HAVE A 1'-6" SQUARE CONCRETE BOX POURED AROUND THEM AT FINISHED GRADE.
24. ALL MANHOLES SHALL BE LINED WITH A CORROSION RESISTANT LINING APPROVED BY THE WTCPUA.
25. BOLTED AND GASKETED COVERS SHALL BE USED FOR ALL MANHOLES LOCATED IN THE 100-YEAR FLOODPLAIN.WHERE THERE ARE MORE THAN THREE GASKETED MANHOLES IN A ROW, VENTS SHALL BE PROVIDED ONE VERY THIRD MANHOLE.
26. THE DOWNSTREAM END OF ANY FORCE MAIN SHALL BE TERMINATED IN A SANITARY SEWER MANHOLE IN A MANNER TO MINIMIZE TURBULENCE.
27. CONTRACTOR SHALL HAVE NECESSARY EROSION AND SEDIMENTATION CONTROLS IN PLACE PRIOR TO COMMENCING WATER/WASTEWATER FACILITY CONSTRUCTION.
28. RECORD DRAWINGS, AS STIPULATED BY THE WTCPUA, SHALL BE SUBMITTED TO THE ENGINEER OF RECORD FOR VERIFICATION AND FURNISHED TO THE WTCPUA UPON COMPLETION OF THE PROJECT.
29. THE WTCPUA WILL OWN AND OPERATE ALL WATER LINES AND APPURTENANCES UP TO AND INCLUDING THE WATER METER. THESE IMPROVEMENTS WILL BE DEFINED BY A RECORDED EASEMENT OR IN PUBLIC RIGHT-OF-WAY.
30. ANY PORTIONS OF WASTEWATER LINES INCLUDING SERVICES THAT ARE LOCATED OUTSIDE OF A RECORDED EASEMENT OR PUBLIC RIGHT-OF-WAY WILL BE OWNED AND MAINTAINED BY THE PROPERTY OWNER, ORHIS/HER ASSIGNS.
31. WHERE EXISTING WATER AND/OR WASTEWATER INFRASTRUCTURE IS TO BE ABANDONED, THE ENGINEER SHALL SUBMIT AN ABANDONMENT PLAN FOR APPROVAL BY THE WTCPUA.
32. WATER SERVICES SHALL BE INSTALLED USING HDPE PIPE. COPPER IS NOT ALLOWED.
33. FOR ANY STORM SEWER LINE CROSSING A WATER OR WASTEWATER LINE CLOSER THAN 18", THE STORM SEWER PIPE SHALL BE LAID SUCH THAT NO STORM SEWER JOINTS WILL BE OVER THE WATER PIPE CROSSING.

OTHER NOTES – ENGINEER IS RESPONSIBLE FOR INCLUDING ALL APPLICABLE NOTES, INCLUDING BUT NOT LIMITED TO COUNTY, CITY, TXDOT, STATE, FIRE DEPARTMENT, TCEQ (CZP, WPAP, ORGANIZED SEWAGE COLLECTION SYSTEM NOTES, GENERAL CONSTRUCTION NOTES). ENGINEER IS RESPONSIBLE FOR ENSURING THE CURRENT ADOPTED VERSION OF ALL NOTES IS INCLUDED IN THE CONSTRUCTION PLANS.

811 Know what's below. Call before you dig.

CAUTION!
IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

FOR CITY USE ONLY:

MillerGRAY
Consulting • Engineering • Infrastructure
7320 N. MoPac Expressway, Suite 203
Austin, Texas 78731
Phone (512) 861-5300
www.miller-gray.com
TBPE FIRM REG. NO. F-16302

STATE OF TEXAS
J. TRAVIS WILSON
97307
LICENSED PROFESSIONAL ENGINEER
4/5/2024

P:\00323 Investor\001 Starbucks Bee Cave\05_CAD\00323-00 tgns.dwg 4/5/2024 10:12 AM

STARBUCKS BEE CAVE
14211 STATE HWY 71, BEE CAVE, TEXAS 78738

WTCPUA NOTES
2 OF 2

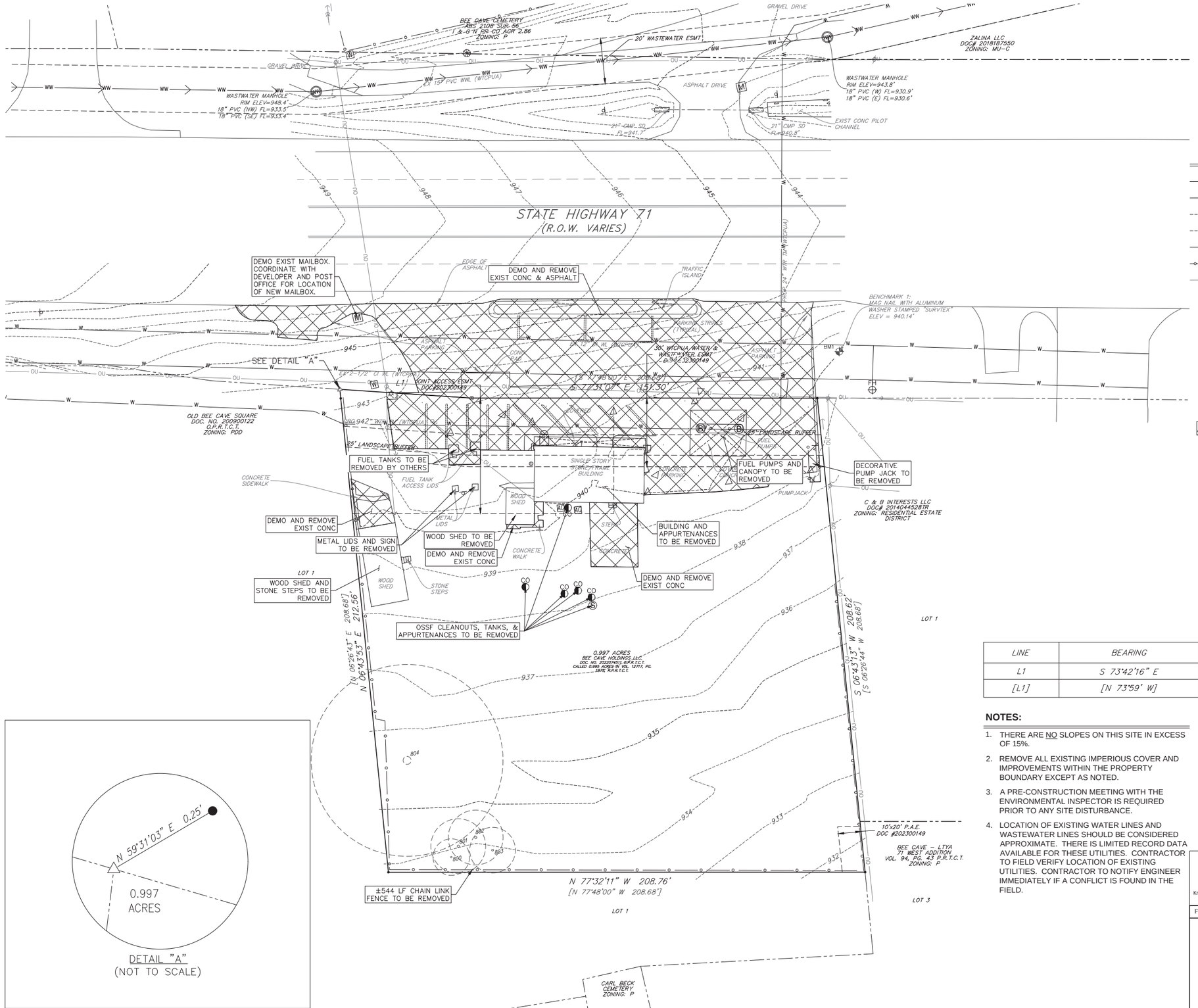
REVISIONS/CORRECTIONS

NO.	DATE	DESCRIPTION	BY

PROJECT NUMBER 00323-001
DATE: 4/5/2024
DESIGNED: KKE
CHECKED: JTW

SHEET NO.
7 OF 41

23-789-SNPS



LEGEND

- SUBJECT TRACT PROPERTY LINE
- ADJOINER TRACT PROPERTY LINE
- EXISTING CONTOUR (MAJOR)
- EXISTING CONTOUR (MINOR)
- EOP
- CHAIN LINK FENCE
- OU — OVERHEAD POWER LINE
- POWER POLE
- GUY ANCHOR
- BM — BENCHMARK
- 4224 — EXISTING TREE
- 4224 — EXISTING TREE TO BE REMOVED
- EXISTING CONCRETE
- 1/2" IRON ROD FOUND
- CHISEL MARK ON CONCRETE SET
- W — WATER METER
- E — ELECTRIC METER
- B — BOLLARD
- S — SEPTIC LID
- AC — AIR COMPRESSOR
- CO — WASTEWATER CLEANOUT
- MISCELLANEOUS VALVE
- M — MAILBOX
- FH — EXISTING FIRE HYDRANT

LINE	BEARING	DISTANCE
L1	S 73°42'16" E	57.94'
[L1]	[N 73°59' W]	

NOTES:

1. THERE ARE NO SLOPES ON THIS SITE IN EXCESS OF 15%.
2. REMOVE ALL EXISTING IMPERIOUS COVER AND IMPROVEMENTS WITHIN THE PROPERTY BOUNDARY EXCEPT AS NOTED.
3. A PRE-CONSTRUCTION MEETING WITH THE ENVIRONMENTAL INSPECTOR IS REQUIRED PRIOR TO ANY SITE DISTURBANCE.
4. LOCATION OF EXISTING WATER LINES AND WASTEWATER LINES SHOULD BE CONSIDERED APPROXIMATE. THERE IS LIMITED RECORD DATA AVAILABLE FOR THESE UTILITIES. CONTRACTOR TO FIELD VERIFY LOCATION OF EXISTING UTILITIES. CONTRACTOR TO NOTIFY ENGINEER IMMEDIATELY IF A CONFLICT IS FOUND IN THE FIELD.

TREE LIST		
NUMBER	DESCRIPTION	
[illegible]	[illegible]	[illegible]
TREE TO BE REMOVED		

811 Know what's below. Call before you dig.

CAUTION!
IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

FOR CITY USE ONLY:

MillerGRAY
Consulting • Engineering • Infrastructure
7320 N. MoPac Expressway, Suite 203
Austin, Texas 78731
Phone (512) 861-5300
www.miller-gray.com
TBPE FIRM REG. NO. F-16302

STATE OF TEXAS
J. TRAVIS WILSON
97307
LICENSED PROFESSIONAL ENGINEER
4/5/2024

P:\00323 Investor\001 Starbucks Bee Cave\05_CAD\00323-00.tcd.dwg 4/5/2024 10:12 AM

STARBUCKS BEE CAVE

14211 STATE HWY 71, BEE CAVE, TEXAS 78738

EXISTING CONDITIONS AND DEMOLITION PLAN

REVISIONS/CORRECTIONS

NO.	DATE	DESCRIPTION	BY

PROJECT NUMBER 00323-001
DATE: 4/5/2024
DESIGNED: KKE
CHECKED: JTW

SHEET NO.
8 OF 41

23-789-SNPS

EXISTING OVERALL IMPERVIOUS COVER

DRAINAGE BASIN	TOTAL AREA (SF)	IMPERV. AREA (SF)	TOTAL AREA (AC)	TOTAL AREA (SQ. MI)	% IMPERV.
EX-SITE	43,446	8,151	1.0	0.0016	18.8%
EX-OFF	16,169	16,169	0.37	0.0006	100.0%

EXISTING CURVE NUMBERS

DRAINAGE AREA	TOT. AREA (AC)	A (AC)	B (AC)	C (AC)	D (AC)	COMPOSITE CN
EX-SITE	1.0			1.0		79
EX-OFF	0.37			0.37		79
SOIL GROUP		A	B	C	D	DCM TBL 2-5, GRASSLND, FAIR
CURVE NUMBER		49	69	79	84	

EXISTING TIME OF CONCENTRATION

DRAINAGE AREA	SHEET FLOW				SHALLOW CONCENTRATED FLOW (UNPAVED)			CHANNEL FLOW	TOTAL	TOTAL
	L (FT)	n	S (%)	T_c (min)	L (FT)	S (%)	T_c (MIN)		T_c	T_{lag} (MIN)
EX-SITE	100	0.15	3.8%	6.7	218	3.8%	1.2	N/A	7.90%	4.7
EX-OFF	100	0.02	2.0%	1.4	0	0.0%	0.0		5.0	3.0

PROPOSED OVERALL IMPERVIOUS COVER

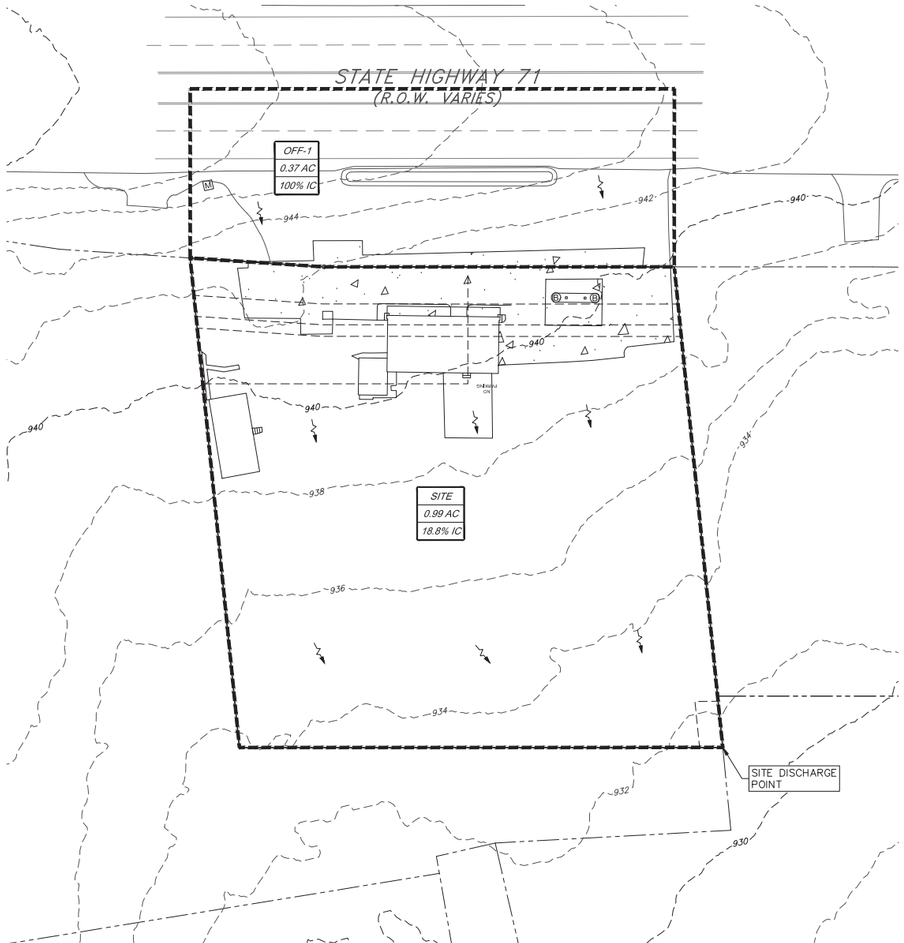
DRAINAGE BASIN	TOTAL AREA (SF)	IMPERV. AREA (SF)	TOTAL AREA (AC)	TOTAL AREA (SQ. MI)	% IMPERV.
PR--SITE	43,446	19,560	1.0	0.0015	45.0%
PR-OFF	16,169	10,057	0.37	0.0006	62.2%

PROPOSED CURVE NUMBERS

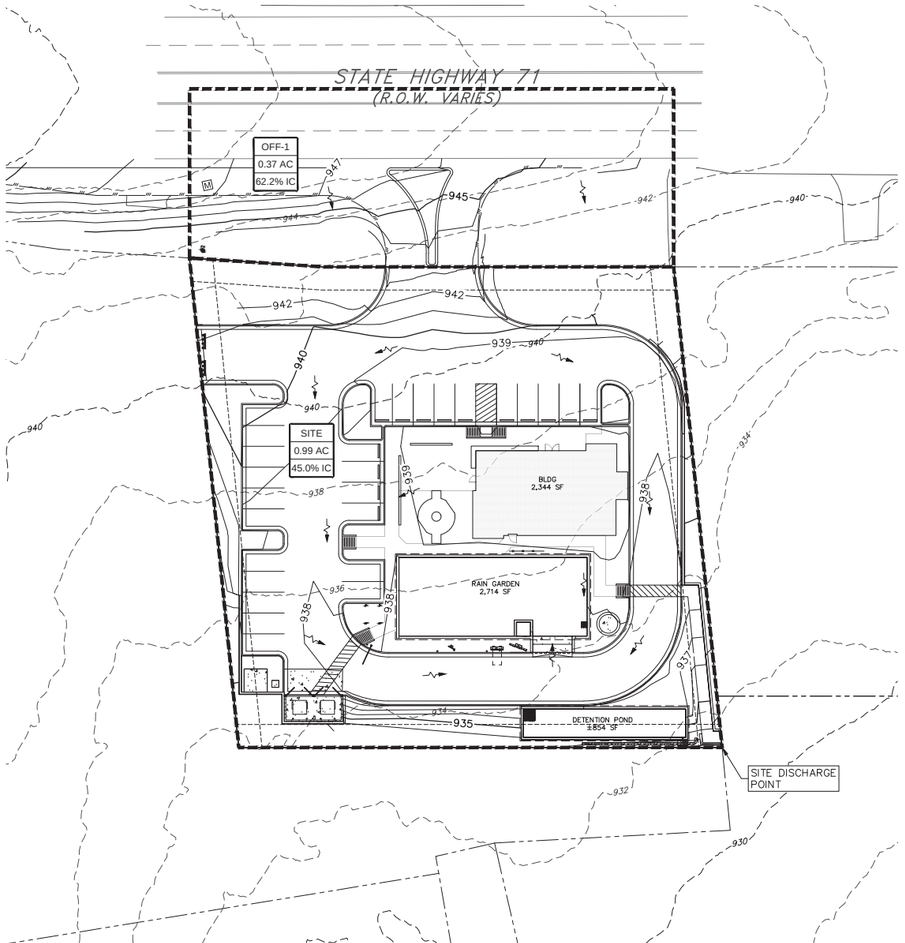
DRAINAGE AREA	TOT. AREA (AC)	A (AC)	B (AC)	C (AC)	D (AC)	COMPOSITE CN
PR-SITE	1.0			1.0		79
PR-OFF	0.37			0.37		79
SOIL GROUP		A	B	C	D	DCM TBL 2-5, FULLY DEV. FAIR
CURVE NUMBER		49	69	79	84	

PROPOSED TIME OF CONCENTRATION

DRAINAGE AREA	SHEET FLOW				SHALLOW CONCENTRATED FLOW (PAVED)			CHANNEL FLOW	TOTAL	TOTAL
	L (FT)	n	S (%)	T_c (min)	L (FT)	S (%)	T_c (MIN)		T_c (MIN)	T_{lag} (MIN)
PR-SITE	25	0.15	3.8%	2.2	293	3.8%	1.2	N/A	5.0	3.0
PR-OFF	100	0.02	2.0%	1.4	0	0.0%	0.0		5.0	3.0



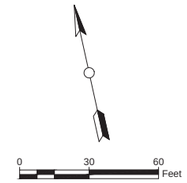
EXISTING DRAINAGE AREA MAP



PROPOSED DRAINAGE AREA MAP

DRAINAGE SUMMARY FOR SITE DISCHARGE POINT

ANNUAL CHANCE EXCEEDANCE (%)	RETURN FREQ (YRS)	COMPUTED PEAK FLOW RATES (CFS)			WATER SURFACE ELEV (FT)	DETENTION VOLUME (AC-FT)
		EXISTING	PROPOSED NO POND	PROPOSED WITH POND		
50%	2	4.9	6.3	4.9	934.2	0.0
10%	10	8.4	10.2	8.2	935.1	0.1
4%	25	10.8	12.8	10.5	935.6	0.1
1%	100	14.7	17.1	14.2	936.4	0.1



LEGEND

- SUBJECT TRACT PROPERTY LINE
- ADJOINER TRACT PROPERTY LINE
- 843 EXISTING CONTOUR (MAJOR)
- 843 EXISTING CONTOUR (MINOR)
- 843 PROPOSED CONTOUR (MAJOR)
- 843 PROPOSED CONTOUR (MINOR)
- DRAINAGE AREA BOUNDARY
- EX-2 / 0.83 AC / 5% IC — EXISTING DRAINAGE AREA LABEL
- PR-2 / 0.83 AC / 40% IC — PROPOSED DRAINAGE AREA LABEL
- FLOW ARROW

NOTES:

1. POND IS SIZED FOR 65% IMPERVIOUS COVER.
2. DRAINAGE FOR THIS DEVELOPMENT HAS BEEN DESIGNED SUCH THAT THERE WILL BE NO ADVERSE IMPACTS ON THE CAPACITY, FUNCTION, OR INTEGRITY OF TEXAS DEPARTMENT OF TRANSPORTATION RIGHT OF WAY DRAINAGE FACILITIES.

811 Know what's **below.** **Call** before you dig.

CAUTION!

IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

FOR CITY USE ONLY:

MillerGRAY
Consulting • Engineering • Infrastructure
7320 N. MoPac Expressway, Suite 203
Austin, Texas 78731
Phone (512) 861-5300
www.miller-gray.com
TBPE FIRM REG. NO. F-16302

STATE OF TEXAS
J. TRAVIS WILSON
97307
LICENSED PROFESSIONAL ENGINEER
5/17/2024

P:\00323 Investco\000\ Starbucks Bee Cave\05_CAD\00323-001dam.dwg 5/17/2024 8:43 AM

STARBUCKS BEE CAVE
14211 STATE HWY 71, BEE CAVE, TEXAS 78738

DETENTION DRAINAGE AREA MAPS

REVISIONS/CORRECTIONS

NO.	DATE	DESCRIPTION	BY

PROJECT NUMBER 00323-001
DATE: 5/17/2024
DESIGNED: KKE
CHECKED: JTW

SHEET NO. 9 OF 41

23-789-SNPS

IMPERVIOUS COVER CALCS

	AREA		IMPERVIOUS DATA		
	(SF)	(AC)	AREA (SF)	DESCRIPTION	% IMPERV.
EXISTING	52929.16	1.22	8,196.04	BUILDING, STRUCTURES, PAVED AREA	15%
PROPOSED			26,291.20	BUILDING, DRIVE ISLE, PARKING AREA, SIDEWALK, CONCRETE PADS	50%

*NOTE: *Please see the water quality drainage area maps shown below for a representation of the impervious areas.*

City of Bee Cave

Pollutant Load Calculations

STEP 1. ENTER SITE DATA

Project Name:	Starbucks Bee Cave
Drainage Area ID:	
Drainage Area (ac.):	1.22
Existing Condition Impervious Cover (%):	15
Proposed Condition Impervious Cover (%):	50

STEP 2. DETERMINE POLLUTANT LOADING

Pollutant	Pre-Developed Loacing, Lpre (lb/yr)	Developed Loading, Ldev (lb/yr)
Total Suspended Solids (TSS)	166.66	500.89
Total Phosphorus (TP)	0.40	1.19
Oil and Grease (O&G)	5.02	15.09

**Pollutant loading: Equation 1 from COA ECM 1.6.9.3.B*

$L = C * V * A_n * CF$

STEP 3. DETERMINE BMP POLLUTANT LOAD REMOVAL EFFICIENCIES

BMP Order in Series	BMP Type	Removal Efficiency (%)		
		TSS	TP	O&G
1	Bioretention	89.0	72.0	89.0
	TOTAL EFFICIENCY	**89.0**	**72.0**	**89.0**

*TSS removal efficiency and O&G (not explicity stated, but related to TSS) are from TCEQ RG-348 Table 3-1, page 3-4

**TP removal is from LCRA Technical Manual Table 2-6, page 2-11

***Removal Efficiency Equation from COBC ECM Section 1.6.2.G: Water Quality Facilities In Series*

$$E_{TOT} = \left[1 - \left(1 - \frac{E_1}{100}\right)\left(1 - 0.65\frac{E_2}{100}\right)\left(1 - 0.25 * \frac{E_3}{100}\right)\right] * 100$$

STEP 4. CALCULATE TOTAL POLLUTANT LOAD REMOVAL

Pollutant	Required Removal*		Total BMP Removal**		Meets Criteria?
	(%)	(lb/yr)	(%)	(lb/yr)	
Total Suspended Solids (TSS)	90.0	300.81	89.0	445.79	YES
Total Phosphorus (TP)	90.0	0.72	72.0	0.86	YES
Oil and Grease (O&G)	90.0	9.06	89.0	13.43	YES

Removal requirements per Article 7, Section 7.3.2.C of City of Bee Cave UDC (% removal of **increased loading from development)*

***Amount removed by BMP per year equation: $R = L_{dev} * (E_{TOT}/100)$*

APPENDIX F-7
RAIN GARDEN CALCULATIONS
FOR DEVELOPMENT PERMITS

PROJECT: STARBUCKS BEE CAVE
CONTROL: PARTIAL FILTRATION RAIN GARDEN

DRAINAGE AREA DATA

DRAINAGE AREA TO CONTROL (MAX 2 AC)	1 22 AC
DRAINAGE AREA IMPERVIOUS COVER (IC)	50 %
CAPTURE DEPTH (CD)	0 80 IN

WATER QUALITY CONTROL CALCULATIONS:

	REQUIRED	PROVIDED
WATER QUALITY VOLUME (WQV=CD*DA*3630)	3,543 CF	3,691 CF
100-YEAR PEAK FLOW RATE TO CONTROL (Q100)	17 1 CFS	
FILTRATION POND AREA (SF)	2,714 SF	2,714 SF
DEPTH OF PONDING (D)	MAX 1 0 FT	1 0 FT
DEPTH OF FILTRATION MEDIA (L AVG)	MIN 1 5 FT	1.50 FT
EFFECTIVE POROSITY WQV (WQVep = 0 24 * AF * L)		977 CF
PONDED DEPTH WQV (WQVpd= AF * D)		2,714 CF
TOTAL WQV		3,691 CF
WATER QUALITY ELEVATION (WQE)		936 40 FT MSL
ELEVATION OF SPLITTER/OVERFLOW WEIR (MINIMUM WQE)		936 40 FT MSL
LENGTH OF SPLITTER WEIR		16 0 FT
REQUIRED HEAD TO PASS Q100	MAX 0 5	0,50 FT
POND FREEBOARD PROVIDED TO PASS Q100	MIN 0 25 FT	0 6 FT

FOR FILTRATION RAIN GARDENS

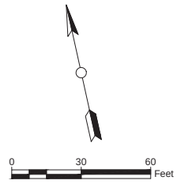
RAIN GARDEN POND DRAWDOWN TIME	MAX 48 HR	47 34 HR
UNDERDRAIN ORIFICE SIZE (DIAMETER)		1 125 IN
UNDERDRAIN ORIFICE SIZE (AREA)		1.00 SQ IN

RAINWATER HARVESTING TANK CALCULATIONS
ISOLATION OF ROOF RUNOFF
FOR ALLOWABLE INCREASE IN SITE IMPERVIOUS COVER

PROJECT: STARBUCKS BEE CAVE
JURISDICTION: CITY OF BEE CAVE, TX
APPLICABLE CODE: UNIFIED DEVELOPMENT CODE (7.3.2.L)

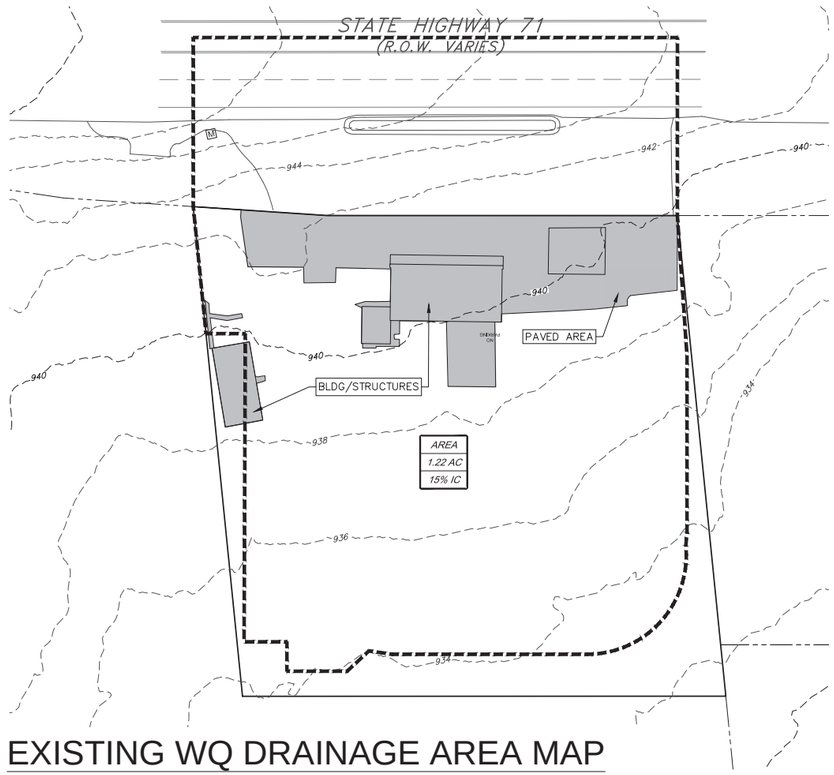
CALCULATIONS

DRAINAGE AREA TO CONTROL (DA): DA = ROOF AREA	2344 SF
DRAINAGE AREA IMPERVIOUS COVER (IC):	100 %
WATER QUALITY CAPTURE DEPTH (CD): CD = 0.5" + 0.1" *PER 10% POINT INCREASE OF ICOVER 20%; EXCESS OVER 20% = IC - 20% = 80% PER 10% POINT INCREASE = 80% * 0.1 = 0.8	1 30 IN
WATER QUALITY VOLUME (WQV): WQV = (CD*12) * DA	254 CF
CONVERSION: 1 CF = 7 48 GAL	1898 GAL

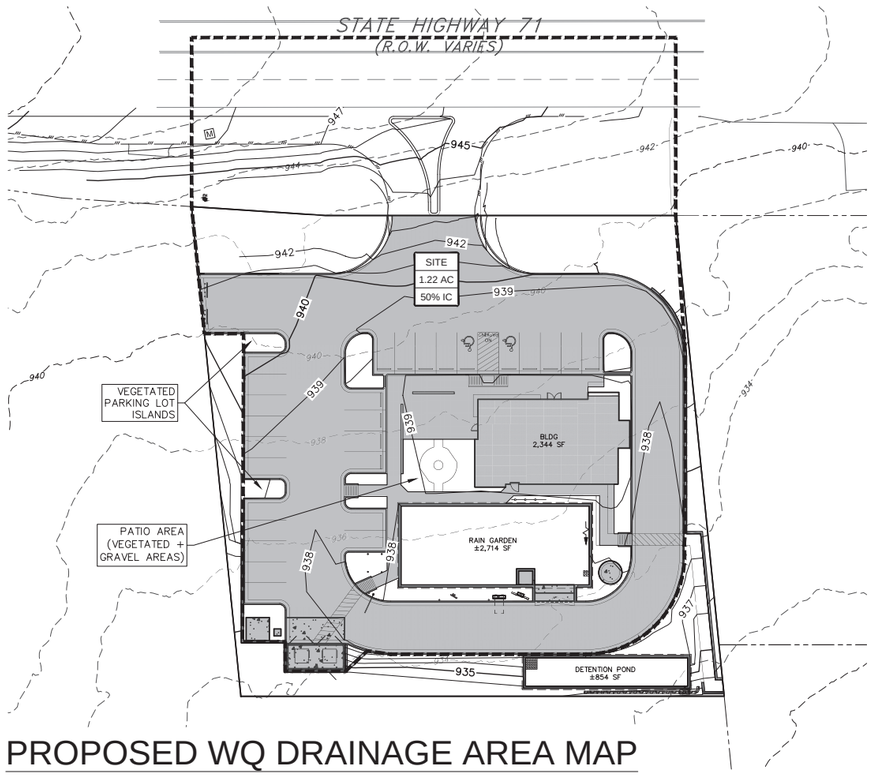


LEGEND

- SUBJECT TRACT PROPERTY LINE
- ADJOINER TRACT PROPERTY LINE
- 843 EXISTING CONTOUR (MAJOR)
- 843 EXISTING CONTOUR (MINOR)
- 843 PROPOSED CONTOUR (MAJOR)
- 843 PROPOSED CONTOUR (MINOR)
- DRAINAGE AREA BOUNDARY
- EX-2 / 0.83 AC / 5% IC — EXISTING DRAINAGE AREA LABEL
- PR-2 / 0.83 AC / 40% IC — PROPOSED DRAINAGE AREA LABEL
- IMPERVIOUS COVER AREA



EXISTING WQ DRAINAGE AREA MAP



PROPOSED WQ DRAINAGE AREA MAP

NOTES:

1. RAIN GARDEN (PARTIAL INFILTRATION) IS SIZED FOR ON-SITE IMPERVIOUS COVER ONLY.
2. DRAINAGE FOR THIS DEVELOPMENT HAS BEEN DESIGNED SUCH THAT THERE WILL BE NO ADVERSE IMPACTS ON THE CAPACITY, FUNCTION, OR INTEGRITY OF TEXAS DEPARTMENT OF TRANSPORTATION RIGHT OF WAY DRAINAGE FACILITIES.

811 Know what's below. Call before you dig.

CAUTION!
IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

FOR CITY USE ONLY:

MillerGRAY
Consulting • Engineering • Infrastructure
7320 N. MoPac Expressway, Suite 203
Austin, Texas 78731
Phone (512) 861-5300
www.miller-gray.com
TBPE FIRM REG. NO. F-16302

STATE OF TEXAS
J. TRAVIS WILSON
97307
LICENSED PROFESSIONAL ENGINEER
4/5/2024

P:\00323 Investco\001 Starbucks Bee Cave\05_CAD\00323-001dam.dwg 4/5/2024 10:13 AM

STARBUCKS BEE CAVE
14211 STATE HWY 71, BEE CAVE, TEXAS 78738

WATER QUALITY DRAINAGE AREA MAPS & CALCS

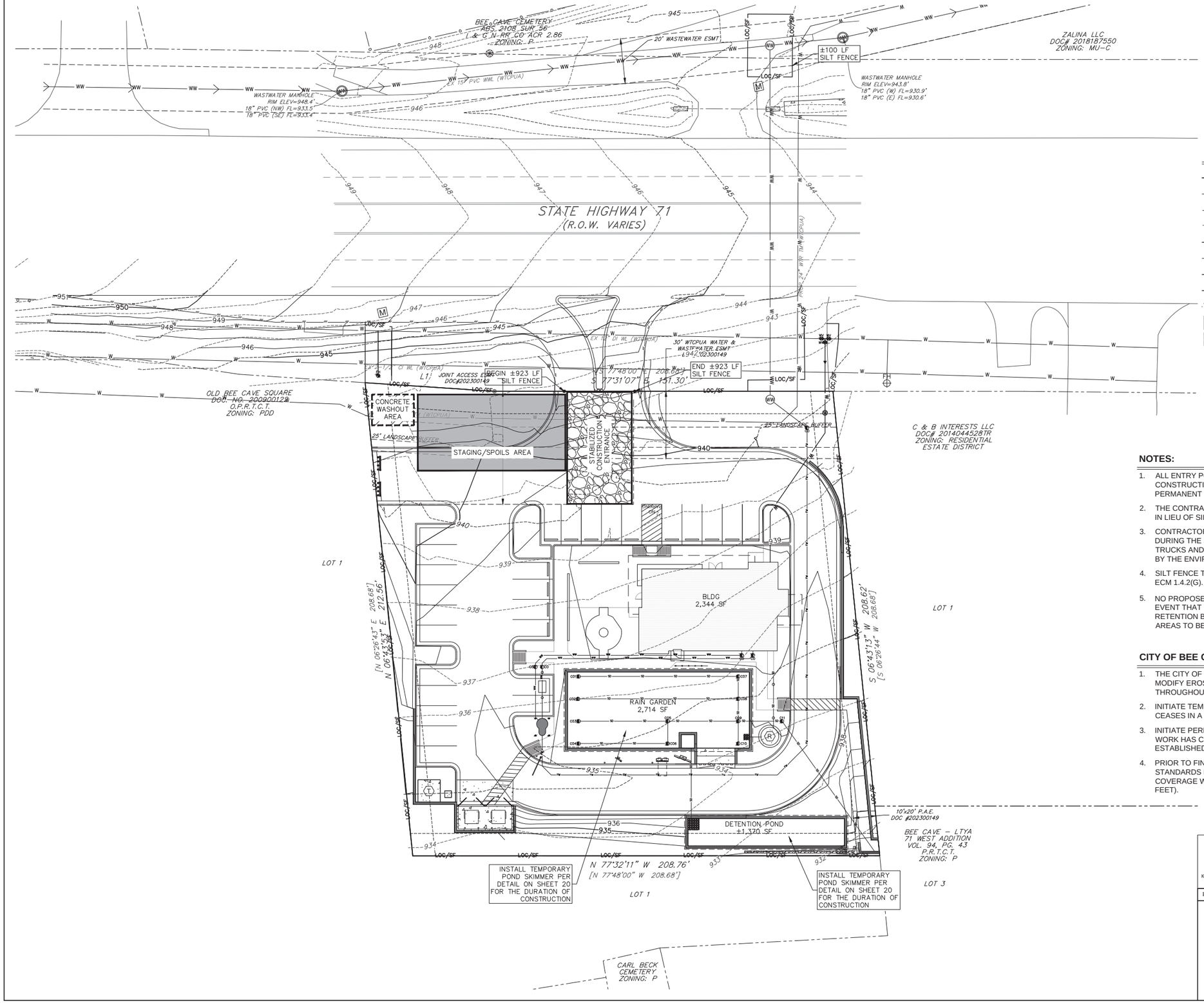
REVISIONS/CORRECTIONS

NO.	DATE	DESCRIPTION	BY

PROJECT NUMBER 00323-001
DATE: 4/5/2024
DESIGNED: KKE
CHECKED: JTW

SHEET NO. 10 OF 41

23-789-SNPS



LEGEND

- SUBJECT TRACT PROPERTY LINE
- ADJOINER TRACT PROPERTY LINE
- 843 EXISTING CONTOUR (MAJOR)
- 843 EXISTING CONTOUR (MINOR)
- 843 PROPOSED CONTOUR (MAJOR)
- 843 PROPOSED CONTOUR (MINOR)
- LOC LIMITS OF CONSTRUCTION
- LOC/SF LIMITS OF CONSTRUCTION/SILT FENCE
- T T T T TREE PROTECTION
- STAGING/SPOILS AREA
- CONSTRUCTION ENTRANCE/EXIT
- RB ROCK BERM LEVEL SPREADER
- (T) TRANSFORMER
- (R) RAINWATER TANK

NOTES:

1. ALL ENTRY POINTS SHALL HAVE A STABILIZED CONSTRUCTION ENTRANCE UNTIL SUCH TIME AS A PERMANENT DRIVEWAY IS CONSTRUCTED.
2. THE CONTRACTOR MAY USE MULCH SOCK (COA DTL 648S-1) IN LIEU OF SILT FENCE AT THIS DISCRETION.
3. CONTRACTOR SHALL UTILIZE DUST CONTROL MEASURES DURING THE SITE CONSTRUCTION SUCH AS IRRIGATION TRUCKS AND MULCHING PER ECM 1.4.5(D) OR AS DIRECTED BY THE ENVIRONMENTAL INSPECTOR.
4. SILT FENCE TYPE AND INSTALLATION SHALL COMPLY WITH ECM 1.4.2(G).
5. NO PROPOSED GRADES EXCEED 15% ON THE SITE. IN THE EVENT THAT FINAL GRADES DO EXCEED 15%, PROVIDE SOIL RETENTION BLANKETS PER COA SPEC ITEM 605S OVER AREAS TO BE REVEGETATED.

CITY OF BEE CAVE NOTES:

1. THE CITY OF BEE CAVE HAS THE AUTHORITY TO ADD OR MODIFY EROSION/SEDIMENTATION CONTROLS ON SITE THROUGHOUT THE DURATION OF THE PROJECT.
2. INITIATE TEMPORARY STABILIZATION WHEN CONSTRUCTION CEASES IN A DISTURBED AREA FOR MORE THAN 14 DAYS.
3. INITIATE PERMANENT STABILIZATION IMMEDIATELY ONCE WORK HAS CEASED AND FINAL GRADE HAS BEEN ESTABLISHED.
4. PRIOR TO FINAL SITE ACCEPTANCE, MINIMUM REVEGETATION STANDARDS MUST BE MET ACROSS THE SITE (95% COVERAGE WITH NO BARE AREAS EXCEEDING 16 SQUARE FEET).

Know what's below. Call before you dig. 811

CAUTION!
IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

FOR CITY USE ONLY:

MillerGRAY
Consulting • Engineering • Infrastructure
7320 N. MoPac Expressway, Suite 203
Austin, Texas 78731
Phone (512) 861-5300
www.miller-gray.com
TBPE FIRM REG. NO. F-16302

STATE OF TEXAS
J. TRAVIS WILSON
97307
LICENSED PROFESSIONAL ENGINEER
4/5/2024

P:\00323 Investcor\001 Starbucks Bee Cave\05_CAD\00323-001esc.dwg 4/5/2024 10:13 AM

STARBUCKS BEE CAVE
14211 STATE HWY 71, BEE CAVE, TEXAS 78738

EROSION & SEDIMENTATION CONTROL PLAN

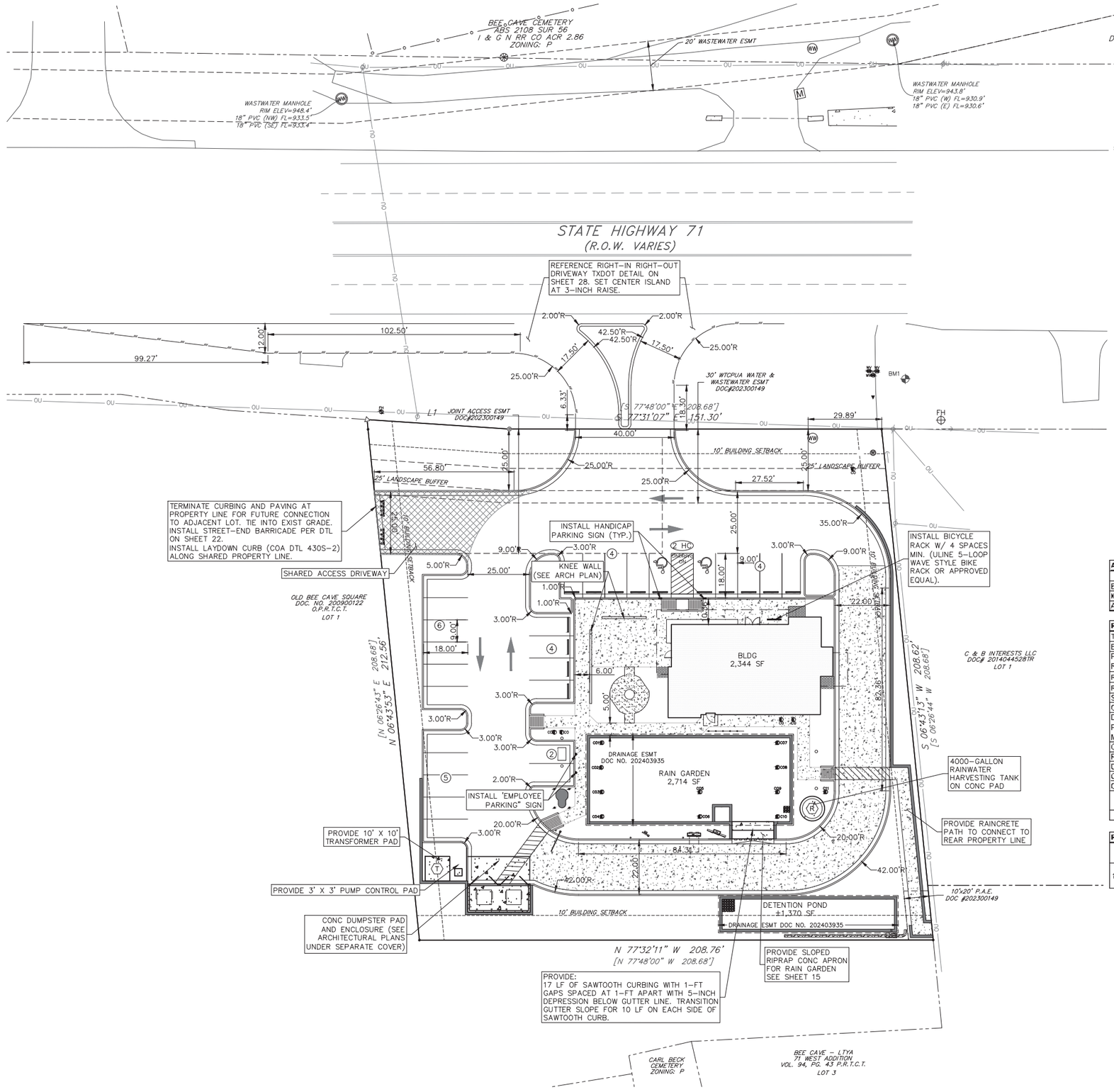
REVISIONS/CORRECTIONS

NO.	DATE	DESCRIPTION	BY

PROJECT NUMBER 00323-001
DATE: 4/5/2024
DESIGNED: KKE
CHECKED: JTW

SHEET NO.
11 OF 41

23-789-SNPS



NOTES:

1. ALL PARKING AREAS AND DRIVE AISLES SHALL BE SURFACED WITH CONCRETE UNLESS SPECIFICALLY NOTED OTHERWISE. SEE GEOTECHNICAL REPORT FOR PAVING RECOMMENDATIONS.
2. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
3. ALL SIDEWALKS AND DRIVE-THRU AISLES ARE TO BE RAINCRETE PERMEABLE CONCRETE.
4. THE WATER STORAGE TANK SHALL BE A CORGAL MODEL 0803-WT-CHR WITH STANDARD 30 DEGREE CORRUGATED METAL ROOF HAVING A NOMINAL CAPACITY OF 4000 GALLONS; NOMINAL TANK DIMENSIONS SHALL BE 8'-0" DIA, 10'-9" EAVE HEIGHT, 13'-3' OVERALL HEIGHT. SEE ARCHITECTURAL PLANS FOR DESIGN DETAILS.
5. THE DRIVE-THRU SIGN WILL REQUIRE A SEPARATE SIGN PERMIT.
6. DRIVE-THRU ESCAPE AND SITE CIRCULATION LANE SHALL NOT BE CONVERTED TO AN ADDITIONAL DRIVE-THRU SERVICE LANE ANYTIME IN THE FUTURE UNLESS PRIOR APPROVAL HAS BEEN GRANTED BY THE CITY OF BEE CAVE.
7. THE MANUFACTURER'S RECOMMENDED MAINTENANCE PLAN FOR THE PERMEABLE PAVEMENT AREAS SHALL BE INCLUDED IN THE WQ MAINTENANCE PLAN ASSOCIATED WITH THE RECORDED RESTRICTIVE COVENANT.

LEGEND

- SUBJECT TRACT PROPERTY LINE
- ADJOINER TRACT PROPERTY LINE
- EXISTING EOP
- OU — EXISTING OVERHEAD POWER LINE
- EXISTING POWER POLE
- EXISTING GUY ANCHOR
- 4224 — EXISTING TREE
- FH — EXISTING FIRE HYDRANT
- CURB AND GUTTER
- PROPOSED SIGN
- HANDICAP PARKING SYMBOL
- T — TRANSFORMER
- R — RAINWATER TANK
- ROCK AREA FOR CANOPY DOWNSPOUTS
- 4" — 6" THICK REINFORCED CONCRETE
- RAINCRETE (PERMEABLE)
- GRAVEL WALKWAY
- RETAINING WALL
- FH — PROPOSED FIRE HYDRANT

Allowable Impervious Cover	Area (SF)	Area (%)
Base level allowable IC	17,376	40%
IC bonus for rainwater harvesting	2,172	5%
Allowable IC w/base and rainwater harvesting bonus	19,548	45%

Proposed Impervious Cover	Measured area (SF)	IC Credit (%)	Effective IC (SF)
Building	2,344	0%	2,344
Paving & other flatwork (Concrete paving, curb & gutter)	14,287	0%	14,287
Raincrete Sidewalk	2,256	50%	1,128
Raincrete Drive Thru and Escape Lane	4,625	100%	-
Raincrete Sidewalk to LTYA (City Request)	721	100%	-
Shared Driveway Connection (City Request)	1,395	100%	-
Grass/landscaping	12,300	100%	-
Detention Pond	854	100%	-
Rain Garden	2,750	100%	-
Misc. Concrete Pads	291	0%	291
Concrete dumpster pad	573	0%	573
Retaining Walls	725	0%	725
Downspout Gravel	74	100%	-
Crushed granite landscape sitting area	211	0%	211
Concrete accessible ramp to LTYA (City Request)	33	100%	-
TOTAL SF IC "ON SITE" ONLY	43,430		19,560
TOTAL AC IC "ON SITE" ONLY	0.997		0.449
	TOTAL IC % "ON SITE" ONLY		45.0%

Parking Table							
Building Address	Proposed Use	Area (SF)	Parking Ratio	Parking Required	Parking Provided	HC Parking Required	HC Parking Provided
14211 State Hwy 71	Commercial Building	2,344	1 SP:100 SF	24	27	1	2
	Patio (not sheltered)	400	1 SP:133 SF	3	-	0	0
			Total	27	27	1	2

811 Know what's below. Call before you dig.

CAUTION!
IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

FOR CITY USE ONLY:

MillerGRAY
Consulting • Engineering • Infrastructure
7320 N. MoPac Expressway, Suite 203
Austin, Texas 78731
Phone (512) 861-5300
www.miller-gray.com
TBPE FIRM REG. NO. F-16302

STATE OF TEXAS
J. TRAVIS WILSON
97307
LICENSED PROFESSIONAL ENGINEER
5/13/2024

P:\00323 Investcor\001 Starbucks Bee Cave\05_CAD\00323-001snp.dwg 5/13/2024 8:23 AM

STARBUCKS BEE CAVE
14211 STATE HWY 71, BEE CAVE, TEXAS 78738

SITE & DIMENSION CONTROL PLAN

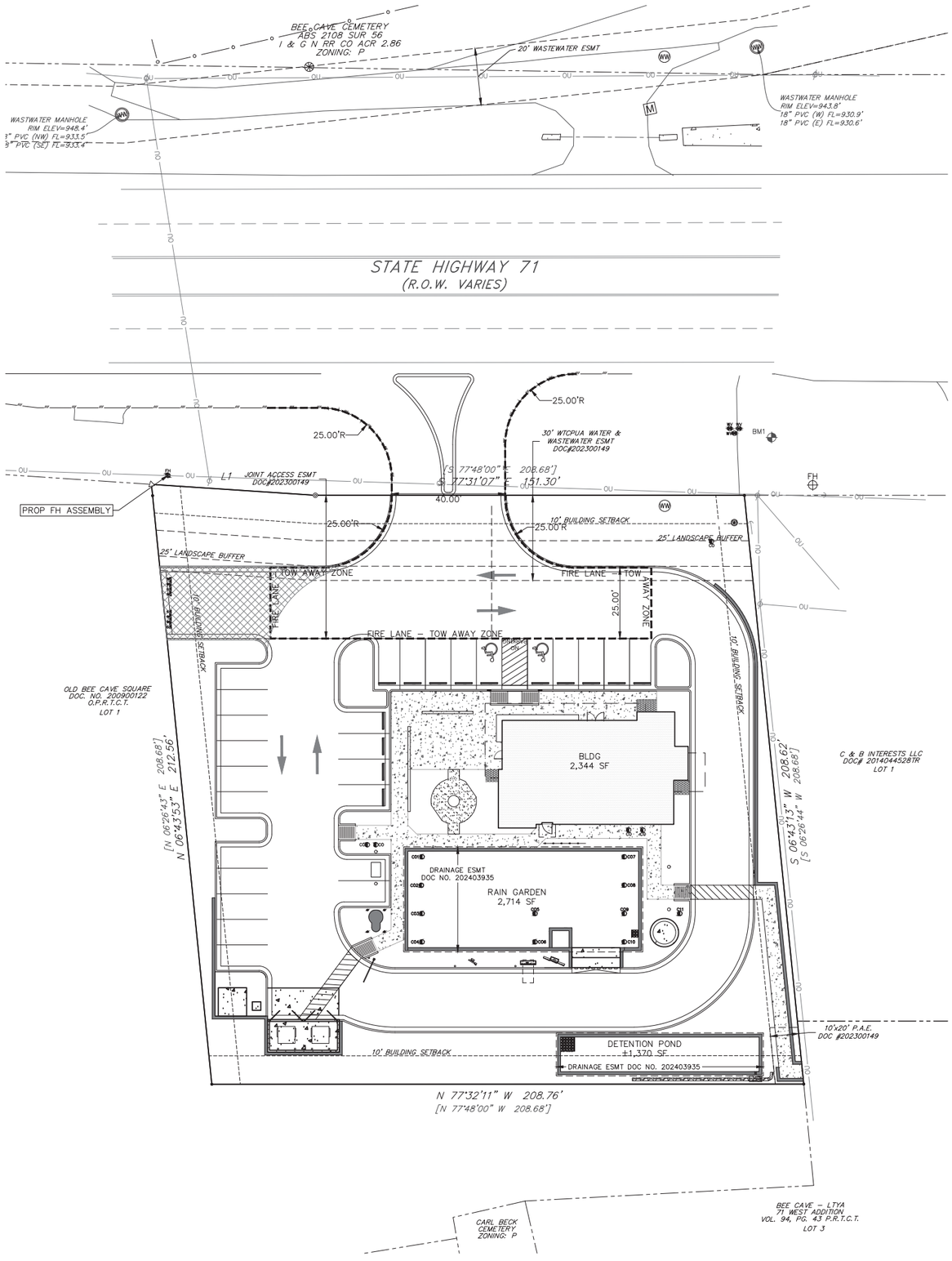
REVISIONS/CORRECTIONS

NO.	DATE	DESCRIPTION	BY

PROJECT NUMBER 00323-001
DATE: 5/13/2024
DESIGNED: KKE
CHECKED: JTW

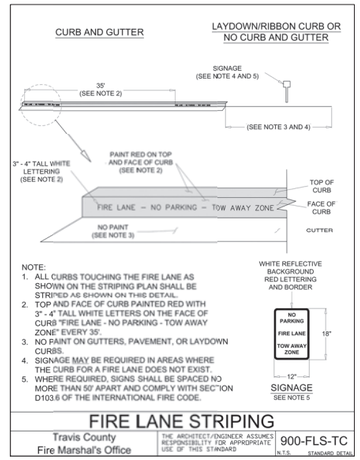
SHEET NO.
12 OF 41

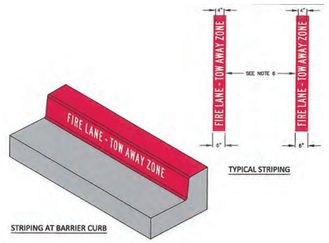
23-789-SNPS

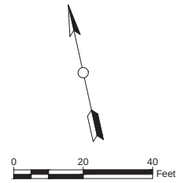


FIRE CONTROL PLAN NOTES:

1. FIRE LANE IS OFFSET 6" FOR GRAPHICAL CLARITY.
2. ALL FIRE LANE STRIPING SHALL COMPLY WITH THE CURRENT INTERNATIONAL FIRE CODE, AS ADOPTED BY THE CITY OF AUSTIN, AND CITY OF AUSTIN CODE OF ORDINANCES.
3. FIRE LANES SHALL BE CONTINUOUSLY MARKED BY RED TRAFFIC PAINT THAT IS MINIMUM 6 INCHES (6") IN WIDTH TO SHOW THE BOUNDARIES OF THE LANE.
4. "FIRE LANE - TOW AWAY ZONE" SHALL APPEAR IN FOUR INCH (4") TYPE D WHITE BLOCK LETTERS AT TWENTY-FIVE FOOT (25') INTERVALS, OR LESS, ON THE RED BORDER MARKINGS ALONG BOTH SIDES OF THE FIRE LANE.
5. WHERE A 6" BARRIER CURB EXISTS, THE FIRE LANE STRIPING SHALL BE ON BOTH THE VERTICAL FACE OF THE CURB AND TOP OF CURB. "FIRE LANE - TOW AWAY ZONE" SHALL BE MARKED IN 4" WHITE BLOCK LETTERS ON FACE OF CURB ONLY.
6. WHERE A FIRE LANE IS ADJACENT TO PARKING SPACES THE FIRE LANE STRIPING SHALL BE AN 8" RED STRIPE PAINTED ON THE DRIVE SURFACE WITH 4" WHITE LETTERS STATING "FIRE LANE NO PARKING TOW AWAY ZONE" FIRE LANE STRIPING SHALL EXTEND BEHIND ALL PARKING SPACES.
7. WHERE A FIRE HYDRANT, FIRE DEPARTMENT CONNECTION, OR OTHER FIRE PROTECTION EQUIPMENT IS LOCATED ON A FIRE LANE, THE FIRE LANE SHALL BE A MINIMUM OF TWENTY-SIX FEET (26') IN WIDTH, EXCLUSIVE OF SHOULDERS.







LEGEND

- SUBJECT TRACT PROPERTY LINE
- ADJOINER TRACT PROPERTY LINE
- EXISTING EOP
- OU — EXISTING OVERHEAD POWER LINE
- EXISTING POWER POLE
- EXISTING GUY ANCHOR
- 4224 — EXISTING TREE
- FH — EXISTING FIRE HYDRANT
- CURB AND GUTTER
- FIRE LANE
- PROPOSED SIGN
- HANDICAP PARKING SYMBOL
- FH — PROPOSED FIRE HYDRANT

TRAVIS COUNTY EMERGENCY SERVICES DISTRICT NO. 6 FIRE DEPARTMENT - SITE PLAN NOTES

1. DESIGNS FOR SITE IMPROVEMENTS SHALL MEET THE CURRENT DESIGN CRITERIA AS REQUIRED BY TCESD NO. 6.
2. ALL PLANS (SITE, BUILDING, FIRE ALARM, FIRE SPRINKLER) SHALL BE SUBMITTED TO LTFR FOR REVIEW. TWO FULL-SIZE SETS ARE REQUIRED. A REVIEW LETTER WILL BE GENERATED. REVIEWS WILL NOT BE PERFORMED UNTIL THE APPLICABLE REVIEW FEES ARE PAID.
3. UPON PLAN APPROVAL, A PERMIT WILL BE ISSUED. THE PERMIT MUST BE CONSPICUOUSLY POSTED.
4. AN ALL-WEATHER DRIVING SURFACE (FIRE APPARATUS ACCESS) MUST BE INSTALLED IN LOCATIONS SHOWN ON THE SITE PLAN, PRIOR TO ANY BUILDING CONSTRUCTION BEYOND THE FOUNDATION.
5. ALL PERVIOUS/DECORATIVE PAVING SHALL BE ENGINEERED AND INSTALLED FOR 80,000 POUNDS LIVE-VEHICLE LOADS. ANY PERVIOUS/DECORATIVE PAVING WITHIN 100 FEET OF ANY BUILDING MUST BE APPROVED BY THE FIRE DEPARTMENT.
6. VERTICAL CLEARANCE REQUIRED FOR FIRE APPARATUS IS 13 FEET, SIX INCHES FOR THE FULL 25 FEET WIDTH OF ACCESS DRIVES AND ROUTES FOR INTERNAL CIRCULATION. DEAD-END FIRE APPARATUS ACCESS ROADS IN EXCESS OF 150 FEET IN LENGTH SHALL BE PROVIDED WITH APPROVED PROVISIONS FOR THE TURNING AROUND OF FIRE APPARATUS, PER FIGURE B-4 OF THIS MANUAL.
7. THE MAXIMUM ALLOWABLE DRIVEWAY, DRIVE AISLE OR FIRE LANE GRADE IS 15 PERCENT.
8. THE MARKINGS OF FIRE LANES MUST BE RED WITH WHITE STENCILING OR WHITE WITH RED STENCILING READING "FIRE LANE - TOW AWAY ZONE" IN LETTERING NO LESS THAN THREE INCHES IN HEIGHT. THE STENCILING SHALL BE AT INTERVALS OF 35 FEET OR LESS. ALTERNATIVE MARKING OF FIRE LANES MAY BE APPROVED BY THE FIRE CHIEF, OR HIS/HER DESIGNATED AGENT, PROVIDED FIRE LANES ARE CLEARLY 7 IDENTIFIED AT BOTH ENDS AND AT INTERVALS NOT TO EXCEED 35 FEET. EXISTING FIRE LANE MARKINGS SHALL BE GRANDFATHERED PROVIDED THAT THEY MEET THE WORDING AND INTERVAL REQUIREMENTS THAT WERE ACCEPTED ON APPROVED SITE PLANS AND OTHER TYPE FIRE LANE SUBMITTALS APPROVED BY THE FIRE DEPARTMENT. EXISTING FIRE LANES THAT ARE IN NEED OF RE-PAINTING SHALL MEET THE REQUIREMENTS OF THIS SECTION.
9. THE FIRE DEPARTMENT CONNECTION (FDC) CONNECTION SHALL BE INSTALLED WHERE SHOWN ON THE SITE PLAN.
10. HYDRANTS MUST BE INSTALLED WITH THE CENTER OF THE FOUR AND ONE-HALF INCH STEAMER OPENING AT LEAST 18 INCHES ABOVE FINISHED GRADE. THE FOUR AND ONE-HALF INCH STEAMER OPENING MUST FACE THE DRIVEWAY OR STREET WITH THREE- TO SIX-FOOT SETBACKS FROM THE CURB LINE(S). NO OBSTRUCTION IS ALLOWED WITHIN THREE FEET OF ANY HYDRANT, AND THE FOUR AND ONE-HALF INCH OPENING MUST BE TOTALLY UNOBSTRUCTED FROM THE STREET/DRIVEWAY.
11. CONTRACTOR SHALL INSTALL BLUE REFLECTIVE MARKERS IN THE PAVEMENT PER TCESD NO. 6 SPECIFICATIONS. NO IMPROVEMENTS MAY BE OCCUPIED UNTIL THE MARKERS ARE INSTALLED.
12. FIRE HYDRANTS SHALL HAVE NATIONAL HOSE THREADS.
13. STATIC WATER TANK HARD SUCTION CONNECTOR SHALL HAVE SIX-INCH NATIONAL HOSE THREADS.
14. A CERTIFIED OR WITNESSED PRESSURE TEST IS REQUIRED FOR ALL WATER MODELS, REQUIRED HYDRANT FLOW TESTS OR SPRINKLER SYSTEM DESIGNS.
15. HYDRANTS SHALL BE PAINTED SILVER AND THE BONNET AND CAPS SHALL BE PAINTED THE DESIGNATED COLOR PER THE GALLONS PER MINUTE (GPM) AS FOLLOWS:

CLASS AA	LIGHT BLUE	1500 OR HIGHER GPM
CLASS A	GREEN	1000 - 1499 GPM
CLASS B	ORANGE	500 - 1499 BPM
CLASS C	RED	LESS THAN 500 GP<
CLASS D	BLACK	OUT OF SERVICE

16. COMMERCIAL DUMPSTERS AND CONTAINERS WITH AN INDIVIDUAL CAPACITY OF ONE- AND ONE-HALF CUBIC YARDS OR GREATER SHALL NOT BE STORED OR PLACED WITHIN 10 FEET OF OPENINGS, COMBUSTIBLE WALLS OR COMBUSTIBLE EAVE LINES.
17. "KEY BOXES"/"KEY SWITCHES" (KNOX-BOX® RAPID ENTRY SYSTEM) SHALL BE INSTALLED IN THE LOCATION(S) SHOWN ON THE SITE/BUILDING PLANS AS APPROVED BY TCESD NO. 6. CONTACT LTFR FOR ORDERING INFORMATION. NO IMPROVEMENTS MAY BE OCCUPIED UNTIL THE KEY BOX/KEY SWITCH IS INSTALLED.

811 Know what's below. Call before you dig.

CAUTION!
IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

FOR CITY USE ONLY:

MillerGRAY
Consulting • Engineering • Infrastructure
7320 N. MoPac Expressway, Suite 203
Austin, Texas 78731
Phone (512) 861-5300
www.miller-gray.com
TBPE FIRM REG. NO. F-16302

STATE OF TEXAS
J. TRAVIS WILSON
97307
LICENSED PROFESSIONAL ENGINEER
4/5/2024

P:\00323 Investor\001 Starbucks Bee Cave\05_CAD\00323-00 tspn.dwg 4/5/2024 10:13 AM

STARBUCKS BEE CAVE
14211 STATE HWY 71, BEE CAVE, TEXAS 78738

FIRE CONTROL PLAN

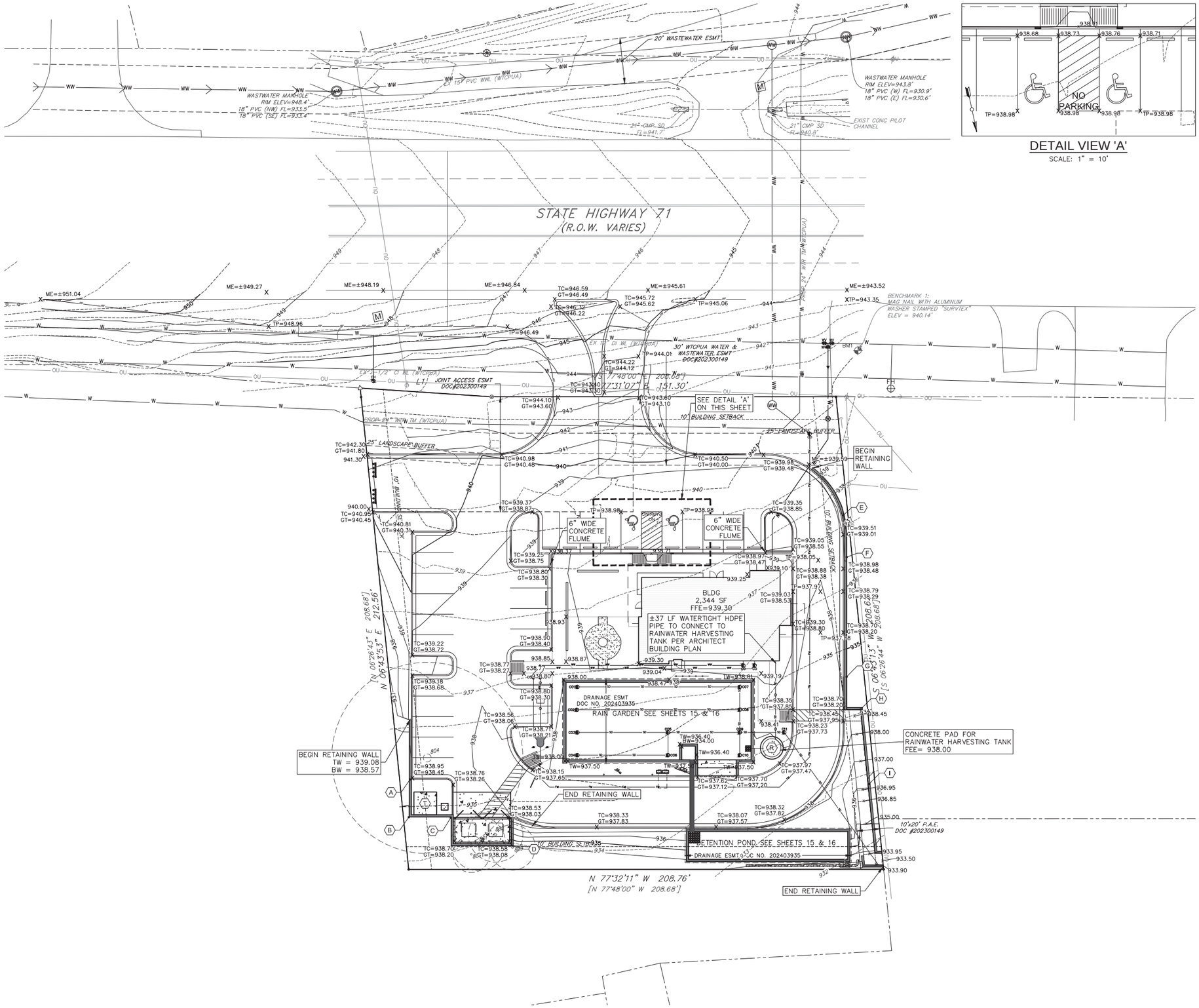
REVISIONS/CORRECTIONS

NO.	DATE	DESCRIPTION	BY

PROJECT NUMBER 00323-001
DATE: 4/5/2024
DESIGNED: KKE
CHECKED: JTW

SHEET NO.
13 OF 41

23-789-SNPS



DETAIL VIEW 'A'
SCALE: 1" = 10'

LEGEND

- SUBJECT TRACT PROPERTY LINE
- ADJOINER TRACT PROPERTY LINE
- 843 EXISTING CONTOUR (MAJOR)
- 843 EXISTING CONTOUR (MINOR)
- 843 PROPOSED CONTOUR (MAJOR)
- 843 PROPOSED CONTOUR (MINOR)
- x 521.2 PROPOSED SPOT ELEVATION
- PROPOSED STORM FLOW

TAGS

- (A) TW = 938.95 BW = 935.50
- (B) TW = 938.98 BW = 935.86
- (C) TW = 938.63 BW = 934.93
- (D) TW = 938.58 BW = 934.59
- (E) TW = 939.54 BW = 937.30
- (F) TW = 939.10 BW = 936.48
- (G) TW = 938.53 BW = 934.63
- (H) TW = 938.28 BW = 935.05
- (I) TW= 936.85 BW= 932.86

ABBREVIATION LIST

ME=	MATCH EXISTING
TP=	TOP OF PAVEMENT
GT=	GUTTER
TC=	TOP OF CURB
FFE=	FINISHED FLOOR ELEVATION
TW=	TOP OF WALL
BW=	BOTTOM OF WALL

MillerGRAY
Consulting • Engineering • Infrastructure
7320 N. MoPac Expressway, Suite 203
Austin, Texas 78731
Phone (512) 861-5300
www.miller-gray.com
TBPE FIRM REG. NO. F-16302

STATE OF TEXAS
J. TRAVIS WILSON
97307
LICENSED PROFESSIONAL ENGINEER
4/5/2024

P:\00323 Investcor\001 Starbucks Bee Cave\05_CAD\00323-001grd.dwg 4/5/2024 10:14 AM

STARBUCKS BEE CAVE

14211 STATE HWY 71, BEE CAVE, TEXAS 78738

OVERALL GRADING & STORM DRAIN PLAN

REVISIONS/CORRECTIONS

NO.	DATE	DESCRIPTION	BY

811 Know what's below. Call before you dig.

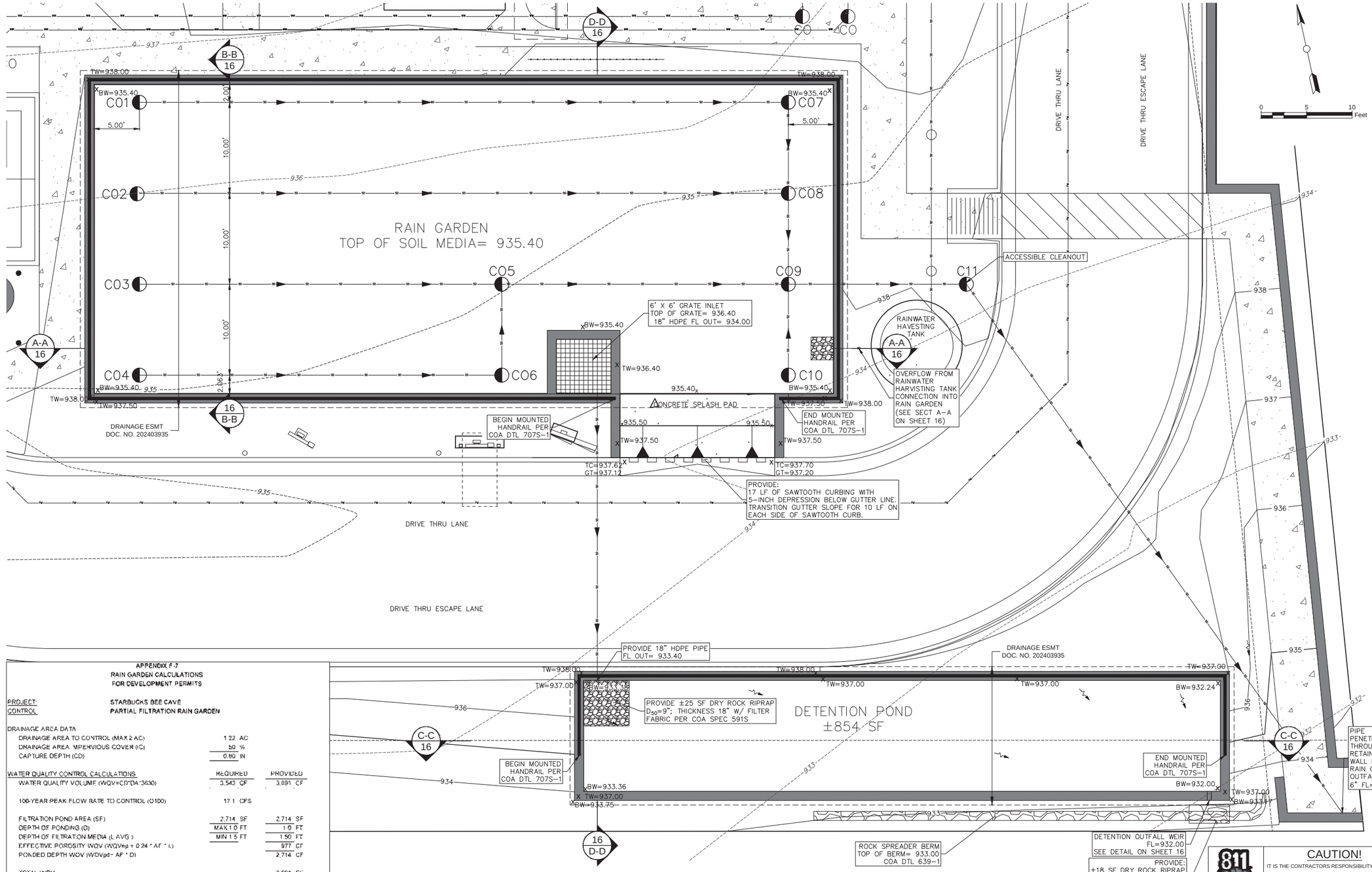
CAUTION!
IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

FOR CITY USE ONLY:

PROJECT NUMBER 00323-001
DATE: 4/5/2024
DESIGNED: KKE
CHECKED: JTW

SHEET NO.
14 OF 41

23-789-SNPS



APPENDIX F-7
RAIN GARDEN CALCULATIONS FOR DEVELOPMENT PERMITS

PROJECT: STARBUCKS BEE CAVE
CONTROL: PARTIAL FILTRATION RAIN GARDEN

DRAINAGE AREA DATA		
DRAINAGE AREA TO CONTROL (MAX 2 AC)	1.22 AC	
DRAINAGE AREA IMPERVIOUS COVER (IC)	50 %	
CAPTURE DEPTH (CD)	0.80 IN	
WATER QUALITY CONTROL CALCULATIONS	REQUIRED	PROVIDED
WATER QUALITY VOLUME (WQV=CD*DA*3630)	3,543 CF	3,691 CF
100-YEAR PEAK FLOW RATE TO CONTROL (Q100)	17.1 CFS	
FILTRATION POND AREA (SF)	2,714 SF	2,714 SF
DEPTH OF PONDING (D)	MAX 1.0 FT	1.0 FT
DEPTH OF FILTRATION MEDIA (L AVG.)	MIN 1.5 FT	1.50 FT
EFFECTIVE POROSITY WQV (WQVep = 0.24 * AF * L)		977 CF
PONDED DEPTH WQV (WQVpd= AF * D)		2,714 CF
TOTAL WQV		3,691 CF
WATER QUALITY ELEVATION (WQE)		936.40 FT MSL
ELEVATION OF SPLITTER/OVERFLOW WEIR (MINIMUM WQE)		936.40 FT MSL
LENGTH OF SPLITTER WEIR		16.0 FT
REQUIRED HEAD TO PASS Q100	MAX 0.5	0.50 FT
POND FREEBOARD PROVIDED TO PASS Q100	MIN 0.25 FT	0.6 FT
FOR FILTRATION RAIN GARDENS		
RAIN GARDEN POND DRAWDOWN TIME	MAX 48 HR	47.34 HR
UNDERDRAIN ORIFICE SIZE (DIAMETER)		1.125 IN
UNDERDRAIN ORIFICE SIZE (AREA)		1.00 SQ IN

DETENTION POND ELEVATION DISCHARGE RATING CURVE

CONTROL 1	WEIR	
Width	0.50	FT
Flowline	932.00	FT
Elevation (FT)	Height (FT)	Q (CFS)
932	0.00	0.0
933	1.00	1.5
934	2.00	4.2
935	3.00	7.8
936	4.00	12.0
937	5.00	16.8

WQ CLEANOUT FLOW LINES

CO1	933.21
CO2	933.13
CO3	933.03
CO4	933.12
CO5	932.69
CO6	932.78
CO7	932.6
CO8	932.51
CO9	932.42
CO10	932.58
CO11	932.25

NOTES:

1. THE TOPS OF ALL CLEANOUTS MUST BE FLUSH WITH THE TOP OF THE RAIN GARDEN SOIL MEDIA WITH THE EXCEPTION OF ACCESSIBLE CLEANOUT, WHICH IS TO BE FLUSH WITH ADJACENT GRADE.

811 Know what's below. Call before you dig.

CAUTION!
IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

FOR CITY USE ONLY:

MillerGRAY
Consulting • Engineering • Infrastructure
7320 N. MoPac Expressway, Suite 203
Austin, Texas 78731
Phone (512) 861-5300
www.miller-gray.com
TBPE FIRM REG. NO. F-16302

STATE OF TEXAS
J. TRAVIS WILSON
97307
LICENSED PROFESSIONAL ENGINEER
4/5/2024

P:\00323 Investcor\001 Starbucks Bee Cave\05_CAD\00323-001bond.dwg 4/5/2024 10:14 AM

STARBUCKS BEE CAVE

14211 STATE HWY 71, BEE CAVE, TEXAS 78738

DETENTION POND & RAIN GARDEN PLAN

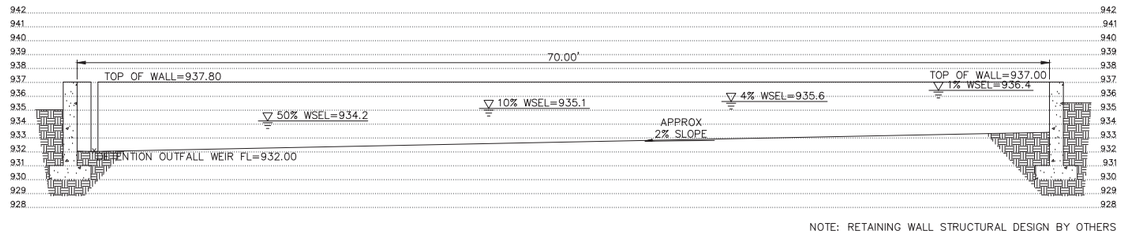
REVISIONS/CORRECTIONS

NO.	DATE	DESCRIPTION	BY

PROJECT NUMBER 00323-001
DATE: 4/5/2024
DESIGNED: KKE
CHECKED: JTW

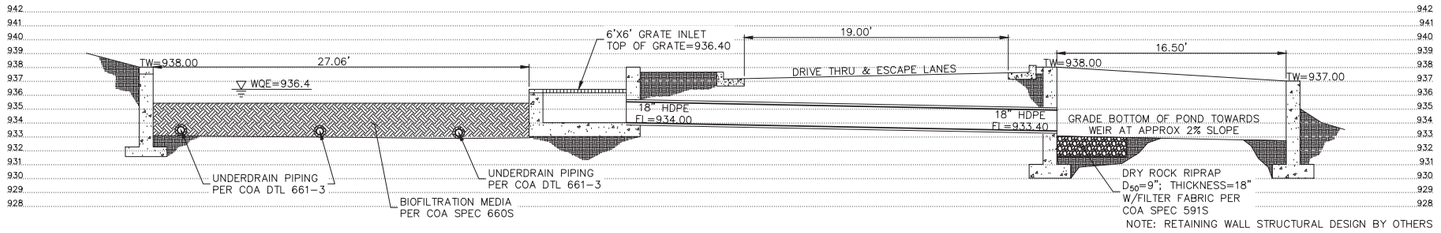
SHEET NO. 15 OF 41

23-789-SNPS



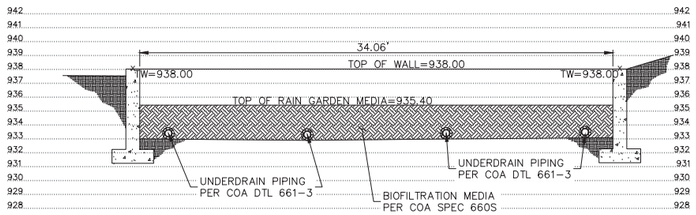
NOTE: RETAINING WALL STRUCTURAL DESIGN BY OTHERS

C-C 15 DETENTION POND SECTION
SCALE: 1" = 5' HORZ
1" = 5' VERT



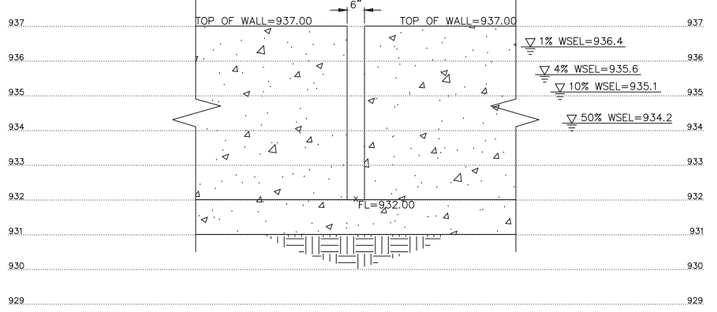
NOTE: RETAINING WALL STRUCTURAL DESIGN BY OTHERS

D-D 15 DETENTION POND SECTION
SCALE: 1" = 5' HORZ
1" = 5' VERT



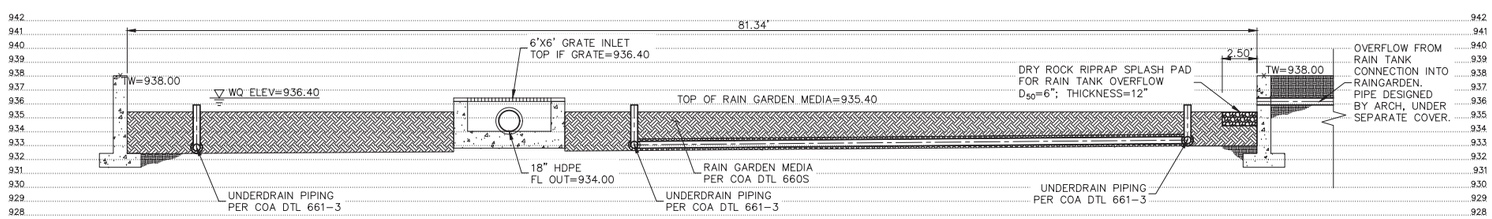
NOTE: RETAINING WALL STRUCTURAL DESIGN BY OTHERS

B-B 15 RAIN GARDEN SECTION
SCALE: 1" = 5' HORZ
1" = 5' VERT



NOTE: RETAINING WALL STRUCTURAL DESIGN BY OTHERS

15 DETENTION OUTFALL WEIR SECTION
SCALE: 1" = 2' HORZ
1" = 2' VERT



NOTE: RETAINING WALL STRUCTURAL DESIGN BY OTHERS

A-A 15 RAIN GARDEN SECTION
SCALE: 1" = 5' HORZ
1" = 5' VERT

MillerGRAY
Consulting • Engineering • Infrastructure
7320 N. MoPac Expressway, Suite 203
Austin, Texas 78731
Phone (512) 861-5300
www.miller-gray.com
TBPE FIRM REG. NO. F-16302

STATE OF TEXAS
J. TRAVIS WILSON
97307
LICENSED PROFESSIONAL ENGINEER
4/5/2024

P:\00323 Investacor\001 Starbucks Bee Cave\05_CAD\00323-001pond.dwg 4/5/2024 10:14 AM

STARBUCKS BEE CAVE
14211 STATE HWY 71, BEE CAVE, TEXAS 78738

DETENTION POND & RAIN GARDEN SECTIONS

REVISIONS/CORRECTIONS

NO.	DATE	DESCRIPTION	BY

811 Know what's below. Call before you dig.

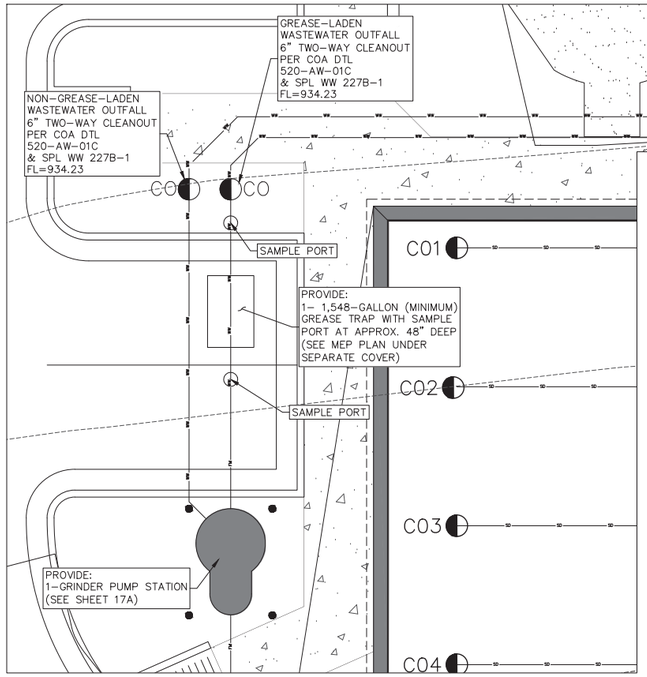
CAUTION!
IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

FOR CITY USE ONLY:

PROJECT NUMBER 00323-001
DATE: 4/5/2024
DESIGNED: KKE
CHECKED: JTW

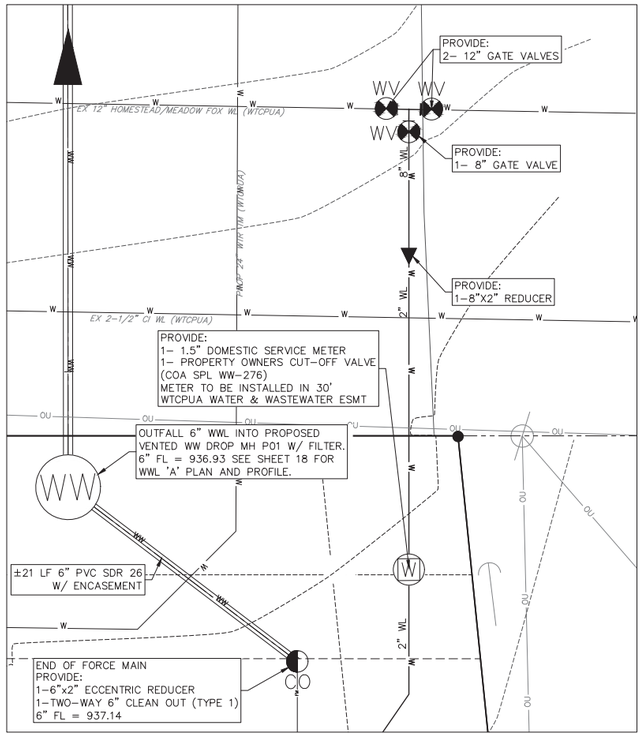
SHEET NO.
16 OF 41

23-789-SNPS



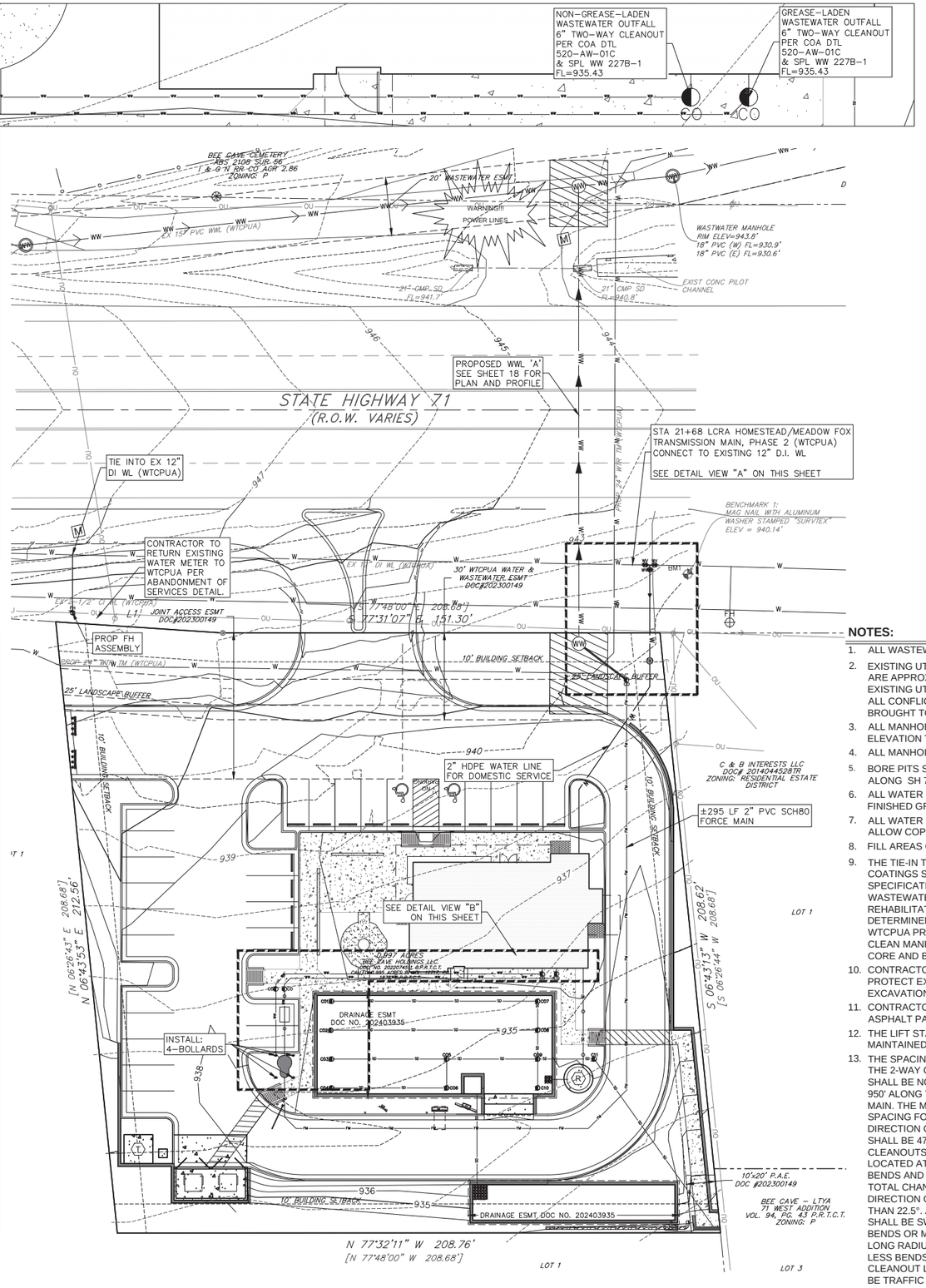
DETAIL VIEW "B"

SCALE: 1" = 5'



DETAIL VIEW "A"

SCALE: 1" = 5'



0 20 40 Feet

LEGEND

- SUBJECT TRACT PROPERTY LINE
- ADJOINER TRACT PROPERTY LINE
- EXISTING EOP
- EXISTING OVERHEAD POWER LINE
- EXISTING POWER POLE
- EXISTING GUY ANCHOR
- EXISTING TREE
- EXISTING FIRE HYDRANT
- CURB AND GUTTER
- PROPOSED WATER LINE
- PROPOSED WASTEWATER LINE
- PROPOSED STORM DRAIN LINE
- PROPOSED WATER VALVE
- PROPOSED WATER METER
- PROPOSED WASTEWATER MANHOLE
- PROPOSED WASTEWATER CLEANOUT
- TRANSFORMER
- RAINWATER TANK

NOTES:

1. ALL WASTEWATER LINES TO BE PVC, SDR26, ASTM D3034.
2. EXISTING UTILITY LOCATIONS AND CROSSINGS SHOWN IN PLAN AND PROFILE ARE APPROXIMATE. CONTRACTOR RESPONSIBLE FOR VERIFYING ALL EXISTING UTILITY LOCATIONS AND CROSSINGS PRIOR TO CONSTRUCTION. ALL CONFLICTS WITH INFORMATION SHOWN IN THESE PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER/ENGINEER IMMEDIATELY.
3. ALL MANHOLES NOT BENEATH PAVEMENT SHALL BE BOLTED AND HAVE A RIM ELEVATION TWO INCHES ABOVE ADJACENT GRADE.
4. ALL MANHOLES SHALL HAVE CONCENTRIC CONES.
5. BORE PITS SHALL BE LOCATED A MINIMUM OF 16' FROM EDGE OF PAVEMENT ALONG SH 71.
6. ALL WATER LINE SHALL HAVE A MINIMUM OF FOUR (4) FEET OF COVER FROM FINISHED GRADE.
7. ALL WATER SERVICE LINES SHALL BE HDPE BLACK PIPE. WTCPUA DOES NOT ALLOW COPPER SERVICE PIPES.
8. FILL AREAS OUTSIDE PAVEMENT TO BE COMPACTED TO 95%.
9. THE TIE-IN TO EXISTING WASTEWATER MANHOLE AND ALL MANHOLE COATINGS SHALL BE IN ACCORDANCE WITH THE CITY OF AUSTIN SPECIFICATIONS. ALL WASTEWATER CONNECTIONS TO EXISTING WASTEWATER MANHOLES SHALL MEET WASTEWATER MANHOLE REHABILITATION REQUIREMENTS. THESE REQUIREMENTS MUST BE DETERMINED PRIOR TO ANY CONNECTION. CONTRACTOR SHALL NOTIFY WTCPUA PRIOR, TO MAKE WASTEWATER CONNECTION. CONTRACTOR SHALL CLEAN MANHOLE TO ALLOW INSPECTION BY PUA. CONTRACTOR SHALL CORE AND BOOT PROPOSED CONNECTION AND RECOAT MANHOLE.
10. CONTRACTOR IS REQUIRED TO PROVIDE ENGINEER SUPPORT PLAN TO PROTECT EXISTING WATER LINES WHEN SAID LINES ARE WITHIN 5 FEET OF EXCAVATION AND WHEN EXCAVATION CROSSES WATER LINES.
11. CONTRACTOR SHALL REPAIR/RESTORE EXISTING CONCRETE AND/OR ASPHALT PAVING AND RIPRAP TO EXISTING CONDITION AS NECESSARY.
12. THE LIFT STATION VALVE VAULT, AND GREASE TRAP ARE TO BE PRIVATELY MAINTAINED.
13. THE SPACING BETWEEN THE 2-WAY CLEANOUTS SHALL BE NO MORE THAN 950' ALONG THE FORCE MAIN. THE MAXIMUM SPACING FOR SINGLE DIRECTION CLEANOUTS SHALL BE 475'. CLEANOUTS SHALL BE LOCATED AT SHARP BENDS AND PRIOR TO TOTAL CHANGE IN DIRECTION GREATER THAN 22.5°. ALL BENDS SHALL BE SWEEPING BENDS OR MADE UP OF A LONG RADIUS 45° OR LESS BENDS. ALL CLEANOUT LIDS SHALL BE TRAFFIC RATED.

811 Know what's below. Call before you dig.

CAUTION!

IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

FOR CITY USE ONLY:

MillerGRAY
Consulting • Engineering • Infrastructure
7320 N. MoPac Expressway, Suite 203
Austin, Texas 78731
Phone (512) 861-5300
www.miller-gray.com
TBPE FIRM REG. NO. F-16302

STATE OF TEXAS
J. TRAVIS WILSON
97307
LICENSED PROFESSIONAL ENGINEER
4/5/2024

P:\00323 Investcor\001 Starbucks Bee Cave\05_CAD\00323-001d.dwg 4/5/2024 10:14 AM

STARBUCKS BEE CAVE
14211 STATE HWY 71, BEE CAVE, TEXAS 78738

UTILITY PLAN

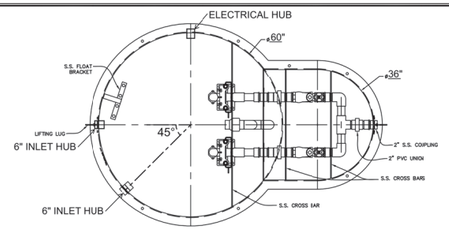
REVISIONS/CORRECTIONS

NO.	DATE	DESCRIPTION	BY

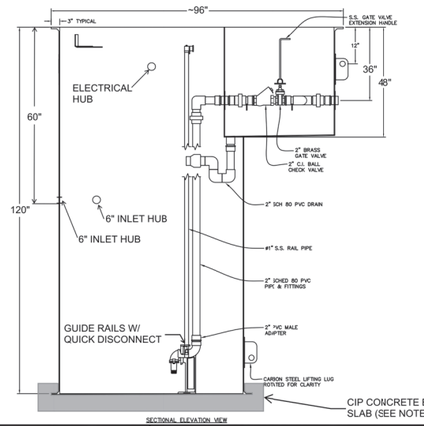
PROJECT NUMBER 00323-001
DATE: 4/5/2024
DESIGNED: KKE
CHECKED: JTW

SHEET NO. 17 OF 41

23-789-SNPS

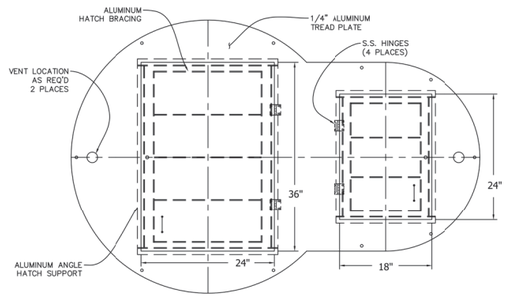


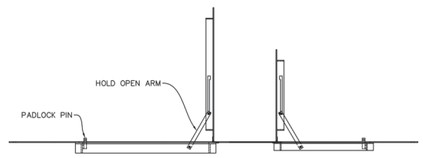
PLAN VIEW



SECTIONAL ELEVATION VIEW

STEELE PLASTICS, INC. 1280 Sturgis Rd. Conway, AR 72034 (501) 327-5122 Fax (501) 327-0807	TITLE PACKAGE DUPLEX 2" WITH VALVE BOX – PVC 10' PROJECT	JOB NO.
	CUSTOMER	P.O. NO. DWG. NO. PFD200-VBA-PVC10





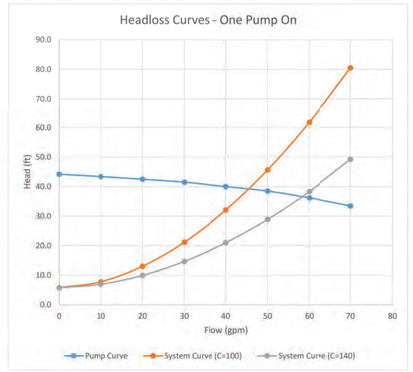
ALUMINUM HATCH COVER
KEY-HOLE STYLE

STEELE PLASTICS, INC. 1280 Sturgis Rd. Conway, AR 72034 (501) 327-5122 Fax (501) 327-0807	TITLE ____ x ____ ALUMINUM HATCH COVER PROJECT	JOB NO.
	CUSTOMER	P.O. NO. DWG. NO. CYA-KH

MillerGRAY

Project Starbucks Grinder Station
Client Investcor
Prj No 00323-001
Date 3/20/2024
By RY/SS
Title Lift Station Design

Pump Curve



CONTROL ELEVATIONS

Top of Lid =	938.20	ft
8" Invert =	933.20	ft
High Level Alarm =	933.00	ft
Lag Pump On =	932.70	ft
Lead Pump On =	931.70	ft
Pumps Off =	929.70	ft
Bottom of Wet Well =	928.20	ft
Total Well Depth (Dw) =	10.00	ft
Cycle Time (Θ) =	6.00	min
Pump Capacity (Q) =	50.00	gpm

Page 1 of 1

EBARA Submersible Grinder Pumps *(residential / commercial)* **EBG, EBHG**

Specifications – 3, 5, 7.5 10 HP

Pump Model:
Pump shall be of the centrifugal type with an integrally built-in grinder unit and submersible type motor. The grinder unit shall be capable of macerating all material in normal domestic and commercial sewage, including reasonable amounts of foreign objects such as sanitary napkins, disposable diapers, thin rubber, small wood, plastic and the like to a fine slurry that easily pass through the pump and 2" discharge pipe. Discharge shall be standard with slotted bolt pattern to accomodate either a 2.5" or 3" 150 lb. ANSI flange.

Operating Conditions:
The pump shall have a capacity of **50** GPM at a total head of **46** feet, and shall use a motor rated at **3** HP and 3450 RPM.

Pump Impeller:
Cast brass and threaded on a stainless steel shaft. The impeller shall be of the recessed vortex type to provide an unobstructed passage through the volute for the ground solids.

Grinder Construction:
Both grinder impellers and shredding ring shall be of 440C stainless steel hardened to 56-60 Rockwell C. The grinder assembly shall consist of a grinder impeller and shredding ring mounted directly below the voute passage. The grinder impeller is threaded to a stainless steel shaft, locked with a screw and washer. The shredding ring shall be pressed into an iron holding flange for easy removal. The flange shall be provided with tapped back-off holes so screws can be used to push the shredding ring from the housing. All grinding of solids shall be from the action of the grinder impeller against the shredding ring.

Seals:
Type 21, dual mechanical seal construction mounted in tandem, shall protect the motor. Primary seal shall be silicon / carbide. Secondary seal shall be silicon / carbide. The seal face shall be lapped to a flatness of one light band. A double electrode shall be mounted in the seal chamber to detect water entering the chamber through the lower seal. Water in the chamber shall cause a red light to turn on at the control box. This signal shall not stop the motor, but shall act as a warning only, indicating service is required.

Motor:
The pump motor shall be of the submersible type, rated **3** HP, 3450 RPM. The motor shall be for 60 Hz, ~~either 208, 230 or 460~~ volt, single ~~or three~~ phase operation. Major operating temperature must not exceed Class B ratings.

The stator winding shall be of the open type with Class F insulation. Winding housing shall be filled with clean, high dielectric oil that lubricates bearings and seals, transferring heat from windings and rotor to the outer cast housing.

An upper motor bearing cap shall be a separate casting for easy mounting and replacement. The motor shall have two heavy-duty ball bearings to support the pump shaft, taking radial and thrust loadings. A sleeve guide bushing is mounted directly above the lower seal to take radial load and act as a flame path for the seal chamber. Ball bearings shall be designed for a minimum 50,000 hours B-10 life. The stator shall be pressed into the motor housing. The common motor pump and grinder shaft shall be of 416 SST, threaded to take the pump and grinder impeller.

Motors shall have a heat sensor thermostat attached to the top end of the motor windings to stop the motor if the motor winding temperature reaches 200 degrees F. The high temperature shut-off will cause the pump to cease operation, should a control failure cause the pump to run in a dry wet well. The thermostat shall autmatically reset when the motor cools to a safe operating temperature.

Power Cord:
The motor power cord shall be 10 Ga. SOW/SOWA or SOOW. The cable jacket shall be sealed at the motor entrance by means of a rubber compression washer and compression nut. An epoxy filled tube shall seal the outer cable jacket and individual leads to prevent water from entering the motor housing. Individual conductor strands shall be soldered within the epoxy seal. Cords shall withstand a pull of 300 pounds.

EBARA Submersible Grinder Pumps *(residential / commercial)* **EBG, EBHG**

Electrical Data

Project: Model: Chk'd: Date:

Model EBG, EBHG
2,~~3~~ 5, 7.5 HP, 60Hz, Single Phase, 20~~8~~/~~230~~V

	Item No.				
Name-Plate Rating	Output (HP)	2	~~3~~	5	7½
	Phase	1	1	1	1
	Poles	2	2	2	2
	Volts	208 / 230	~~208~~ / 230	208 / 230	230
	Amperes	15.5 / 12.8	~~37~~ / 34	44 / 40	47
	Speed	3450	3450	3450	3450
	Insulation Class	F	F	F	F
Capacitor μ F	Start	150	274 - 324	274 - 324	274 - 324
	Run	30	30	30	30
Resistance at 20°C OHMS	Main Coil	1.8	.3	.3	.3
	Aux. Coil	5.1	.8	.8	.8
Start Current A		28 / 25	~~185~~ / 170	220 / 200	235
Service Factor		1.59	3.96	2.37	1.4

GRINDER PUMP STATION NOTES

1. CONTRACTOR SHALL FURNISH AND INSTALL A PACKAGED DUPLEX GRINDER PUMP STATION FROM MANSFIELD PUMP COMPANY, NEW BRAUNFELS, TEXAS, (210) 964-5999.
2. WET WELL SHALL BE FIBERGLASS WITH INTEGRAL VALVE VAULT IN A KEYHOLE OR FIGURE EIGHT CONFIGURATION.
3. WET WELL & VALVE VAULT SHALL CONTAIN ALL NECESSARY INLETS, OUTLETS, GUIDE RAILS, PIPING, VALVES, HATCHES, AND APPURTENANCES.
4. PUMPS SHALL BE MANUFACTURED BY EBARA WITH THE FOLLOWING CHARACTERISTICS:
   a. FLOW = 50 GPM
   b. HEAD = 46 FT
   c. MODEL = EBG-31
   d. IMPELLER = 3.75" DIA.
   e. MOTOR = 3 HP
   f. PHASE = SINGLE
   g. VOLTAGE = 230 V
5. A PUMP CONTROL PANEL SHALL BE PROVIDED IN A NEMA 4X WITH AUTOMATIC OPERATION, ALTERNATING PUMPS, AUDIO-VISUAL ALARM, FLOATS, AND ALL NECESSARY APPURTENANCES.
6. VAULT AND WET WELL SHALL HAVE PVC VENTS WITH ACTIVATED CARBON INSERTS FOR THE CONTROL OF ODOR.
7. CIP CONCRETE BOTTOM SLAP SHALL HAVE THE FOLLOWING CHARACTERISTICS:
   a. CONCRETE CLASS: TXDOT OR COA CLASS C.
   b. CONCRETE THICKNESS UNDER WET WELL: 9"
   c. CONCRETE TOTAL THICKNESS: 12" (INCL. 3" EMBEDMENT AROUND FLANGE)
   d. REBAR SIZE: NO. 5
   e. REBAR SPACING: 16" O.C.E.W.
   f. CONCRETE WIDTH: 12" BEYOND WETWELL OUTER DIAMETER
   g. REBAR CLEAR COVER: 2"

811 Know what's **below.** **Call** before you dig.

CAUTION!
IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

FOR CITY USE ONLY:

MillerGRAY
Consulting • Engineering • Infrastructure
7320 N. MoPac Expressway, Suite 203
Austin, Texas 78731
Phone (512) 861-5300
www.miller-gray.com
TBPE FIRM REG. NO. F-16302

STATE OF TEXAS
J. TRAVIS WILSON
97307
LICENSED PROFESSIONAL ENGINEER
4/5/2024

P:\00323 Investcor\001 Starbucks Bee Cave\05_CAD\00323-001d.dwg 4/5/2024 10:14 AM

STARBUCKS BEE CAVE
14211 STATE HWY 71, BEE CAVE, TEXAS 78738

GRINDER PUMP STATION DETAILS

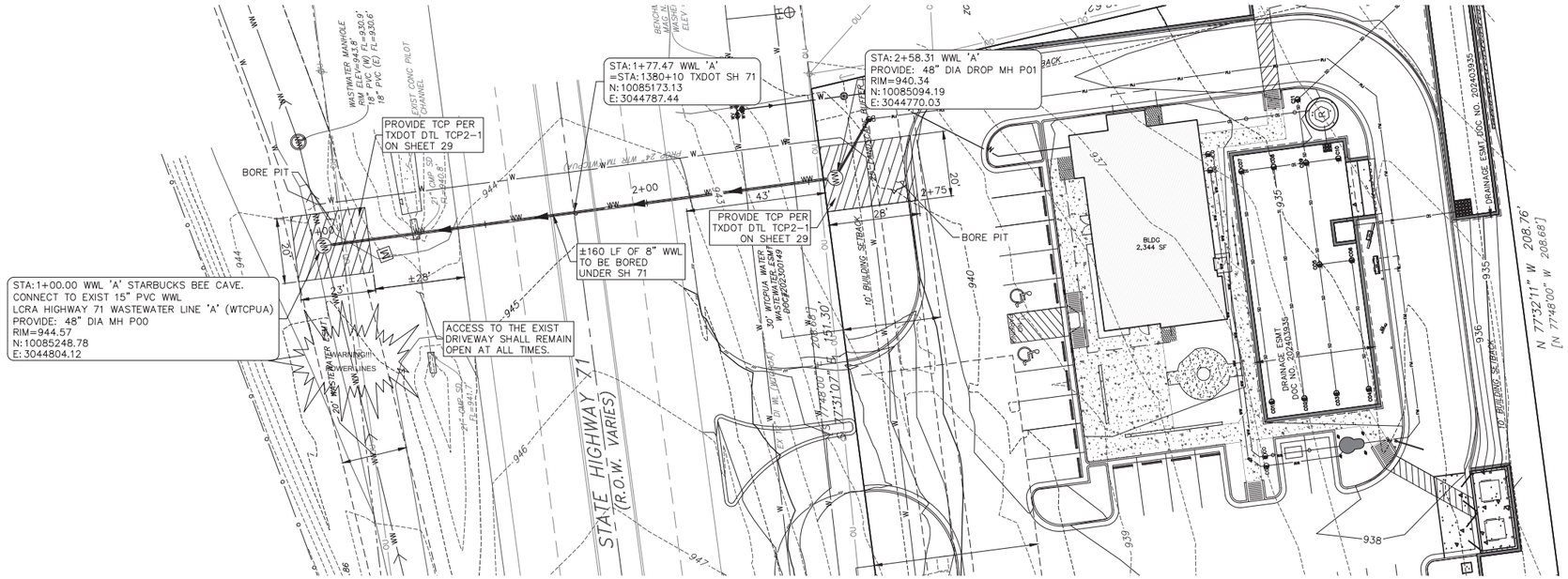
REVISIONS/CORRECTIONS

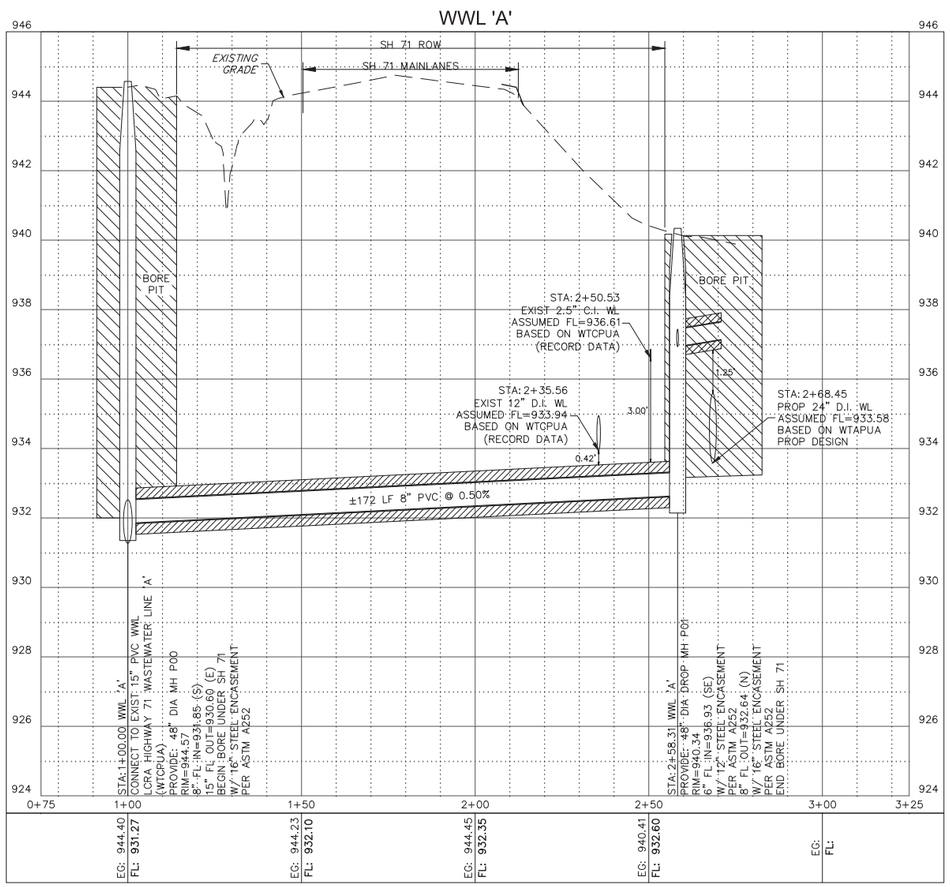
NO.	DATE	DESCRIPTION	BY

PROJECT NUMBER 00323-001
DATE: 4/5/2024
DESIGNED: KKE
CHECKED: JTW

SHEET NO. 17A OF 41

23-789-SNPS





PROFILE SCALE
1"=20' HORIZONTAL
1"= 2' VERTICAL

NOTES:

1. ALL WASTEWATER LINES TO BE PVC, SDR26, ASTM D3034.
2. EXISTING UTILITY LOCATIONS AND CROSSINGS SHOWN IN PLAN AND PROFILE ARE APPROXIMATE. CONTRACTOR RESPONSIBLE FOR VERIFYING ALL EXISTING UTILITY LOCATIONS AND CROSSINGS PRIOR TO CONSTRUCTION. ALL CONFLICTS WITH INFORMATION SHOWN IN THESE PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER/ENGINEER IMMEDIATELY.
3. CONTRACTOR IS REQUIRED TO PROVIDE ENGINEER SUPPORT PLAN TO PROTECT EXISTING WATER LINES WHEN SAID LINES ARE WITHIN 5 FEET OF EXCAVATION AND WHEN EXCAVATION CROSSES WATER LINES.
4. ALL MANHOLES NOT BENEATH PAVEMENT SHALL BE BOLTED AND HAVE A RIM ELEVATION TWO INCHES ABOVE ADJACENT GRADE.
5. ALL MANHOLES SHALL HAVE CONCENTRIC CONES.
6. CONTRACTOR SHALL REPAIR/RESTORE EXISTING CONCRETE AND/OR ASPHALT PAVING AND RIPRAP TO EXISTING CONDITION AS NECESSARY.
7. BORE PITS SHALL BE LOCATED A MINIMUM OF 16' FROM EDGE OF PAVEMENT ALONG SH 71.

811 Know what's below. Call before you dig.

CAUTION!

IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

FOR CITY USE ONLY:

MillerGRAY
Consulting • Engineering • Infrastructure
7320 N. MoPac Expressway, Suite 203
Austin, Texas 78731
Phone (512) 861-5300
www.miller-gray.com
TBPE FIRM REG. NO. F-16302

STATE OF TEXAS
J. TRAVIS WILSON
97307
LICENSED PROFESSIONAL ENGINEER
4/5/2024

P:\00323 Investcor\001 Starbucks Bee Cave\05_CAD\00323-001.dwg 4/5/2024 10:14 AM

STARBUCKS BEE CAVE
14211 STATE HWY 71, BEE CAVE, TEXAS 78738

WWL 'A' PLAN & PROFILE

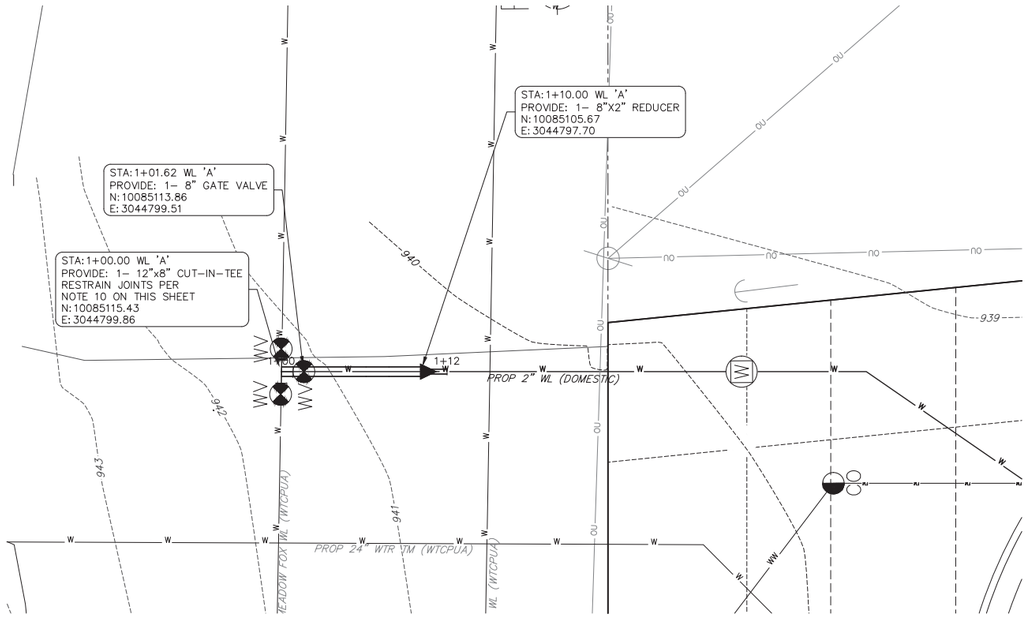
REVISIONS/CORRECTIONS

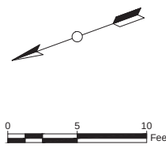
NO.	DATE	DESCRIPTION	BY

PROJECT NUMBER 00323-001
DATE: 4/5/2024
DESIGNED: KKE
CHECKED: JTW

SHEET NO. 18 OF 41

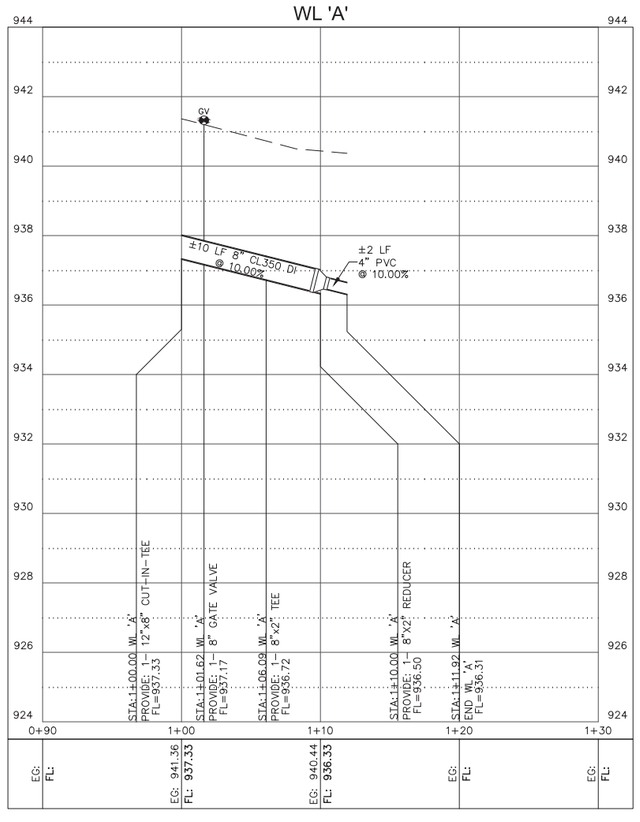
23-789-SNPS





LEGEND

- SUBJECT TRACT PROPERTY LINE
- EXISTING WATER LINE
- PROPOSED WATER LINE
- PROPOSED WASTEWATER LINE
- PROPOSED STORM DRAIN LINE
- EXIST OVERHEAD POWER LINE
- EXIST POWER POLE
- EXIST GUY ANCHOR
- EXISTING FIRE HYDRANT



PROFILE SCALE
1"= 5' HORIZONTAL
1"= 2' VERTICAL

NOTES:

1. ALL WASTEWATER LINES TO BE PVC, SDR26, ASTM D3034.
2. EXISTING UTILITY LOCATIONS AND CROSSINGS SHOWN IN PLAN AND PROFILE ARE APPROXIMATE. CONTRACTOR RESPONSIBLE FOR VERIFYING ALL EXISTING UTILITY LOCATIONS AND CROSSINGS PRIOR TO CONSTRUCTION. ALL CONFLICTS WITH INFORMATION SHOWN IN THESE PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER/ENGINEER IMMEDIATELY.
3. CONTRACTOR IS REQUIRED TO PROVIDE ENGINEER SUPPORT PLAN TO PROTECT EXISTING WATER LINES WHEN SAID LINES ARE WITHIN 5 FEET OF EXCAVATION AND WHEN EXCAVATION CROSSES WATER LINES.
4. ALL MANHOLES NOT BENEATH PAVEMENT SHALL BE BOLTED AND HAVE A RIM ELEVATION TWO INCHES ABOVE ADJACENT GRADE.
5. ALL MANHOLES SHALL HAVE CONCENTRIC CONES.
6. CONTRACTOR SHALL REPAIR/RESTORE EXISTING CONCRETE AND/OR ASPHALT PAVING AND RIPRAP TO EXISTING CONDITION AS NECESSARY.
7. BORE PITS SHALL BE LOCATED A MINIMUM OF 16' FROM EDGE OF PAVEMENT ALONG SH 71.
8. ALL WATER LINE SHALL HAVE A MINIMUM OF FOUR (4) FEET OF COVER FROM FINISHED GRADE.
9. ALL WATER SERVICE LINES SHALL BE HDPE BLACK PIPE.
10. A MINIMUM OF 2 PIPE JOINTS TO BE RESTRAINED ALONG THE EXISTING 12" WATER LINE ON EITHER SIDE OF THE CUT-IN TEE AND INSTALLED PRIOR TO THE CUT-IN TEE CONSTRUCTION.

811 Know what's below. Call before you dig.

CAUTION!

IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

FOR CITY USE ONLY:

MillerGRAY
Consulting • Engineering • Infrastructure
7320 N. MoPac Expressway, Suite 203
Austin, Texas 78731
Phone (512) 861-5300
www.miller-gray.com
TBPE FIRM REG. NO. F-16302

STATE OF TEXAS
J. TRAVIS WILSON
97307
LICENSED PROFESSIONAL ENGINEER
4/5/2024

P:\00323 Investacon\001 Starbucks Bee Cave\05_CAD\00323-001wrkprf.dwg 4/5/2024 10:15 AM

STARBUCKS BEE CAVE

14211 STATE HWY 71, BEE CAVE, TEXAS 78738

WL 'A' PLAN & PROFILE

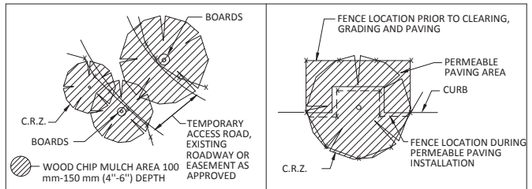
REVISIONS/CORRECTIONS

NO.	DATE	DESCRIPTION	BY

PROJECT NUMBER 00323-001
DATE: 4/5/2024
DESIGNED: KKE
CHECKED: JTW

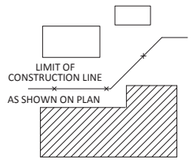
SHEET NO.
19 OF 41

23-789-SNPS

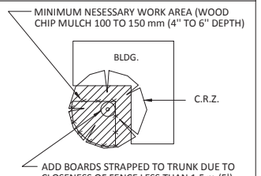


LINEAR CONSTRUCTION THROUGH TREES

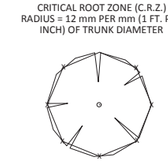
TREES IN PAVING AREA



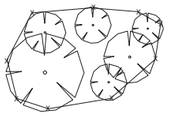
NATURAL AREAS



TREES NEAR CONSTRUCTION ACTIVITY

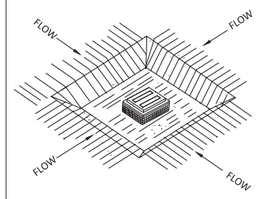


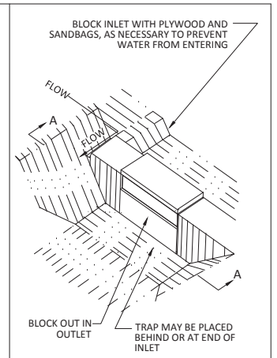
INDIVIDUAL TREE

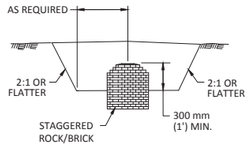


GROUP OF TREES

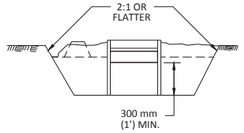
CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT	TREE PROTECTION FENCE LOCATIONS	
RECORD COPY SIGNED BY J. PATRICK MURPHY 11/15/99 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 610S-1







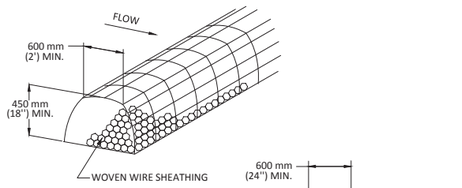
CROSS SECTION
YARD DRAIN



SECTION A-A
CURB DRAIN

NOTE:
WHERE CURB IS IN PLACE, PROVIDE A 300 mm (1') WIDE OPENING IN THE CURB, OR USE A SANDBAG TO DAM TO FORCE WATER OVER THE CURB TO THE TRAP.

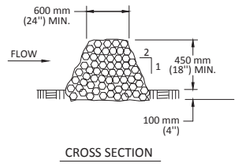
CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT	STORM INLET SEDIMENT TRAP	
RECORD COPY SIGNED BY J. PATRICK MURPHY 3/27/00 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 632S-1



ROCK BERM

STANDARD SYMBOL FOR ROCK BERM (RB)

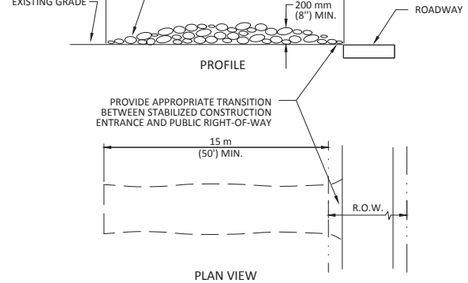
___ RB ___



CROSS SECTION

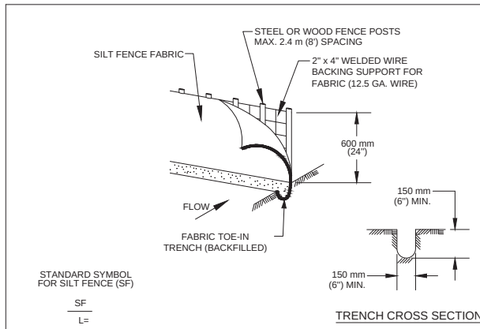
NOTES:
1. USE ONLY OPEN GRADED ROCK 75 to 125 mm (3 to 5") DIAMETER FOR ALL CONDITIONS.
2. THE ROCK BERM SHALL BE SECURED WITH A WOVEN WIRE SHEATHING HAVING MAXIMUM 25 mm (1") OPENING AND MINIMUM WIRE DIAMETER OF 12.9 mm (20 GAUGE).
3. THE ROCK BERM SHALL BE INSPECTED DAILY OR AFTER EACH RAIN, AND THE STONE AND/OR FABRIC CORE-WOVEN SHEATHING SHALL BE REPLACED WHEN THE STRUCTURE CEASES TO FUNCTION AS INTENDED, DUE TO SEDIMENT ACCUMULATION AMONG THE ROCKS, WASHOUT, CONSTRUCTION TRAFFIC DAMAGE, ETC.
4. IF SEDIMENT REACHES A DEPTH EQUAL TO ONE-THIRD THE HEIGHT OF THE BERM OR 150 mm (6"), WHICHEVER IS LESS, THE SEDIMENT SHALL BE REMOVED AND DISPOSED OF ON AN APPROVED SITE AND IN A MANNER THAT WILL NOT CREATE A SEDIMENTION PROBLEM.
5. WHEN THE SITE IS COMPLETELY STABILIZED,THE BERM AND ACCUMULATED SEDIMENT SHALL BE REMOVED AND DISPOSED OF IN AN APPROVED MANNER.

CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT	ROCK BERM	
RECORD COPY SIGNED BY MORGAN BYARS 8/24/2010 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 639S-1



NOTES:
1. STONE SIZE: 75-125 mm (3-5") OPEN GRADED ROCK.
2. LENGTH: AS EFFECTIVE BUT NOT LESS THAN 15 m (50').
3. THICKNESS: NOT LESS THAN 200 mm (8").
4. WIDTH: NOT LESS THAN FULL WIDTH OF ALL POINTS OF INGRESS/EGRESS.
5. WASHING: WHEN NECESSARY, VEHICLE WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC ROADWAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE AND DRAINS INTO AN APPROVED TRAP OR SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATERCOURSE USING APPROVED METHODS.
6. MAINTENANCE: THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC ROADWAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND, AS WELL AS REPAIR AND CLEAN OUT OF ANY MEASURE DEVICES USED TO TRAP SEDIMENT. ALL SEDIMENTS THAT IS SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC ROADWAY MUST BE REMOVED IMMEDIATELY.
7. DRAINAGE: ENTRANCE MUST BE PROPERLY GRADED OR INCORPORATE A DRAINAGE SWALE TO PREVENT RUNOFF FROM LEAVING THE CONSTRUCTION SITE.

CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT	STABILIZED CONSTRUCTION ENTRANCE	
RECORD COPY SIGNED BY J. PATRICK MURPHY 5/23/00 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 641S-1



STANDARD SYMBOL FOR SILT FENCE (SF)

SF
L=

TRENCH CROSS SECTION

1. STEEL OR WOOD POSTS WHICH SUPPORT THE SILT FENCE SHALL BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POST MUST BE EMBEDDED A MINIMUM OF 300 mm (12 INCHES). IF WOOD POSTS CANNOT ACHIEVE 300 mm (12 inches) DEPTH, USE STEEL POSTS.

2. THE TOE OF THE SILT FENCE SHALL BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWNSLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW.

3. THE TRENCH MUST BE A MINIMUM OF 150 mm (6 inches) DEEP AND 150 mm (6 inches) WIDE TO ALLOW FOR THE SILT FENCE FABRIC TO BE LAID IN THE GROUND AND BACKFILLED WITH COMPACTED MATERIAL.

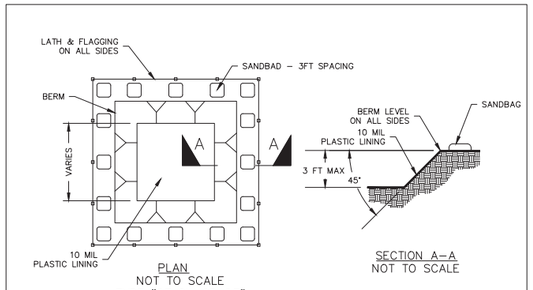
4. SILT FENCE FABRIC SHOULD BE SECURELY FASTENED TO EACH STEEL OR WOOD SUPPORT POST OR TO WOVEN WIRE , WHICH IS IN TURN ATTACHED TO THE STEEL OR WOOD FENCE POST.

5. INSPECTION SHALL BE MADE WEEKLY OR AFTER EACH RAINFALL EVENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTY AS NEEDED.

6. SILT FENCE SHALL BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

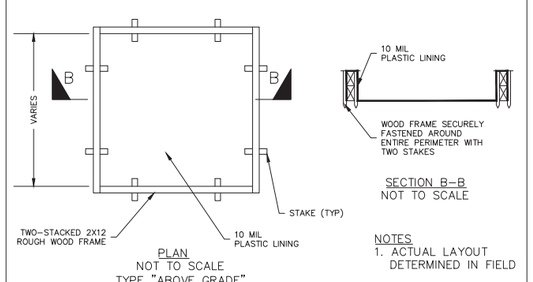
7. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF 150 mm (6 inches). THE SILT SHALL BE DISPOSED OF ON AN APPROVED SITE AND IN SUCH A MANNER THAT WILL NOT CONTRIBUTE TO ADDITIONAL SILTATION.

CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT	SILT FENCE	
RECORD COPY SIGNED BY MORGAN BYARS *09/01/2011* ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 642S-1



PLAN
NOT TO SCALE
TYPE "BELOW GRADE"

SECTION A–A
NOT TO SCALE

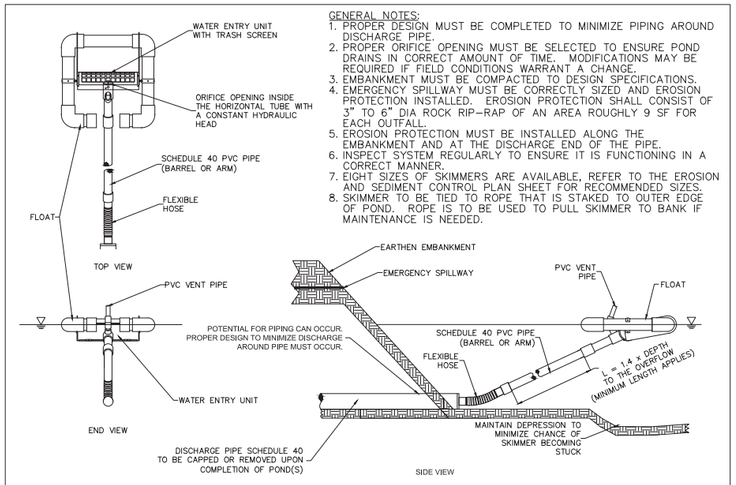


PLAN
NOT TO SCALE
TYPE "ABOVE GRADE"

SECTION B–B
NOT TO SCALE

NOTES
1. ACTUAL LAYOUT DETERMINED IN FIELD

CONCRETE WASHOUT | N.T.S



GENERAL NOTES:
1. PROPER DESIGN MUST BE COMPLETED TO MINIMIZE PIPING AROUND DISCHARGE PIPE.
2. PROPER ORIFICE OPENING MUST BE SELECTED TO ENSURE POND DRAINS IN CORRECT AMOUNT OF TIME. MODIFICATIONS MAY BE REQUIRED IF FIELD CONDITIONS WARRANT A CHANGE.
3. EMBANKMENT MUST BE COMPACTED TO DESIGN SPECIFICATIONS.
4. EMERGENCY SPILLWAY MUST BE CORRECTLY SIZED AND EROSION PROTECTION INSTALLED. EROSION PROTECTION SHALL CONSIST OF 3" TO 6" DIA ROCK RIP-RAP OF AN AREA ROUGHLY 9 SF FOR EACH OUTFALL.
5. EROSION PROTECTION MUST BE INSTALLED ALONG THE EMBANKMENT AND AT THE DISCHARGE END OF THE PIPE.
6. INSPECT SYSTEM REGULARLY TO ENSURE IT IS FUNCTIONING IN A CORRECT MANNER.
7. EIGHT SIZES OF SKIMMERS ARE AVAILABLE, REFER TO THE EROSION AND SEDIMENT CONTROL PLAN SHEET FOR RECOMMENDED SIZES.
8. SKIMMER TO BE TIED TO ROPE THAT IS STAKED TO OUTER EDGE OF POND. ROPE IS TO BE USED TO PULL SKIMMER TO BANK IF MAINTENANCE IS NEEDED.

POND SKIMMER | N.T.S.

811 Know what's below. Call before you dig.

CAUTION!

IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

FOR CITY USE ONLY:

MillerGRAY
Consulting • Engineering • Infrastructure
7320 N. MoPac Expressway, Suite 203
Austin, Texas 78731
Phone (512) 861-5300
www.miller-gray.com
TBPE FIRM REG. NO. F-16302

P:\00323 Investcor\001 Starbucks Bee Cave\05_CAD\00323-001dt.dwg 4/5/2024 10:15 AM

STATE OF TEXAS
J. TRAVIS WILSON
97307
LICENSED PROFESSIONAL ENGINEER
4/5/2024

STARBUCKS BEE CAVE
14211 STATE HWY 71, BEE CAVE, TEXAS 78738

STANDARD DETAILS
1 OF 10

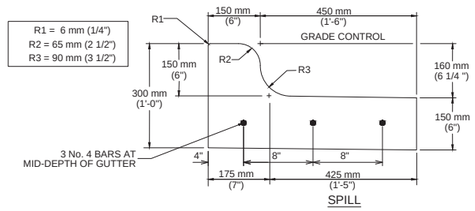
REVISIONS/CORRECTIONS

NO.	DATE	DESCRIPTION	BY

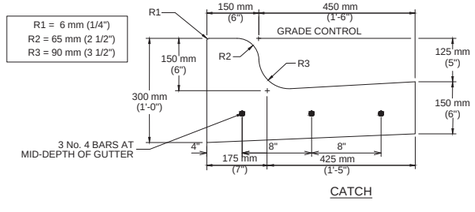
PROJECT NUMBER 00323-001 | DATE: 4/5/2024 | DESIGNED: KKE | CHECKED: JTW

SHEET NO.
20 OF 41

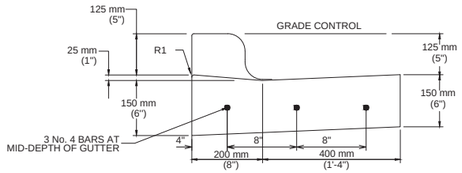
23-789-SNPS



SPILL

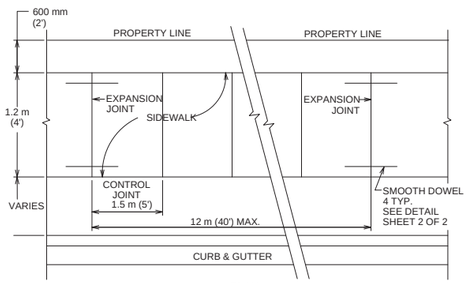


CATCH

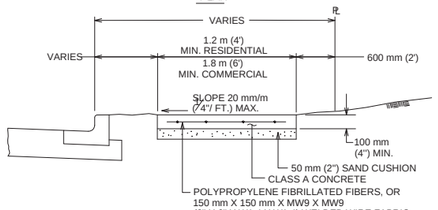


LAYDOWN CURB

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		REINFORCED CURB AND GUTTER SECTION	
RECORD COPY SIGNED BY SAM ANGOORI	01/04/10 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 430S-2



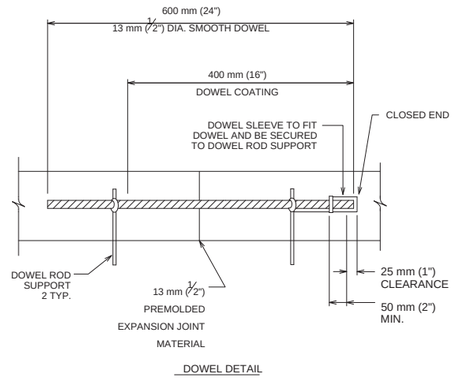
PLAN



REINFORCEMENT SHALL ACCURATELY PLACED AT SLAB MID-DEPTH AND HELD FIRMLY IN PLACE BY MEANS OF BAR SUPPORTS OF ADEQUATE STRENGTH AND NUMBER THAT WILL PREVENT DISPLACEMENT AND KEEP THE STEEL AT ITS PROPER POSITION DURING THE PLACEMENT OF THE P.C. CONCRETE. IN NO INSTANCE SHALL THE STEEL BE PLACED DIRECTLY ON THE SUBGRADE OR SAND CUSHION LAYER.

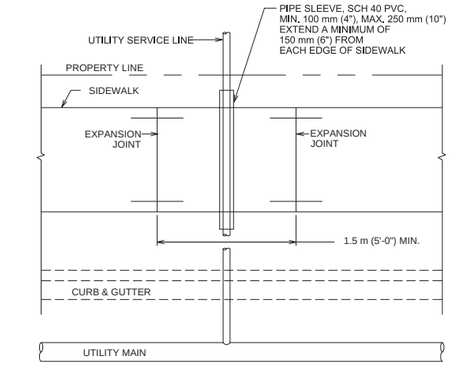
SECTION

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		SIDEWALK	
RECORD COPY SIGNED BY BILL GARDNER	03/26/08 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 432S-1 1 OF 3

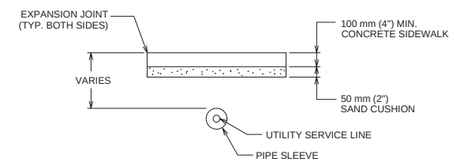


DOWEL DETAIL

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		SIDEWALK	
RECORD COPY SIGNED BY BILL GARDNER	03/26/08 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 432S-1 2 OF 3



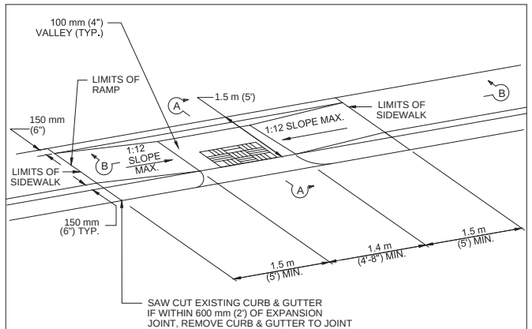
SIDEWALK OVER UTILITY SERVICE LINE PLAN

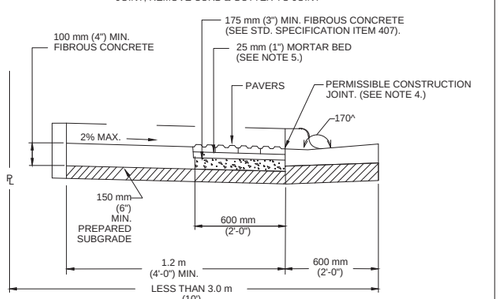


SECTION OF SIDEWALK OVER UTILITY SERVICE LINES

NOTES:
1. THIS STANDARD APPLIES TO THE INSTALLATION OF NEW UTILITIES OR UTILITIES BEING REPLACED BY A NEW LINE.
2. NO JOINTS IN UTILITY SERVICE PIPE TO BE LOCATED INSIDE PVC PIPE SLEEVE.

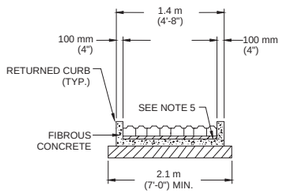
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		SIDEWALK	
RECORD COPY SIGNED BY BILL GARDNER	03/26/08 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 432S-1 3 OF 3





SECTION A-A

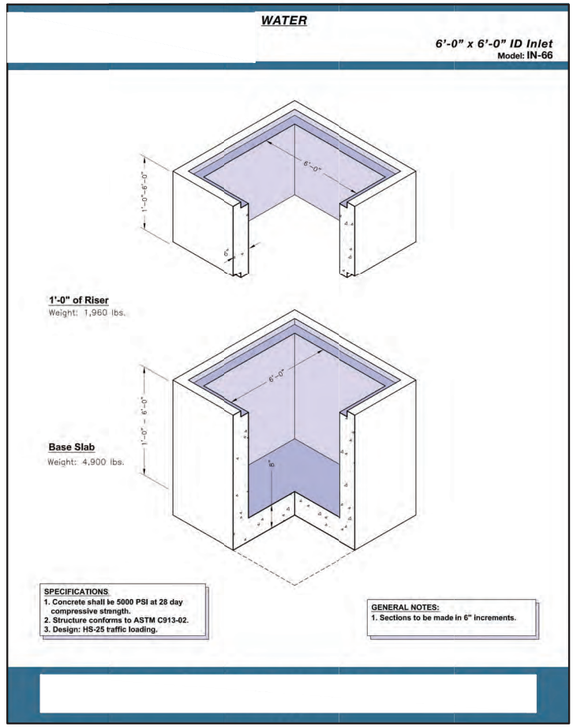
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		COMBINED SIDEWALK CURB RAMP WITH PAVERS WITHIN LIMITED ROW ONLY	
RECORD COPY SIGNED BY BILL GARDNER	06/21/07 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 432S-3G 1 OF 2



SECTION B-B

GENERAL NOTES:
1. THIS STANDARD IS APPLICABLE FOR RAMP CONSTRUCTION WITHIN RIGHT-OF-WAY OR EASEMENT ONLY.
2. PAVERS WILL HAVE DETECTABLE WARNING THAT CONSISTS OF RAISED TRUNCATED DOMES WITH A DIAMETER OF 23 mm (0.9"), A NOMINAL HEIGHT OF 5 mm (0.2") AND A NOMINAL CENTER TO CENTER SPACING OF 60 mm (2.35") AND SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES, EITHER LIGHT-ON-DARK OR DARK-ON-LIGHT (Re: ADAAG SECTION 4.29.2). MATERIAL USED TO PROVIDE CONTRAST SHALL BE AN INTEGRAL PART OF THE WALKING SURFACE. A BASKET WEAVE PAVER PATTERN SHALL BE USED UNLESS DIRECTED BY THE ENGINEER OR DESIGNATED REPRESENTATIVE. PAVER PATTERN VARIES PER MANUFACTURER'S RECOMMENDATIONS. REFER TO STANDARD DETAIL 432S-5 FOR PAVER BASE PREPARATION DETAILS.
3. THE CURB, GUTTER AND RAMP SYSTEM SHALL BE CONFIGURED TO MAINTAIN ALL RUNOFF FROM A 25 YEAR FREQUENCY STORM WITHIN THE RIGHT-OF-WAY (DRAINAGE CRITERIA MANUAL SECTION 1.2.2.B).
4. TYPICAL SIDEWALK WIDTHS AND CURB RADII ARE SHOWN FOR ILLUSTRATION ONLY. REFER TO THE TRANSPORTATION CRITERIA MANUAL FOR SIDEWALK WIDTHS, CURB RADII AND CURB BASIC REQUIREMENTS.
5. THE PERMISSIBLE CONSTRUCTION JOINT BETWEEN THE PAVERS AND THE ADJOINING 1 SURFACE SHALL BE LIMITED TO 6 mm (4 ") JOINT SIZE. GAPS LARGER THAN 6 mm 1 (4 ") MUST BE APPROVED BY THE ENGINEER OR DESIGNATED REPRESENTATIVE. ALL JOINTS BETWEEN BRICKS AND ADJOINING SURFACE SHALL BE MORTAR FILLED UNLESS DIRECTED OTHERWISE BY THE ENGINEER OR DESIGNATED REPRESENTATIVE.
6. MORTAR SHALL CONFORM TO STD. SPECIFICATION ITEM SECTION 403S.3.5, MORTAR AND GROUT. ALL OTHER CONCRETE SHALL CONFORM TO STD. SPECIFICATION ITEM 403S, CONCRETE FOR STRUCTURES, UNLESS OTHERWISE NOTED.
7. CURB RAMPS WITH 100 mm (4") CONCRETE VALLEY MAY ONLY BE USED WHERE PEDESTRIANS WOULD NOT NORMALLY WALK DIAGONALLY ACROSS THE RAMP.

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		COMBINED SIDEWALK CURB RAMP WITH PAVERS WITHIN LIMITED ROW ONLY	
RECORD COPY SIGNED BY BILL GARDNER	06/21/07 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 432S-3G 2 OF 2



811 Know what's below. Call before you dig.

CAUTION!

IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

FOR CITY USE ONLY:

MillerGRAY
Consulting • Engineering • Infrastructure
7320 N. MoPac Expressway, Suite 203
Austin, Texas 78731
Phone (512) 861-5300
www.miller-gray.com
TBPE FIRM REG. NO. F-16302

STATE OF TEXAS
J. TRAVIS WILSON
97307
LICENSED PROFESSIONAL ENGINEER
4/5/2024

P:\00323 Investcor\001 Starbucks Bee Cave\05_CAD\00323-001dt.dwg 4/5/2024 10:15 AM

STARBUCKS BEE CAVE
14211 STATE HWY 71, BEE CAVE, TEXAS 78738

STANDARD DETAILS
2 OF 10

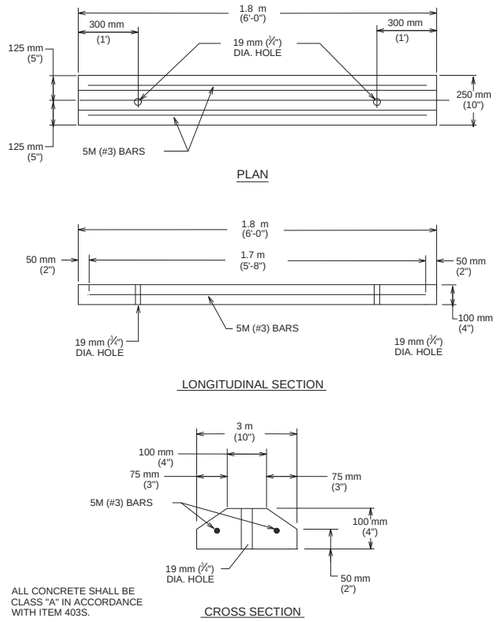
REVISIONS/CORRECTIONS

NO.	DATE	DESCRIPTION	BY

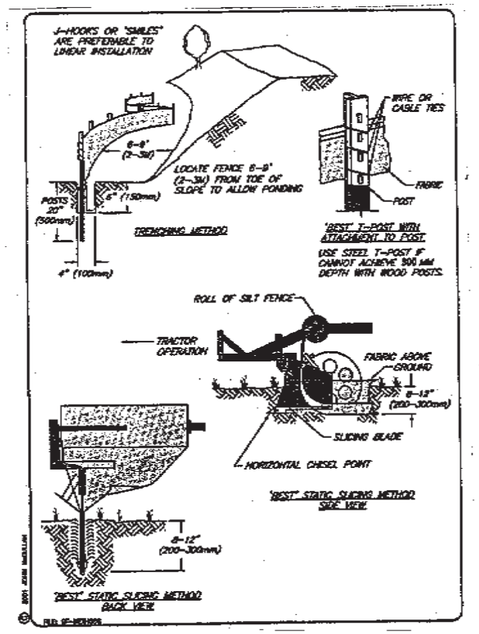
PROJECT NUMBER 00323-001
DATE: 4/5/2024
DESIGNED: KKE
CHECKED: JTW

SHEET NO.
21 OF 41

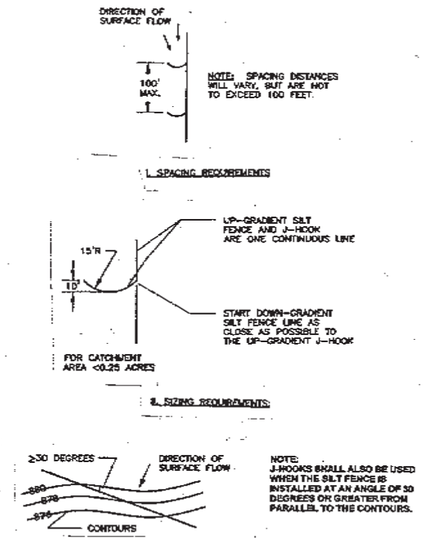
23-789-SNPS



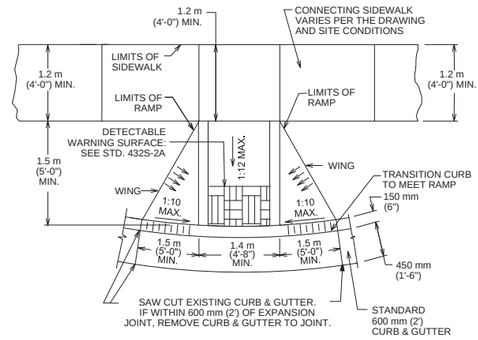
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		PARKING LOT BUMPER CURB	
RECORD COPY SIGNED BY BILL GARDNER	3/15/05	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 439S-1
APPROVED	ADOPTED		



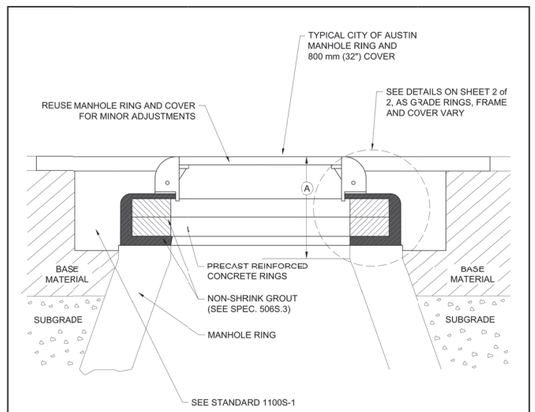
Silt Fence Installation



Silt Fence J - Hook Detail (N.T.S.)



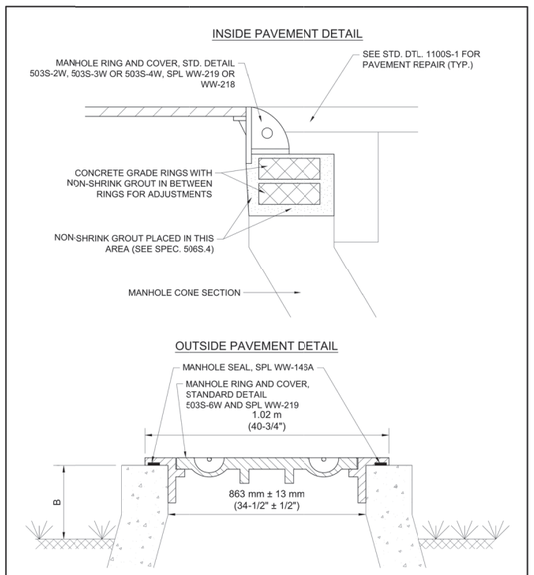
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		TYPE 1 SIDEWALK CURB RAMP	
RECORD COPY SIGNED BY BILL GARDNER	9/14/05	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 432S-5
	ADOPTED		



NOTES:

1. NON-SHRINK GROUT SHALL NOT EXCEED 25 mm (1") IN ANY DIMENSION.
2. SUB-GRADE AND BASE MATERIALS SHALL BE COMPACTED ACCORDING TO ITEMS 201S AND 210S, RESPECTIVELY, OF THE CITY OF AUSTIN STANDARD SPECIFICATIONS.
3. REFER TO STANDARD 1100S-1 FOR REPAIRS AROUND MANHOLES.
4. SEE STANDARD 506S-4A FOR HDPE RING INSTALLATION (FOR USE IN PAVED AREAS ONLY).

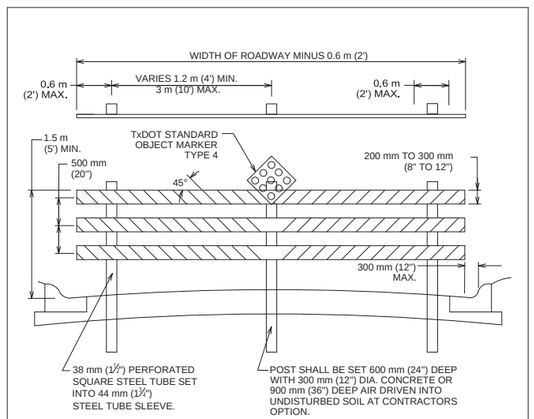
CITY OF AUSTIN AUSTIN WATER UTILITY		MINOR MANHOLE ADJUSTMENT & NEW MANHOLE CONSTRUCTION	
RECORD COPY SIGNED BY KATHI L FLOWERS	08/31/2011	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.	STANDARD NO. 506S-4 1 OF 2
	ADOPTED		



NOTES:

1. FOR USE IN UNPAVED AREAS ONLY.
2. WHEN USED WITHIN 100-YEAR FLOODPLAIN, SEE DTL. 506S-6 FOR ADDITIONAL M.H. REQUIREMENTS.
3. DIMENSION B=150-300 mm (6"-12") FOR M.H. LOCATED IN 100-YR FLOOD PLAN; B=50-300 mm (2"-12") FOR M.H. OUTSIDE 100-YR FLOOD PLAN.

CITY OF AUSTIN AUSTIN WATER UTILITY		MINCR MANHOLE ADJUSTMENT & NEW MANHOLE CONSTRUCTION	
RECORD COPY SIGNED BY KATHI L FLOWERS	03/31/2011	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.	STANDARD NO. 506S-4 2 OF 2
	ADOPTED		



NOTES:

1. WIDTH OF RAIL SHALL BE A MINIMUM OF 200 mm (8") AND MAY BE UP TO A MAXIMUM OF 300 mm (12"), 25 mm (1") HOLLOW-PROFILE PLASTIC LUMBER WITH INTERNAL STIFFNERS.
2. RAILS SHALL BE FASTENED TO EACH TUBE WITH 50 mm (2") STEEL BOLTS WITH NUTS AND WASHERS ON EACH SIDE. BOLT THREADS SHALL BE PEENED.
3. THE RAILS SHALL HAVE 150 mm (6") WIDE REFLECTORIZED RED STRIPES OF TAPE PLACED ON 45 DEGREE SLOPES, DOWN AND TOWARD THE CENTER OF THE BARRICADE.
4. BARRICADES MAY BE CONSTRUCTED IN SECTIONS OR MAY BE CONTINUOUS ACROSS ROADWAY WIDTH. SPLICES ON CONTINUOUS RAIL BARRICADES SHALL BE AT POSTS AND SHALL HAVE A 600 mm (2') SPLICE BLOCK ON BACK SIDE OF THE SAME MATERIAL AS RAIL.
5. 450 mm (18") DIAMOND REFLECTORIZED RED PANEL OR 450 mm (18") DIAMOND RED OR BLACK PANEL WITH NINE-75 mm (3") DIAMETER RED REFLECTORS SYMMETRICALLY PLACED AT CENTER POSTS, A MINIMUM OF 1.2 m (4') ABOVE GROUND SHALL BE USED FOR END OF ROAD MARKERS AS PER TEXAS MANUAL on UNIFORM TRAFFIC CONTROL DEVICES (TMUTCD) SECTION 3C.04.

DEPARTMENT OF PUBLIC WORKS		STREET-END BARRICADE	
RECORD COPY SIGNED BY BILL GARDNER	03/12/07	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 803S-1
	ADOPTED		

Know what's **below.** **Call** before you dig.

CAUTION!

IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

FOR CITY USE ONLY:

MillerGRAY
Consulting • Engineering • Infrastructure
7320 N. MoPac Expressway, Suite 203
Austin, Texas 78731
Phone (512) 861-5300
www.miller-gray.com
TBPE FIRM REG. NO. F-16302

STATE OF TEXAS
J. TRAVIS WILSON
97307
LICENSED PROFESSIONAL ENGINEER
4/5/2024

P:\00323 Investcor\001 Starbucks Bee Cave\05_CAD\00323-001dt.dwg 4/5/2024 10:15 AM

STARBUCKS BEE CAVE
14211 STATE HWY 71, BEE CAVE, TEXAS 78738

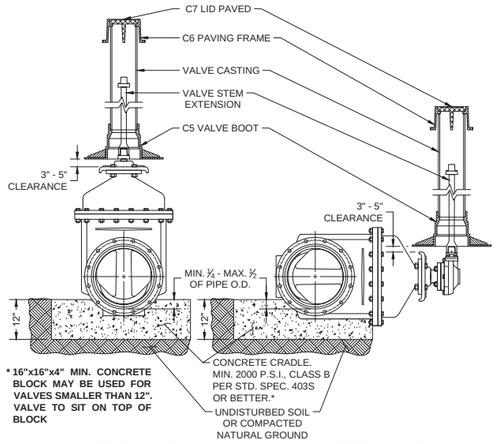
STANDARD DETAILS
3 OF 10

REVISIONS/CORRECTIONS			
NO.	DATE	DESCRIPTION	BY

PROJECT NUMBER 00323-001
DATE: 4/5/2024
DESIGNED: KKE
CHECKED: JTW

SHEET NO.
22 OF 41

23-789-SNPS



VERTICAL VALVE

HORIZONTAL VALVE

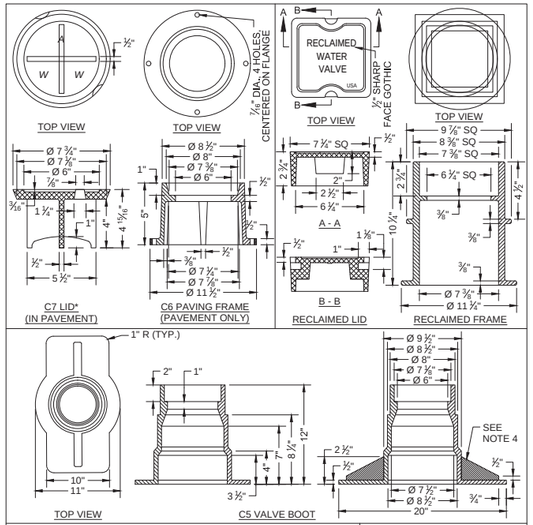
ONLY TO BE USED WHEN CALLED OUT ON THE DRAWINGS.

NOTES:

1. WELD SOCKET 2½" x 2" DEEP TO 1" SCH. 40 CARBON STEEL ROUND STEM EXTENSION, FITTED ON OPERATING NUT, [SCH. 80 FOR LENGTHS OVER 10'.]
2. VALVE CASTING SHALL BE 6" DI PIPE WITH BELL OR COLLAR CENTERED OVER VALVE BOOT.
3. NUT AT TOP OF VALVE EXTENSION ROD SHALL BE SQUARE 2" LONG WELDED TO TOP OF ROD.
4. VALVE STEM EXTENSIONS ARE REQUIRED ON ALL VALVES THAT EXCEED 3' DEEP FROM FINISHED GRADE. VALVE EXTENSIONS SHALL BE PLACED SUCH THAT THE EXTENSION NUT IS BETWEEN 12" AND 18" FROM FINISHED GRADE.

RECLAIMED WATER: ALL RECLAIMED PVC PIPE SHALL BE MANUFACTURED PURPLE PIPE. HDPE PIPE SHALL BE MANUFACTURED WITH PURPLE STRIPES. ALL OTHER PIPE AND APPURTENANCES SHALL BE MANUFACTURED PURPLE IF AVAILABLE. ALL PIPE AND FITTINGS THAT ARE NOT AVAILABLE FROM THE MANUFACTURER IN PURPLE SHALL BE PAINTED PURPLE PER SPL WW-3C. ALL BURIED DI AND CI PIPE AND FITTINGS SHALL ALSO BE WRAPPED IN PURPLE POLYETHYLENE PER SPL WW-27D. ALL COVERS SHALL HAVE **"RECLAIMED WATER"** CAST INTO THEM.

CITY OF AUSTIN AUSTIN WATER	TYPICAL GATE VALVE 4" - 16"	
RECORD COPY SIGNED BY KATHI L FLOWERS *05/18/2016* ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 511-AW-01 1 OF 4



NOTES:

1. MATERIAL SHALL BE GRAY CAST IRON, ASTM A48, GRADE 30B.
2. THE MANUFACTURER'S IDENTIFICATION AND CASTING NUMBER, AND THE COUNTRY WHERE CAST, SHALL BE DISTINCTLY CAST ONTO EACH LID, FRAME, COLLAR AND BASE.
3. DRAFT AND SHRINKAGE ALLOWANCE SHALL BE IN ACCORDANCE WITH NORMAL FOUNDRY PRACTICE.
4. CASTING FINISH BY MANUFACTURER SHALL INCLUDE REMOVAL OF FINS AND FLASHING, AND PAINT WITH BLACK ASPHALT COATING.

WEIGHTS:

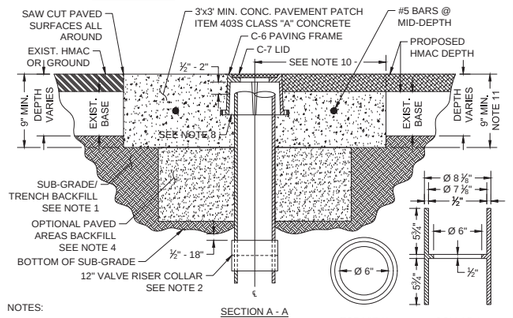
C7 LID: 13 LBS
RECLAIMED LID: 15 LBS
C6 FRAME: 23 LBS
RECLAIMED FRAME: 33 LBS
C5 BASE: 78 LBS

* LETTERING SHALL BE 1½" 2 PICK BAR SLOTS REQUIRED

CITY OF AUSTIN AUSTIN WATER	TYPICAL GATE VALVE 4" - 16"	
RECORD COPY SIGNED BY KATHI L FLOWERS *05/18/2016* ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 511-AW-01 2 OF 4

FULL DEPTH CONCRETE & UNPAVED AREAS

CONCRETE & H.M.A.C.

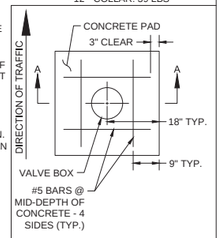


NOTES:

1. SUB-GRADE/TRENCH BACKFILL SHALL BE COMPACTED AS PER ITEM 201S, SUB-GRADE PREPARATION.
2. TO ADJUST VALVE CASTINGS TO FINAL GRADE, REMOVE RISER PIPE BELOW SUB-GRADE AND INSTALL APPROPRIATE LENGTH OF NEW RISER PIPE TO ACHIEVE FINAL GRADE. CONNECT THE TWO PIECES OF RISER PIPE WITH A 6" COLLAR MIN. 12" LENGTH APPROXIMATELY CENTERED ON THE JOINT WITH THE TOP OF SLEEVE LOCATED ½" - 18" BELOW SUB-GRADE. THE INSIDE "LIP" OF COLLAR TO BE PAINTED WITH FLUORESCENT WHITE PAINT OR COVERED WITH FLUORESCENT WHITE TAPE. ALTERNATE: FOR OPTIONAL SINGLE PIECE RISER INSTALLATION SEE SHEET 4 OF 4.
3. CLEAN VALVE BOX OF ALL DEBRIS DOWN TO THE NUT OF THE VALVE; NUT SHALL OPERATE WITH NO OBSTRUCTION.
4. WHERE CASTINGS TO BE REMOVED REQUIRE EXCAVATION GREATER THAN 20" DEEP, CONTRACTOR MAY ELECT TO FILL EXCAVATION WITH CONTROLLED LOW STRENGTH MATERIAL (SPEC. ITEM 402S) TO THE UNDERSIDE OF THE CONCRETE. PAVEMENT PATCH IN LIEU OF COMPACTED BACKFILL.
5. REINFORCING STEEL SHALL MEET SPEC. ITEM 406S.7.
6. NO MORE THAN 2 SECTIONS OF PIPE SHALL BE USED FROM VALVE TO FINAL GRADE.
7. BELL AND SPIGOT IS ACCEPTABLE FOR DEPTH OVER 18'.

12" VALVE RISER COLLAR

* 12" COLLAR: 39 LBS

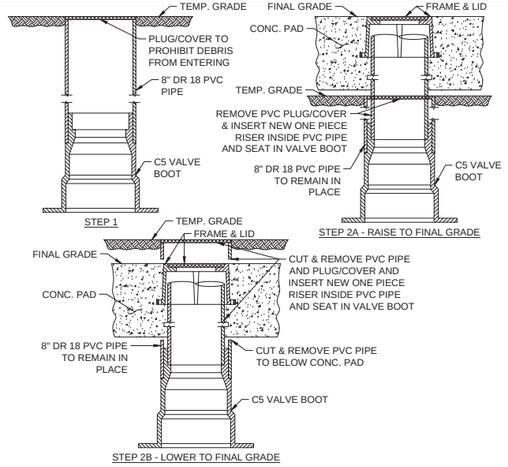


PLAN VIEW

CITY OF AUSTIN AUSTIN WATER	TYPICAL GATE VALVE 4" - 16"	
RECORD COPY SIGNED BY KATHI L FLOWERS *05/18/2016* ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 511-AW-01 3 OF 4

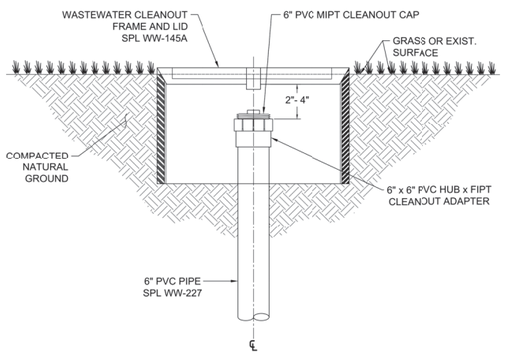
NOTES (CON'T):

8. PAVING FRAME SHALL BE FLUSH WITH THE CONC. PAD AND PLACED ½" - 2" ABOVE RISER PIPE (FRAME SHALL NOT REST ON RISER.)
9. IN UNPAVED AREAS, INSTALL ONE DELINEATOR STAKE IMMEDIATELY ADJACENT TO THE EDGE OF THE CONCRETE PAD. DELINEATOR SHALL BE BLUE FOR POTABLE WATER AND PURPLE FOR RECLAIMED WATER AND SHALL EXTEND AT LEAST 60" ABOVE GROUND. DELINEATORS SHALL HAVE 2" WIDE, WHITE IN COLOR, TYPE I REFLECTIVE TAPE MOUNTED DIAGONALLY AT 12" SPACING ON BOTH SIDES.
10. VALVE SHALL TYPICALLY BE CENTERED IN CONCRETE DIAMOND BUT MAY BE OFFSET WITH A MIN. OF 12" FROM CENTER OF VALVE LID TO EDGE OF CONCRETE IN ALL DIRECTIONS.
11. MIN. TOTAL DEPTH OF ASPHALT PLUS CONC. IS 9" AND MIN. DEPTH OF CONC. PAD SHALL BE 5"



OPTIONAL ONE PIECE VALVE CASTING INSTALLATION

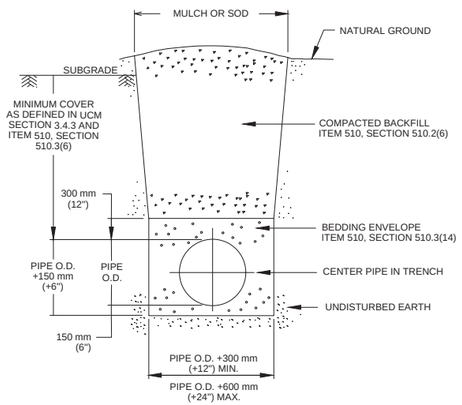
CITY OF AUSTIN AUSTIN WATER	TYPICAL GATE VALVE 4" - 16"	
RECORD COPY SIGNED BY KATHI L FLOWERS *05/18/2016* ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 511-AW-01 4 OF 4



NOTE:

1. WASTEWATER CLEANOUT FRAME AND LID SHALL NOT BE PLACED IN PAVED AREAS, INCLUDING SIDEWALKS, DRIVEWAYS, OR PARKING LOTS, AND MUST EE LOCATED A MINIMUM OF 6" FROM ALL PAVED AREAS.

CITY OF AUSTIN AUSTIN WATER	WASTEWATER CLEANOUT FRAME AND LID	
JEFF A. KYLE *08/16/2019* ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.	STANDARD NO. 520-AW-03 1 OF 1



REFERENCES:

1. UTILITY CRITERIA MANUAL SECTION 3.4.3, "FINAL DESIGN"
2. STANDARD SPECIFICATION MANUAL ITEM 510, SECTION 510.2(6), "SELECT BACKFILL OR BORROW"; SECTION 510.3(6), "TRENCH DEPTH AND DEPTH OF COVER"; SECTION 510.3(14), "PIPE BEDDING ENVELOPE"

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	TYPICAL TRENCH DETAIL WITH UNFINISHED SURFACE	
RECORD COPY SIGNED BY BILL GARDNER 03/13/06 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 510S-5

CAUTION!

IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

Know what's **below.** **Call** before you dig.

FOR CITY USE ONLY:

MillerGRAY
Consulting • Engineering • Infrastructure
7320 N. MoPac Expressway, Suite 203
Austin, Texas 78731
Phone (512) 861-5300
www.miller-gray.com
TBPE FIRM REG. NO. F-16302

STATE OF TEXAS
J. TRAVIS WILSON
97307
LICENSED PROFESSIONAL ENGINEER
4/5/2024

P:\00323 Investcor\001 Starbucks Bee Cave\05_CAD\00323-001dt.dwg 4/5/2024 10:15 AM

STARBUCKS BEE CAVE
14211 STATE HWY 71, BEE CAVE, TEXAS 78738

STANDARD DETAILS
4 OF 10

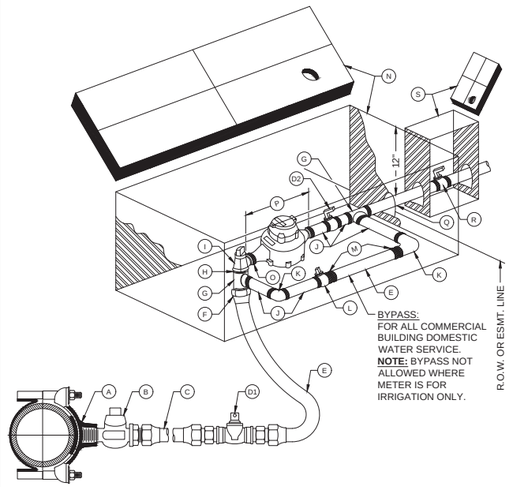
REVISIONS/CORRECTIONS

NO.	DATE	DESCRIPTION	BY

PROJECT NUMBER 00323-001
DATE: 4/5/2024
DESIGNED: KKE
CHECKED: JTW

SHEET NO.
23 OF 41

23-789-SNPS



CITY OF AUSTIN AUSTIN WATER		1 ½" - 2" METER INSTALLATION SHOWING OPTIONAL BYPASS	
RECORD COPY SIGNED BY KATHI L FLOWERS	05/18/2016 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 520-AW-04 1 OF 2

MATERIALS LIST:

A. 2" SERVICE CLAMP
B. 2" CORPORATION STOP MALE THREAD INLET BY COMPRESSION OUTLET
C. 2" COPPER WATER SERVICE TUBING EXTENDED BEYOND PAVEMENT
D1. 2" BALL VALVE, SPL WW-275
D2. 2" BALL VALVE, SPL WW-275
E. 2" COPPER SERVICE TUBING
F. 2" BRASS COUPLING - COMPRESSION TO MALE IPT
G. 2" BRASS TEE
H. 2" BRASS CLOSE-NIPPLE
I. 2" ANGLE METER STOP; SERVICE TUBING INLET x FLANGED OUTLET
J. 2" BRASS NIPPLE
K. 2" BRASS ELBOW
L. 2" LOCKABLE CURB STOP - FEMALE IPT INLET BY COMPRESSION OUTLET
M. 2" BRASS COUPLING - SERVICE TUBING TO MALE IPT
N. RECTANGULAR METER BOX AND COVER, SPL WW-145A
O. BRASS ADAPTER (2" x 1 ½") FOR 1 ½" METER ONLY
P. WATER METER. LENGTH 13", (PURCHASED FROM AUSTIN WATER)
Q. 2" COPPER SERVICE TUBING (PRIVATE PLUMBING PER CODE)
R. CUSTOMER CUT-OFF VALVE
S. CUSTOMER VALVE BOX AND LID

NOTES:

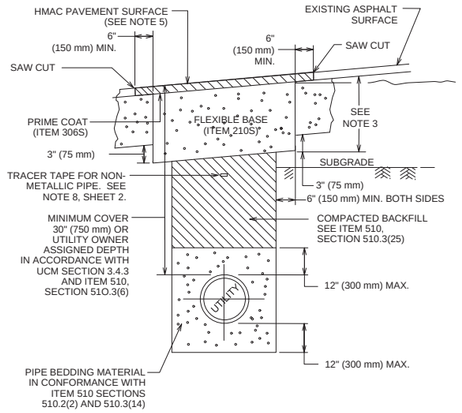
1. SERVICE CLAMP SHALL BE WRAPPED COMPLETELY WITH 8 MIL. POLYETHYLENE FILM.
2. BRANCH CONNECTIONS AND ALL ANGLE METER STOPS MUST BE INSTALLED PRIOR TO ANY METER INSTALLATION.
3. TOP OF BOXES SHOULD BE 1" ABOVE GROUND.
4. PIPING AND TUBING IN STREET RIGHT-OF-WAY SHALL BE BEDDED IN GRANULAR MATERIALS AS REQUIRED BY SECTION 510.3 (14) OF THE CITY OF AUSTIN STANDARD SPECIFICATIONS; BACKFILL ABOVE GRANULAR BEDDING AS REQUIRED BY SECTION 510.3 (25).
5. BOX MUST BE BEHIND CURB NEXT TO PROPERTY LINE OR EASEMENT AND OUT OF VEHICULAR TRAFFIC AREA AND SIDEWALK.
6. BALL VALVE "D1" SHALL NOT BE LOCATED UNDER SIDEWALK, CURB, OR PAVEMENT, AND NOT BE LOCATED MORE THAN 24" HORIZONTALLY FROM METER BOX OR 36" BELOW FINAL GRADE.
7. COPPER SERVICE SHALL BE COPPER TUBING SIZE ANNEALED SEAMLESS TYPE "K" MEETING ASTM B88 WITH NO SWEAT OR SOLDERED JOINTS.

RECLAIMED WATER:

FOR RECLAIMED WATER SERVICES AND METERS, ALL RECLAIMED TUBING SHALL BE MANUFACTURED PURPLE TUBING. ALL OTHER TUBING AND APPURTENANCES SHALL BE MANUFACTURED PURPLE IF AVAILABLE. ALL TUBING AND FITTINGS THAT ARE NOT AVAILABLE FROM THE MANUFACTURER IN PURPLE SHALL BE PAINTED PURPLE PER SPL WW-3C. ALL BURIED DI AND CI PIPE AND FITTINGS SHALL ALSO BE WRAPPED IN PURPLE POLYETHYLENE PER SPL WW-27D. ALL COVERS SHALL HAVE **"RECLAIMED WATER"** CAST INTO THEM.

CITY OF AUSTIN AUSTIN WATER		1 ½" - 2" METER INSTALLATION SHOWING OPTIONAL BYPASS	
RECORD COPY SIGNED BY KATHI L FLOWERS	05/18/2016 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 520-AW-04 2 OF 2

TRENCH REPAIR IN ASPHALTIC SURFACE OVER FLEXIBLE BASE
(UCM SECTION 5.8.0)

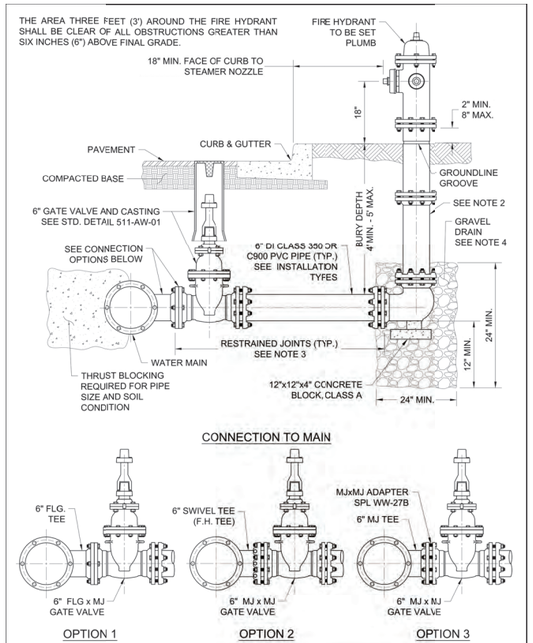


CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		FLEXIBLE BASE WITH ASPHALT SURFACE TRENCH REPAIR-EXISTING PAVEMENT	
RECORD COPY SIGNED BY KERI JUAREZ	01/04/11 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 1100S-2 1 OF 2

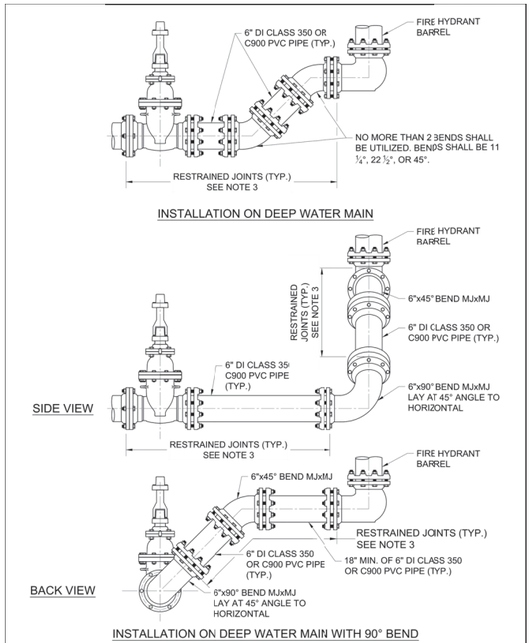
NOTES:

1. THE EXISTING PAVING SURFACE SHALL BE SAW CUT IN A STRAIGHT LINE, A MINIMUM OF 12" (300 mm) WIDER THAN UNDISTURBED SIDES OF THE TRENCH AND SYMMETRICAL ABOUT THE CENTER LINE OF THE EXCAVATION.+
2. IF EXCAVATION AREA IS OPEN FOR TEMPORARY PUBLIC USE, THE SURFACE SHALL BE MAINTAINED LEVEL WITH ADJACENT RIDING SURFACE WITH COLD MIX AC OR TEMPORARY HMAC. TEMPORARY MIX SHALL BE PLACED OVER FLEXIBLE BASE.
3. ROAD BASE SHALL BE REPLACED IN KIND WITH BASE THICKNESS EQUAL TO EXISTING BASE THICKNESS PLUS 3" (75 mm), BUT IN NO CASE LESS THAN 12" (300 mm).
4. DAMAGED PAVEMENT OUTSIDE THE TRENCH CUT SHALL BE REMOVED AND REPLACED WITH A BASE THICKNESS OF 10" (250 mm) OR A THICKNESS MATCHING EXISTING, WHICHEVER IS GREATER.
5. REPLACEMENT AC SURFACE LAYER SHALL BE OF THE TYPE AND THICKNESS BASED ON FUNCTIONAL CLASSIFICATION.
   a) MIN. 2" (50 mm) HMAC TYPE "D" FOR TRENCH REPAIR IN LOCAL/RESIDENTIAL STREETS.
   b) MIN. 3" (75 mm) HMAC TYPE "C" FOR TRENCH REPAIR IN COLLECTOR/ARTERIAL STREETS. SEE ITEM 340S, SECTION 340S.4.
6. CLASS "J" PC CONCRETE (ITEM 403S) OR CONTROLLED LOW STRENGTH MATERIAL (CLSM) MAY BE SUBSTITUTED IN THESE REPAIRS FOR THE FLEXIBLE BASE AND COMPACTED BACKFILL. PC CONCRETE GREATER THAN A 2 SACK MIX WILL NOT BE ALLOWED.
7. TACK COAT ALL EXPOSED EDGES AND SURFACES (SPEC ITEM 307S).
8. AS PER CITY OF AUSTIN STANDARD SPECIFICATION 510, SECTION 510.2(8)(K)5, FOR ALL NON-METALLIC PIPE, DIRECTLY ABOVE THE CENTERLINE OF THE PIPE AND A MINIMUM OF 12" (300 mm) BELOW THE SUBGRADE, OR A MINIMUM OF 18" (450 mm) BELOW FINISHED GRADE ON AREAS OUTSIDE THE LIMITS OF PAVEMENT, SHALL BE PLACED INDUCTIVE TRACER TAPE IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS. THE TAPE SHALL BE ENCASED IN A PROTECTIVE, INERT, PLASTIC JACKET AND COLOR CODED IN ACCORDANCE WITH APWA UNIFORM COLOR CODE.

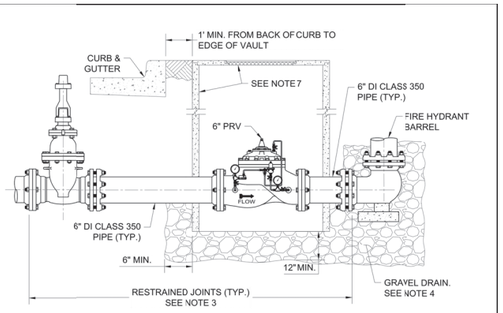
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		FLEXIBLE BASE WITH ASPHALT SURFACE TRENCH REPAIR-EXISTING PAVEMENT	
RECORD COPY SIGNED BY KERI JUAREZ	01/04/11 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 1100S-2 2 OF 2



CITY OF AUSTIN AUSTIN WATER		FIRE HYDRANT	
RECORD COPY SIGNED BY KATHI L FLOWERS	05/18/2016 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.	STANDARD NO. 511-AW-02 1 OF 3



CITY OF AUSTIN AUSTIN WATER		FIRE HYDRANT	
RECORD COPY SIGNED BY KATHI L FLOWERS	05/18/2016 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.	STANDARD NO. 511-AW-02 2 OF 3



NOTES: APPLICABLE TO ALL INSTALLATION TYPES.

1. NO PART OF A HYDRANT OR ITS NOZZLE CAPS SHALL BE WITHIN 6' OF ANY SIDEWALK OR PEDESTRIAN RAMP. ANY FIRE HYDRANT PLACED NEAR A STREET CORNER SHALL BE LOCATED OUTSIDE THE CURVE RADIUS AND A MINIMUM OF 4' FROM RAMPS.
2. ONE BARREL EXTENSION NOT EXCEEDING 2' LENGTH MAY BE INSTALLED DIRECTLY BELOW THE FIRE HYDRANT IN ORDER TO MEET THE REQUIRED BURY DEPTH OF 4' - 5'. BREAK AWAY BOLTS (SHOE TYPES) SHALL BE PROPERLY SPACED AND PLACED.
3. FIRE LINE SHALL HAVE ALL JOINTS RESTRAINED FROM MAIN TO FIRE HYDRANT. JOINTS SHOWN MAY VARY. SEE SPL WW-27, WW-27A, AND WW-27B FOR RESTRAINT OPTIONS.
4. BELOW EACH HYDRANT, A DRAINAGE PIT 24" IN DIAMETER AND 12" DEEP SHALL BE EXCAVATED AND FILLED WITH COMPACTED COARSE GRAVEL OR BROKEN STONE MIXED WITH COARSE SAND UNDER AND AROUND THE BOWL OF THE HYDRANT, AND TO A LEVEL 12" ABOVE THE HYDRANT DRAIN OPENING (SEE STD. SPEC. 510). THE HYDRANT DRAINAGE PIT SHALL NOT BE CONNECTED TO A SANITARY SEWER. THE DRAIN GRAVEL SHALL BE COVERED WITH FILTER FABRIC PER STD. SPEC. 620S. FOR PRV, GRAVEL SHALL EXTEND UNDER THE PRV VAULT 12" MIN. DEPTH UNDER THE VAULT AND 6" MIN. BEYOND VAULT.
5. FOR FIRE HYDRANT LEADS AT A MAIN OUTLET LARGER THAN 6" DIAMETER, OUTLET SHALL BE FLANGED AND A FLG x FLG REDUCER SHALL BE INSTALLED DIRECTLY ON THE OUTLET.
6. WRAP 8 MIL. POLY-FILM WRAP ON ALL BURIED PIPE AND FITTINGS.
7. FOR HYDRANTS WITH PRV: CLASS III RCP VAULT 60" MIN. I.D. WITH REINFORCED PRECAST CONCRETE LID (AASHTO H-20 LOADING) WITH COA FRAME AND 32" COVER WITH LETTERING MODIFIED FOR WATER.

CITY OF AUSTIN AUSTIN WATER		FIRE HYDRANT	
RECORD COPY SIGNED BY KATHI L FLOWERS	05/18/2016 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.	STANDARD NO. 511-AW-02 3 OF 3

Water Meter Length and Total Length with Gaskets

Description	Meter Length	With Gaskets
5/8" PB BL 3G	7.5" inches	7.75" inches
3/4" PB BL 3G	7.5" inches	7.75" inches
1" PB BL 3G	10.75" inches	11" inches
1.5" FLG MS 3G	13" inches	13.25 inches
2" FLG MS 3G	17" inches	17.25 inches
2" Octave Meter	10" inches	10.25 inches

WTCPUA METER LENGTH DIMENSION DETAIL

811 Know what's **below.** **Call** before you dig.

CAUTION!

IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

FOR CITY USE ONLY:

MillerGRAY
Consulting • Engineering • Infrastructure
7320 N. MoPac Expressway, Suite 203
Austin, Texas 78731
Phone (512) 861-5300
www.miller-gray.com
TBPE FIRM REG. NO. F-16302

STATE OF TEXAS
J. TRAVIS WILSON
97307
LICENSED PROFESSIONAL ENGINEER
4/5/2024

P:\00323 Investcor\001 Starbucks Bee Cave\05_CAD\00323-001dt.dwg 4/5/2024 10:15 AM

STARBUCKS BEE CAVE
14211 STATE HWY 71, BEE CAVE, TEXAS 78738

STANDARD DETAILS
5 OF 10

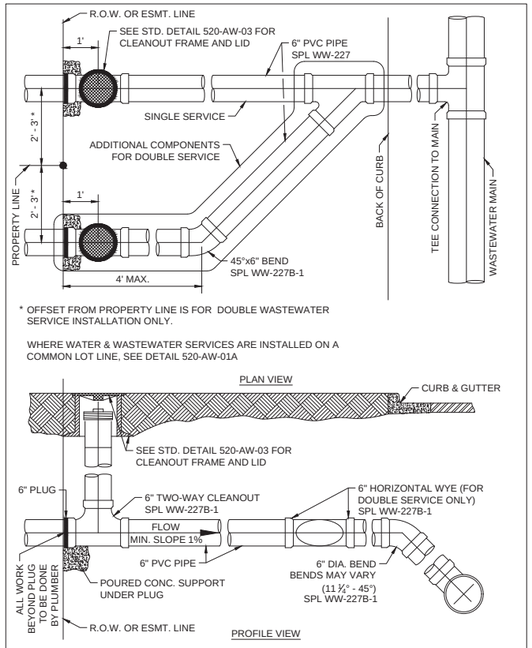
REVISIONS/CORRECTIONS

NO.	DATE	DESCRIPTION	BY

PROJECT NUMBER 00323-001
DATE: 4/5/2024
DESIGNED: KKE
CHECKED: JTW

SHEET NO.
24 OF 41

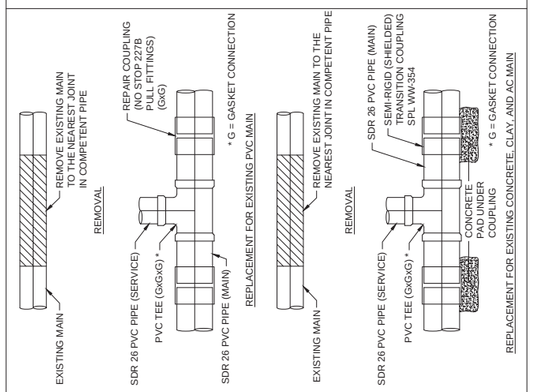
23-789-SNPS



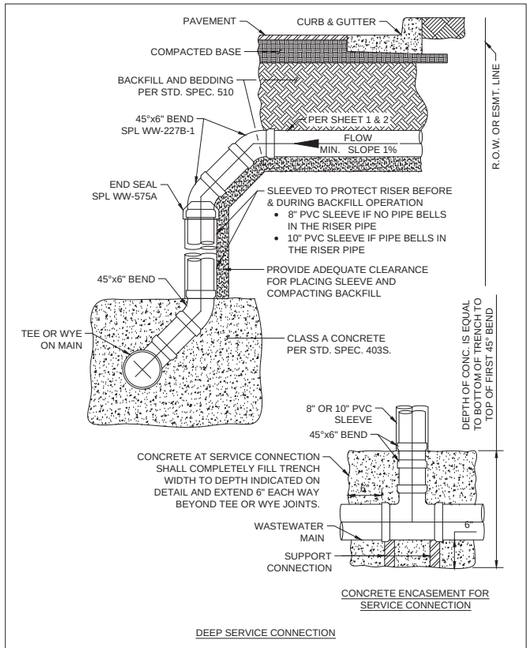
CITY OF AUSTIN AUSTIN WATER	SINGLE AND DOUBLE WASTEWATER SERVICE CONNECTION	
RECORD COPY SIGNED JEFF A. KYLE 11/07/2018 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 520-AW-01C 1 OF 4

NOTES:

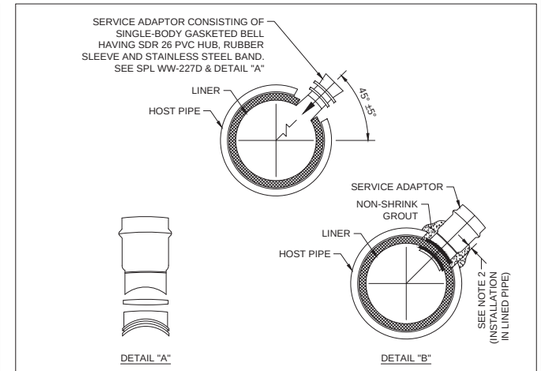
1. DURING SUBDIVISION CONSTRUCTION, UTILITY CONTRACTOR INSTALLS WASTEWATER TEE CONNECTION TO MAIN, 6" STUB, HORIZONTAL WYE FOR DOUBLE SERVICES, 6" SERVICE BRANCH WITH TWO-WAY CLEANOUT(S) AND RISER, FRAME, AND COVER. CLEANOUT(S) TO BE PLUGGED AT PROPERTY LINE OR EASEMENT LINE END. ALL WASTEWATER PIPING SHALL HAVE ELASTOMERIC GASKET TYPE JOINTS AND SLOPE DOWNWARD TO MAIN 1% MIN. TO 45° MAX. DEPTH OF SERVICE AT PROPERTY LINE WILL BE SHOWN ON PLANS BY ENGINEER IF GREATER THAN 4', OTHERWISE THE INSTALLED DEPTH WILL BE 4' MIN. AND 6' MAX. AT PROPERTY LINE. IF WASTEWATER SERVICE LINE TO MAIN REQUIRES DEFLECTION EXCEEDING 45°, SEE SHEET 3 OF 4.
2. PIPING IN STREET RIGHT-OF-WAY AND IN EASEMENT AREA SHALL BE BEDDED IN GRANULAR MATERIALS AS REQUIRED BY CITY OF AUSTIN STANDARD SPECIFICATION 510.3 (14); MATERIALS SHALL BE AS SPECIFIED IN 510.2 (2)(A) AND (3)(B); BACKFILL ABOVE THE GRANULAR BEDDING SHALL BE AS REQUIRED BY SECTION 510.3 (25). SERVICE LINES IN THESE AREAS SHALL HAVE A MIN. COVER BELOW FINAL STREET GRADE OF 42".
3. PLUMBER SHALL REMOVE PLUG AND CONNECT TO TWO-WAY CLEANOUT. NO CONNECTION TO CLEANOUT STACK IS ALLOWED.



CITY OF AUSTIN AUSTIN WATER	SINGLE AND DOUBLE WASTEWATER SERVICE CONNECTION	
RECORD COPY SIGNED JEFF A. KYLE 11/07/2018 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 520-AW-01C 2 OF 4



CITY OF AUSTIN AUSTIN WATER	SINGLE AND DOUBLE WASTEWATER SERVICE CONNECTION	
RECORD COPY SIGNED JEFF A. KYLE 11/07/2018 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 520-AW-01C 3 OF 4



INSTALLATION IN LINED PIPE:

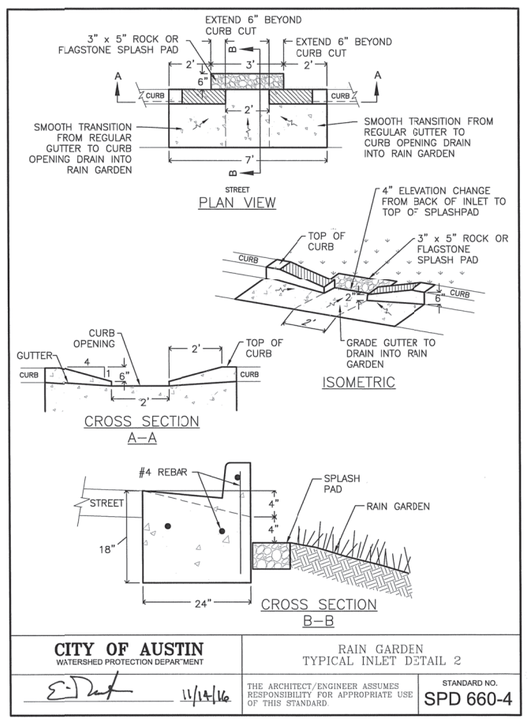
1. MARK LOCATION OF TAP.
2. BREAK & REMOVE HOST PIPE SO THAT OPENING IS AT LEAST 2" BUT NO MORE THAN 3" WIDER THAN DIAMETER OF THE SERVICE ADAPTOR.
3. DO NOT DAMAGE LINER.
4. CORE HOLE THROUGH LINER USING ADAPTOR MANUFACTURER RECOMMENDED BIT.
5. INSTALL SERVICE ADAPTOR.
6. HOLES CUT IN HOST PIPE SHALL BE PACKED WITH NON-SHRINK GROUT (ASTM C1107 GRADE). SEE DETAIL "B"

NOTES:

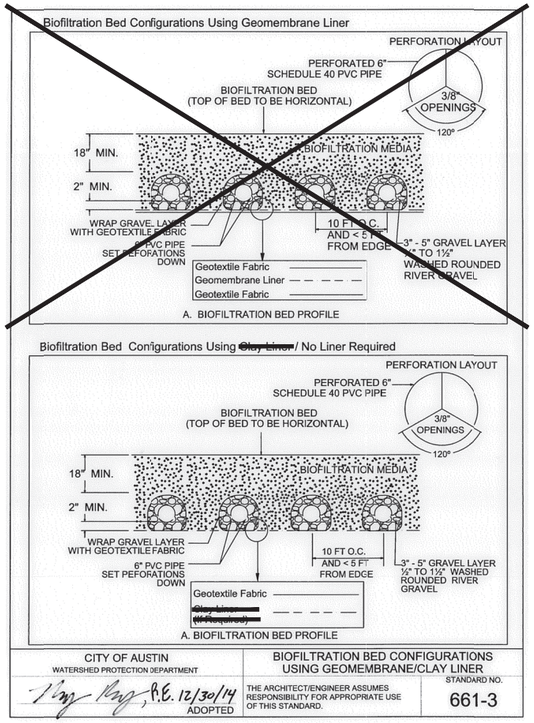
1. USE ONLY TO TAP EXISTING LINED PIPE.
2. SEE APPROPRIATE STD. FOR SERVICE LINE INFORMATION.
3. THE EDGE OF THE CORE HOLE MUST BE AT LEAST 3' FROM THE ENDS OF THE PIPE, ANY OTHER CORE SERVICE CONNECTIONS, AND ANY FITTINGS.
4. FOR DEEP SERVICE APPLICATIONS SEE SHEET 3 OF 4, EXCEPT SUBSTITUTE A CORED HOLE, AND SERVICE ADAPTOR FOR THE TEE OR WYE.
5. SERVICE CONNECTIONS TO MANHOLES MUST BE MADE USING A PIPE-TO-MANHOLE CONNECTOR WHICH LIMITS THE PIPE SLOPE INTO THE MANHOLE TO 12% MAX.

6" WASTEWATER CONNECTION TO EXISTING LINED MAIN

CITY OF AUSTIN AUSTIN WATER	SINGLE AND DOUBLE WASTEWATER SERVICE CONNECTION	
RECORD COPY SIGNED JEFF A. KYLE 11/07/2018 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 520-AW-01C 4 OF 4



CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT	RAIN GARDEN TYPICAL INLET DETAIL 2	
11/14/16	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. SPD 660-4



CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT	BIOFILTRATION BED CONFIGURATIONS USING GEOMEMBRANE/CLAY LINER	
P.E. 12/30/14 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 661-3

MillerGRAY
Consulting • Engineering • Infrastructure
7320 N. MoPac Expressway, Suite 203
Austin, Texas 78731
Phone (512) 861-5300
www.miller-gray.com
TBPE FIRM REG. NO. F-16302

P:\00323 Investcor\001 Starbucks Bee Cave\05_CAD\00323-001dt.dwg 4/5/2024 10:15 AM

STATE OF TEXAS
J. TRAVIS WILSON
97307
LICENSED PROFESSIONAL ENGINEER
4/5/2024

STARBUCKS BEE CAVE
14211 STATE HWY 71, BEE CAVE, TEXAS 78738

STANDARD DETAILS
6 OF 10

REVISIONS/CORRECTIONS

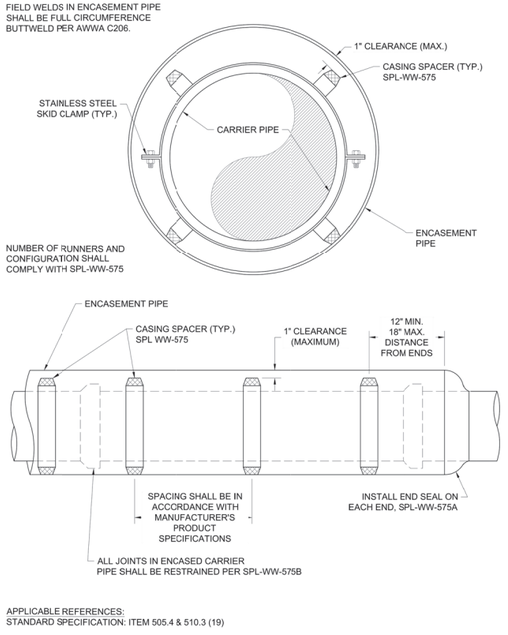
NO.	DATE	DESCRIPTION	BY

CAUTION!
IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.
811 Know what's below. Call before you dig.
FOR CITY USE ONLY:

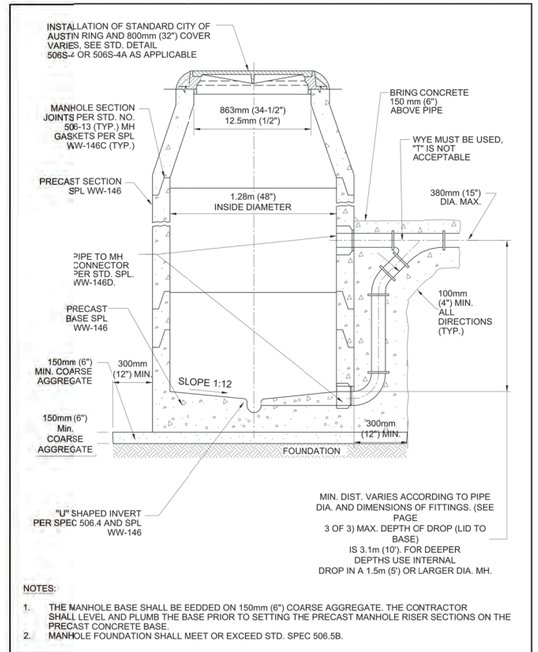
PROJECT NUMBER 00323-001
DATE: 4/5/2024
DESIGNED: KKE
CHECKED: JTW

SHEET NO.
25 OF 41

23-789-SNPS



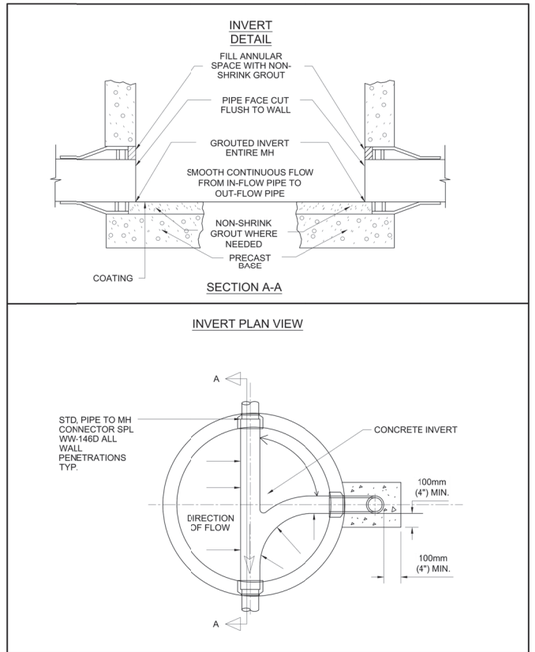
CITY OF AUSTIN WATER	ENCASEMENT PIPE DETAIL WITH CASING SPACERS	
JEFF A. KYLE 02/22/2021 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.	STANDARD NO. 501-AW-01 1 OF 1



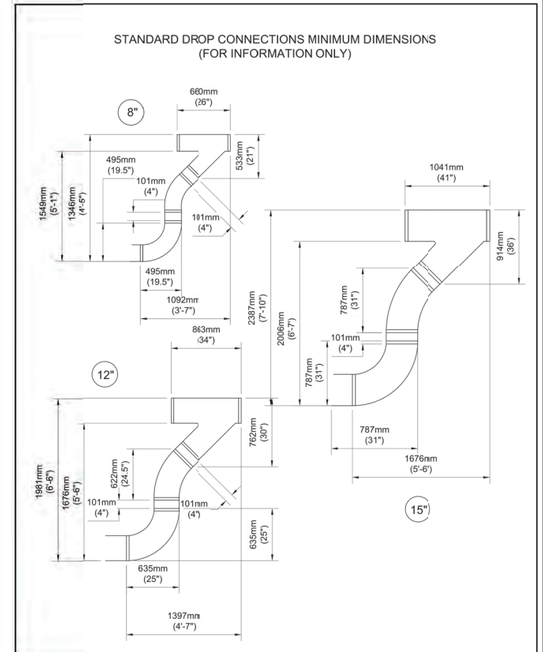
NOTES:

1. THE MANHOLE BASE SHALL BE BEDDED ON 150mm (6") COARSE AGGREGATE. THE CONTRACTOR SHALL LEVEL AND PLUMB THE BASE PRIOR TO SETTING THE PRECAST MANHOLE RISER SECTIONS ON THE PRECAST CONCRETE BASE.
2. MANHOLE FOUNDATION SHALL MEET OR EXCEED STD. SPEC 506.5B.

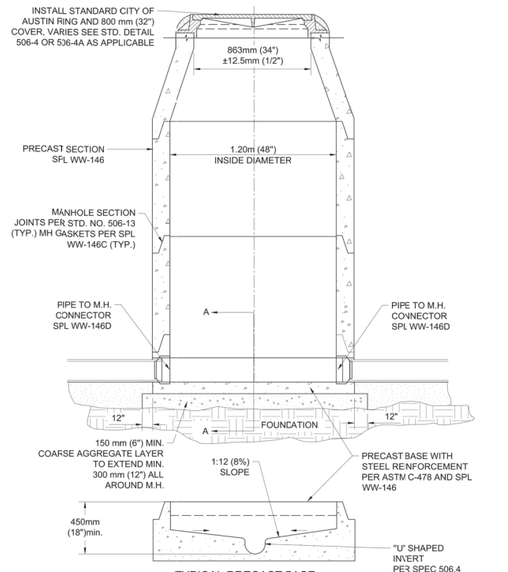
CITY OF AUSTIN AUSTIN WATER UTILITY	PRECAST MANHOLE WITH DROP INLET ON PRECAST BASE	
RECORD COPY SIGNED BY KATHI L FLOWERS 08/31/2011 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.	STANDARD NO. 506S-8 1 OF 3



CITY OF AUSTIN AUSTIN WATER UTILITY	PRECAST MANHOLE WITH DROP INLET ON PRECAST BASE	
RECORD COPY SIGNED BY KATHI L FLOWERS 03/31/2011 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.	STANDARD NO. 506S-8 2 OF 3



CITY OF AUSTIN AUSTIN WATER UTILITY	PRECAST MANHOLE WITH DROP INLET ON PRECAST BASE	
RECORD COPY SIGNED BY KATHI L FLOWERS 08/31/2011 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.	STANDARD NO. 506S-8 3 OF 3



TYPICAL PRECAST EASE

NOTE:
1. THE MANHOLE BASE SHALL BE BEDDED ON 150 mm (6") COARSE AGGREGATE. THE CONTRACTOR SHALL LEVEL AND PLUMB THE BASE PRIOR TO SETTING THE PRECAST MANHOLE RISER SECTIONS ON THE PRECAST CONCRETE BASE.
2. MH FOUNDATION SHALL MEET OR EXCEED STD. SPEC. 506.5B

CITY OF AUSTIN AUSTIN WATER UTILITY	WASTEWATER MANHOLE ON PRECAST BASE	
RECORD COPY SIGNED BY KATHI L FLOWERS 03/31/2011 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.	STANDARD NO. 506S-10 1 OF 1

811 Know what's below. Call before you dig.

CAUTION!

IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

FOR CITY USE ONLY:

MillerGRAY
Consulting • Engineering • Infrastructure
7320 N. MoPac Expressway, Suite 203
Austin, Texas 78731
Phone (512) 861-5300
www.miller-gray.com
TBPE FIRM REG. NO. F-16302

P:\00323 Investcor\001 Starbucks Bee Cave\05_CAD\00323-001dt.dwg 4/5/2024 10:15 AM

STATE OF TEXAS
J. TRAVIS WILSON
97307
LICENSED PROFESSIONAL ENGINEER
4/5/2024

STARBUCKS BEE CAVE
14211 STATE HWY 71, BEE CAVE, TEXAS 78738

STANDARD DETAILS
7 OF 10

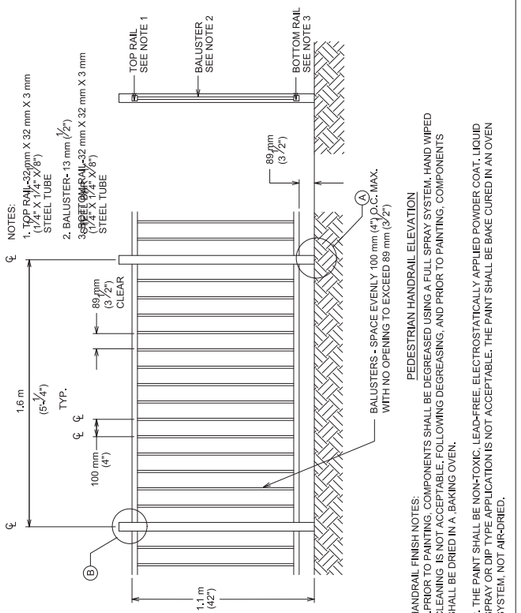
REVISIONS/CORRECTIONS

NO.	DATE	DESCRIPTION	BY

PROJECT NUMBER 00323-001
DATE: 4/5/2024
DESIGNED: KKE
CHECKED: JTW

SHEET NO.
26 OF 41

23-789-SNPS

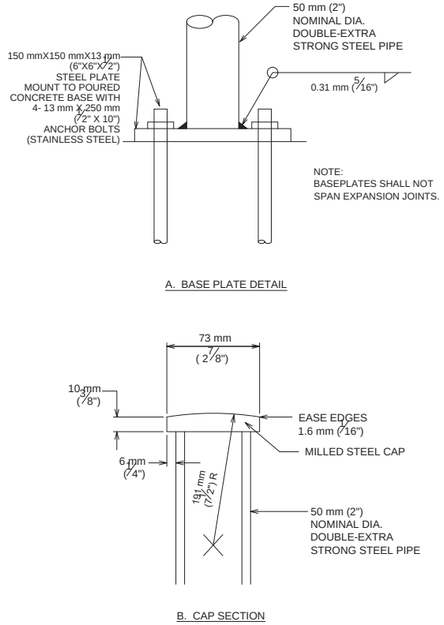


NOTES:
1. TOP RAIL - 32 mm X 32 mm X 3 mm (1 1/4" X 1 1/4" X 0.8") STEEL TUBE
2. BALUSTER - 13 mm (1/2") SQUARE BAR
3. BOTTOM RAIL - 32 mm X 32 mm X 3 mm (1 1/4" X 1 1/4" X 0.8") STEEL TUBE

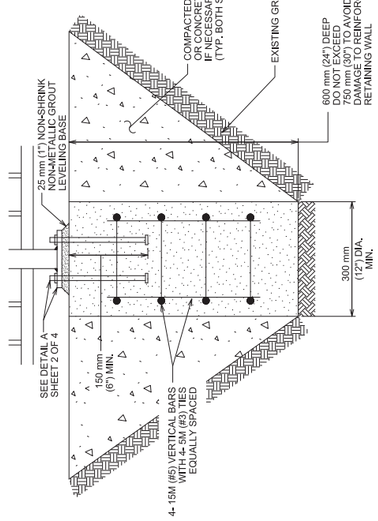
PEDESTRIAN HANDRAIL ELEVATION

HANDRAIL FINISH NOTES:
1. PRIOR TO PAINTING, COMPONENTS SHALL BE DEGREASED USING A FULL SPRAY SYSTEM, HAND WIPED CLEANING IS NOT ACCEPTABLE, FOLLOWING DEGREASING, AND PRIOR TO PAINTING, COMPONENTS SHALL BE DRIED IN A BAKING OVEN.
2. THE PAINT SHALL BE NON-TOXIC, LEAD-FREE, ELECTROSTATICALLY APPLIED POWDER COAT, LIQUID SPRAY OR DIP TYPE APPLICATION IS NOT ACCEPTABLE. THE PAINT SHALL BE BAKE CURED IN AN OVEN SYSTEM, NOT AIR-DRIED.

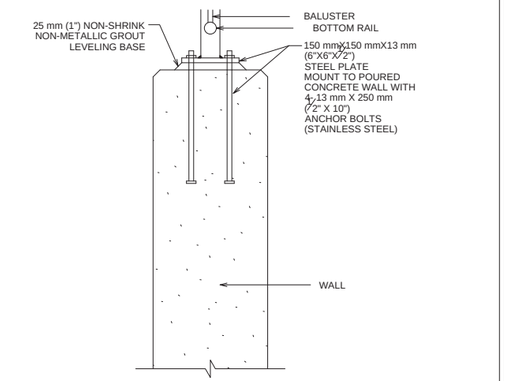
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	PEDESTRIAN HANDRAIL	
RECORD COPY SIGNED BY KERI JUAREZ — 01/04/11 — ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 707S-1 1 OF 4



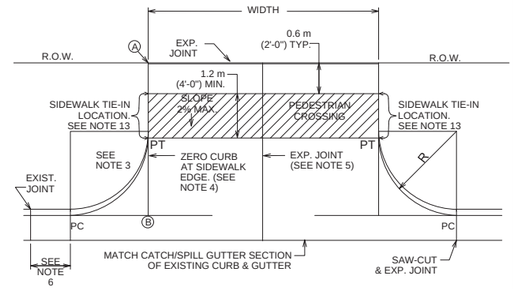
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	PEDESTRIAN HANDRAIL	
RECORD COPY SIGNED BY KERI JUAREZ — 01/04/11 — ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 707S-1 2 OF 4



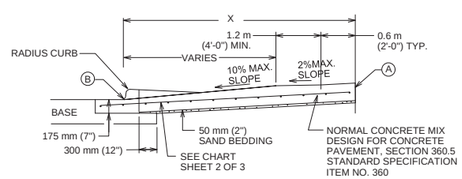
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	PEDESTRIAN HANDRAIL	
RECORD COPY SIGNED BY KERI JUAREZ — 01/04/11 — ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 707S-1 3 OF 4



CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	PEDESTRIAN HANDRAIL	
RECORD COPY SIGNED BY KERI JUAREZ — 01/04/11 — ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 707S-1 4 OF 4

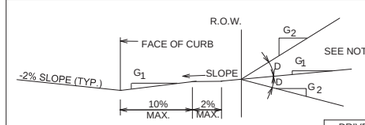


NOTE: ALL DRIVEWAYS SHALL BE SLOPED TOWARDS THE STREET FROM THE R.O.W. LINE. ELEVATION OF POINT(A)ABOVE POINT(B)IS, TYPICALLY A MINIMUM OF 150 mm (6") PLUS 20 mm/m (¼" RISE/FOOT) OVER DISTANCE "X" IN METERS (FEET).



CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	TYPE II DRIVEWAY	
RECORD COPY SIGNED BY CUONG TRAN — 02/24/10 — ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 433S-2 1 OF 2

USE	THICKNESS	REINFORCEMENT
DRIVEWAYS FOR PASSENGER VEHICLE PARKING LOTS	150 mm (6") MIN.	125 mm (5") MIN. CONCRETE WITH ONE LAYER OF13M (#4) BARS PLACED ON CHAIRS AT MIDDEPTH OF SLAB AT NO MORE THAN 450 mm (18") O.C. BOTH DIRECTIONS
ALL OTHERS	175 mm (7") MIN.	125 mm (5") MIN. CONCRETE WITH ONE LAYER OF13M (#4) BARS PLACED ON CHAIRS AT MIDDEPTH OF SLAB AT NO MORE THAN 450 mm (18") O.C. BOTH DIRECTIONS

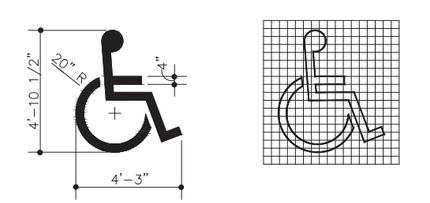


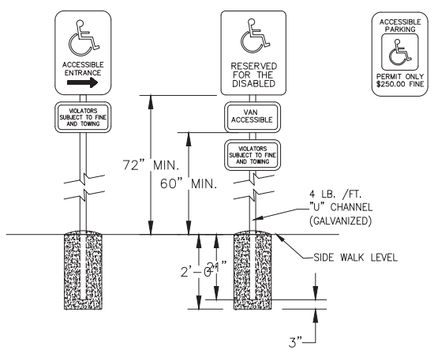
ALLOWABLE GRADES

DRIVEWAY VOLUME (ADT)	D=GRADE CHANGE STD.	MAX
>1500	0%	3%
500-1500	3%	6%
< 500	6%	15%

NOTES:
1. ALL TYPE II DRIVEWAYS SHALL HAVE RADIUS ENDS.
2. DRIVEWAY WIDTHS AND RADII DIMENSIONS, ONE/TWO WAY TRAVEL REQUIREMENTS, AND GEOMETRIC LAY-OUT ARE HIGHLY VARIABLE, SUBJECT TO SITE SPECIFIC CONDITIONS AND REQUIREMENTS. SEE TRANSPORTATION CRITERIA MANUAL. SECTION 5 "DRIVEWAYS".
3. THE DRIVEWAY EDGE SHALL BE SMOOTHLY TRANSITITIONED INTO THE SIDEWALK TIE-IN LOCATION BEGINNING AT THE RADIUS PC LINE.
4. "ZERO" CURB AT PT OR SIDEWALK EDGE, WHICHEVER IS ENCOUNTERED FIRST.
5. PLACE AN EXPANSION JOINT DOWN THE CENTER OF DRIVEWAY ALL DRIVEWAYS.
6. IF DIMENSION IS LESS THAN 1.5 METERS (5 FEET), REMOVE CURB AND GUTTER TO EXISTING JOINT AND POUR MONOLITHICALLY WITH DRIVEWAY.
7. IF THE BASE IS OVER-EXCAVATED WHERE THE CURB AND GUTTER WERE REMOVED, BACKFILL WITH CONCRETE MONOLITHICALLY WITH THE DRIVEWAY.
8. TYPE II DRIVEWAYS ARE TO BE LOCATED NO CLOSER TO THE CORNER OF INTERSECTING RIGHT OF WAY THAN 60% OF PARCEL FRONTAGE AT 30 METERS (100 FEET): WHICHEVER IS LESS.
9. DRIVEWAY SHALL NOT BE CONSTRUCTED WITHIN THE CURB RETURN OF A STREET INTERSECTION.
10. WHILE THE PROPERTY OWNER REMAINS RESPONSIBLE FOR GRADE BREAKS WITHIN PRIVATE PROPERTY, THE FIRE DEPARTMENT SHALL BE CONSULTED WHERE THE DRIVEWAY IS ESSENTIAL TO EMERGENCY VEHICLE ACCESS AND "G2 IS GREATER THAN 15%.
11. USE 12 MM (1/2") ASPHALT BOARD OR OTHER APPROVED MATERIAL FOR CURB AND GUTTER EXPANSION JOINTS. SIDEWALK, AT THE R.O.W. LINE AND AT MIDWIDTH, SEE NOTE 5.
12. SEE TRANSPORTATION CRITERIA MANUAL, SECTION 5 FOR OTHER DRIVEWAY REQUIREMENTS.
13. THE SIDEWALK, REGARDLESS OF ITS LOCATION WITH RESPECT TO THE CURB OR PROPERTY LINE, SHALL BE CONNECTED TO THE DRIVEWAY AT THESE LOCATIONS.
14. WATER METER BOXES AND WASTEWATER CLEAN OUTS ARE PROHIBITED FROM BEING LOCATED IN DRIVEWAY AREAS.

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	TYPE II DRIVEWAY	
RECORD COPY SIGNED BY CUONG TRAN — 02/24/10 — ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 433S-2 2 OF 2





ACCESSIBLE PARKING SIGNAGE — N.T.S.

MillerGRAY
Consulting • Engineering • Infrastructure
7320 N. MoPac Expressway, Suite 203
Austin, Texas 78731
Phone (512) 861-5300
www.miller-gray.com
TBPE FIRM REG. NO. F-16302

P:\00323 Investcor\001 Starbucks Bee Cave\05_CAD\00323-001dt.dwg 4/5/2024 10:15 AM

STATE OF TEXAS
J. TRAVIS WILSON
97307
LICENSED PROFESSIONAL ENGINEER
4/5/2024

STARBUCKS BEE CAVE
14211 STATE HWY 71, BEE CAVE, TEXAS 78738

STANDARD DETAILS
8 OF 10

REVISIONS/CORRECTIONS

NO.	DATE	DESCRIPTION	BY

PROJECT NUMBER 00323-001
DATE: 4/5/2024
DESIGNED: KKE
CHECKED: JTW

CAUTION!
IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

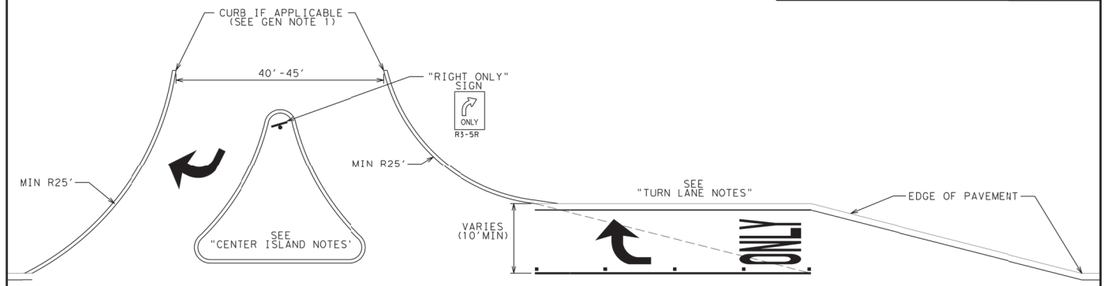
811 Know what's below. Call before you dig.

FOR CITY USE ONLY:

SHEET NO.
27 OF 41

23-789-SNPS

STANDARD RIGHT IN/RIGHT OUT DRIVEWAY DETAIL



NOTES

CENTER ISLAND NOTES

1. SIGN (R3-5R) MAINTAINED BY DRIVEWAY OWNER
2. "RIGHT ONLY" SIGN TO USE " " BASE
3. SEE GENERAL NOTE 1
4. CURB ON CENTER ISLAND SHALL BE PAINTED YELLOW USING TY I (100 MIL). PER TXDOT ITEM 666.
5. CENTER OF ISLAND SHALL BE 4" CONCRETE RIPRAP

TURN LANE NOTES

1. IF TAPERED DRIVEWAY OPTION IS APPLICABLE OR ALLOWED BY AREA ENGINNER:
   - LESS THAN 45 MPH = ANGLED 100' TAPER
   - GREATER THAN 45 MPH = 100' STORAGE AND 100' TAPER
2. ALL STRIPING SHALL BE TY I (100 MIL) PER TXDOT ITEM 646
3. REFERENCE PM-22 STANDARD FOR ALL STRIPING AND BUTTON DETAILS.

GENERAL NOTES

1. ALL CURB WITHIN TXDOT R.O.W. AND ADJACENT TO A FACILITY THAT IS GREATER THAN 50 MPH, MUST BE TY I MOUNTABLE CURB. SEE STANDARD DETAIL CCCG-22
2. DRIVEWAY MATERIAL SHALL BE ALL WEATHER SURFACE (CONCRETE OR HOTMIX)

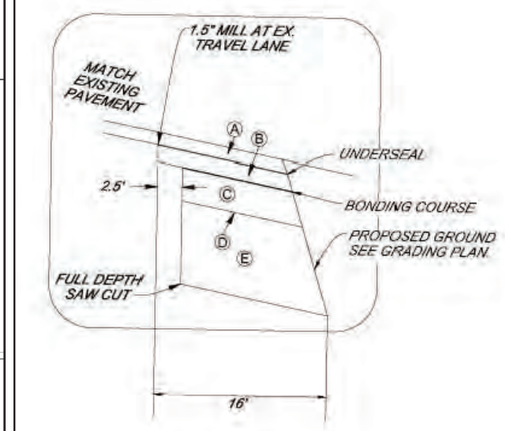
Austin District
South Travis Area Office

Texas Department of Transportation

RIGHT IN / RIGHT OUT DRIVEWAY DETAIL

©	CONT	SECT	JOB	HIGHWAY
DW: CK:				
DW: CK:	DIST	COUNTY		SHEET NO.

DATE: 8/DATE
FILE: 8'FILE'



DETAIL 'A'
NTS

LEGEND:

- (A) 1.5" PFC (ASPHALT) (PG 76-22)
- (B) 2" TY D PG64-22 HMAC
- (C) 5" TY B PG64-22 HMAC
- (D) PRIME COAT
- (E) 10" TY D GR 5 FLEX BASE

TCP	TITLE	MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
1-1	CONVENTIONAL ROAD SHOULDER WORK		✓	✓		
1-2	ONE-LANE TWO-WAY TRAFFIC CONTROL		✓	✓		
1-3	TRAFFIC SHIFTS ON TWO-LANE ROADS		✓	✓		
1-4	LANE CLOSURES ON MULTILANE CONVENTIONAL ROADS		✓	✓		
1-5	LANE CLOSURES FOR DIVIDED HIGHWAYS			✓		
1-6	AUTOMATED FLAGGER ASSISTANCE DEVICES (AFADS)		✓	✓		
2-1	CONVENTIONAL ROAD SHOULDER WORK		✓	✓	✓	✓
2-2	ONE-LANE TWO-WAY TRAFFIC CONTROL		✓	✓	✓	
2-3	TRAFFIC SHIFTS ON TWO-LANE ROADS				✓	✓ (2-3b ONLY)
2-4	LANE CLOSURES ON MULTILANE CONVENTIONAL ROADS			✓	✓	
2-5	LONG TERM LANE CLOSURES MULTILANE CONVENTIONAL ROADS				✓	✓
2-6	LANE CLOSURES ON DIVIDED HIGHWAYS				✓	✓
2-7	DIVERSIONS AND NARROW BRIDGES				✓	✓
2-8	LONG TERM ONE-LANE TWO-WAY CONTROL				✓	✓
3-1	MOBILE OPERATIONS UNDIVIDED HIGHWAYS	✓				
3-2	MOBILE OPERATIONS DIVIDED HIGHWAYS	✓				
3-3	MOBILE OPERATIONS RAISED PAVEMENT MARKER INSTALLATION/REMOVAL	✓				
3-4	MOBILE OPERATIONS FOR ISOLATED WORK AREAS UNDIVIDED HIGHWAYS	✓				
3-5	MOBILE OPERATIONS HERBICIDE TRUCK OPERATIONS	✓				
5-1	SHOULDER WORK FOR FREEWAYS / EXPRESSWAYS		✓ (5-1a only)	✓ (5-1b only)	✓ (5-1b only)	
6-1	FREEWAY LANE CLOSURES		✓	✓	✓	
6-2	WORK AREA NEAR RAMP		✓	✓	✓	
6-3	WORK AREA BEYOND RAMP		✓	✓	✓	
6-4	WORK AREA AT EXIT RAMP		✓	✓	✓	
6-5	WORK AREA BEYOND EXIT RAMP		✓	✓	✓	
6-6	FREEWAY CLOSURE		✓	✓	✓	
6-7	SHORT DURATION FREEWAY CLOSURE SEQUENCE		✓			
6-8	WORK IN EXIT GORE FOR ADT GREATER THAN 10,000		✓	✓		
6-9	WORK IN EXIT GORE FOR ADT LESS THAN 10,000		✓	✓		
7-1	TRAFFIC CONTROL DETAILS FOR SURFACING OPERATIONS				✓	✓

MOBILE
Work that moves continuously or intermittently (stopping for up to approximately 15 minutes).

SHORT DURATION
Work that occupies a location up to 1 hour.

SHORT TERM STATIONARY
Daytime work that occupies a location for more than 1 hour in a single daylight period.

INTERMEDIATE TERM STATIONARY
Work that occupies a location more than one daylight period up to 3 days, or night-time work lasting more than 1 hour.

LONG TERM STATIONARY
Work that occupies a location more than 3 days.

NOTE
THIS SHEET IS A WORKSHEET FOR PLAN PREPARATION ONLY. IT IS NOT TO BE INCLUDED IN P.S.&E's.

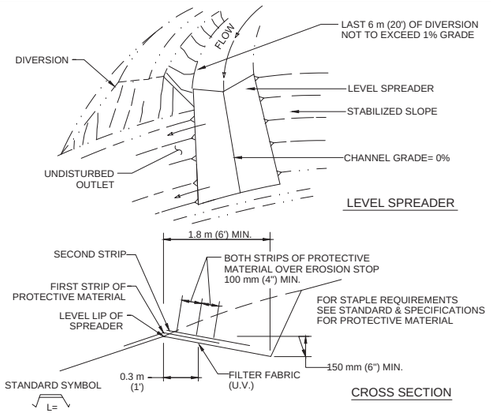
Texas Department of Transportation — Traffic Operations Division Standard

TRAFFIC CONTROL PLAN SELECTION WORKSHEET

File: tcpws-16.dgn	DW: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
© TxDOT April 1996	CONT	SECT	JOB	HIGHWAY
REVISIONS				
4-16	DIST	COUNTY		SHEET NO.

149

DATE:
FILE:



GENERAL NOTES:

1. LEVEL SPREADERS SHALL BE INSTALLED UNDER THE DIRECT SUPERVISION OF THE ENGINEER.
2. CONSTRUCT LEVEL LIP ON ZERO PERCENT GRADE TO INSURE UNIFORM SPREADING OF SEDIMENT-FREE RUNOFF (CONVERTING CHANNEL FLOW TO SHEET FLOW).
3. LEVEL SPREADER SHALL BE CONSTRUCTED ON UNDISTURBED SOIL (NOT ON FILL).
4. A MATTING EROSION STOP SHALL BE PLACED VERTICALLY AND AT LEAST 150 mm (6") DEEP IN A SILT TRENCH 0.3 m (1') BACK OF AND PARALLEL WITH THE LIP. THIS EROSION STOP SHALL EXTEND THE ENTIRE LENGTH OF THE LEVEL LIP AND SHALL BE TRIMMED AFTER BACKFILLING WITH TAMPED SOIL, SO THAT THE UPPER EDGE IS FLUSH WITH THE SOIL SURFACE.
5. THE ENTIRE LEVEL LIP AREA SHALL BE PROTECTED BY PLACING 2 STRIPS OF JUTE, EXCELSIOR OR OTHER APPROVED PROTECTIVE MATERIAL AS SHOWN ABOVE.
6. THE ENTRANCE CHANNEL SHALL NOT EXCEED A 1% GRADE FOR AT LEAST 6 m (20') BEFORE ENTERING SPREADER.
7. STORM RUNOFF CONVERTED TO SHEET FLOW SHALL OUTLET ONTO STABILIZED AREAS. WATER SHALL NOT BE RECONCENTRATED IMMEDIATELY BELOW THE POINT OF DISCHARGE.
8. PERIODIC INSPECTION AND REQUIRED MAINTENANCE SHALL BE PROVIDED.

CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT		LEVEL SPREADER	
RECORD COPY SIGNED BY J. PATRICK MURPHY	3/27/00 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 634S-1

Know what's below. Call before you dig.

CAUTION!
IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

FOR CITY USE ONLY:

MillerGRAY
Consulting • Engineering • Infrastructure
7320 N. MoPac Expressway, Suite 203
Austin, Texas 78731
Phone (512) 861-5300
www.miller-gray.com
TBPE FIRM REG. NO. F-16302

STATE OF TEXAS
J. TRAVIS WILSON
97307
LICENSED PROFESSIONAL ENGINEER
4/5/2024

P:\00323 Investcor\001 Starbucks Bee Cave\05_CAD\00323-001dt.dwg 4/5/2024 10:15 AM

STARBUCKS BEE CAVE
14211 STATE HWY 71, BEE CAVE, TEXAS 78738

STANDARD DETAILS
9 OF 10

REVISIONS/CORRECTIONS

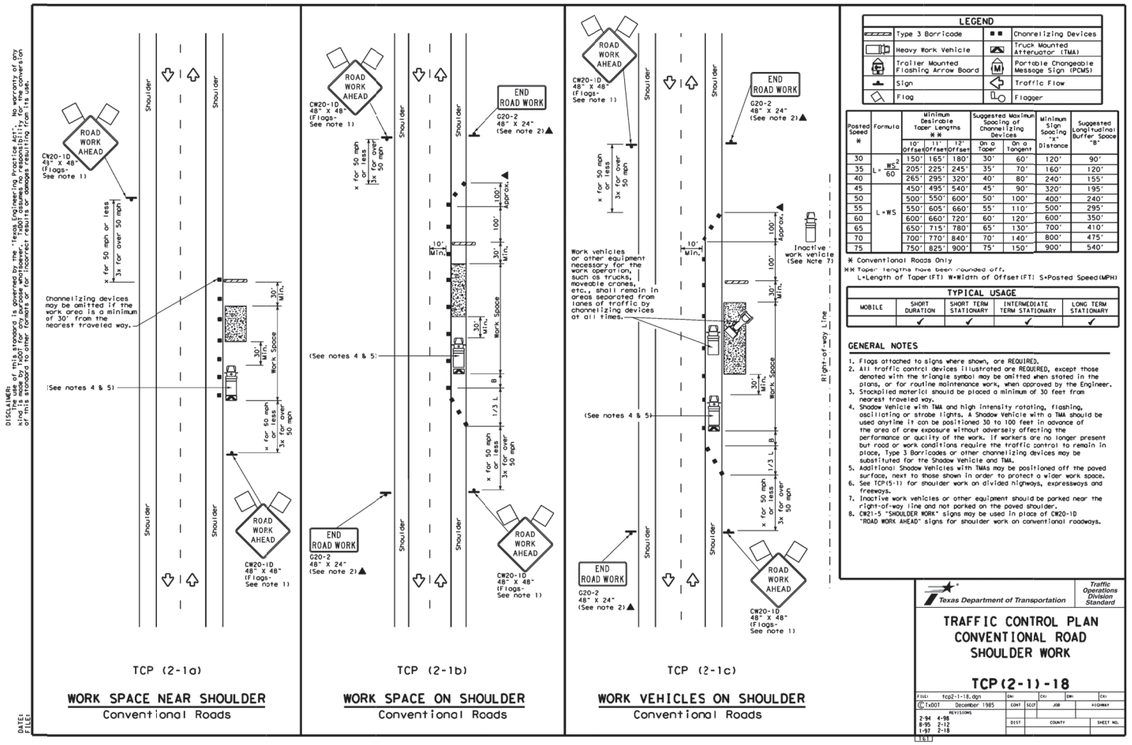
NO.	DATE	DESCRIPTION	BY

PROJECT NUMBER 00323-001
DATE: 4/5/2024
DESIGNED: KKE
CHECKED: JTW

SHEET NO.
28 OF 41

23-789-SNPS

DISCLAIMER:
The use of this standard is governed by the "Texas Engineering Practice Act". No warranty of any kind is made by the Texas Department of Transportation for any purpose whatsoever. Texas Department of Transportation assumes no responsibility and shall not be liable for any damage resulting from the reuse of this standard or for incorrect results or damages resulting from its use.



TCP (2-1a)

WORK SPACE NEAR SHOULDER
Conventional Roads

TCP (2-1b)

WORK SPACE ON SHOULDER
Conventional Roads

TCP (2-1c)

WORK VEHICLES ON SHOULDER
Conventional Roads

DISCLAIMER:
The use of this standard is governed by the "Texas Engineering Practice Act". No warranty of any kind is made by TxDOT for any purpose whatsoever. TxDOT assumes no responsibility for the conversion of this standard to other formats or for incorrect results or damages resulting from its use.

DATE:
FILE:

LEGEND

	Type 3 Barricade	■ ■	Channelizing Devices
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Board		Portable Changeable Message Sign (PCMS)
	Sign		Traffic Flow
	Flag		Flagger

Posted Speed M	Formula	Minimum Desirable Taper Lengths M N 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Channelizing Devices On a Taper	On a Tangent	Minimum Sign Spacing "X" Distance	Suggested Longitudinal Buffer Space "B"
30	L = WS² / 60	150'	165'	180'	30'	60'	120'	90'
35		205'	225'	245'	35'	70'	160'	120'
40		265'	295'	320'	40'	80'	240'	155'
45	L = WS	450'	495'	540'	45'	90'	320'	195'
50		500'	550'	600'	50'	100'	400'	240'
55		550'	605'	660'	55'	110'	500'	295'
60		600'	660'	720'	60'	120'	600'	350'
65		650'	715'	780	65'	130'	700'	410'
70		700'	770'	840'	70'	140'	800'	475'
75		750'	825'	900'	75'	150'	900'	540'

※ Conventional Roads Only
MM Taper lengths have been rounded off.
L=Length of Taper(FT) W=Width of Offset(FT) S=Posted Speed(MPH)

TYPICAL USAGE

MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
	✓	✓	✓	✓

GENERAL NOTES

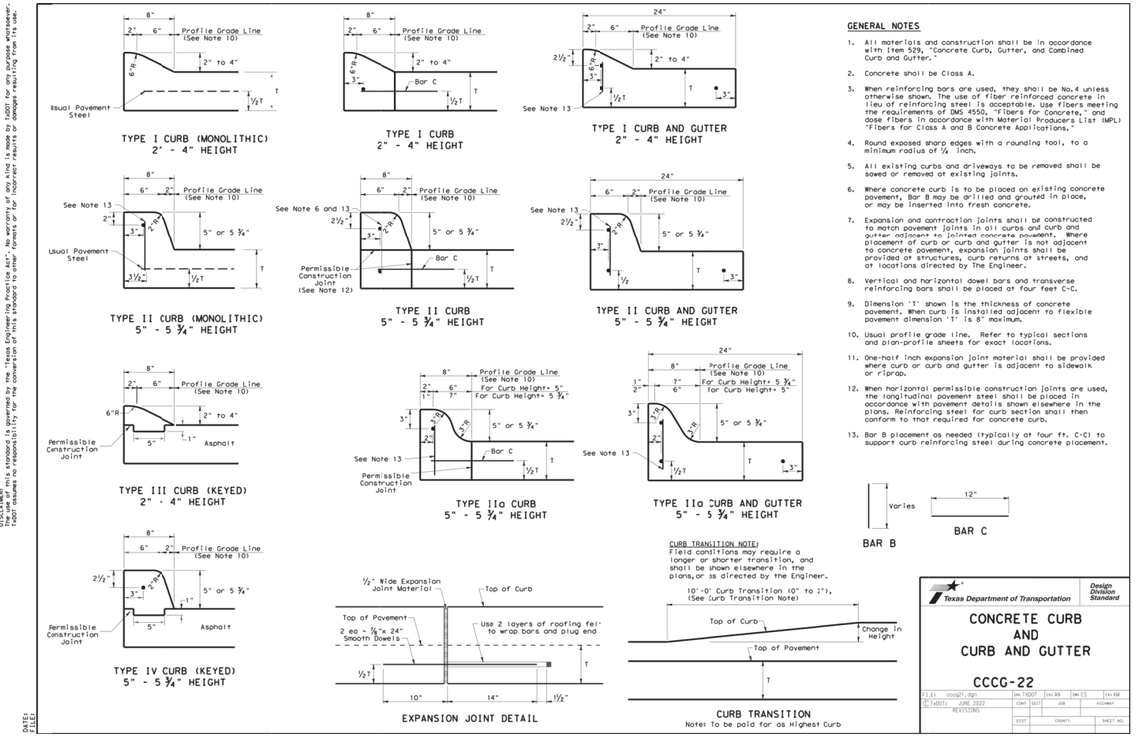
1. Flags attached to signs where shown, are REQUIRED.
2. All traffic control devices illustrated are REQUIRED, except those denoted with the triangle symbol may be omitted when stated in the plans, or for routine maintenance work, when approved by the Engineer.
3. Stockpiled material should be placed a minimum of 30 feet from nearest traveled way.
4. Shadow Vehicle with TMA and high intensity rotating, flashing, oscillating or strobe lights. A Shadow Vehicle with a TMA should be used anytime it can be positioned 30 to 100 feet in advance of the area of crew exposure without adversely affecting the performance or quality of the work. If workers are no longer present but road or work conditions require the traffic control to remain in place, Type 3 Barricades or other channelizing devices may be substituted for the Shadow Vehicle and TMA.
5. Additional Shadow Vehicles with TMAs may be positioned off the paved surface, next to those shown in order to protect a wider work space.
6. See TCP(5-1) for shoulder work on divided highways, expressways and freeways.
7. Inactive work vehicles or other equipment should be parked near the right-of-way line and not parked on the paved shoulder.
8. CW21-5 "SHOULDER WORK" signs may be used in place of CW20-1D "ROAD WORK AHEAD" signs for shoulder work on conventional roadways.

Texas Department of Transportation — Traffic Operations Division Standard

TRAFFIC CONTROL PLAN
CONVENTIONAL ROAD SHOULDER WORK

TCP(2-1)-18

FILE: tcp2-1-18.dgn	DN:	CK:	DW:	CK:
©TxDOT December 1985	CONT	SECT	JOB	HIGHWAY
REVISIONS 2-94 4-98 8-95 2-12 1-97 2-18	DIST	COUNTY		SHEET NO.



TYPE I CURB (MONOLITHIC)
2" - 4" HEIGHT

TYPE I CURB
2" - 4" HEIGHT

TYPE I CURB AND GUTTER
2" - 4" HEIGHT

TYPE II CURB (MONOLITHIC)
5" - 5 ¾" HEIGHT

TYPE II CURB
5" - 5 ¾" HEIGHT

TYPE II CURB AND GUTTER
5" - 5 ¾" HEIGHT

TYPE III CURB (KEYED)
2" - 4" HEIGHT

TYPE IIa CURB
5" - 5 ¾" HEIGHT

TYPE IIa CURB AND GUTTER
5" - 5 ¾" HEIGHT

TYPE IV CURB (KEYED)
5" - 5 ¾" HEIGHT

EXPANSION JOINT DETAIL

GENERAL NOTES

1. All materials and construction shall be in accordance with Item 529, "Concrete Curb, Gutter, and Combined Curb and Gutter."
2. Concrete shall be Class A.
3. When reinforcing bars are used, they shall be No.4 unless otherwise shown. The use of fiber reinforced concrete in lieu of reinforcing steel is acceptable. Use fibers meeting the requirements of DMS 4550, "Fibers for Concrete," and dose fibers in accordance with Material Producers List (MPL) "Fibers for Class A and B Concrete Applications."
4. Round exposed sharp edges with a rounding tool, to a minimum radius of ¼ inch.
5. All existing curbs and driveways to be removed shall be sawed or removed at existing joints.
6. Where concrete curb is to be placed on existing concrete pavement, Bar B may be drilled and grouted in place, or may be inserted into fresh concrete.
7. Expansion and contraction joints shall be constructed to match pavement joints in all curbs and curb and gutter adjacent to jointed concrete pavement. Where placement of curb or curb and gutter is not adjacent to concrete pavement, expansion joints shall be provided at structures, curb returns at streets, and at locations directed by The Engineer.
8. Vertical and horizontal dowel bars and transverse reinforcing bars shall be placed at four feet C-C.
9. Dimension "T" shown is the thickness of concrete pavements. When curb is installed adjacent to flexible pavement dimension "T" is 8" maximum.
10. Usual profile grade line. Refer to typical sections and plan-profile sheets for exact locations.
11. One-half inch expansion joint material shall be provided where curb or curb and gutter is adjacent to sidewalk or riprap.
12. When horizontal permissible construction joints are used, the longitudinal pavement steel shall be placed in accordance with pavement details shown elsewhere in the plans. Reinforcing steel for curb section shall then conform to that required for concrete curb.
13. Bar B placement as needed (typically at four ft. C-C) to support curb reinforcing steel during concrete placement.

Varies — BAR B

12" — BAR C

CURB TRANSITION NOTE:
Field conditions may require a longer or shorter transition, and shall be shown elsewhere in the plans, or as directed by the Engineer.

CURB TRANSITION
Note: To be paid for as Highest Curb

Texas Department of Transportation — Design Division Standard

CONCRETE CURB AND CURB AND GUTTER

CCCG-22

FILE: cccg01.dgn	DN: TxDOT	CK: BN	DW: CS	CK: KM
©TxDOT JUNE 2002	CONT	SECT	JOB	HIGHWAY
REVISIONS	DIST	COUNTY		SHEET NO.

DISCLAIMER:
The use of this standard is governed by the "Texas Engineering Practice Act". No warranty of any kind is made by TxDOT for any purpose whatsoever. TxDOT assumes no responsibility for the conversion of this standard to other formats or for incorrect results or damages resulting from its use.

DATE:
FILE:

MillerGRAY
Consulting • Engineering • Infrastructure
7320 N. MoPac Expressway, Suite 203
Austin, Texas 78731
Phone (512) 861-5300
www.miller-gray.com
TBPE FIRM REG. NO. F-16302

STATE OF TEXAS
J. TRAVIS WILSON
97307
LICENSED PROFESSIONAL ENGINEER
4/5/2024

P:\00323 Investcor\001 Starbucks Bee Cave\05_CAD\00323-001.dt.dwg 4/5/2024 10:15 AM

STARBUCKS BEE CAVE
14211 STATE HWY 71, BEE CAVE, TEXAS 78738

STANDARD DETAILS
10 OF 10

REVISIONS/CORRECTIONS

NO.	DATE	DESCRIPTION	BY

PROJECT NUMBER
00323-001

DATE: 4/5/2024
DESIGNED: KKE
CHECKED: JTW

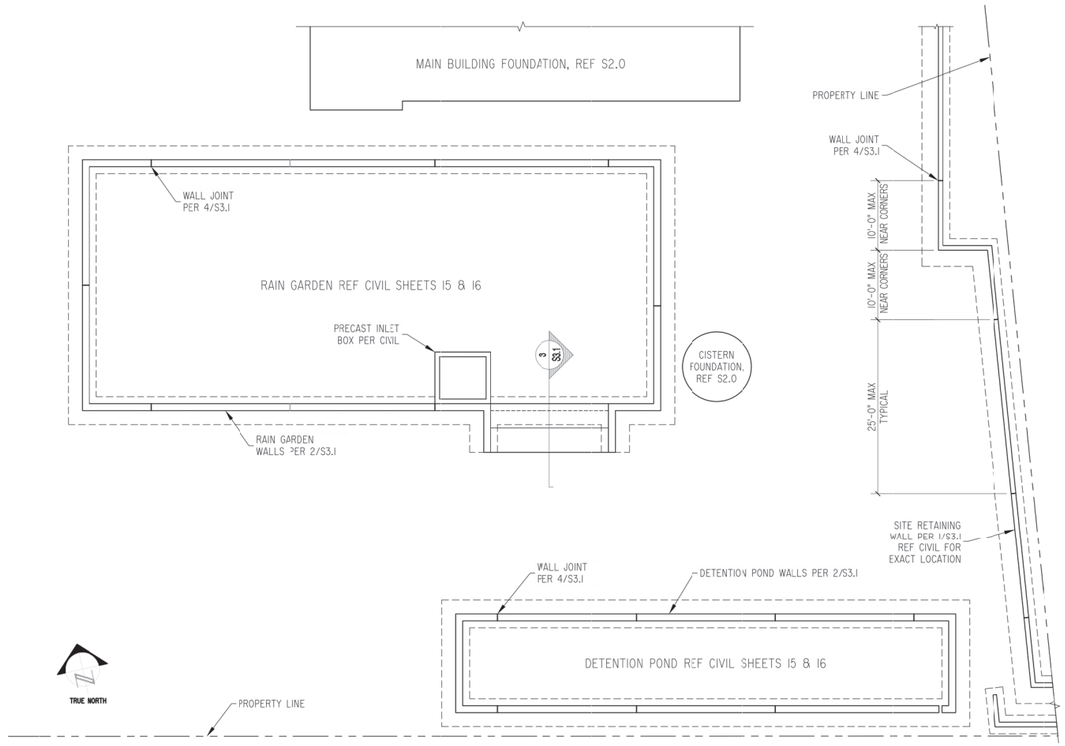
811 Know what's below. Call before you dig.

CAUTION!
IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

FOR CITY USE ONLY:

SHEET NO.
29 OF 41

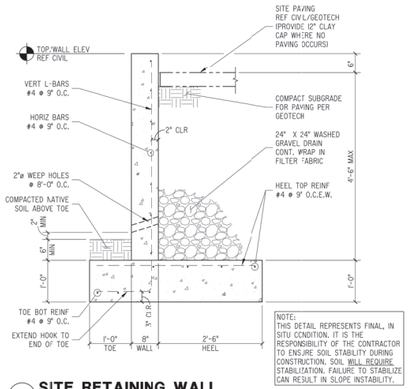
23-789-SNPS



RETAINING WALL DESIGN CRITERIA:	
ALLOWABLE BEARING PRESSURE	2500 PSF
ACTIVE PRESSURE, ASSUMED	40 PSF/FT COINCIDENT WITH SURCHARGE
AT-REST PRESSURE, ASSUMED	60 PSF/FT COINCIDENT WITH SURCHARGE
PASSIVE PRESSURE AT TOE, ASSUMED	360 PSF/FT, NEGLECTING TOP 6"
SURCHARGE PRESSURE	250 PSF AT FIRE LANE OR EQUIPMENT PAD
SAFETY FACTORS	1.5 FOR SLIDING & 2.0 FOR OVERTURNING

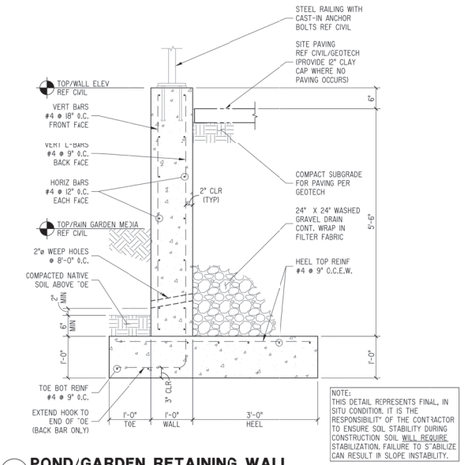
RAIN GARDEN AND DETENTION POND PLAN

1/8"=1'0"



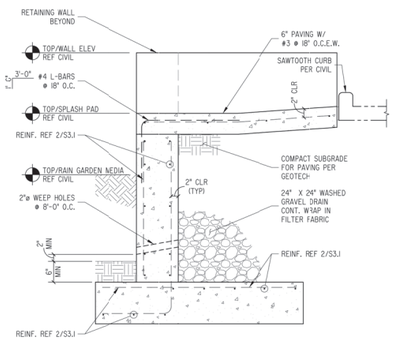
1 SITE RETAINING WALL

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



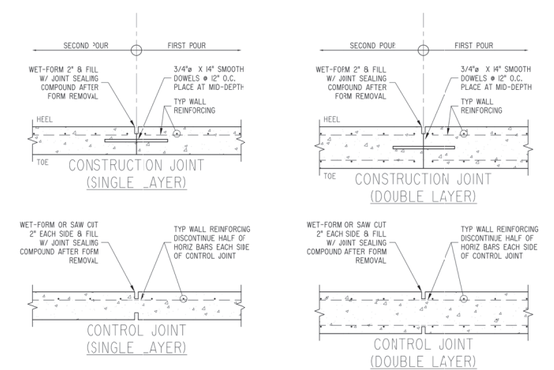
2 POND/GARDEN RETAINING WALL

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



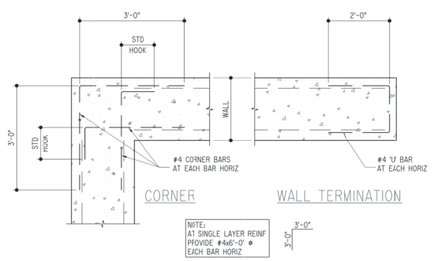
3 SPLASH PAD SECTION

N.T.S.



4 SITE WALL JOINT DETAIL

N.T.S.



5 WALL CORNER BAR DETAIL

N.T.S.

ATS Engineers Inspectors & Surveyors
www.ats-engineers.com
4810 W. Highway 290
AUSTIN, TEXAS 78735
TEL: (512) 329-0622
FAX: (512) 329-0666
REGISTR. #2487
ATS Project #: 22C9038.0

USE OF THESE DRAWINGS INDICATES AGREEMENT TO CONFORM WITH GENERAL NOTES. ALL DOCUMENTS AND COPYRIGHTS ARE PROPERTY OF ARCH TECHNICAL SERVICES, LLC, DBA ATS ENGINEERS, INSPECTORS AND SURVEYORS FIRM REGISTRATION NO. 2487

4942 HWY 290 W
AUSTIN, TEXAS
78735
(512) 476-0622

14211 W. Highway 71
Bee Cave, Texas

PROJECT

ENVIROPLAN
ARCHITECTS PLANNERS

2 ADDENDUM #2 11.14.23
4 ADDENDUM #4 2.02.24
6 ADDENDUM #6 3.15.24

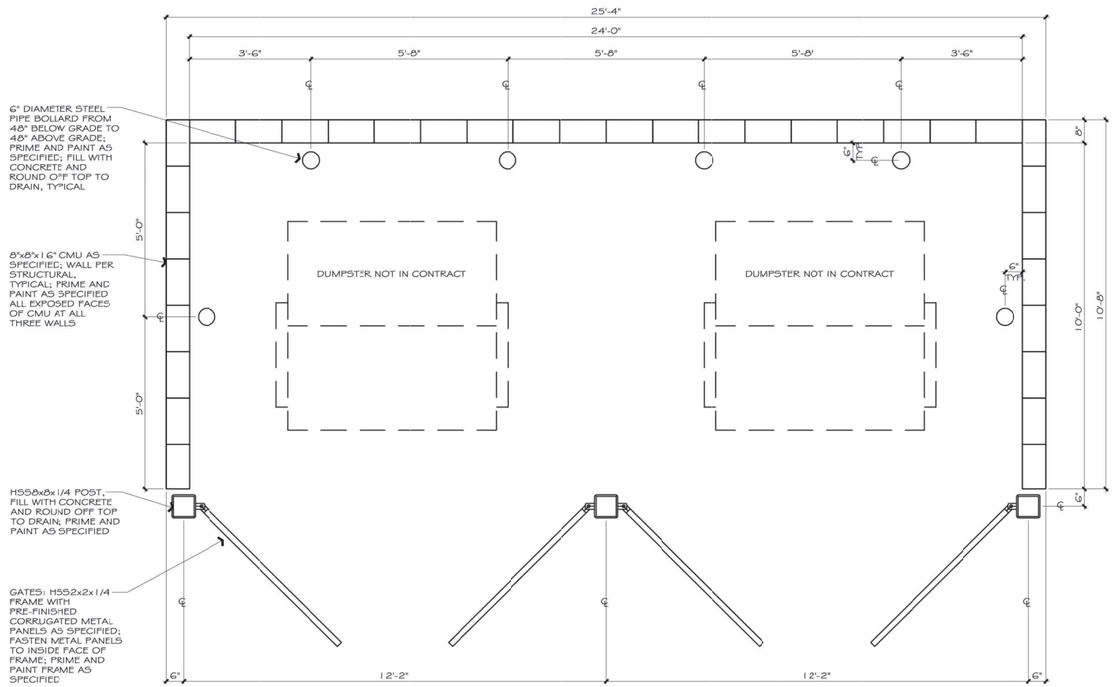
REVISIONS

03/15/2024 11:00 AM

STATE OF TEXAS
DAVID A. DUNKMAN
122387
LICENSED PROFESSIONAL ENGINEER

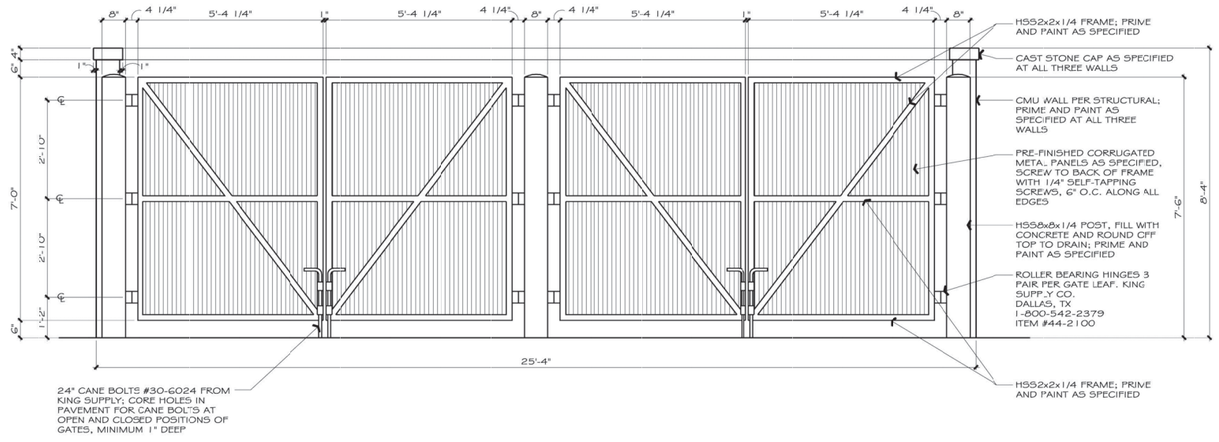
07.14.23
DATE

S3.1
30 OF 41



1 DUMPSTER ENCLOSURE PLAN

SCALE: 1/2" = 1'-0"



2 DUMPSTER ENCLOSURE ELEVATION

SCALE: 1/2" = 1'-0"

ENVIROPLAN
ARCHITECTS
•
PLANNERS
4942 HWY 290 W
AUSTIN, TEXAS
78735
(512) 476-0622

4211 W. Highway 71

Bee Cave, Texas

1427

PROJECT

REVISIONS

REGISTERED ARCHITECT
TIMOTHY S. FOWLER
1651
STATE OF TEXAS

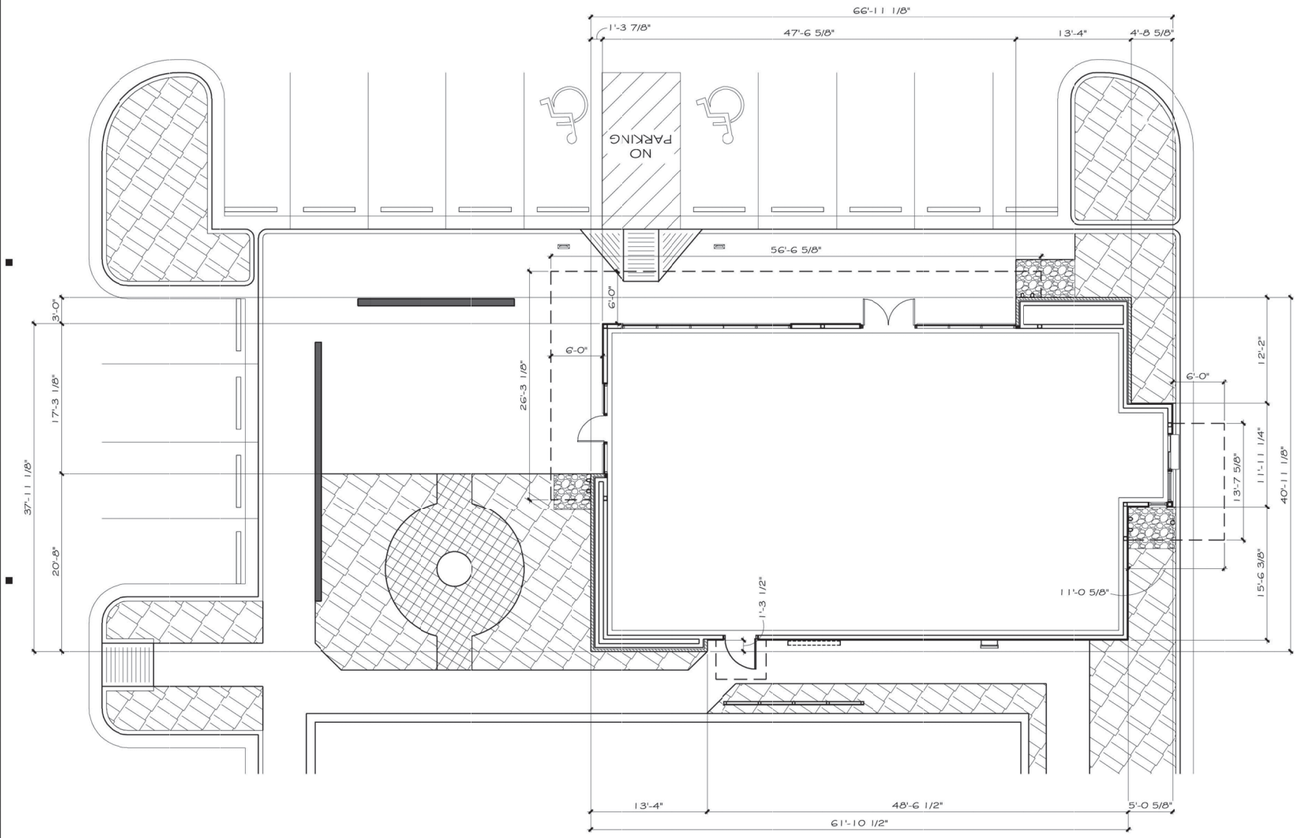
9.21.23

9.21.23

DATE

31 OF 41

A1



1 FLOOR PLAN

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

PLAN NORTH TRUE NORTH

LINEAR GLAZING FRONTAGE FOR NORTH ELEVATION FACING R.O.W. = 37'-3" (55.7%) LINEAR GLAZING

FACADE MATERIAL CALCULATIONS			
	TOTAL FACADE AREA	MASONRY (BRICK + STUCCO)	GLAZING
NORTH ELEVATION	1,222 S.F.	360 S.F. (29.5%)	327 S.F. (26.8%)
WEST ELEVATION	821 S.F.	538 S.F. (65.5%)	93 S.F. (11.9%)
SOUTH ELEVATION	1,282 S.F.	1,171 S.F. (91.3%)	10 S.F. (0.8%)
EAST ELEVATION	801 S.F.	599 S.F. (74.8%)	38 S.F. (4.7%)
ALL ELEVATIONS	4,126 S.F.	2,668 S.F. (64.7%)	468 S.F. (11.3%)

ARCHITECTURAL ELEMENTS:

HIGH-QUALITY DESIGN ELEMENTS:

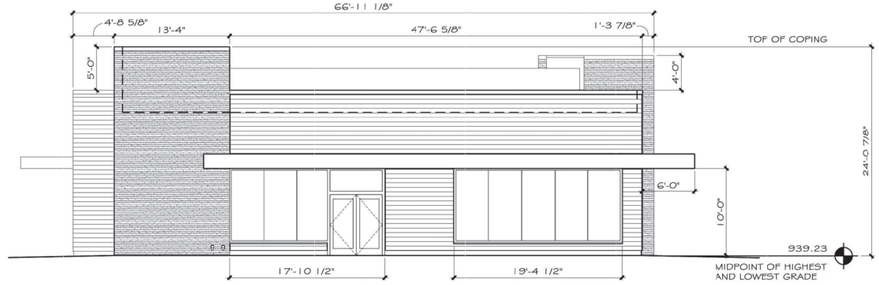
- CANOPIES WITH 6'-0" DEPTH.
- OUTDOOR PATIO AT LEAST 250 S.F. AND EXCLUSIVE OF SIDEWALKS.
- DISPLAY WINDOWS AT LEAST 7'-0" IN HEIGHT AND MEASURING NO MORE THAN 3'-0" FROM THE GROUND.
- INTEGRATED KNEE WALLS WITH LANDSCAPE AND SITTING AREA.

SITE DESIGN ELEMENTS:

- AT LEAST 50% OF THE PARKING AREA ON THE SAME LOT TO THE SIDE OR REAR OF ALL BUILDINGS.
- PATIO FOR OUTDOOR DINING EQUIVALENT TO 5% OF THE SITE OR 30% OF PLANNED RESTAURANT DINING AREA. THE OUTDOOR PATIO IS 500 S.F. WHICH IS 67% OF THE 750 S.F. INTERIOR RESTAURANT DINING AREA.
- ADDITIONAL OFF-STREET CONNECTION WITH NEIGHBORING PROPERTY.
- ALL DRIVE-THRU LANES AND WINDOWS LOCATED BEHIND OR TO THE SIDE OF ALL BUILDINGS AND NOT BETWEEN PUBLIC OR PRIVATE RIGHT-OF-WAY AND THE FRONT OF THE BUILDING OR AN OPEN SPACE.

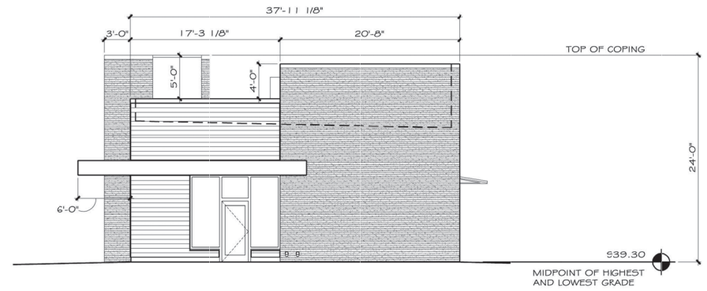
SUSTAINABILITY ELEMENTS:

- ALTERED TOPOGRAPHY AND ELEVATION OF THE SITE BY NO MORE THAN 4'-0" ACROSS 80% OF THE SITE.
- INCORPORATION OF A RAINWATER HARVESTING SYSTEM CAPABLE OF CAPTURING A ONE INCH RAINFALL EVENT FOR AT LEAST 25% OF THE ROOF AREA.



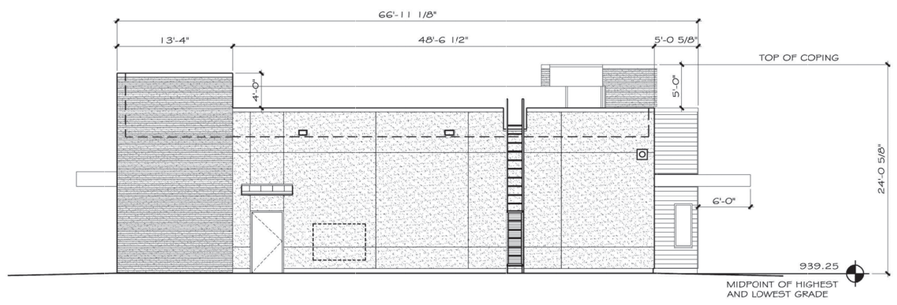
2 NORTH ELEVATION

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



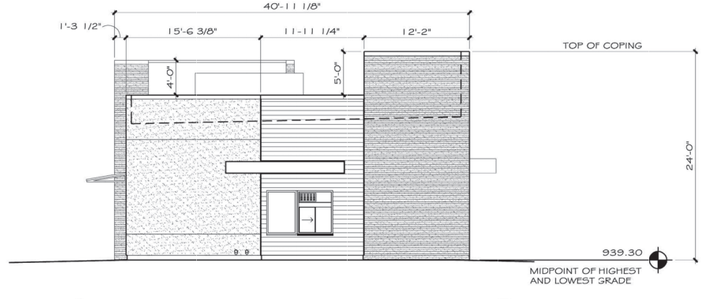
3 WEST ELEVATION

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



4 SOUTH ELEVATION

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



5 EAST ELEVATION

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

ENVIROPLAN
ARCHITECTS
•
PLANNERS
4942 HWY 290 W
AUSTIN, TEXAS
78735
(512) 476-0622

14211 W. Highway 71
Bee Cave, Texas

PROJECT

REVISIONS

REGISTERED ARCHITECT GARY L. FAGAN 16531 STATE OF TEXAS

1.22.24

1.22.24
DATE

A2
32 OF 41



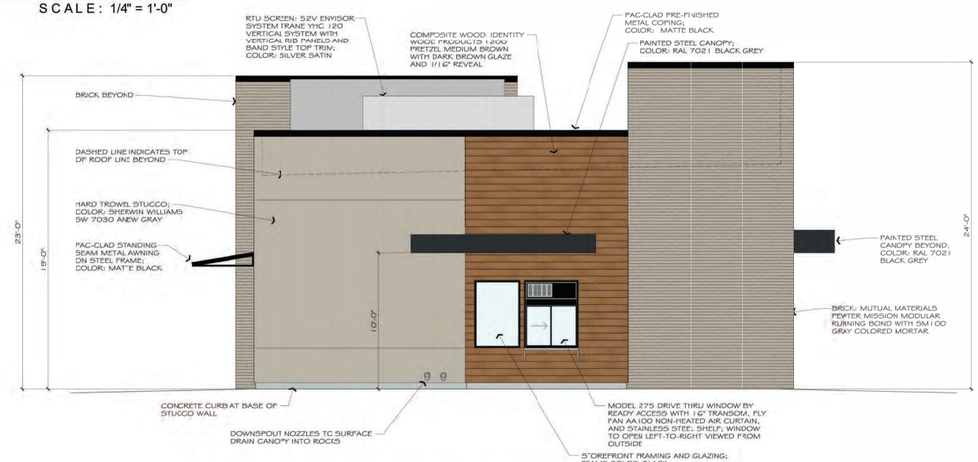
1 NORTH ELEVATION

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



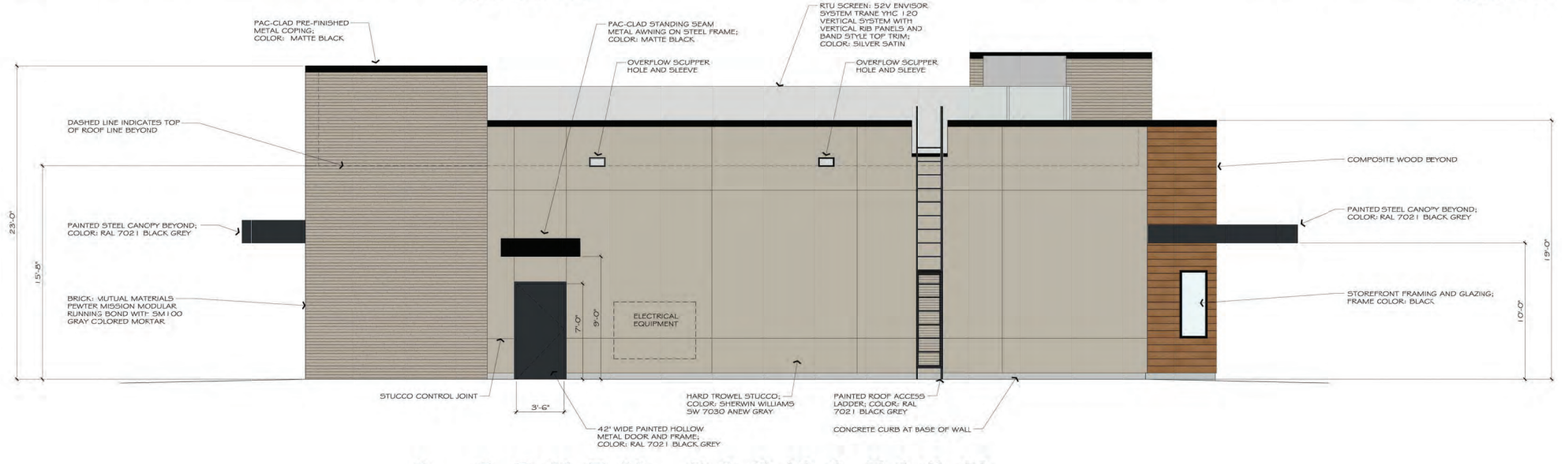
2 WEST ELEVATION

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



3 EAST ELEVATION

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



4 SOUTH ELEVATION

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

4942 HWY 290 W
AUSTIN, TEXAS
78735
(512) 476-0622

14211 W. Highway 71

Bee Cave, Texas

PROJECT

ENVIROPLAN
ARCHITECTS PLANNERS

REVISIONS

1.22.24

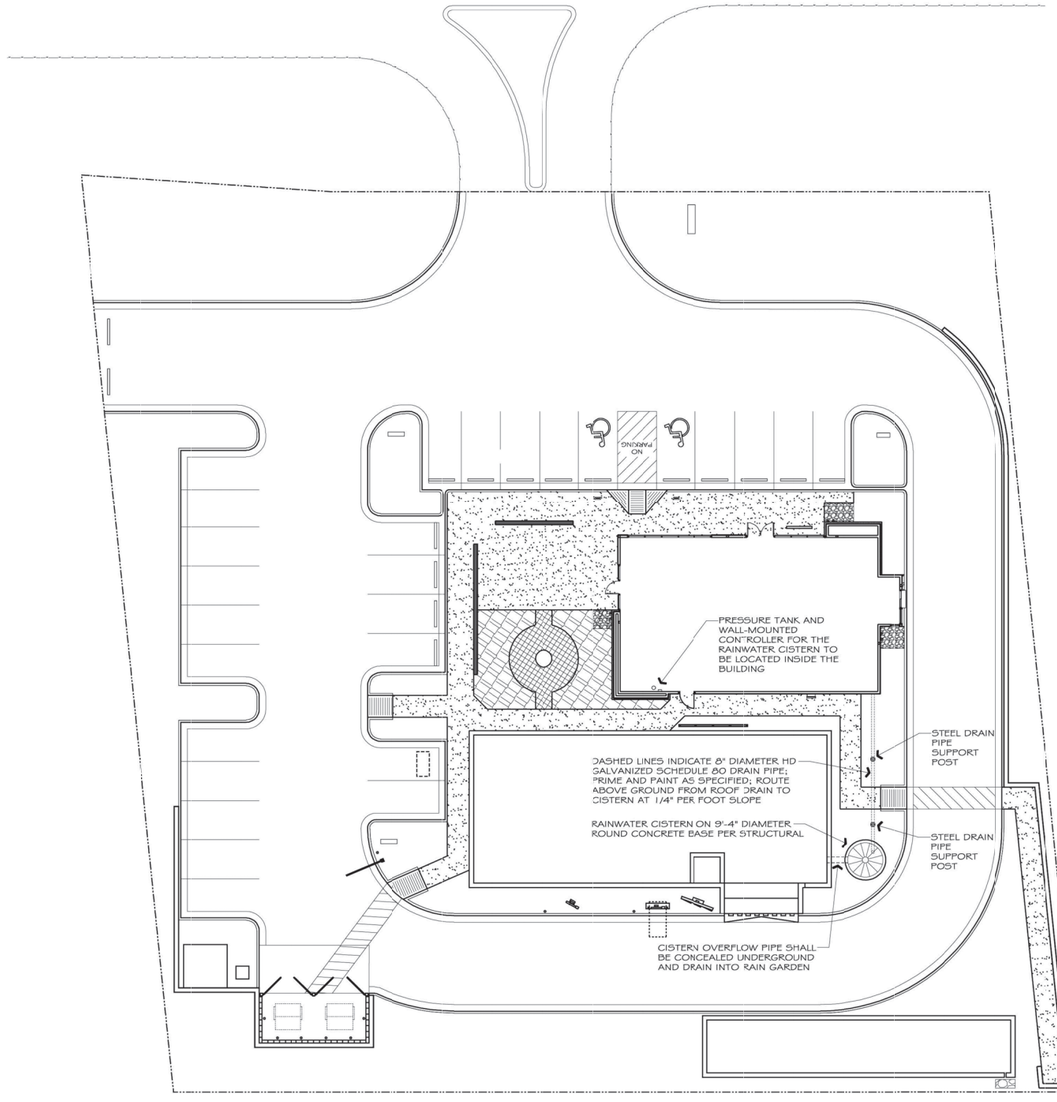
1.22.24

DATE

33 OF 41

A2.3

COLORED ELEVATIONS



1 ARCHITECTURAL SITE PLAN

SCALE: 1/16" = 1'-0"

PLAN NORTH

TRUE NORTH

NOTES:

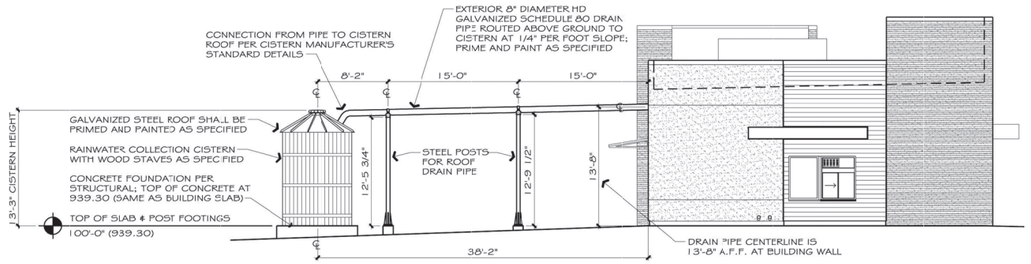
RAINWATER CISTERN SHALL BE 8'-0" DIAMETER TIMBERTANK WITH WOOD STAVES BY WATER STORAGE TANKS, INC.; https://waterstoragetanksinc.com/
CONTACT BRITTANY AT SPECIFIED WATER SYSTEMS
(512) 962-0954
bnttany@specwater.com

THE WATER STORAGE TANK SHALL BE A CORGAL MODEL 0803-WT-CHR WITH STANDARD 30 DEGREE CORRUGATED METAL ROOF HAVING A NOMINAL CAPACITY OF 4,000 GALLONS; NOMINAL TANK DIMENSIONS SHALL BE 8'-0" DIAMETER, 10'-9" EAVE HEIGHT, 13'-3" OVERALL HEIGHT.

CISTERN OVERFLOW PIPE SHALL BE CONCEALED UNDERGROUND AND DRAIN INTO RAIN GARDEN; CISTERN GALVANIZED STEEL ROOF SHALL BE PRIMED AND PAINTED AS SPECIFIED; CISTERN RAINWATER COLLECTION SYSTEM SHALL HAVE FILTER AND PUMP FOR IRRIGATION; INSTALL ALL COMPONENTS FOR A COMPLETE RAINWATER COLLECTION AND IRRIGATION SYSTEM PER MANUFACTURERS RECOMMENDED DETAILS.

IRRIGATION SYSTEM - FURNISH AND INSTALL IRRIGATION SYSTEM IN COMPLIANCE WITH LOCAL REGULATIONS. IRRIGATION SYSTEM SHALL BE TYPE DRIP OR MICRO SPRAY WITH WEATHER AND SOIL MOISTURE SENSOR AND SMRT LOGIC INTERNET COMPATIBLE. SYSTEM DESIGN SHALL MAXIMIZE DELIVERY OF WATER TO PLANT AREAS, INCLUDING PLANTERS, WHILE MINIMIZING OVER-SPRAY, RUNOFF AND CUSTOMER DISRUPTION. CONTROLS SHALL BE SET TO RUN AT OPTIMAL TIMES; EARLY MORNING AND EVENING, TO MINIMIZE EVAPORATION LOSS AND BUSINESS HOURS DISRUPTION. IRRIGATION SYSTEM SHALL BE SEPARATELY METERED AND INCLUDE AN INTEGRAL BACKFLOW PREVENTION DEVICE. VAULT TYPE CONTROL AND VALVES ARE PREFERRED AND MUST BE ACCESSIBLE BY TENANT.

THE WATER STORAGE TANK WILL BE MONITORED AND CONTROLLED BY THE INTELLITANK APP AND WIRELESS TANK MONITORING SYSTEM BY WELLSENSE TECHNOLOGIES. https://www.intelli-tank.com/



2 EAST ELEVATION

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

3 SOUTH ELEVATION

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

ENVIROPLAN
ARCHITECTS
•
PLANNERS
4942 HWY 290 W
AUSTIN, TEXAS
78735
(512) 476-0622

4211 W. Highway 71

Bee Cave, Texas

142

PROJECT

REVISIONS

REGISTERED ARCHITECT
TIMOTHY S. PARKER
13554
STATE OF TEXAS

1.22.24

1.22.24

DATE

A3

34 OF 41

Schedule									
Symbol	Label	QTY	Manufacturer	Catalog	Description	Number Lamps	Lamp Output	LLF	Input Power
	D	2	Indy	LLP4 08LM 30K MVOLT G4 80CRI ZT CONTROLS HW BD	INDY 4" DIA. 1-LED 08LM, 30K, 80CRI, GEN4 DOWNLIGHT WITH A BLACK DIFFUSE (BD) WIDE HYPERBOLIC REFLECTOR	1	520	0.9	7.5
	D(em)	2	Indy	LLP4 08LM 30K MVOLT G4 80CRI ZT BR CONTROLS HW BD	INDY 4" DIA. 1-LED 08LM, 30K, 80CRI, GEN4 DOWNLIGHT WITH A BLACK DIFFUSE (BD) WIDE HYPERBOLIC REFLECTOR	1	520	0.9	7.5
	D1	2	Indy	LLP4 15LM 30K MVOLT G4 80CRI ZT HM BD	INDY 4" DIA. 1-LED 15LM, 30K, 80CRI, GEN4 DOWNLIGHT WITH A BLACK DIFFUSE (BD) MEDIUM HYPERBOLIC REFLECTOR	1	1001	0.9	13.7
	SP1	5	Lithonia Lighting	DSX0 LED P1 30K 80CRI BLC4 MVOLT RPA PERS DBLXD DLL127F1.5JU	D-Series Size 0 Area Luminaire P1 Performance Package 3000K CCT 80 CRI Type 4 Extreme Backlight Control	1	3135	0.9	33.21
	SP4	1	Lithonia Lighting	DSX0 LED P1 30K 80CRI LCCO MVOLT RPA PERS DBLXD DLL127F1.5JU	D-Series Size 0 Area Luminaire P1 Performance Package 3000K CCT 80 CRI Left Corner Cutoff Extreme Backlight Control	1	3063	0.9	33.21
	SP5	2	Lithonia Lighting	DSX0 LED P1 30K 80CRI TFTM MVOLT RPA PERS HS DBLXD DLL127F1.5JU	D-Series Size 0 Area Luminaire P1 Performance Package 3000K CCT 80 CRI Forward Throw Houssside Shield	1	3577	0.9	33.21
	SP6	2	Landscape Forms	AI500-T5-80F 30K UV1 P2 x _10FT AJ550-10-01 (BLACK)	Black aluminum housing, frosted plastic lens enclosure	1	2761	0.9	31.8
	SP7	2	Landscape Forms Inc	AI100-T5 30K UV1 (BLACK)	Black aluminum housing, frosted plastic lens enclosure	1	1011	0.9	10.3
	W1(em)	1	Lithonia Lighting	WDGE1 LED P1 30K 83CRI VF MVOLT SRM EWH DBLXD	WDGE1 LED WITH P: - PERFORMANCE PACKAGE, 3000K, 80CRI, VISUAL COMFORT FORWARD OPTIC	1	1161	0.9	10
	W2	1	Lithonia Lighting	WDGE1 LED P1 30K 83CRI VW	WDGE1 LED WITH P: - PERFORMANCE PACKAGE, 3000K, 80CRI, VISUAL COMFORT WIDE OPTIC	1	1163	0.9	10

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Bldg. Entrances	+	3.1 fc	5.8 fc	0.5 fc	11.6:1	6.2:1
Bldg. Perimeter Site	+	1.1 fc	9.0 fc	0.3 fc	30.0:1	3.7:1
Drive Thru Cashier Window	+	10.4 fc	11.2 fc	9.2 fc	1.2:1	1.1:1
Parking / Drive	+	0.9 fc	5.5 fc	0.1 fc	55.0:1	9.0:1
Patio Area	+	3.6 fc	6.5 fc	1.5 fc	4.3:1	2.4:1
Property Line	+	0.0 fc	0.1 fc	0.0 fc	N/A	N/A
Service Door	+	6.2 fc	7.4 fc	5.3 fc	1.4:1	1.2:1
5' Offset Property Line	+	0.0 fc	0.1 fc	0.0 fc	N/A	N/A

SITE LIGHTING NOTES:

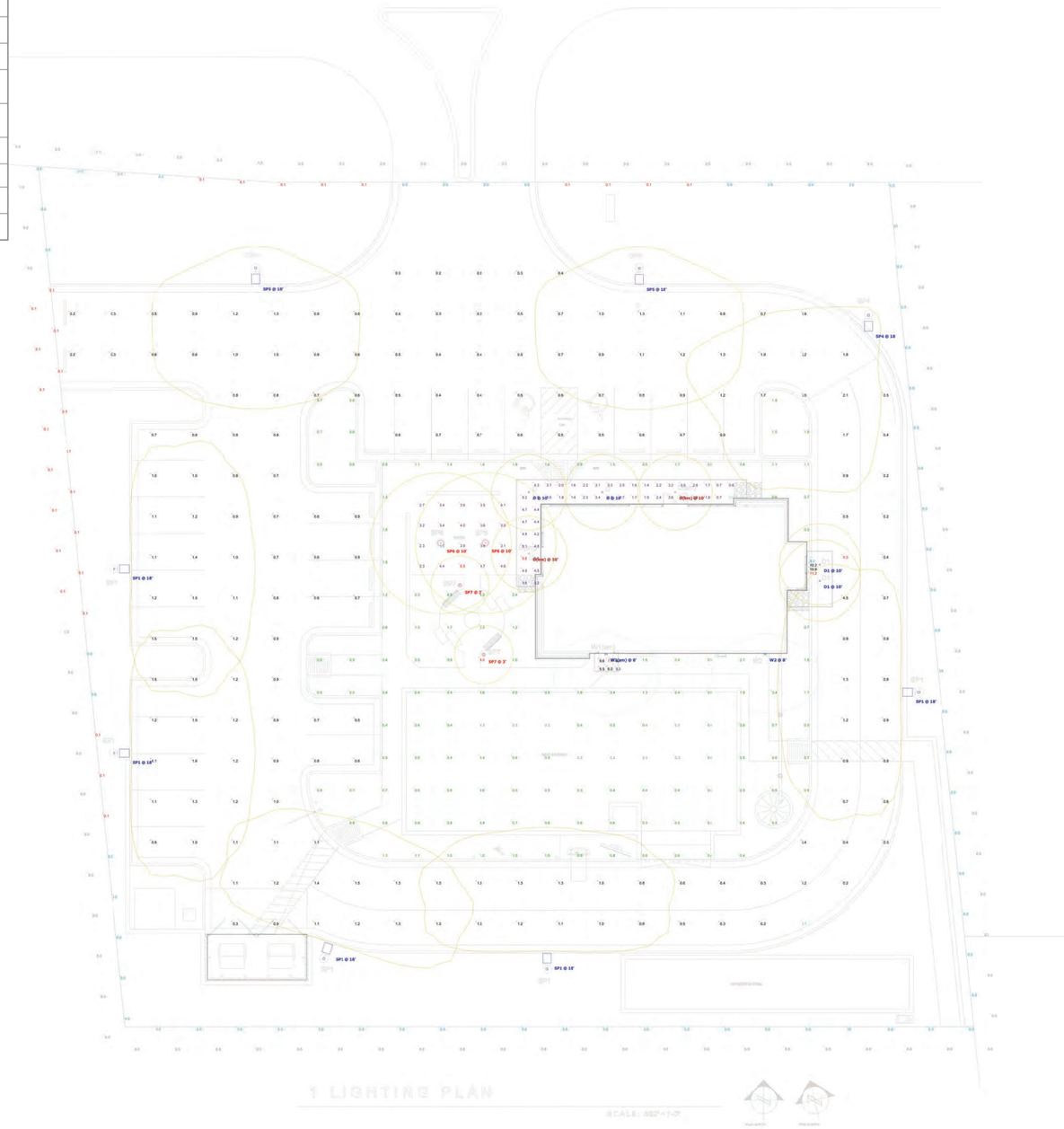
1). This site is zoned MU-N and is classified as IES Lighting Zone 2 which allows for a total site lumen limit of 2.5 lumens per square foot of hardscape using the Hardscape Area Method of the Prescriptive Method of Regulatory Compliance. 14,739 s.f. of hardscape x 2.5 lumens plus an additional allowance of 4,000 lumens for the drive-up window per section 6.2.9.C.2 equals an allowable lumen level of 40,847. This site is in lumen compliance with a total of 39,962.34 lumens."

2). Photocells shall be provided that automatically extinguish all outdoor lighting when sufficient daylight is available. A timer shall be provided to reduce the total outdoor lighting lumens by at least thirty percent (30%) from one (1) hour after business closing to one (1) hour before business opening.

3). The illuminated drive-thru sign will require a separate permit.

4). Lighting photometric calculations are an estimate of light levels. Site conditions may alter the levels indicated on this plan.

5). Light fixture symbols are diagramatic and shown for clarity. Refer to the fixture cut sheets for actual fixture dimensions and more detailed information.



1 LIGHTING PLAN
SCALE: 1/32" = 1'-0"

Plan View
Scale 1" = 10ft

14,739 S.F. OF HARDSCAPE

SPECTRUM LIGHTING

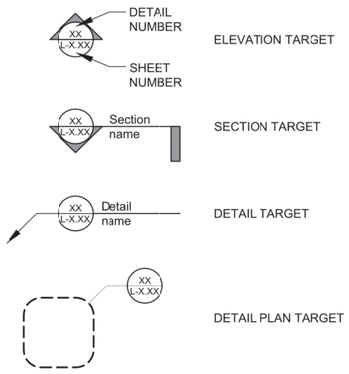
BEE CAVES, TX
STARBUCK'S SITE
LIGHTING PHOTOMETRICS
Revised 2023-12-21

Designer
mosaki
Date
03/28/2023
Scale
Not to Scale
Drawing No.

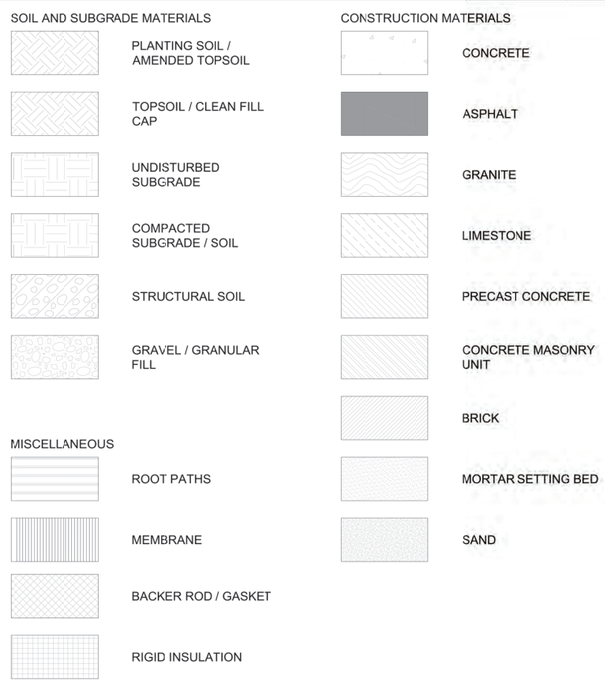
ABBREVIATIONS

&	And
@	At
AD	Area Drain
ADJ	Adjacent Finish
AFF	Above Finished Floor
ALS	Acrylic Latex Sealant
ALUM	Aluminum
ANOD	Anodized
AP	Access Panel
APPROX	Approximately
ARCH	Architectural
B-B	Back to Back
BC	Bottom of Curb
BJF	Bituminous Joint Filler
BLK	Block (Wood Blocking)
BMT	Butylmastic Tape Sealant
BRK	Brick
BRS	Butyl Rubber Sealant
BW	Bottom of Wall
C/C	Center to Center
CB	Catch Basin
CJ	Cold Joint
CJF	Cork Joint Filler
CL	Center Line
CLR	Clear Opening
COL	Column
CONC	Concrete
CONCP	Concrete Painted
CONST	Construction
CONTR	Contractor
CONT	Continuous
CMU	Concrete Masonry Unit
CMUP	Concrete Masonry Unit Painted
CO	Clean Out
DF	Drinking Fountain
DI	Ductile Iron
DIA	Diameter
DIM	Dimension
DN	Down
DTL	Detail
DWG	Drawing
EA	Each
EC	Exposed Construction
ECP	Exposed Construction Painted
EFTS	Expanding Foam Tape Sealant
EL	Elevation
EJ	Expansion Joint
EQ	Equal
EX	Existing
FFE	Finished Floor Elevation
FG	Finished Grade
GA	Gauge
GALV	Galvanized
GB	Glazed Block
GC	General Contractor
GL	Glass
GRND	Ground
G	Gutter
HDW	Hardware
HNCG	Hollow Neoprene Compression Gasket
HORIZ	Horizontal
HM	Hollow Metal
HP	High Point
HR	Hours
HT	Height
IV	Invert
ID	Inside Diameter
IN	Inch
INLET	Drain Inlet
INFO	Information
INSUL	Insulation
INT	Interior
LAM	Laminated
LBS, #	Pounds
LP	Low Point
MACH	Machine
MATL	Material
MAX	Maximum
MECH	Mechanical
MED	Medium
MFR	Manufacturer
MH	Manhole
MIN	Minimum
MISC	Miscellaneous
MO	Masonry Opening
MTL	Metal
NIC	Not In Contract
NO	Number
NOM	Nominal
NTS	Not To Scale
OA	Overall
OC	On Center
OD	Outside Diameter
OPNG	Opening
OPP	Opposite
PA	Planting Area
PC	Pool Coping
PCC	Portland Cement Concrete
PERP	Perpendicular
PLBG	Plumbing
PLWD	Plywood
POB	Point of Beginning
PR	Pair
PREFAB	Prefabricated
PSF	Pounds Per Square Foot
PSI	Pounds Per Square Inch
2-PUMS	Polyurethane Sealant (Two Part)
PTD	Painted Finish
QTY	Quantity
R	Radius
RD	Roof Drain
REF	Reference
REINF	Reinforced
REQ'D	Required
REV	Revision
RM	Room
RO	Rough Opening
SE	Steel Edge
SECT	Section
SHT	Sheet
SIM	Similar
SPEC	Specification
SQ	Square
SS	Stainless Steel
SRS	Silicone Rubber Sealant
ST	Sealant Tape
STD	Standard
STL	Steel
STOR	Storage
STRUCT	Structural
SUSP	Suspended
T	Tread
T/	Top Of
TC	Top of Curb
TEL	Telephone
TF	Top of Frame
THK	Thick
TC	Top of Curb
TP	Top of Pavement
TS	Top of Step
TT	Traffic Topping
TW	Top of Wall
TYP	Typical
UNO	Unless Noted Otherwise
VERT	Vertical
VIF	Verify in Field
W/	With
W/O	Without
WC	Water Closet
WD	Wood
WP	Work Point
WPR	Waterproofing
WT	Weight

ANNOTATIONS



MATERIAL SYMBOLS - DETAILS AND SECTIONS



GENERAL NOTES:

1.) Locate and verify the condition of existing utilities prior to excavation. Take responsibility of contacting line location services and any cost incurred for bodily injury and / or damage of owner's property or said utilities.

2.) The landscape architect shall be notified by the contractor of any discrepancies discovered between the contract documents and actual site conditions before proceeding with the work. The contractor shall be liable for all modifications and damages if work proceeds without this notification.

3.) The contractor is responsible for all aspects of maintaining a safe work site including, but not limited to, providing for traffic control, installation and placement of fencing and barricades, excavation and trench protection, and compliance with all federal and local regulations and codes. All safety exposures or violations shall be rectified immediately.

4.) The contractor is responsible for protection of all existing improvements both on site and adjacent to the work site and shall repair any damage to these improvements to the satisfaction of the owner.

5.) The contractor shall notify the owner and the landscape architect 48 hours prior to commencement of work to coordinate project inspection schedules.

6.) Any alternates and or substitutions proposed by the contractor shall be submitted to the landscape architect for approval. Changes to the scope of work and / or contract documents resulting from the acceptance of the contractor's alternates and / or substitutions shall be the responsibility of the contractor.

7.) The contractor is responsible for removal of trash on a daily basis.

8.) The contractor shall comply with all applicable codes, regulations and ordinances. Prior to construction, all permits and approvals required for construction of the project shall be paid for and obtained by the contractor (plan review fees are paid by owner) costs for permits shall be included in the bid. It is the contractor's responsibility to become aware of required inspections that are associated with permits issued for the work and to schedule these inspections at the appropriate stage of construction. Examples include but are not limited to rough-in electrical, rough-in plumbing, irrigation piping, foundation steel for structures (including walls), fire inspections related to entry gates and associated structures any required special inspections and others as may apply.

9.) Coordinate work with subcontractors to accomplish the scope of work as shown and noted in the contract documents, as well as coordinate construction with other contractors working on the site.

10.) The contractor shall coordinate the storing of materials, parking of vehicles, and restrictions of work and access with the owner. Under no circumstances shall any contractor store materials, park vehicles or equipment under the canopy of existing trees.

11.) Unless specified otherwise, the contractor is responsible for providing and paying all temporary utilities and services necessary to completely install all work as shown and noted in the contract documents.

12.) The contractor is responsible for providing and servicing temporary toilet facilities.

13.) The contractor is responsible for the legal off-site disposal of surplus material and debris.

14.) Upon completion of construction and prior to final approval, the contractor shall thoroughly clean the project site of all trash, repair all damage to finish grade, including tailings from excavations, wheel ruts and any settling or erosion that has occurred prior to completion. All areas of the project site shall be left in a neat and presentable condition satisfactory to the owner prior to submittal of the final payment.

15.) Contractor is responsible for providing and paying for all water and electricity required for construction. Owner will order and pay for permanent water and electrical services.

16.) The contractor shall prepare & keep current, for the landscape architects' review, a schedule of submittals which is coordinated w/ the contractor's construction schedule and allows the landscape architect reasonable time to review submittals. Submittals include but are not limited to shop drawings, material selections, plant photos with measuring device included in image.

HITCHCOCK DESIGN GROUP
creating better places
1601 Rio Grande Street
Suite 450
Austin, Texas 78701
T 512.770.4503
hitchcockdesigngroup.com

PREPARED FOR
Investcor Development
3001 RR 620 S, Suite #324
Austin, Texas 78738

CONSULTANTS

Civil Engineer
Miller Gray
7320 N MoPac Expy
Suite 203
Austin, TX, 78731
T 512.861.5300

Architect
Enviroplan Architects
4942 US 290 West
Austin, TX, 78735
T 512.476.0622

PROJECT
Starbucks Bee Cave
14211 W. Highway 71
Bee Cave, Texas 78738

REGISTERED LANDSCAPE ARCHITECT
BRYAN C. WARNER
2321
STATE OF TEXAS
03/13/2024

ISSUED
March 13, 2024

REVISIONS

No	Date	Issue

CHECKED BY
BW

DRAWN BY
JB & MP

SHEET TITLE
GENERAL NOTES

THIS DRAWING, AS AN INSTRUMENT OF SERVICE, IS AND SHALL REMAIN THE PROPERTY OF HITCHCOCK DESIGN GROUP AND SHALL NOT BE REPRODUCED, PUBLISHED OR USED IN ANY WAY WITHOUT THE PERMISSION OF HITCHCOCK DESIGN GROUP

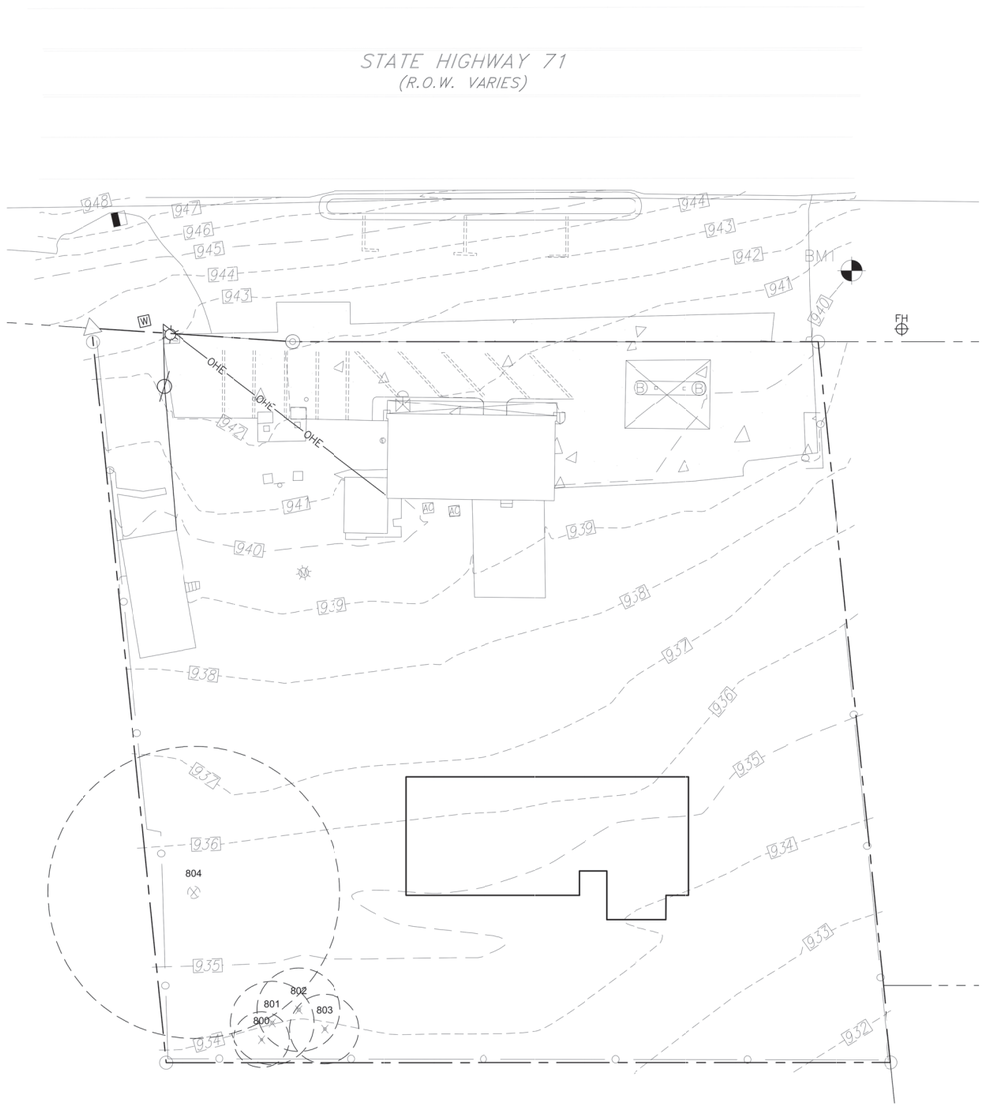
Texas 811 Know what's below. Call before you dig.

NOTE: BEWARE: UNDERGROUND UTILITIES IN PLACE INCLUDING ELECTRICAL, GAS, WATER, SEWER, TELEPHONE, AND OTHERS. CONSULT PROJECT ENGINEER PRIOR TO CONSTRUCTION. ALL UTILITIES TO BE FLAGGED AND IDENTIFIED. LANDSCAPE CONTRACTOR RESPONSIBILITY.

SHEET NUMBER
L0.01

©2024 Hitchcock Design Group

J:\Projects\Austin\Investcor\Starbucks Bee Cave\06 Drawings and Production\01 HDG CAD\00 Current\L0 General Notes.dwg

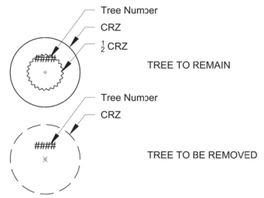


1 EXISTING TREE PLAN
1" = 20'

0' 10' 20' 40'

NORTH

EXISTING TREE LEGEND



EXISTING TREE SCHEDULE

HERITAGE	MULTI-TRUNK	TAG#	To Remove	Invasive	SPECIES	CAL 1	CAL 2
		800	x		Live Oak	8	
	x	801	x		Live Oak	9	6
		802	x		Live Oak	12	
		803	x		Live Oak	10	
	x	804	x		Cedar	42	

HITCHCOCK DESIGN GROUP
creating better places

1601 Rio Grande Street
Suite 450
Austin, Texas 78701
T 512.770.4503
hitchcockdesigngroup.com

PREPARED FOR
Investcor Development
3001 RR 620 S, Suite #324
Austin, Texas 78738

CONSULTANTS

Civil Engineer
Miller Gray
7320 N Mopac Expy
Suite 203
Austin, TX, 78731
T 512.861.5300

Architect
Enviroplan Architects
4942 US 290 West
Austin, TX, 78735
T 512.476.0622

PROJECT
Starbucks Bee Cave
14211 W. Highway 71
Bee Cave, Texas 78738

REGISTERED LANDSCAPE ARCHITECT
BRYAN C. WARNER
2321
STATE OF TEXAS
03/13/2024

ISSUED
March 13, 2024

REVISIONS

No	Date	Issue

CHECKED BY
BW

DRAWN BY
JB & MP

SHEET TITLE
EXISTING TREE PLAN

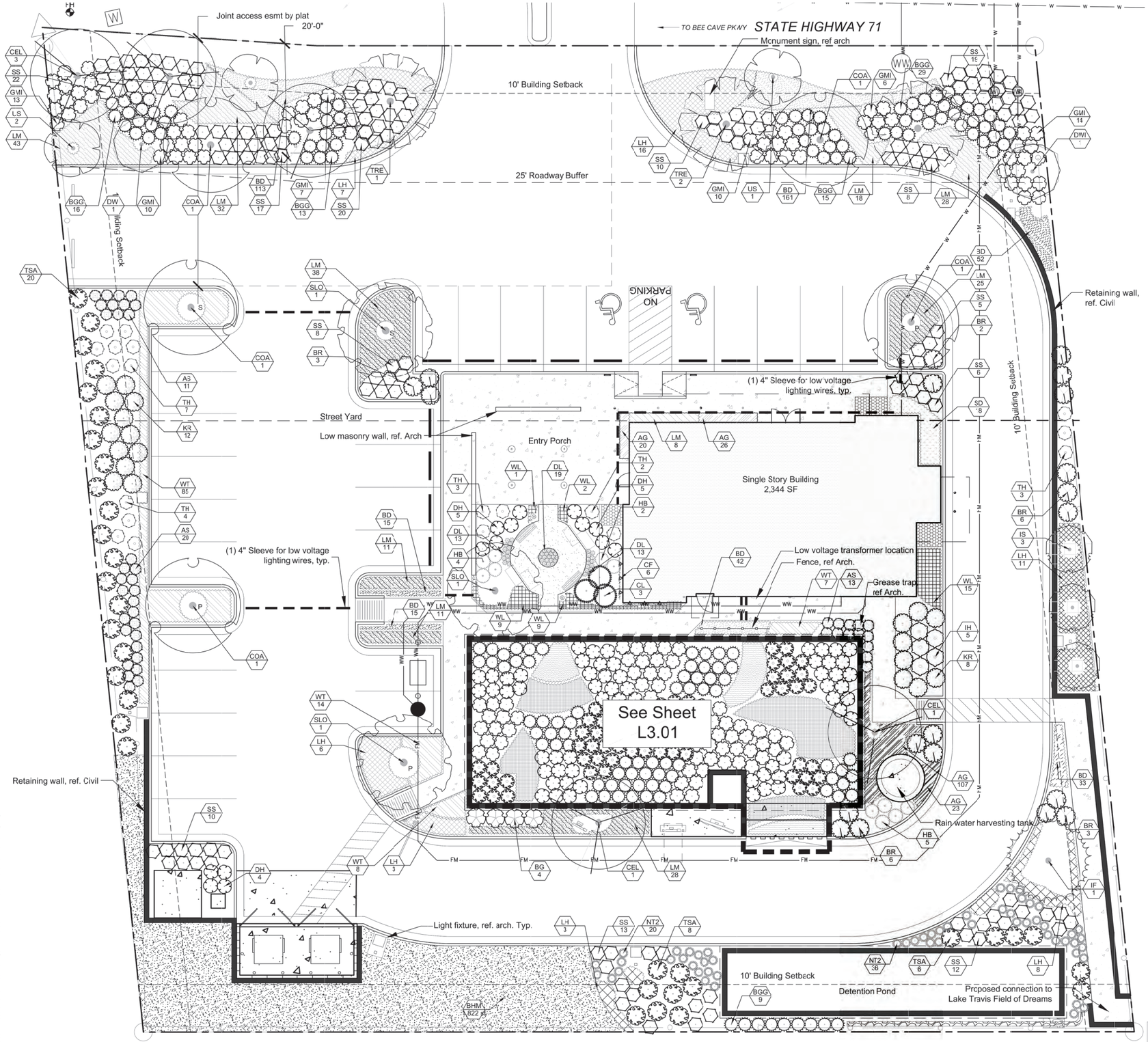
THIS DRAWING, AS AN INSTRUMENT OF SERVICE, IS AND SHALL REMAIN THE PROPERTY OF HITCHCOCK DESIGN GROUP AND SHALL NOT BE REPRODUCED, PUELISHED OR USED IN ANY WAY WITHOUT THE PERMISSION OF HITCHCOCK DESIGN GROUP

NOTE: BEWARE: UNDERGROUND UTILITIES IN PLACE. INCLUDING ELECTRICAL, GAS, WATER, SEWER, TELEPHONE, AND OTHERS. CONSULLT PROJECT ENGINEER PRIOR TO CONSTRUCTION. ALL UTILITIES TO BE FLAGGED AND IDENTIFIED. LANDSCAPE CONTRACTOR RESPONSIBILITY.

SHEET NUMBER
L0.02

©2024 Hitchcock Design Group

J:\Projects\Austin\Investcor\Starbucks Bee Cave\06 Drawings and Production\01 HDG CAD\00 Current\L3 Planting.dwg



1 LANDSCAPE PLAN
1" = 10'

0' 5' 10' 20'

NORTH

J:\Projects\Austin\Investcor\Starbucks Bee Cave\06 Drawings and Production\01 HDG CAD\00 Current\L3 Planting.dwg

PLANT LEGEND, REF. L3.03 FOR FULL SCHEDULE

PLANT LEGEND	
DECIDUOUS TREES	BOTANICAL / COMMON NAME
TRE	Cercis canadensis `texensis` Texas Redbud
DWI	Chilopsis linearis Desert Willow
COA	Quercus muehlenbergii Chinkapin Oak
CEL	Ulmus crassifolia Cedar Elm
US	Ungnadia speciosa Mexican Buckeye
EVERGREEN TREES	BOTANICAL / COMMON NAME
IF	Ilex x attenuata 'Fosteri' Foster's Holly
IS	Ilex x attenuata 'Savannah' Savannah Holly
CL	Prunus caroliniana 'Monus' Bright 'N Tight Carolina Laurel Cherry
SLO	Quercus virginiana Southern Live Oak
DECIDUOUS SHRUBS	BOTANICAL / COMMON NAME
FAC	Anisacanthus quadrifidus wrightii Flame Acanthus
EVERGREEN SHRUBS	BOTANICAL / COMMON NAME
CF	Ficus pumila Creeping Fig
DH	Ilex vomitoria `Nana` Dwarf Yaupon Holly
TSA	Leucophyllum frutescens Texas Sage
IH	Rhaphiolepis indica Indian Hawthorn
BR	Rosmarinus officinalis 'Upright Blue' Upright Blue Rosemary
SS	Scutellaria suffrutescens Pink Skullcap
BG	Teucrium fruticans 'Azureum' Azure Bush Germander
ORNAMENTAL GRASSES	BOTANICAL / COMMON NAME
BGG	Bouteloua gracilis 'Blonde Ambition' Blonde Ambition Blue Grama Grass
NT2	Nassella tenuissima Mexican Feather Grass
PERENNIALS	BOTANICAL / COMMON NAME
GMI	Conoclinium greggii Gregg's Mistflower
DL	Hemerocallis x 'Stella de Oro' Stella de Oro Daylily
HB	Nandina domestica 'Firepower' Firepower Heavenly Bamboo
KR	Rosa x `Radrazz` TM Knock Out Shrub Rose
AS	Salvia greggii Autumn Sage
SEMI-EVERGREEN SHRUBS	BOTANICAL / COMMON NAME
TH	Thryallis glauca Thryallis
EVERGREEN GROUNDCOVER	BOTANICAL / COMMON NAME
SD	Dichondra argentea Silver Dichondra
LM	Liriope muscari Lilyturf
BD	Melampodium leucarthum Blackfoot Daisy
AG	Ophiopogon intermedius Aztec Grass
NATIVE SEED MIX	BOTANICAL / COMMON NAME
BHM	Bee Happy Mix Native American Seed
ORNAMENTAL GRASS	BOTANICAL / COMMON NAME
TSE	Carex texensis Texas Sedge
PERENNIAL GROUNDCOVER	BOTANICAL / COMMON NAME
WT	Stemodia lanata Gray Woolly Twintip
SEMI-EVERGREEN GROUNDCOVER	BOTANICAL / COMMON NAME
WL	Lantana montevidensis 'Alba' White Trailing Lantara
LH	Lantana x 'New Gold' New Gold Lantana

S Proposed Street Yard Tree

P Proposed Parking Tree

THIS DRAWING, AS AN INSTRUMENT OF SERVICE, IS AND SHALL REMAIN THE PROPERTY OF HITCHCOCK DESIGN GROUP AND SHALL NOT BE REPRODUCED, PUBLISHED OR USED IN ANY WAY WITHOUT THE PERMISSION OF HITCHCOCK DESIGN GROUP

NOTE: BEWARE: UNDERGROUND UTILITIES IN PLACE. INCLUDING ELECTRICAL, GAS, WATER, SEWER, TELEPHONE, AND OTHERS. CONSULT PROJECT ENGINEER PRIOR TO CONSTRUCTION. ALL UTILITIES TO BE FLAGGED AND IDENTIFIED. LANDSCAPE CONTRACTOR RESPONSIBILITY.

HITCHCOCK DESIGN GROUP
creating better places
1601 Rio Grande Street
Suite 450
Austin, Texas 78701
T 512.770.4503
hitchcockdesigngroup.com

PREPARED FOR
Investcor Development
3001 RR 620 S, Suite #324
Austin, Texas 78738

CONSULTANTS
Civil Engineer
Miller Gray
7320 N Mopac Expy
Suite 203
Austin, TX, 78731
T 512.861.5300

Architect
Enviroplan Architects
4942 US 290 West
Austin, TX, 78735
T 512.476.0622

PROJECT
Starbucks Bee Cave
14211 W. Highway 71
Bee Cave, Texas 78738

REGISTERED LANDSCAPE ARCHITECT BRYAN C. WARNER 2321 STATE OF TEXAS
03/13/2024

ISSUED
March 13, 2024

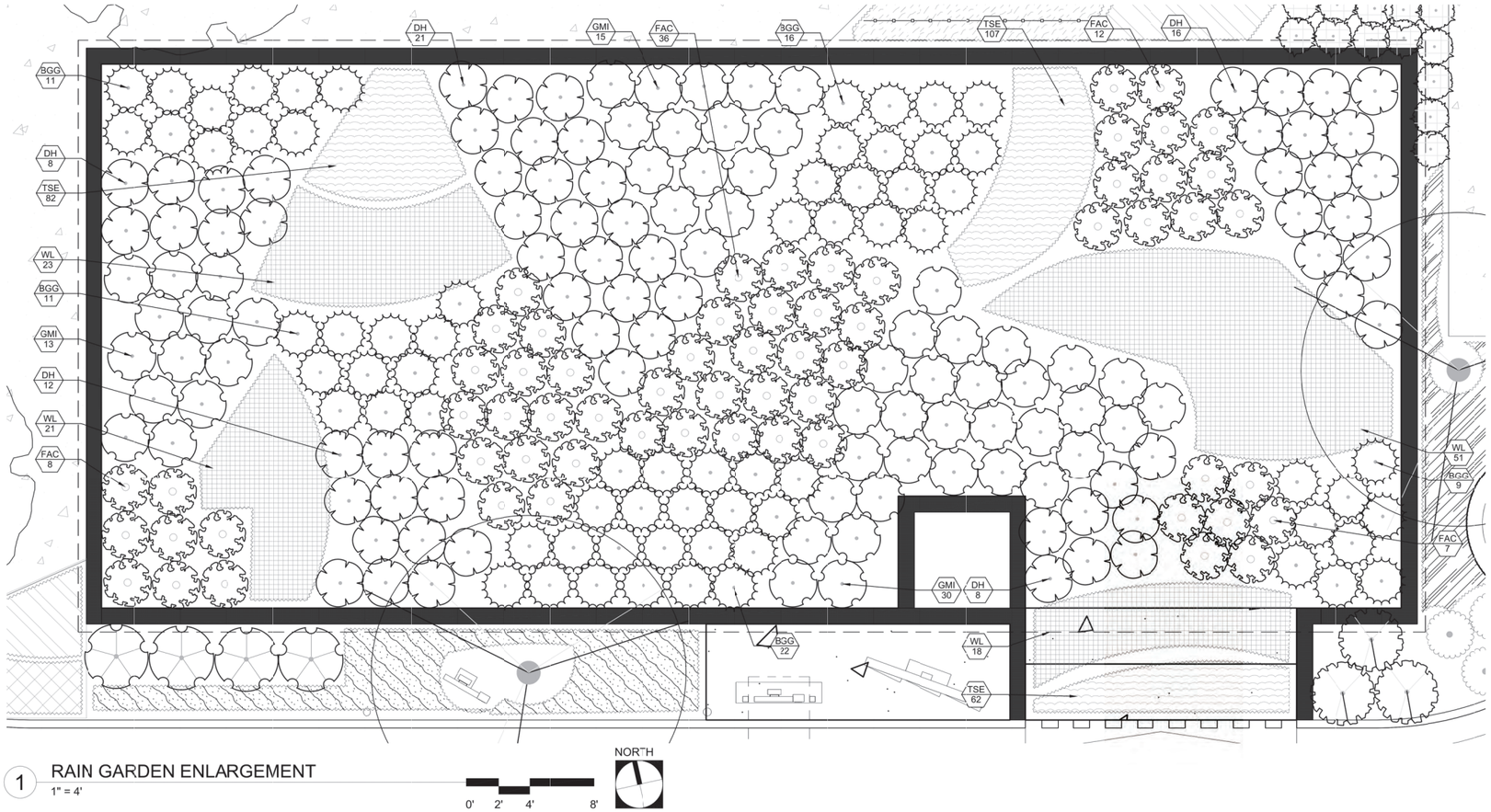
REVISIONS

No	Date	Issue

CHECKED BY BW
DRAWN BY JB & MP

SHEET TITLE
LANDSCAPE PLAN

©2024 Hitchcock Design Group



1 RAIN GARDEN ENLARGEMENT
1" = 4'

0' 2' 4' 8'

PLANT LEGEND, REF. L3.03 FOR FULL SCHEDULE

PLANT LEGEND RAIN GARDEN	
DECIDUOUS SHRUBS	BOTANICAL / COMMON NAME
FAC	Anisacanthus quadrifidus wrightii Flame Acanthus
EVERGREEN SHRUBS	BOTANICAL / COMMON NAME
DH	Ilex vomitoria 'Nana' Dwarf Yaupon Holly
ORNAMENTAL GRASSES	BOTANICAL / COMMON NAME
BGG	Bouteloua gracilis 'Blonde Ambition' Blonde Ambition Blue Grama Grass
PERENNIALS	BOTANICAL / COMMON NAME
GMI	Conoclinium greggii Gregg's Mistflower
ORNAMENTAL GRASS	BOTANICAL / COMMON NAME
TSE	Carex texensis Texas Sedge
SEMI-EVERGREEN GROUNDCOVER	BOTANICAL / COMMON NAME
WL	Lantana montevidensis 'Alba' White Trailing Lantana

Filtration Basin 2714 sq. ft. x 0.20 = 543 plants required				
Plant	Size	Spacing	Quantity	1 gallon equivalent
Flame Acanthus	5 Gal	36" O.C.	63	252
Dwarf Yaupon Holly	5 Gal	36" O.C.	65	260
Blonde Ambition Blue Grama Grass	5 Gal	36" O.C.	69	276
Gregg's Mistflower	5 Gal	24" O.C.	59	236
Texas Sedge	1 Gal	24" O.C.	251	251
White Trailing Lantana	3 Gal	48" O.C.	113	226
			TOTAL	1501

HITCHCOCK DESIGN GROUP
creating better places
1601 Rio Grande Street
Suite 450
Austin, Texas 78701
T 512.770.4503
hitchcockdesigngroup.com

PREPARED FOR
Investcor Development
3001 RR 620 S, Suite #324
Austin, Texas 78738

CONSULTANTS
Civil Engineer
Miller Gray
7320 N Mopac Expy
Suite 203
Austin, TX, 78731
T 512.861.5300

Architect
Enviroplan Architects
4942 US 290 West
Austin, TX, 78735
T 512.476.0622

PROJECT
Starbucks
Bee Cave
14211 W. Highway 71
Bee Cave, Texas 78738

REGISTERED LANDSCAPE ARCHITECT
BRYAN C. WARNER
2321
STATE OF TEXAS
03/13/2024

ISSUED
March 13, 2024

REVISIONS

No	Date	Issue

CHECKED BY
BW

DRAWN BY
JB & MP

SHEET TITLE
LANDSCAPE PLAN

THIS DRAWING, AS AN INSTRUMENT OF SERVICE, IS AND SHALL REMAIN THE PROPERTY OF HITCHCOCK DESIGN GROUP AND SHALL NOT BE REPRODUCED, PUBLISHED OR USED IN ANY WAY WITHOUT THE PERMISSION OF HITCHCOCK DESIGN GROUP

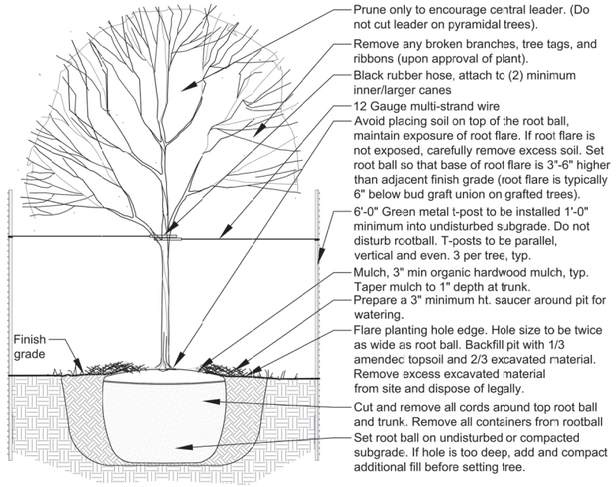
Texas 811 Know what's below. Call before you dig.

NOTE: BEWARE: UNDERGROUND UTILITIES IN PLACE. INCLUDING ELECTRICAL, GAS, WATER, SEWER, TELEPHONE, AND OTHERS. CONSULT PROJECT ENGINEER PRIOR TO CONSTRUCTION. ALL UTILITIES TO BE FLAGGED AND IDENTIFIED. LANDSCAPE CONTRACTOR RESPONSIBILITY.

SHEET NUMBER
L3.01

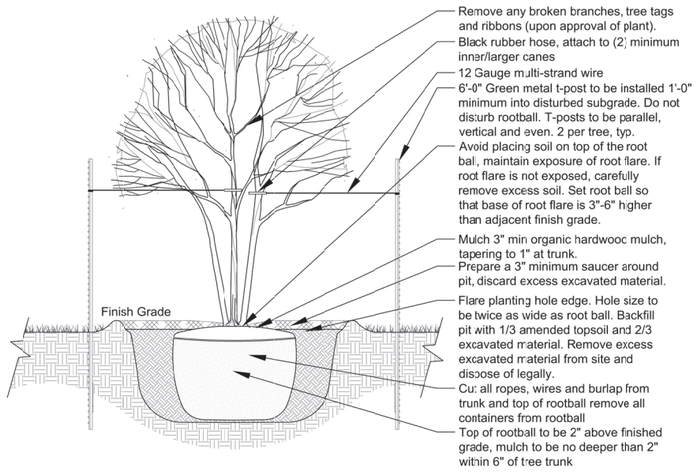
©2024 Hitchcock Design Group

J:\Projects\Austin\Investcor\Starbucks Bee Cave\06 Drawings and Production\01 HDG CAD\00 Current\L3 Planting.dwg



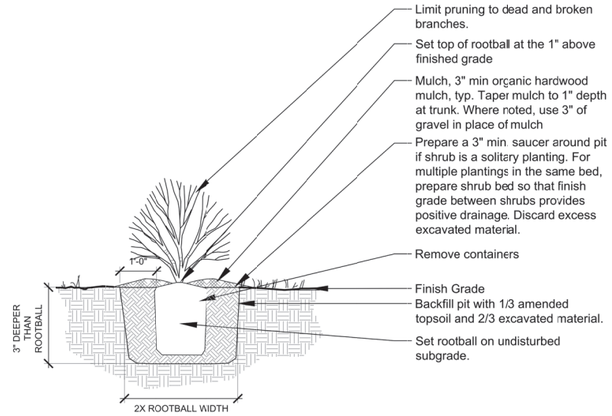
1 SHADE TREE

1/2" = 1'-0"



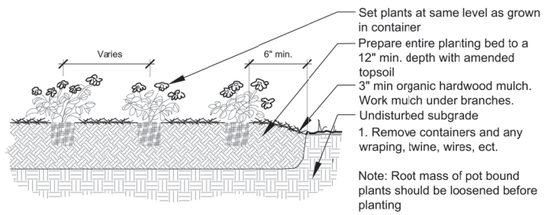
2 ORNAMENTAL TREE PLANTING

1/2" = 1'-0"



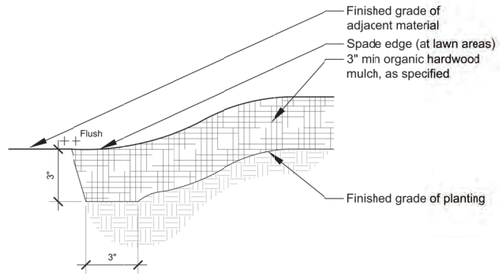
3 SHRUB PLANTING

1/2" = 1'-0"



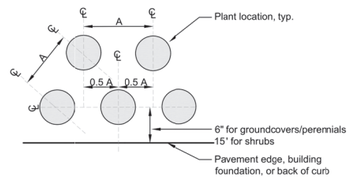
4 PERENNIAL PLANTING

1/2" = 1'-0"



5 MULCH TRENCH

3" = 1'-0"



NOTE:
Plant spacings vary per plant type. Ref. plant schedule for spacing requirements

6 TRIANGULAR PLANT SPACING

NOT TO SCALE

HITCHCOCK DESIGN GROUP
creating better places
1601 Rio Grande Street
Suite 450
Austin, Texas 78701
T 512.770.4503
hitchcockdesigngroup.com

PREPARED FOR
Investcor Development
3001 RR 620 S, Suite #324
Austin, Texas 78738

CONSULTANTS
Civil Engineer
Miller Gray
7320 N Mopac Expy
Suite 203
Austin, TX, 78731
T 512.861.5300

Architect
Enviroplan Architects
4942 US 290 West
Austin, TX, 78735
T 512.476.0622

PROJECT
Starbucks Bee Cave
14211 W. Highway 71
Bee Cave, Texas 78738

REGISTERED LANDSCAPE ARCHITECT
BRYAN C. WARNER
2321
STATE OF TEXAS
3/13/2024

ISSUED
March 13, 2024

REVISIONS

No	Date	Issue

CHECKED BY
BW

DRAWN BY
JB & MP

SHEET TITLE
PLANTING DETAILS

THIS DRAWING, AS AN INSTRUMENT OF SERVICE, IS AND SHALL REMAIN THE PROPERTY OF HITCHCOCK DESIGN GROUP AND SHALL NOT BE REPRODUCED, PUBLISHED OR USED IN ANY WAY WITHOUT THE PERMISSION OF HITCHCOCK DESIGN GROUP

Texas 811 Know what's below. Call before you dig.

NOTE: BEWARE: UNDERGROUND UTILITIES IN PLACE. INCLUDING ELECTRICAL, GAS, WATER, SEWER, TELEPHONE, AND OTHERS. CONSULT PROJECT ENGINEER PRIOR TO CONSTRUCTION. ALL UTILITIES TO BE FLAGGED AND IDENTIFIED. LANDSCAPE CONTRACTOR RESPONSIBILITY.

SHEET NUMBER
L3.02

©2024 Hitchcock Design Group

J:\Projects\Austin\Investcor\Starbucks Bee Cave\06 Drawings and Production\01 HDG CAD\00 Current\L3 Planting.dwg

PLANTING NOTES

1. Contractor shall receive site at approximately final grade. Any exceptions will be documented in the construction documents. The landscape contractor shall fill area around walls per typical wall section, plan, and landscape grading notes with backfill provided by contractor. All slopes shall be smooth and uniform with a maximum slope of 3:1 unless otherwise noted. Tie into existing adjacent grades smoothly and fine grade for positive drainage and prevent water from standing. Cut swales to direct water away from all structures and property lines and towards storm sewer inlets. Do not drain any water towards lots or easements. Final location and height of berms to be approved by Hitchcock Design Group (HDG) in the field. Provide a minimum of 8" of granular fill wrapped in filter fabric behind walls and to a depth below weeps holes to allow for proper drainage (reference typical wall section, planting detail sheet).

2. Shrub Beds: Reference specification and details for planting requirements, materials, and execution, including plant pit dimensions and backfill requirements. Shrubs and groundcovers to be triangularly spaced (spacing per plans and plant list). Ryerson 3/16" x 4" steel edging (dark green) shall be installed to separate all beds from turf areas. Reference planting bed detail for drainage requirement of all beds occurring directly at the back of curb. Backfill all shrub pits with specified planting mix. Incorporate 5 lbs of 13-13-13 fertilizer per cubic yard of mix into all planting beds. All beds shall receive a minimum of 3" deep organic hardwood mulch.

3. Tree Planting: Reference specifications and details for planting requirements, materials, and execution, including staking methods, plant pit dimensions, and backfill requirements. Guy all trees 4" in caliper and greater and stake all trees smaller than 4" in caliper unless machine moved. Stake all machine moved trees with three (3) metal "T" stakes per detail. Backfill all shrub pits with specified planting mix. Incorporate 5 lbs of 13-13-13 fertilizer per cubic yard of mix into all planting beds. All beds shall receive a minimum of 3" deep organic hardwood mulch.

4. Machine Moved Trees: All trees to be machine moved directly from grower shall be approved by HDG prior to relocation. Coordinate tree pruning to balance root loss with HDG. Trees to be mechanically transplanted using tree spade allowing 9" rootball per caliper inch of tree. Set tree straight and plumb and fill any air spaces around tree with specified sand or sandy loam topsoil, water in to displace air pockets. Install 3' high water retention basin per specifications with 3" deep organic mulch and water spaded trees the day of transplanting.

5. Trees shall be located a minimum of 5'-0" from walls, overheads, walks, edging, curbs and other trees within the project. If conflicts arise between size of areas and plans, contractor to contact HDG for resolution. Failure to make such conflicts known to HDG may result in contractor's liability to relocate materials.

6. All plant materials shall be approved by HDG prior to installation. Final location of all plant material shall be subject to the approval of HDG. Contractor shall notify HDG 48 hours prior to commencement of work to coordinate project inspection schedules.

7. Lawn Installation: Prior to application of hydromulch, contractor shall apply contact herbicide (recommended mixture of Image and Roundup) to remove all existing weeds as necessary, scarify existing soil to specified depths. Remove all lumps, clods, trash, and stick greater than 1". Fine grade to provide positive drainage and smooth lawn areas and cut swales as necessary to ensure no ponding of water. Lay specified sod strip along the back of curb and hydromulch per specifications within approximate limits shown on plans. Finished grade of lawn and planting areas to be minimum ½" below finished grade of adjacent pavement.

IRRIGATION NOTES

Automatic irrigation systems shall comply with TCEQ Chapter 344, as well as the following requirements:

1. These requirements shall be noted on the Site Development Permit and shall be implemented as part of the landscape inspection:
   A. the system must provide a moisture level adequate to sustain growth of the plant materials;
   B. the system does not include spray irrigation on areas less than ten (10) feet wide (such as medians, buffer strips, and parking lot islands);
   C. circuit remote control valves have adjustable flow controls;
   D. serviceable in-head check valves area adjacent to paved areas where elevation differences may cause low head drainage;
   E. a master valve installed on the discharge side of the backflow preventer;
   F. above-ground irrigation emission devices are set back at least six (6) inches from impervious surfaces;
   G. an automatic rain shut-off device shuts off the irrigation system automatically after more than a one-half inch (½") rainfall; and
   H. newly planted trees shall have permanent irrigation consisting of drip or bubblers.
2. The irrigation installer shall develop and provide an as-built design plan to the City at the time the final irrigation inspection is performed;
   A. unless fiscal security is provided to the City for the installation of the system, it must be operational at the time of the final landscape inspection.
3. The irrigation installer shall also provide exhibits to be permanently installed inside or attached to the irrigation controller, including:
   A. a laminated copy of the water budget containing zone numbers, precipitation rate, gallons per minute and the location of the isolation valve; and an as built plan.

SOIL CONDITIONING AND MULCHING

1. A minimum of 3 inches of organic mulch shall be added in non-turf areas to the soil surface after planting.
2. Non-porous material such as sheet plastic shall not be placed under the mulch.
3. A minimum of 6" permeable soil, native or imported and meeting the requirements of Standard Specification 601S, shall be required for turf and landscaped areas.
4. Tree planting areas are to be provided with a minimum of 12 inches of friable native loam soil meeting the requirements of Standard Specification 601S. Planting in relatively undisturbed existing native soils is encouraged. Soil to a minimum depth of 12 inches is required within the entire landscape median or peninsula. All other planting areas must have a minimum soil depth of 12 inches within a radius of six feet from the tree trunk. Trees are not to be planted in caiche, solid rock, or, in soils whose texture has been compacted by construction equipment. Areas of compaction which have been subsequently amended with 12 inches of friable native soil are suitable for planting.

REMEDIAL TREE CARE NOTES AERATION AND SUPPLEMENTAL NUTRIENT REQUIREMENTS FOR TREES WITHIN CONSTRUCTION AREAS

1. Preserved trees within the limits of construction may require soil aeration and supplemental nutrients. Soil and/or foliar analysis should be used to determine the need for supplemental nutrients. The City Arborist may require these analyses as part of a comprehensive tree care plan. Soil pH shall be considered when determining the fertilization composition as soil pH influences the tree's ability to uptake nutrients from the soil. If analyses indicate the need for supplemental nutrients, then humate/nutrient solutions with mycorrhizae components are highly recommended. In addition, soil analysis may be needed to determine if organic material or beneficial microorganisms are needed to improve soil health. Materials and methods are to be approved by the City Arborist (512-974-1876) prior to application. The owner or general contractor shall select a fertilization contractor and ensure coordination with the City Arborist.
2. Pre-construction treatment should be applied in the appropriate season, ideally the season preceding the proposed construction. Minimally, areas to be treated include the entire critical root zone of trees as depicted on the City approved plans. Treatment should include, but not limited to, fertilization, soil treatment, mulching, and proper pruning.
3. Post-construction treatment should occur during final revegetation or as determined by a qualified arborist after construction. Construction activities often result in a reduction in soil macro and micro pores and an increase in soil bulk density. To ameliorate the degraded soil conditions, aeration via water and/or air injected into the soil is needed or by other methods as approved by the City Arborist. The proposed nutrient mix specifications and soil and/or foliar analysis results need to be provided to and approved by the City Arborist prior to application. Construction which will be completed in less than 90 days may use materials at ½ recommended rates. Alternative organic fertilizer materials are acceptable when approved by the City Arborist.

TREE & NATURAL AREA PROTECTION

1. All trees and natural areas shown on plan to be preserved shall be protected during construction with temporary fencing.
2. Protective fences shall be erected according to City of Bee Cave Standards for Tree Protection.
3. Protective fences shall be installed prior to the start of any site preparation work (clearing, grubbing or grading), and shall be maintained throughout all phases of the construction project.
4. Erosion and sedimentation control barriers shall be installed or maintained in a manner which does not result in soil build-up within tree drip lines.
5. Protective fences shall surround the trees or group of trees, and will be located at the outermost limit of branches (drip line) , for natural areas, protective fences shall follow the Limit of Construction line, in order to prevent the following:
   A. Soil compaction in the root zone area resulting from vehicular traffic or storage of equipment or materials;
   B. Root zone disturbances due to grade changes (greater than 6 inches cut or fill), or trenching not reviewed and authorized by the City Aborist;
   C. Wounds to exposed roots, trunk or limbs by mechanical equipment;
   D. Other activities detrimental to trees such as chemical storage, cement truck cleaning, and fires.
6. Exceptions to installing fences at tree drip lines may be permited in the following cases:
   A. Where there is to be an approved grade change, impermeable paving surface, tree well, or other such site development, erect the fence approximately 2 to 4 feet beyond the area disturbed;
   B. Where permeable paving is to be installed within a tree's drip line, erect the fence at the outer limits of the permeable paving area (prior to site grading so that this area is graded separately prior to paving installation to minimizec root damage);
   C. Where trees are close to proposed buildings, erect the fence to allow 6 to 10 feet of work space between the fence and the building;
   D. Where there are severe space constraints due to tract size or other special requirements, contact the City Arborist to discuss alternatives.

Special Note: For the protection of natural areas, no exceptions to installing fences at the Limit of Construction line will be permitted.

7. Where any of the above exceptions result in a fence being closer than 4 feet to a tree trunk, protect the trunk with strapped-on planking to a height of 8 ft (or to the limits of lower branching) in addition to the reduced fencing provided.
8. Trees approved for removal shall be removed in a manner which does not impact trees to be preserved.
9. Any roots exposed by construction activity shall be pruned flush with the soil. Backfill root areas with good quality top soil as soon as possible. If exposed root areas are not backfilled within 2 days, cover them with organic material in a manner which reduces soil temperature and minimizes water loss due to evaporation.
10. Any trenching required for the installation of landscape irrigation shall be placed as far from existing tree trunks as possible.
11. No landscape topsoil dressing greater than 4 inches shall be permitted within the drip line of trees. No soil is permitted on the root flare of any tree.
12. Pruning to provide clearance for structures, vehicular traffic and equipment shall take place before damage occurs (ripping of branches, etc.).
13. All finished pruning shall be done according to recognized, approved standards of the industry (Reference the National Arborist Association Pruning Standards for Shade Trees available on request from the City Arborist).
14. Deviations from the above notes may be considered ordinance violations if there is substantial non-compliance or if a tree sustains damage as a result.

SPECIAL CONSTRUCTION TECHNIQUES

1. Prior to excavation within tree driplines or removal of trees adjacent to other trees that are to remain, make a clean cut between the disturbed and undisturbed root zones with a rock saw or similar equipment to minimize root damage.
2. In critical root zone areas that cannot be protected during construction with fencing and where heavy vehicular traffic is anticipated, cover those areas with a minimum of 12 inches of organic mulch to minimize soil compaction. In areas with high soil plasticity Geotextile fabric, per standard specification 620S, should be placed under the mulch to prevent excessive mixing of soil and mulch. Additionally, material such as plywood and metal sheets, could be required by the City Arborist to minimize root impacts from heavy equipment. Once the project is completed, all materials should be removed, and the mulch should be reduced to a depth of 3 inches.
3. Perform all grading within critical root zone areas by hand or with small equipment to minimize root damage.
4. Water all areas most heavily impacted by construction activities deeply once a wee during periods of hot, dry weather. Spray tree crowns with water periodically to reduce dust accumulation on the leaves.
5. When installing concrete adjacent to the root zone of a tree, use a plastic vapor barrier behind the concrete to prohibit leaching of lime into the soil.

VERTICAL CLEARANCE NOTES

1. All trees to be limbed up to provide a minimum vertical clearance of 80" (in) along accessible route.
2. For all drive ways and internal circulations areas on site where fire department access is required, a minimum clearance of 14' (ft) is required.

HERITAGE	MULTI-TRUNK	TAG#	To Remove	Invasive	SPECIES	CAL 1	CAL 2	CAL 3	CAL 4	CAL 5
		800	x		Live Oak	8				
	x	801	x		Live Oak	9	6			
		802	x		Live Oak	12				
		803	x		Live Oak	10				
x		804	x		Cedar	42				
Total caliper inch removed						87				

HW 71 Buffer: 25'		
134.8 LF of street frontage	Req	Provided
6 3" trees per 100 LF*	8	8
3 4" trees per 100 LF*	4	4
Total	12	12

Street Yard Landscape Requirements		
11,678 SF Total Street Yard	Req	Provided
20% landscape area	2336	1710
1 tree per 1,000 SF	2	2

Parking Lot Landscape		
7654 SF Parking Area	Req	Provided
25% minimum shaded SF	1914	2326

Parking Area Shade Calculation				
		Shaded Area	Quantity	Total SF
Quercus muhlenbergii	Chinquapin Oak	942	1	942
Quercus virginiana	Live Oak	942	2	1884
			total	2826

5' Landscape Buffer				
196 LF Building Perimeter				
	Required	980	SF	
112 LF	Provided	550	SF	57%
	Alternative Compliance Provided*	579	SF	59%
	1 tree per 1,000 SF	1 required	1 prcvided	

*Alternative compliance provided via planted area adjacent to entry porch.

PLANT SCHEDULE

DECIDUOUS TREES	BOTANICAL / COMMON NAME	CONTAINER	CALIPER	HEIGHT
TRE	Cercis canadensis `texensis` Texas Redbud	45 gal	3"-6" Cal.	12`
DWI	Chilopsis linearis Desert Willow	95 gal	3"	7` - 9`
COA	Quercus muehlenbergii Chinkapin Oak	100 gal	4"	16`
CEL	Ulmus crassifolia Cedar Elm	100 gal	4"	16`
US	Ungnadia speciosa Mexican Buckeye	95 gal	3"	8` - 9`

EVERGREEN TREES	BOTANICAL / COMMON NAME	CONTAINER	CALIPER	HEIGHT
IF	Ilex x attenuata 'Fosteri' Foster's Holly	30 gal	2" Cal.	7`
IS	Ilex x attenuata 'Savannah' Savannah Holly	45 gal	3"-6" Cal.	12`
CL	Prunus caroliniana 'Monus' Bright 'N Tight Carolina Laurel Cherry	30 gal	2" Cal.	7`
SLO	Quercus virginiana Southern Live Oak	100 gal	3"-4" Cal.	16`

DECIDUOUS SHRUBS	BOTANICAL / COMMON NAME	CONTAINER	HEIGHT	SPACING
FAC	Anisacanthus quadrifidus wrightii Flame Acanthus	5 gal	16"-18"	36" O.C.

EVERGREEN SHRUBS	BOTANICAL / COMMON NAME	CONTAINER	HEIGHT	SPACING
CF	Ficus pumila Creeping Fig	3 gal	10"	36" O.C.
DH	Ilex vomitoria `Nana` Dwarf Yaupon Holly	5 gal	48"	36" O.C.
TSA	Leucophyllum frutescens Texas Sage	7 gal	14"	48" O.C.
IH	Rhaphiolepis indica Indian Hawthorn	7 gal	14"	36" O.C.
BR	Rosmarinus officinalis 'Upright Blue' Upright Blue Rosemary	5 gal	12"	36" O.C.
SS	Scutellaria suffrutescens Pink Skullcap	1 gal	6"	36" O.C.
BG	Teucrium fruticans 'Azureum' Azure Bush Germander	5 gal	12"	48" O.C.

ORNAMENTAL GRASSES	BOTANICAL / COMMON NAME	CONTAINER	HEIGHT	SPACING
BGG	Bouteloua gracilis 'Blonde Ambition' Blonde Ambition Blue Grama Grass	5 gal	36"	24" O.C.
NT2	Nassella tenuissima Mexican Feather Grass	7 gal	14"	24" O.C.

PERENNIALS	BOTANICAL / COMMON NAME	CONTAINER	HEIGHT	SPACING
GMI	Conoclinium greggii Gregg's Mistflower	5 gal	24"	24" O.C.
DL	Hemerocallis x 'Stella de Oro' Stella de Oro Daylily	5 gal	12"	12" O.C.
HB	Nandina domestica 'Firepower' Firepower Heavenly Bamboo	7 gal	14"	36" O.C.
KR	Rosa x `Radrazz` TM Knock Out Shrub Rose	10 gal	17"	48" O.C.
AS	Salvia greggii Autumn Sage	5 gal	12"	48" O.C.

SEMI-EVERGREEN SHRUBS	BOTANICAL / COMMON NAME	CONTAINER	HEIGHT	SPACING
TH	Thryallis glauca Thryallis	15 gal	3`	36" O.C.

EVERGREEN GROUNDCOVER	BOTANICAL / COMMON NAME	CONTAINER	HEIGHT	SPACING
SD	Dichondra argentea Silver Dichondra	1 gal	6"	24" O.C.
LM	Liriope muscari Lilyturf	5 gal	12"	24" O.C.
BD	Melampodium leucanthum Blackfoot Daisy	3 gal	10"	12" O.C.
AG	Ophiopogon intermedius Aztec Grass	3 gal	10"	12" O.C.

NATIVE SEED MIX	BOTANICAL / COMMON NAME	CONTAINER	HEIGHT	SPACING
BHM	Bee Happy Mix Native American Seed	seed		

ORNAMENTAL GRASS	BOTANICAL / COMMON NAME	CONTAINER	HEIGHT	SPACING
TSE	Carex texensis Texas Sedge	1 gal	12"-15"	10" O.C.

PERENNIAL GROUNDCOVER	BOTANICAL / COMMON NAME	CONTAINER	HEIGHT	SPACING
WT	Stemodia lanata Gray Woolly Twintip	1 gal	6"	24" O.C.

SEMI-EVERGREEN GROUNDCOVER	BOTANICAL / COMMON NAME	CONTAINER	HEIGHT	SPACING
WL	Lantana montevidensis 'Alba' White Trailing Lantana	3 gal	10"	24" O.C.
LH	Lantana x 'New Gold' New Gold Lantana	3 gal	10"	48" O.C.

THIS DRAWING, AS AN INSTRUMENT OF SERVICE, IS AND SHALL REMAIN THE PROPERTY OF HITCHCOCK DESIGN GROUP AND SHALL NOT BE REPRODUCED, PUBLISHED OR USED IN ANY WAY WITHOUT THE PERMISSION OF HITCHCOCK DESIGN GROUP

Texas 811 Know what's below. Call before you dig.
NOTE: BEWARE: UNDERGROUND UTILITIES IN PLACE INCLUDING ELECTRICAL, GAS, WATER, SEWER, TELEPHONE, AND OTHERS. CONSULT PROJECT ENGINEER PRIOR TO CONSTRUCTION. ALL UTILITIES TO BE FLAGGED AND IDENTIFIED. LANDSCAPE CONTRACTOR RESPONSIBILITY.

HITCHCOCK DESIGN GROUP
creating better places
1601 Rio Grande Street
Suite 450
Austin, Texas 78701
T 512.770.4503
hitchcockdesigngroup.com

PREPARED FOR
Investcor Development
3001 RR 620 S, Suite #324
Austin, Texas 78738

CONSULTANTS
Civil Engineer
Miller Gray
7320 N Mopac Expy
Suite 203
Austin, TX, 78731
T 512.861.5300

Architect
Enviroplan Architects
4942 US 290 West
Austin, TX, 78735
T 512.476.0622

PROJECT
Starbucks Bee Cave
14211 W. Highway 71
Bee Cave, Texas 78738

REGISTERED LANDSCAPE ARCHITECT BRYAN C. WARNE 2321 STATE OF TEXAS
3/13/2024

ISSUED
March 13, 2024

REVISIONS

No	Date	Issue

CHECKED BY BW
DRAWN BY JB & MP

SHEET TITLE
PLANTING NOTES & TABLES

41 OF 41
SHEET NUMBER
L3.03

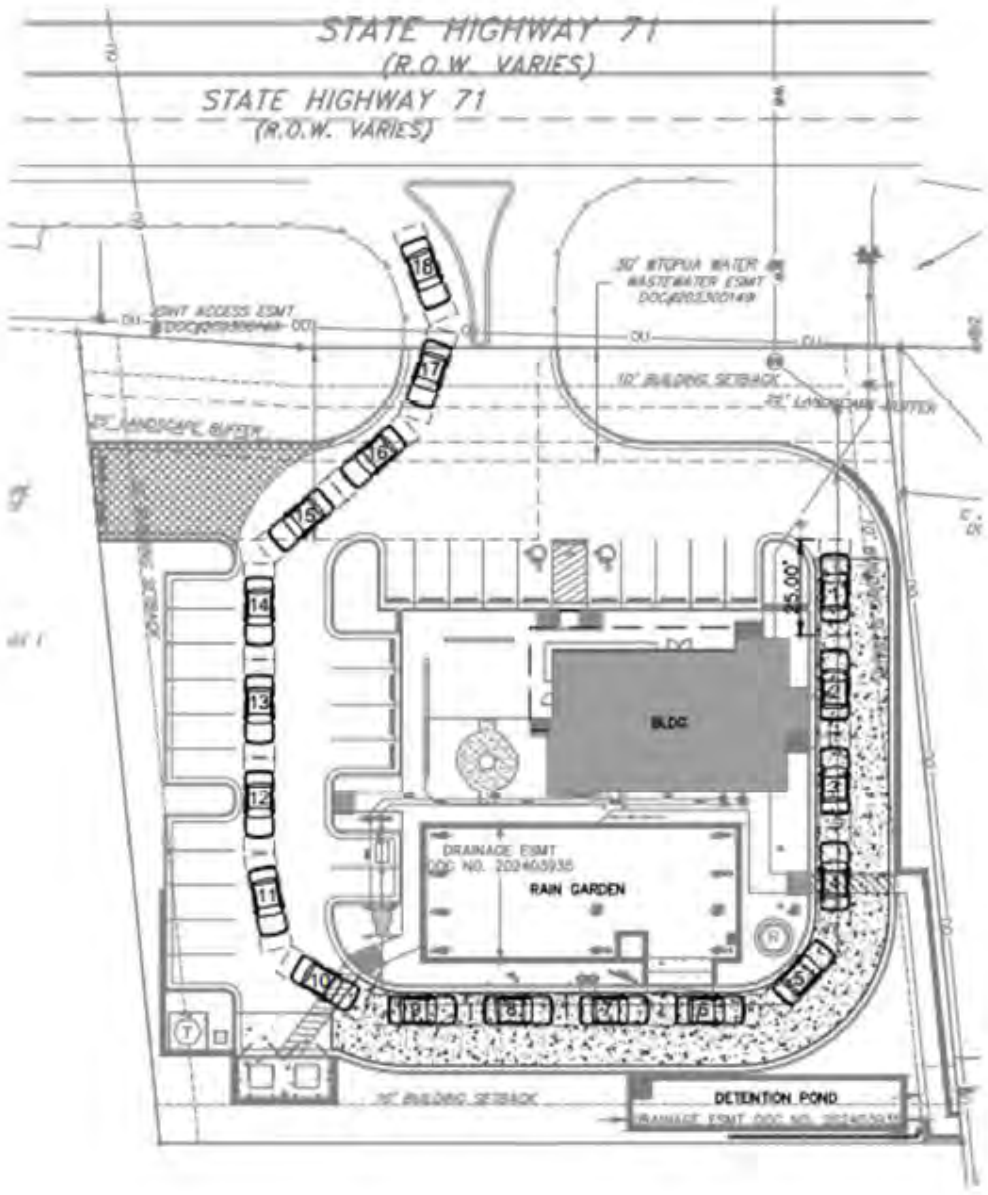
©2024 Hitchcock Design Group

J:\Projects\Austin\Investcor\Starbucks Bee Cave\05 Drawings and Production\01 HDG CAD\00 Current\L3 Planting.dwg

EXHIBIT "B"

QUEUING PLAN

Figure 8: Queue Stacking Capacity



Planning and Zoning Commission Meeting
5/21/2024
Agenda Item Transmittal

Agenda Item:	**4.**
Agenda Title:	**Public hearing, discussion, and possible action on Ordinance No. 535 to allow a specific use permit for the use "Food and Beverage Services (with drive-through)" with an associated Site and NPS Plan located at 14211 W State Highway 71, Bee Cave, Texas.**
Commission Action:	**Discussion and possible action**
Department:	**City Secretary**
Staff Contact:	**Amanda Padilla, Senior Planner and Logan Maurer, Staff Engineer**

1. INTRODUCTION/PURPOSE

See attached TL

2. DESCRIPTION/JUSTIFICATION

a) Background

See attached TL

b) Issues and Analysis

See attached TL

3. FINANCIAL/BUDGET

Amount Requested	Fund/Account No.
Cert. Obligation	GO Funds
Other source	Grant title
Addtl tracking info	

4. TIMELINE CONSIDERATIONS

5. RECOMMENDATION

See attached TL

ATTACHMENTS:

Description	Type
SUP & SP/NPS Technical Letter	Cover Memo
Ordinance 535 Part 1	Ordinance
Ordinance 535 Part 2	Ordinance
Waiver Request	Backup Material
Traffic Impact Analysis	Backup Material

Planning and Zoning Commission Meeting
May 21, 2024
Agenda Item Transmittal

Agenda Title: Public hearing, discussion, and possible action on Ordinance No. 535 to allow a specific use permit for the use "Food and Beverage Services (with drive-through)" with an associated Site and NPS Plan located at 14211 W State Highway 71, Bee Cave, Texas.

Commission Action: Approve or Deny

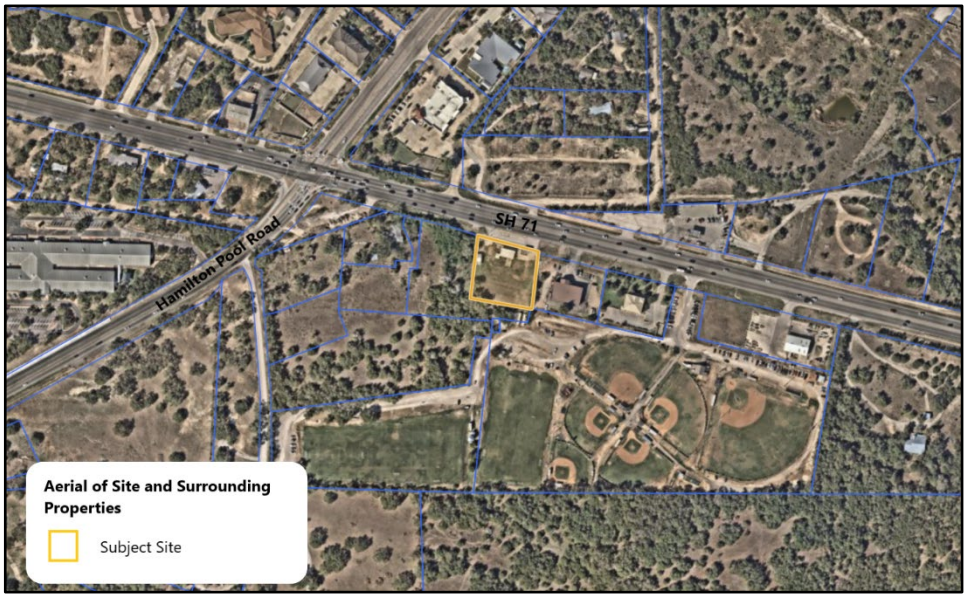
Department: Planning & Development

Staff Contact: Amanda Padilla, Senior Planner and Logan Maurer, Staff Engineer

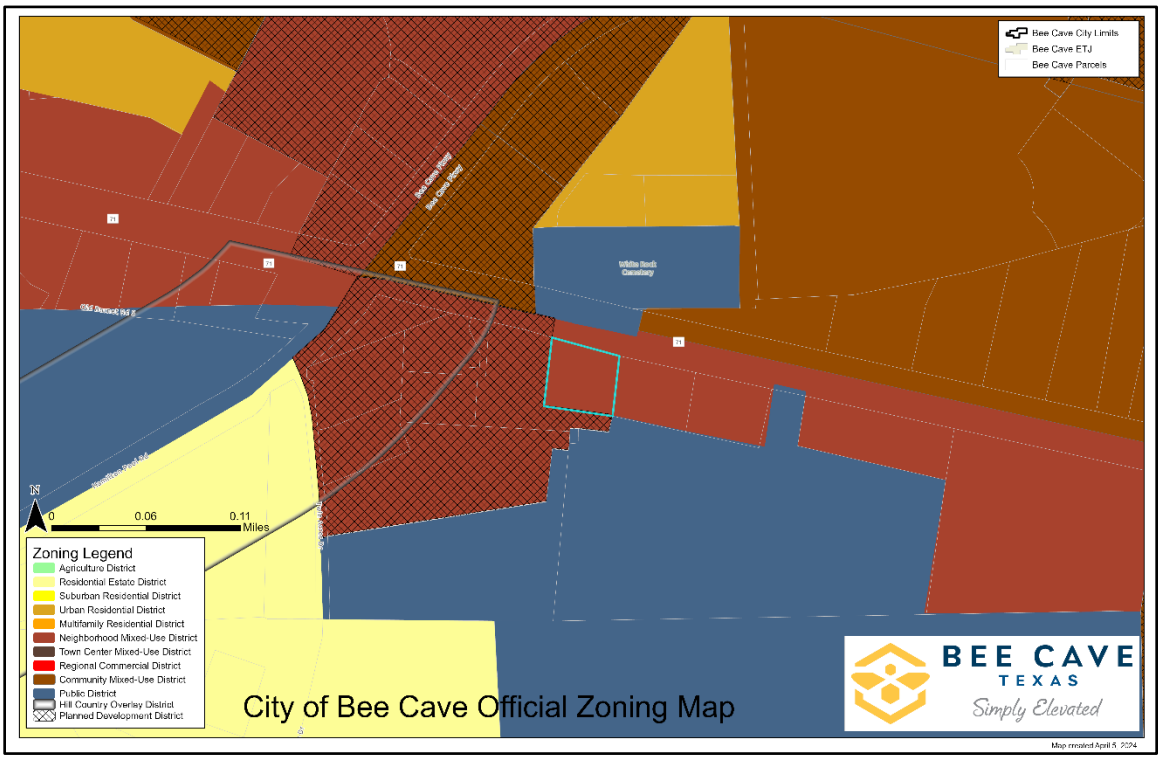
1. INTRODUCTION/PURPOSE

Discuss and possible action on Ordinance No. 535 to allow a specific use permit for the use "Food and Beverage Services (with drive-through)" with an associated Site and NPS Plan located at 14211 W State Highway 71, Bee Cave, Texas.

2. DESCRIPTION/ JUSTIFICATION



The property is located on the south side of State Highway 71 at 14211 W State Highway 71, commonly referred to as the "Yellow Store Gas Station". It is approximately 0.997 acres and is zoned Neighborhood Mixed-Use (MU-N).



In September 2022, the City Council approved the rezoning of the 0.997-acre lot from Residential Estate (R-1) to Neighborhood Mixed-Use (MU-N), which was consistent with the Future Land Use designation of Urban Corridor. Subsequently, in October 2022, the applicant filed a Minor Plat application for the lot, which was administratively approved under Section 2.3.7 of the UDC. Following the approval and recordation of the Minor Plat, the applicant submitted applications for a Specific Use Permit (SUP) and an NPS/Site Plan in accordance with Section 3.5.6.

The Property has requested a Specific Use Permit with an associated Site and NPS plan to establish a Coffee Shop with a drive-through. Per Section 3.3.5 Use Chart of the Unified Development Code, the addition of a drive-through facility necessitates a specific use permit.

Existing Conditions. Currently, the property has an existing building and driveway. The applicant has proposed to remove all existing development (including all existing concrete within SH 71 right-of-way which does not encompass the new driveway entrance) and redevelop the site in accordance with the requirements of the Unified Development Code. The new commercial development will have access from Hwy 71, with a single driveway restricted to right-in and right-out movements.



The properties surrounding the subject tract feature compatible uses, including retail and entertainment establishments. The table below summarizes the uses of the surrounding properties.

Adjacent Properties	Development	Zoning
North (across SH-71)	White Rock Cemetery/ Shell Gas Station, CVS Pharmacy	Public (P)/Community Mixed-Use (MU-C), Planned Development District (PDD)
East	QualTech Automotive, Bean Sprout Pediatrics	Neighborhood Mixed-Use (MU-N)
South	Field of Dreams – Sports Fields	Public (P)
West	Undeveloped property under a PDD	Planned Development District (PDD)



Parking. The UDC requires that a "Restaurant (Drive-through)"/ "Coffee Shop" require 1 parking space per 100 square feet. The building is approximately 2,344 sf, requiring 24 parking spaces. The proposed project contains a patio which requires the property to add an additional 3 parking spaces for a total of 27 parking spaces. The applicant is providing exactly 27 parking spaces.

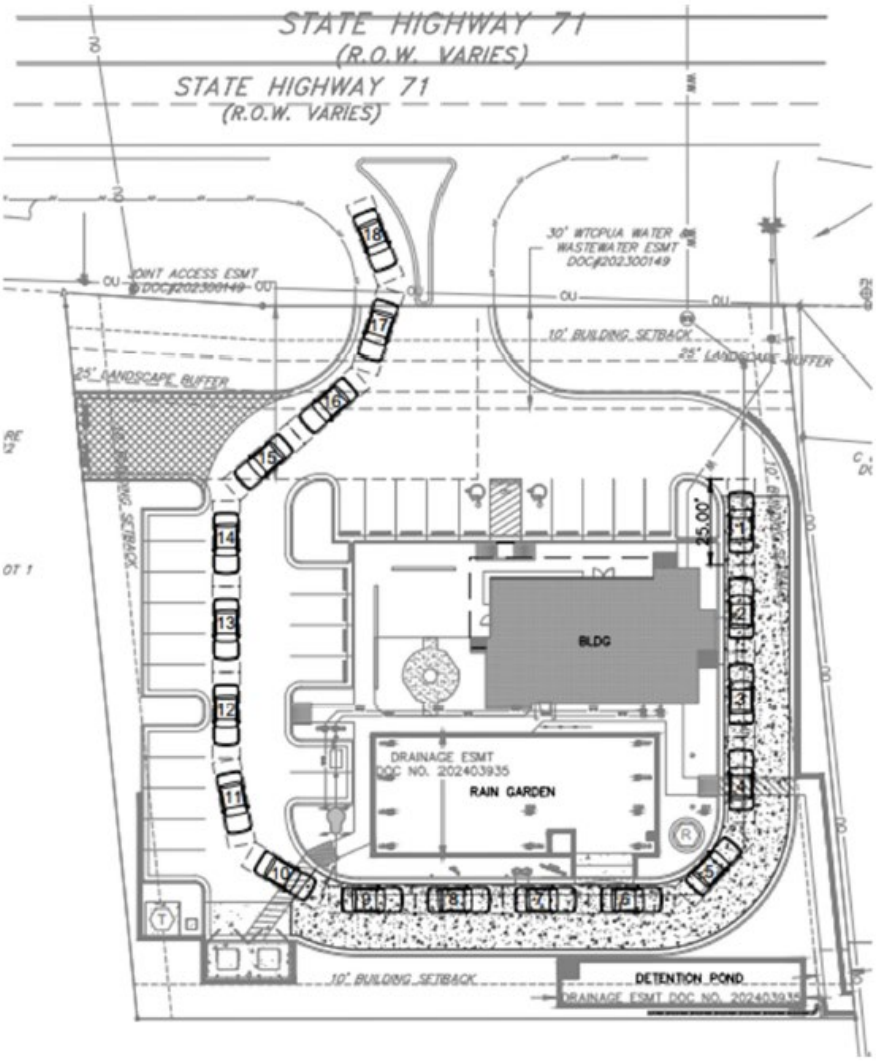
Compatibility. The proposed specific use permit for a "Food and Beverage Service (with drive-through) is a compatible use for the surrounding properties and businesses.

Noise. The property shall comply with the city's noise ordinance. The Surrounding properties are commercial/ entertainment uses and will not be affected by the properties use.

Access and Traffic Circulation. The property has ingress and egress from Highway 71 from one driveway restricted to right-in and right-out. Additionally, a shared access drive shall be constructed to allow future connection with the adjacent lot. It is

expected that the Coffee Shop User will have peak queuing times between 7:00 a.m. and 8:45 a.m., however, the drive through shall maintain an unobstructed 18-car queuing length at all times, as demonstrated in the exhibit attached to the SUP. In the event a new certificate of occupancy is requested for the tenant space, the City may require a new queuing plan, subject to review, that must be approved prior to issuance of a Certificate of Occupancy. *The required queue length was determined by a study of weekday AM peak period (7-8:45am) drive through car queue lengths at two (2) coffee/drive through establishments, Starbucks in Lakeway and Summer Moon at Bella Colinas. The maximum queue length observed was 10 vehicles.*

Figure 8: Queue Stacking Capacity



The TIA was reviewed based off of the UDC requirements, which included evaluation of the SH71 /HPR, SH71/RR620, and BCP/RR620 intersections. After review, it was found that only one intersection (BCP and RR620) was determined to have an impact per code. As a result, a mitigation fee of $5,000 will be provided for future signal timing optimization analysis. See attached Traffic Impact Analysis report for more detailed information.

Lighting Plan. The proposed plan meets the City's standards and requirements. The photometric plan shows no light trespass onto the adjacent properties.

Impervious Cover. The existing impervious cover for the site is approximately 19% and the off-site SH 71 right-of-way is 100% impervious. The site is allowed up to 40% impervious cover and the applicant has proposed rainwater harvesting to achieve an additional 5% impervious cover allowance. However, the proposed site plan exceeds 45% in accordance with our code. As such, as part of the site plan approval, the applicant is requesting a waiver to Section 7.3.2(D) of the Unified Development Code titled Impervious Cover to allow the drive-through and escape lane to be considered a pervious surface by installing a permeable pavement called "Raincrete" (See attached Waiver Request Letter provided by the applicant). Specifically, the waiver requests a 100% credit of 4,625 square feet of permeable pavement to bring the site impervious cover to 45%. This code section only allows a credit of 50% for use of permeable pavement for pedestrian surfaces only. Approval of this waiver would allow 100% credit for permeable pavement in a vehicular area.

In an effort to mitigate for this impervious cover request, the applicant is:
Capturing and treating in the proposed water quality and detention facility approximately 10,000 square feet of Highway 71 that is currently an untreated area.
Maintenance requirements as recommended by the manufacturer will be included in the required Water Quality Restrictive Covenant which is recorded with Travis County Public Records; and the 4,625 square feet of pervious area shall still be considered an impervious area as it pertains to the water quality treatment calculations. Should the permeable area ever become clogged, the water quality facility will be appropriately sized to treat this additional area.

Per Section7.3.3.I, the City Council may approve a waiver to one or more provisions of Article 7 if it makes an affirmative finding with regard to the following:

(1) That undue hardships will result from strict compliance with one or more provisions of this section 7.3;

(2) That the purposes of these regulations may be served to a greater extent by an alternative proposal;

(3) The waiver does not have the effect of nullifying the intent and the purpose of these regulations;

(4) Granting the waiver will not be detrimental to the public safety, health or welfare, and will not be injurious to other property or to the owners of other

property, and the waiver will not prevent the orderly development or use of other property in the vicinity;

(5) The conditions upon which the request for a waiver is based are unique to the property for which the waiver is sought, and are not applicable generally to other property;

(6) Because of the particular physical surroundings, shape or topographical conditions of the specific property involved, a particular hardship to the property owner would result, as distinguished from a mere inconvenience, if the strict letter of these regulations is carried out; and

(7) An alternate design will generally achieve the same result or intent as the standards and regulations prescribed in this section 7.3.

Such findings of the City Council, together with the specific facts upon which such findings are based, shall be incorporated into the official minutes of the City Council at which a waiver is considered.

Drainage, Water Quality Treatment, and Stormwater Detention. The topography of both the off-site right of way and site naturally lends to stormwater draining to the south end of the site. Existing conditions do not have any water quality treatment measures in place. The proposed rain garden and detention pond are sized to treat and handle flow from both the off-site right of way and the proposed site conditions with impervious cover improvements. Notably, the proposed rain garden is sized to treat the amount of runoff that would be generated from an impervious version of the proposed raincrete drive through and escape lane. Additionally, the proposed raincrete section will be maintained as part of an outlined maintenance plan to the site's water quality features through the restrictive covenant.

Tree Preservation and Mitigation. The five existing trees located in the southwest corner of the site will be removed. The proposal meets the mitigation requirements of code.

Landscape Plan and Screening. The proposed landscape plan provides the required amount and diversity of landscaping outlined in the UDC. The applicant was administratively approved for the use of Alternative Plants and to provide alternative compliance for the building's perimeter landscaping.

Trail Easement. A public access easement is provided for the raincrete path which connects the Starbucks property to the adjacent LTYA property. The applicant was also granted relief to the landscape buffer requirement along Hwy 71 per section 3.4.1H.2.(i) and was permitted a 25' landscape buffer at the time of Platting.

Utilities. Water and Wastewater will be provided by the West Travis County Public Utility Agency (WTCPUA). Irrigation lines will be installed. However, a commercial service meter will not be installed by WTCPUA due to current water restrictions.

Building. The proposed one-story building will have a maximum height of 24 feet. The proposed building is in compliance with the City's applicable exterior construction and design requirements. See the attached Ordinance 535 site plan exhibit for materials and appearance.

3. TIMELINE CONSIDERATIONS

None

4. RECOMMENDATION

If the Commission chooses to approve the Specific Use Permit with the associated Site and NPS Plan, staff recommends the following conditions placed within Ordinance 535.

5. FILES

Attached

- Ordinance No. 535
  - Exhibit "A" - Site Plan
  - Exhibit "B" – Queuing Plan
- Waiver Request to Section 7.3.2(D)
- Traffic Impact Analysis (TIA)

ORDINANCE NO. 535

AN ORDINANCE APPROVING A SPECIFIC USE PERMIT FOR THE USE "FOOD AND BEVERAGE SERVICES (WITH DRIVE-THROUGH)" WITHIN THE NEIGHBORHOOD MIXED-USE ZONING (MU-N) DISTRICT FOR THE PROPERTY LOCATED AT 14211 WEST STATE HIGHWAY 71, BEE CAVE, TEXAS; DESCRIBED AS LOT 1 OF THE 0.997 ACRES W HWY 71 COMMERCIAL TRACT RECORDED IN DOCUMENT NO. 202300149, OPRTC; PROVIDING FOR CERTAIN CONDITIONS; PROVIDING FOR PENALTY OF A FINE NOT TO EXCEED THE SUM OF TWO THOUSAND DOLLARS ($2,000.00) FOR EACH OFFENSE; PROVIDING FOR FINDINGS OF FACT, SEVERABILITY, EFFECTIVE DATE AND PROPER NOTICE AND MEETING

WHEREAS, an application has been submitted for a specific use permit for the use "Food and Beverage Services (with drive-through) within the Neighborhood Mixed-Use Zoning district for a 0.997-acre lot described as Lot 1 of the 0.997 Acres W Hwy 71 Commercial Tract, as recorded in Document No. 202300149, OPRTC, and which property is located at 14911 W State Highway 71, Bee Cave, Texas (the "Property"); and

WHEREAS, the use of the property for a "Food and Beverage Service (with drive-through) is a specific use permit in the Neighborhood Mixed-Use (MU-N) zoning district; and

WHEREAS, the property owner has submitted a Site Plan depicting the proposed use of the Property as Food and Beverage Services (with drive-through) and the terms and conditions of this Ordinance are sufficient to make this proposed use compatible with other Neighborhood Mixed-Use districts and adjacent property uses in the vicinity; and

WHEREAS, the notice as required by the City's Zoning Ordinance has been published in the official newspaper and given to adjacent property owners; and

WHEREAS, the Planning and Zoning Commission and the City Council has each conducted Public Hearings on the Application for a Specific Use Permit wherein public comment was received and considered on the Application; and

WHEREAS, the City Council finds that the use of the Property as depicted in the Site Plan, Exhibit "A", and in accordance with this Ordinance as Food and Beverage Services (with drive-through) is an appropriate use for the Property.

NOW THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF BEE CAVE, TEXAS:

SECTION 1. Findings of Fact. All of the above premises are hereby found to be true and correct legislative and factual findings of the City and are hereby approved and

incorporated into the body of this Ordinance as if copied in their entirety.

SECTION 2. The City Council finds that the information submitted in the Application for a Specific Use Permit submitted by Applicant meets the requirements of the City of Bee Cave Unified Development Code for the Property and depicted on the Site Plan attached hereto and incorporated herein as Exhibit "A".

SECTION 3. Uses. A Specific Use Permit is hereby granted, subject to the conditions listed in Section 5 herein described, to authorize Food and Beverage Services (with drive-through) uses on the Property as depicted in Exhibit "A" and in conjunction with any other permitted uses authorized in the Neighborhood Mixed-Use Zoning district.

SECTION 4. Site Plan. The Site Plan attached hereto as Exhibit "A" depicting the Food and Beverage Services (with drive-through) uses are all hereby approved contingent upon the property owner meeting the conditions contained within Section 5.

SECTION 5. Specific Use Permit. The City Council hereby approves a Specific Use Permit to the property upon the following terms and conditions:

1. The Property Owner shall not commence development until all necessary permits and approvals are obtained as required by the City of Bee Cave Ordinances.

2. The Specific Use Permit authorizes development of the subject Property only as represented in the Site Plan described in Exhibit "A," attached hereto, and only to the extent authorized herein. If portions of the development of the subject Property requested are not depicted in Exhibit "A", then that portion of development is specifically denied.

3. Any amendments to the Exhibit "A" that involve any of the following will result in a new Specific Use Permit (SUP) being submitted:
    a. An increase in impervious coverage
    b. A change in traffic flow or a change to the drive-through queuing plan
    c. Alterations to the drive-through function or emergency lane function
    d. Any new waiver requests

4. The queuing plan submitted as Exhibit "B" is approved as part of the Specific Use Permit.

5. Due to the close proximity of the Refuse area to the Drive-through queuing lane, the applicant has agreed that Texas Disposal Systems will service the area after the peak hours, or during designated non-peak hours, which are defined as after 10:00 AM on each service day. Should there be any changes to these service hours that

affect the drive-through queuing process, the applicant will be obligated to submit an amended site plan and queuing plan for review.

6. The emergency lane must remain exclusively designated for emergency use and cannot be repurposed for restaurant services or other non-emergency uses.

SECTION. 6. Penalty. That any person, firm or corporation violating any of the provisions of this Ordinance or the Unified Development Code, of the Code of Ordinances, as amended hereby, shall be deemed guilty of a misdemeanor and, upon conviction in the municipal court of the City of Bee Cave, Texas, shall be punished by a fine not to exceed the sum of two thousand dollars ($2,000.00) for each offense, and each and every day of any such violation shall be deemed to constitute a separate offense, in accordance with Section 1.1.14 of the City's Unified Development Code.

SECTION 7. Severability. Should any sentence, paragraph, subdivision, clause, phrase, or section of this Ordinance be adjusted or held to be unconstitutional, illegal, or invalid, the same shall not affect the validity of this Ordinance in whole or any part or provision thereof, other than the part so declared to be invalid, illegal or unconstitutional, and shall not affect the validity of the City's Zoning Ordinance or Map as a whole.

SECTION 8. Proper Notice and Meeting. It is hereby officially found and determined that the meeting at which this Ordinance was adopted was open to the public and that public notice of the time, place and purpose of said meeting was given as required by the Open Meetings Act, Chapter 551 of the Texas Government Code.

SECTION 9. Effective Date. This Ordinance shall take effect immediately from and after its passage and publication as required by law.

PASSED AND APPROVED this _____ day of _____, 2024.

APPROVED:

_____
Kara King, Mayor
City of Bee Cave

ATTEST:

_____

Thomas Hatfield, Interim City Secretary
City of Bee Cave, Texas

[SEAL]

APPROVED AS TO FORM:

_____
City Attorney
Ryan Henry, Law Offices of Ryan Henry, PLLC

EXHIBIT “A”

SITE PLAN

WTCPUA 71-22-016

SITE DEVELOPMENT PLAN AND NPS POLLUTION CONTROL PLAN FOR

STARBUCKS BEE CAVE

14211 STATE HWY 71
BEE CAVE, TEXAS 78738

PROJECT CONTACTS

OWNER:	BEE CAVE HOLDINGS, LLC 3001 RANCH ROAD 620, STE 324 AUSTIN, TX 78738 (512) 750-7272	DEVELOPER:	INVESTCOR DEVELOPMENT 3001 RANCH ROAD 620, STE 324 AUSTIN, TX 78738 (512) 750-7272
ENGINEER:	MILLER GRAY, LLC 7320 N MOPAC EXPY, STE. 203 AUSTIN, TEXAS 78731 (512) 861-5300	ARCHITECT:	ENVIROPLAN ARCHITECTS & PLANNERS 4942 US 290 WEST AUSTIN, TEXAS 78735 (512) 476-0622
SURVEYOR:	SURVTEX LLC 600 W. WHITESTONE BLVD. CEDAR PARK, TEXAS 78613 (512) 249-8875	LANDSCAPE ARCHITECT:	HITCHCOCK DESIGN GROUP 1601 RIO GRANDE STREET, STE 450 AUSTIN, TEXAS 78701 (512) 770-4503
STRUCTURAL ENGINEER:	ATS ENGINEERS, INSPECTORS AND SURVEYORS 4910 HIGHWAY 290 WEST AUSTIN, TEXAS 78735 (512) 328-6995 EXT. 154	LIGHTING DESIGNER:	SPECTRUM LIGHTING 8868 RESEARCH BLVD, STE 104 AUSTIN, TEXAS 78758 (512) 442-0661

ZONING/USE

JURISDICTION:	BEE CAVE
ZONING:	NEIGHBORHOOD MIXED-USE DISTRICT
LAND USE:	COMMERCIAL
ACREAGE:	0.997
TOTAL IMPERVIOUS COVER:	19,560 SF (45%)
BUILDING IMPERVIOUS COVER:	2344 SF (5%)
TRAVIS COUNTY TAX ID TRACT #:	0118770419

LEGAL DESCRIPTION

LOT 1 BLK A OF THE MINOR PLAT OF 0.997 ACRES .564 AC RECORDED IN DOCUMENT 202300149, TRAVIS COUNTY, TEXAS

FUTURE LAND USE

RETAIL COFFEE SHOP

SURVEY

TOPOGRAPHY SURVEY PREPARED BY SURVTEX LLC, DATED 5/16/2022

BENCHMARK

BM1 MAG NAIL WITH ALUMINUM WASHER STAMPED "SURVTEX"
ELEV: 940.14

WATERSHED

WATERSHED: LITTLE BARTON

EDWARDS AQUIFER

THIS PROJECT IS LOCATED WITHIN THE EDWARDS AQUIFER CONTRIBUTING ZONE AS DEFINED BY CITY OF TCEQ.

VARIANCE REQUESTS

1. SECTION 7.3: USE OF PAVEMENT TYPE REQUIREMENTS

NOTES

NO PORTION OF THE SUBJECT PROPERTY IS WITHIN THE 100-YEAR FLOOD PLAIN AS SHOWN ON THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAP (FIRM) NO. 48453C0415J, TRAVIS COUNTY, TEXAS, DATED JANUARY 22, 2020.

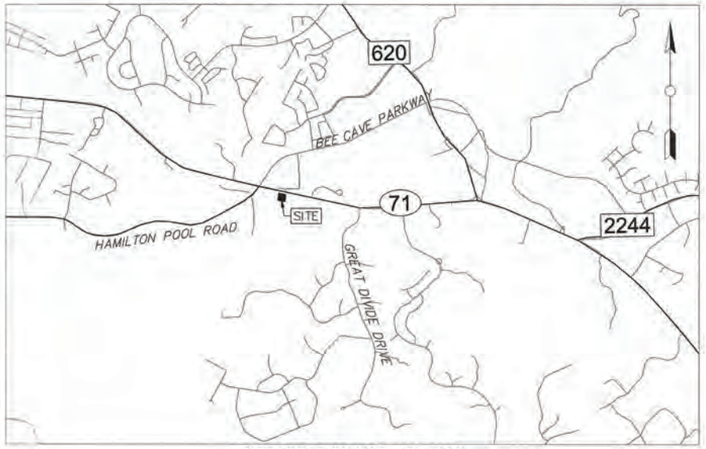
CONSTRUCTION HOURS ARE BETWEEN 7:00 AM TO 7:00 PM

ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE PLANS REMAINS WITH THE ENGINEER WHO PREPARED THEM. IN APPROVING THESE PLANS, THE CITY OF BEE CAVE MUST RELY UPON THE ADEQUACY OF THE WORK OF THE DESIGN ENGINEER.

THIS SITE IS SUBJECT TO A RESTRICTIVE COVENANT AND DRAINAGE EASEMENT RECORDED AS DOCUMENT NO. 202403935 WITH THE TRAVIS COUNTY OFFICE OF PUBLIC RECORDS.

REVISION/CORRECTION

REVISION NO.	DESCRIPTION	SHEETS REVISED	APPROVAL



SITE LOCATION MAP - 1" = 2000'
WTCPUA 71 WATER SYSTEM GRID: I-10
PRESSURE PLANE - 1280 HGL
WTCPUA WASTEWATER SYSTEM GRID: D-5
MAPSCO: 549R & 549V

OFFICIAL DATE OF SUBMISSION: 7/26/23

SUBMITTED BY:

3/15/2024
J. TRAVIS WILSON, P.E. DATE

MillerGRAY
Consulting · Engineering · Infrastructure
TBPELS FIRM REG NO. F-16302

I, J. TRAVIS WILSON, P.E., CERTIFY THAT THESE ENGINEERING DOCUMENTS ARE COMPLETE , ACCURATE AND ADEQUATE FOR THE INTENDED PURPOSES, INCLUDING CONSTRUCTION BUT ARE NOT AUTHORIZED FOR CONSTRUCTION PRIOR TO FORMAL APPROVAL BY THE CITY OF BEE CAVE. THE DRAWINGS, PLANS, AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION COMPLY WITH THE APPLICATION TECHNICAL CODES , RULES, AND REGULATIONS. I DO CERTIFY THAT THE ENGINEERING WORK BEING SUBMITTED HEREIN COMPLIES WITH ALL PROVISIONS OF THE TEXAS ENGINEERING PRACTICE ACT.

RELEASE OF THIS APPLICATION DOES NOT CONSTITUTE A VERIFICATION OF ALL DATA, INFORMATION AND CALCULATIONS SUPPLIED BY THE APPLICANT. THE ENGINEER OF RECORD IS SOLELY RESPONSIBLE FOR THE COMPLETENESS, ACCURACY, AND ADEQUACY OF HIS/HER SUBMITTAL WHETHER OR NOT THE APPLICATION IS REVIEWED FOR CODE COMPLIANCE BY CITY ENGINEERS.

TRAVIS COUNTY ESD NO. 6

DESIGN STANDARDS	2015 IFC WITH LOCAL AMENDMENTS
CONSTRUCTION CLASSIFICATION	VB
OCCUPANCY CLASSIFICATION	A-2
BUILDING AREA	2,344 SF
BUILDING HEIGHT IN FEET	23'-0"
BUILDING HEIGHT IN STORIES	1
HIGH-RISE	NO
AUTOMATIC FIRE SPRINKLER SYSTEM	NO
REQUIRED FIRE FLOW @ 20 PSI	1,500 GPM
AVAILABLE FIRE FLOW @ 20 PSI	1,500 GPM

SHEET INDEX

NO.	TITLE	NO.	TITLE
1	COVER SHEET	22	STANDARD DETAILS 3 OF 10
2	FINAL PLAT SHEET 1 OF 2	23	STANDARD DETAILS 4 OF 10
3	FINAL PLAT SHEET 2 OF 2	24	STANDARD DETAILS 5 OF 10
4	CITY OF BEE CAVE NOTES 1 OF 2	25	STANDARD DETAILS 6 OF 10
5	CITY OF BEE CAVE NOTES 2 OF 2	26	STANDARD DETAILS 7 OF 10
6	WTCPUA NOTES 1 OF 2	27	STANDARD DETAILS 8 OF 10
7	WTCPUA NOTES 2 OF 2	28	STANDARD DETAILS 9 OF 10
8	EXISTING CONDITIONS AND DEMOLITION PLAN	29	STANDARD DETAILS 10 OF 10
9	DETENTION DRAINAGE AREA MAPS	30	RETAINING WALL DETAILS
10	WATER QUALITY DRAINAGE AREA MAPS & CALCS	31	DUMPSTER DETAIL
11	EROSION & SEDIMENTATION CONTROL PLAN	32	FLOOR PLAN
12	SITE & DIMENSION CONTROL PLAN	33	BUILDING ELEVATION VIEWS
13	FIRE CONTROL PLAN	34	ARCHITECTURAL SITE PLAN
14	OVERALL GRADING & STORM DRAIN PLAN	35	ELECTRICAL SITE LIGHTING PHOTOMETRIC PLAN
15	DETENTION POND & RAIN GARDEN PLAN	36	LANDSCAPE GENERAL NOTES
16	DETENTION POND & RAIN GARDEN SECTIONS	37	EXISTING TREE PLAN
17	UTILITY PLAN	38	LANDSCAPE PLAN
18	WWL 'A' PLAN & PROFILE	39	LANDSCAPE PLAN - RAIN GARDEN
19	WL 'A' PLAN & PROFILE	40	PLANTING DETAILS
20	STANDARD DETAILS 1 OF 10	41	PLANTING NOTES & TABLES
21	STANDARD DETAILS 2 OF 10		

PUBLIC WATER & WASTEWATER IMPROVEMENTS - QUANTITIES

1.	12 LF	PIPE, 8-INCH DIA., CL 350 DI	7.	2	12-INCH GATE VALVE
2.	23 LF	PIPE, 2-INCH DIA., HDPE	8.	40 LF	MECHANICAL RESTRAINTS FOR 12-INCH WL
3.	1	8-INCH GATE VALVE	9.	160 LF	16-INCH STEEL ENCASEMENT
4.	1	1.5-INCH WATER METER	10.	1	48"-INCH DIA DROP MH
5.	1	8-INCH X 2-INCH REDUCER	11.	160 LF	PIPE, 8-INCH, DIA., PVC
6.	1	12-INCH X 8-INCH CUT-IN-TEE	12.	1	FIRE HYDRANT ASSEMBLY

CITY OF BEE CAVE APPROVAL DATE

REVIEWED BY:

CITY OF BEE CAVE DATE

Tricia S, Tichenor-Altamirano, PE Digitally signed by Tricia S, Tichenor-Altamirano, PE Date: 2024.03.26 18:39:16-05'00'
WEST TRAVIS COUNTY PUBLIC UTILITY AGENCY DATE

4/1/2024
LAKE TRAVIS FIRE AND RESCUE DATE

23-786-SNPS
CITY OF BEE CAVE SITE AND NPS NUMBER

24-44653
TxDOT DRIVEWAY PERMIT NUMBER

WEST TRAVIS COUNTY PUBLIC UTILITY AGENCY (WTCPUA) NOTES:

PRESSURE PLANE:

1. THE WEST TRAVIS COUNTY PUBLIC UTILITY AGENCY IS THE RETAIL WATER AND WASTEWATER PROVIDER.
2. BUILDING 1: 1.5" METER NO:_____ FOR DOMESTIC PURPOSES ONLY.
3. WTCPUA DOES NOT GUARANTEE FIRE FLOW.
4. A WTCPUA REPRESENTATIVE MUST BE PRESENT AT THE TIME ON CONNECTION TO THE EXISTING SYSTEM.
5. ALL WATER AND WASTEWATER INFRASTRUCTURE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF AUSTIN WATER AND WASTEWATER CONSTRUCTION SPECIFICATIONS AND WITH MATERIALS FROM THE CURRENT APPROVED CITY OF AUSTIN STANDARD PRODUCTS LIST (SPL).
6. WATER FOR LANDSCAPE IRRIGATION WILL NOT BE PROVIDED BY WTCPUA.
   NO. LUE'S FOR DOMESTIC WATER: 6
   NO. LUE'S FOR WASTEWATER: 6

811 Know what's below. Call before you dig.

CAUTION!
IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

FOR CITY USE ONLY:

MillerGRAY
Consulting · Engineering · Infrastructure
7320 N. MoPac Expressway, Suite 203
Austin, Texas 78731
Phone (512) 861-5300
www.miller-gray.com
TBPELS FIRM REG. NO. F-16302

STATE OF TEXAS
J. TRAVIS WILSON
97307
LICENSED PROFESSIONAL ENGINEER
3/15/2024

P:\00323 Investor\001 Starbucks Bee Cave\06_CAD\00323-001cvr.dwg 3/15/2024 2:42 PM

STARBUCKS BEE CAVE
14211 STATE HWY 71, BEE CAVE, TEXAS 78738

COVER SHEET

REVISIONS/CORRECTIONS

NO.	DATE	DESCRIPTION	BY

PROJECT NUMBER 00323-001 | DATE: 3/15/2024 | DESIGNED: KKE | CHECKED: JTW

SHEET NO.
1 OF 41

23-786-SNPS

$75.00

6-29-2023

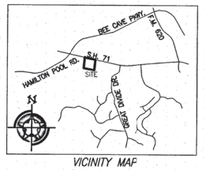
202300149

MINOR PLAT OF
0.997 ACRES W HWY 71 COMMERCIAL TRACT

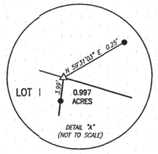


SCALE: 1" = 50'

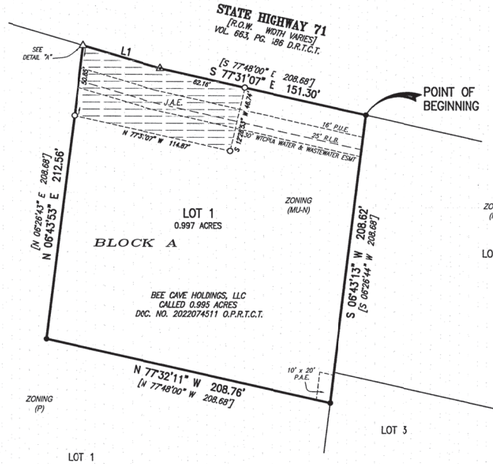
BEARINGS BASED ON THE TEXAS STATE PLANE COORDINATE SYSTEM, NORTH AMERICAN DATUM OF 1983, CENTRAL ZONE.



VICINITY MAP
SCALE: 1" = 2000'



DETAIL "A"
(NOT TO SCALE)



LINE TABLE		
LINE	BEARING	DISTANCE
L1	S 73°42'16" E	57.84'
[L1]	[N 73°59' W]	

LOT AREA TABLE		
BLOCK	LOT	AREA
A	1	0.997 ACRES

LEGEND
UNLESS NOTED OTHERWISE

●	1/2" IRON ROD "OUND
○	1/2" IRON ROD WITH SURVITEX PLASTIC CAP SET
△	CALCULATED POINT
⊕	MAG NAIL WITH METAL WASHER STAMPED "SURVITEX" SET
P.R.T.C.T.	PLAT RECORDS OF TRAVIS COUNTY, TEXAS
R.P.R.T.C.T.	REAL PROPERTY RECORDS OF TRAVIS COUNTY, TEXAS
O.P.R.T.C.T.	OFFICIAL PUBLIC RECORDS OF TRAVIS COUNTY, TEXAS
D.R.T.C.T.	DEED RECORDS OF TRAVIS COUNTY, TEXAS
[ ]	RECORD INFORMATION
R.O.W.	RIGHT-OF-WAY
R.L.B.	ROADWAY LANDSCAPE BUFFER
J.A.E.	JOINT ACCESS EASEMENT
P.A.E.	PEDESTRIAN ACCESS EASEMENT
WTCPUA	WEST TRAVIS COUNTY PUBLIC UTILITY AGENCY

DRAWN BY: A. LOPEZ
CHECKED BY: J.McCOWN
PROJ. NO.: 2022-0027
FILE NAME: 2022-0027_PLAT.DWG
DATE: OCTOBER 17, 2022
SHEET: 1 OF 2

SURVITEX LLC
PROFESSIONAL SURVEYING and MAPPING SERVICES
600 W. Whitestone Blvd.
Cedar Park, Texas 78613
(512) 249-8875
TBPCLS Firm No. 10084600

OWNER
JUSTIN HOBSON
BEE CAVE HOLDINGS, LLC
3001 RANCH ROAD 620 S
SUITE # 324
AUSTIN, TX 78738
512-750-7272

SITE PLAN ENGINEER
MILLER GRAY
7320 NORTH MOPAC EXPRESSWAY
SUITE # 203
AUSTIN, TX 78731
512-861-5300
TBPELS FIRM NO. F-16302

MINOR PLAT ENGINEER
STEVEN M. MINOR
GRAY ENGINEERING INC.
8834 NORTH CAPITAL OF TEXAS HIGHWAY
SUITE # 140
512-452-0371
TBPELS FIRM NO. 2946

811 Know what's below. Call before you dig.

CAUTION!
IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

FOR CITY USE ONLY:

MillerGRAY
Consulting • Engineering • Infrastructure
7320 N. MoPac Expressway, Suite 203
Austin, Texas 78731
Phone (512) 861-5300
www.miller-gray.com
TBPE FIRM REG. NO. F-16302

STATE OF TEXAS
J. TRAVIS WILSON
97307
LICENSED PROFESSIONAL ENGINEER
4/5/2024

P:\00323 Investcor\001 Starbucks Bee Cave\05_CAD\00323-001pl.dwg 4/5/2024 10:12 AM

STARBUCKS BEE CAVE
14211 STATE HWY 71, BEE CAVE, TEXAS 78738

FINAL PLAT
SHEET 1 OF 2

REVISIONS/CORRECTIONS

NO.	DATE	DESCRIPTION	BY

PROJECT NUMBER 00323-001
DATE: 4/5/2024
DESIGNED: KKE
CHECKED: JTW

SHEET NO.
2 OF 41

23-789-SNPS

202300149

MINOR PLAT OF
0.997 ACRES W HWY 71 COMMERCIAL TRACT

LEGAL DESCRIPTION:
BEING A 0.997 ACRE TRACT OF LAND SITUATED IN THE HALL MEDLIN SURVEY NO. 523, ABSTRACT NO. 540, IN TRAVIS COUNTY, TEXAS, AND BEING ALL OF THAT CALLED 0.995 ACRE TRACT CONVEYED TO BEE CAVE HOLDINGS AS RECORDED IN DOCUMENT NUMBER 2022074511, OFFICIAL PUBLIC RECORDS OF TRAVIS COUNTY, TEXAS, SAID 0.997 ACRE TRACT BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

COMMENCING AT A TXDOT TYPE I MONUMENT (CONCRETE OBELISK) FOUND MARKING A POINT OF CURVATURE AT OR NEAR STATION 1399+38.6 IN THE SOUTH RIGHT-OF-WAY LINE OF S.H. 71;

THENCE NORTH 77°31'07" WEST, WITH SAID SOUTH RIGHT-OF-WAY LINE, AT A DISTANCE OF 1839.85 FEET, PASSING A TXDOT TYPE I MONUMENT (CONCRETE OBELISK) FOUND LYING IN SAID SOUTH RIGHT-OF-WAY LINE, AS RECORDED IN VOL. 663, PG. 186 OF THE DEED RECORDS OF TRAVIS COUNTY, TEXAS, AND CONTINUING FOR A TOTAL DISTANCE OF 1938.44 FEET TO A 1/2-INCH IRON ROD FOUND MARKING THE COMMON NORTH CORNER OF SAID 0.995 ACRE TRACT AND OF LOT 1, BEE CAVE – LTYA 71 WEST ADDITION, A SUBDIVISION RECORDED IN VOL. 94, PG. 43, OF THE PLAT RECORDS OF TRAVIS COUNTY, TEXAS, SAID 1/2-INCH IRON ROD ALSO MARKING THE NORTHEAST CORNER AND POINT OF BEGINNING OF THE HEREIN DESCRIBED TRACT;

THENCE SOUTH 06°43'13" WEST, WITH THE COMMON LINE OF SAID 0.995 ACRE TRACT AND SAID LOT 1, AT A DISTANCE OF 186.33 FEET PASSING A 1/2-INCH IRON ROD FOUND MARKING THE COMMON WEST CORNER OF SAID LOT 1 AND LOT 3 OF SAID BEE CAVE – LTYA 71 WEST ADDITION, CONTINUING WITH THE COMMON LINE OF SAID 0.995 ACRE TRACT AND SAID LOT 3, FOR A TOTAL DISTANCE OF 208.62 FEET TO A 1/2-INCH IRON ROD FOUND MARKING THE EASTERLY NORTHEAST CORNER OF LOT 1, BLOCK A, OLD BEE CAVE SQUARE, A SUBDIVISION RECORDED IN DOC. NO. 200900122, O.P.R.T.C.T., SAME BEING THE SOUTHEAST CORNER OF SAID 0.995 ACRE TRACT AND OF THE HEREIN DESCRIBED TRACT;

THENCE NORTH 77°32'11" WEST, DEPARTING FROM SAID LOT 3 WITH THE COMMON LINE OF SAID 0.995 ACRE TRACT AND SAID LOT 1, BLOCK A, FOR A DISTANCE OF 208.76 FEET TO A 1/2-INCH IRON ROD FOUND MARKING THE SOUTHWEST CORNER OF SAID 0.995 ACRE TRACT AND OF THE HEREIN DESCRIBED TRACT, SAME BEING AN ANGLE POINT IN THE EASTERLY LINE OF SAID LOT 1, BLOCK A;

THENCE NORTH 06°43'53" EAST, CONTINUING WITH SAID COMMON LINE FOR A DISTANCE OF 212.56 FEET TO A CALCULATED POINT FOR THE COMMON NORTH CORNER OF SAID 0.995 ACRE TRACT AND SAID LOT 1, BLOCK A, SAME BEING THE NORTHWEST CORNER OF THE HEREIN DESCRIBED TRACT AND LYING IN THE AFORESAID SOUTH RIGHT-OF-WAY LINE, FROM WHICH A 1/2-INCH IRON FOUND LYING IN SAID COMMON LINE BEARS SOUTH 06°43'53" WEST, A DISTANCE OF 3.99 FEET FOR REFERENCE, ALSO FROM WHICH A 1/2-INCH IRON ROD FOUND BEARS NORTH 59°31'03" EAST A DISTANCE OF 0.25 FEET, FOR REFERENCE;

THENCE SOUTH 73°42'6" EAST, DEPARTING FROM SAID LOT 1, BLOCK A, WITH THE COMMON LINE OF SAID 0.995 ACRE TRACT AND SAID SOUTH RIGHT-OF-WAY LINE FOR A DISTANCE OF 57.94 FEET TO A "MAG" NAIL WITH AN ALUMINUM WASHER STAMPED "SURVTEX" SET MARKING AN ANGLE POINT IN SAID COMMON LINE;

THENCE SOUTH 77°31'07" EAST, CONTINUING WITH SAID COMMON LINE FOR A DISTANCE OF 151.30 FEET TO THE POINT OF BEGINNING AND CONTAINING 0.997 ACRES OF LAND, MORE OR LESS.

FLOODPLAIN CERTIFICATION
NO PART OF THE SUBJECT PROPERTY LIES WITHIN A FLOODPLAIN OR FLOOD PRONE AREA OR A FLOOD WAY OF ANY BODY OF WATER PER THE FEDERAL EMERGENCY MANAGEMENT AGENCY RATE MAP, COMMUNITY F.I.R.M. MAP PREPARED FOR TRAVIS COUNTY, DATED EFFECTIVE JANUARY 22, 2020, AS SHOWN ON COMMUNITY PANEL No. 48453C0415J.

6-27-23
STEVEN M. MINOR, P.E. DATE
STATE OF TEXAS NO. 133778
8834 N. CAPITAL OF TX HWY, SUITE 140
AUSTIN, TEXAS 78759
(512) 452-0371

STATE OF TEXAS
STEVEN M. MINOR
133778
LICENSED
PROFESSIONAL ENGINEER
6-27-23

THE STATE OF TEXAS §
COUNTY OF TRAVIS §

KNOW ALL MEN BY THESE PRESENTS
THAT I, JOHN W. McCOWN, DO HEREBY CERTIFY THAT THIS PLAT WAS PREPARED FROM AN ACTUAL ON-THE-GROUND SURVEY OF THE LAND SHOWN HEREON AND THAT THE SURVEY MONUMENTS SHOWN HEREON WERE SET UNDER MY SUPERVISION IN ACCORDANCE WITH THE SUBDIVISION ORDINANCE OF THE CITY OF BEE CAVE, TEXAS.

6-26-23
JOHN W. McCOWN DATE
610 W. WHITESTONE BLVD.
CEDAR PARK, TEXAS 78613
(512) 249-8875

STATE OF TEXAS
JOHN W. McCOWN
5135
REGISTERED
PROFESSIONAL
LAND SURVEYOR

DRAWN BY:	A. LOPEZ
CHECKED BY:	J.McCOWN
PROJ. NO.:	2022-0027
FILE NAME:	2022-0027_PLAT.DWG
DATE:	OCTOBER 17, 2022
SHEET:	2 OF 2

SURVTEX LLC
PROFESSIONAL SURVEYING and MAPPING SERVICES
600 W. Whitestone Blvd.
Cedar Park, Texas 78613
(512) 249-8875
TBPELS Firm No. 10084600

THE STATE OF TEXAS §
COUNTY OF TRAVIS §

KNOW ALL MEN BY THESE PRESENTS
THAT WE, BEE CAVE HOLDINGS, LLC, OWNERS OF A CALLED 0.995 ACRES OF LAND OUT OF THE HALL MEDLIN SURVEY NO. 523, ABSTRACT 540 IN TRAVIS COUNTY, TEXAS RECORDED IN DOCUMENT NUMBER 2022074511, O.P.R.T.C.T. DO HEREBY ADOPT THIS MINOR PLAT AS SHOWN HEREON TO BE KNOWN AS "0.997 ACRES W HWY 71 COMMERCIAL TRACT" AND DO DEDICATE TO THE PUBLIC THE USE ALL NON-VACATED STREETS AND EASEMENTS SHOWN HEREON.

WITNESS MY HAND, THIS THE 27th DAY OF June, 2023 A.D.
BEE CAVE HOLDINGS, LLC

6/27/2023
JUSTIN HOBSON DATE
BEE CAVE HOLDINGS, LLC
3001 RR 620 S, SUITE # 324
AUSTIN, TX. 78738
512-750-7272

THE STATE OF TEXAS §
COUNTY OF TRAVIS §

BEFORE ME, THE UNDERSIGNED AUTHORITY ON THIS DAY PERSONALLY APPEARED JUSTIN HOBSON OF BEE CAVE HOLDINGS, LLC, AS OWNER KNOWN TO ME TO BE THE PERSON WHOSE NAME IS SWORN AND SUBSCRIBED TO THE FOREGOING INSTRUMENT, AND ACKNOWLEDGED TO ME THAT HE EXECUTED THE SAME FOR THE PURPOSE AND CONSIDERATON HEREIN EXPRESSED AND IN THE CAPACITIES THEREIN STATED.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, THIS 27 DAY OF June, 2023 A.D.

Holly Kennemer — Holly Kennemer
NOTARY PUBLIC, STATE OF TEXAS — PRINTED NAME
May 22, 2024
EXPIRATION DATE

HOLLY KENNEMER
NOTARY PUBLIC
STATE OF TEXAS
ID # 1197803-2
My Comm. Expires 05-22-2024

BY: FIRST UNITED BANK & TRUST COMPANY, BENEFICIARY

6/27/23
MARLA SALERNO DATE
FIRST UNITED BANK & TRUST COMPANY, BENEFICIARY
1517 CENTRC PLACE DRIVE, STE 100
DENTON, TX. 76205
940-349-5661

THE STATE OF TEXAS §
COUNTY OF TRAVIS §

BEFORE ME, THE UNDERSIGNED AUTHORITY ON THIS DAY PERSONALLY APPEARED MARLA SALERNO OF THE FIRST UNITED BANK & TRUST COMPANY, KNOWN TO ME TO BE THE PERSON WHOSE NAME IS SWORN AND SUBSCRIBED TO THE FOREGOING INSTRUMENT, AND ACKNOWLEDGED TO ME THAT SHE EXECUTED THE SAME FOR THE PURPOSE AND CONSIDERATION HEREIN EXPRESSED AND IN THE CAPACITIES THEREIN STATED.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, THIS 27 DAY OF June, 2023 A.D.

Holly Kennemer — Holly Kennemer
NOTARY PUBLIC, STATE OF TEXAS — PRINTED NAME
May 22, 2024
EXPIRATION DATE

HOLLY KENNEMER
NOTARY PUBLIC
STATE OF TEXAS
ID # 1197803-2
My Comm. Expires 05-22-2024

CITY CERTIFICATIONS:
I, THE UNDERSIGNED PLANNING & DEVELOPMENT DIRECTOR OF THE CITY OF BEE CAVE, HEREBY CERTIFY THAT THIS SUBDIVISION PLAT CONFORMS TO ALL REQUIREMENTS OF THE SUBDIVISION REGULATION OF THIS CITY AND IS HEREBY AUTHORIZED AND APPROVED FOR RECORDING IN THE PLAT RECORDS OF TRAVIS COUNTY, TEXAS.

Emerson Wier 6/27/23
PLANNING & DEVELOPMENT DIRECTOR DATE

ATTEST:

6/27/23
CITY SECRETARY DATE

THE STATE OF TEXAS §
COUNTY OF TRAVIS §

I, DYANA LIMON-MERCADO, CLERK OF TRAVIS COUNTY, TEXAS DO HEREBY CERTIFY THAT THE FOREGOING INSTRUMENT OF WRITING AND ITS CERTIFICATE OF AUTHENTICATION WAS FILED FOR RECORD IN MY OFFICE ON THE 29 DAY OF June, 2023, AT 7:11 O'CLOCK P.M. AND DULY RECORDED ON THE 29 DAY OF June, 2023 A.D. AT 7:11 O'CLOCK P.M., OFFICIAL PUBLIC RECORDS OF SAID COUNTY AND STATE IN DOCUMENT NO. 202300149

WITNESS MY HAND AND SEAL OF OFFICE OF THE COUNTY CLERK, THIS 29 DAY OF June, 2023 A.D.
DYANA LIMON-MERCADO,
COUNTY CLERK, TRAVIS COUNTY, TEXAS.

BY: K. Johnson
DEPUTY Kimberly Johnson

NOTES:
1. THIS SUBDIVISION IS LOCATED WITHIN THE CITY LIMITS OF BEE CAVE AND IS SUBJECT TO APPLICABLE CITY OF BEE CAVE ORDINANCES.
2. THIS SUBDIVISION IS LOCATED WITHIN THE LITTLE BARTON CREEK WATERSHED.
3. THIS SUBDIVISION IS LOCATED WITHIN THE EDWARDS AQUIFER CONTRIBUTING ZONE.
4. ELECTRIC SERVICE WILL BE PROVIDED TO THE SUBDIVISION BY AUSTIN ENERGY.
5. AUSTIN ENERGY HAS THE RIGHT TO PRUNE AND/OR REMOVE TREES, SHRUBBERY, AND OTHER OBSTRUCTIONS TO THE EXTENT NECESSARY TO KEEP THE EASEMENTS CLEAR. AUSTIN ENERGY WILL PERFORM ALL TREE WORK IN COMPLIANCE WITH THE LAND DEVELOPMENT CODE AND THE CITY OF BEE CAVE OAK WILT REGULATIONS.
6. THE OWNERS OF THIS SUBDIVISION SHALL PROVIDE AUSTIN ENERGY WITH AN EASEMENT AND/OR ACCESS REQUIRED IN ADDITION TO THOSE INDICATED, EXCLUSIVELY FOR THE INSTALLMENT AND ONGOING MAINTENANCE OF FACILITIES FOR IMPROVEMENTS TO THIS SUBDIVISION AND FOR NO OTHER PURPOSE. THESE EASEMENTS AND/OR ACCESS ARE REQUIRED TO PROVIDE ELECTRICAL SERVICE TO THE BUILDING AND WILL NOT BE LOCATED SO AS TO CAUSE THE SITE TO BE OUT OF COMPLIANCE WITH THE LAND DEVELOPMENT CODE.
7. THE OWNER SHALL BE RESPONSIBLE FOR INSTALLATION OF TEMPORARY EROSION CONTROL, REVEGETATION AND TREE PROTECTION. IN ADDITION, THE OWNER SHALL BE RESPONSIBLE FOR ANY INITIAL TREE PRUNING AND TREE REMOVAL THAT IS WITHIN TEN FEET OF THE CENTER LINE OF THE PROPOSED OVERHEAD ELECTRICAL FACILITIES DESIGNED TO PROVIDE ELECTRIC SERVICE TO THIS PROJECT. THE OWNER SHALL INCLUDE AUSTIN ENERGY'S WORK WITHIN THE LIMITS OF CONSTRUCTION FOR THIS PROJECT.
8. THE OWNER OF THE PROPERTY OR HIS/HER ASSIGNS IS RESPONSIBLE FOR MAINTAINING CLEARANCES REQUIRED BY THE NATIONAL ELECTRIC SAFETY CODE, THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (O.S.H.A) REGULATIONS, AUSTIN ENERGY RULES AND REGULATIONS AND STATE LAWS PERTAINING TO CLEARANCES WHEN WORKING IN CLOSE PROXIMITY TO OVERHEAD POWER LINES AND EQUIPMENT. AUSTIN ENERGY WILL NOT RENDER ELECTRIC SERVICES UNLESS REQUIRED CLEARANCES ARE MAINTAINED. ALL COSTS INCURRED BECAUSE OF FAILURE TO COMPLY WITH THE REQUIRED CLEARANCES WILL BE CHARGED TO THE OWNER.
9. WATER AND WASTEWATER WILL BE PROVIDED BY WEST TRAVIS COUNTY PUBLIC UTILITY AGENCY (WTC PUA).
10. NO STRUCTURE IN THIS SUBDIVISION SHALL BE OCCUPIED UNTIL CONNECTED TO AN APPROVED PUBLIC WATER AND WASTEWATER SYSTEM.
11. A SIXTEEN FOOT (16') WIDE PUBLIC UTILITY EASEMENT (P.U.E.) IS DEDICATED FOR USE FOR PUBLIC UTILITIES ADJACENT TO ALL STREET SIDE PROPERTY LINES OF ALL LOTS SHOWN ON THIS PLAT.
12. THE WATER SYSTEM FOR THIS SUBDIVISION SHALL BE DESIGNED TO SUPPLY THE FIRE FLOWS AS REQUIRED BY ORDINANCE 2010-1 ENACTED BY TRAVIS COUNTY EMERGENCY SERVICES DISTRICT NO. 6. PLANS SHALL BE REVIEWED AND APPROVED BY TRAVIS COUNTY EMERGENCY SERVICES DISTRICT NO. 6 FOR CONSTRUCTION OF THE SUBDIVISION IMPROVEMENTS AND SITE DEVELOPMENT OF ALL LOTS, EXCEPT SINGLE FAMILY.
13. IN APPROVING THIS PLAT, THE CITY OF BEE CAVE, TEXAS ASSUMES NO OBLIGATION TO BUILD STREETS OR ROADS SHOWN ON THIS PLAT OR BUILD ANY BRIDGES, CULVERTS OR DRAINAGE STRUCTURES IN CONNECTION THEREWITH, OR PROVIDE ANY TRAFFIC CONTROL DEVICES OR SIGNS IN CONNECTION THEREWITH. THE BUILDING OF ALL STREETS OR ROADS SHOWN ON THIS PLAT, AND ALL BRIDGES, CULVERTS, DRAINAGE STRUCTURES CONSTRUCTED OR IN PLACE IN SUCH STREETS OR ROADS OR IN CONNECTION THEREWITH IS THE RESPONSIBILITY OF THE OWNER AND/OR DEVELOPER OF THE TRACT OF LAND COVERED BY THIS PLAT IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS PRESCRIBED BY THE CITY OF BEE CAVE, TEXAS.
14. THE PROPERTY HAS ACCESS TO AND FROM A DEDICATED PUBLIC ROADWAY.
15. DRAINAGE AND WATER QUALITY EASEMENTS ARE FOR THE PROTECTION OF THE ENVIRONMENT BY IMPROVING THE QUALITY OF STORM WATER RUNOFF FROM DEVELOPED LANDS. THE NATIVE LAND OR MANAGEMENT PRACTICES WITHIN THESE EASEMENTS ARE TO HELP MAINTAIN CLEAN WATER IN CREEKS, RIVERS, AND LAKES. NO STRUCTURE OR IMPROVEMENTS, OTHER THAN NATIVE PLANT ENHANCEMENTS, OR WATER QUALITY CONTROL IMPROVEMENTS IN ACCORDANCE WITH THE NON-POINT SOURCE POLLUTION CONTROL PERMIT FOR THE SUBDIVISION, OR MAINTENANCE TO THE AREAS IN ACCORDANCE WITH THE NON-POINT SOURCE POLLUTION CONTROL PERMIT FOR THE SUBDIVISION MAY BE PLACED OR PERFORMED WITH IN THESE EASEMENTS WITHOUT PRIOR AUTHORIZATION AND APPROVAL IN WRITING FROM THE CITY O' BEE CAVE. THESE EASEMENTS SHALL BE MAINTAINED BY THE OWNER OR ITS APPROVED ASSIGNS IN ACCORDANCE WITH THE MAINTENANCE PLAN OF THE NON-POINT SOURCE POLLUTION CONTROL PERMIT APPLICABLE TO THE LOT. THESE EASEMENTS MAY NOT BE AMENDED OR ALTERED EXCEPT BY EXPRESS WRITTEN AGREEMENT O' THE CITY. PROPERTY OWNER AND/OR HIS/HER ASSIGNS SHALL PROVDE FOR ACCESS TO DRAINAGE EASEMENTS/STORM SEWER EASEMENTS AS MAY BE NECESSARY AND SHALL NOT PROHIBIT ACCESS BY THE CITY OF BEE CAVE FOR INSPECTION OR MAINTENANCE OF SAID EASEMENTS.
16. DEVELOPMENT OF THIS PROPERTY SHALL NOT COMMENCE UNTIL A NON-POINT SOURCE POLLUTION CONTROL PERMIT AS REQUIRED BY THE CITY OF BEE CAVE, TEXAS HAS BEEN ISSUED BY THE CITY OF BEE CAVE, TEXAS.
17. ALL PROPERTY HEREIN IS SUBJECT TO THE CITY OF BEE CAVE NON-POINT SOURCE POLLUTION CONTROL PERMIT FOR THIS SUBDIVISION. SHOULD THE USE OF THIS PROPERTY CHANGE, ALTER, OR AMEND THE USE AS PERMITTED IN THE NON-POINT SOURCE POLLUTION CONTROL PERMIT, THEN AN AMENDED NON-SOURCE POLLUTION CONTROL PERMIT SHALL BE REQUIRED.
18. SELLING A PORTION OF THIS LAND BY METES AND BOUNDS IS A VIOLATION OF THE CITY OF BEE CAVE ORDINANCES AND STATE LAW, AND IS SUBJECT TO FINES AND THE WITHHOLDING OF UTILITIES AND BUILDING PERMITS.
19. NO CONVEYANCE OR SALES OF ANY PORTION OR LOT OF THIS PROPERTY MAY OCCUR UNTIL AFTER THE FINAL PLAT IS RECORDED WITH THE CLERK OF TRAVIS COUNTY, TEXAS.
20. AN INTEGRATED PEST MANAGEMENT PLAN SHALL BE PROVIDED AT THE SITE AND NPS PLAN STATE TO THE CITY OF BEE CAVE.
21. THIS SUBDIVISION IS ZONED MIXED USE NEIGHBORHOOD.
22. ALL DEVELOPMENT SHALL BE IN ACCORDANCE WITH THE CITY OF BEE CAVE SIGN ORDINANCE.
23. THE APPROVAL BY THE CITY O' BEE CAVE OF THIS PLAT SHALL NOT, IN AND OF ITSELF, BE DEEMED TO CONSTITUTE OR IMPLY THE ACCEPTANCE BY THE CITY OF ANY STREET, PUBLIC AREA, EASEMENT OR PARK SHOWN ON THE PLAT.
24. THE OWNER OF LOT 1 OF THE 0.997 ACRES W HWY 71 COMMERCIAL TRACT MINOR PLAT IS RESPONSIBLE FOR MAINTENANCE OF THE JOINT ACCESS EASEMENT.

THE STATE OF TEXAS §
COUNTY OF TRAVIS §

KNOW ALL MEN BY THESE PRESENTS
THAT I, STEVEN M. MINOR, P.E. A LICENSED PROFESSIONAL ENGINEER, LICENSED BY THE STATE OF TEXAS, HEREBY CERTIFY THAT THE PROPER ENGINEERING CONSIDERATION HAVE BEEN GIVEN TO THIS PLAT AND IT MEETS THE REQUIREMENTS OF THE SUBDIVISION ORDINANCE OF THE CITY OF BEE CAVE, TEXAS.

6-27-23
STEVEN M. MINOR, P.E. DATE
STATE OF TEXAS NO. 133778
8834 N. CAPITAL OF TX HWY, SUITE 140
AUSTIN, TEXAS 78759
(512) 452-0371

STATE OF TEXAS
STEVEN M. MINOR
133778
LICENSED
PROFESSIONAL ENGINEER
6-27-23

MillerGRAY
Consulting • Engineering • Infrastructure
7320 N. MoPac Expressway, Suite 203
Austin, Texas 78731
Phone (512) 861-5300
www.miller-gray.com
TBPE FIRM REG. NO. F-16302

P:\00323 Investcor\001 Starbucks Bee Cave\05_CAD\00323-001dt.dwg 4/5/2024 10:12 AM

STATE OF TEXAS
J. TRAVIS WILSON
97307
LICENSED
PROFESSIONAL ENGINEER
4/5/2024

STARBUCKS BEE CAVE
14211 STATE HWY 71, BEE CAVE, TEXAS 78738

FINAL PLAT
SHEET 2 OF 2

REVISIONS/CORRECTIONS

NO.	DATE	DESCRIPTION	BY

811 Know what's below. Call before you dig.

CAUTION!
IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

FOR CITY USE ONLY:

PROJECT NUMBER 00323-001
DATE: 4/5/2024
DESIGNED: KKE
CHECKED: JTW

SHEET NO. 3 OF 41

23-789-SNPS

CITY OF BEE CAVE STANDARD CONSTRUCTION NOTES - ADOPTED JUNE 24, 2022

GENERAL NOTES

1. THE CONTRACTOR SHALL VERIFY ALL DEPTHS AND LOCATIONS OF EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION. ANY DISCREPANCIES WITH CONSTRUCTION PLANS FOUND IN THE FIELD SHALL BE BROUGHT IMMEDIATELY TO THE ATTENTION OF THE ENGINEER.
2. THE CONTRACTOR SHALL CONTACT THE TEXAS EXCAVATION SYSTEM AT 1-800-344-8377 FOR EXISTING UTILITY LOCATIONS 48 HOURS PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES THAT ARE TO BE EXTENDED, TIED TO, CROSSED, OR ALTERED; OR SUBJECT TO DAMAGE/INCONVENIENCE BY THE CONSTRUCTION OPERATIONS.
3. CONTACT THE AUTHORITY HAVING JURISDICTION (WTCPUA/WCID17) FOR EXISTING WATER AND WASTEWATER LOCATIONS 48 HOURS PRIOR TO CONSTRUCTION.
4. ANY CHANGES OR REVISIONS TO THESE PLANS MUST FIRST BE SUBMITTED TO THE CITY BY THE DESIGN ENGINEER FOR REVIEW AND WRITTEN APPROVAL PRIOR TO CONSTRUCTION OF THE REVISION. THE CITY ENGINEER MAY ALLOW FIELD ADJUSTMENTS WITHOUT FORMAL APPROVAL OF A CORRECTION, ON A CASE BY CASE BASIS, WITH THOSE CHANGES TO BE REFLECTED ON THE RECORD DRAWINGS
5. A TRAFFIC CONTROL PLAN, IN ACCORDANCE WITH THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, SHALL BE SUBMITTED TO THE CITY FOR REVIEW AND APPROVAL PRIOR TO ANY PARTIAL OR COMPLETE ROADWAY CLOSURES. TRAFFIC CONTROL PLANS SHALL BE SITE SPECIFIC AND SEALED BY A REGISTERED PROFESSIONAL ENGINEER. LANE CLOSURES ON ARTERIALS AND ANY FULL ROAD CLOSURES REQUIRE MESSAGE BOARDS NOTIFYING THE PUBLIC ONE WEEK PRIOR TO THE CLOSURE.
6. NO WORK IS TO BE PERFORMED BETWEEN THE HOURS OF 7:00 P.M. AND 7:00 A.M PER THE CITY'S NOISE ORDINANCE. REQUESTS FOR EXCEPTIONS TO THE NOISE ORDINANCE MUST BE MADE IN WRITING TO THE CITY MANAGER.
7. CONTACT THE CITY ENGINEERING STAFF (512-767-6675) AT LEAST 4 DAYS PRIOR TO WORK TO SCHEDULE ANY INSPECTIONS ON WEEKENDS OR CITY HOLIDAYS.
8. NO STREET LIGHTS OR SIGNS OF ANY KIND ARE TO BE PLACED WITHIN ANY SIDEWALKS.
9. NO BLASTING IS ALLOWED.
10. ANY EXISTING UTILITIES, PAVEMENT, CURBS, SIDEWALKS, STRUCTURES, TREES, ETC., THAT ARE DAMAGED OR REMOVED SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT NO COST TO THE OWNER.
11. THE CONTRACTOR SHALL GIVE THE CITY OF BEE CAVE 48 HOURS NOTICE BEFORE BEGINNING EACH PHASE OF CONSTRUCTION. CONTACT THE PLANNING & DEVELOPMENT DEPARTMENT AT 512-767-6675.
12. A PRE-CONSTRUCTION CONFERENCE SHALL BE HELD WITH THE CONTRACTOR, DESIGN ENGINEER/PERMIT APPLICANT AND THE CITY OF BEE CAVE REPRESENTATIVES PRIOR TO INSTALLATION OF EROSION/SEDIMENTATION CONTROLS AND TREE PROTECTION MEASURES AND PRIOR TO BEGINNING ANY WORK. THE CONTRACTOR SHALL NOTIFY THE CITY OF BEE CAVE ENGINEERING STAFF AT LEAST THREE (3) DAYS PRIOR TO THE MEETING DATE. FOR PROJECT IN THE ETJ, THE PRE-CONSTRUCTION MEETING MUST BE SCHEDULED THROUGH TRAVIS COUNTY AND COORDINATED WITH THE CITY TO CONDUCT A SIMULTANEOUS CITY/COUNTY PRE-CONSTRUCTION MEETING. THE APPLICANT IS RESPONSIBLE FOR COORDINATING/SCHEDULING ATTENDANCE OF REPRESENTATIVES FROM THE UTILITY AND FIRE AUTHORITY HAVING JURISDICTION.
13. THE CONTRACTOR AND ENGINEER SHALL KEEP ACCURATE RECORDS OF ALL CONSTRUCTION THAT DEVIATES FROM THE PLANS. THE ENGINEER SHALL FURNISH THE CITY OF BEE CAVE
14. ACCURATE "RECORD DRAWINGS" FOLLOWING THE COMPLETION OF ALL CONSTRUCTION. THESE "RECORD DRAWINGS" SHALL MEET THE SATISFACTION OF THE ENGINEERING DEPARTMENTS PRIOR TO FINAL ACCEPTANCE
15. WHEN CONSTRUCTION IS BEING CARRIED OUT WITHIN EASEMENTS, THE CONTRACTOR SHALL CONFINE HIS WORK TO WITHIN THE PERMANENT AND TEMPORARY EASEMENTS. PRIOR TO ACCEPTANCE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL TRASH AND DEBRIS WITHIN THE PERMANENT EASEMENTS AND PROVIDE REVEGETATION IN ACCORDANCE WITH CITY STANDARDS. CLEANUP SHALL BE TO THE SATISFACTION OF THE ENGINEER.
16. CONTRACTOR TO LOCATE, PROTECT, AND MAINTAIN BENCHMARKS, MONUMENTS, CONTROL POINTS AND PROJECT ENGINEERING REFERENCE POINTS. RE-ESTABLISH DISTURBED OR DESTROYED ITEMS BY REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF TEXAS, AT NO ADDITIONAL COST TO OWNER.
17. THE CONTRACTOR SHALL PROTECT ALL EXISTING FENCES. IN THE EVENT THAT A FENCE MUST BE REMOVED, THE CONTRACTOR SHALL REPLACE SAID FENCE OR PORTION THEREOF WITH THE SAME TYPE OF FENCING TO A QUALITY OF EQUAL OR BETTER THAN THE ORIGINAL FENCE.
18. ALL CONSTRUCTION OPERATIONS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH APPLICABLE REGULATIONS OF THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA). OSHA STANDARDS MAY BE PURCHASED FROM THE GOVERNMENT PRINTING OFFICE; INFORMATION AND RELATED REFERENCE MATERIALS MAY BE PURCHASED FROM OSHA, 1033 LA POSADA DR. SUITE 375, AUSTIN, TEXAS 78752-3832.
19. ALL MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THE SCOPE OF THIS CONTRACT WHERE NOT SPECIFICALLY COVERED IN THE PROJECT SPECIFICATIONS SHALL CONFORM TO ALL CITY OF AUSTIN DETAILS AND STANDARD SPECIFICATIONS IN ACCORDANCE WITH THE CITY OF BEE CAVE ENGINEERING TECHNICAL MANUAL.
20. PROJECT SPECIFICATIONS TAKE PRECEDENCE OVER PLANS AND SPECIAL CONDITIONS GOVERN OVER TECHNICAL SPECIFICATIONS.
21. HOT MIX ASPHALTIC CONCRETE PAVEMENT SHALL BE MINIMUM THICKNESS OF 2 INCHES WITH NO RECYCLED ASPHALT SHINGLES CONTENT.
22. CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY QUESTIONS THAT MAY RISE CONCERNING THE INTENT, PLACEMENT, OR LIMITS OF DIMENSIONS OR GRADES NECESSARY FOR THE CONSTRUCTION OF THIS PROJECT.
23. CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ALL PERMITS, TESTS, APPROVALS AND ACCEPTANCES REQUIRED TO COMPLETE CONSTRUCTION OF THIS PROJECT.
24. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COORDINATION BETWEEN HIMSELF AND OTHER CONTRACTORS AND UTILITIES IN THE VICINITY OF THE PROJECT. THIS INCLUDES GAS, WATER, WASTEWATER, ELECTRICAL, TELEPHONE, CABLE TV AND STREET DRAINAGE WORK. ONCE THE CONTRACTOR BECOMES AWARE OF A POSSIBLE CONFLICT, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE ENGINEER WITHIN TWENTY-FOUR (24) HOURS.
25. THE CONTRACTOR MUST OBTAIN A CONSTRUCTION WATER METER FOR ALL WATER USED DURING CONSTRUCTION. A COPY OF THIS PERMIT MUST BE CARRIED AT ALL TIMES BY ALL WHO USE WATER.
26. CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING ROADS AND DRIVES ADJACENT TO AND NEAR THE SITE FREE FROM SOIL, SEDIMENT AND DEBRIS. CONTRACTOR WILL NOT REMOVE SOIL, SEDIMENT OR DEBRIS FROM ANY AREA OR VEHICLE BY MEANS OF WATER. ONLY SHOVELING AND SWEEPING WILL BE ALLOWED. CONTRACTOR WILL BE RESPONSIBLE FOR DUST CONTROL FROM THE SITE.
27. THE CITY OF BEE CAVE SHALL NOT BE PETITIONED FOR ACCEPTANCE UNTIL ALL NECESSARY EASEMENT DOCUMENTS HAVE BEEN SIGNED AND RECORDED.

CITY OF BEE CAVE STANDARD CONSTRUCTION NOTES - ADOPTED JUNE 24, 2022

28. AN ENGINEER'S CONCURRENCE LETTER AND RECORD DRAWINGS SHALL BE SUBMITTED TO THE CITY ENGINEER PRIOR TO CONDUCTING THE FINAL CITY INSPECTION. THE ENGINEER AND CONTRACTOR SHALL VERIFY THAT ALL FINAL REVISIONS AND CHANGES HAVE BEEN MADE TO THE DIGITAL COPY PRIOR TO CITY SUBMITTAL. RECORD CONSTRUCTION DRAWINGS, INCLUDING ROADWAY AND ALL UTILITIES SHALL BE PROVIDED TO THE CITY IN DIGITAL FORMAT AS AUTOCAD ".DWG" FILES, MICROSTATION ".DGN" FILES OR ESRI ".SHP" FILES. LINE WEIGHTS, LINE TYPES AND TEXT SIZE SHALL BE SUCH THAT IF HALF-SIZE PRINTS (11"X17") WERE PRODUCED, THE PLANS WOULD STILL BE LEGIBLE. ALL REQUIRED DIGITAL FILES SHALL CONTAIN A MINIMUM OF TWO CONTROL POINTS REFERENCED TO THE STATE PLANE GRID COORDINATE SYSTEM – TEXAS CENTRAL ZONE (4203), IN US SURVEY FEET AND SHALL INCLUDE ROTATION INFORMATION AND SCALE FACTOR REQUIRED TO REDUCE SURFACE COORDINATES TO GRID COORDINATES IN US SURVEY FEET

STREET AND DRAINAGE NOTES

1. ALL SIDEWALKS SHALL COMPLY WITH THE AMERICANS WITH DISABILITIES ACT. THE CITY OF BEE CAVE HAS NOT REVIEWED THESE PLANS FOR COMPLIANCE WITH THE AMERICANS WITH DISABILITIES ACT, OR ANY OTHER ACCESSIBILITY LEGISLATION, AND DOES NOT WARRANTY OR APPROVE THESE PLANS FOR ANY ACCESSIBILITY STANDARDS.
2. PRIOR TO ACCEPTANCE THE ENGINEER SHALL SUBMIT DOCUMENTATION THAT THE IMPROVEMENTS WERE INSPECTED BY TDLR OR A REGISTERED ACCESSIBLITY SPECIALIST (RAS) AND ARE IN COMPLIANCE WITH THE REQUIREMENTS OF THE TABA.
3. CONTRACTOR SHALL PROVIDE QUALITY TESTING FOR ALL INFRASTRUCTURES TO BE ACCEPTED AND MAINTAINED BY THE CITY OF BEE CAVE AFTER COMPLETION. THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEER AT 512-7697-6675 NO LESS THAN 48 HOURS PRIOR TO ANY TESTING.
4. BACKFILL BEHIND THE CURB SHALL BE COMPACTED TO OBTAIN A MINIMUM OF 95% MAXIMUM DENSITY TO WITHIN 6" OF TOP OF CURB. MATERIAL USED SHALL BE PRIMARILY GRANULAR
5. WITH NO ROCKS LARGER THAN 6" IN THE GREATEST DIMENSION. THE REMAINING 6" SHALL BE CLEAN TOPSOIL FREE FROM ALL CLODS AND SUITABLE FOR SUSTAINING PLANT LIFE
6. A MINIMUM OF 6" OF TOPSOIL SHALL BE PLACED BETWEEN THE CURB AND RIGHT-OF-WAY AND IN ALL DRAINAGE CHANNELS EXCEPT CHANNELS CUT IN STABLE ROCK.
7. DEPTH OF COVER FOR ALL CROSSINGS UNDER PAVEMENT, INCLUDING GAS, ELECTRIC TELEPHONE, CABLE TV, ETC., SHALL BE A MINIMUM OF 36" BELOW SUBGRADE.
8. STREET RIGHT-OF-WAY SHALL BE GRADED AT A SLOPE OF ¼" PER FOOT TOWARD THE CURB UNLESS OTHERWISE INDICATED. HOWEVER, IN NO CASE SHALL THE WIDTH OF RIGHT-OFWAY AT ¼" PER FOOT SLOPE BE LESS THAN 10 FEET UNLESS A SPECIFIC REQUEST FOR AN ALTERNATE GRADING SCHEME IS MADE TO AND ACCEPTED BY THE CITY OF BEE CAVE ENGINEERING STAFF.
9. BARRICADES BUILT TO THE CITY OF BEE CAVE STANDARDS SHALL BE ERECTED ON ALL DEAD-END STREETS AND AS NECESSARY DURING CONSTRUCTION TO MAINTAIN JOB AND PUBLIC SAFETY.
10. ALL REINFORCED CONCRETE PIPE SHALL BE MINIMUM CLASS III OF TONGUE AND GROOVE OR O-RING JOINT DESIGN.
11. THE CONTRACTOR IS TO NOTIFY THE ENGINEERING STAFF 48 HOURS PRIOR TO THE FOLLOWING TESTING: PROOF ROLLING SUB-GRADE AND EVERY LIFT OF ROADWAY EMBANKMENT, IN-PLACE DENSITY TESTING OF EVERY BASE COURSE, AND ASPHALT CORES. ALL OF THIS TESTING MUST BE WITNESSED BY A CITY OF BEE CAVE REPRESENTATIVE UNLESS OTHERWISE INSTRUCTED BY THE CITY ENGINEER.
12. THE CONTRACTOR MUST PROVIDE A PNEUMATIC TRUCK PER TXDOT SPEC FOR PROOF ROLLING.
13. ALL STRIPING, WITH THE EXCEPTION OF STOP BARS, CROSS WALKS, WORDS AND ARROWS, IS TO BE TYPE II (WATER BASED). STOP BARS, CROSS WALKS, WORDS AND ARROWS REQUIRE TYPE I THERMOPLASTIC.
14. MANHOLE FRAMES, COVERS, VALVES, CLEAN-OUTS, ETC. SHALL BE RAISED TO GRADE PRIOR TO FINAL PAVEMENT CONSTRUCTION.
15. CONTRACTOR SHALL NOTIFY THE CITY ENGINEER AT LEAST 48 HOURS PRIOR TO THE INSTALLATION OF ANY DRAINAGE FACILITY WITHIN A DRAINAGE EASEMENT OR STREET ROW.
16. A STOP BAR SHALL BE PLACED AT ALL STOP SIGN LOCATIONS.
17. A MINIMUM OF SEVEN DAYS OF CURE TIME IS REQUIRED FOR HMAC PRIOR TO THE INTRODUCTION OF PUBLIC VEHICULAR TRAFFIC TO ANY STREETS.
18. THE GEOTECHNICAL ENGINEER SHALL INSPECT THE SUBGRADE FOR COMPLIANCE WITH THE DESIGN ASSUMPTIONS MADE DURING PREPARATION OF THE SOILS REPORT. ANY ADJUSTMENTS THAT ARE REQUIRED SHALL BE MADE THROUGH REVISIONS OF THE CONSTRUCTION PLANS.
19. GEOTECHNICAL INVESTIGATION INFORMATION AND PAVEMENT RECOMMENDATIONS WERE PROVIDED BY PSI GEOTECHNICAL (PSI PROJECT NO. 03031690). PAVEMENT RECOMMENDATIONS ARE AS FOLLOWS:

MATERIAL	OPTION 1		OPTION 2	
TRAFFIC TYPE	LIGHT	HEAVY	LIGHT	HEAVY
PORTLAND CEMENT CONCRETE	5"	6 1/2"	5"	6 1/2"
LOW PI MATERIAL (PI<25)	-	-	-	-
LIME STABILIZED SUBGRADE	8"		-	
COMPACTED SUBGRADE	-		8"	

TRENCH SAFETY NOTES

1. TRENCH SAFETY SYSTEMS TO BE UTILIZED FOR THIS PROJECT ARE DESCRIBED IN ITEM 509S "TRENCH SAFETY SYSTEMS" OF THE CITY OF AUSTIN STANDARD SPECIFICATIONS AND SHALL BE IN ACCORDANCE WITH THE LAWS OF THE STATE OF TEXAS AND THE U.S. OCCUPATION SAFETY AND HEALTH ADMINISTRATION REGULATIONS.

GRADING NOTES

1. POSITIVE DRAINAGE SHALL BE MAINTAINED ON ALL SURFACE AREAS WITHIN THE SCOPE OF THIS PROJECT. CONTRACTOR SHOULD TAKE PRECAUTIONS NOT TO ALLOW ANY PONDING OF WATER.
2. THE CONTRACTOR SHALL CONSTRUCT EARTHEN EMBANKMENTS WITH SLOPES NO STEEPER THAN 3:1 AND COMPACT SOIL TO 95% OF MAXIMUM DENSITY IN ACCORDANCE WITH THE CITY OF AUSTIN STANDARD SPECIFICATIONS.
3. AREAS OF SOIL DISTURBANCE ARE LIMITED TO GRADING AND IMPROVEMENTS SHOWN. ALL OTHER AREAS WILL NOT BE DISTURBED.

BENCHMARK NOTES

BM1 MAG NAIL WITH ALUMINUM WASHER STAMPED "SURVTEX"

ELEV : 940.14

APPENDIX E-3: ADOPTED JUNE 28, 2022
CITY OF BEE CAVE STANDARD SEQUENCE OF CONSTRUCTION

A. TEMPORARY EROSION AND SEDIMENTATION CONTROLS ARE TO BE INSTALLED AS INDICATED ON THE APPROVED SITE PLAN OR SUBDIVISION CONSTRUCTION PLAN AND IN ACCORDANCE WITH THE EROSION SEDIMENTATION CONTROL PLAN (ESC) AND STORM WATER POLLUTION PREVENTION PLAN (SWPPP) THAT IS REQUIRED TO BE POSTED ON THE SITE. INSTALL TREE PROTECTION, INITIATE TREE MITIGATION MEASURES AND CONDUCT "PRE - CONSTRUCTION" TREE FERTILIZATION (IF APPLICABLE).

B. THE ENVIRONMENTAL PROJECT MANAGER OR SITE SUPERVISOR MUST CONTACT THE PLANNING & DEVELOPMENT DEPARTMENT AT 512-767-6675, 72 HOURS PRIOR TO THE SCHEDULED DATE OF THE REQUIRED ON-SITE PRECONSTRUCTION MEETING.

C. THE ENVIRONMENTAL PROJECT MANAGER, AND/OR SITE SUPERVISOR, AND/OR DESIGNATED RESPONSIBLE PARTY, AND THE GENERAL CONTRACTOR WILL FOLLOW THE EROSION SEDIMENTATION CONTROL PLAN (ESC) AND 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.

D. 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 MUST CONSIST OF A SUMP PIT OUTLET AND AN EMERGENCY SPILLWAY MEETING THE REQUIREMENTS OF THE DRAINAGE CRITERIA MANUAL AND/OR THE ENVIRONMENTAL CRITERIA MANUAL, AS REQUIRED. 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).

E. TEMPORARY EROSION AND SEDIMENTATION CONTROLS WILL BE INSPECTED AND MAINTAINED IN ACCORDANCE WITH THE EROSION SEDIMENTATION CONTROL PLAN (ESC) AND STORM WATER POLLUTION PREVENTION PLAN (SWPPP) POSTED ON THE SITE.

F. BEGIN SITE CLEARING/CONSTRUCTION (OR DEMOLITION) ACTIVITIES.

G. PERMANENT WATER QUALITY PONDS OR CONTROLS WILL BE CLEANED OUT AND FILTER MEDIA WILL BE INSTALLED PRIORTO/CONCURRENTLY WITH REVEGETATION OF SITE.

H. COMPLETE CONSTRUCTION AND START REVEGETATION OF THE SITE AND INSTALLATION OF LANDSCAPING.

I. UPON COMPLETION OF THE SITE CONSTRUCTION AND REVEGETATION OF A PROJECT SITE, THE DESIGN ENGINEER SHALL SUBMIT AN ENGINEER'S LETTER OF CONCURRENCE BEARING THE ENGINEER'S SEAL, SIGNATURE, AND DATE TO THE CITY ENGINEER INDICATING THAT CONSTRUCTION, INCLUDING REVEGETATION, IS COMPLETE AND IN SUBSTANTIAL COMPLIANCE WITH THE APPROVED PLANS. AFTER RECEIVING THIS LETTER, A FINAL INSPECTION WILL BE SCHEDULED BY THE APPROPRIATE CITY ENGINEERING STAFF.

J. UPON COMPLETION OF LANDSCAPE INSTALLATION OF A PROJECT SITE, THE LANDSCAPE ARCHITECT SHALL SUBMIT A LETTER OF CONCURRENCE TO THE CITY ENGINEER INDICATING THAT THE REQUIRED LANDSCAPING IS COMPLETE AND IN SUBSTANTIAL CONFORMITY WITH THE APPROVED PLANS. AFTER RECEIVING THIS LETTER, A FINAL INSPECTION WILL BE SCHEDULED BY THE APPROPRIATE CITY ENGINEERING STAFF.

K. AFTER A FINAL INSPECTION HAS BEEN CONDUCTED BY THE CITY ENGINEER AND WITH APPROVAL FROM THE CITY ENGINEER,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.

Know what's below. Call before you dig.

CAUTION!
IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

FOR CITY USE ONLY:

MillerGRAY
Consulting • Engineering • Infrastructure
7320 N. MoPac Expressway, Suite 203
Austin, Texas 78731
Phone (512) 861-5300
www.miller-gray.com
TBPE FIRM REG. NO. F-16302

STATE OF TEXAS
J. TRAVIS WILSON
97307
LICENSED PROFESSIONAL ENGINEER
4/5/2024

P:\00323 Investor\001 Starbucks Bee Cave\05_CAD\00323-00 tgns.dwg 4/5/2024 10:12 AM

STARBUCKS BEE CAVE
14211 STATE HWY 71, BEE CAVE, TEXAS 78738

CITY OF BEE CAVE NOTES
1 OF 2

REVISIONS/CORRECTIONS

NO.	DATE	DESCRIPTION	BY

PROJECT NUMBER 00323-001
DATE: 4/5/2024
DESIGNED: KKE
CHECKED: JTW

SHEET NO.
4 OF 41

23-789-SNPS

APPENDIX E-1: ADOPTED JUNE 28, 2022
CITY OF BEE CAVE EROSION CONTROL NOTES

1. THE CONTRACTOR SHALL INSTALL EROSION/SEDIMENTATION CONTROLS, TREE/NATURAL AREA PROTECTIVE FENCING, AND CONDUCT "PRE-CONSTRUCTION" TREE FERTILIZATION (IF APPLICABLE) PRIOR TO ANY SITE PREPARATION WORK (CLEARING, GRUBBING OR EXCAVATION).

2. THE PLACEMENT OF EROSION/SEDIMENTATION CONTROLS SHALL BE IN ACCORDANCE WITH THE ENVIRONMENTAL CRITERIA MANUAL AND THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN. THE BEE CAVE ESC PLAN SHALL BE CONSULTED AND USED AS THE BASIS FOR A TPDES REQUIRED SWPPP. IF A SWPPP IS REQUIRED, IT SHALL BE AVAILABLE FOR REVIEW BY THE CITY OF BEE CAVE ENGINEERING STAFF AT ALL TIMES DURING CONSTRUCTION, INCLUDING AT THE PRE-CONSTRUCTION MEETING. THE CHECKLIST BELOW CONTAINS THE BASIC ELEMENTS THAT SHALL BE REVIEWED FOR PERMIT APPROVAL BY BEE CAVE EV PLAN REVIEWERS AS WELL AS BEE CAVE EV INSPECTORS.

3. THE PLACEMENT OF TREE/NATURAL AREA PROTECTIVE FENCING SHALL BE IN ACCORDANCE WITH THE CITY OF BEE CAVE STANDARD NOTES FOR TREE AND NATURAL AREA PROTECTION AND THE APPROVED GRADING/TREE AND NATURAL AREA PLAN.

4. A PRE-CONSTRUCTION CONFERENCE SHALL BE HELD ON-SITE WITH THE CONTRACTOR, DESIGN ENGINEER/PERMIT APPLICANT AND BEE CAVE ENGINEERING STAFF AFTER INSTALLATION OF THE EROSION/SEDIMENTATION CONTROLS, TREE/NATURAL AREA PROTECTION MEASURES AND "PRE-CONSTRUCTION" TREE FERTILIZATION (IF APPLICABLE) PRIOR TO BEGINNING ANY SITE PREPARATION WORK. THE OWNER OR OWNER'S REPRESENTATIVE SHALL NOTIFY THE PLANNING & DEVELOPMENT DEPARTMENT, 512-757-6675, AT LEAST THREE DAYS PRIOR TO THE MEETING DATE. BEE CAVE APPROVED ESC PLAN AND TPDES SWPPP (IF REQUIRED) SHOULD BE REVIEWED BY THE ENGINEERING STAFF AT THIS TIME.

5. ANY MAJOR VARIATION IN MATERIALS OR LOCATIONS OF CONTROLS OR FENCES FROM THOSE SHOWN ON THE APPROVED PLANS WILL REQUIRE A REVISION AND MUST BE APPROVED BY THE REVIEWING ENGINEER. MAJOR REVISIONS MUST BE APPROVED BY AUTHORIZED BEE CAVE STAFF. MINOR CHANGES TO BE MADE AS FIELD REVISIONS TO THE EROSION AND SEDIMENTATION CONTROL PLAN MAY BE REQUIRED BY THE ENGINEERING STAFF DURING THE COURSE OF CONSTRUCTION TO CORRECT CONTROL INADEQUACIES.

6. THE CONTRACTOR IS REQUIRED TO PROVIDE A CERTIFIED INSPECTOR THAT IS EITHER A LICENSED ENGINEER (OR PERSON DIRECTLY SUPERVISED BY THE LICENSED ENGINEER) OR CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC OR CPESC - IT), CERTIFIED EROSION, SEDIMENT AND STORMWATER - INSPECTOR (CESSWI OR CESSWI - IT) OR CERTIFIED INSPECTOR OF SEDIMENTATION AND EROSION CONTROLS (CISEC OR CISEC - IT) CERTIFICATION TO INSPECT THE CONTROLS AND FENCES AT WEEKLY OR BI-WEEKLY INTERVALS AND AFTER ONE-HALF (½) INCH OR GREATER 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 OR ONE-THIRD (⅓) OF THE INSTALLED HEIGHT OF THE CONTROL WHICHEVER IS LESS.

7. PRIOR TO FINAL ACCEPTANCE BY THE CITY, 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.

8. ALL WORK MUST STOP IF A VOID IN THE ROCK SUBSTRATE IS DISCOVERED WHICH IS; ONE SQUARE FOOT IN TOTAL AREA; BLOWS AIR FROM WITHIN THE SUBSTRATE AND/OR CONSISTENTLY RECEIVES WATER DURING ANY RAIN EVENT. AT THIS TIME IT IS THE RESPONSIBILITY OF THE PROJECT MANAGER TO IMMEDIATELY CONTACT A CITY OF BEE CAVE FOR FURTHER INVESTIGATION. IN ADDITION, IF THE PROJECT SITE IS LOCATED WITHIN THE EDWARDS AQUIFER, THE PROJECT MANAGER MUST NOTIFY THE TRAVIS COUNTY BALCONES CANYONLANDS CONSERVATION PRESERVE (BCCP) BY EMAIL AT BCCP@TRAVISCOUNTYTX.GOV. CONSTRUCTION ACTIVITIES WITHIN 50 FEET OF THE VOID MUST STOP.

9. TEMPORARY AND PERMANENT EROSION CONTROL: ALL DISTURBED AREAS SHALL BE RESTORED AS NOTED BELOW:

   A. ALL DISTURBED AREAS TO BE REVEGETATED ARE REQUIRED TO PLACE A MINIMUM OF SIX (6) INCHES OF TOPSOIL [SEE CITY OF AUSTIN STANDARD SPECIFICATION ITEM NO. 601S.3(A)]. DO NOT ADD TOPSOIL WITHIN THE CRITICAL ROOT ZONE OF EXISTING TREES.

   - TOPSOIL SALVAGED FROM THE EXISTING SITE IS ENCOURAGED FOR USE, BUT IT SHOULD MEET THE STANDARDS SET FORTH IN 601S.

   AN OWNER/ENGINEER MAY PROPOSE USE OF ONSITE SALVAGED TOPSOIL WHICH DOES NOT MEET THE CRITERIA OF CITY OF AUSTIN STANDARD SPECIFICATION 601S BY PROVIDING A SOIL ANALYSIS AND A WRITTEN STATEMENT FROM A QUALIFIED PROFESSIONAL IN SOILS, LANDSCAPE ARCHITECTURE, OR AGRONOMY INDICATING THE ONSITE TOPSOIL WILL PROVIDE AN EQUIVALENT GROWTH MEDIA AND SPECIFYING WHAT, IF ANY, SOIL AMENDMENTS ARE REQUIRED.

   - SOIL AMENDMENTS SHALL BE WORKED INTO THE EXISTING ONSITE TOPSOIL WITH A DISC OR TILLER TO CREATE A WELL-BLENDED MATERIAL.

   THE VEGETATIVE STABILIZATION OF AREAS DISTURBED BY CONSTRUCTION SHALL BE AS FOLLOWS:

TEMPORARY VEGETATIVE STABILIZATION:

A. FROM SEPTEMBER 15 TO MARCH 1, SEEDING SHALL BE WITH OR INCLUDE A COOL SEASON COVER CROP: (WESTERN WHEATGRASS (PASCOPYRUM SMITHII) AT 5.6 POUNDS PER ACRE, OATS (AVENA SATIVA) AT 4.0 POUNDS PER ACRE, CEREAL RYE GRAIN (SECALE CEREALE) AT 45 POUNDS PER ACRE. CONTRACTOR MUST ENSURE THAT ANY SEED APPLICATION REQUIRING A COOL SEASON COVER CROP DOES NOT UTILIZE ANNUAL RYEGRASS (LOLIUM MULTIFLORUM) OR PERENNIAL RYEGRASS (LOLIUM PERENNE). COOL SEASON COVER CROPS ARE NOT PERMANENT EROSION CONTROL.

B. FROM MARCH 2 TO SEPTEMBER 14, SEEDING SHALL BE WITH HULLED BERMUDA AT A RATE OF 45 POUNDS PER ACRE OR A NATIVE PLANT SEED MIX CONFORMING TO ITEM 604S OR 609S.

   1. FERTILIZER USE SHALL FOLLOW THE RECOMMENDATION OF A SOIL TEST. SEE ITEM 606S, FERTILIZER. APPLICATIONS OF FERTILIZER (AND PESTICIDE) ON CITY-OWNED AND MANAGED PROPERTY REQUIRES THE YEARLY SUBMITTAL OF A PESTICIDE AND FERTILIZER APPLICATION RECORD, ALONG WITH A CURRENT COPY OF THE APPLICATOR'S LICENSE. FOR CURRENT COPY OF THE RECORD TEMPLATE CONTACT THE CITY OF AUSTIN'S IPM COORDINATOR.

   2. HYDROMULCH SHALL COMPLY WITH TABLE 2, BELOW.

   3. TEMPORARY EROSION CONTROL SHALL BE ACCEPTABLE WHEN THE GRASS HAS GROWN AT LEAST IH INCHES HIGH WITH A MINIMUM OF 95% TOTAL COVERAGE SO THAT ALL AREAS OF A SITE THAT RELY ON VEGETATION FOR TEMPORARY STABILIZATION ARE UNIFORMLY VEGETATED, AND PROVIDED THERE ARE NO BARE SPOTS LARGER THAN 10 SQUARE FEET.

   4. WHEN REQUIRED, NATIVE PLANT SEEDING SHALL COMPLY WITH REQUIREMENTS OF THE CITY OF AUSTIN ENVIRONMENTAL CRITERIA MANUAL, AND STANDARD SPECIFICATION 604S OR 609S

APPENDIX E-1: ADOPTED JUNE 28, 2022
CITY OF BEE CAVE EROSION CONTROL NOTES

TABLE 1: HYDROMULCHING FOR TEMPORARY VEGETATIVE STABILIZATION

MATERIAL	DESCRIPTION	LONGEVITY	TYPICAL APPLICATIONS	APPLICATION RATES
100% OR ANY BLEND OF WOOD, CELLULOSE, STRAW, AND/OR COTTON PLANT MATERIAL (EXCEPT NO MULCH SHALL EXCEED 30% PAPER)	70% OR GREATER WOOD/STRAW 30% OR LESS PAPER OR NATURAL FIBERS	0-3 MONTHS	MODERATE SLOPES; FROM FLAT TO 3:1	1,500 TO 2,000 LBS PER ACRE

PERMANENT VEGETATIVE STABILIZATION:

A. FROM SEPTEMBER 15 TO MARCH 1, SEEDING IS CONSIDERED TO BE TEMPORARY STABILIZATION ONLY. IF COOL SEASON COVER CROPS EXIST WHERE PERMANENT VEGETATIVE STABILIZATION IS DESIRED, THE GRASSES SHALL BE MOWED TO A HEIGHT OF LESS THAN ONE-HALF (½) INCH AND THE AREA SHALL BE RE-SEEDED IN ACCORDANCE WITH TABLE 2 BELOW. ALTERNATIVELY, THE COOL SEASON COVER CROP CAN BE MIXED WITH BERMUDAGRASS OR NATIVE SEED AND INSTALLED TOGETHER, UNDERSTANDING THAT GERMINATION OF WARM-SEASON SEED TYPICALLY REQUIRES SOIL TEMPERATURES OF 60 TO 70 DEGREES.

B. FROM MARCH 2 TO SEPTEMBER 14, SEEDING SHALL BE WITH HULLED BERMUDA AT A RATE OF 45 POUNDS PER ACRE WITH A PURITY OF 95% AND A MINIMUM PURE LIVE SEED (PLS) OF 0.83. BERMUDA GRASS IS A WARM SEASON GRASS AND IS CONSIDERED PERMANENT EROSION CONTROL. PERMANENT VEGETATIVE STABILIZATION CAN ALSO BE ACCOMPLISHED WITH A NATIVE PLANT SEED MIX CONFORMING TO ITEM 604S OR 609S.

   1. FERTILIZER USE SHALL FOLLOW THE RECOMMENDATION OF A SOIL TEST. SEE ITEM 606S, FERTILIZER. APPLICATIONS OF FERTILIZER (AND PESTICIDE) ON CITY-OWNED AND MANAGED PROPERTY REQUIRES THE YEARLY SUBMITTAL OF A PESTICIDE AND FERTILIZER APPLICATION RECORD, ALONG WITH A CURRENT COPY OF THE APPLICATOR'S LICENSE. FOR CURRENT COPY OF THE RECORD TEMPLATE CONTACT THE CITY OF BEE CAVE ENGINEERING STAFF.

   2. HYDROMULCH SHALL COMPLY WITH TABLE 2, BELOW.

   3. WATER THE SEEDED AREAS IMMEDIATELY AFTER INSTALLATION TO ACHIEVE GERMINATION AND A HEALTHY STAND OF PLANTS THAT CAN ULTIMATELY SURVIVE WITHOUT SUPPLEMENTAL WATER. APPLY THE WATER UNIFORMLY TO THE PLANTED AREAS WITHOUT CAUSING DISPLACEMENT OR EROSION OF THE MATERIALS OR SOIL. MAINTAIN THE SEEDBED IN A MOIST CONDITION FAVORABLE FOR PLANT GROWTH. ALL WATERING SHALL COMPLY WITH CITY CODE, AT RATES AND FREQUENCIES DETERMINED BY A LICENSED IRRIGATOR OR OTHER QUALIFIED PROFESSIONAL, AND AS ALLOWED BY THE WTCPUA/WCID NO. 17 AND CURRENT WATER RESTRICTIONS AND WATER CONSERVATION INITIATIVES.

   4. PERMANENT EROSION CONTROL SHALL BE ACCEPTABLE WHEN THE GRASS HAS GROWN AT LEAST 1½ INCHES HIGH WITH A MINIMUM OF 95 PERCENT FOR THE NON-NATIVE MIX, AND 95 PERCENT COVERAGE FOR THE NATIVE MIX SO THAT ALL AREAS OF A SITE THAT RELY ON VEGETATION FOR STABILITY MUST BE UNIFORMLY VEGETATED, AND PROVIDED THERE ARE NO BARE SPOTS LARGER THAN 10 SQUARE FEET.

   5. WHEN REQUIRED, NATIVE PLANT SEEDING SHALL COMPLY WITH REQUIREMENTS OF THE CITY OF BEE CAVE UDC, ENVIRONMENTAL CRITERIA MANUAL, AND CITY OF AUSTIN ITEMS 604S AND 609S.

TABLE 2: HYDROMULCHING FOR PERMANENT VEGETATIVE STABILIZATION

MATERIAL	DESCRIPTION	LONGEVITY	TYPICAL APPLICATIONS	APPLICATION RATES
BONDED FIBER MATRIX (BFM)	80% ORGANIC DEFIBRATED FIBERS			
10% TACKIFIER	6 MONTHS	ON SLOPES UP TO 2:1 AND EROSIVE SOIL CONDITIONS	2500 TO 4000 LBS PER ACRE (SEE MANUFACTURERS RECOMMENDATIONS)	
FIBER REINFORCED MATRIX (FRM)	65% ORGANIC DEFIBRATED FIBERS 25% REINFORCING FIBERS OR LESS 10% TACKIFIER	UP TO 12 MONTHS	ON SLOPES UP TO 1:1 AND EROSIVE SOIL CONDITIONS	3,000 TO 4,500 LBS PER ACRE (SEE MANUFACTURERS RECOMMENDATIONS)

DEVELOPER INFORMATION:

OWNER: INVESTCOR DEVELOPMENT

PHONE: (512) 750-7272

ADDRESS: 3001 RANCH ROAD 620, STE 324

AUSTIN, TX 78738

OWNER'S REPRESENTATIVE RESPONSIBLE FOR PLAN ALTERATIONS:

MILLER GRAY, LLC

PERSON OR FIRM RESPONSIBLE FOR EROSION/SEDIMENTATION CONTROL MAINTENANCE:

CONTRACTOR

PERSON OR FIRM RESPONSIBLE FOR TREE/NATURAL AREA PROTECTION MAINTENANCE:

CONTRACTOR

THE CONTRACTOR SHALL NOT DISPOSE OF SURPLUS EXCAVATED MATERIAL FROM THE SITE WITHOUT NOTIFYING THE PLANNING AND DEVELOPMENT REVIEW DEPARTMENT AT 974-2278 AT LEAST 48 HOURS PRIOR WITH THE LOCATION AND A COPY OF THE PERMIT ISSUED TO RECEIVE THE MATERIAL.

APPENDIX E-2: ADOPTED JUNE 28, 2022
CITY OF BEE CAVE STANDARD NOTES FOR TREE AND NATURAL AREA PROTECTION

A. ALL TREES AND NATURAL AREAS SHOWN ON PLAN TO BE PRESERVED SHALL BE PROTECTED DURING CONSTRUCTION WITH TEMPORARY FENCING.

B. PROTECTIVE FENCES SHALL BE ERECTED ACCORDING TO CITY OF BEE CAVE STANDARDS FOR TREE PROTECTION.

C. PROTECTIVE FENCES SHALL BE INSTALLED PRIOR TO THE START OF ANY SITE PREPARATION WORK (CLEARING, GRUBBING OR GRADING), AND SHALL BE MAINTAINED THROUGHOUT ALL PHASES OF THE CONSTRUCTION PROJECT.

D. EROSION AND SEDIMENTATION CONTROL BARRIERS SHALL BE INSTALLED OR MAINTAINED IN A MANNER WHICH DOES NOT RESULT IN SOIL BUILD- UP WITHIN TREE DRIP LINES.

E. PROTECTIVE FENCES SHALL SURROUND THE TREES OR GROUP OF TREES, AND WILL BE LOCATED AT THE OUTERMOST LIMIT OF BRANCHES (DRIP LINE), FOR NATURAL AREAS, PROTECTIVE FENCES SHALL FOLLOW THE LIMIT OF CONSTRUCTION LINE, IN ORDER TO PREVENT THE FOLLOWING:

   1. SOIL COMPACTION IN THE ROOT ZONE AREA RESULTING FROM VEHICULAR TRAFFIC OR STORAGE OF EQUIPMENT OR MATERIALS;
   2. ROOT ZONE DISTURBANCES DUE TO GRADE CHANGES (GREATER THAN 6 INCHES CUT OR FILL), OR TRENCHING NOT REVIEWEDAND AUTHORIZED BY THE CITY;
   3. WOUNDS TO EXPOSED ROOTS, TRUNK OR LIMBS BY MECHANICAL EQUIPMENT;
   4. OTHER ACTIVITIES DETRIMENTAL TO TREES SUCH AS CHEMICAL STORAGE, CEMENT TRUCK CLEANING, AND FIRES.

F. EXCEPTIONS TO INSTALLING FENCES AT TREE DRIP LINES MAY BE PERMITTED IN THE FOLLOWING CASES:

   1. WHERE THERE IS TO BE AN APPROVED GRADE CHANGE, IMPERMEABLE PAVING SURFACE, TREE WELL, OR OTHER SUCH SITE DEVELOPMENT, ERECT THE FENCE APPROXIMATELY 2 TO 4 FEET BEYOND THE AREA DISTURBED;
   2. WHERE PERMEABLE PAVING IS TO BE INSTALLED WITHIN A TREE'S DRIP LINE, ERECT THE FENCE AT THE OUTER LIMITS OF THE PERMEABLE PAVING AREA (PRIOR TO SITE GRADING SO THAT THIS AREA IS GRADED SEPARATELY PRIOR TO PAVING INSTALLATION TO MINIMIZED ROOT DAMAGE);
   3. WHERE TREES ARE CLOSE TO PROPOSED BUILDINGS, ERECT THE FENCE TO ALLOW 6 TO 10 FEET OF WORK SPACE BETWEENTHE FENCE AND THE BUILDING;
   4. WHERE THERE ARE SEVERE SPACE CONSTRAINTS DUE TO TRACT SIZE, OR OTHER SPECIAL REQUIREMENTS, CONTACT THE CITYAT 512-767-6675 TO DISCUSS ALTERNATIVES.

   SPECIAL NOTE: FOR THE PROTECTION OF NATURAL AREAS, NO EXCEPTIONS TO INSTALLING FENCES AT THE LIMIT OFCONSTRUCTION LINE WILL BE PERMITTED.

G. WHERE ANY OF THE ABOVE EXCEPTIONS RESULT IN A FENCE BEING CLOSER THAN 4 FEET TO A TREE TRUNK, PROTECT THE TRUNK WITH STRAPPED- ON PLANKING TO A HEIGHT OF 8 FT (OR TO THE LIMITS OF LOWER BRANCHING) IN ADDITION TO THE REDUCED FENCING PROVIDED.

H. TREES APPROVED FOR REMOVAL SHALL BE REMOVED IN A MANNER WHICH DOES NOT IMPACT TREES TO BE PRESERVED.

I. ANY ROOTS EXPOSED BY CONSTRUCTION ACTIVITY SHALL BE PRUNED FLUSH WITH THE SOIL. BACKFILL ROOT AREAS WITH GOOD QUALITY TOP SOIL AS SOON AS POSSIBLE. IF EXPOSED ROOT AREAS ARE NOT BACKFILLED WITHIN 2 DAYS, COVER THEM WITH ORGANIC MATERIAL IN A MANNER WHICH REDUCES SOIL TEMPERATURE AND MINIMIZES WATER LOSS DUE TO EVAPORATION.

J. ANY TRENCHING REQUIRED FOR THE INSTALLATION OF LANDSCAPE IRRIGATION SHALL BE PLACED AS FAR FROM EXISTING TREE TRUNKS AS POSSIBLE.

K. NO LANDSCAPE TOPSOIL DRESSING GREATER THAN 4 INCHES SHALL BE PERMITTED WITHIN THE DRIP LINE OF TREES. NO SOIL ISPERMITTED ON THE ROOT FLARE OF ANY TREE.

L. PRUNING TO PROVIDE CLEARANCE FOR STRUCTURES, VEHICULAR TRAFFIC AND EQUIPMENT SHALL TAKE PLACE BEFORE DAMAGEOCCURS (RIPPING OF BRANCHES, ETC.).

M. ALL FINISHED PRUNING SHALL BE DONE ACCORDING TO RECOGNIZED, APPROVED STANDARDS OF THE INDUSTRY (REFERENCE THENATIONAL ARBORIST ASSOCIATION PRUNING STANDARDS FOR SHADE TREES AVAILABLE ON REQUEST FROM THE CITY ARBORIST).

N. DEVIATIONS FROM THE ABOVE NOTES MAY BE CONSIDERED ORDINANCE VIOLATIONS IF THERE IS SUBSTANTIAL NON-COMPLIANCE OR IF A TREE SUSTAINS DAMAGE AS A RESULT.

811 Know what's below. Call before you dig.

CAUTION!
IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

FOR CITY USE ONLY:

MillerGRAY
Consulting • Engineering • Infrastructure
7320 N. MoPac Expressway, Suite 203
Austin, Texas 78731
Phone (512) 861-5300
www.miller-gray.com
TBPE FIRM REG. NO. F-16302

STATE OF TEXAS
J. TRAVIS WILSON
97307
LICENSED PROFESSIONAL ENGINEER
4/5/2024

P:\00323 Investcor\001 Starbucks Bee Cave\05_CAD\00323-00 tgns.dwg 4/5/2024 10:12 AM

STARBUCKS BEE CAVE
14211 STATE HWY 71, BEE CAVE, TEXAS 78738

CITY OF BEE CAVE NOTES
2 OF 2

REVISIONS/CORRECTIONS

NO.	DATE	DESCRIPTION	BY

PROJECT NUMBER 00323-001
DATE: 4/5/2024
DESIGNED: KKE
CHECKED: JTW

SHEET NO.
5 OF 41

23-789-SNPS

SPOILS MANAGEMENT AND DISPOSAL NOTES (WTCPUA) - REVISED MAY 25, 2020

1. TEMPORARY HOLDING SITES AS NECESSARY TO STOCKPILE EXCAVATED SOILS, EMBEDMENT MATERIAL, AND/OR PIPING AND APPURTENANCES MAY BE LOCATED WITHIN THE LIMITS OF CONSTRUCTION AS SHOWN ON THE PLANS.
2. NO PERMANENT SPOILS DISPOSAL SHALL BE ALLOWED ON-SITE, UNLESS APPROVED BY THE OWNER AND GOVERNING AUTHORITY.
3. ALL SPOILS MATERIALS SHALL BE DISPOSED OF BY THE CONTRACTOR AT AN APPROVED SPOIL DISPOSAL SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND SECURING A PERMIT FOR THE SITE; AND SHALL NOTIFY THE OWNER AND/OR ENGINEER AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO DISPOSAL OF ANY SPOILS MATERIAL.

EROSION/ SEDIMENTATION CONTROL NOTES (WTCPUA)

REFER TO CITY OF BEE CAVE EROSION/SEDIMENTATION NOTES ON SHEET 5

STANDARD TREE PROTECTION NOTES (WTCPUA)

REFER TO CITY OF BEE CAVE EROSION/SEDIMENTATION NOTES ON SHEET 5

HOURS OF CONSTRUCTION (WTCPUA)
REVISED MAY 25, 2020

1. NO WORK SHALL BE DONE BETWEEN THE HOURS OF 8:00 P.M. AND 6:00 A.M; NOR ON SUNDAYS OR LEGAL HOLIDAYS WITHOUT THE WRITTEN PERMISSION OF THE WTCPUA IN EACH CASE, EXCEPT SUCH WORK AS MAY BE NECESSARY FOR THE PROPER CARE, MAINTENANCE AND PROTECTION OF THE WORK ALREADY DONE OR IN THE CASE OF AN EMERGENCY.

LIMITS OF CONSTRUCTION NOTES (WTCPUA)
REVISED MAY 25, 2020

1. THE LIMITS OF CONSTRUCTION SHALL BE BOUNDED BY THE RIGHT OF WAY LINE OR PERMANENT/ TEMPORARY EASEMENT LIMITS SHOWN ON THE PLANS. LIMITS OF CONSTRUCTION MAY BE FURTHER RESTRICTED BY PLACEMENT OF SILT FENCE, TREE PROTECTION FENCING, OR OTHER APPURTENANCES AS SHOWN ON THE PLANS.
2. LIMITS OF CONSTRUCTION SHALL BE CLEARLY DELINEATED BY THE CONTRACTOR BY INSTALLING SILT FENCE, ORANGE TENSAR FENCING (4 - FOOT ROLL TIED TO 6 FOOT POSTS SET AT 10 FOOT INTERVALS) OR OTHER BARRIERS AS APPROVED BY THE ENGINEER. ALL TEMPORARY BARRIERS SHALL BE REMOVED AT THE END OF THE PROJECT.
3. ANY AREAS OUTSIDE THE LIMITS OF CONSTRUCTION DISTURBED BY THE CONTRACTOR SHALL IMMEDIATELY BE RESTORED TO PRECONSTRUCTION CONDITION.

SANITARY FACILITIES (WTCPUA) - REVISED MAY 25, 2020

1. PROVISIONS SHALL BE MADE FOR NECESSARY SANITARY CONVENIENCES FOR THE USE OF LABORERS ON THE WORK. THE FACILITIES MUST BE PROPERLY SECLUDED FROM PUBLIC OBSERVATION AND SHALL BE INSTALLED AND MAINTAINED BY THE CONTRACTOR.

PROTECTION OF BORE PITS (WTCPUA)
REVISED MAY 25, 2020

1. INSTALL BARRIER FENCING (TENSAR ORANGE FENCING OR CHAIN LINK FENCING) TO SURROUND THE BORE PITS. BARRIER FENCING SHALL REMAIN IN PLACE AT ALL TIMES WHILE THE BORE PIT IS OPEN. CONTRACTOR SHALL BE RESPONSIBLE FOR SECURITY AND SAFETY AT THE BORE PITS.

HORIZONTAL CONTROLS (WTCPUA)
REVISED MAY 25, 2020

1. ALL LINE WORK SHALL BE STAKED PRIOR TO CONSTRUCTION WITH SEALED CUT SHEETS PROVIDED TO THE WTCPUA INSPECTOR PRIOR TO CONSTRUCTION.

CONSTRUCTION SEQUENCING

REFER TO CITY OF BEE CAVE EROSION/SEDIMENTATION NOTES ON SHEET 5

TRAFFIC CONTROL NOTES (WTCPUA) - REVISED MAY 25, 2020

1. PLANS SHALL INDICATE RESPONSIBLE AGENT FOR TRAFFIC CONTROL (ENGINEER OR CONTRACTOR).
2. CONTRACTOR SHALL MAINTAIN REASONABLE LOCAL VEHICULAR TRAFFIC THROUGHOUT CONSTRUCTION OPERATIONS.
3. CONTRACTOR SHALL PROVIDE SIGNS, BARRICADES, FLAGGERS, AND OTHER MEASURES AS REQUIRED TO ALLOW FOR VEHICULAR AND PEDESTRIAN TRAFFIC TO PROCEED SAFELY WITH MINIMUM INCONVENIENCE.
4. SIGNS, BARRICADES, FLAGGERS, AND RELATED WORK SHALL BE IN ACCORDANCE WITH THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND WITH THE REQUIREMENTS OF THE GOVERNING CITY/COUNTY.
5. FOR ANY ACTIVITY WITHIN TXDOT RIGHT-OF-WAY, PROJECT MUST HA', E A TXDOT PERMIT. A COPY OF THE TXDOT PERMIT SHALL BE PROVIDED TO THE WTCPUA PRIOR TO CONSTRUCTION.

SWPPP NOTES (WTCPUA)
REVISED MAY 25, 2020

THIS PROJECT IS SUBJECT TO THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY'S (TCEQ) TEXAS POLLUTION DISCHARGE ELIMINATION SYSTEM (TPDES) GENERAL PERMIT TXR150000 FOR CONSTRUCTION ACTIVITIES. THE GENERAL PERMIT REQUIRES THE PREPARATION OF A STORM WATER POLLUTION PREVENTION PLAN (SWPPP), WHICH HAS BEEN PROVIDED BY THE OWNER FOR USE BY THE CONTRACTOR. THE OWNER SHALL PROVIDE THE OWNER'S NOTICE OF INTENT (NOI) AND NOTICE OF TERMINATION (N0T) TO THE TCEQ. THE CONTRACTOR'S RESPONSIBILITIES ARE AS FOLLOWS:

1. MAINTAIN A COPY OF THE SWPPP AND A SET OF CONSTRUCTION PLANS WITH THE TEMPORARY EROSION ANDSEDIMENT CONTROL PLAN AT THE WORK SITE AT ALL TIMES.
2. FILE A NOTICE OF INTENT (NOI) AND APPLICABLE PAYMENT TO THE TCEQ AT LEAST 2 DAYS PRIOR TO SITE DISTURBANCE.
3. POST A COPY OF THE OWNER'S AND CONTRACTOR'S NOI FORMS AT THE WORK SITE.
4. SIGN THE CERTIFICATION AND OBTAIN A SIGNED CERTIFICATION STATEMENT FROM ALL SUBCONTRACTORS RESPONSIBLE FOR IMPLEMENTING THE EROSION AND SEDIMENT CONTROL MEASURES WHICH INDICATES THAT THE CONTRACTOR AND SUBCONTRACTOR UNDERSTANDS THE PERMIT REQUIREMENTS (FORMS ARE IN THE SWPPP)
5. FOLLOW AND COMPLY WITH ALL ASPECTS OF THE TPDES GENERAL PERMIT NO. TXR150000. THIS INCLUDES BUT IS NOT LIMITED TO FIELD INSPECTIONS AND REPORT, MAINTAINING AND REPAIRING EROSION CONTROLS AND UPDATING EROSION CONTROLS AND UPDATING EROSION CONTROL PLAN SHEETS BASED ON FIELD CHANGES AND MODIFICATIONS.
6. FILE A COPY OF THE CONTRACTOR'S NOTICE OF TERMINATION (NOT) WITH THE TCEQ ONCE THEWORK IS COMPLETED IN ACCORDANCE WITH THE TPDES GENERAL PERMIT NO TXR.150000 AND HAS BEEN ACCEPTED BY THE OWNER.

WATER & WASTEWATER GENERAL CONSTRUCTION NOTES (WTCPUA)
REVISED MAY 25, 2020

1. ALL CONSTRUCTION OPERATIONS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH APPLICABLE STATESTATUTES AND U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION REGULATIONS (O.S.H.A.).COPIES OF O.S.H.A. STANDARDS MAY BE PURCHASED FROM THE U.S. GOVERNMENT PRINTING OFFICE.INFORMATION AND RELATED REFERENCE MATERIALS MAY BE OBTAINED FROM O.S.H.A. AUSTIN AREAOFFICE - LA COSTA GREEN BLDG 1033, LA POSADA DR, SUITE 375, AUSTIN, TEXAS 78752-3832, 512-374-0271.
2. THE ATTENTION OF THE CONTRACTOR IS DIRECTED TO THE CITY OF AUSTIN STANDARD SPECIFICATIONSAND TO THE STATE LAW, (VERNON'S ANNOTATED TEXAS STATUTES, ARTICLE 1436 ©) AND THE NEEDFOR EFFECTIVE PRECAUTIONARY MEASURES WHEN OPERATING IN THE VICINITY OF ELECTRICAL LINES. THECONTRACTOR IS RESPONSIBLE FOR ALL SAFETY REQUIREMENTS, AND FOR COORDINATION OF ALL WORK WITHTHE APPROPRIATE ELECTRIC UTILITY COMPANY.
3. THE CONTRACTOR SHALL CONTACT THE ONE-CALL BOARD OF TEXAS AT 811 OR 1-800-545-6005 FOREXISTING UTILITY LOCATIONS PRIOR TO ANY EXCAVATION. THE LOCATION AND TYPE OF UTILITIES ANDUNDERGROUND FACILITIES SHOWN ON THESE PLANS ARE NOT GUARANTEED TO BE ACCURATE OR ALL-INCLUSIVE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE AND PROTECT ALL EXISTING UTILITIES. THECONTRACTOR SHALL VERIFY ALL DEPTHS AND LOCATIONS OF EXISTING UTILITIES PRIOR TO ANYCONSTRUCTION. IN ADDITIONAL TO NORMAL PRECAUTIONS WHEN EXCAVATING, USE EXTRA CAUTIONWHEN EXCAVATING WITHIN 25 FEET OF ANY UTILITIES SHOWN ON THE PLANS.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COORDINATION BETWEEN HIMSELF AND OTHERCONTRACTORS AND UTILITIES IN THE VICINITY OF THE PROJECT. THIS INCLUDES ALL WATER, WASTEWATER,GAS, ELECTRICAL, TELEPHONE, CABLE TELEVISION, AND STREET AND DRAINAGE WORK. ONCE THECONTRACTOR BECOMES AWARE OF A POSSIBLE CONFLICT, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFYTHE ENGINEER AND WTCPUA INSPECTOR WITHIN TWENTY-FOUR (24) HOURS.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DISPOSING OF ALL SPOIL MATERIAL FROM THE CONSTRUCTION SITE. ALL SPOILS MATERIAL SHALL BE DISPOSED OF BY THE CONTRACTOR AT AN APPROVED SPOIL SITE.THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND SECURING A PERMIT FOR THE SITE. THE CONTRACTOR SHALL NOTIFY THE WTCPUA INSPECTOR AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO DISPOSAL OF THE MATERIAL. NO SPOILS ARE TO REMAIN OVERNIGHT IN THE FLOODPLAIN.
6. NO BLASTING OR BURNING WILL BE ALLOWED.
7. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR, AT HIS EXPENSE, ALL UTILITIES, PAVEMENT,CURB, FENCES OR ANY OTHER ITEMS DAMAGED DURING CONSTRUCTION REGARDLESS OF WHETHER THESE ITEMS ARE SHOWN ON THE CONSTRUCTION PLANS.
8. WHENEVER EXISTING UTILITIES, INDICATED OR NOT ON PLANS, PRESENT OBSTRUCTIONS TO GRADE AND/OR ALIGNMENT OF PROPOSED PIPE, CONTRACTOR IS TO IMMEDIATELY NOTIFY THE ENGINEER WHO WILL DETERMINE IF EXISTING IMPROVEMENTS ARE TO BE RELOCATED OR IF THE GRADE AND/OR ALIGNMENT OF PROPOSED PIPE IS TO BE CHANGED.
9. DUST PREVENTION SHALL BE PROVIDED BY THE CONTRACTOR AT HIS OWN EXPENSE. DUST CONTROL SHALL INCLUDE SPRAYING OF WATER ON ALL DISTURBED AREAS, SPOIL PILES, OR HAUL MATERIALS ASSOCIATED WITH THE PROJECT OR OTHER METHODS APPROVED BY THE WTCPUA.
10. CLEANUP - UPON COMPLETION AND BEFORE MAKING APPLICATION FOR ACCEPTANCE OF THE WORK, THE CONTRACTOR SHALL CLEAN ALL STREETS AND ALL GROUND OCCUPIED BY HIM IN CONNECTION WITH THE WORK OF ALL RUBBISH, EXCESS MATERIALS, EXCESS EXCAVATED MATERIALS, TEMPORARY STRUCTURES AND EQUIPMENT. ALL PARTS OF THE WORK SHALL BE LEFT IN A NEAT AND PRESENTABLE CONDITION SATISFACTORY TO THE WTCPUA AND OTHER GOVERNMENTAL BODIES HAVING JURISDICTION PRIOR TO SUBMITTAL OF THE FINAL PAYMENT.
11. THE CONTRACTOR SHALL MAINTAIN ACCESS TO BUSINESSES AND RESIDENCES AT ALL TIMES. THE CONTRACTOR SHALL COORDINATE WITH PROPERTY OWNERS TO MINIMIZE DISRUPTION OF DELIVERIES, PARKING, AND OTHER ACTIVITIES.
12. DEWATERING, IF NECESSARY, SHALL BE CONSIDERED INCIDENTAL TO THE WORK AND SHALL NOT CONSTITUTE ABASIS FOR ADDITIONAL PAYMENT.
13. THE MINIMUM DEPTH OF COVER FROM TOP OF PIPE TO FINISHED GRADE FOR ALL WATER LINES SHALL BE FOUR FEET. INSTALL LINES TO AVOID HIGH POINTS.
14. CONCRETE SHALL BE CLASS 'A' WITH A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 3,000 PSI, UNLESS OTHERWISE NOTED. '
15. REINFORCING STEEL SHALL BE ASTM A 615M, GRADE 60 UNLESS OTHERWISE NOTED.
16. ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE PLANS REMAINS WITH THE ENGINEER WHO PREPARED THEM. IN REVIEWING THESE PLANS, THE WTCPUA MUST RELY ON THE ADEQUACY OF THE DESIGN ENGINEER. APPROVAL OF THESE PLANS BY THE WTCPUA DOES NOT RELEASE THE DESIGN ENGINEER OFTHESE RESPONSIBILITIES.

WTCPUA CONTACT INFORMATION

FACILITIES OWNER: WEST TRAVIS COUNTY PUA

13215 BEE CAVE PARKWAY, BUILDING B, SUITE 110

BEE CAVE, TEXAS 78738

(512) 263-0100

JRIECHERS@WTCPUA.ORG

LAND OWNER INFORMATION: BEE CAVE HOLDINGS, LLC

3001 RANCH ROAD 620, STE 324

AUSTIN, TEXAS 78738

(512) 750-7272

OWNER'S REPRESENTATIVE RESPONSIBLE FOR PLAN ALTERATIONS:

MILLER GRAY, LLC (512) 861-5300

MAINTENANCE: PERSON OR FIRM RESPONSIBLE FOR EROSION/SEDIMENTATION CONTROL:

CONTRACTOR

PERSON OR FIRM RESPONSIBLE FOR TREE/NATURAL AREA PROTECTION:

CONTRACTOR

Know what's **below.** **Call** before you dig.

CAUTION!

IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

FOR CITY USE ONLY:

MillerGRAY
Consulting • Engineering • Infrastructure
7320 N. MoPac Expressway, Suite 203
Austin, Texas 78731
Phone (512) 861-5300
www.miller-gray.com
TBPE FIRM REG. NO. F-16302

STATE OF TEXAS
J. TRAVIS WILSON
97307
LICENSED PROFESSIONAL ENGINEER
4/5/2024

P:\00323 Investor\001 Starbucks Bee Cave\05_CAD\00323-00 tgns.dwg 4/5/2024 10:12 AM

STARBUCKS BEE CAVE
14211 STATE HWY 71, BEE CAVE, TEXAS 78738

WTCPUA NOTES
1 OF 2

REVISIONS/CORRECTIONS

NO.	DATE	DESCRIPTION	BY

PROJECT NUMBER 00323-001
DATE: 4/5/2024
DESIGNED: KKE
CHECKED: JTW

SHEET NO.
6 OF 41

23-789-SNPS

TCEQ WATER DISTRIBUTION SYSTEM
GENERAL CONSTRUCTION NOTES - REVISED FEBRUARY 2019 OR LATEST VERSION

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 SYSTEMS30 TEXAS ADMINISTRATIVE CODE (TAC) CHAPTER 290 SUBCHAPTER D. WHEN CONFLICTS ARE NOTED WITH LOCAL STANDARDS, THE MORE STRINGENT REQUIREMENT SHALL BE APPLIED. AT A MINIMUM, CONSTRUCTION FOR PUBLIC WATER SYSTEMS MUST ALWAYS MEET TCEQ'S "RULES AND REGULATIONS FOR PUBLIC WATER SYSTEMS."
2. 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 [§290.44(A)(1)].
3. 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 [§290.44(A)(2)].
4. 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 [§290.44(A)(3)].
5. ALL WATER LINE CROSSINGS OF WASTEWATER MAINS SHALL BE PERPENDICULAR [§290.44(E)(4)(B)].
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 [§290.44(A)(4)].
7. THE MAXIMUM ALLOWABLE LEAD CONTENT OF PIPES, PIPE FITTINGS, PLUMBING FITTINGS, AND FIXTURES IS0.25 PERCENT [§290.44(B)].
8. THE CONTRACTOR SHALL INSTALL APPROPRIATE AIR RELEASE DEVICES WITH VENT OPENINGS TO THE ATMOSPHERE COVERED WITH 16-MESH OR FINER, CORROSION RESISTANT SCREENING MATERIAL OR AN ACCEPTABLE EQUIVALENT [§290.44(D)(1)].
9. THE CONTRACTOR SHALL NOT PLACE THE PIPE IN WATER OR WHERE IT CAN BE FLOODED WITH WATER OR SEWAGE DURING ITS STORAGE OR INSTALLATION [§290.44(F)(1)].
10. WHEN WATERLINES ARE LAID UNDER ANY FLOWING OR INTERMITTENT STREAM OR SEMI-PERMANENT BODY OF WATER THE WATERLINE 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 [§290.44(F)(2)].
11. 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;

$$Q = \frac{LD\sqrt{P}}{148{,}000}$$

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 IN (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;

$$L = \frac{SD\sqrt{P}}{148{,}000}$$

Q = 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 IN (PSI).

12. THE CONTRACTOR SHALL MAINTAIN A MINIMUM SEPARATION DISTANCE IN ALL DIRECTIONS OF NINE FEET BETWEEN THE PROPOSED WATERLINE AND WASTEWATER COLLECTION FACILITIES INCLUDING MANHOLES. 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 §290.44(E)(1)-(4).
13. 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 [§290.44(E)(5)].
14. 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 [§290.44(E)(6)].
15. 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 [§290.44(E)(7)].
16. WATERLINES SHALL NOT BE INSTALLED CLOSER THAN TEN FEET TO SEPTIC TANK DRAIN FIELDS [§290.44(E)(8)].
17. THE CONTRACTOR SHALL DISINFECT THE NEW WATERLINES IN ACCORDANCE WITH AWWA STANDARD C-651-14 OR MOST RECENT, 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 WATERLINE WILL BE REQUIRED OR AT THE NEXT AVAILABLE SAMPLING POINT BEYOND 1,000 FEET AS DESIGNATED BY THE DESIGN ENGINEER [§290.44(F)(3)].
18. DE-CHLORINATION OF DISINFECTING WATER SHALL BE IN STRICT ACCORDANCE WITH CURRENT AWWA STANDARD C655-09 OR MOST RECENT.

WATER AND WASTEWATER UTILITY NOTES (WTCPUA)
REVISED MAY 25, 2020

1. WEST TRAVIS COUNTY PUA IS THE WATER AND / OR WASTEWATER SERVICE PROVIDER FOR THIS PROJECT.A PRE-CONSTRUCTION MEETING WITH THE WTCPUA SHALL BE HELD PRIOR TO COMMENCEMENT OF CONSTRUCTION TO SCHEDULE INSPECTION OF INSTALLATION OF WATER/WASTEWATER FACILITIES. WATER FACILITIES WILL BE INSPECTED UP TO, AND INCLUDING, THE WATER METER AND/OR FIRE HYDRANTS. THE CONTACT NUMBER FOR WTCPUA IS (512) 263- 0100.
2. THE CITY OF AUSTIN STANDARD SPECIFICATIONS AND STANDARD DETAILS CURRENT AT THE TIME OF CONSTRUCTION SHALL GOVERN MATERIALS AND METHODS USED TO PERFORM THIS WORK. CITY OF AUSTIN SPECIFICATIONS AND STANDARD DETAILS ARE AVAILABLE AT HTTPS://LIBRARY.MUNICODE.COM/TX/AUSTIN/CODES/
3. CONTRACTOR SHALL OBTAIN ALL APPROVALS AND PERMITS, INCLUDING BUT NOT LIMITED TO STREET/DRIVEWAY CUT AND UTILITY CUT PERMITS FROM THE APPROPRIATE GOVERNMENTAL AGENCY BEFORE BEGINNING CONSTRUCTION WITHIN THE RIGHT-OF-WAY OF A PUBLIC STREET OR ALLEY.
4. THE WTCPUA SHALL BE CONTACTED AT (512) 263-0100 AT LEAST 48 HOURS BEFORE CONNECTING TO THEIR EXISTING WATER AND/OR WASTEWATER FACILITIES.
5. THE CONTRACTOR SHALL CONTACT THE AUSTIN AREA "ONE CALL" SYSTEM AT 811 OR 1-800-545-6005 FOR EXISTING UTILITY LOCATIONS PRIOR TO ANY EXCAVATION. IN ADVANCE OF CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITIES TO BE EXTENDED, TIED TO, OR ALTERED, OR SUBJECT TO DAMAGE/INCONVENIENCE BY THE CONSTRUCTION OPERATIONS.
6. NO OTHER UTILITY SERVICE/APPURTENANCES SHALL BE PLACED NEAR THE PROPERTY LINE, OR OTHER ASSIGNED LOCATION DESIGNATED FOR WATER AND WASTEWATER UTILITY SERVICE THAT WOULD INTERFERE WITH THE WATER AND/OR WASTEWATER SERVICES.
8. WHERE WATER LINES AND 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). ANY DEVIATION THESE STANDARDS SHALL REQUIRE A VARIANCE APPROVED BY TCEQ BEFORE SUBMITTING PIPING ASSIGNMENTS TO THE WTCPUA.
9. THE CITY OF AUSTIN SPECIFICATION ITEM 509S WILL BE REQUIRED AS A MINIMUM TRENCH SAFETY MEASURE. CONTRACT DOCUMENTS, WHICH INCLUDE A TRENCH SAFETY PLAN SIGNED AND SEALED BY A TEXAS PROFESSIONAL ENGINEER AND A PAY ITEM FOR TRENCH SAFETY MEASURES, IN COMPLIANCE WITH OSHA, STATE, COUNTY, AND CITY REQUIREMENTS BEFORE BEGINNING WORK ON THE PROJECT.
10. ALL MATERIAL TESTS, INCLUDING SOIL DENSITY TESTS AND RELATED SOIL ANALYSIS, SHALL BE ACCOMPLISHED BY AN INDEPENDENT LABORATORY FUNDED BY THE OWNER IN ACCORDANCE WITH CITY OF AUSTIN STANDARD SPECIFICATION ITEM 1804S.4.
11. CONNECTIONS TO EXISTING WTCPUA WATER LINES SHALL BE MADE BY CUT-IN TEES IN ACCORDANCE WITH CITY OF AUSTIN STANDARD SPECIFICATION ITEM 510.3(24). ISOLATION VALVES SHALL BE INSTALLED ON THE ENDS OF THE CUT-IN TEE, AS NECESSARY. A SHUT-OUT VALVE PLAN SHALL BE PROVIDED SHOWING THE LOCATION OF EXISTING GATE VALVES IN THE VICINITY OF THE CONNECTION. THE SHUT-OUT PLAN SHALL IDENTIFY ALL AFFECTED PROPERTY OWNERS. CONTRACTOR SHALL PERFORM ALL WORK AND SHALL FURNISH ALL MATERIALS, INCLUDING DRAINING AND CUTTING INTO EXISTING PIPING AND CONNECTING A NEW PIPELINE OR OTHER EXTENSION INTO THE EXISTING PRESSURE PIPING, FORMING AN ADDITION TO THE POTABLE WATER TRANSMISSION AND DISTRIBUTION NETWORK AND PERFORMING NECESSARY SHUTOFFS. CONTRACTOR SHALL SCHEDULE ALL SUCH CONNECTIONS IN ADVANCE AND SUCH SCHEDULE SHALL BE APPROVED BY THE WTCPUA BEFORE BEGINNING THE WORK. AT LEAST 48 HOURS-NOTICE SHALL BE GIVEN TO THE WTCPUA PRIOR TO MAKING THE CONNECTION, AND A REPRESENTATIVE FROM THE WTCPUA SHALL BE PRESENT WHEN THE CONNECTION IS MADE. PRESSURE TAPS MAY BE APPROVED ON A CASE-BY-CASE BASIS. "SIZE ON SIZE" TAPS WILL NOT BE PERMITTED. WHEN APPROVED, ANY TAPS SHALL BE MADE BY USE OF AND APPROVED FULL CIRCLE, GASKETED CAST IRON OR DUCTILE IRON TAPPING SLEEVE. CONCRETE BLOCKING SHALL BE PLACED BEHIND AND UNDER ALL TAP SLEEVES PRIOR TO MAKING THE PRESSURE TAP AND THE USE OF PRECAST BLOCKS MAY BE USED TO HOLD THE TAP IN ITS CORRECTION POSITION PRIOR TO BLOCKING. THE BLOCKING BEHIND AND UNDER THE TAP SHALL HAVE A MINIMUM OF 24 HOURS CURING TIME BEFORE THE VALVE CAN BE REOPENED FOR SERVICE FROM THAT TAP. THE CONTRACTOR SHALL NOTIFY THE WTCPUA INSPECTOR A MINIMUM OF SEVENTY-TWO (72) HOURS IN ADVANCE FOR THE WTCPUA TO NOTIFY THE AFFECTED CUSTOMERS. THE WTCPUA SHALL BE PRESENT WHILE ALL WORK IS PERFORMED TO MAKE THE CONNECTION.
12. THRUST RESTRAINT SHALL BE BY METAL THRUST RESTRAINTS IN ACCORDANCE WITH CITY OF AUSTIN STANDARD SPECIFICATION ITEM 510.3(22).
13. FIRE HYDRANTS SHALL BE SET IN ACCORDANCE WITH CITY OF STANDARD SPECIFICATION ITEM 51LS.3 E ANDSHALL BE APPROVED FIRE DEPARTMENT OR OTHER APPROPRIATE PARTY PRIOR TO INSTALLATION. FIREHYDRANTS ON MAINS UNDER CONSTRUCTION SHALL BE SECURELY WRAPPED WITH A POLY WRAP BAG ANDTAPED INTO PLACE. THE POLY WRAP WILL BE REMOVED WHEN THE MAINS ARE ACCEPTED AND PLACED INSERVICE. FIRE HYDRANTS THAT ARE TO BE USED AS DRAIN HYDRANTS SHALL BE PAINTED SILVER W/ BLUE CAPSPRIOR TO ACCEPTANCE. WHERE STORZ ADAPTORS ARE REQUIRED (HAYS COUNTY), FIRE HYDRANTS SHALL BEMANUFACTURED WITH INTEGRAL STORZ ADAPTORS.
14. WATER LINE TESTING AND STERILIZATION SHALL BE PERFORMED IN ACCORDANCE WITH CITY OF AUSTIN STANDARD SPECIFICATION ITEM 510.3(29) AND/OR TCEQ RULES.
15. TEST PRESSURE FOR 2-HOUR TEST SHALL BE AT 175 PSI AT THE LOWEST POINT IN THE LINE.

NOTE:
PRIOR TO PRESSURE TESTING, CONTRACTOR SHALL VERIFY THAT THRUST BLOCKING AND/OR THRUST RESTRAINT BACK TO AND INCLUDING THE VALVE AGAINST WHICH THE PRESSURE TEST SHALL BE PERFORMED, HAS BEEN INSTALLED TO AT LEAST THE SPECIFICATIONS OF THIS PROJECT. FAILURE TO VERIFY THAT THRUST BLOCKING AND/OR THRUST RESTRAINT IN THE EXISTING LINE MEETS OR EXCEEDS THE SPECIFICATIONS OF THIS PROJECT MAY RESULT IN SERIOUS DAMAGE TO THE EXISTING WATERLINE.

16. WATER LINES SHALL BE FILLED WITH WATER AND ALL AIR EXPELLED AT LEAST 24 HOURS BEFORE TESTING. ALL SERVICE LATERALS AND DRAIN VALVE LEADS, WITH THE HYDRANT VALVES CLOSED AND NOZZLE CAPS OPEN SHALL BE INCLUDED IN THE TESTS.
17. CONTRACTOR SHALL SUBMIT A DISINFECTION AND FLUSHING PLAN IN ACCORDANCE WITH AWWA STANDARDS TO THE WTCPUA FOR APPROVAL. REQUIRED FLUSHING VOLUMES, FLUSHING SCHEDULE, AND METHOD OF DISPOSAL OF FLUSH WATER SHALL BE IN ACCORDANCE WITH THE APPROVED PLAN.
18. GATE VALVES SHALL BE RESILIENT SEATED GATE VALVES CONFORMING TO AWWA C509, WITH A MINIMUM RATED WORKING PRESSURE OF 250 PSIG.
19. FORCE MAIN TESTING SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY OF AUSTIN STANDARD SPECIFICATION ITEM 510.3(27) AND/OR TCEQ RULES.
20. GRAVITY SANITARY SEWER MAIN TESTING SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY OF AUSTIN STANDARD SPECIFICATION ITEMS 510.3(26) AND/OR TCEQ RULES. IN ADDITION, ALL GRAVITY SANITARY SEWER MAINS SHALL BE TELEVISED PRIOR TO ACCEPTANCE BY WTCPUA. DIGITAL FILES (VIA CD-ROM) CLEARLY SHOWING TELEVISED RECORDING SHALL BE SUBMITTED TO THE ENGINEER OF RECORD FOLLOWING INSPECTION.
21. LOCATOR 'FINDER' WIRE - ALL NON -METALLIC WATER LINES SHALL HAVE A FINDER WIRE LOCATED ABOVETHE PIPE. THE WIRE SHALL BE POLY-INSULATED NO. 10 SOLID COPPER AND WILL TERMINATE AT EACHISOLATION VALVE SUCH THAT IT IS ACCESSIBLE FROM THE VALVE BOX.

WATER AND WASTEWATER UTILITY NOTES (WTCPUA)
REVISED MAY 25, 2020

22. LOCATOR 'FINDER' WIRE - ALL NON-METALLIC WASTEWATER LINES SHALL HAVE A FINDER WIRE LOCATED ABOVETHE PIPE. THE WIRE SHALL BE POLY-INSULATED NO. 10 SOLID COPPER AND WILL TERMINATE AT READILYACCESSIBLE LOCATIONS THROUGHOUT THE COLLECTION SYSTEM.
23. ALL VALVE RISERS SHALL HAVE A 1'-6" SQUARE CONCRETE BOX POURED AROUND THEM AT FINISHED GRADE.
24. ALL MANHOLES SHALL BE LINED WITH A CORROSION RESISTANT LINING APPROVED BY THE WTCPUA.
25. BOLTED AND GASKETED COVERS SHALL BE USED FOR ALL MANHOLES LOCATED IN THE 100-YEAR FLOODPLAIN.WHERE THERE ARE MORE THAN THREE GASKETED MANHOLES IN A ROW, VENTS SHALL BE PROVIDED ONE VERY THIRD MANHOLE.
26. THE DOWNSTREAM END OF ANY FORCE MAIN SHALL BE TERMINATED IN A SANITARY SEWER MANHOLE IN A MANNER TO MINIMIZE TURBULENCE.
27. CONTRACTOR SHALL HAVE NECESSARY EROSION AND SEDIMENTATION CONTROLS IN PLACE PRIOR TO COMMENCING WATER/WASTEWATER FACILITY CONSTRUCTION.
28. RECORD DRAWINGS, AS STIPULATED BY THE WTCPUA, SHALL BE SUBMITTED TO THE ENGINEER OF RECORD FOR VERIFICATION AND FURNISHED TO THE WTCPUA UPON COMPLETION OF THE PROJECT.
29. THE WTCPUA WILL OWN AND OPERATE ALL WATER LINES AND APPURTENANCES UP TO AND INCLUDING THE WATER METER. THESE IMPROVEMENTS WILL BE DEFINED BY A RECORDED EASEMENT OR IN PUBLIC RIGHT-OF-WAY.
30. ANY PORTIONS OF WASTEWATER LINES INCLUDING SERVICES THAT ARE LOCATED OUTSIDE OF A RECORDED EASEMENT OR PUBLIC RIGHT-OF-WAY WILL BE OWNED AND MAINTAINED BY THE PROPERTY OWNER, ORHIS/HER ASSIGNS.
31. WHERE EXISTING WATER AND/OR WASTEWATER INFRASTRUCTURE IS TO BE ABANDONED, THE ENGINEER SHALL SUBMIT AN ABANDONMENT PLAN FOR APPROVAL BY THE WTCPUA.
32. WATER SERVICES SHALL BE INSTALLED USING HDPE PIPE. COPPER IS NOT ALLOWED.
33. FOR ANY STORM SEWER LINE CROSSING A WATER OR WASTEWATER LINE CLOSER THAN 18", THE STORM SEWER PIPE SHALL BE LAID SUCH THAT NO STORM SEWER JOINTS WILL BE OVER THE WATER PIPE CROSSING.

OTHER NOTES – ENGINEER IS RESPONSIBLE FOR INCLUDING ALL APPLICABLE NOTES, INCLUDING BUT NOT LIMITED TO COUNTY, CITY, TXDOT, STATE, FIRE DEPARTMENT, TCEQ (CZP, WPAP, ORGANIZED SEWAGE COLLECTION SYSTEM NOTES, GENERAL CONSTRUCTION NOTES). ENGINEER IS RESPONSIBLE FOR ENSURING THE CURRENT ADOPTED VERSION OF ALL NOTES IS INCLUDED IN THE CONSTRUCTION PLANS.

811 Know what's below. Call before you dig.

CAUTION!
IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

FOR CITY USE ONLY:

MillerGRAY
Consulting • Engineering • Infrastructure
7320 N. MoPac Expressway, Suite 203
Austin, Texas 78731
Phone (512) 861-5300
www.miller-gray.com
TBPE FIRM REG. NO. F-16302

STATE OF TEXAS
J. TRAVIS WILSON
97307
LICENSED PROFESSIONAL ENGINEER
4/5/2024

P:\00323 Investor\001 Starbucks Bee Cave\05_CAD\00323-00 tgns.dwg 4/5/2024 10:12 AM

STARBUCKS BEE CAVE
14211 STATE HWY 71, BEE CAVE, TEXAS 78738

WTCPUA NOTES
2 OF 2

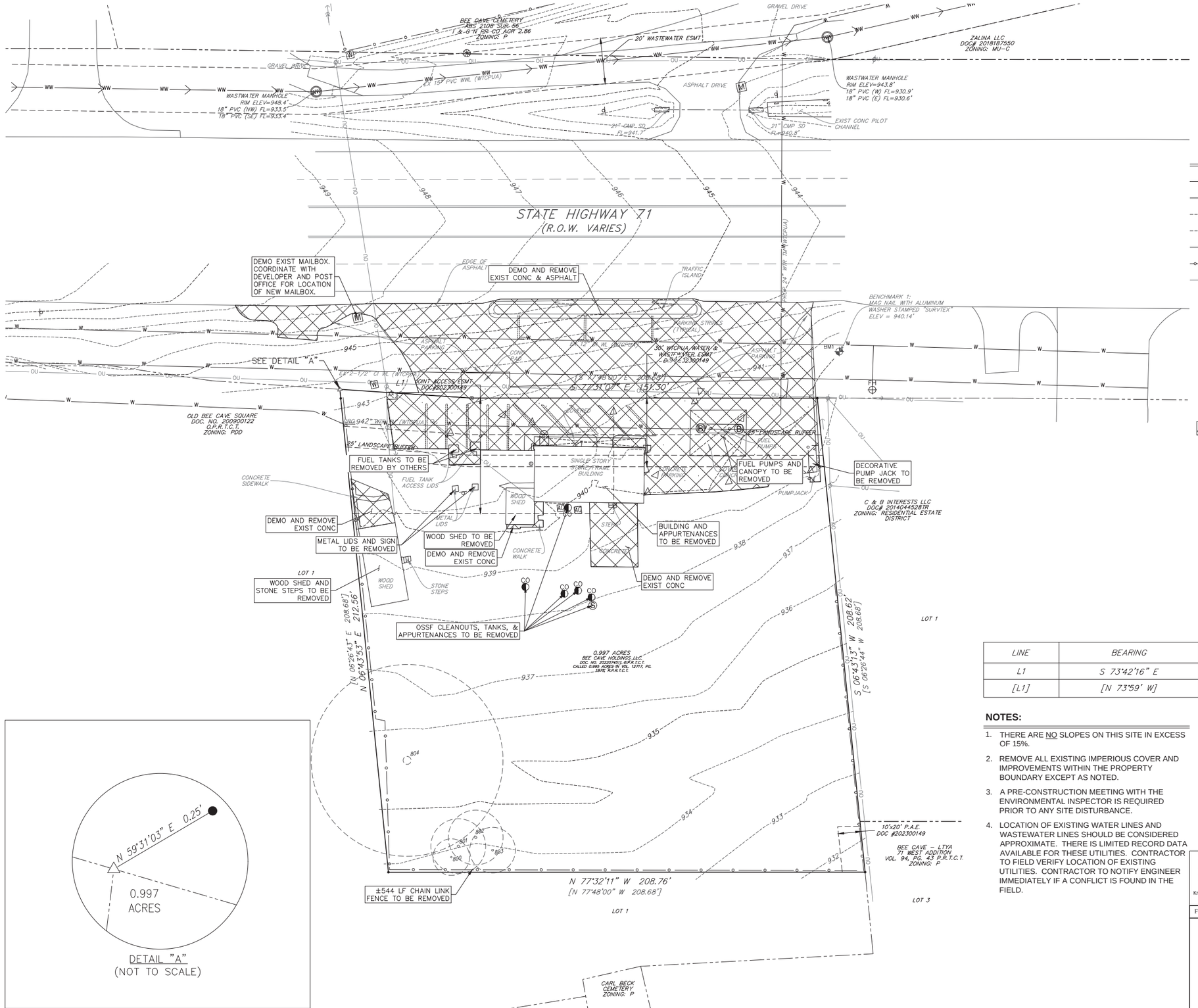
REVISIONS/CORRECTIONS

NO.	DATE	DESCRIPTION	BY

PROJECT NUMBER 00323-001
DATE: 4/5/2024
DESIGNED: KKE
CHECKED: JTW

SHEET NO.
7 OF 41

23-789-SNPS



LEGEND

- SUBJECT TRACT PROPERTY LINE
- ADJOINER TRACT PROPERTY LINE
- EXISTING CONTOUR (MAJOR)
- EXISTING CONTOUR (MINOR)
- EOP
- CHAIN LINK FENCE
- OU — OVERHEAD POWER LINE
- POWER POLE
- GUY ANCHOR
- BM — BENCHMARK
- 4224 — EXISTING TREE
- 4224 — EXISTING TREE TO BE REMOVED
- EXISTING CONCRETE
- 1/2" IRON ROD FOUND
- CHISEL MARK ON CONCRETE SET
- W — WATER METER
- E — ELECTRIC METER
- B — BOLLARD
- S — SEPTIC LID
- AC — AIR COMPRESSOR
- CO — WASTEWATER CLEANOUT
- MISCELLANEOUS VALVE
- M — MAILBOX
- FH — EXISTING FIRE HYDRANT

LINE	BEARING	DISTANCE
L1	S 73°42'16" E	57.94'
[L1]	[N 73°59' W]	

NOTES:

1. THERE ARE NO SLOPES ON THIS SITE IN EXCESS OF 15%.
2. REMOVE ALL EXISTING IMPERIOUS COVER AND IMPROVEMENTS WITHIN THE PROPERTY BOUNDARY EXCEPT AS NOTED.
3. A PRE-CONSTRUCTION MEETING WITH THE ENVIRONMENTAL INSPECTOR IS REQUIRED PRIOR TO ANY SITE DISTURBANCE.
4. LOCATION OF EXISTING WATER LINES AND WASTEWATER LINES SHOULD BE CONSIDERED APPROXIMATE. THERE IS LIMITED RECORD DATA AVAILABLE FOR THESE UTILITIES. CONTRACTOR TO FIELD VERIFY LOCATION OF EXISTING UTILITIES. CONTRACTOR TO NOTIFY ENGINEER IMMEDIATELY IF A CONFLICT IS FOUND IN THE FIELD.

TREE LIST		
NUMBER	DESCRIPTION	
[illegible]	[illegible]	[illegible]
TREE TO BE REMOVED		

811 Know what's below. Call before you dig.

CAUTION!
IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

FOR CITY USE ONLY:

MillerGRAY
Consulting • Engineering • Infrastructure
7320 N. MoPac Expressway, Suite 203
Austin, Texas 78731
Phone (512) 861-5300
www.miller-gray.com
TBPE FIRM REG. NO. F-16302

STATE OF TEXAS
J. TRAVIS WILSON
97307
LICENSED PROFESSIONAL ENGINEER
4/5/2024

P:\00323 Investor\001 Starbucks Bee Cave\05_CAD\00323-00.tcd.dwg 4/5/2024 10:12 AM

STARBUCKS BEE CAVE

14211 STATE HWY 71, BEE CAVE, TEXAS 78738

EXISTING CONDITIONS AND DEMOLITION PLAN

REVISIONS/CORRECTIONS

NO.	DATE	DESCRIPTION	BY

PROJECT NUMBER 00323-001
DATE: 4/5/2024
DESIGNED: KKE
CHECKED: JTW

SHEET NO.
8 OF 41

23-789-SNPS

EXISTING OVERALL IMPERVIOUS COVER

DRAINAGE BASIN	TOTAL AREA (SF)	IMPERV. AREA (SF)	TOTAL AREA (AC)	TOTAL AREA (SQ. MI)	% IMPERV.
EX-SITE	43,446	8,151	1.0	0.0016	18.8%
EX-OFF	16,169	16,169	0.37	0.0006	100.0%

EXISTING CURVE NUMBERS

DRAINAGE AREA	TOT. AREA (AC)	A (AC)	B (AC)	C (AC)	D (AC)	COMPOSITE CN
EX-SITE	1.0			1.0		79
EX-OFF	0.37			0.37		79
SOIL GROUP		A	B	C	D	DCM TBL 2-5, GRASSLND, FAIR
CURVE NUMBER		49	69	79	84	

EXISTING TIME OF CONCENTRATION

DRAINAGE AREA	SHEET FLOW				SHALLOW CONCENTRATED FLOW (UNPAVED)			CHANNEL FLOW	TOTAL	TOTAL
	L (FT)	n	S (%)	T_c (min)	L (FT)	S (%)	T_c (MIN)		T_c	T_{lag} (MIN)
EX-SITE	100	0.15	3.8%	6.7	218	3.8%	1.2	N/A	7.90%	4.7
EX-OFF	100	0.02	2.0%	1.4	0	0.0%	0.0		5.0	3.0

PROPOSED OVERALL IMPERVIOUS COVER

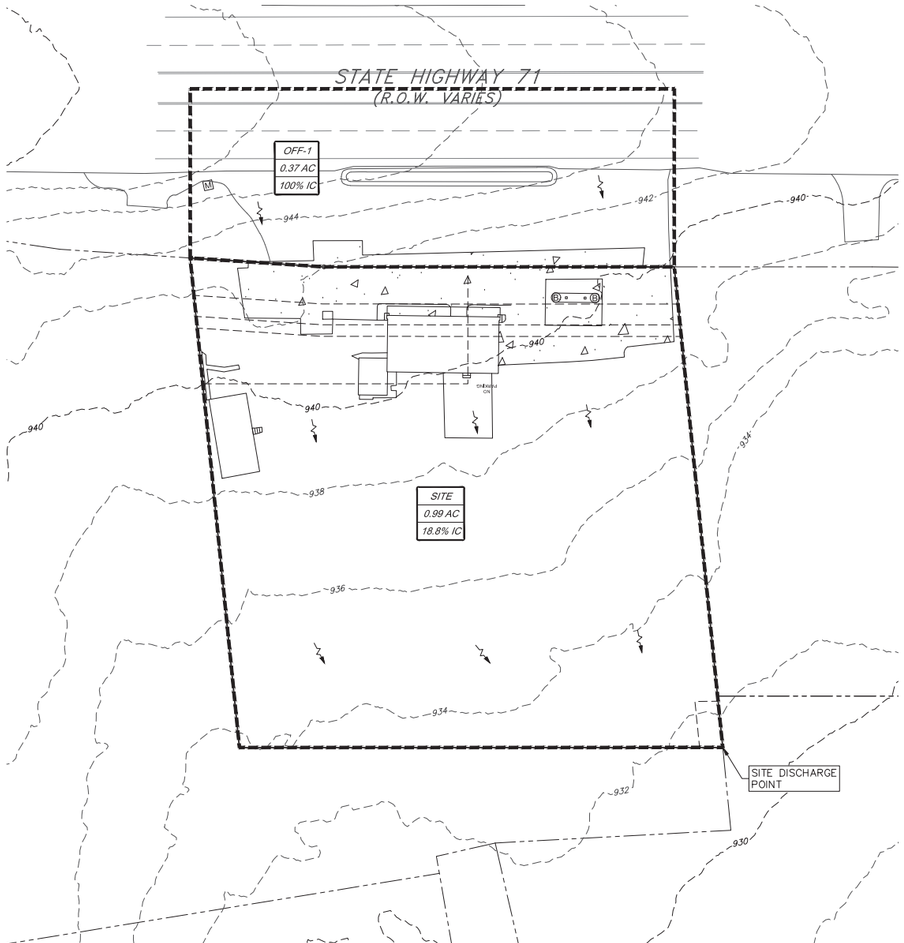
DRAINAGE BASIN	TOTAL AREA (SF)	IMPERV. AREA (SF)	TOTAL AREA (AC)	TOTAL AREA (SQ. MI)	% IMPERV.
PR--SITE	43,446	19,560	1.0	0.0015	45.0%
PR-OFF	16,169	10,057	0.37	0.0006	62.2%

PROPOSED CURVE NUMBERS

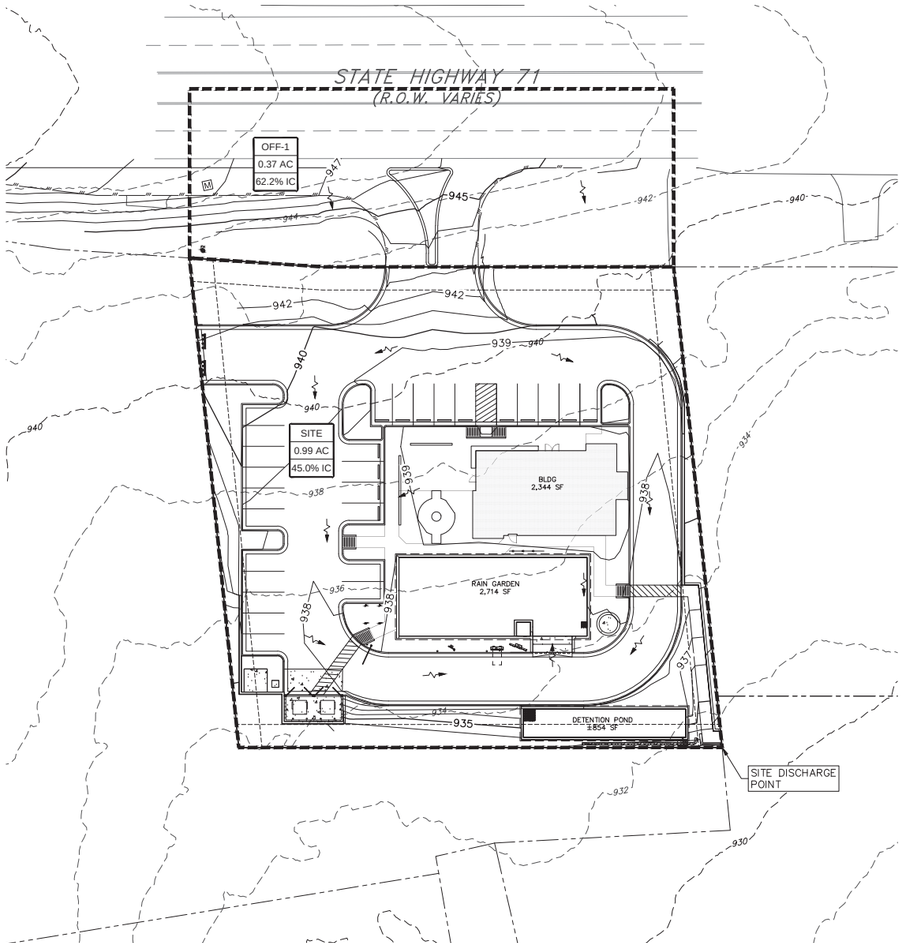
DRAINAGE AREA	TOT. AREA (AC)	A (AC)	B (AC)	C (AC)	D (AC)	COMPOSITE CN
PR-SITE	1.0			1.0		79
PR-OFF	0.37			0.37		79
SOIL GROUP		A	B	C	D	DCM TBL 2-5, FULLY DEV. FAIR
CURVE NUMBER		49	69	79	84	

PROPOSED TIME OF CONCENTRATION

DRAINAGE AREA	SHEET FLOW				SHALLOW CONCENTRATED FLOW (PAVED)			CHANNEL FLOW	TOTAL	TOTAL
	L (FT)	n	S (%)	T_c (min)	L (FT)	S (%)	T_c (MIN)		T_c (MIN)	T_{lag} (MIN)
PR-SITE	25	0.15	3.8%	2.2	293	3.8%	1.2	N/A	5.0	3.0
PR-OFF	100	0.02	2.0%	1.4	0	0.0%	0.0		5.0	3.0



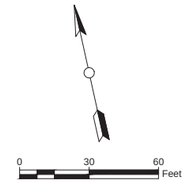
EXISTING DRAINAGE AREA MAP



PROPOSED DRAINAGE AREA MAP

DRAINAGE SUMMARY FOR SITE DISCHARGE POINT

ANNUAL CHANCE EXCEEDANCE (%)	RETURN FREQ (YRS)	COMPUTED PEAK FLOW RATES (CFS)			WATER SURFACE ELEV (FT)	DETENTION VOLUME (AC-FT)
		EXISTING	PROPOSED NO POND	PROPOSED WITH POND		
50%	2	4.9	6.3	4.9	934.2	0.0
10%	10	8.4	10.2	8.2	935.1	0.1
4%	25	10.8	12.8	10.5	935.6	0.1
1%	100	14.7	17.1	14.2	936.4	0.1



LEGEND

- SUBJECT TRACT PROPERTY LINE
- ADJOINER TRACT PROPERTY LINE
- 843 EXISTING CONTOUR (MAJOR)
- 843 EXISTING CONTOUR (MINOR)
- 843 PROPOSED CONTOUR (MAJOR)
- 843 PROPOSED CONTOUR (MINOR)
- DRAINAGE AREA BOUNDARY
- EX-2 / 0.83 AC / 5% IC — EXISTING DRAINAGE AREA LABEL
- PR-2 / 0.83 AC / 40% IC — PROPOSED DRAINAGE AREA LABEL
- FLOW ARROW

NOTES:

1. POND IS SIZED FOR 65% IMPERVIOUS COVER.
2. DRAINAGE FOR THIS DEVELOPMENT HAS BEEN DESIGNED SUCH THAT THERE WILL BE NO ADVERSE IMPACTS ON THE CAPACITY, FUNCTION, OR INTEGRITY OF TEXAS DEPARTMENT OF TRANSPORTATION RIGHT OF WAY DRAINAGE FACILITIES.

811 Know what's **below.** **Call** before you dig.

CAUTION!

IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

FOR CITY USE ONLY:

MillerGRAY
Consulting • Engineering • Infrastructure
7320 N. MoPac Expressway, Suite 203
Austin, Texas 78731
Phone (512) 861-5300
www.miller-gray.com
TBPE FIRM REG. NO. F-16302

STATE OF TEXAS
J. TRAVIS WILSON
97307
LICENSED PROFESSIONAL ENGINEER
5/17/2024

P:\00323 Investco\000\ Starbucks Bee Cave\05_CAD\00323-001dam.dwg 5/17/2024 8:43 AM

STARBUCKS BEE CAVE
14211 STATE HWY 71, BEE CAVE, TEXAS 78738

DETENTION DRAINAGE AREA MAPS

REVISIONS/CORRECTIONS

NO.	DATE	DESCRIPTION	BY

PROJECT NUMBER 00323-001
DATE: 5/17/2024
DESIGNED: KKE
CHECKED: JTW

SHEET NO. 9 OF 41

23-789-SNPS

IMPERVIOUS COVER CALCS

	AREA		IMPERVIOUS DATA		
	(SF)	(AC)	AREA (SF)	DESCRIPTION	% IMPERV.
EXISTING	52929.16	1.22	8,196.04	BUILDING, STRUCTURES, PAVED AREA	15%
PROPOSED			26,291.20	BUILDING, DRIVE ISLE, PARKING AREA, SIDEWALK, CONCRETE PADS	50%

*NOTE: *Please see the water quality drainage area maps shown below for a representation of the impervious areas.*

City of Bee Cave

Pollutant Load Calculations

STEP 1. ENTER SITE DATA

Project Name:	Starbucks Bee Cave
Drainage Area ID:	
Drainage Area (ac.):	1.22
Existing Condition Impervious Cover (%):	15
Proposed Condition Impervious Cover (%):	50

STEP 2. DETERMINE POLLUTANT LOADING

Pollutant	Pre-Developed Loacing, Lpre (lb/yr)	Developed Loading, Ldev (lb/yr)
Total Suspended Solids (TSS)	166.66	500.89
Total Phosphorus (TP)	0.40	1.19
Oil and Grease (O&G)	5.02	15.09

**Pollutant loading: Equation 1 from COA ECM 1.6.9.3.B*

$L = C * V * A_n * CF$

STEP 3. DETERMINE BMP POLLUTANT LOAD REMOVAL EFFICIENCIES

BMP Order in Series	BMP Type	Removal Efficiency (%)		
		TSS	TP	O&G
1	Bioretention	89.0	72.0	89.0
	TOTAL EFFICIENCY	**89.0**	**72.0**	**89.0**

*TSS removal efficiency and O&G (not explicity stated, but related to TSS) are from TCEQ RG-348 Table 3-1, page 3-4

**TP removal is from LCRA Technical Manual Table 2-6, page 2-11

***Removal Efficiency Equation from COBC ECM Section 1.6.2.G: Water Quality Facilities In Series*

$$E_{TOT} = \left[1 - \left(1 - \frac{E_1}{100}\right)\left(1 - 0.65\frac{E_2}{100}\right)\left(1 - 0.25 * \frac{E_3}{100}\right)\right] * 100$$

STEP 4. CALCULATE TOTAL POLLUTANT LOAD REMOVAL

Pollutant	Required Removal*		Total BMP Removal**		Meets Criteria?
	(%)	(lb/yr)	(%)	(lb/yr)	
Total Suspended Solids (TSS)	90.0	300.81	89.0	445.79	YES
Total Phosphorus (TP)	90.0	0.72	72.0	0.86	YES
Oil and Grease (O&G)	90.0	9.06	89.0	13.43	YES

Removal requirements per Article 7, Section 7.3.2.C of City of Bee Cave UDC (% removal of **increased loading from development)*

***Amount removed by BMP per year equation: $R = L_{dev} * (E_{TOT}/100)$*

APPENDIX F-7
RAIN GARDEN CALCULATIONS
FOR DEVELOPMENT PERMITS

PROJECT: STARBUCKS BEE CAVE
CONTROL: PARTIAL FILTRATION RAIN GARDEN

DRAINAGE AREA DATA

DRAINAGE AREA TO CONTROL (MAX 2 AC)	1 22 AC
DRAINAGE AREA IMPERVIOUS COVER (IC)	50 %
CAPTURE DEPTH (CD)	0 80 IN

WATER QUALITY CONTROL CALCULATIONS:

	REQUIRED	PROVIDED
WATER QUALITY VOLUME (WQV=CD*DA*3630)	3,543 CF	3,691 CF
100-YEAR PEAK FLOW RATE TO CONTROL (Q100)	17 1 CFS	
FILTRATION POND AREA (SF)	2,714 SF	2,714 SF
DEPTH OF PONDING (D)	MAX 1 0 FT	1 0 FT
DEPTH OF FILTRATION MEDIA (L AVG)	MIN 1 5 FT	1.50 FT
EFFECTIVE POROSITY WQV (WQVep = 0 24 * AF * L)		977 CF
PONDED DEPTH WQV (WQVpd= AF * D)		2,714 CF
TOTAL WQV		3,691 CF
WATER QUALITY ELEVATION (WQE)		936 40 FT MSL
ELEVATION OF SPLITTER/OVERFLOW WEIR (MINIMUM WQE)		936 40 FT MSL
LENGTH OF SPLITTER WEIR		16 0 FT
REQUIRED HEAD TO PASS Q100	MAX 0 5	0,50 FT
POND FREEBOARD PROVIDED TO PASS Q100	MIN 0 25 FT	0 6 FT

FOR FILTRATION RAIN GARDENS

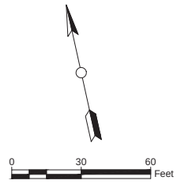
RAIN GARDEN POND DRAWDOWN TIME	MAX 48 HR	47 34 HR
UNDERDRAIN ORIFICE SIZE (DIAMETER)		1 125 IN
UNDERDRAIN ORIFICE SIZE (AREA)		1.00 SQ IN

RAINWATER HARVESTING TANK CALCULATIONS
ISOLATION OF ROOF RUNOFF
FOR ALLOWABLE INCREASE IN SITE IMPERVIOUS COVER

PROJECT: STARBUCKS BEE CAVE
JURISDICTION: CITY OF BEE CAVE, TX
APPLICABLE CODE: UNIFIED DEVELOPMENT CODE (7.3.2.L)

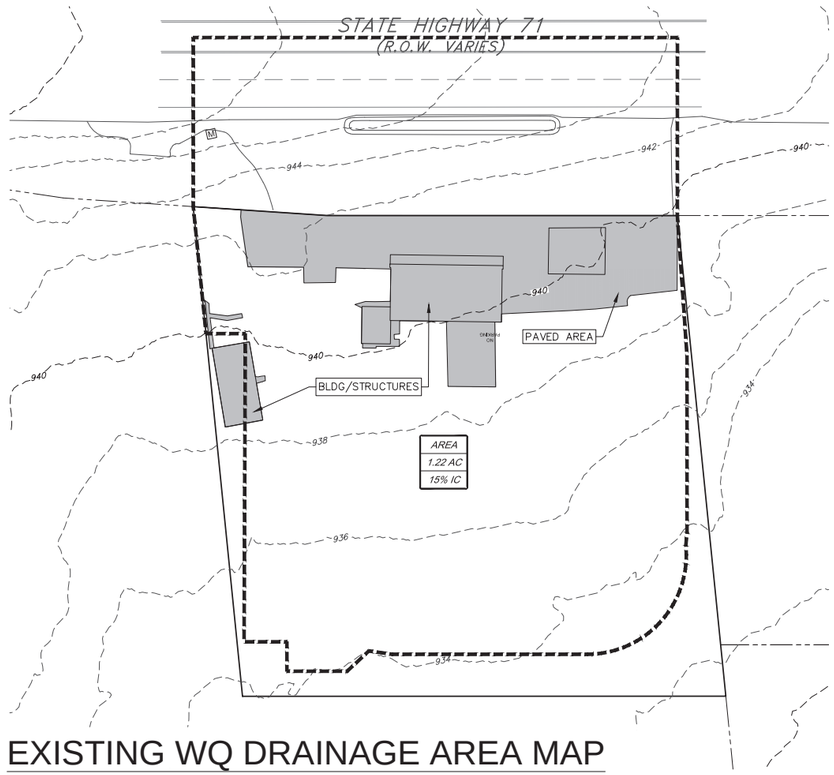
CALCULATIONS

DRAINAGE AREA TO CONTROL (DA): DA = ROOF AREA	2344 SF
DRAINAGE AREA IMPERVIOUS COVER (IC):	100 %
WATER QUALITY CAPTURE DEPTH (CD): CD = 0.5" + 0.1" *PER 10% POINT INCREASE OF ICOVER 20%; EXCESS OVER 20% = IC - 20% = 80% PER 10% POINT INCREASE = 80% * 0.1 = 0.8	1 30 IN
WATER QUALITY VOLUME (WQV): WQV = (CD*12) * DA	254 CF
CONVERSION: 1 CF = 7 48 GAL	1898 GAL

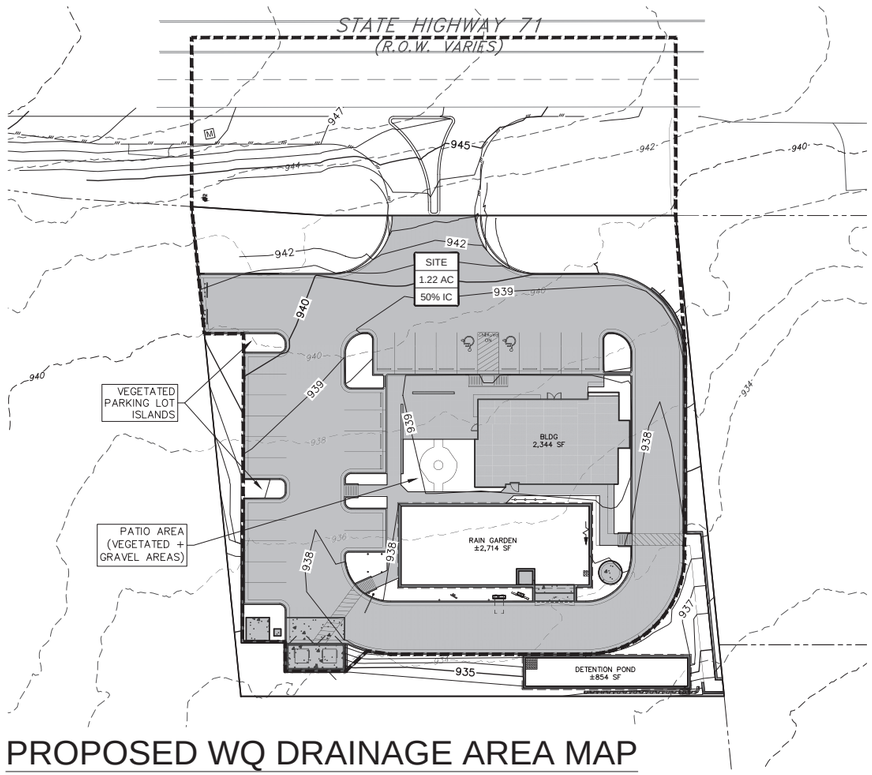


LEGEND

- SUBJECT TRACT PROPERTY LINE
- ADJOINER TRACT PROPERTY LINE
- 843 EXISTING CONTOUR (MAJOR)
- 843 EXISTING CONTOUR (MINOR)
- 843 PROPOSED CONTOUR (MAJOR)
- 843 PROPOSED CONTOUR (MINOR)
- DRAINAGE AREA BOUNDARY
- EX-2 / 0.83 AC / 5% IC — EXISTING DRAINAGE AREA LABEL
- PR-2 / 0.83 AC / 40% IC — PROPOSED DRAINAGE AREA LABEL
- IMPERVIOUS COVER AREA



EXISTING WQ DRAINAGE AREA MAP



PROPOSED WQ DRAINAGE AREA MAP

NOTES:

1. RAIN GARDEN (PARTIAL INFILTRATION) IS SIZED FOR ON-SITE IMPERVIOUS COVER ONLY.
2. DRAINAGE FOR THIS DEVELOPMENT HAS BEEN DESIGNED SUCH THAT THERE WILL BE NO ADVERSE IMPACTS ON THE CAPACITY, FUNCTION, OR INTEGRITY OF TEXAS DEPARTMENT OF TRANSPORTATION RIGHT OF WAY DRAINAGE FACILITIES.

811 Know what's below. Call before you dig.

CAUTION!
IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

FOR CITY USE ONLY:

MillerGRAY
Consulting • Engineering • Infrastructure
7320 N. MoPac Expressway, Suite 203
Austin, Texas 78731
Phone (512) 861-5300
www.miller-gray.com
TBPE FIRM REG. NO. F-16302

STATE OF TEXAS
J. TRAVIS WILSON
97307
LICENSED PROFESSIONAL ENGINEER
4/5/2024

P:\00323 Investco\001 Starbucks Bee Cave\05_CAD\00323-001dam.dwg 4/5/2024 10:13 AM

STARBUCKS BEE CAVE
14211 STATE HWY 71, BEE CAVE, TEXAS 78738

WATER QUALITY DRAINAGE AREA MAPS & CALCS

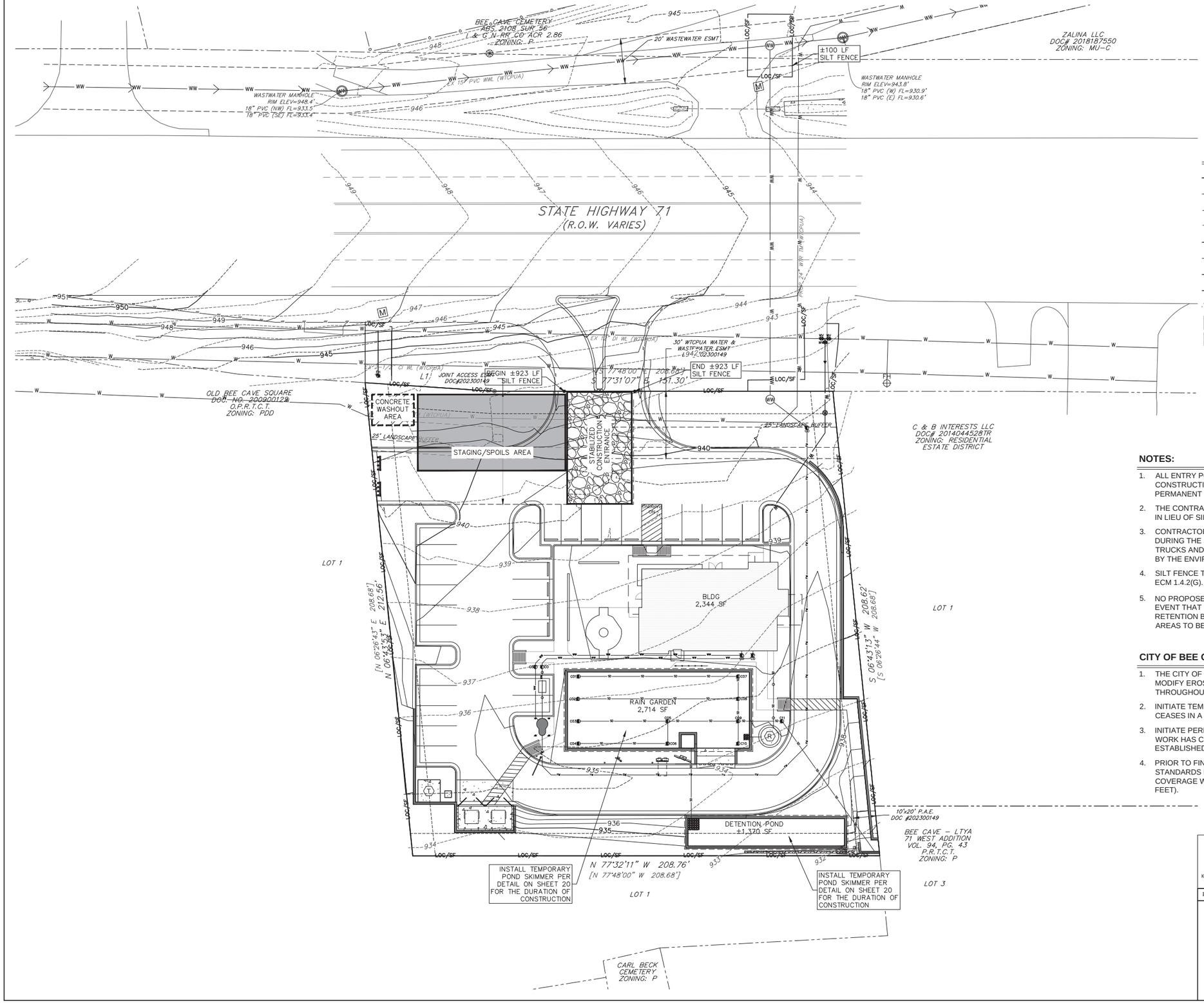
REVISIONS/CORRECTIONS

NO.	DATE	DESCRIPTION	BY

PROJECT NUMBER 00323-001
DATE: 4/5/2024
DESIGNED: KKE
CHECKED: JTW

SHEET NO. 10 OF 41

23-789-SNPS



LEGEND

- SUBJECT TRACT PROPERTY LINE
- ADJOINER TRACT PROPERTY LINE
- 843 EXISTING CONTOUR (MAJOR)
- 843 EXISTING CONTOUR (MINOR)
- 843 PROPOSED CONTOUR (MAJOR)
- 843 PROPOSED CONTOUR (MINOR)
- LOC LIMITS OF CONSTRUCTION
- LOC/SF LIMITS OF CONSTRUCTION/SILT FENCE
- T T T T TREE PROTECTION
- STAGING/SPOILS AREA
- CONSTRUCTION ENTRANCE/EXIT
- RB ROCK BERM LEVEL SPREADER
- (T) TRANSFORMER
- (R) RAINWATER TANK

NOTES:

1. ALL ENTRY POINTS SHALL HAVE A STABILIZED CONSTRUCTION ENTRANCE UNTIL SUCH TIME AS A PERMANENT DRIVEWAY IS CONSTRUCTED.
2. THE CONTRACTOR MAY USE MULCH SOCK (COA DTL 648S-1) IN LIEU OF SILT FENCE AT THIS DISCRETION.
3. CONTRACTOR SHALL UTILIZE DUST CONTROL MEASURES DURING THE SITE CONSTRUCTION SUCH AS IRRIGATION TRUCKS AND MULCHING PER ECM 1.4.5(D) OR AS DIRECTED BY THE ENVIRONMENTAL INSPECTOR.
4. SILT FENCE TYPE AND INSTALLATION SHALL COMPLY WITH ECM 1.4.2(G).
5. NO PROPOSED GRADES EXCEED 15% ON THE SITE. IN THE EVENT THAT FINAL GRADES DO EXCEED 15%, PROVIDE SOIL RETENTION BLANKETS PER COA SPEC ITEM 605S OVER AREAS TO BE REVEGETATED.

CITY OF BEE CAVE NOTES:

1. THE CITY OF BEE CAVE HAS THE AUTHORITY TO ADD OR MODIFY EROSION/SEDIMENTATION CONTROLS ON SITE THROUGHOUT THE DURATION OF THE PROJECT.
2. INITIATE TEMPORARY STABILIZATION WHEN CONSTRUCTION CEASES IN A DISTURBED AREA FOR MORE THAN 14 DAYS.
3. INITIATE PERMANENT STABILIZATION IMMEDIATELY ONCE WORK HAS CEASED AND FINAL GRADE HAS BEEN ESTABLISHED.
4. PRIOR TO FINAL SITE ACCEPTANCE, MINIMUM REVEGETATION STANDARDS MUST BE MET ACROSS THE SITE (95% COVERAGE WITH NO BARE AREAS EXCEEDING 16 SQUARE FEET).

Know what's below. Call before you dig. 811

CAUTION!
IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

FOR CITY USE ONLY:

MillerGRAY
Consulting • Engineering • Infrastructure
7320 N. MoPac Expressway, Suite 203
Austin, Texas 78731
Phone (512) 861-5300
www.miller-gray.com
TBPE FIRM REG. NO. F-16302

STATE OF TEXAS
J. TRAVIS WILSON
97307
LICENSED PROFESSIONAL ENGINEER
4/5/2024

P:\00323 Investcor\001 Starbucks Bee Cave\05_CAD\00323-001esc.dwg 4/5/2024 10:13 AM

STARBUCKS BEE CAVE
14211 STATE HWY 71, BEE CAVE, TEXAS 78738

EROSION & SEDIMENTATION CONTROL PLAN

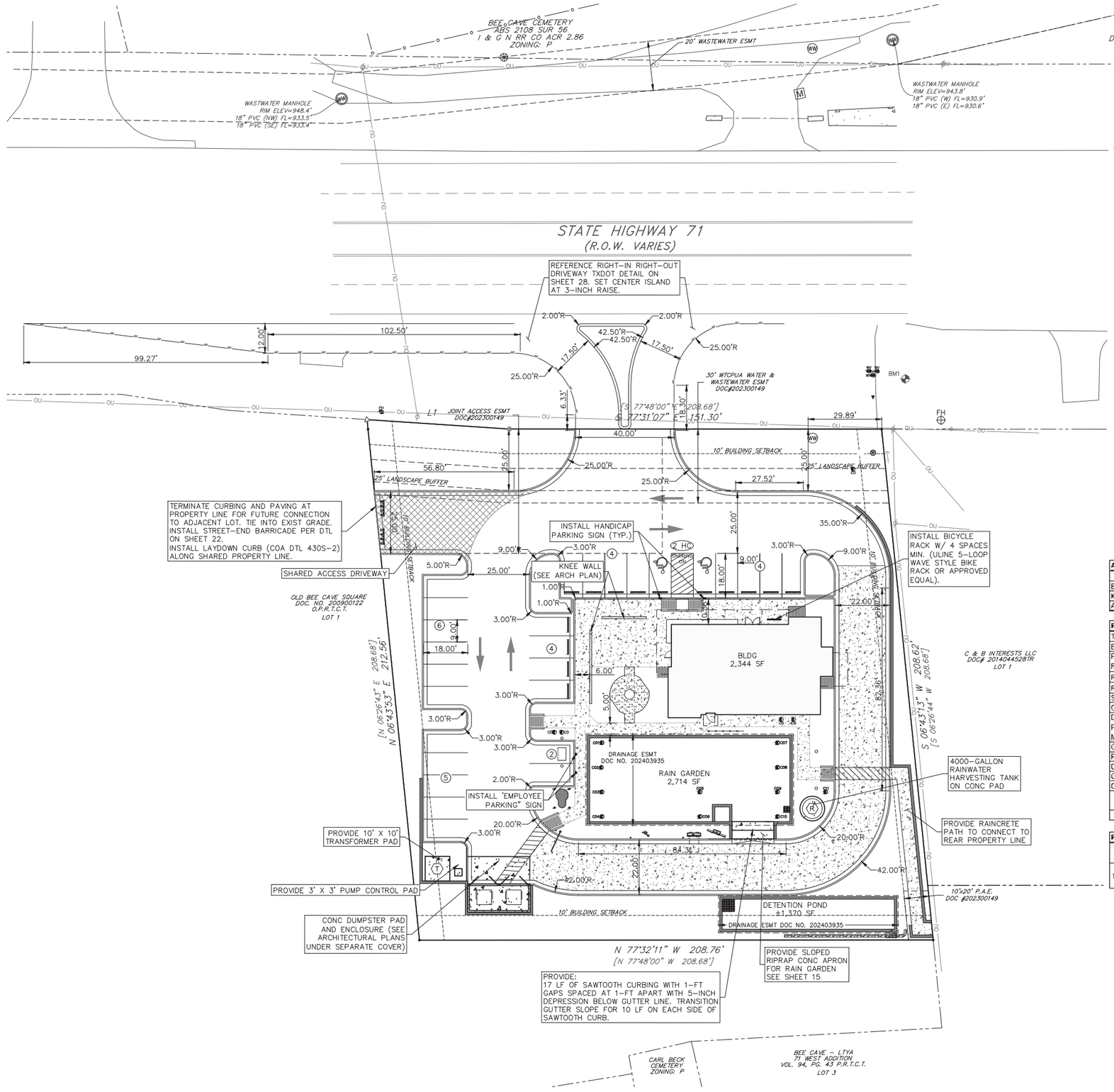
REVISIONS/CORRECTIONS

NO.	DATE	DESCRIPTION	BY

PROJECT NUMBER 00323-001
DATE: 4/5/2024
DESIGNED: KKE
CHECKED: JTW

SHEET NO.
11 OF 41

23-789-SNPS



NOTES:

1. ALL PARKING AREAS AND DRIVE AISLES SHALL BE SURFACED WITH CONCRETE UNLESS SPECIFICALLY NOTED OTHERWISE. SEE GEOTECHNICAL REPORT FOR PAVING RECOMMENDATIONS.
2. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
3. ALL SIDEWALKS AND DRIVE-THRU AISLES ARE TO BE RAINCRETE PERMEABLE CONCRETE.
4. THE WATER STORAGE TANK SHALL BE A CORGAL MODEL 0803-WT-CHR WITH STANDARD 30 DEGREE CORRUGATED METAL ROOF HAVING A NOMINAL CAPACITY OF 4000 GALLONS; NOMINAL TANK DIMENSIONS SHALL BE 8'-0" DIA, 10'-9" EAVE HEIGHT, 13'-3' OVERALL HEIGHT. SEE ARCHITECTURAL PLANS FOR DESIGN DETAILS.
5. THE DRIVE-THRU SIGN WILL REQUIRE A SEPARATE SIGN PERMIT.
6. DRIVE-THRU ESCAPE AND SITE CIRCULATION LANE SHALL NOT BE CONVERTED TO AN ADDITIONAL DRIVE-THRU SERVICE LANE ANYTIME IN THE FUTURE UNLESS PRIOR APPROVAL HAS BEEN GRANTED BY THE CITY OF BEE CAVE.
7. THE MANUFACTURER'S RECOMMENDED MAINTENANCE PLAN FOR THE PERMEABLE PAVEMENT AREAS SHALL BE INCLUDED IN THE WQ MAINTENANCE PLAN ASSOCIATED WITH THE RECORDED RESTRICTIVE COVENANT.

LEGEND

- SUBJECT TRACT PROPERTY LINE
- ADJOINER TRACT PROPERTY LINE
- EXISTING EOP
- OU — EXISTING OVERHEAD POWER LINE
- EXISTING POWER POLE
- EXISTING GUY ANCHOR
- 4224 — EXISTING TREE
- FH — EXISTING FIRE HYDRANT
- CURB AND GUTTER
- PROPOSED SIGN
- HANDICAP PARKING SYMBOL
- T — TRANSFORMER
- R — RAINWATER TANK
- ROCK AREA FOR CANOPY DOWNSPOUTS
- 4" — 6" THICK REINFORCED CONCRETE
- RAINCRETE (PERMEABLE)
- GRAVEL WALKWAY
- RETAINING WALL
- FH — PROPOSED FIRE HYDRANT

Allowable Impervious Cover	Area (SF)	Area (%)
Base level allowable IC	17,376	40%
IC bonus for rainwater harvesting	2,172	5%
Allowable IC w/base and rainwater harvesting bonus	19,548	45%

Proposed Impervious Cover	Measured area (SF)	IC Credit (%)	Effective IC (SF)
Building	2,344	0%	2,344
Paving & other flatwork (Concrete paving, curb & gutter)	14,287	0%	14,287
Raincrete Sidewalk	2,256	50%	1,128
Raincrete Drive Thru and Escape Lane	4,625	100%	-
Raincrete Sidewalk to LTYA (City Request)	721	100%	-
Shared Driveway Connection (City Request)	1,395	100%	-
Grass/landscaping	12,300	100%	-
Detention Pond	854	100%	-
Rain Garden	2,750	100%	-
Misc. Concrete Pads	291	0%	291
Concrete dumpster pad	573	0%	573
Retaining Walls	725	0%	725
Downspout Gravel	74	100%	-
Crushed granite landscape sitting area	211	0%	211
Concrete accessible ramp to LTYA (City Request)	33	100%	-
TOTAL SF IC "ON SITE" ONLY	43,430		19,560
TOTAL AC IC "ON SITE" ONLY	0.997		0.449
	TOTAL IC % "ON SITE" ONLY		45.0%

Parking Table							
Building Address	Proposed Use	Area (SF)	Parking Ratio	Parking Required	Parking Provided	HC Parking Required	HC Parking Provided
14211 State Hwy 71	Commercial Building	2,344	1 SP:100 SF	24	27	1	2
	Patio (not sheltered)	400	1 SP:133 SF	3	-	0	0
			Total	27	27	1	2

811 Know what's below. Call before you dig.

CAUTION!
IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

FOR CITY USE ONLY:

MillerGRAY
Consulting • Engineering • Infrastructure
7320 N. MoPac Expressway, Suite 203
Austin, Texas 78731
Phone (512) 861-5300
www.miller-gray.com
TBPE FIRM REG. NO. F-16302

STATE OF TEXAS
J. TRAVIS WILSON
97307
LICENSED PROFESSIONAL ENGINEER
5/13/2024

P:\00323 Investcor\001 Starbucks Bee Cave\05_CAD\00323-001snp.dwg 5/13/2024 8:23 AM

STARBUCKS BEE CAVE
14211 STATE HWY 71, BEE CAVE, TEXAS 78738

SITE & DIMENSION CONTROL PLAN

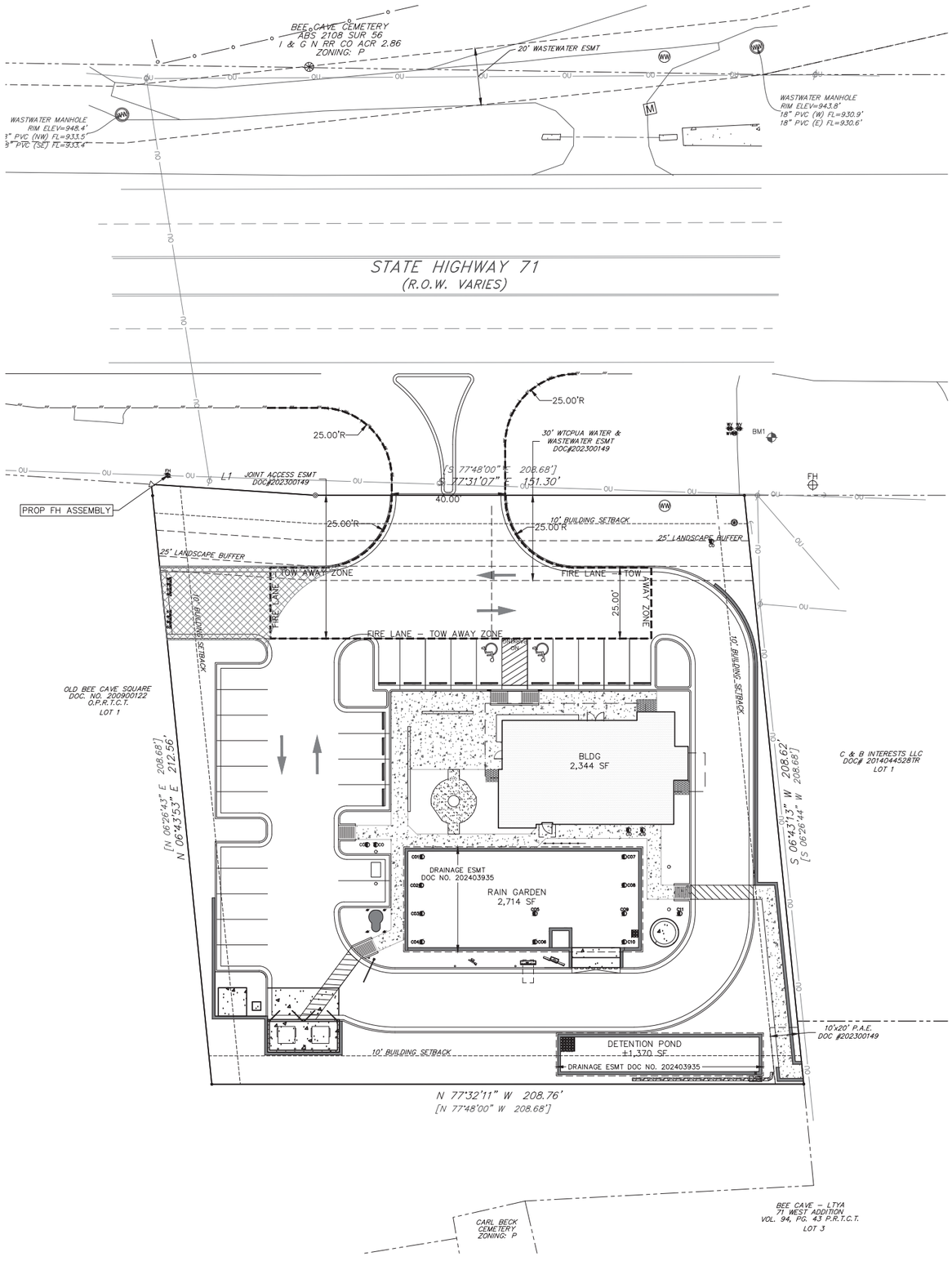
REVISIONS/CORRECTIONS

NO.	DATE	DESCRIPTION	BY

PROJECT NUMBER 00323-001
DATE: 5/13/2024
DESIGNED: KKE
CHECKED: JTW

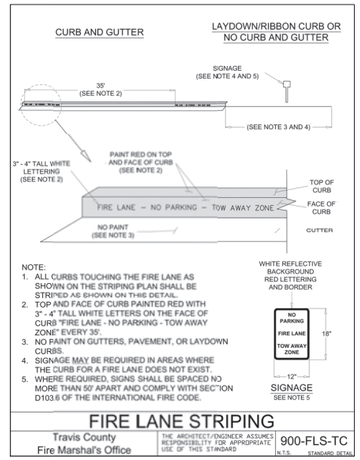
SHEET NO.
12 OF 41

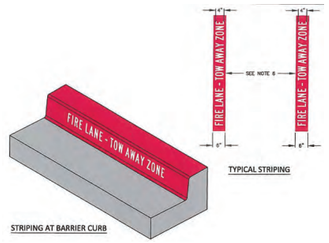
23-789-SNPS

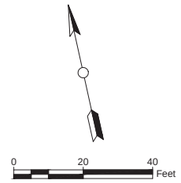


FIRE CONTROL PLAN NOTES:

1. FIRE LANE IS OFFSET 6" FOR GRAPHICAL CLARITY.
2. ALL FIRE LANE STRIPING SHALL COMPLY WITH THE CURRENT INTERNATIONAL FIRE CODE, AS ADOPTED BY THE CITY OF AUSTIN, AND CITY OF AUSTIN CODE OF ORDINANCES.
3. FIRE LANES SHALL BE CONTINUOUSLY MARKED BY RED TRAFFIC PAINT THAT IS MINIMUM 6 INCHES (6") IN WIDTH TO SHOW THE BOUNDARIES OF THE LANE.
4. "FIRE LANE - TOW AWAY ZONE" SHALL APPEAR IN FOUR INCH (4") TYPE D WHITE BLOCK LETTERS AT TWENTY-FIVE FOOT (25') INTERVALS, OR LESS, ON THE RED BORDER MARKINGS ALONG BOTH SIDES OF THE FIRE LANE.
5. WHERE A 6" BARRIER CURB EXISTS, THE FIRE LANE STRIPING SHALL BE ON BOTH THE VERTICAL FACE OF THE CURB AND TOP OF CURB. "FIRE LANE - TOW AWAY ZONE" SHALL BE MARKED IN 4" WHITE BLOCK LETTERS ON FACE OF CURB ONLY.
6. WHERE A FIRE LANE IS ADJACENT TO PARKING SPACES THE FIRE LANE STRIPING SHALL BE AN 8" RED STRIPE PAINTED ON THE DRIVE SURFACE WITH 4" WHITE LETTERS STATING "FIRE LANE NO PARKING TOW AWAY ZONE" FIRE LANE STRIPING SHALL EXTEND BEHIND ALL PARKING SPACES.
7. WHERE A FIRE HYDRANT, FIRE DEPARTMENT CONNECTION, OR OTHER FIRE PROTECTION EQUIPMENT IS LOCATED ON A FIRE LANE, THE FIRE LANE SHALL BE A MINIMUM OF TWENTY-SIX FEET (26') IN WIDTH, EXCLUSIVE OF SHOULDERS.







LEGEND

- SUBJECT TRACT PROPERTY LINE
- ADJOINER TRACT PROPERTY LINE
- EXISTING EOP
- OU — EXISTING OVERHEAD POWER LINE
- EXISTING POWER POLE
- EXISTING GUY ANCHOR
- 4224 — EXISTING TREE
- FH — EXISTING FIRE HYDRANT
- CURB AND GUTTER
- FIRE LANE
- PROPOSED SIGN
- HANDICAP PARKING SYMBOL
- FH — PROPOSED FIRE HYDRANT

TRAVIS COUNTY EMERGENCY SERVICES DISTRICT NO. 6 FIRE DEPARTMENT - SITE PLAN NOTES

1. DESIGNS FOR SITE IMPROVEMENTS SHALL MEET THE CURRENT DESIGN CRITERIA AS REQUIRED BY TCESD NO. 6.
2. ALL PLANS (SITE, BUILDING, FIRE ALARM, FIRE SPRINKLER) SHALL BE SUBMITTED TO LTFR FOR REVIEW. TWO FULL-SIZE SETS ARE REQUIRED. A REVIEW LETTER WILL BE GENERATED. REVIEWS WILL NOT BE PERFORMED UNTIL THE APPLICABLE REVIEW FEES ARE PAID.
3. UPON PLAN APPROVAL, A PERMIT WILL BE ISSUED. THE PERMIT MUST BE CONSPICUOUSLY POSTED.
4. AN ALL-WEATHER DRIVING SURFACE (FIRE APPARATUS ACCESS) MUST BE INSTALLED IN LOCATIONS SHOWN ON THE SITE PLAN, PRIOR TO ANY BUILDING CONSTRUCTION BEYOND THE FOUNDATION.
5. ALL PERVIOUS/DECORATIVE PAVING SHALL BE ENGINEERED AND INSTALLED FOR 80,000 POUNDS LIVE-VEHICLE LOADS. ANY PERVIOUS/DECORATIVE PAVING WITHIN 100 FEET OF ANY BUILDING MUST BE APPROVED BY THE FIRE DEPARTMENT.
6. VERTICAL CLEARANCE REQUIRED FOR FIRE APPARATUS IS 13 FEET, SIX INCHES FOR THE FULL 25 FEET WIDTH OF ACCESS DRIVES AND ROUTES FOR INTERNAL CIRCULATION. DEAD-END FIRE APPARATUS ACCESS ROADS IN EXCESS OF 150 FEET IN LENGTH SHALL BE PROVIDED WITH APPROVED PROVISIONS FOR THE TURNING AROUND OF FIRE APPARATUS, PER FIGURE B-4 OF THIS MANUAL.
7. THE MAXIMUM ALLOWABLE DRIVEWAY, DRIVE AISLE OR FIRE LANE GRADE IS 15 PERCENT.
8. THE MARKINGS OF FIRE LANES MUST BE RED WITH WHITE STENCILING OR WHITE WITH RED STENCILING READING "FIRE LANE - TOW AWAY ZONE" IN LETTERING NO LESS THAN THREE INCHES IN HEIGHT. THE STENCILING SHALL BE AT INTERVALS OF 35 FEET OR LESS. ALTERNATIVE MARKING OF FIRE LANES MAY BE APPROVED BY THE FIRE CHIEF, OR HIS/HER DESIGNATED AGENT, PROVIDED FIRE LANES ARE CLEARLY 7 IDENTIFIED AT BOTH ENDS AND AT INTERVALS NOT TO EXCEED 35 FEET. EXISTING FIRE LANE MARKINGS SHALL BE GRANDFATHERED PROVIDED THAT THEY MEET THE WORDING AND INTERVAL REQUIREMENTS THAT WERE ACCEPTED ON APPROVED SITE PLANS AND OTHER TYPE FIRE LANE SUBMITTALS APPROVED BY THE FIRE DEPARTMENT. EXISTING FIRE LANES THAT ARE IN NEED OF RE-PAINTING SHALL MEET THE REQUIREMENTS OF THIS SECTION.
9. THE FIRE DEPARTMENT CONNECTION (FDC) CONNECTION SHALL BE INSTALLED WHERE SHOWN ON THE SITE PLAN.
10. HYDRANTS MUST BE INSTALLED WITH THE CENTER OF THE FOUR AND ONE-HALF INCH STEAMER OPENING AT LEAST 18 INCHES ABOVE FINISHED GRADE. THE FOUR AND ONE-HALF INCH STEAMER OPENING MUST FACE THE DRIVEWAY OR STREET WITH THREE- TO SIX-FOOT SETBACKS FROM THE CURB LINE(S). NO OBSTRUCTION IS ALLOWED WITHIN THREE FEET OF ANY HYDRANT, AND THE FOUR AND ONE-HALF INCH OPENING MUST BE TOTALLY UNOBSTRUCTED FROM THE STREET/DRIVEWAY.
11. CONTRACTOR SHALL INSTALL BLUE REFLECTIVE MARKERS IN THE PAVEMENT PER TCESD NO. 6 SPECIFICATIONS. NO IMPROVEMENTS MAY BE OCCUPIED UNTIL THE MARKERS ARE INSTALLED.
12. FIRE HYDRANTS SHALL HAVE NATIONAL HOSE THREADS.
13. STATIC WATER TANK HARD SUCTION CONNECTOR SHALL HAVE SIX-INCH NATIONAL HOSE THREADS.
14. A CERTIFIED OR WITNESSED PRESSURE TEST IS REQUIRED FOR ALL WATER MODELS, REQUIRED HYDRANT FLOW TESTS OR SPRINKLER SYSTEM DESIGNS.
15. HYDRANTS SHALL BE PAINTED SILVER AND THE BONNET AND CAPS SHALL BE PAINTED THE DESIGNATED COLOR PER THE GALLONS PER MINUTE (GPM) AS FOLLOWS:

CLASS AA	LIGHT BLUE	1500 OR HIGHER GPM
CLASS A	GREEN	1000 - 1499 GPM
CLASS B	ORANGE	500 - 1499 BPM
CLASS C	RED	LESS THAN 500 GP<
CLASS D	BLACK	OUT OF SERVICE

16. COMMERCIAL DUMPSTERS AND CONTAINERS WITH AN INDIVIDUAL CAPACITY OF ONE- AND ONE-HALF CUBIC YARDS OR GREATER SHALL NOT BE STORED OR PLACED WITHIN 10 FEET OF OPENINGS, COMBUSTIBLE WALLS OR COMBUSTIBLE EAVE LINES.
17. "KEY BOXES"/"KEY SWITCHES" (KNOX-BOX® RAPID ENTRY SYSTEM) SHALL BE INSTALLED IN THE LOCATION(S) SHOWN ON THE SITE/BUILDING PLANS AS APPROVED BY TCESD NO. 6. CONTACT LTFR FOR ORDERING INFORMATION. NO IMPROVEMENTS MAY BE OCCUPIED UNTIL THE KEY BOX/KEY SWITCH IS INSTALLED.

811 Know what's below. Call before you dig.

CAUTION!
IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

FOR CITY USE ONLY:

MillerGRAY
Consulting • Engineering • Infrastructure
7320 N. MoPac Expressway, Suite 203
Austin, Texas 78731
Phone (512) 861-5300
www.miller-gray.com
TBPE FIRM REG. NO. F-16302

STATE OF TEXAS
J. TRAVIS WILSON
97307
LICENSED PROFESSIONAL ENGINEER
4/5/2024

P:\00323 Investor\001 Starbucks Bee Cave\05_CAD\00323-00 tspn.dwg 4/5/2024 10:13 AM

STARBUCKS BEE CAVE
14211 STATE HWY 71, BEE CAVE, TEXAS 78738

FIRE CONTROL PLAN

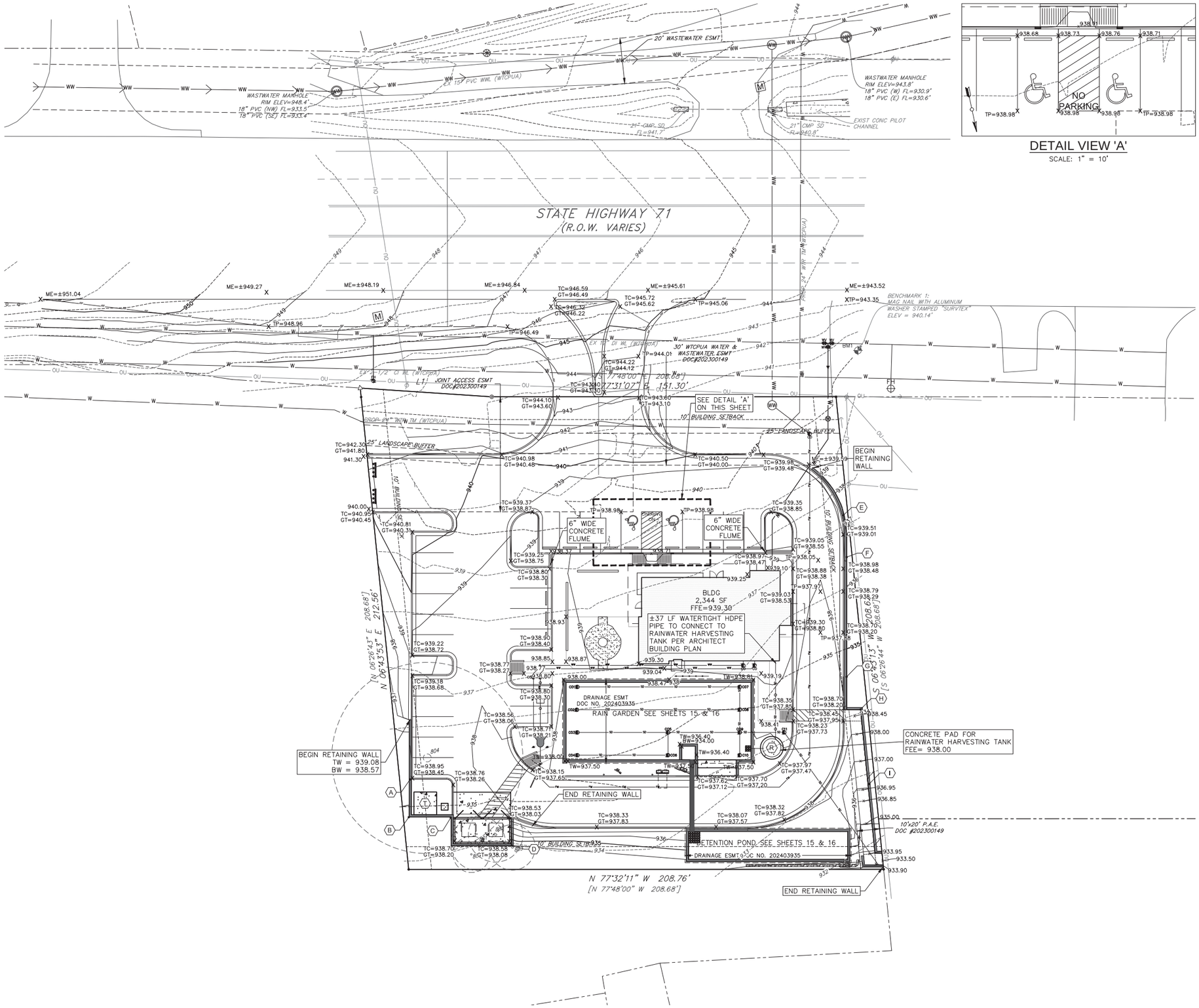
REVISIONS/CORRECTIONS

NO.	DATE	DESCRIPTION	BY

PROJECT NUMBER 00323-001
DATE: 4/5/2024
DESIGNED: KKE
CHECKED: JTW

SHEET NO.
13 OF 41

23-789-SNPS



DETAIL VIEW 'A'
SCALE: 1" = 10'

LEGEND

- SUBJECT TRACT PROPERTY LINE
- ADJOINER TRACT PROPERTY LINE
- 843 EXISTING CONTOUR (MAJOR)
- 843 EXISTING CONTOUR (MINOR)
- 843 PROPOSED CONTOUR (MAJOR)
- 843 PROPOSED CONTOUR (MINOR)
- x 521.2 PROPOSED SPOT ELEVATION
- PROPOSED STORM FLOW

TAGS

- (A) TW = 938.95 BW = 935.50
- (B) TW = 938.98 BW = 935.86
- (C) TW = 938.63 BW = 934.93
- (D) TW = 938.58 BW = 934.59
- (E) TW = 939.54 BW = 937.30
- (F) TW = 939.10 BW = 936.48
- (G) TW = 938.53 BW = 934.63
- (H) TW = 938.28 BW = 935.05
- (I) TW= 936.85 BW= 932.86

ABBREVIATION LIST

ME=	MATCH EXISTING
TP=	TOP OF PAVEMENT
GT=	GUTTER
TC=	TOP OF CURB
FFE=	FINISHED FLOOR ELEVATION
TW=	TOP OF WALL
BW=	BOTTOM OF WALL

MillerGRAY
Consulting • Engineering • Infrastructure
7320 N. MoPac Expressway, Suite 203
Austin, Texas 78731
Phone (512) 861-5300
www.miller-gray.com
TBPE FIRM REG. NO. F-16302

STATE OF TEXAS
J. TRAVIS WILSON
97307
LICENSED PROFESSIONAL ENGINEER
4/5/2024

P:\00323 Investcor\001 Starbucks Bee Cave\05_CAD\00323-001grd.dwg 4/5/2024 10:14 AM

STARBUCKS BEE CAVE

14211 STATE HWY 71, BEE CAVE, TEXAS 78738

OVERALL GRADING & STORM DRAIN PLAN

REVISIONS/CORRECTIONS

NO.	DATE	DESCRIPTION	BY

811 Know what's below. Call before you dig.

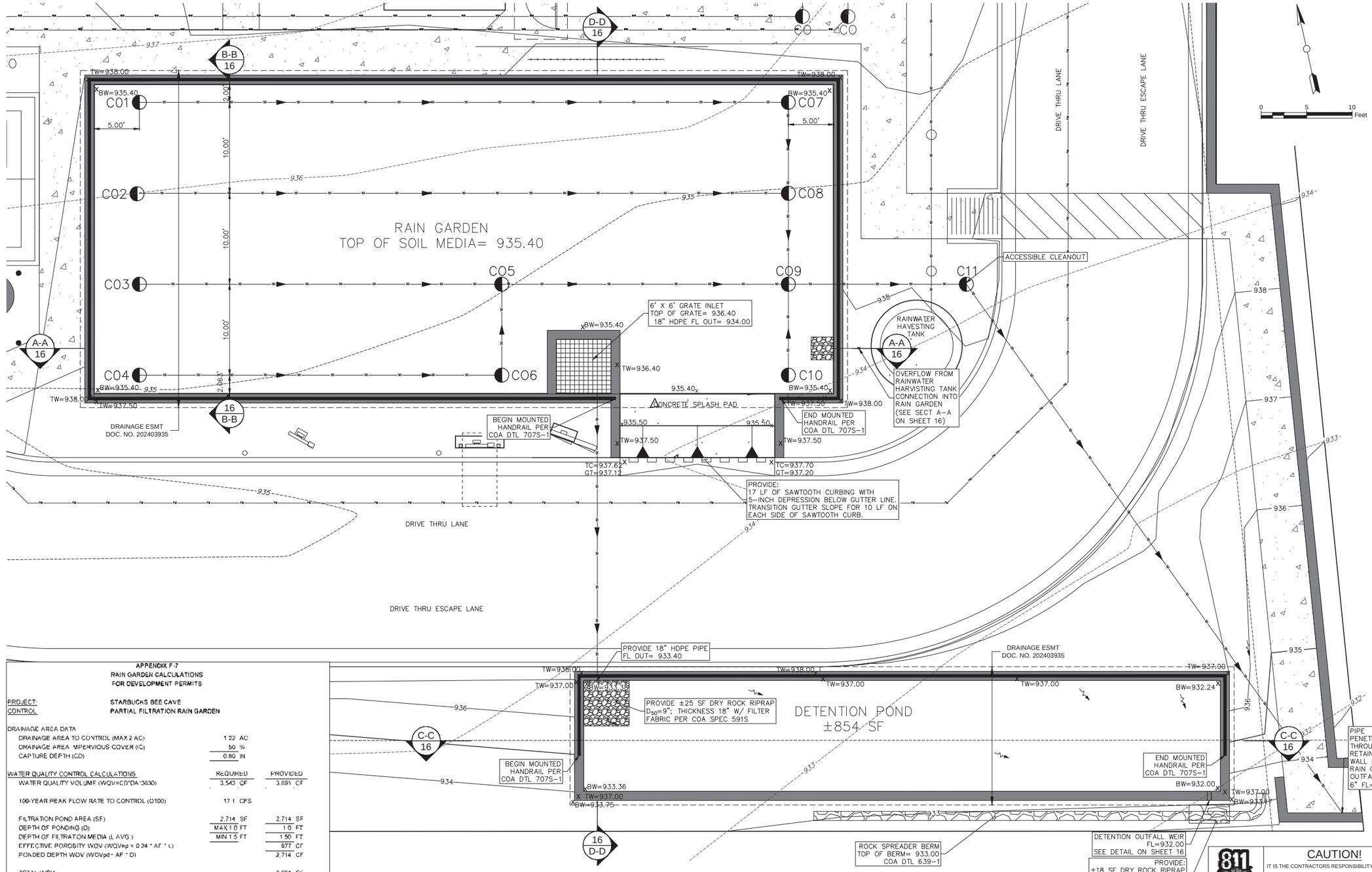
CAUTION!
IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

FOR CITY USE ONLY:

PROJECT NUMBER 00323-001
DATE: 4/5/2024
DESIGNED: KKE
CHECKED: JTW

SHEET NO.
14 OF 41

23-789-SNPS



APPENDIX F-7
RAIN GARDEN CALCULATIONS FOR DEVELOPMENT PERMITS

PROJECT: STARBUCKS BEE CAVE
CONTROL: PARTIAL FILTRATION RAIN GARDEN

DRAINAGE AREA DATA		
DRAINAGE AREA TO CONTROL (MAX 2 AC)	1.22 AC	
DRAINAGE AREA IMPERVIOUS COVER (IC)	50 %	
CAPTURE DEPTH (CD)	0.80 IN	
WATER QUALITY CONTROL CALCULATIONS	REQUIRED	PROVIDED
WATER QUALITY VOLUME (WQV=CD*DA*3630)	3,543 CF	3,691 CF
100-YEAR PEAK FLOW RATE TO CONTROL (Q100)	17.1 CFS	
FILTRATION POND AREA (SF)	2,714 SF	2,714 SF
DEPTH OF PONDING (D)	MAX 1.0 FT	1.0 FT
DEPTH OF FILTRATION MEDIA (L AVG.)	MIN 1.5 FT	1.50 FT
EFFECTIVE POROSITY WQV (WQVep = 0.24 * AF * L)		977 CF
PONDED DEPTH WQV (WQVpd= AF * D)		2,714 CF
TOTAL WQV		3,691 CF
WATER QUALITY ELEVATION (WQE)		936.40 FT MSL
ELEVATION OF SPLITTER/OVERFLOW WEIR (MINIMUM WQE)		936.40 FT MSL
LENGTH OF SPLITTER WEIR		16.0 FT
REQUIRED HEAD TO PASS Q100	MAX 0.5	0.50 FT
POND FREEBOARD PROVIDED TO PASS Q100	MIN 0.25 FT	0.6 FT
FOR FILTRATION RAIN GARDENS		
RAIN GARDEN POND DRAWDOWN TIME	MAX 48 HR	47.34 HR
UNDERDRAIN ORIFICE SIZE (DIAMETER)		1.125 IN
UNDERDRAIN ORIFICE SIZE (AREA)		1.00 SQ IN

DETENTION POND ELEVATION DISCHARGE RATING CURVE

CONTROL 1	WEIR	
Width	0.50	FT
Flowline	932.00	FT
Elevation (FT)	Height (FT)	Q (CFS)
932	0.00	0.0
933	1.00	1.5
934	2.00	4.2
935	3.00	7.8
936	4.00	12.0
937	5.00	16.8

WQ CLEANOUT FLOW LINES

CO1	933.21
CO2	933.13
CO3	933.03
CO4	933.12
CO5	932.69
CO6	932.78
CO7	932.6
CO8	932.51
CO9	932.42
CO10	932.58
CO11	932.25

NOTES:

1. THE TOPS OF ALL CLEANOUTS MUST BE FLUSH WITH THE TOP OF THE RAIN GARDEN SOIL MEDIA WITH THE EXCEPTION OF ACCESSIBLE CLEANOUT, WHICH IS TO BE FLUSH WITH ADJACENT GRADE.

811 Know what's below. Call before you dig.

CAUTION!
IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

FOR CITY USE ONLY:

MillerGRAY
Consulting • Engineering • Infrastructure
7320 N. MoPac Expressway, Suite 203
Austin, Texas 78731
Phone (512) 861-5300
www.miller-gray.com
TBPE FIRM REG. NO. F-16302

STATE OF TEXAS
J. TRAVIS WILSON
97307
LICENSED PROFESSIONAL ENGINEER
4/5/2024

P:\00323 Investcor\001 Starbucks Bee Cave\05_CAD\00323-001bond.dwg 4/5/2024 10:14 AM

STARBUCKS BEE CAVE

14211 STATE HWY 71, BEE CAVE, TEXAS 78738

DETENTION POND & RAIN GARDEN PLAN

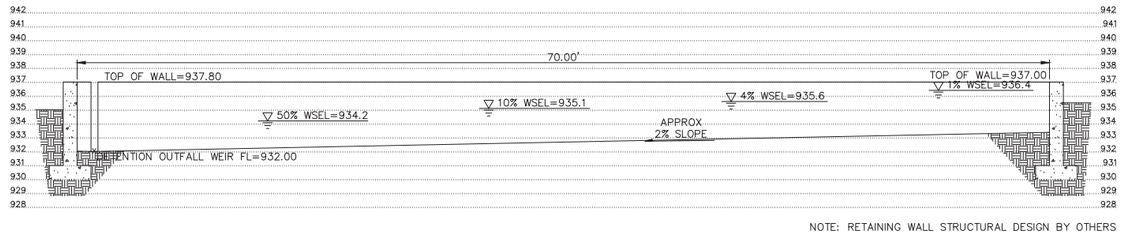
REVISIONS/CORRECTIONS

NO.	DATE	DESCRIPTION	BY

PROJECT NUMBER 00323-001
DATE: 4/5/2024
DESIGNED: KKE
CHECKED: JTW

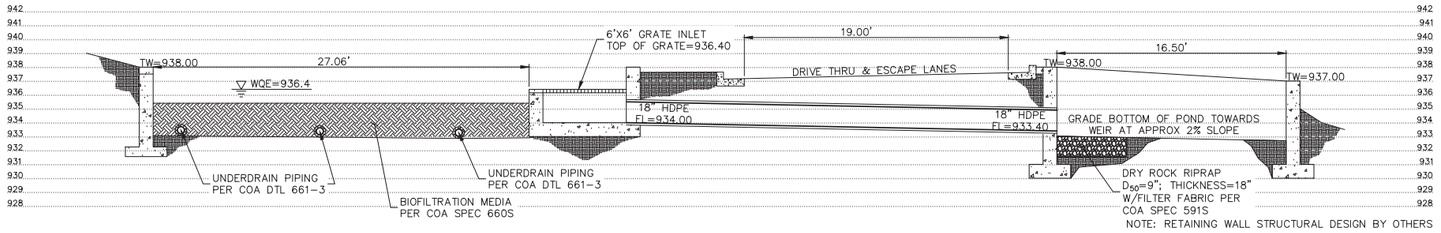
SHEET NO. 15 OF 41

23-789-SNPS



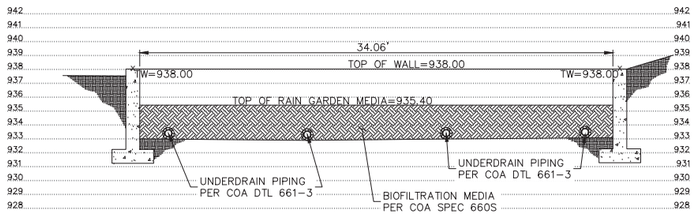
NOTE: RETAINING WALL STRUCTURAL DESIGN BY OTHERS

C-C 15 DETENTION POND SECTION
SCALE: 1" = 5' HORZ
1" = 5' VERT



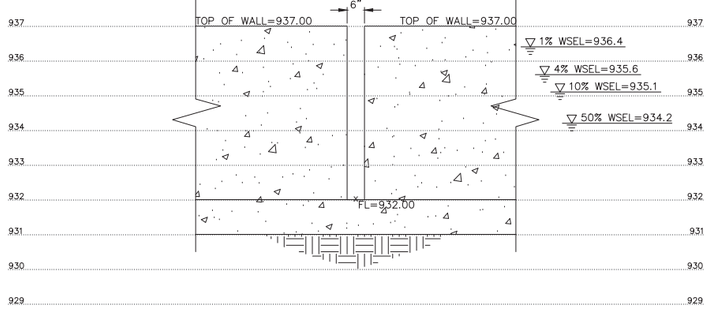
NOTE: RETAINING WALL STRUCTURAL DESIGN BY OTHERS

D-D 15 DETENTION POND SECTION
SCALE: 1" = 5' HORZ
1" = 5' VERT



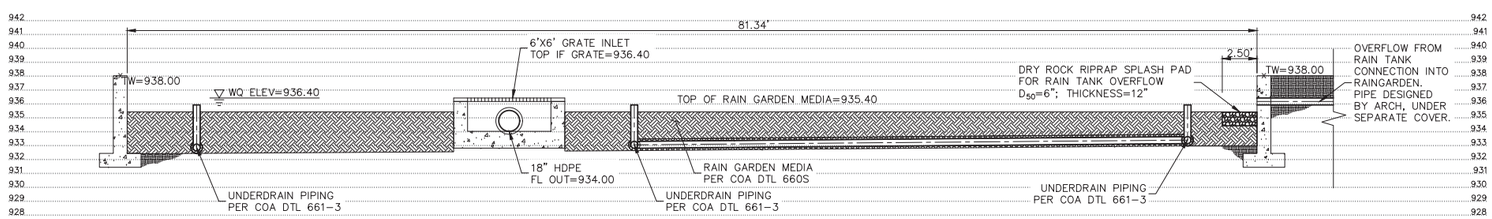
NOTE: RETAINING WALL STRUCTURAL DESIGN BY OTHERS

B-B 15 RAIN GARDEN SECTION
SCALE: 1" = 5' HORZ
1" = 5' VERT



NOTE: RETAINING WALL STRUCTURAL DESIGN BY OTHERS

15 DETENTION OUTFALL WEIR SECTION
SCALE: 1" = 2' HORZ
1" = 2' VERT



NOTE: RETAINING WALL STRUCTURAL DESIGN BY OTHERS

A-A 15 RAIN GARDEN SECTION
SCALE: 1" = 5' HORZ
1" = 5' VERT

MillerGRAY
Consulting • Engineering • Infrastructure
7320 N. MoPac Expressway, Suite 203
Austin, Texas 78731
Phone (512) 861-5300
www.miller-gray.com
TBPE FIRM REG. NO. F-16302

STATE OF TEXAS
J. TRAVIS WILSON
97307
LICENSED PROFESSIONAL ENGINEER
4/5/2024

P:\00323 Investacor\001 Starbucks Bee Cave\05_CAD\00323-001pond.dwg 4/5/2024 10:14 AM

STARBUCKS BEE CAVE
14211 STATE HWY 71, BEE CAVE, TEXAS 78738

DETENTION POND & RAIN GARDEN SECTIONS

REVISIONS/CORRECTIONS

NO.	DATE	DESCRIPTION	BY

811 Know what's below. Call before you dig.

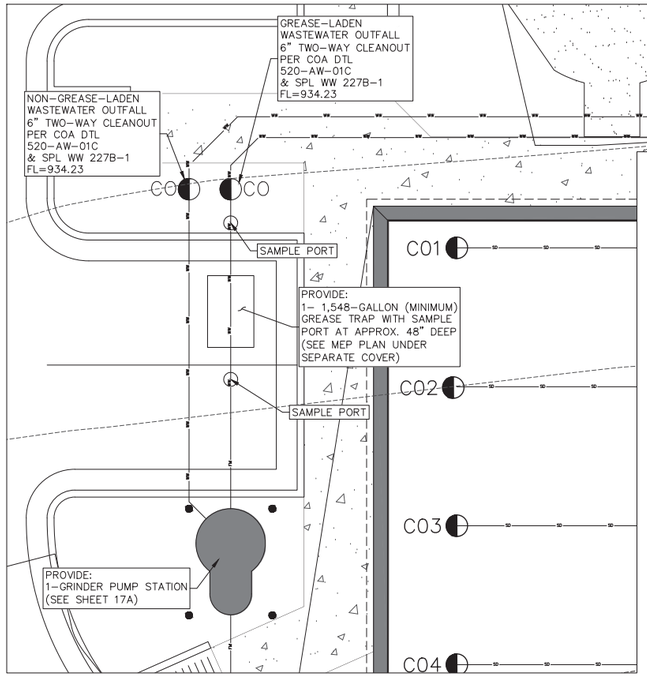
CAUTION!
IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

FOR CITY USE ONLY:

PROJECT NUMBER 00323-001
DATE: 4/5/2024
DESIGNED: KKE
CHECKED: JTW

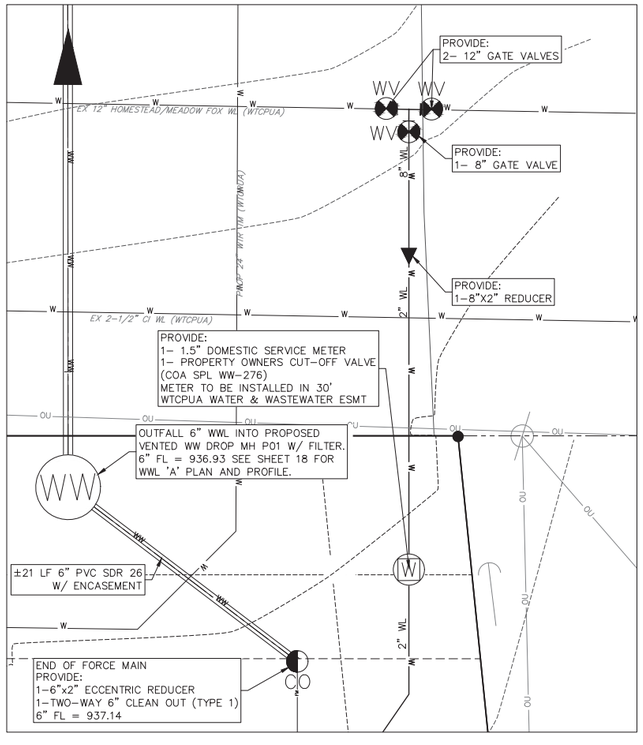
SHEET NO.
16 OF 41

23-789-SNPS



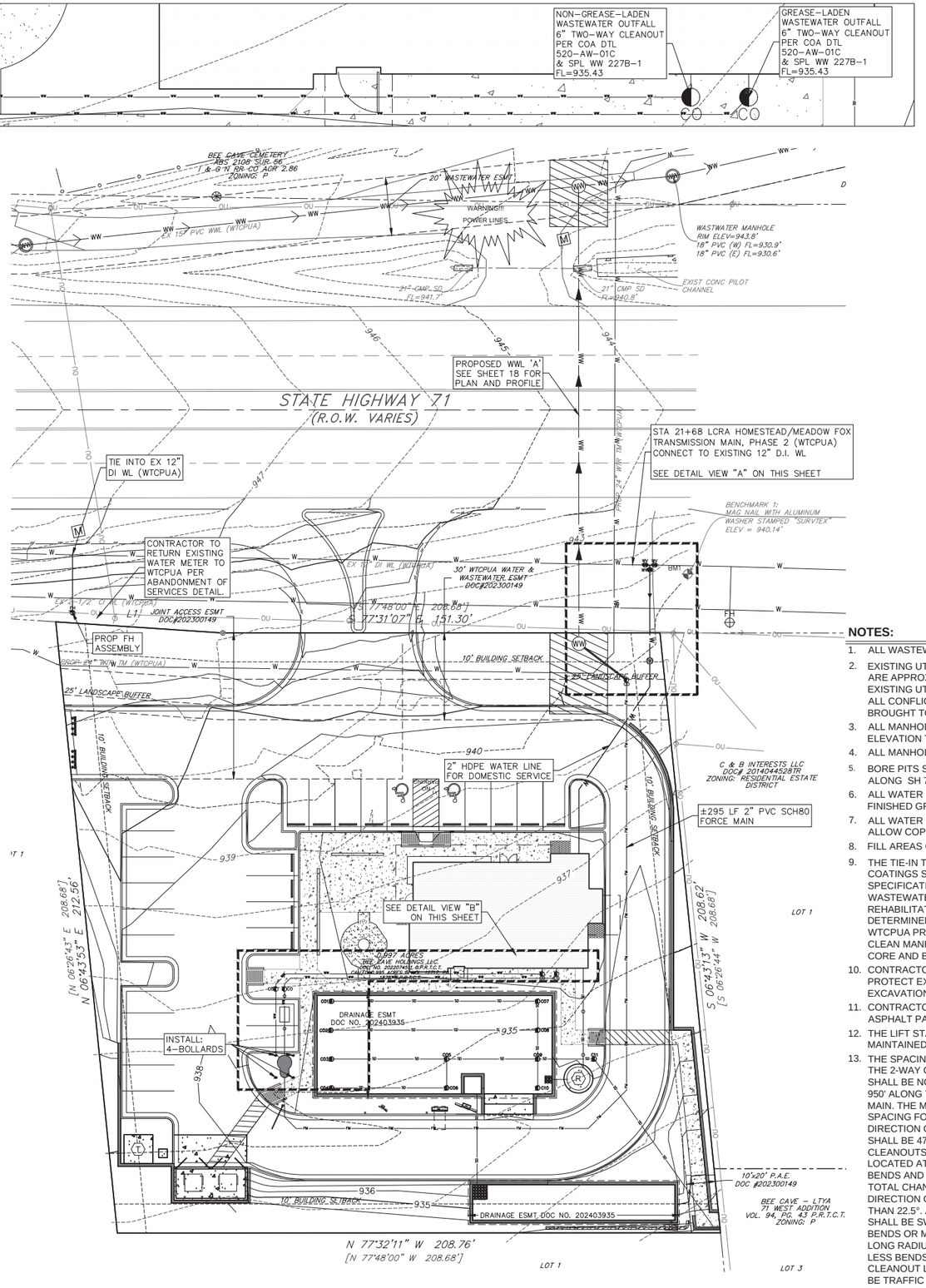
DETAIL VIEW "B"

SCALE: 1" = 5'



DETAIL VIEW "A"

SCALE: 1" = 5'



0 20 40 Feet

LEGEND

- SUBJECT TRACT PROPERTY LINE
- ADJOINER TRACT PROPERTY LINE
- EXISTING EOP
- EXISTING OVERHEAD POWER LINE
- EXISTING POWER POLE
- EXISTING GUY ANCHOR
- EXISTING TREE
- EXISTING FIRE HYDRANT
- CURB AND GUTTER
- PROPOSED WATER LINE
- PROPOSED WASTEWATER LINE
- PROPOSED STORM DRAIN LINE
- PROPOSED WATER VALVE
- PROPOSED WATER METER
- PROPOSED WASTEWATER MANHOLE
- PROPOSED WASTEWATER CLEANOUT
- TRANSFORMER
- RAINWATER TANK

NOTES:

1. ALL WASTEWATER LINES TO BE PVC, SDR26, ASTM D3034.
2. EXISTING UTILITY LOCATIONS AND CROSSINGS SHOWN IN PLAN AND PROFILE ARE APPROXIMATE. CONTRACTOR RESPONSIBLE FOR VERIFYING ALL EXISTING UTILITY LOCATIONS AND CROSSINGS PRIOR TO CONSTRUCTION. ALL CONFLICTS WITH INFORMATION SHOWN IN THESE PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER/ENGINEER IMMEDIATELY.
3. ALL MANHOLES NOT BENEATH PAVEMENT SHALL BE BOLTED AND HAVE A RIM ELEVATION TWO INCHES ABOVE ADJACENT GRADE.
4. ALL MANHOLES SHALL HAVE CONCENTRIC CONES.
5. BORE PITS SHALL BE LOCATED A MINIMUM OF 16' FROM EDGE OF PAVEMENT ALONG SH 71.
6. ALL WATER LINE SHALL HAVE A MINIMUM OF FOUR (4) FEET OF COVER FROM FINISHED GRADE.
7. ALL WATER SERVICE LINES SHALL BE HDPE BLACK PIPE. WTCPUA DOES NOT ALLOW COPPER SERVICE PIPES.
8. FILL AREAS OUTSIDE PAVEMENT TO BE COMPACTED TO 95%.
9. THE TIE-IN TO EXISTING WASTEWATER MANHOLE AND ALL MANHOLE COATINGS SHALL BE IN ACCORDANCE WITH THE CITY OF AUSTIN SPECIFICATIONS. ALL WASTEWATER CONNECTIONS TO EXISTING WASTEWATER MANHOLES SHALL MEET WASTEWATER MANHOLE REHABILITATION REQUIREMENTS. THESE REQUIREMENTS MUST BE DETERMINED PRIOR TO ANY CONNECTION. CONTRACTOR SHALL NOTIFY WTCPUA PRIOR, TO MAKE WASTEWATER CONNECTION. CONTRACTOR SHALL CLEAN MANHOLE TO ALLOW INSPECTION BY PUA. CONTRACTOR SHALL CORE AND BOOT PROPOSED CONNECTION AND RECOAT MANHOLE.
10. CONTRACTOR IS REQUIRED TO PROVIDE ENGINEER SUPPORT PLAN TO PROTECT EXISTING WATER LINES WHEN SAID LINES ARE WITHIN 5 FEET OF EXCAVATION AND WHEN EXCAVATION CROSSES WATER LINES.
11. CONTRACTOR SHALL REPAIR/RESTORE EXISTING CONCRETE AND/OR ASPHALT PAVING AND RIPRAP TO EXISTING CONDITION AS NECESSARY.
12. THE LIFT STATION VALVE VAULT, AND GREASE TRAP ARE TO BE PRIVATELY MAINTAINED.
13. THE SPACING BETWEEN THE 2-WAY CLEANOUTS SHALL BE NO MORE THAN 950' ALONG THE FORCE MAIN. THE MAXIMUM SPACING FOR SINGLE DIRECTION CLEANOUTS SHALL BE 475'. CLEANOUTS SHALL BE LOCATED AT SHARP BENDS AND PRIOR TO TOTAL CHANGE IN DIRECTION GREATER THAN 22.5°. ALL BENDS SHALL BE SWEEPING BENDS OR MADE UP OF A LONG RADIUS 45° OR LESS BENDS. ALL CLEANOUT LIDS SHALL BE TRAFFIC RATED.

811 Know what's below. Call before you dig.

CAUTION!

IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

FOR CITY USE ONLY:

MillerGRAY
Consulting • Engineering • Infrastructure
7320 N. MoPac Expressway, Suite 203
Austin, Texas 78731
Phone (512) 861-5300
www.miller-gray.com
TBPE FIRM REG. NO. F-16302

STATE OF TEXAS
J. TRAVIS WILSON
97307
LICENSED PROFESSIONAL ENGINEER
4/5/2024

P:\00323 Investcor\001 Starbucks Bee Cave\05_CAD\00323-001d.dwg 4/5/2024 10:14 AM

STARBUCKS BEE CAVE
14211 STATE HWY 71, BEE CAVE, TEXAS 78738

UTILITY PLAN

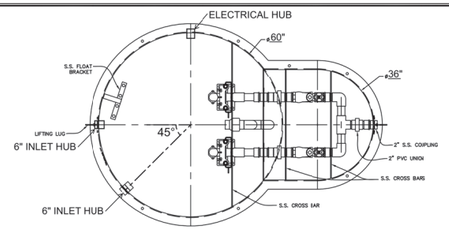
REVISIONS/CORRECTIONS

NO.	DATE	DESCRIPTION	BY

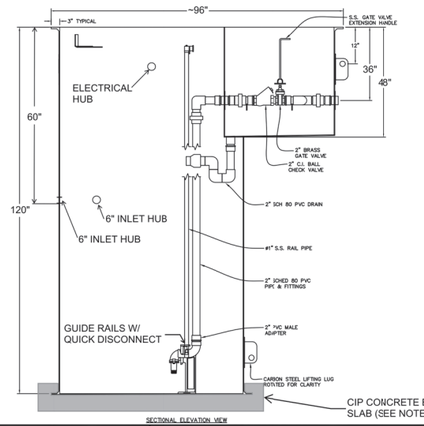
PROJECT NUMBER 00323-001
DATE: 4/5/2024
DESIGNED: KKE
CHECKED: JTW

SHEET NO. 17 OF 41

23-789-SNPS

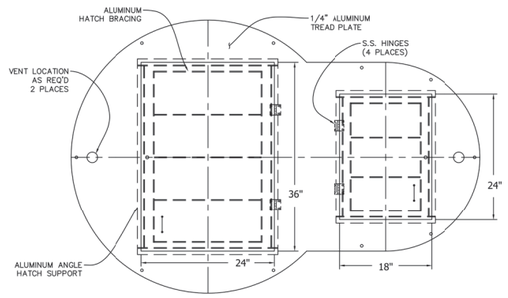


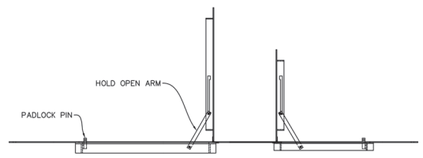
PLAN VIEW



SECTIONAL ELEVATION VIEW

STEELE PLASTICS, INC. 1280 Sturgis Rd. Conway, AR 72034 (501) 327-5122 Fax (501) 327-0807	TITLE PACKAGE DUPLEX 2" WITH VALVE BOX – PVC 10' PROJECT	JOB NO.
	CUSTOMER	P.O. NO. DWG. NO. PFD200-VBA-PVC10





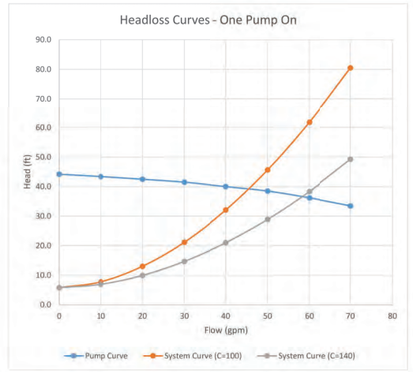
ALUMINUM HATCH COVER
KEY-HOLE STYLE

STEELE PLASTICS, INC. 1280 Sturgis Rd. Conway, AR 72034 (501) 327-5122 Fax (501) 327-0807	TITLE ____ x ____ ALUMINUM HATCH COVER PROJECT	JOB NO.
	CUSTOMER	P.O. NO. DWG. NO. CYA-KH

MillerGRAY

Project Starbucks Grinder Station
Client Investcor
Prj No 00323-001
Date 3/20/2024
By RY/SS
Title Lift Station Design

Pump Curve



CONTROL ELEVATIONS

Top of Lid =	938.20	ft
8" Invert =	933.20	ft
High Level Alarm =	933.00	ft
Lag Pump On =	932.70	ft
Lead Pump On =	931.70	ft
Pumps Off =	929.70	ft
Bottom of Wet Well =	928.20	ft
Total Well Depth (Dw) =	10.00	ft
Cycle Time (Θ) =	6.00	min
Pump Capacity (Q) =	50.00	gpm

Page 1 of 1

EBARA Submersible Grinder Pumps *(residential / commercial)* **EBG, EBHG**

Specifications – 3, 5, 7.5 10 HP

Pump Model:
Pump shall be of the centrifugal type with an integrally built-in grinder unit and submersible type motor. The grinder unit shall be capable of macerating all material in normal domestic and commercial sewage, including reasonable amounts of foreign objects such as sanitary napkins, disposable diapers, thin rubber, small wood, plastic and the like to a fine slurry that easily pass through the pump and 2" discharge pipe. Discharge shall be standard with slotted bolt pattern to accomodate either a 2.5" or 3" 150 lb. ANSI flange.

Operating Conditions:
The pump shall have a capacity of **50** GPM at a total head of **46** feet, and shall use a motor rated at **3** HP and 3450 RPM.

Pump Impeller:
Cast brass and threaded on a stainless steel shaft. The impeller shall be of the recessed vortex type to provide an unobstructed passage through the volute for the ground solids.

Grinder Construction:
Both grinder impellers and shredding ring shall be of 440C stainless steel hardened to 56-60 Rockwell C. The grinder assembly shall consist of a grinder impeller and shredding ring mounted directly below the voute passage. The grinder impeller is threaded to a stainless steel shaft, locked with a screw and washer. The shredding ring shall be pressed into an iron holding flange for easy removal. The flange shall be provided with tapped back-off holes so screws can be used to push the shredding ring from the housing. All grinding of solids shall be from the action of the grinder impeller against the shredding ring.

Seals:
Type 21, dual mechanical seal construction mounted in tandem, shall protect the motor. Primary seal shall be silicon / carbide. Secondary seal shall be silicon / carbide. The seal face shall be lapped to a flatness of one light band. A double electrode shall be mounted in the seal chamber to detect water entering the chamber through the lower seal. Water in the chamber shall cause a red light to turn on at the control box. This signal shall not stop the motor, but shall act as a warning only, indicating service is required.

Motor:
The pump motor shall be of the submersible type, rated **3** HP, 3450 RPM. The motor shall be for 60 Hz, ~~either 208, 230 or 460~~ volt, single ~~or three~~ phase operation. Major operating temperature must not exceed Class B ratings.

The stator winding shall be of the open type with Class F insulation. Winding housing shall be filled with clean, high dielectric oil that lubricates bearings and seals, transferring heat from windings and rotor to the outer cast housing.

An upper motor bearing cap shall be a separate casting for easy mounting and replacement. The motor shall have two heavy-duty ball bearings to support the pump shaft, taking radial and thrust loadings. A sleeve guide bushing is mounted directly above the lower seal to take radial load and act as a flame path for the seal chamber. Ball bearings shall be designed for a minimum 50,000 hours B-10 life. The stator shall be pressed into the motor housing. The common motor pump and grinder shaft shall be of 416 SST, threaded to take the pump and grinder impeller.

Motors shall have a heat sensor thermostat attached to the top end of the motor windings to stop the motor if the motor winding temperature reaches 200 degrees F. The high temperature shut-off will cause the pump to cease operation, should a control failure cause the pump to run in a dry wet well. The thermostat shall autmatically reset when the motor cools to a safe operating temperature.

Power Cord:
The motor power cord shall be 10 Ga. SOW/SOWA or SOOW. The cable jacket shall be sealed at the motor entrance by means of a rubber compression washer and compression nut. An epoxy filled tube shall seal the outer cable jacket and individual leads to prevent water from entering the motor housing. Individual conductor strands shall be soldered within the epoxy seal. Cords shall withstand a pull of 300 pounds.

EBARA Submersible Grinder Pumps *(residential / commercial)* **EBG, EBHG**

Electrical Data

Project: Model: Chk'd: Date:

Model EBG, EBHG
2,~~3~~ 5, 7.5 HP, 60Hz, Single Phase, 20~~8~~/~~230~~V

	Item No.				
Name-Plate Rating	Output (HP)	2	~~3~~	5	7½
	Phase	1	1	1	1
	Poles	2	2	2	2
	Volts	208 / 230	~~208~~ / 230	208 / 230	230
	Amperes	15.5 / 12.8	~~37~~ / 34	44 / 40	47
	Speed	3450	3450	3450	3450
	Insulation Class	F	F	F	F
Capacitor μ F	Start	150	274 - 324	274 - 324	274 - 324
	Run	30	30	30	30
Resistance at 20°C OHMS	Main Coil	1.8	.3	.3	.3
	Aux. Coil	5.1	.8	.8	.8
Start Current A		28 / 25	~~185~~ / 170	220 / 200	235
Service Factor		1.59	3.96	2.37	1.4

GRINDER PUMP STATION NOTES

1. CONTRACTOR SHALL FURNISH AND INSTALL A PACKAGED DUPLEX GRINDER PUMP STATION FROM MANSFIELD PUMP COMPANY, NEW BRAUNFELS, TEXAS, (210) 964-5999.
2. WET WELL SHALL BE FIBERGLASS WITH INTEGRAL VALVE VAULT IN A KEYHOLE OR FIGURE EIGHT CONFIGURATION.
3. WET WELL & VALVE VAULT SHALL CONTAIN ALL NECESSARY INLETS, OUTLETS, GUIDE RAILS, PIPING, VALVES, HATCHES, AND APPURTENANCES.
4. PUMPS SHALL BE MANUFACTURED BY EBARA WITH THE FOLLOWING CHARACTERISTICS:
   a. FLOW = 50 GPM
   b. HEAD = 46 FT
   c. MODEL = EBG-31
   d. IMPELLER = 3.75" DIA.
   e. MOTOR = 3 HP
   f. PHASE = SINGLE
   g. VOLTAGE = 230 V
5. A PUMP CONTROL PANEL SHALL BE PROVIDED IN A NEMA 4X WITH AUTOMATIC OPERATION, ALTERNATING PUMPS, AUDIO-VISUAL ALARM, FLOATS, AND ALL NECESSARY APPURTENANCES.
6. VAULT AND WET WELL SHALL HAVE PVC VENTS WITH ACTIVATED CARBON INSERTS FOR THE CONTROL OF ODOR.
7. CIP CONCRETE BOTTOM SLAP SHALL HAVE THE FOLLOWING CHARACTERISTICS:
   a. CONCRETE CLASS: TXDOT OR COA CLASS C.
   b. CONCRETE THICKNESS UNDER WET WELL: 9"
   c. CONCRETE TOTAL THICKNESS: 12" (INCL. 3" EMBEDMENT AROUND FLANGE)
   d. REBAR SIZE: NO. 5
   e. REBAR SPACING: 16" O.C.E.W.
   f. CONCRETE WIDTH: 12" BEYOND WETWELL OUTER DIAMETER
   g. REBAR CLEAR COVER: 2"

811 Know what's **below.** **Call** before you dig.

CAUTION!
IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

FOR CITY USE ONLY:

MillerGRAY
Consulting • Engineering • Infrastructure
7320 N. MoPac Expressway, Suite 203
Austin, Texas 78731
Phone (512) 861-5300
www.miller-gray.com
TBPE FIRM REG. NO. F-16302

STATE OF TEXAS
J. TRAVIS WILSON
97307
LICENSED PROFESSIONAL ENGINEER
4/5/2024

P:\00323 Investcor\001 Starbucks Bee Cave\05_CAD\00323-001d.dwg 4/5/2024 10:14 AM

STARBUCKS BEE CAVE
14211 STATE HWY 71, BEE CAVE, TEXAS 78738

GRINDER PUMP STATION DETAILS

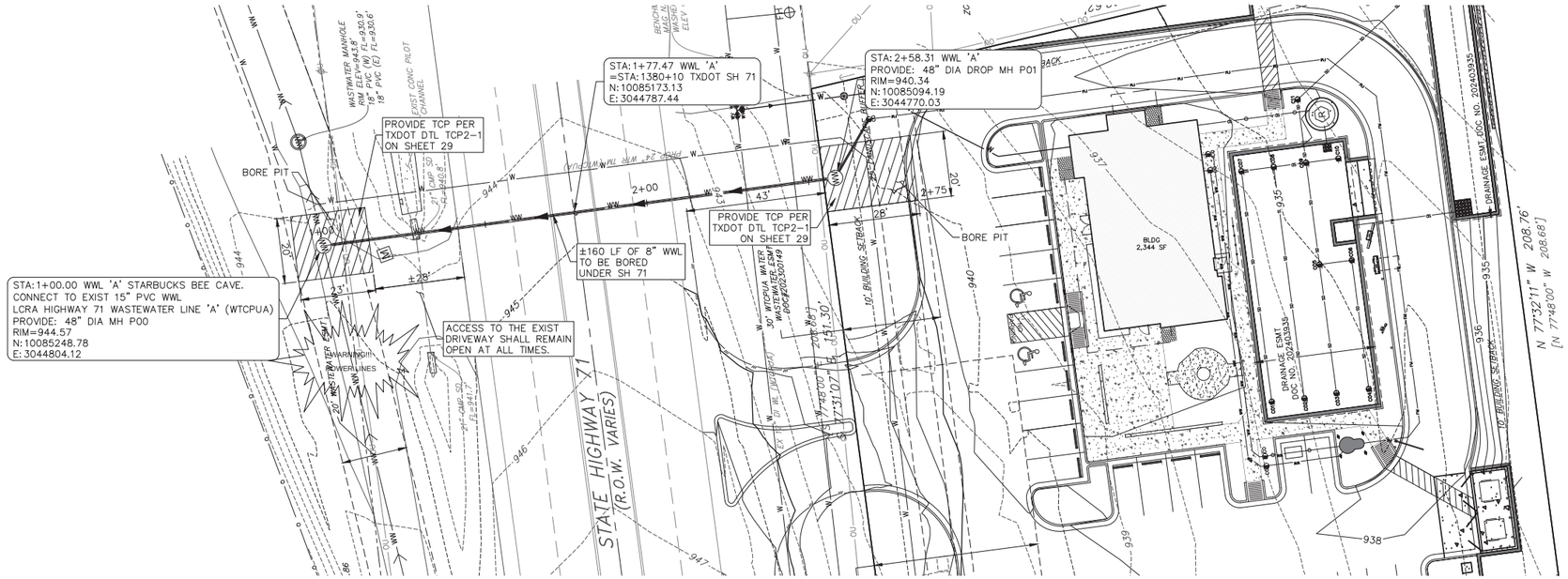
REVISIONS/CORRECTIONS

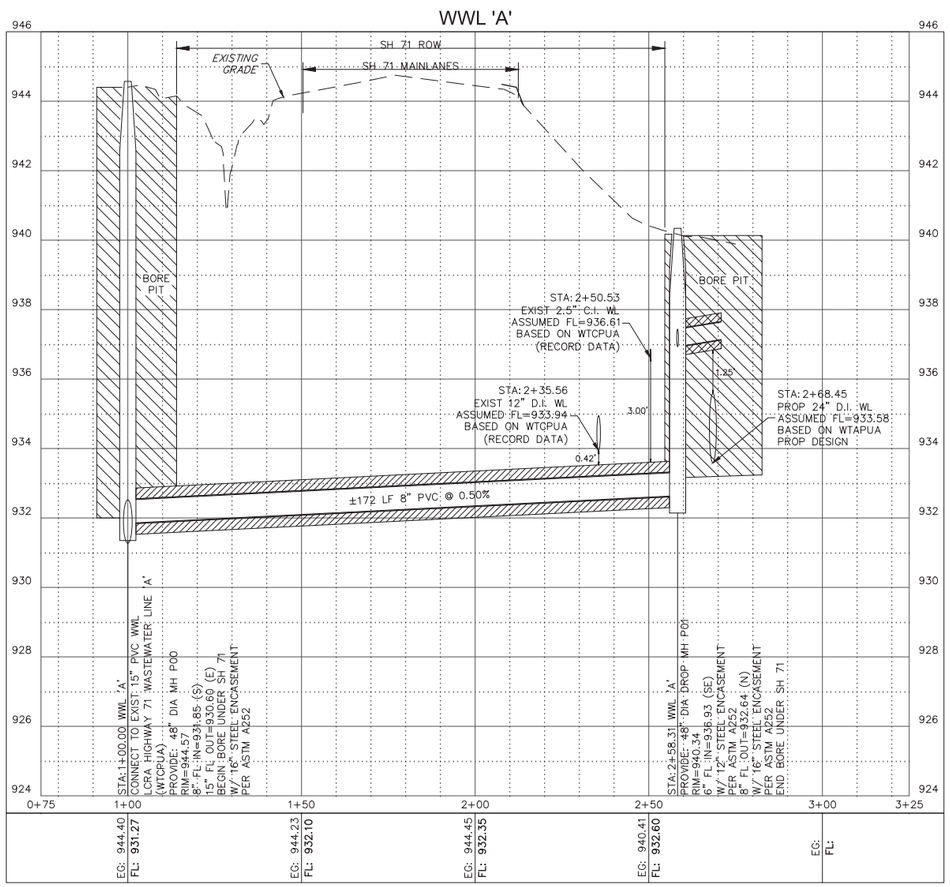
NO.	DATE	DESCRIPTION	BY

PROJECT NUMBER 00323-001
DATE: 4/5/2024
DESIGNED: KKE
CHECKED: JTW

SHEET NO. 17A OF 41

23-789-SNPS





PROFILE SCALE
1"=20' HORIZONTAL
1"= 2' VERTICAL

NOTES:

1. ALL WASTEWATER LINES TO BE PVC, SDR26, ASTM D3034.
2. EXISTING UTILITY LOCATIONS AND CROSSINGS SHOWN IN PLAN AND PROFILE ARE APPROXIMATE. CONTRACTOR RESPONSIBLE FOR VERIFYING ALL EXISTING UTILITY LOCATIONS AND CROSSINGS PRIOR TO CONSTRUCTION. ALL CONFLICTS WITH INFORMATION SHOWN IN THESE PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER/ENGINEER IMMEDIATELY.
3. CONTRACTOR IS REQUIRED TO PROVIDE ENGINEER SUPPORT PLAN TO PROTECT EXISTING WATER LINES WHEN SAID LINES ARE WITHIN 5 FEET OF EXCAVATION AND WHEN EXCAVATION CROSSES WATER LINES.
4. ALL MANHOLES NOT BENEATH PAVEMENT SHALL BE BOLTED AND HAVE A RIM ELEVATION TWO INCHES ABOVE ADJACENT GRADE.
5. ALL MANHOLES SHALL HAVE CONCENTRIC CONES.
6. CONTRACTOR SHALL REPAIR/RESTORE EXISTING CONCRETE AND/OR ASPHALT PAVING AND RIPRAP TO EXISTING CONDITION AS NECESSARY.
7. BORE PITS SHALL BE LOCATED A MINIMUM OF 16' FROM EDGE OF PAVEMENT ALONG SH 71.

811 Know what's below. Call before you dig.

CAUTION!

IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

FOR CITY USE ONLY:

MillerGRAY
Consulting • Engineering • Infrastructure
7320 N. MoPac Expressway, Suite 203
Austin, Texas 78731
Phone (512) 861-5300
www.miller-gray.com
TBPE FIRM REG. NO. F-16302

STATE OF TEXAS
J. TRAVIS WILSON
97307
LICENSED PROFESSIONAL ENGINEER
4/5/2024

P:\00323 Investcor\001 Starbucks Bee Cave\05_CAD\00323-001.dwg 4/5/2024 10:14 AM

STARBUCKS BEE CAVE
14211 STATE HWY 71, BEE CAVE, TEXAS 78738

WWL 'A' PLAN & PROFILE

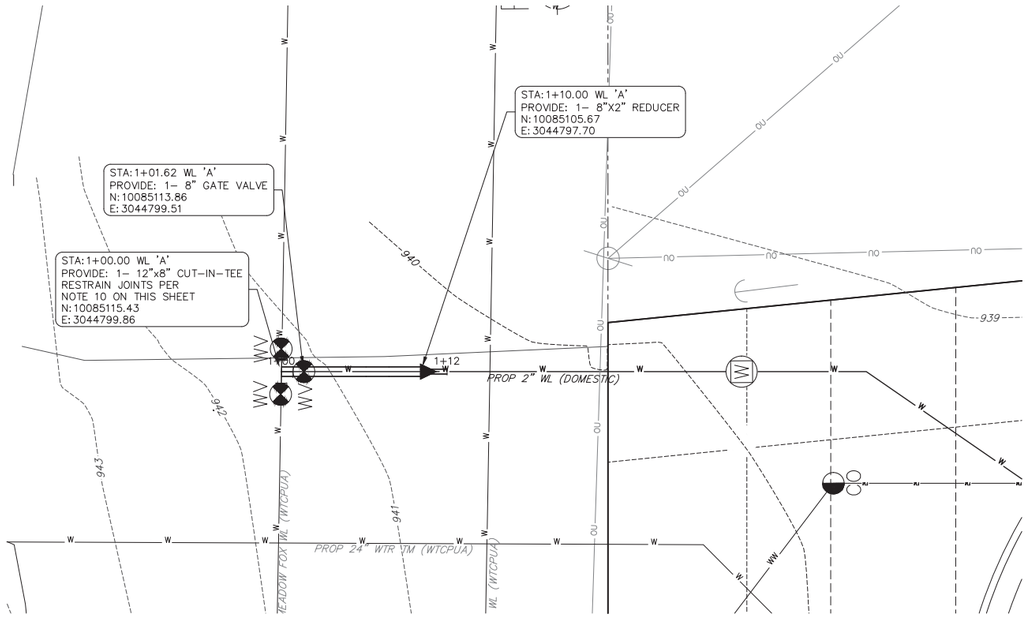
REVISIONS/CORRECTIONS

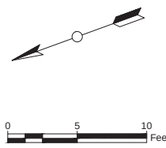
NO.	DATE	DESCRIPTION	BY

PROJECT NUMBER 00323-001
DATE: 4/5/2024
DESIGNED: KKE
CHECKED: JTW

SHEET NO. 18 OF 41

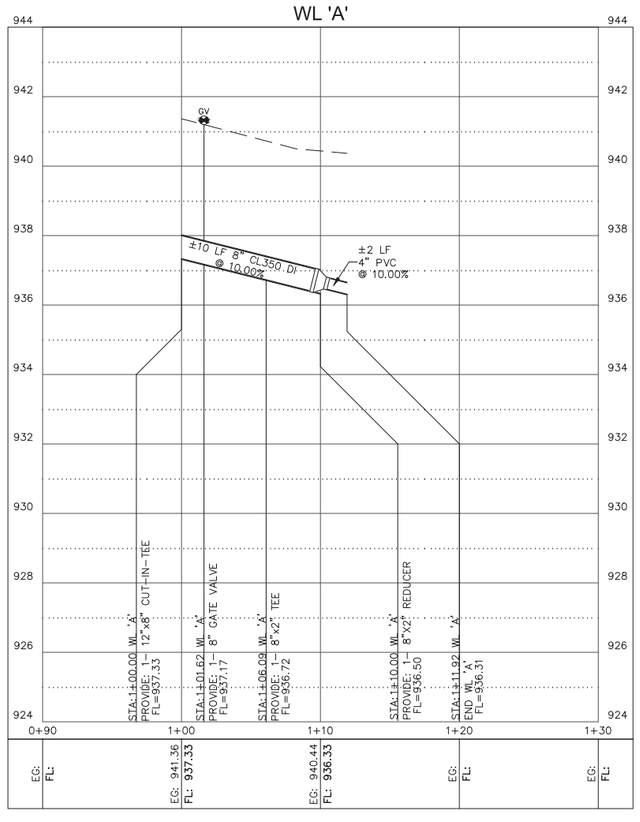
23-789-SNPS





LEGEND

- SUBJECT TRACT PROPERTY LINE
- EXISTING WATER LINE
- PROPOSED WATER LINE
- PROPOSED WASTEWATER LINE
- PROPOSED STORM DRAIN LINE
- EXIST OVERHEAD POWER LINE
- EXIST POWER POLE
- EXIST GUY ANCHOR
- EXISTING FIRE HYDRANT



PROFILE SCALE
1"= 5' HORIZONTAL
1"= 2' VERTICAL

NOTES:

1. ALL WASTEWATER LINES TO BE PVC, SDR26, ASTM D3034.
2. EXISTING UTILITY LOCATIONS AND CROSSINGS SHOWN IN PLAN AND PROFILE ARE APPROXIMATE. CONTRACTOR RESPONSIBLE FOR VERIFYING ALL EXISTING UTILITY LOCATIONS AND CROSSINGS PRIOR TO CONSTRUCTION. ALL CONFLICTS WITH INFORMATION SHOWN IN THESE PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER/ENGINEER IMMEDIATELY.
3. CONTRACTOR IS REQUIRED TO PROVIDE ENGINEER SUPPORT PLAN TO PROTECT EXISTING WATER LINES WHEN SAID LINES ARE WITHIN 5 FEET OF EXCAVATION AND WHEN EXCAVATION CROSSES WATER LINES.
4. ALL MANHOLES NOT BENEATH PAVEMENT SHALL BE BOLTED AND HAVE A RIM ELEVATION TWO INCHES ABOVE ADJACENT GRADE.
5. ALL MANHOLES SHALL HAVE CONCENTRIC CONES.
6. CONTRACTOR SHALL REPAIR/RESTORE EXISTING CONCRETE AND/OR ASPHALT PAVING AND RIPRAP TO EXISTING CONDITION AS NECESSARY.
7. BORE PITS SHALL BE LOCATED A MINIMUM OF 16' FROM EDGE OF PAVEMENT ALONG SH 71.
8. ALL WATER LINE SHALL HAVE A MINIMUM OF FOUR (4) FEET OF COVER FROM FINISHED GRADE.
9. ALL WATER SERVICE LINES SHALL BE HDPE BLACK PIPE.
10. A MINIMUM OF 2 PIPE JOINTS TO BE RESTRAINED ALONG THE EXISTING 12" WATER LINE ON EITHER SIDE OF THE CUT-IN TEE AND INSTALLED PRIOR TO THE CUT-IN TEE CONSTRUCTION.

811 Know what's below. Call before you dig.

CAUTION!

IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

FOR CITY USE ONLY:

MillerGRAY
Consulting • Engineering • Infrastructure
7320 N. MoPac Expressway, Suite 203
Austin, Texas 78731
Phone (512) 861-5300
www.miller-gray.com
TBPE FIRM REG. NO. F-16302

STATE OF TEXAS
J. TRAVIS WILSON
97307
LICENSED PROFESSIONAL ENGINEER
4/5/2024

P:\00323 Investacon\001 Starbucks Bee Cave\05_CAD\00323-001wrkprf.dwg 4/5/2024 10:15 AM

STARBUCKS BEE CAVE

14211 STATE HWY 71, BEE CAVE, TEXAS 78738

WL 'A' PLAN & PROFILE

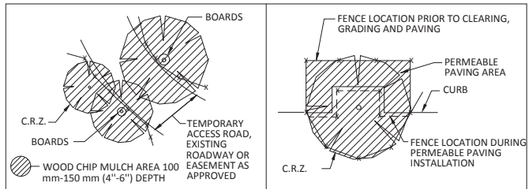
REVISIONS/CORRECTIONS

NO.	DATE	DESCRIPTION	BY

PROJECT NUMBER 00323-001
DATE: 4/5/2024
DESIGNED: KKE
CHECKED: JTW

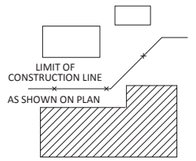
SHEET NO.
19 OF 41

23-789-SNPS

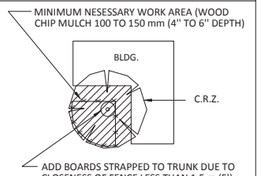


LINEAR CONSTRUCTION THROUGH TREES

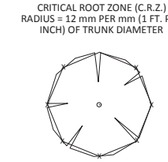
TREES IN PAVING AREA



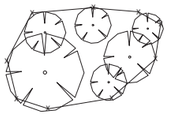
NATURAL AREAS



TREES NEAR CONSTRUCTION ACTIVITY

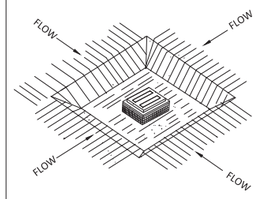


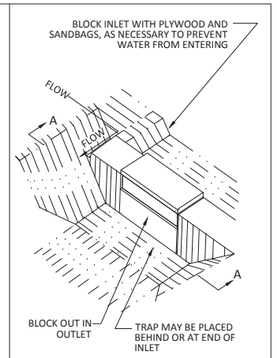
INDIVIDUAL TREE

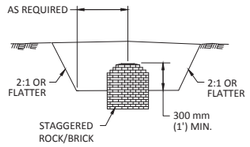


GROUP OF TREES

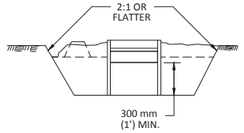
CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT	TREE PROTECTION FENCE LOCATIONS	
RECORD COPY SIGNED BY J. PATRICK MURPHY 11/15/99 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 610S-1







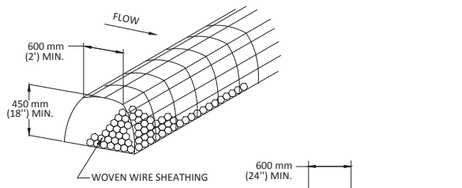
CROSS SECTION
YARD DRAIN



SECTION A-A
CURB DRAIN

NOTE:
WHERE CURB IS IN PLACE, PROVIDE A 300 mm (1') WIDE OPENING IN THE CURB, OR USE A SANDBAG TO DAM TO FORCE WATER OVER THE CURB TO THE TRAP.

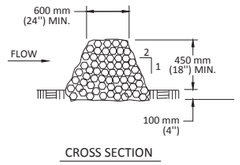
CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT	STORM INLET SEDIMENT TRAP	
RECORD COPY SIGNED BY J. PATRICK MURPHY 3/27/00 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 632S-1



ROCK BERM

STANDARD SYMBOL FOR ROCK BERM (RB)

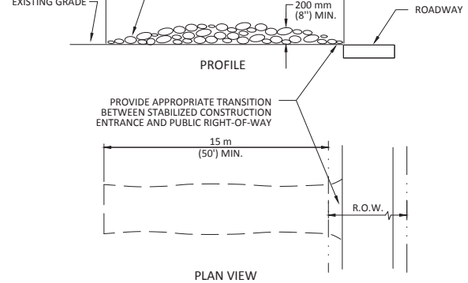
___ RB ___



CROSS SECTION

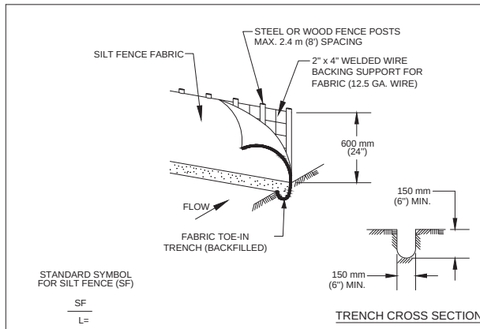
NOTES:
1. USE ONLY OPEN GRADED ROCK 75 to 125 mm (3 to 5") DIAMETER FOR ALL CONDITIONS.
2. THE ROCK BERM SHALL BE SECURED WITH A WOVEN WIRE SHEATHING HAVING MAXIMUM 25 mm (1") OPENING AND MINIMUM WIRE DIAMETER OF 12.9 mm (20 GAUGE).
3. THE ROCK BERM SHALL BE INSPECTED DAILY OR AFTER EACH RAIN, AND THE STONE AND/OR FABRIC CORE-WOVEN SHEATHING SHALL BE REPLACED WHEN THE STRUCTURE CEASES TO FUNCTION AS INTENDED, DUE TO SEDIMENT ACCUMULATION AMONG THE ROCKS, WASHOUT, CONSTRUCTION TRAFFIC DAMAGE, ETC.
4. IF SEDIMENT REACHES A DEPTH EQUAL TO ONE-THIRD THE HEIGHT OF THE BERM OR 150 mm (6"), WHICHEVER IS LESS, THE SEDIMENT SHALL BE REMOVED AND DISPOSED OF ON AN APPROVED SITE AND IN A MANNER THAT WILL NOT CREATE A SEDIMENTION PROBLEM.
5. WHEN THE SITE IS COMPLETELY STABILIZED,THE BERM AND ACCUMULATED SEDIMENT SHALL BE REMOVED AND DISPOSED OF IN AN APPROVED MANNER.

CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT	ROCK BERM	
RECORD COPY SIGNED BY MORGAN BYARS 8/24/2010 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 639S-1



NOTES:
1. STONE SIZE: 75-125 mm (3-5") OPEN GRADED ROCK.
2. LENGTH: AS EFFECTIVE BUT NOT LESS THAN 15 m (50').
3. THICKNESS: NOT LESS THAN 200 mm (8").
4. WIDTH: NOT LESS THAN FULL WIDTH OF ALL POINTS OF INGRESS/EGRESS.
5. WASHING: WHEN NECESSARY, VEHICLE WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC ROADWAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE AND DRAINS INTO AN APPROVED TRAP OR SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATERCOURSE USING APPROVED METHODS.
6. MAINTENANCE: THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC ROADWAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND, AS WELL AS REPAIR AND CLEAN OUT OF ANY MEASURE DEVICES USED TO TRAP SEDIMENT. ALL SEDIMENTS THAT IS SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC ROADWAY MUST BE REMOVED IMMEDIATELY.
7. DRAINAGE: ENTRANCE MUST BE PROPERLY GRADED OR INCORPORATE A DRAINAGE SWALE TO PREVENT RUNOFF FROM LEAVING THE CONSTRUCTION SITE.

CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT	STABILIZED CONSTRUCTION ENTRANCE	
RECORD COPY SIGNED BY J. PATRICK MURPHY 5/23/00 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 641S-1



STANDARD SYMBOL FOR SILT FENCE (SF)

SF
L=

TRENCH CROSS SECTION

1. STEEL OR WOOD POSTS WHICH SUPPORT THE SILT FENCE SHALL BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POST MUST BE EMBEDDED A MINIMUM OF 300 mm (12 INCHES). IF WOOD POSTS CANNOT ACHIEVE 300 mm (12 inches) DEPTH, USE STEEL POSTS.

2. THE TOE OF THE SILT FENCE SHALL BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWNSLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW.

3. THE TRENCH MUST BE A MINIMUM OF 150 mm (6 inches) DEEP AND 150 mm (6 inches) WIDE TO ALLOW FOR THE SILT FENCE FABRIC TO BE LAID IN THE GROUND AND BACKFILLED WITH COMPACTED MATERIAL.

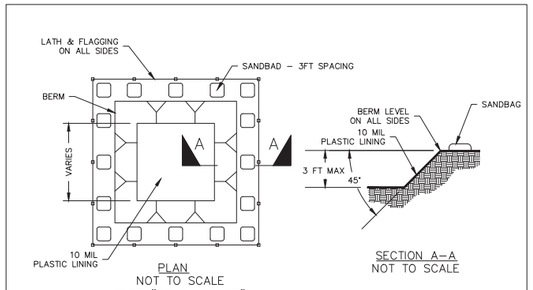
4. SILT FENCE FABRIC SHOULD BE SECURELY FASTENED TO EACH STEEL OR WOOD SUPPORT POST OR TO WOVEN WIRE , WHICH IS IN TURN ATTACHED TO THE STEEL OR WOOD FENCE POST.

5. INSPECTION SHALL BE MADE WEEKLY OR AFTER EACH RAINFALL EVENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTY AS NEEDED.

6. SILT FENCE SHALL BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

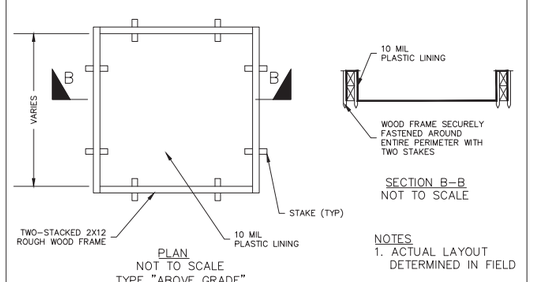
7. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF 150 mm (6 inches). THE SILT SHALL BE DISPOSED OF ON AN APPROVED SITE AND IN SUCH A MANNER THAT WILL NOT CONTRIBUTE TO ADDITIONAL SILTATION.

CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT	SILT FENCE	
RECORD COPY SIGNED BY MORGAN BYARS *09/01/2011* ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 642S-1



PLAN
NOT TO SCALE
TYPE "BELOW GRADE"

SECTION A–A
NOT TO SCALE

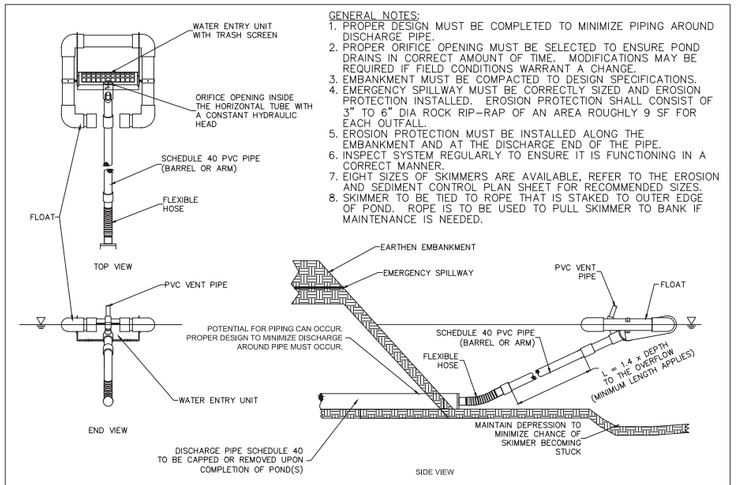


PLAN
NOT TO SCALE
TYPE "ABOVE GRADE"

SECTION B–B
NOT TO SCALE

NOTES
1. ACTUAL LAYOUT DETERMINED IN FIELD

CONCRETE WASHOUT | N.T.S



GENERAL NOTES:
1. PROPER DESIGN MUST BE COMPLETED TO MINIMIZE PIPING AROUND DISCHARGE PIPE.
2. PROPER ORIFICE OPENING MUST BE SELECTED TO ENSURE POND DRAINS IN CORRECT AMOUNT OF TIME. MODIFICATIONS MAY BE REQUIRED IF FIELD CONDITIONS WARRANT A CHANGE.
3. EMBANKMENT MUST BE COMPACTED TO DESIGN SPECIFICATIONS.
4. EMERGENCY SPILLWAY MUST BE CORRECTLY SIZED AND EROSION PROTECTION INSTALLED. EROSION PROTECTION SHALL CONSIST OF 3" TO 6" DIA ROCK RIP-RAP OF AN AREA ROUGHLY 9 SF FOR EACH OUTFALL.
5. EROSION PROTECTION MUST BE INSTALLED ALONG THE EMBANKMENT AND AT THE DISCHARGE END OF THE PIPE.
6. INSPECT SYSTEM REGULARLY TO ENSURE IT IS FUNCTIONING IN A CORRECT MANNER.
7. EIGHT SIZES OF SKIMMERS ARE AVAILABLE, REFER TO THE EROSION AND SEDIMENT CONTROL PLAN SHEET FOR RECOMMENDED SIZES.
8. SKIMMER TO BE TIED TO ROPE THAT IS STAKED TO OUTER EDGE OF POND. ROPE IS TO BE USED TO PULL SKIMMER TO BANK IF MAINTENANCE IS NEEDED.

POND SKIMMER | N.T.S.

811 Know what's below. Call before you dig.

CAUTION!

IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

FOR CITY USE ONLY:

MillerGRAY
Consulting • Engineering • Infrastructure
7320 N. MoPac Expressway, Suite 203
Austin, Texas 78731
Phone (512) 861-5300
www.miller-gray.com
TBPE FIRM REG. NO. F-16302

P:\00323 Investcor\001 Starbucks Bee Cave\05_CAD\00323-001dt.dwg 4/5/2024 10:15 AM

STATE OF TEXAS
J. TRAVIS WILSON
97307
LICENSED PROFESSIONAL ENGINEER
4/5/2024

STARBUCKS BEE CAVE
14211 STATE HWY 71, BEE CAVE, TEXAS 78738

STANDARD DETAILS
1 OF 10

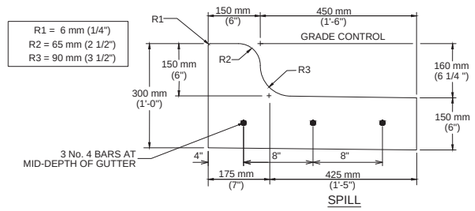
REVISIONS/CORRECTIONS

NO.	DATE	DESCRIPTION	BY

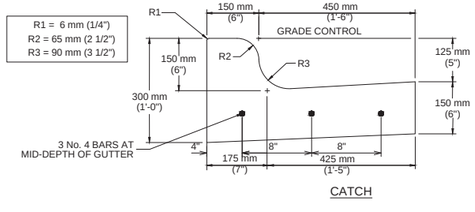
PROJECT NUMBER 00323-001 | DATE: 4/5/2024 | DESIGNED: KKE | CHECKED: JTW

SHEET NO.
20 OF 41

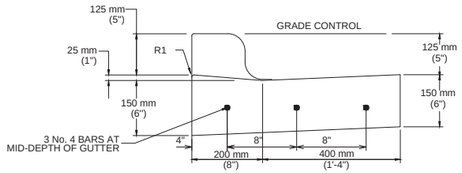
23-789-SNPS



SPILL

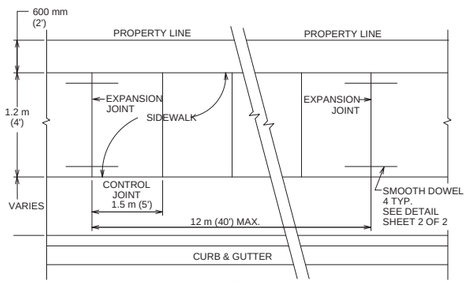


CATCH

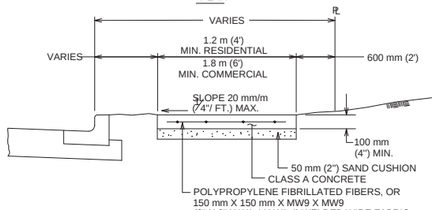


LAYDOWN CURB

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		REINFORCED CURB AND GUTTER SECTION	
RECORD COPY SIGNED BY SAM ANGOORI	01/04/10 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 430S-2



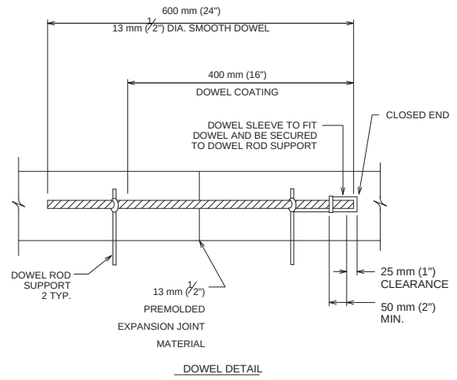
PLAN



REINFORCEMENT SHALL ACCURATELY PLACED AT SLAB MID-DEPTH AND HELD FIRMLY IN PLACE BY MEANS OF BAR SUPPORTS OF ADEQUATE STRENGTH AND NUMBER THAT WILL PREVENT DISPLACEMENT AND KEEP THE STEEL AT ITS PROPER POSITION DURING THE PLACEMENT OF THE P.C. CONCRETE. IN NO INSTANCE SHALL THE STEEL BE PLACED DIRECTLY ON THE SUBGRADE OR SAND CUSHION LAYER.

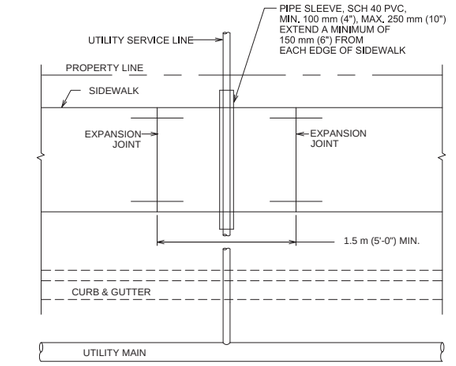
SECTION

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		SIDEWALK	
RECORD COPY SIGNED BY BILL GARDNER	03/26/08 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 432S-1 1 OF 3

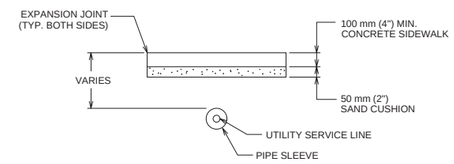


DOWEL DETAIL

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		SIDEWALK	
RECORD COPY SIGNED BY BILL GARDNER	03/26/08 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 432S-1 2 OF 3



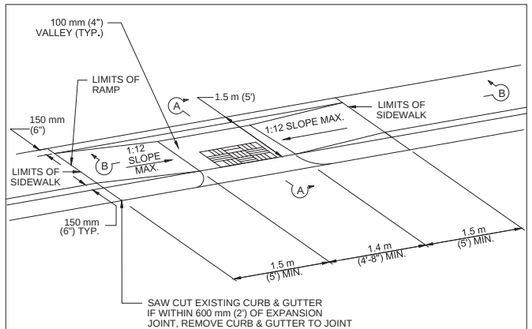
SIDEWALK OVER UTILITY SERVICE LINE PLAN

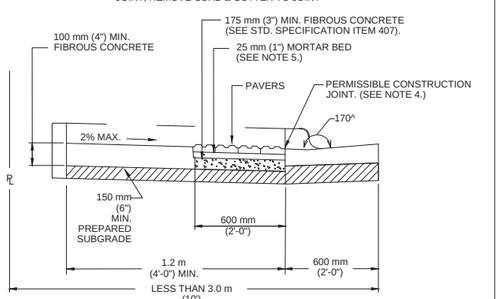


SECTION OF SIDEWALK OVER UTILITY SERVICE LINES

NOTES:
1. THIS STANDARD APPLIES TO THE INSTALLATION OF NEW UTILITIES OR UTILITIES BEING REPLACED BY A NEW LINE.
2. NO JOINTS IN UTILITY SERVICE PIPE TO BE LOCATED INSIDE PVC PIPE SLEEVE.

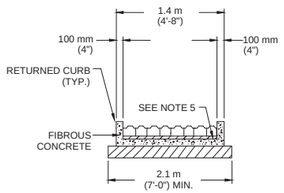
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		SIDEWALK	
RECORD COPY SIGNED BY BILL GARDNER	03/26/08 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 432S-1 3 OF 3





SECTION A-A

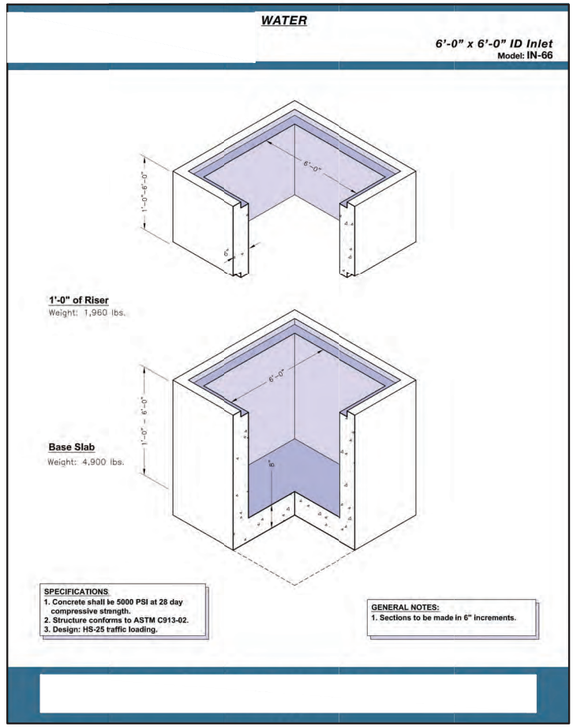
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		COMBINED SIDEWALK CURB RAMP WITH PAVERS WITHIN LIMITED ROW ONLY	
RECORD COPY SIGNED BY BILL GARDNER	06/21/07 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 432S-3G 1 OF 2



SECTION B-B

GENERAL NOTES:
1. THIS STANDARD IS APPLICABLE FOR RAMP CONSTRUCTION WITHIN RIGHT-OF-WAY OR EASEMENT ONLY.
2. PAVERS WILL HAVE DETECTABLE WARNING THAT CONSISTS OF RAISED TRUNCATED DOMES WITH A DIAMETER OF 23 mm (0.9"), A NOMINAL HEIGHT OF 5 mm (0.2") AND A NOMINAL CENTER TO CENTER SPACING OF 60 mm (2.35") AND SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES, EITHER LIGHT-ON-DARK OR DARK-ON-LIGHT (Re: ADAAG SECTION 4.29.2). MATERIAL USED TO PROVIDE CONTRAST SHALL BE AN INTEGRAL PART OF THE WALKING SURFACE. A BASKET WEAVE PAVER PATTERN SHALL BE USED UNLESS DIRECTED BY THE ENGINEER OR DESIGNATED REPRESENTATIVE. PAVER PATTERN VARIES PER MANUFACTURER'S RECOMMENDATIONS. REFER TO STANDARD DETAIL 432S-5 FOR PAVER BASE PREPARATION DETAILS.
3. THE CURB, GUTTER AND RAMP SYSTEM SHALL BE CONFIGURED TO MAINTAIN ALL RUNOFF FROM A 25 YEAR FREQUENCY STORM WITHIN THE RIGHT-OF-WAY (DRAINAGE CRITERIA MANUAL SECTION 1.2.2.B).
4. TYPICAL SIDEWALK WIDTHS AND CURB RADII ARE SHOWN FOR ILLUSTRATION ONLY. REFER TO THE TRANSPORTATION CRITERIA MANUAL FOR SIDEWALK WIDTHS, CURB RADII AND CURB BASIC REQUIREMENTS.
5. THE PERMISSIBLE CONSTRUCTION JOINT BETWEEN THE PAVERS AND THE ADJOINING 1 SURFACE SHALL BE LIMITED TO 6 mm (4 ") JOINT SIZE. GAPS LARGER THAN 6 mm 1 (4 ") MUST BE APPROVED BY THE ENGINEER OR DESIGNATED REPRESENTATIVE. ALL JOINTS BETWEEN BRICKS AND ADJOINING SURFACE SHALL BE MORTAR FILLED UNLESS DIRECTED OTHERWISE BY THE ENGINEER OR DESIGNATED REPRESENTATIVE.
6. MORTAR SHALL CONFORM TO STD. SPECIFICATION ITEM SECTION 403S.3.5, MORTAR AND GROUT. ALL OTHER CONCRETE SHALL CONFORM TO STD. SPECIFICATION ITEM 403S, CONCRETE FOR STRUCTURES, UNLESS OTHERWISE NOTED.
7. CURB RAMPS WITH 100 mm (4") CONCRETE VALLEY MAY ONLY BE USED WHERE PEDESTRIANS WOULD NOT NORMALLY WALK DIAGONALLY ACROSS THE RAMP.

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		COMBINED SIDEWALK CURB RAMP WITH PAVERS WITHIN LIMITED ROW ONLY	
RECORD COPY SIGNED BY BILL GARDNER	06/21/07 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 432S-3G 2 OF 2



811 Know what's below. Call before you dig.

CAUTION!

IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

FOR CITY USE ONLY:

MillerGRAY
Consulting • Engineering • Infrastructure
7320 N. MoPac Expressway, Suite 203
Austin, Texas 78731
Phone (512) 861-5300
www.miller-gray.com
TBPE FIRM REG. NO. F-16302

STATE OF TEXAS
J. TRAVIS WILSON
97307
LICENSED PROFESSIONAL ENGINEER
4/5/2024

P:\00323 Investcor\001 Starbucks Bee Cave\05_CAD\00323-001dt.dwg 4/5/2024 10:15 AM

STARBUCKS BEE CAVE
14211 STATE HWY 71, BEE CAVE, TEXAS 78738

STANDARD DETAILS
2 OF 10

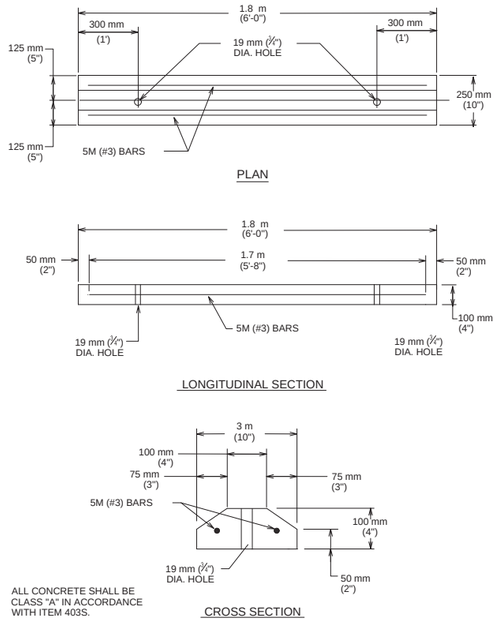
REVISIONS/CORRECTIONS

NO.	DATE	DESCRIPTION	BY

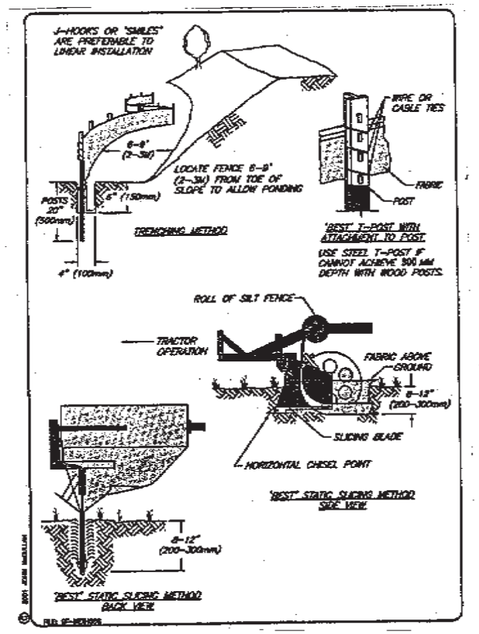
PROJECT NUMBER 00323-001
DATE: 4/5/2024
DESIGNED: KKE
CHECKED: JTW

SHEET NO.
21 OF 41

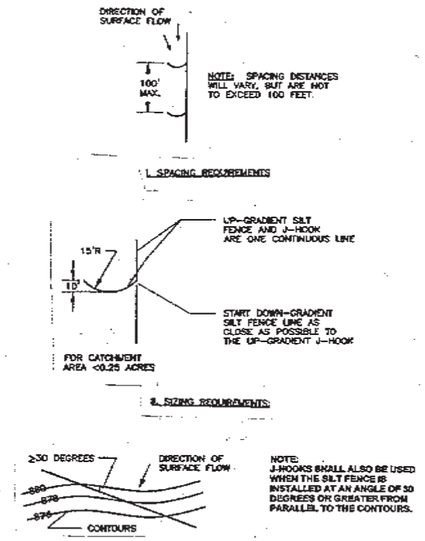
23-789-SNPS



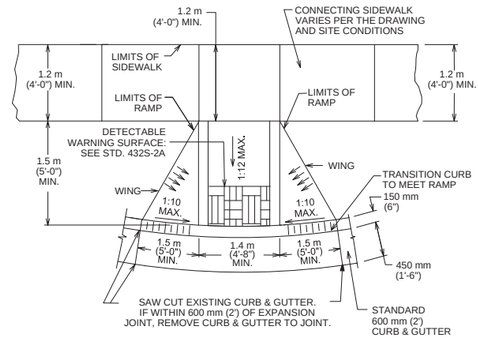
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		PARKING LOT BUMPER CURB	
RECORD COPY SIGNED BY BILL GARDNER	3/15/05	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 439S-1
APPROVED	ADOPTED		



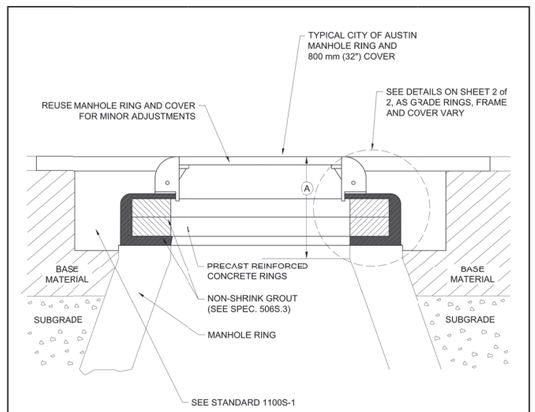
Silt Fence Installation



Silt Fence J - Hook Detail (N.T.S.)



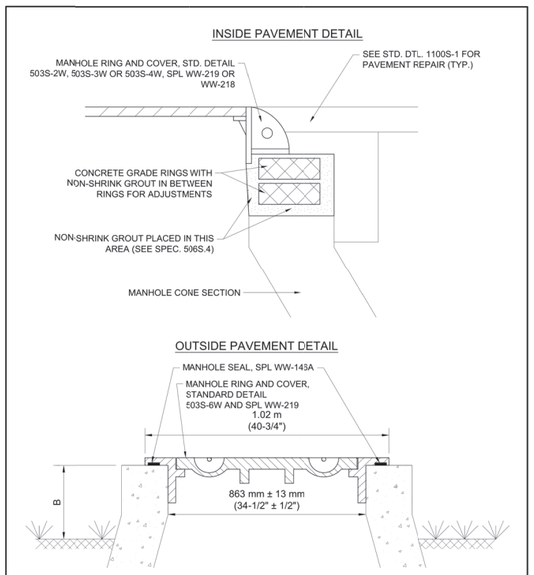
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		TYPE 1 SIDEWALK CURB RAMP	
RECORD COPY SIGNED BY BILL GARDNER	9/14/05	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 432S-5
	ADOPTED		



NOTES:

1. NON-SHRINK GROUT SHALL NOT EXCEED 25 mm (1") IN ANY DIMENSION.
2. SUB-GRADE AND BASE MATERIALS SHALL BE COMPACTED ACCORDING TO ITEMS 201S AND 210S, RESPECTIVELY, OF THE CITY OF AUSTIN STANDARD SPECIFICATIONS.
3. REFER TO STANDARD 1100S-1 FOR REPAIRS AROUND MANHOLES.
4. SEE STANDARD 506S-4A FOR HDPE RING INSTALLATION (FOR USE IN PAVED AREAS ONLY).

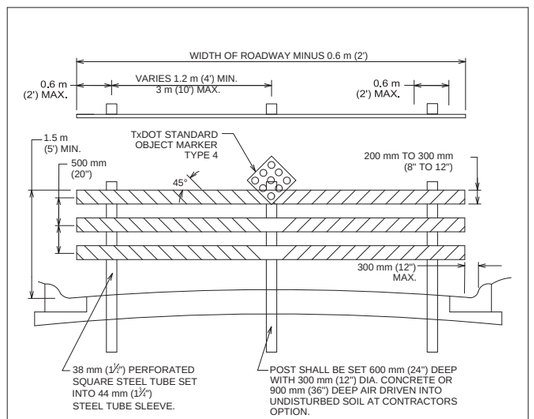
CITY OF AUSTIN AUSTIN WATER UTILITY		MINOR MANHOLE ADJUSTMENT & NEW MANHOLE CONSTRUCTION	
RECORD COPY SIGNED BY KATHI L FLOWERS	08/31/2011	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.	STANDARD NO. 506S-4 1 OF 2
	ADOPTED		



NOTES:

1. FOR USE IN UNPAVED AREAS ONLY.
2. WHEN USED WITHIN 100-YEAR FLOODPLAIN, SEE DTL. 506S-6 FOR ADDITIONAL M.H. REQUIREMENTS.
3. DIMENSION B=150-300 mm (6"-12") FOR M.H. LOCATED IN 100-YR FLOOD PLAN; B=50-300 mm (2"-12") FOR M.H. OUTSIDE 100-YR FLOOD PLAN.

CITY OF AUSTIN AUSTIN WATER UTILITY		MINCR MANHOLE ADJUSTMENT & NEW MANHOLE CONSTRUCTION	
RECORD COPY SIGNED BY KATHI L FLOWERS	03/31/2011	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.	STANDARD NO. 506S-4 2 OF 2
	ADOPTED		



NOTES:

1. WIDTH OF RAIL SHALL BE A MINIMUM OF 200 mm (8") AND MAY BE UP TO A MAXIMUM OF 300 mm (12"), 25 mm (1") HOLLOW-PROFILE PLASTIC LUMBER WITH INTERNAL STIFFNERS.
2. RAILS SHALL BE FASTENED TO EACH TUBE WITH 50 mm (2") STEEL BOLTS WITH NUTS AND WASHERS ON EACH SIDE. BOLT THREADS SHALL BE PEENED.
3. THE RAILS SHALL HAVE 150 mm (6") WIDE REFLECTORIZED RED STRIPES OF TAPE PLACED ON 45 DEGREE SLOPES, DOWN AND TOWARD THE CENTER OF THE BARRICADE.
4. BARRICADES MAY BE CONSTRUCTED IN SECTIONS OR MAY BE CONTINUOUS ACROSS ROADWAY WIDTH. SPLICES ON CONTINUOUS RAIL BARRICADES SHALL BE AT POSTS AND SHALL HAVE A 600 mm (2') SPLICE BLOCK ON BACK SIDE OF THE SAME MATERIAL AS RAIL.
5. 450 mm (18") DIAMOND REFLECTORIZED RED PANEL OR 450 mm (18") DIAMOND RED OR BLACK PANEL WITH NINE-75 mm (3") DIAMETER RED REFLECTORS SYMMETRICALLY PLACED AT CENTER POSTS, A MINIMUM OF 1.2 m (4') ABOVE GROUND SHALL BE USED FOR END OF ROAD MARKERS AS PER TEXAS MANUAL on UNIFORM TRAFFIC CONTROL DEVICES (TMUTCD) SECTION 3C.04.

DEPARTMENT OF PUBLIC WORKS		STREET-END BARRICADE	
RECORD COPY SIGNED BY BILL GARDNER	03/12/07	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 803S-1
	ADOPTED		

Know what's **below.** **Call** before you dig.

CAUTION!

IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

FOR CITY USE ONLY:

MillerGRAY
Consulting • Engineering • Infrastructure
7320 N. MoPac Expressway, Suite 203
Austin, Texas 78731
Phone (512) 861-5300
www.miller-gray.com
TBPE FIRM REG. NO. F-16302

STATE OF TEXAS
J. TRAVIS WILSON
97307
LICENSED PROFESSIONAL ENGINEER
4/5/2024

P:\00323 Investcor\001 Starbucks Bee Cave\05_CAD\00323-001dt.dwg 4/5/2024 10:15 AM

STARBUCKS BEE CAVE
14211 STATE HWY 71, BEE CAVE, TEXAS 78738

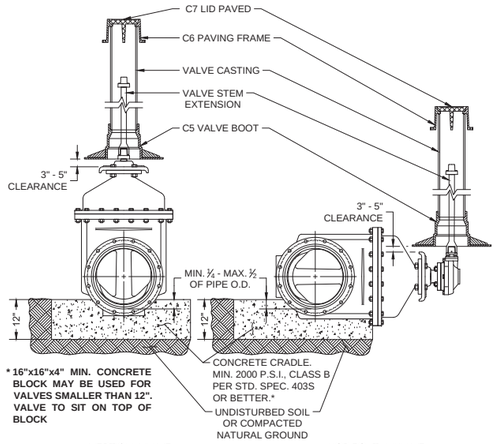
STANDARD DETAILS
3 OF 10

REVISIONS/CORRECTIONS			
NO.	DATE	DESCRIPTION	BY

PROJECT NUMBER 00323-001
DATE: 4/5/2024
DESIGNED: KKE
CHECKED: JTW

SHEET NO.
22 OF 41

23-789-SNPS



VERTICAL VALVE

HORIZONTAL VALVE

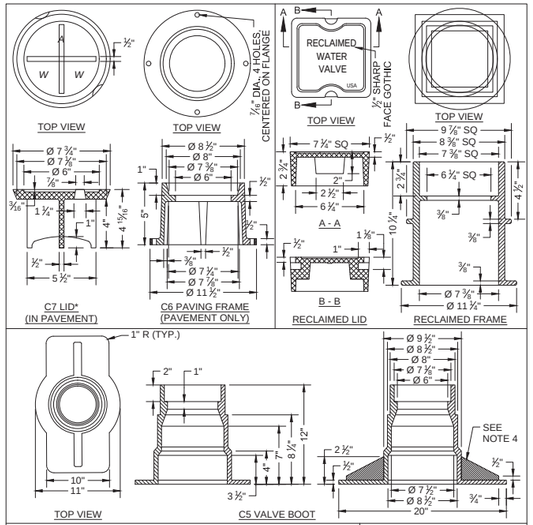
ONLY TO BE USED WHEN CALLED OUT ON THE DRAWINGS.

NOTES:

1. WELD SOCKET 2½" x 2" DEEP TO 1" SCH. 40 CARBON STEEL ROUND STEM EXTENSION, FITTED ON OPERATING NUT, [SCH. 80 FOR LENGTHS OVER 10'.]
2. VALVE CASTING SHALL BE 6" DI PIPE WITH BELL OR COLLAR CENTERED OVER VALVE BOOT.
3. NUT AT TOP OF VALVE EXTENSION ROD SHALL BE SQUARE 2" LONG WELDED TO TOP OF ROD.
4. VALVE STEM EXTENSIONS ARE REQUIRED ON ALL VALVES THAT EXCEED 3' DEEP FROM FINISHED GRADE. VALVE EXTENSIONS SHALL BE PLACED SUCH THAT THE EXTENSION NUT IS BETWEEN 12" AND 18" FROM FINISHED GRADE.

RECLAIMED WATER: ALL RECLAIMED PVC PIPE SHALL BE MANUFACTURED PURPLE PIPE. HDPE PIPE SHALL BE MANUFACTURED WITH PURPLE STRIPES. ALL OTHER PIPE AND APPURTENANCES SHALL BE MANUFACTURED PURPLE IF AVAILABLE. ALL PIPE AND FITTINGS THAT ARE NOT AVAILABLE FROM THE MANUFACTURER IN PURPLE SHALL BE PAINTED PURPLE PER SPL WW-3C. ALL BURIED DI AND CI PIPE AND FITTINGS SHALL ALSO BE WRAPPED IN PURPLE POLYETHYLENE PER SPL WW-27D. ALL COVERS SHALL HAVE **"RECLAIMED WATER"** CAST INTO THEM.

CITY OF AUSTIN AUSTIN WATER	TYPICAL GATE VALVE 4" - 16"	
RECORD COPY SIGNED BY KATHI L FLOWERS *05/18/2016* ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 511-AW-01 1 OF 4



NOTES:

1. MATERIAL SHALL BE GRAY CAST IRON, ASTM A48, GRADE 30B.
2. THE MANUFACTURER'S IDENTIFICATION AND CASTING NUMBER, AND THE COUNTRY WHERE CAST, SHALL BE DISTINCTLY CAST ONTO EACH LID, FRAME, COLLAR AND BASE.
3. DRAFT AND SHRINKAGE ALLOWANCE SHALL BE IN ACCORDANCE WITH NORMAL FOUNDRY PRACTICE.
4. CASTING FINISH BY MANUFACTURER SHALL INCLUDE REMOVAL OF FINS AND FLASHING, AND PAINT WITH BLACK ASPHALT COATING.

WEIGHTS:

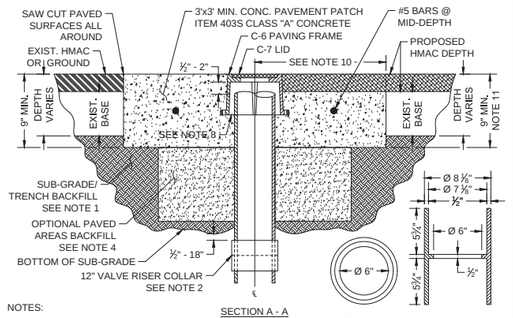
C7 LID: 13 LBS
RECLAIMED LID: 15 LBS
C6 FRAME: 23 LBS
RECLAIMED FRAME: 33 LBS
C5 BASE: 78 LBS

* LETTERING SHALL BE 1½" 2 PICK BAR SLOTS REQUIRED

CITY OF AUSTIN AUSTIN WATER	TYPICAL GATE VALVE 4" - 16"	
RECORD COPY SIGNED BY KATHI L FLOWERS *05/18/2016* ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 511-AW-01 2 OF 4

FULL DEPTH CONCRETE & UNPAVED AREAS

CONCRETE & H.M.A.C.

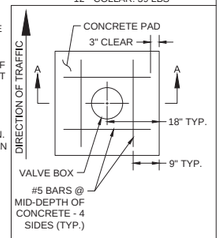


NOTES:

1. SUB-GRADE/TRENCH BACKFILL SHALL BE COMPACTED AS PER ITEM 201S, SUB-GRADE PREPARATION.
2. TO ADJUST VALVE CASTINGS TO FINAL GRADE, REMOVE RISER PIPE BELOW SUB-GRADE AND INSTALL APPROPRIATE LENGTH OF NEW RISER PIPE TO ACHIEVE FINAL GRADE. CONNECT THE TWO PIECES OF RISER PIPE WITH A 6" COLLAR MIN. 12" LENGTH APPROXIMATELY CENTERED ON THE JOINT WITH THE TOP OF SLEEVE LOCATED ½" - 18" BELOW SUB-GRADE. THE INSIDE "LIP" OF COLLAR TO BE PAINTED WITH FLUORESCENT WHITE PAINT OR COVERED WITH FLUORESCENT WHITE TAPE. ALTERNATE: FOR OPTIONAL SINGLE PIECE RISER INSTALLATION SEE SHEET 4 OF 4.
3. CLEAN VALVE BOX OF ALL DEBRIS DOWN TO THE NUT OF THE VALVE; NUT SHALL OPERATE WITH NO OBSTRUCTION.
4. WHERE CASTINGS TO BE REMOVED REQUIRE EXCAVATION GREATER THAN 20" DEEP, CONTRACTOR MAY ELECT TO FILL EXCAVATION WITH CONTROLLED LOW STRENGTH MATERIAL (SPEC. ITEM 402S) TO THE UNDERSIDE OF THE CONCRETE. PAVEMENT PATCH IN LIEU OF COMPACTED BACKFILL.
5. REINFORCING STEEL SHALL MEET SPEC. ITEM 406S.7.
6. NO MORE THAN 2 SECTIONS OF PIPE SHALL BE USED FROM VALVE TO FINAL GRADE.
7. BELL AND SPIGOT IS ACCEPTABLE FOR DEPTH OVER 18'.

12" VALVE RISER COLLAR

* 12" COLLAR: 39 LBS

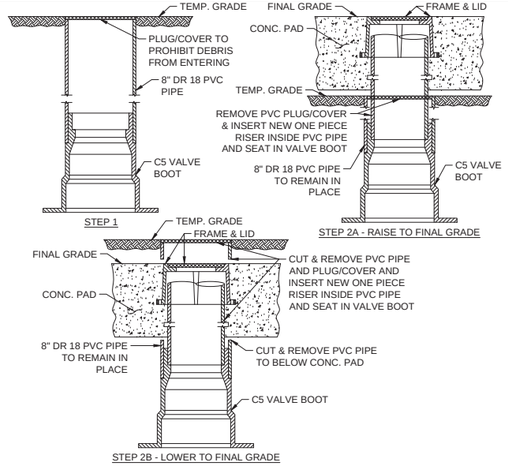


PLAN VIEW

CITY OF AUSTIN AUSTIN WATER	TYPICAL GATE VALVE 4" - 16"	
RECORD COPY SIGNED BY KATHI L FLOWERS *05/18/2016* ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 511-AW-01 3 OF 4

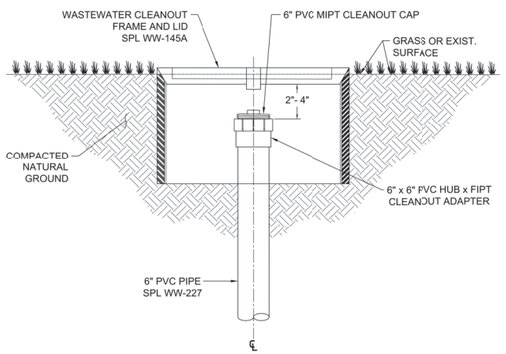
NOTES (CON'T):

8. PAVING FRAME SHALL BE FLUSH WITH THE CONC. PAD AND PLACED ½" - 2" ABOVE RISER PIPE (FRAME SHALL NOT REST ON RISER.)
9. IN UNPAVED AREAS, INSTALL ONE DELINEATOR STAKE IMMEDIATELY ADJACENT TO THE EDGE OF THE CONCRETE PAD. DELINEATOR SHALL BE BLUE FOR POTABLE WATER AND PURPLE FOR RECLAIMED WATER AND SHALL EXTEND AT LEAST 60" ABOVE GROUND. DELINEATORS SHALL HAVE 2" WIDE, WHITE IN COLOR, TYPE I REFLECTIVE TAPE MOUNTED DIAGONALLY AT 12" SPACING ON BOTH SIDES.
10. VALVE SHALL TYPICALLY BE CENTERED IN CONCRETE DIAMOND BUT MAY BE OFFSET WITH A MIN. OF 12" FROM CENTER OF VALVE LID TO EDGE OF CONCRETE IN ALL DIRECTIONS.
11. MIN. TOTAL DEPTH OF ASPHALT PLUS CONC. IS 9" AND MIN. DEPTH OF CONC. PAD SHALL BE 5"



OPTIONAL ONE PIECE VALVE CASTING INSTALLATION

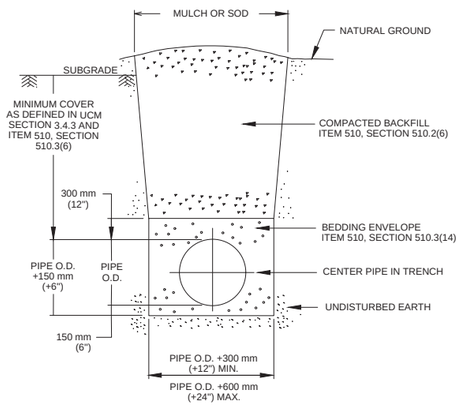
CITY OF AUSTIN AUSTIN WATER	TYPICAL GATE VALVE 4" - 16"	
RECORD COPY SIGNED BY KATHI L FLOWERS *05/18/2016* ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 511-AW-01 4 OF 4



NOTE:

1. WASTEWATER CLEANOUT FRAME AND LID SHALL NOT BE PLACED IN PAVED AREAS, INCLUDING SIDEWALKS, DRIVEWAYS, OR PARKING LOTS, AND MUST EE LOCATED A MINIMUM OF 6" FROM ALL PAVED AREAS.

CITY OF AUSTIN AUSTIN WATER	WASTEWATER CLEANOUT FRAME AND LID	
JEFF A. KYLE *08/16/2019* ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.	STANDARD NO. 520-AW-03 1 OF 1



REFERENCES:

1. UTILITY CRITERIA MANUAL SECTION 3.4.3, "FINAL DESIGN"
2. STANDARD SPECIFICATION MANUAL ITEM 510, SECTION 510.2(6), "SELECT BACKFILL OR BORROW"; SECTION 510.3(6), "TRENCH DEPTH AND DEPTH OF COVER"; SECTION 510.3(14), "PIPE BEDDING ENVELOPE"

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	TYPICAL TRENCH DETAIL WITH UNFINISHED SURFACE	
RECORD COPY SIGNED BY BILL GARDNER 03/13/06 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 510S-5

CAUTION!

IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

Know what's **below.** **Call** before you dig.

FOR CITY USE ONLY:

MillerGRAY
Consulting • Engineering • Infrastructure
7320 N. MoPac Expressway, Suite 203
Austin, Texas 78731
Phone (512) 861-5300
www.miller-gray.com
TBPE FIRM REG. NO. F-16302

STATE OF TEXAS
J. TRAVIS WILSON
97307
LICENSED PROFESSIONAL ENGINEER
4/5/2024

P:\00323 Investcor\001 Starbucks Bee Cave\05_CAD\00323-001dt.dwg 4/5/2024 10:15 AM

STARBUCKS BEE CAVE
14211 STATE HWY 71, BEE CAVE, TEXAS 78738

STANDARD DETAILS
4 OF 10

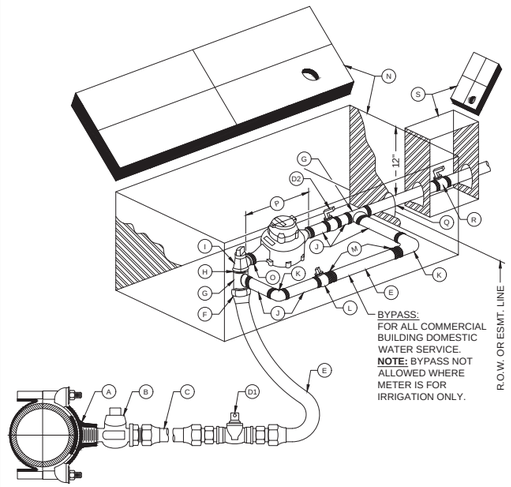
REVISIONS/CORRECTIONS

NO.	DATE	DESCRIPTION	BY

PROJECT NUMBER 00323-001
DATE: 4/5/2024
DESIGNED: KKE
CHECKED: JTW

SHEET NO.
23 OF 41

23-789-SNPS



CITY OF AUSTIN AUSTIN WATER		1 ½" - 2" METER INSTALLATION SHOWING OPTIONAL BYPASS	
RECORD COPY SIGNED BY KATHI L FLOWERS	05/18/2016 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 520-AW-04 1 OF 2

MATERIALS LIST:

A. 2" SERVICE CLAMP
B. 2" CORPORATION STOP MALE THREAD INLET BY COMPRESSION OUTLET
C. 2" COPPER WATER SERVICE TUBING EXTENDED BEYOND PAVEMENT
D1. 2" BALL VALVE, SPL WW-275
D2. 2" BALL VALVE, SPL WW-275
E. 2" COPPER SERVICE TUBING
F. 2" BRASS COUPLING - COMPRESSION TO MALE IPT
G. 2" BRASS TEE
H. 2" BRASS CLOSE-NIPPLE
I. 2" ANGLE METER STOP; SERVICE TUBING INLET x FLANGED OUTLET
J. 2" BRASS NIPPLE
K. 2" BRASS ELBOW
L. 2" LOCKABLE CURB STOP - FEMALE IPT INLET BY COMPRESSION OUTLET
M. 2" BRASS COUPLING - SERVICE TUBING TO MALE IPT
N. RECTANGULAR METER BOX AND COVER, SPL WW-145A
O. BRASS ADAPTER (2" x 1 ½") FOR 1 ½" METER ONLY
P. WATER METER. LENGTH 13", (PURCHASED FROM AUSTIN WATER)
Q. 2" COPPER SERVICE TUBING (PRIVATE PLUMBING PER CODE)
R. CUSTOMER CUT-OFF VALVE
S. CUSTOMER VALVE BOX AND LID

NOTES:

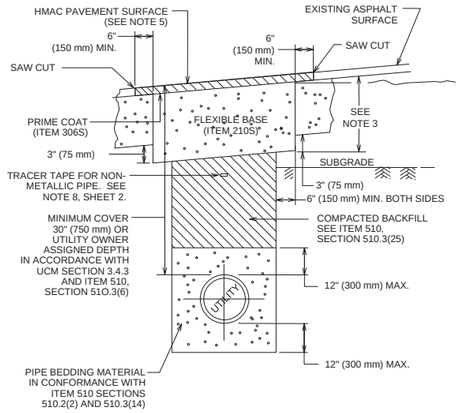
1. SERVICE CLAMP SHALL BE WRAPPED COMPLETELY WITH 8 MIL. POLYETHYLENE FILM.
2. BRANCH CONNECTIONS AND ALL ANGLE METER STOPS MUST BE INSTALLED PRIOR TO ANY METER INSTALLATION.
3. TOP OF BOXES SHOULD BE 1" ABOVE GROUND.
4. PIPING AND TUBING IN STREET RIGHT-OF-WAY SHALL BE BEDDED IN GRANULAR MATERIALS AS REQUIRED BY SECTION 510.3 (14) OF THE CITY OF AUSTIN STANDARD SPECIFICATIONS; BACKFILL ABOVE GRANULAR BEDDING AS REQUIRED BY SECTION 510.3 (25).
5. BOX MUST BE BEHIND CURB NEXT TO PROPERTY LINE OR EASEMENT AND OUT OF VEHICULAR TRAFFIC AREA AND SIDEWALK.
6. BALL VALVE "D1" SHALL NOT BE LOCATED UNDER SIDEWALK, CURB, OR PAVEMENT, AND NOT BE LOCATED MORE THAN 24" HORIZONTALLY FROM METER BOX OR 36" BELOW FINAL GRADE.
7. COPPER SERVICE SHALL BE COPPER TUBING SIZE ANNEALED SEAMLESS TYPE "K" MEETING ASTM B88 WITH NO SWEAT OR SOLDERED JOINTS.

RECLAIMED WATER:

FOR RECLAIMED WATER SERVICES AND METERS, ALL RECLAIMED TUBING SHALL BE MANUFACTURED PURPLE TUBING. ALL OTHER TUBING AND APPURTENANCES SHALL BE MANUFACTURED PURPLE IF AVAILABLE. ALL TUBING AND FITTINGS THAT ARE NOT AVAILABLE FROM THE MANUFACTURER IN PURPLE SHALL BE PAINTED PURPLE PER SPL WW-3C. ALL BURIED DI AND CI PIPE AND FITTINGS SHALL ALSO BE WRAPPED IN PURPLE POLYETHYLENE PER SPL WW-27D. ALL COVERS SHALL HAVE **"RECLAIMED WATER"** CAST INTO THEM.

CITY OF AUSTIN AUSTIN WATER		1 ½" - 2" METER INSTALLATION SHOWING OPTIONAL BYPASS	
RECORD COPY SIGNED BY KATHI L FLOWERS	05/18/2016 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 520-AW-04 2 OF 2

TRENCH REPAIR IN ASPHALTIC SURFACE OVER FLEXIBLE BASE
(UCM SECTION 5.8.0)

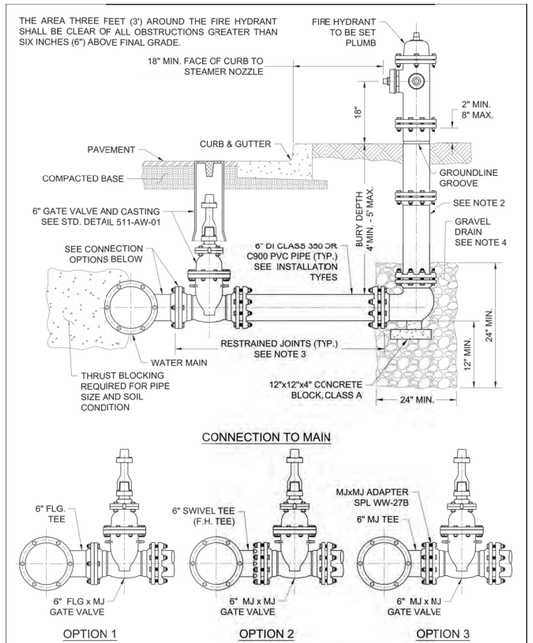


CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		FLEXIBLE BASE WITH ASPHALT SURFACE TRENCH REPAIR-EXISTING PAVEMENT	
RECORD COPY SIGNED BY KERI JUAREZ	01/04/11 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 1100S-2 1 OF 2

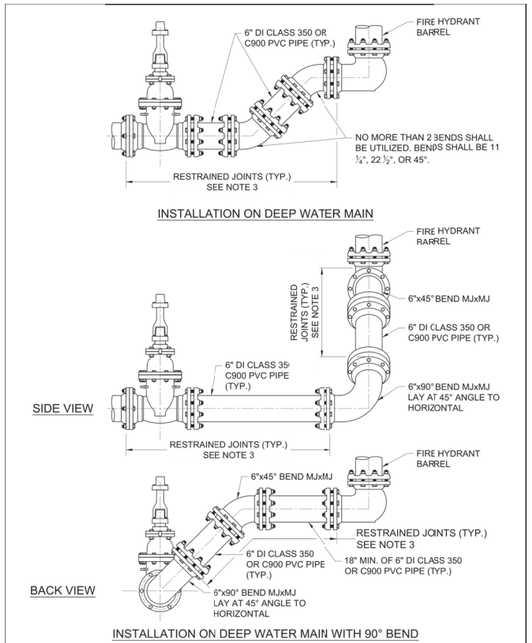
NOTES:

1. THE EXISTING PAVING SURFACE SHALL BE SAW CUT IN A STRAIGHT LINE, A MINIMUM OF 12" (300 mm) WIDER THAN UNDISTURBED SIDES OF THE TRENCH AND SYMMETRICAL ABOUT THE CENTER LINE OF THE EXCAVATION.+
2. IF EXCAVATION AREA IS OPEN FOR TEMPORARY PUBLIC USE, THE SURFACE SHALL BE MAINTAINED LEVEL WITH ADJACENT RIDING SURFACE WITH COLD MIX AC OR TEMPORARY HMAC. TEMPORARY MIX SHALL BE PLACED OVER FLEXIBLE BASE.
3. ROAD BASE SHALL BE REPLACED IN KIND WITH BASE THICKNESS EQUAL TO EXISTING BASE THICKNESS PLUS 3" (75 mm), BUT IN NO CASE LESS THAN 12" (300 mm).
4. DAMAGED PAVEMENT OUTSIDE THE TRENCH CUT SHALL BE REMOVED AND REPLACED WITH A BASE THICKNESS OF 10" (250 mm) OR A THICKNESS MATCHING EXISTING, WHICHEVER IS GREATER.
5. REPLACEMENT AC SURFACE LAYER SHALL BE OF THE TYPE AND THICKNESS BASED ON FUNCTIONAL CLASSIFICATION.
   a) MIN. 2" (50 mm) HMAC TYPE "D" FOR TRENCH REPAIR IN LOCAL/RESIDENTIAL STREETS.
   b) MIN. 3" (75 mm) HMAC TYPE "C" FOR TRENCH REPAIR IN COLLECTOR/ARTERIAL STREETS. SEE ITEM 340S, SECTION 340S.4.
6. CLASS "J" PC CONCRETE (ITEM 403S) OR CONTROLLED LOW STRENGTH MATERIAL (CLSM) MAY BE SUBSTITUTED IN THESE REPAIRS FOR THE FLEXIBLE BASE AND COMPACTED BACKFILL. PC CONCRETE GREATER THAN A 2 SACK MIX WILL NOT BE ALLOWED.
7. TACK COAT ALL EXPOSED EDGES AND SURFACES (SPEC ITEM 307S).
8. AS PER CITY OF AUSTIN STANDARD SPECIFICATION 510, SECTION 510.2(8)(K)5, FOR ALL NON-METALLIC PIPE, DIRECTLY ABOVE THE CENTERLINE OF THE PIPE AND A MINIMUM OF 12" (300 mm) BELOW THE SUBGRADE, OR A MINIMUM OF 18" (450 mm) BELOW FINISHED GRADE ON AREAS OUTSIDE THE LIMITS OF PAVEMENT, SHALL BE PLACED INDUCTIVE TRACER TAPE IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS. THE TAPE SHALL BE ENCASED IN A PROTECTIVE, INERT, PLASTIC JACKET AND COLOR CODED IN ACCORDANCE WITH APWA UNIFORM COLOR CODE.

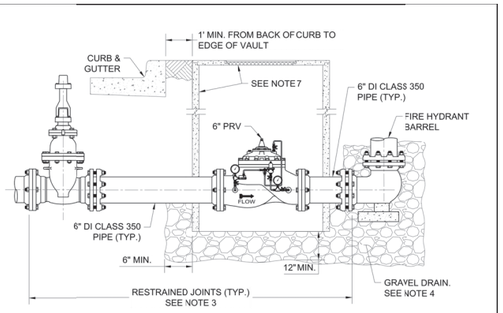
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		FLEXIBLE BASE WITH ASPHALT SURFACE TRENCH REPAIR-EXISTING PAVEMENT	
RECORD COPY SIGNED BY KERI JUAREZ	01/04/11 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 1100S-2 2 OF 2



CITY OF AUSTIN AUSTIN WATER		FIRE HYDRANT	
RECORD COPY SIGNED BY KATHI L FLOWERS	05/18/2016 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.	STANDARD NO. 511-AW-02 1 OF 3



CITY OF AUSTIN AUSTIN WATER		FIRE HYDRANT	
RECORD COPY SIGNED BY KATHI L FLOWERS	05/18/2016 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.	STANDARD NO. 511-AW-02 2 OF 3



NOTES: APPLICABLE TO ALL INSTALLATION TYPES.

1. NO PART OF A HYDRANT OR ITS NOZZLE CAPS SHALL BE WITHIN 6' OF ANY SIDEWALK OR PEDESTRIAN RAMP. ANY FIRE HYDRANT PLACED NEAR A STREET CORNER SHALL BE LOCATED OUTSIDE THE CURVE RADIUS AND A MINIMUM OF 4' FROM RAMPS.
2. ONE BARREL EXTENSION NOT EXCEEDING 2' LENGTH MAY BE INSTALLED DIRECTLY BELOW THE FIRE HYDRANT IN ORDER TO MEET THE REQUIRED BURY DEPTH OF 4' - 5'. BREAK AWAY BOLTS (SHOE TYPES) SHALL BE PROPERLY SPACED AND PLACED.
3. FIRE LINE SHALL HAVE ALL JOINTS RESTRAINED FROM MAIN TO FIRE HYDRANT. JOINTS SHOWN MAY VARY. SEE SPL WW-27, WW-27A, AND WW-27B FOR RESTRAINT OPTIONS.
4. BELOW EACH HYDRANT, A DRAINAGE PIT 24" IN DIAMETER AND 12" DEEP SHALL BE EXCAVATED AND FILLED WITH COMPACTED COARSE GRAVEL OR BROKEN STONE MIXED WITH COARSE SAND UNDER AND AROUND THE BOWL OF THE HYDRANT, AND TO A LEVEL 12" ABOVE THE HYDRANT DRAIN OPENING (SEE STD. SPEC. 510). THE HYDRANT DRAINAGE PIT SHALL NOT BE CONNECTED TO A SANITARY SEWER. THE DRAIN GRAVEL SHALL BE COVERED WITH FILTER FABRIC PER STD. SPEC. 620S. FOR PRV, GRAVEL SHALL EXTEND UNDER THE PRV VAULT 12" MIN. DEPTH UNDER THE VAULT AND 6" MIN. BEYOND VAULT.
5. FOR FIRE HYDRANT LEADS AT A MAIN OUTLET LARGER THAN 6" DIAMETER, OUTLET SHALL BE FLANGED AND A FLG x FLG REDUCER SHALL BE INSTALLED DIRECTLY ON THE OUTLET.
6. WRAP 8 MIL. POLY-FILM WRAP ON ALL BURIED PIPE AND FITTINGS.
7. FOR HYDRANTS WITH PRV: CLASS III RCP VAULT 60" MIN. I.D. WITH REINFORCED PRECAST CONCRETE LID (AASHTO H-20 LOADING) WITH COA FRAME AND 32" COVER WITH LETTERING MODIFIED FOR WATER.

CITY OF AUSTIN AUSTIN WATER		FIRE HYDRANT	
RECORD COPY SIGNED BY KATHI L FLOWERS	05/18/2016 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.	STANDARD NO. 511-AW-02 3 OF 3

Water Meter Length and Total Length with Gaskets

Description	Meter Length	With Gaskets
5/8" PB BL 3G	7.5" inches	7.75" inches
3/4" PB BL 3G	7.5" inches	7.75" inches
1" PB BL 3G	10.75" inches	11" inches
1.5" FLG MS 3G	13" inches	13.25 inches
2" FLG MS 3G	17" inches	17.25 inches
2" Octave Meter	10" inches	10.25 inches

WTCPUA METER LENGTH DIMENSION DETAIL

811 Know what's **below.** **Call** before you dig.

CAUTION!

IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

FOR CITY USE ONLY:

MillerGRAY
Consulting • Engineering • Infrastructure
7320 N. MoPac Expressway, Suite 203
Austin, Texas 78731
Phone (512) 861-5300
www.miller-gray.com
TBPE FIRM REG. NO. F-16302

STATE OF TEXAS
J. TRAVIS WILSON
97307
LICENSED PROFESSIONAL ENGINEER
4/5/2024

P:\00323 Investcor\001 Starbucks Bee Cave\05_CAD\00323-001dt.dwg 4/5/2024 10:15 AM

STARBUCKS BEE CAVE
14211 STATE HWY 71, BEE CAVE, TEXAS 78738

STANDARD DETAILS
5 OF 10

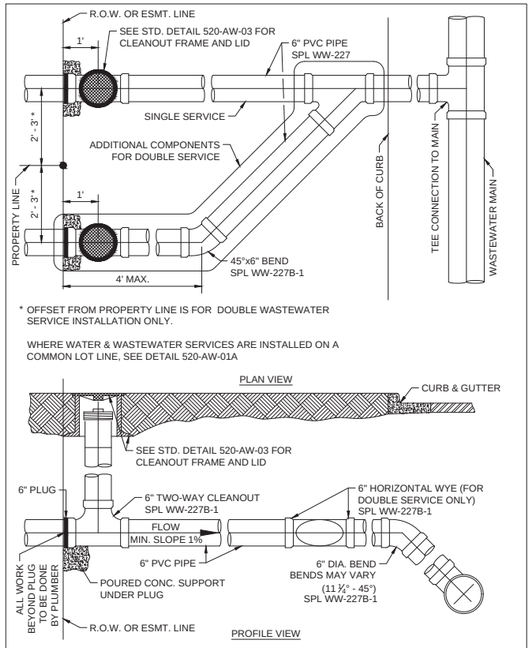
REVISIONS/CORRECTIONS

NO.	DATE	DESCRIPTION	BY

PROJECT NUMBER 00323-001
DATE: 4/5/2024
DESIGNED: KKE
CHECKED: JTW

SHEET NO.
24 OF 41

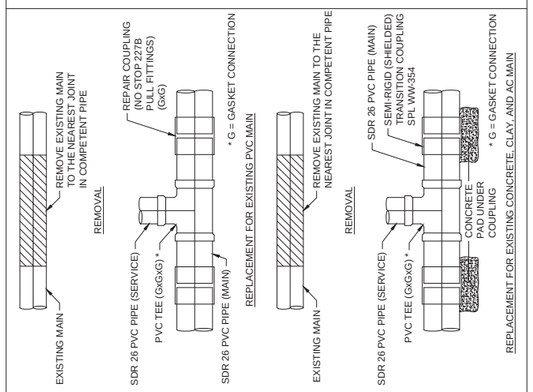
23-789-SNPS



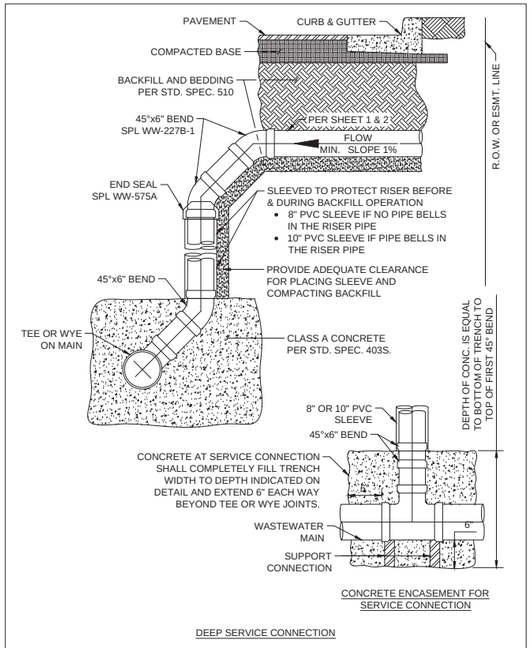
CITY OF AUSTIN AUSTIN WATER	SINGLE AND DOUBLE WASTEWATER SERVICE CONNECTION	
RECORD COPY SIGNED JEFF A. KYLE 11/07/2018 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 520-AW-01C 1 OF 4

NOTES:

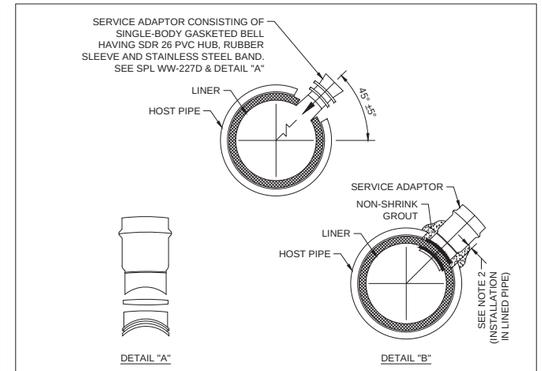
1. DURING SUBDIVISION CONSTRUCTION, UTILITY CONTRACTOR INSTALLS WASTEWATER TEE CONNECTION TO MAIN, 6" STUB, HORIZONTAL WYE FOR DOUBLE SERVICES, 6" SERVICE BRANCH WITH TWO-WAY CLEANOUT(S) AND RISER, FRAME, AND COVER. CLEANOUT(S) TO BE PLUGGED AT PROPERTY LINE OR EASEMENT LINE END. ALL WASTEWATER PIPING SHALL HAVE ELASTOMERIC GASKET TYPE JOINTS AND SLOPE DOWNWARD TO MAIN 1% MIN. TO 45° MAX. DEPTH OF SERVICE AT PROPERTY LINE WILL BE SHOWN ON PLANS BY ENGINEER IF GREATER THAN 4', OTHERWISE THE INSTALLED DEPTH WILL BE 4' MIN. AND 6' MAX. AT PROPERTY LINE. IF WASTEWATER SERVICE LINE TO MAIN REQUIRES DEFLECTION EXCEEDING 45°, SEE SHEET 3 OF 4.
2. PIPING IN STREET RIGHT-OF-WAY AND IN EASEMENT AREA SHALL BE BEDDED IN GRANULAR MATERIALS AS REQUIRED BY CITY OF AUSTIN STANDARD SPECIFICATION 510.3 (14); MATERIALS SHALL BE AS SPECIFIED IN 510.2 (2)(A) AND (3)(B); BACKFILL ABOVE THE GRANULAR BEDDING SHALL BE AS REQUIRED BY SECTION 510.3 (25). SERVICE LINES IN THESE AREAS SHALL HAVE A MIN. COVER BELOW FINAL STREET GRADE OF 42".
3. PLUMBER SHALL REMOVE PLUG AND CONNECT TO TWO-WAY CLEANOUT. NO CONNECTION TO CLEANOUT STACK IS ALLOWED.



CITY OF AUSTIN AUSTIN WATER	SINGLE AND DOUBLE WASTEWATER SERVICE CONNECTION	
RECORD COPY SIGNED JEFF A. KYLE 11/07/2018 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 520-AW-01C 2 OF 4



CITY OF AUSTIN AUSTIN WATER	SINGLE AND DOUBLE WASTEWATER SERVICE CONNECTION	
RECORD COPY SIGNED JEFF A. KYLE 11/07/2018 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 520-AW-01C 3 OF 4



INSTALLATION IN LINED PIPE:

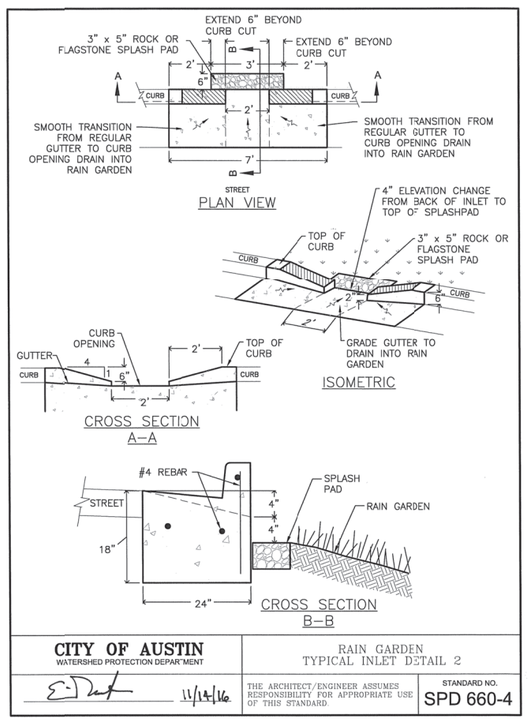
1. MARK LOCATION OF TAP.
2. BREAK & REMOVE HOST PIPE SO THAT OPENING IS AT LEAST 2" BUT NO MORE THAN 3" WIDER THAN DIAMETER OF THE SERVICE ADAPTOR.
3. DO NOT DAMAGE LINER.
4. CORE HOLE THROUGH LINER USING ADAPTOR MANUFACTURER RECOMMENDED BIT.
5. INSTALL SERVICE ADAPTOR.
6. HOLES CUT IN HOST PIPE SHALL BE PACKED WITH NON-SHRINK GROUT (ASTM C1107 GRADE). SEE DETAIL "B"

NOTES:

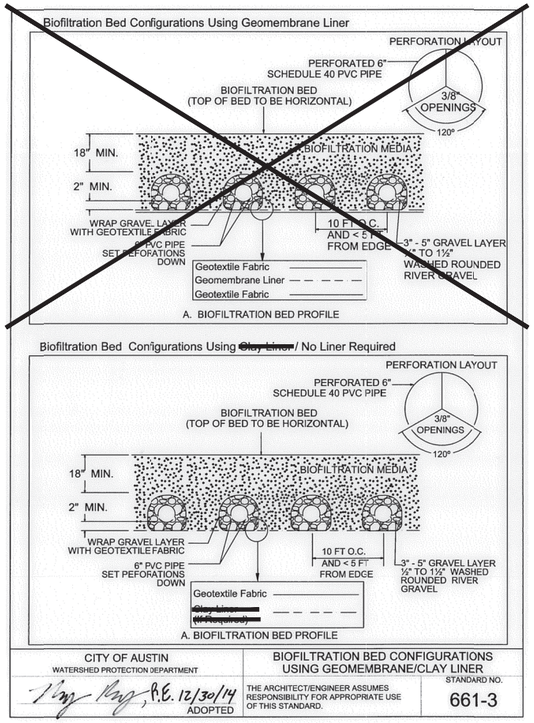
1. USE ONLY TO TAP EXISTING LINED PIPE.
2. SEE APPROPRIATE STD. FOR SERVICE LINE INFORMATION.
3. THE EDGE OF THE CORE HOLE MUST BE AT LEAST 3' FROM THE ENDS OF THE PIPE, ANY OTHER CORE SERVICE CONNECTIONS, AND ANY FITTINGS.
4. FOR DEEP SERVICE APPLICATIONS SEE SHEET 3 OF 4, EXCEPT SUBSTITUTE A CORED HOLE, AND SERVICE ADAPTOR FOR THE TEE OR WYE.
5. SERVICE CONNECTIONS TO MANHOLES MUST BE MADE USING A PIPE-TO-MANHOLE CONNECTOR WHICH LIMITS THE PIPE SLOPE INTO THE MANHOLE TO 12% MAX.

6" WASTEWATER CONNECTION TO EXISTING LINED MAIN

CITY OF AUSTIN AUSTIN WATER	SINGLE AND DOUBLE WASTEWATER SERVICE CONNECTION	
RECORD COPY SIGNED JEFF A. KYLE 11/07/2018 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 520-AW-01C 4 OF 4



CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT	RAIN GARDEN TYPICAL INLET DETAIL 2	
11/14/16	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. SPD 660-4



CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT	BIOFILTRATION BED CONFIGURATIONS USING GEOMEMBRANE/CLAY LINER	
P.E. 12/30/14 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 661-3

MillerGRAY
Consulting • Engineering • Infrastructure
7320 N. MoPac Expressway, Suite 203
Austin, Texas 78731
Phone (512) 861-5300
www.miller-gray.com
TBPE FIRM REG. NO. F-16302

P:\00323 Investcor\001 Starbucks Bee Cave\05_CAD\00323-001dt.dwg 4/5/2024 10:15 AM

STATE OF TEXAS
J. TRAVIS WILSON
97307
LICENSED PROFESSIONAL ENGINEER
4/5/2024

STARBUCKS BEE CAVE
14211 STATE HWY 71, BEE CAVE, TEXAS 78738

STANDARD DETAILS
6 OF 10

REVISIONS/CORRECTIONS

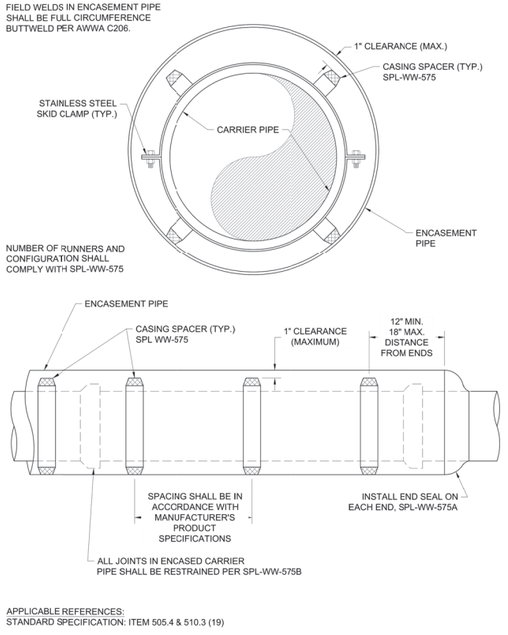
NO.	DATE	DESCRIPTION	BY

CAUTION!
IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.
811 Know what's below. Call before you dig.
FOR CITY USE ONLY:

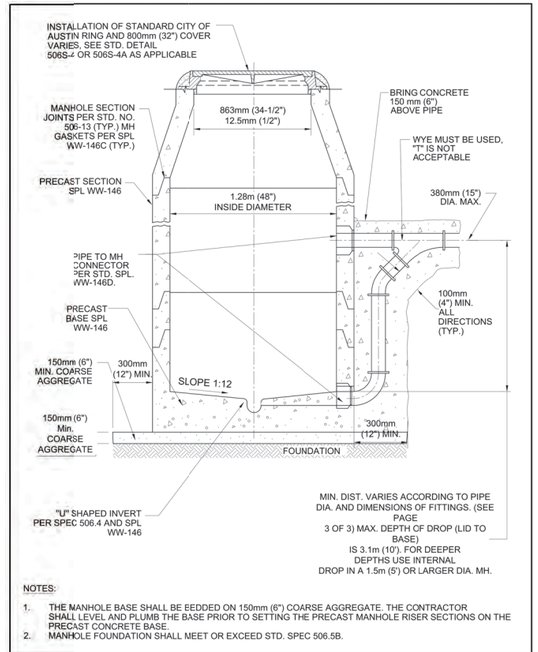
PROJECT NUMBER 00323-001
DATE: 4/5/2024
DESIGNED: KKE
CHECKED: JTW

SHEET NO.
25 OF 41

23-789-SNPS



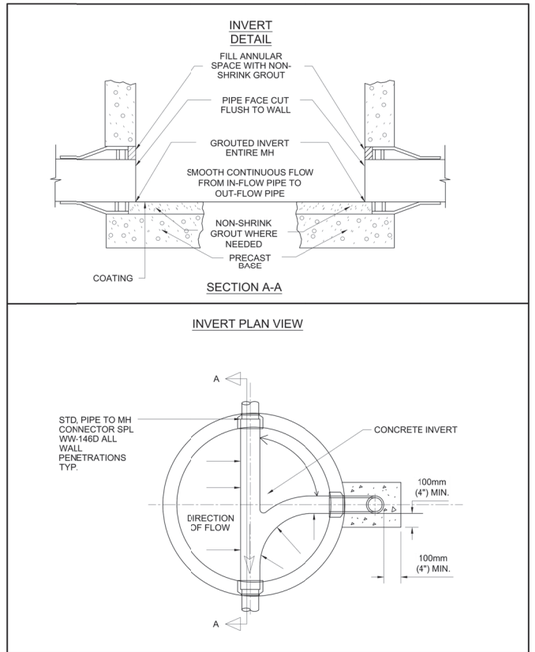
CITY OF AUSTIN WATER	ENCASEMENT PIPE DETAIL WITH CASING SPACERS	
JEFF A. KYLE 02/22/2021 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.	STANDARD NO. 501-AW-01 1 OF 1



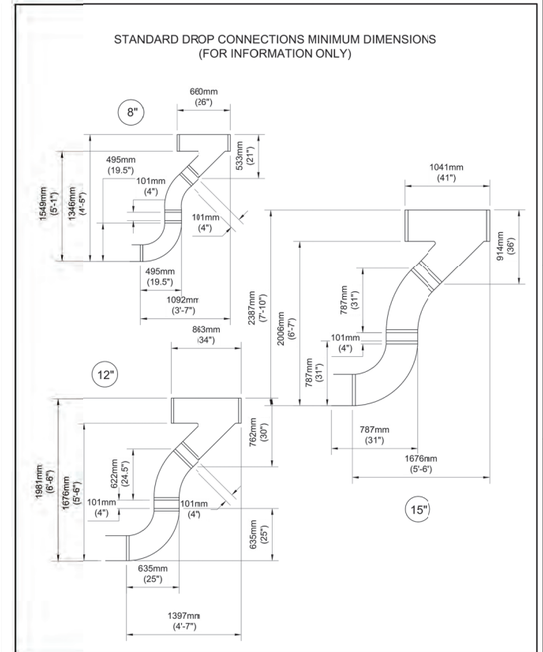
NOTES:

1. THE MANHOLE BASE SHALL BE BEDDED ON 150mm (6") COARSE AGGREGATE. THE CONTRACTOR SHALL LEVEL AND PLUMB THE BASE PRIOR TO SETTING THE PRECAST MANHOLE RISER SECTIONS ON THE PRECAST CONCRETE BASE.
2. MANHOLE FOUNDATION SHALL MEET OR EXCEED STD. SPEC 506.5B.

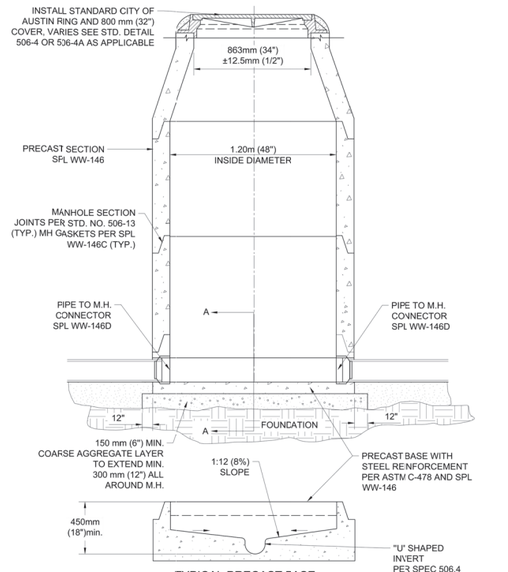
CITY OF AUSTIN AUSTIN WATER UTILITY	PRECAST MANHOLE WITH DROP INLET ON PRECAST BASE	
RECORD COPY SIGNED BY KATHI L FLOWERS 08/31/2011 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.	STANDARD NO. 506S-8 1 OF 3



CITY OF AUSTIN AUSTIN WATER UTILITY	PRECAST MANHOLE WITH DROP INLET ON PRECAST BASE	
RECORD COPY SIGNED BY KATHI L FLOWERS 03/31/2011 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.	STANDARD NO. 506S-8 2 OF 3



CITY OF AUSTIN AUSTIN WATER UTILITY	PRECAST MANHOLE WITH DROP INLET ON PRECAST BASE	
RECORD COPY SIGNED BY KATHI L FLOWERS 08/31/2011 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.	STANDARD NO. 506S-8 3 OF 3



TYPICAL PRECAST EASE

NOTE:
1. THE MANHOLE BASE SHALL BE BEDDED ON 150 mm (6") COARSE AGGREGATE. THE CONTRACTOR SHALL LEVEL AND PLUMB THE BASE PRIOR TO SETTING THE PRECAST MANHOLE RISER SECTIONS ON THE PRECAST CONCRETE BASE.
2. MH FOUNDATION SHALL MEET OR EXCEED STD. SPEC. 506.5B

CITY OF AUSTIN AUSTIN WATER UTILITY	WASTEWATER MANHOLE ON PRECAST BASE	
RECORD COPY SIGNED BY KATHI L FLOWERS 03/31/2011 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.	STANDARD NO. 506S-10 1 OF 1

811 Know what's below. Call before you dig.

CAUTION!

IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

FOR CITY USE ONLY:

MillerGRAY
Consulting • Engineering • Infrastructure
7320 N. MoPac Expressway, Suite 203
Austin, Texas 78731
Phone (512) 861-5300
www.miller-gray.com
TBPE FIRM REG. NO. F-16302

P:\00323 Investcor\001 Starbucks Bee Cave\05_CAD\00323-001dt.dwg 4/5/2024 10:15 AM

STATE OF TEXAS
J. TRAVIS WILSON
97307
LICENSED PROFESSIONAL ENGINEER
4/5/2024

STARBUCKS BEE CAVE
14211 STATE HWY 71, BEE CAVE, TEXAS 78738

STANDARD DETAILS
7 OF 10

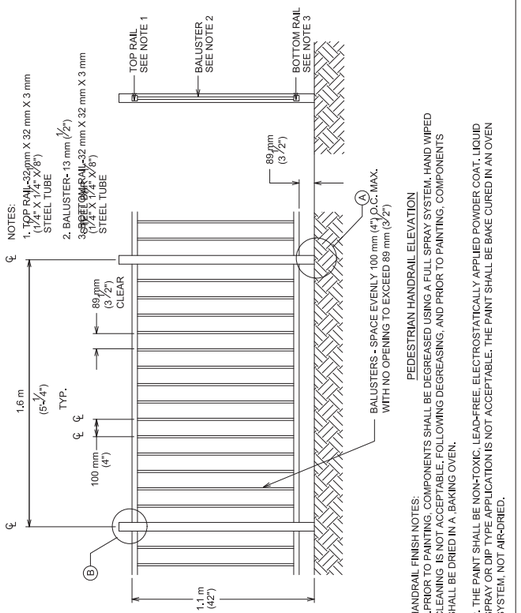
REVISIONS/CORRECTIONS

NO.	DATE	DESCRIPTION	BY

PROJECT NUMBER 00323-001
DATE: 4/5/2024
DESIGNED: KKE
CHECKED: JTW

SHEET NO.
26 OF 41

23-789-SNPS

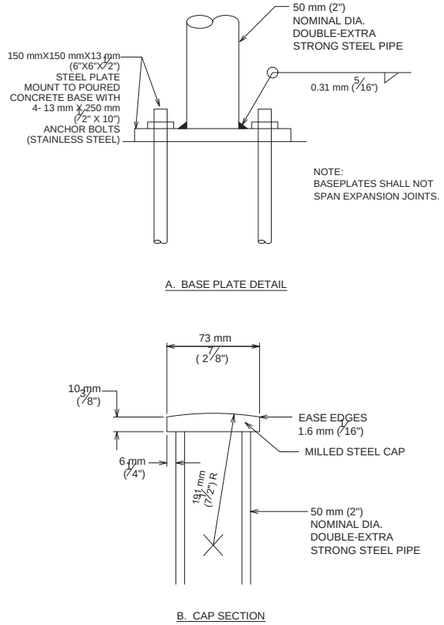


NOTES:
1. TOP RAIL - 32 mm X 32 mm X 3 mm (1 1/4" X 1 1/4" X 0.8") STEEL TUBE
2. BALUSTER - 13 mm (1/2") SQUARE BAR
3. BOTTOM RAIL - 32 mm X 32 mm X 3 mm (1 1/4" X 1 1/4" X 0.8") STEEL TUBE

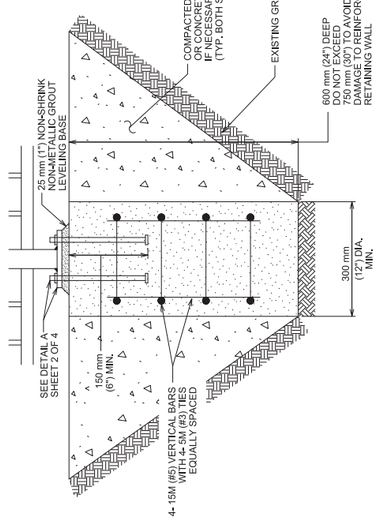
PEDESTRIAN HANDRAIL ELEVATION

HANDRAIL FINISH NOTES:
1. PRIOR TO PAINTING, COMPONENTS SHALL BE DEGREASED USING A FULL SPRAY SYSTEM, HAND WIPED CLEANING IS NOT ACCEPTABLE, FOLLOWING DEGREASING, AND PRIOR TO PAINTING, COMPONENTS SHALL BE DRIED IN A BAKING OVEN.
2. THE PAINT SHALL BE NON-TOXIC, LEAD-FREE, ELECTROSTATICALLY APPLIED POWDER COAT, LIQUID SPRAY OR DIP TYPE APPLICATION IS NOT ACCEPTABLE. THE PAINT SHALL BE BAKE CURED IN AN OVEN SYSTEM, NOT AIR-DRIED.

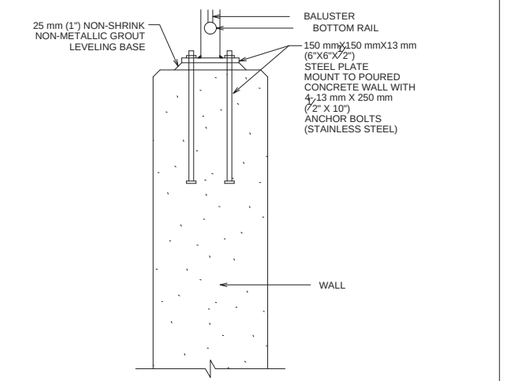
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	PEDESTRIAN HANDRAIL	
RECORD COPY SIGNED BY KERI JUAREZ — 01/04/11 — ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 707S-1 1 OF 4



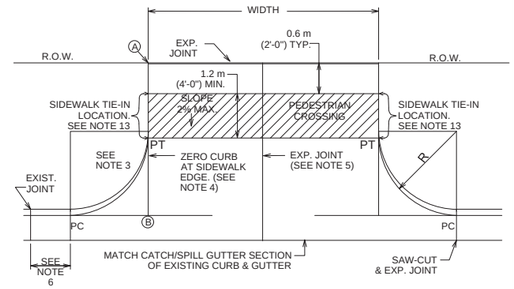
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	PEDESTRIAN HANDRAIL	
RECORD COPY SIGNED BY KERI JUAREZ — 01/04/11 — ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 707S-1 2 OF 4



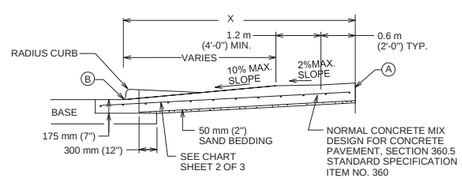
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	PEDESTRIAN HANDRAIL	
RECORD COPY SIGNED BY KERI JUAREZ — 01/04/11 — ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 707S-1 3 OF 4



CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	PEDESTRIAN HANDRAIL	
RECORD COPY SIGNED BY KERI JUAREZ — 01/04/11 — ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 707S-1 4 OF 4

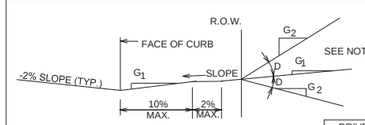


NOTE: ALL DRIVEWAYS SHALL BE SLOPED TOWARDS THE STREET FROM THE R.O.W. LINE. ELEVATION OF POINT(A)ABOVE POINT(B)IS, TYPICALLY A MINIMUM OF 150 mm (6") PLUS 20 mm/m (¼" RISE/FOOT) OVER DISTANCE "X" IN METERS (FEET).



CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	TYPE II DRIVEWAY	
RECORD COPY SIGNED BY CUONG TRAN — 02/24/10 — ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 433S-2 1 OF 2

USE	THICKNESS	REINFORCEMENT
DRIVEWAYS FOR PASSENGER VEHICLE PARKING LOTS	150 mm (6") MIN.	125 mm (5") MIN. CONCRETE WITH ONE LAYER OF13M (#4) BARS PLACED ON CHAIRS AT MIDDEPTH OF SLAB AT NO MORE THAN 450 mm (18") O.C. BOTH DIRECTIONS
ALL OTHERS	175 mm (7") MIN.	125 mm (5") MIN. CONCRETE WITH ONE LAYER OF13M (#4) BARS PLACED ON CHAIRS AT MIDDEPTH OF SLAB AT NO MORE THAN 450 mm (18") O.C. BOTH DIRECTIONS

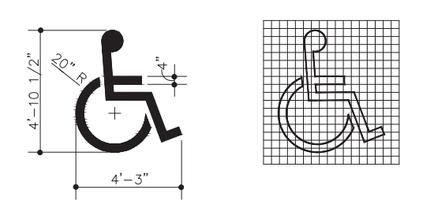


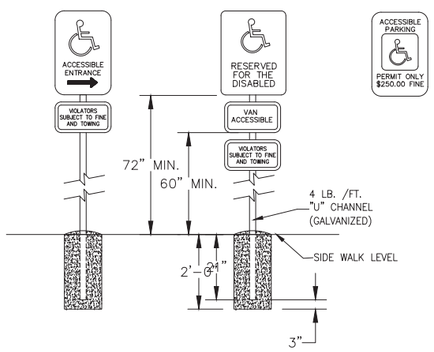
ALLOWABLE GRADES

DRIVEWAY VOLUME (ADT)	D=GRADE CHANGE STD.	MAX
>1500	0%	3%
500-1500	3%	6%
< 500	6%	15%

NOTES:
1. ALL TYPE II DRIVEWAYS SHALL HAVE RADIUS ENDS.
2. DRIVEWAY WIDTHS AND RADII DIMENSIONS, ONE/TWO WAY TRAVEL REQUIREMENTS, AND GEOMETRIC LAY-OUT ARE HIGHLY VARIABLE, SUBJECT TO SITE SPECIFIC CONDITIONS AND REQUIREMENTS. SEE TRANSPORTATION CRITERIA MANUAL. SECTION 5 "DRIVEWAYS".
3. THE DRIVEWAY EDGE SHALL BE SMOOTHLY TRANSITITIONED INTO THE SIDEWALK TIE-IN LOCATION BEGINNING AT THE RADIUS PC LINE.
4. "ZERO" CURB AT PT OR SIDEWALK EDGE, WHICHEVER IS ENCOUNTERED FIRST.
5. PLACE AN EXPANSION JOINT DOWN THE CENTER OF DRIVEWAY ALL DRIVEWAYS.
6. IF DIMENSION IS LESS THAN 1.5 METERS (5 FEET), REMOVE CURB AND GUTTER TO EXISTING JOINT AND POUR MONOLITHICALLY WITH DRIVEWAY.
7. IF THE BASE IS OVER-EXCAVATED WHERE THE CURB AND GUTTER WERE REMOVED, BACKFILL WITH CONCRETE MONOLITHICALLY WITH THE DRIVEWAY.
8. TYPE II DRIVEWAYS ARE TO BE LOCATED NO CLOSER TO THE CORNER OF INTERSECTING RIGHT OF WAY THAN 60% OF PARCEL FRONTAGE AT 30 METERS (100 FEET): WHICHEVER IS LESS.
9. DRIVEWAY SHALL NOT BE CONSTRUCTED WITHIN THE CURB RETURN OF A STREET INTERSECTION.
10. WHILE THE PROPERTY OWNER REMAINS RESPONSIBLE FOR GRADE BREAKS WITHIN PRIVATE PROPERTY, THE FIRE DEPARTMENT SHALL BE CONSULTED WHERE THE DRIVEWAY IS ESSENTIAL TO EMERGENCY VEHICLE ACCESS AND "G2 IS GREATER THAN 15%.
11. USE 12 MM (1/2") ASPHALT BOARD OR OTHER APPROVED MATERIAL FOR CURB AND GUTTER EXPANSION JOINTS. SIDEWALK, AT THE R.O.W. LINE AND AT MIDWIDTH, SEE NOTE 5.
12. SEE TRANSPORTATION CRITERIA MANUAL, SECTION 5 FOR OTHER DRIVEWAY REQUIREMENTS.
13. THE SIDEWALK, REGARDLESS OF ITS LOCATION WITH RESPECT TO THE CURB OR PROPERTY LINE, SHALL BE CONNECTED TO THE DRIVEWAY AT THESE LOCATIONS.
14. WATER METER BOXES AND WASTEWATER CLEAN OUTS ARE PROHIBITED FROM BEING LOCATED IN DRIVEWAY AREAS.

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	TYPE II DRIVEWAY	
RECORD COPY SIGNED BY CUONG TRAN — 02/24/10 — ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 433S-2 2 OF 2





ACCESSIBLE PARKING SIGNAGE — N.T.S.

MillerGRAY
Consulting • Engineering • Infrastructure
7320 N. MoPac Expressway, Suite 203
Austin, Texas 78731
Phone (512) 861-5300
www.miller-gray.com
TBPE FIRM REG. NO. F-16302

P:\00323 Investcor\001 Starbucks Bee Cave\05_CAD\00323-001dt.dwg 4/5/2024 10:15 AM

STATE OF TEXAS
J. TRAVIS WILSON
97307
LICENSED PROFESSIONAL ENGINEER
4/5/2024

STARBUCKS BEE CAVE
14211 STATE HWY 71, BEE CAVE, TEXAS 78738

STANDARD DETAILS
8 OF 10

REVISIONS/CORRECTIONS

NO.	DATE	DESCRIPTION	BY

PROJECT NUMBER 00323-001
DATE: 4/5/2024
DESIGNED: KKE
CHECKED: JTW

CAUTION!
IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

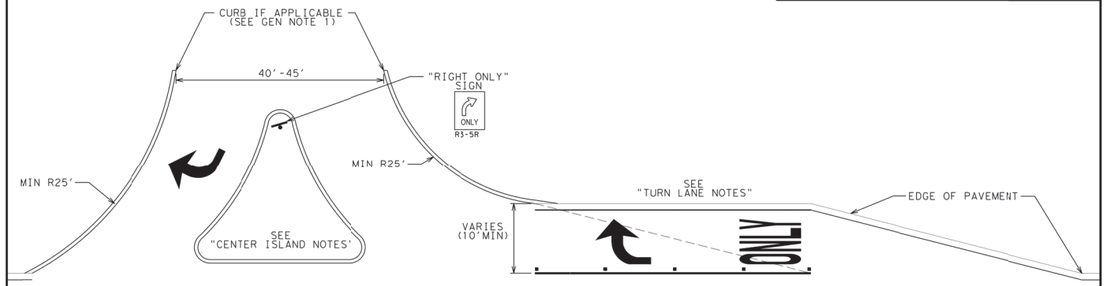
811 Know what's below. Call before you dig.

FOR CITY USE ONLY:

SHEET NO.
27 OF 41

23-789-SNPS

STANDARD RIGHT IN/RIGHT OUT DRIVEWAY DETAIL



NOTES

CENTER ISLAND NOTES

1. SIGN (R3-5R) MAINTAINED BY DRIVEWAY OWNER
2. "RIGHT ONLY" SIGN TO USE " " BASE
3. SEE GENERAL NOTE 1
4. CURB ON CENTER ISLAND SHALL BE PAINTED YELLOW USING TY I (100 MIL). PER TXDOT ITEM 666.
5. CENTER OF ISLAND SHALL BE 4" CONCRETE RIPRAP

TURN LANE NOTES

1. IF TAPERED DRIVEWAY OPTION IS APPLICABLE OR ALLOWED BY AREA ENGINNER:
   - LESS THAN 45 MPH = ANGLED 100' TAPER
   - GREATER THAN 45 MPH = 100' STORAGE AND 100' TAPER
2. ALL STRIPING SHALL BE TY I (100 MIL) PER TXDOT ITEM 646
3. REFERENCE PM-22 STANDARD FOR ALL STRIPING AND BUTTON DETAILS.

GENERAL NOTES

1. ALL CURB WITHIN TXDOT R.O.W. AND ADJACENT TO A FACILITY THAT IS GREATER THAN 50 MPH, MUST BE TY I MOUNTABLE CURB. SEE STANDARD DETAIL CCCG-22
2. DRIVEWAY MATERIAL SHALL BE ALL WEATHER SURFACE (CONCRETE OR HOTMIX)

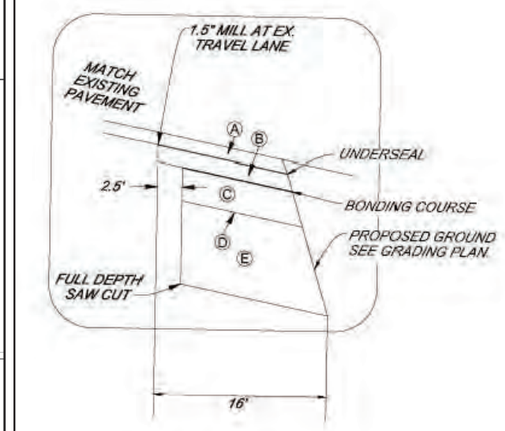
Austin District
South Travis Area Office

Texas Department of Transportation

RIGHT IN / RIGHT OUT DRIVEWAY DETAIL

©	CONT	SECT	JOB	HIGHWAY
DW: CK:				
DW: CK:	DIST	COUNTY		SHEET NO.

DATE: 8/DATE
FILE: 8'FILE'



DETAIL 'A'
NTS

LEGEND:

- (A) 1.5" PFC (ASPHALT) (PG 76-22)
- (B) 2" TY D PG64-22 HMAC
- (C) 5" TY B PG64-22 HMAC
- (D) PRIME COAT
- (E) 10" TY D GR 5 FLEX BASE

TCP	TITLE	MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
1-1	CONVENTIONAL ROAD SHOULDER WORK		✓	✓		
1-2	ONE-LANE TWO-WAY TRAFFIC CONTROL		✓	✓		
1-3	TRAFFIC SHIFTS ON TWO-LANE ROADS		✓	✓		
1-4	LANE CLOSURES ON MULTILANE CONVENTIONAL ROADS		✓	✓		
1-5	LANE CLOSURES FOR DIVIDED HIGHWAYS			✓		
1-6	AUTOMATED FLAGGER ASSISTANCE DEVICES (AFADS)		✓	✓		
2-1	CONVENTIONAL ROAD SHOULDER WORK		✓	✓	✓	✓
2-2	ONE-LANE TWO-WAY TRAFFIC CONTROL		✓	✓	✓	
2-3	TRAFFIC SHIFTS ON TWO-LANE ROADS				✓	✓ (2-3b ONLY)
2-4	LANE CLOSURES ON MULTILANE CONVENTIONAL ROADS			✓	✓	
2-5	LONG TERM LANE CLOSURES MULTILANE CONVENTIONAL ROADS				✓	✓
2-6	LANE CLOSURES ON DIVIDED HIGHWAYS				✓	✓
2-7	DIVERSIONS AND NARROW BRIDGES				✓	✓
2-8	LONG TERM ONE-LANE TWO-WAY CONTROL				✓	✓
3-1	MOBILE OPERATIONS UNDIVIDED HIGHWAYS	✓				
3-2	MOBILE OPERATIONS DIVIDED HIGHWAYS	✓				
3-3	MOBILE OPERATIONS RAISED PAVEMENT MARKER INSTALLATION/REMOVAL	✓				
3-4	MOBILE OPERATIONS FOR ISOLATED WORK AREAS UNDIVIDED HIGHWAYS	✓				
3-5	MOBILE OPERATIONS HERBICIDE TRUCK OPERATIONS	✓				
5-1	SHOULDER WORK FOR FREEWAYS / EXPRESSWAYS		✓ (5-1a only)	✓ (5-1b only)	✓ (5-1b only)	
6-1	FREEWAY LANE CLOSURES		✓	✓	✓	
6-2	WORK AREA NEAR RAMP		✓	✓	✓	
6-3	WORK AREA BEYOND RAMP		✓	✓	✓	
6-4	WORK AREA AT EXIT RAMP		✓	✓	✓	
6-5	WORK AREA BEYOND EXIT RAMP		✓	✓	✓	
6-6	FREEWAY CLOSURE		✓	✓	✓	
6-7	SHORT DURATION FREEWAY CLOSURE SEQUENCE		✓			
6-8	WORK IN EXIT GORE FOR ADT GREATER THAN 10,000		✓	✓		
6-9	WORK IN EXIT GORE FOR ADT LESS THAN 10,000		✓	✓		
7-1	TRAFFIC CONTROL DETAILS FOR SURFACING OPERATIONS				✓	✓

MOBILE
Work that moves continuously or intermittently (stopping for up to approximately 15 minutes).

SHORT DURATION
Work that occupies a location up to 1 hour.

SHORT TERM STATIONARY
Daytime work that occupies a location for more than 1 hour in a single daylight period.

INTERMEDIATE TERM STATIONARY
Work that occupies a location more than one daylight period up to 3 days, or night-time work lasting more than 1 hour.

LONG TERM STATIONARY
Work that occupies a location more than 3 days.

NOTE
THIS SHEET IS A WORKSHEET FOR PLAN PREPARATION ONLY. IT IS NOT TO BE INCLUDED IN P.S.&E's.

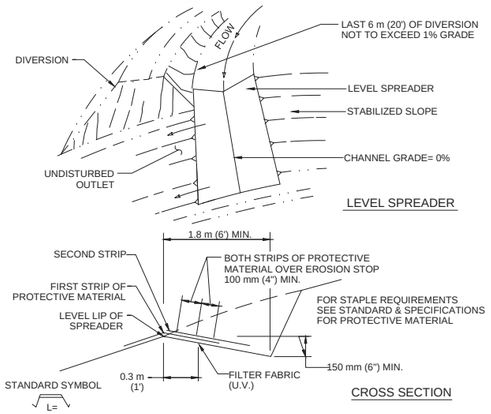
Texas Department of Transportation — Traffic Operations Division Standard

TRAFFIC CONTROL PLAN SELECTION WORKSHEET

File: tcpws-16.dgn	DW: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
© TxDOT April 1996	CONT	SECT	JOB	HIGHWAY
REVISIONS				
4-16	DIST	COUNTY		SHEET NO.

149

DATE:
FILE:



GENERAL NOTES:

1. LEVEL SPREADERS SHALL BE INSTALLED UNDER THE DIRECT SUPERVISION OF THE ENGINEER.
2. CONSTRUCT LEVEL LIP ON ZERO PERCENT GRADE TO INSURE UNIFORM SPREADING OF SEDIMENT-FREE RUNOFF (CONVERTING CHANNEL FLOW TO SHEET FLOW).
3. LEVEL SPREADER SHALL BE CONSTRUCTED ON UNDISTURBED SOIL (NOT ON FILL).
4. A MATTING EROSION STOP SHALL BE PLACED VERTICALLY AND AT LEAST 150 mm (6") DEEP IN A SILT TRENCH 0.3 m (1') BACK OF AND PARALLEL WITH THE LIP. THIS EROSION STOP SHALL EXTEND THE ENTIRE LENGTH OF THE LEVEL LIP AND SHALL BE TRIMMED AFTER BACKFILLING WITH TAMPED SOIL, SO THAT THE UPPER EDGE IS FLUSH WITH THE SOIL SURFACE.
5. THE ENTIRE LEVEL LIP AREA SHALL BE PROTECTED BY PLACING 2 STRIPS OF JUTE, EXCELSIOR OR OTHER APPROVED PROTECTIVE MATERIAL AS SHOWN ABOVE.
6. THE ENTRANCE CHANNEL SHALL NOT EXCEED A 1% GRADE FOR AT LEAST 6 m (20') BEFORE ENTERING SPREADER.
7. STORM RUNOFF CONVERTED TO SHEET FLOW SHALL OUTLET ONTO STABILIZED AREAS. WATER SHALL NOT BE RECONCENTRATED IMMEDIATELY BELOW THE POINT OF DISCHARGE.
8. PERIODIC INSPECTION AND REQUIRED MAINTENANCE SHALL BE PROVIDED.

CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT		LEVEL SPREADER	
RECORD COPY SIGNED BY J. PATRICK MURPHY	3/27/00 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 634S-1

Know what's below. Call before you dig.

CAUTION!
IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

FOR CITY USE ONLY:

MillerGRAY
Consulting • Engineering • Infrastructure
7320 N. MoPac Expressway, Suite 203
Austin, Texas 78731
Phone (512) 861-5300
www.miller-gray.com
TBPE FIRM REG. NO. F-16302

STATE OF TEXAS
J. TRAVIS WILSON
97307
LICENSED PROFESSIONAL ENGINEER
4/5/2024

P:\00323 Investcor\001 Starbucks Bee Cave\05_CAD\00323-001dt.dwg 4/5/2024 10:15 AM

STARBUCKS BEE CAVE
14211 STATE HWY 71, BEE CAVE, TEXAS 78738

STANDARD DETAILS
9 OF 10

REVISIONS/CORRECTIONS

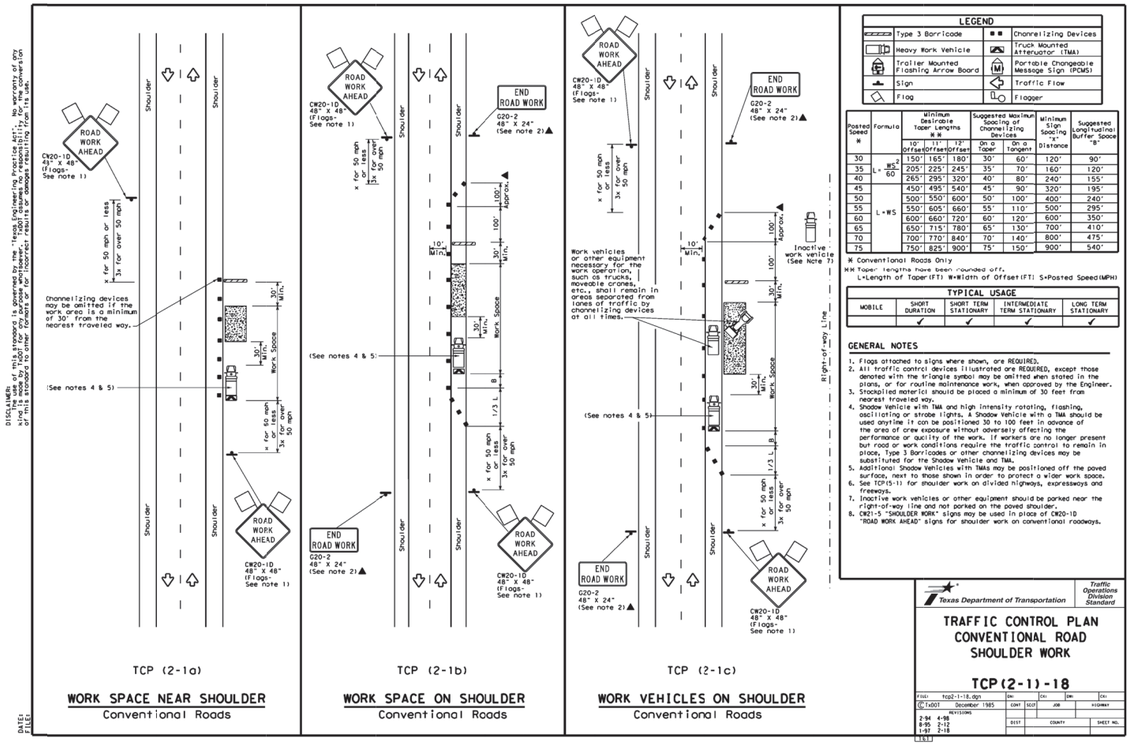
NO.	DATE	DESCRIPTION	BY

PROJECT NUMBER 00323-001
DATE: 4/5/2024
DESIGNED: KKE
CHECKED: JTW

SHEET NO.
28 OF 41

23-789-SNPS

DISCLAIMER:
The use of this standard is governed by the "Texas Engineering Practice Act". No warranty of any kind is made by the Texas Department of Transportation for any purpose whatsoever. Texas Department of Transportation assumes no responsibility and shall not be liable for any damage resulting from the reuse of this standard or for incorrect results or damages resulting from its use.



TCP (2-1a)

WORK SPACE NEAR SHOULDER
Conventional Roads

TCP (2-1b)

WORK SPACE ON SHOULDER
Conventional Roads

TCP (2-1c)

WORK VEHICLES ON SHOULDER
Conventional Roads

DISCLAIMER:
The use of this standard is governed by the "Texas Engineering Practice Act". No warranty of any kind is made by TxDOT for any purpose whatsoever. TxDOT assumes no responsibility for the conversion of this standard to other formats or for incorrect results or damages resulting from its use.

DATE:
FILE:

LEGEND

	Type 3 Barricade	■ ■	Channelizing Devices
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Board		Portable Changeable Message Sign (PCMS)
	Sign		Traffic Flow
	Flag		Flagger

Posted Speed M	Formula	Minimum Desirable Taper Lengths M N 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Channelizing Devices On a Taper	On a Tangent	Minimum Sign Spacing "X" Distance	Suggested Longitudinal Buffer Space "B"
30	L = WS² / 60	150'	165'	180'	30'	60'	120'	90'
35		205'	225'	245'	35'	70'	160'	120'
40		265'	295'	320'	40'	80'	240'	155'
45	L = WS	450'	495'	540'	45'	90'	320'	195'
50		500'	550'	600'	50'	100'	400'	240'
55		550'	605'	660'	55'	110'	500'	295'
60		600'	660'	720'	60'	120'	600'	350'
65		650'	715'	780	65'	130'	700'	410'
70		700'	770'	840'	70'	140'	800'	475'
75		750'	825'	900'	75'	150'	900'	540'

※ Conventional Roads Only
MM Taper lengths have been rounded off.
L=Length of Taper(FT) W=Width of Offset(FT) S=Posted Speed(MPH)

TYPICAL USAGE

MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
	✓	✓	✓	✓

GENERAL NOTES

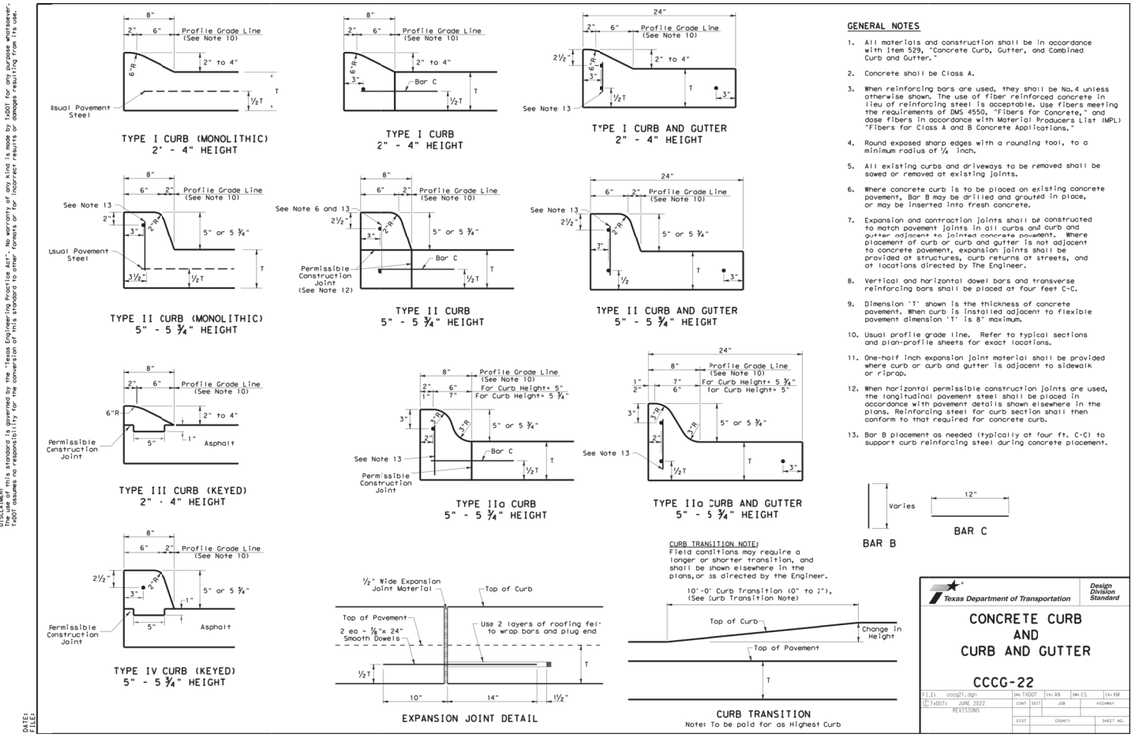
1. Flags attached to signs where shown, are REQUIRED.
2. All traffic control devices illustrated are REQUIRED, except those denoted with the triangle symbol may be omitted when stated in the plans, or for routine maintenance work, when approved by the Engineer.
3. Stockpiled material should be placed a minimum of 30 feet from nearest traveled way.
4. Shadow Vehicle with TMA and high intensity rotating, flashing, oscillating or strobe lights. A Shadow Vehicle with a TMA should be used anytime it can be positioned 30 to 100 feet in advance of the area of crew exposure without adversely affecting the performance or quality of the work. If workers are no longer present but road or work conditions require the traffic control to remain in place, Type 3 Barricades or other channelizing devices may be substituted for the Shadow Vehicle and TMA.
5. Additional Shadow Vehicles with TMAs may be positioned off the paved surface, next to those shown in order to protect a wider work space.
6. See TCP(5-1) for shoulder work on divided highways, expressways and freeways.
7. Inactive work vehicles or other equipment should be parked near the right-of-way line and not parked on the paved shoulder.
8. CW21-5 "SHOULDER WORK" signs may be used in place of CW20-1D "ROAD WORK AHEAD" signs for shoulder work on conventional roadways.

Texas Department of Transportation — Traffic Operations Division Standard

TRAFFIC CONTROL PLAN
CONVENTIONAL ROAD SHOULDER WORK

TCP(2-1)-18

FILE: tcp2-1-18.dgn	DN:	CK:	DW:	CK:
©TxDOT December 1985	CONT	SECT	JOB	HIGHWAY
REVISIONS 2-94 4-98 8-95 2-12 1-97 2-18	DIST	COUNTY		SHEET NO.



TYPE I CURB (MONOLITHIC)
2" - 4" HEIGHT

TYPE I CURB
2" - 4" HEIGHT

TYPE I CURB AND GUTTER
2" - 4" HEIGHT

TYPE II CURB (MONOLITHIC)
5" - 5 ¾" HEIGHT

TYPE II CURB
5" - 5 ¾" HEIGHT

TYPE II CURB AND GUTTER
5" - 5 ¾" HEIGHT

TYPE III CURB (KEYED)
2" - 4" HEIGHT

TYPE IIa CURB
5" - 5 ¾" HEIGHT

TYPE IIa CURB AND GUTTER
5" - 5 ¾" HEIGHT

TYPE IV CURB (KEYED)
5" - 5 ¾" HEIGHT

EXPANSION JOINT DETAIL

GENERAL NOTES

1. All materials and construction shall be in accordance with Item 529, "Concrete Curb, Gutter, and Combined Curb and Gutter."
2. Concrete shall be Class A.
3. When reinforcing bars are used, they shall be No.4 unless otherwise shown. The use of fiber reinforced concrete in lieu of reinforcing steel is acceptable. Use fibers meeting the requirements of DMS 4550, "Fibers for Concrete," and dose fibers in accordance with Material Producers List (MPL) "Fibers for Class A and B Concrete Applications."
4. Round exposed sharp edges with a rounding tool, to a minimum radius of ¼ inch.
5. All existing curbs and driveways to be removed shall be sawed or removed at existing joints.
6. Where concrete curb is to be placed on existing concrete pavement, Bar B may be drilled and grouted in place, or may be inserted into fresh concrete.
7. Expansion and contraction joints shall be constructed to match pavement joints in all curbs and curb and gutter adjacent to jointed concrete pavement. Where placement of curb or curb and gutter is not adjacent to concrete pavement, expansion joints shall be provided at structures, curb returns at streets, and at locations directed by The Engineer.
8. Vertical and horizontal dowel bars and transverse reinforcing bars shall be placed at four feet C-C.
9. Dimension "T" shown is the thickness of concrete pavements. When curb is installed adjacent to flexible pavement dimension "T" is 8" maximum.
10. Usual profile grade line. Refer to typical sections and plan-profile sheets for exact locations.
11. One-half inch expansion joint material shall be provided where curb or curb and gutter is adjacent to sidewalk or riprap.
12. When horizontal permissible construction joints are used, the longitudinal pavement steel shall be placed in accordance with pavement details shown elsewhere in the plans. Reinforcing steel for curb section shall then conform to that required for concrete curb.
13. Bar B placement as needed (typically at four ft. C-C) to support curb reinforcing steel during concrete placement.

Varies — BAR B

12" — BAR C

CURB TRANSITION NOTE:
Field conditions may require a longer or shorter transition, and shall be shown elsewhere in the plans, or as directed by the Engineer.

CURB TRANSITION
Note: To be paid for as Highest Curb

Texas Department of Transportation — Design Division Standard

CONCRETE CURB AND CURB AND GUTTER

CCCG-22

FILE: cccg01.dgn	DN: TxDOT	CK: BN	DW: CS	CK: KM
©TxDOT JUNE 2002	CONT	SECT	JOB	HIGHWAY
REVISIONS	DIST	COUNTY		SHEET NO.

DISCLAIMER:
The use of this standard is governed by the "Texas Engineering Practice Act". No warranty of any kind is made by TxDOT for any purpose whatsoever. TxDOT assumes no responsibility for the conversion of this standard to other formats or for incorrect results or damages resulting from its use.

DATE:
FILE:

MillerGRAY
Consulting • Engineering • Infrastructure
7320 N. MoPac Expressway, Suite 203
Austin, Texas 78731
Phone (512) 861-5300
www.miller-gray.com
TBPE FIRM REG. NO. F-16302

STATE OF TEXAS
J. TRAVIS WILSON
97307
LICENSED PROFESSIONAL ENGINEER
4/5/2024

P:\00323 Investcor\001 Starbucks Bee Cave\05_CAD\00323-001.dt.dwg 4/5/2024 10:15 AM

STARBUCKS BEE CAVE
14211 STATE HWY 71, BEE CAVE, TEXAS 78738

STANDARD DETAILS
10 OF 10

REVISIONS/CORRECTIONS

NO.	DATE	DESCRIPTION	BY

PROJECT NUMBER
00323-001

DATE: 4/5/2024
DESIGNED: KKE
CHECKED: JTW

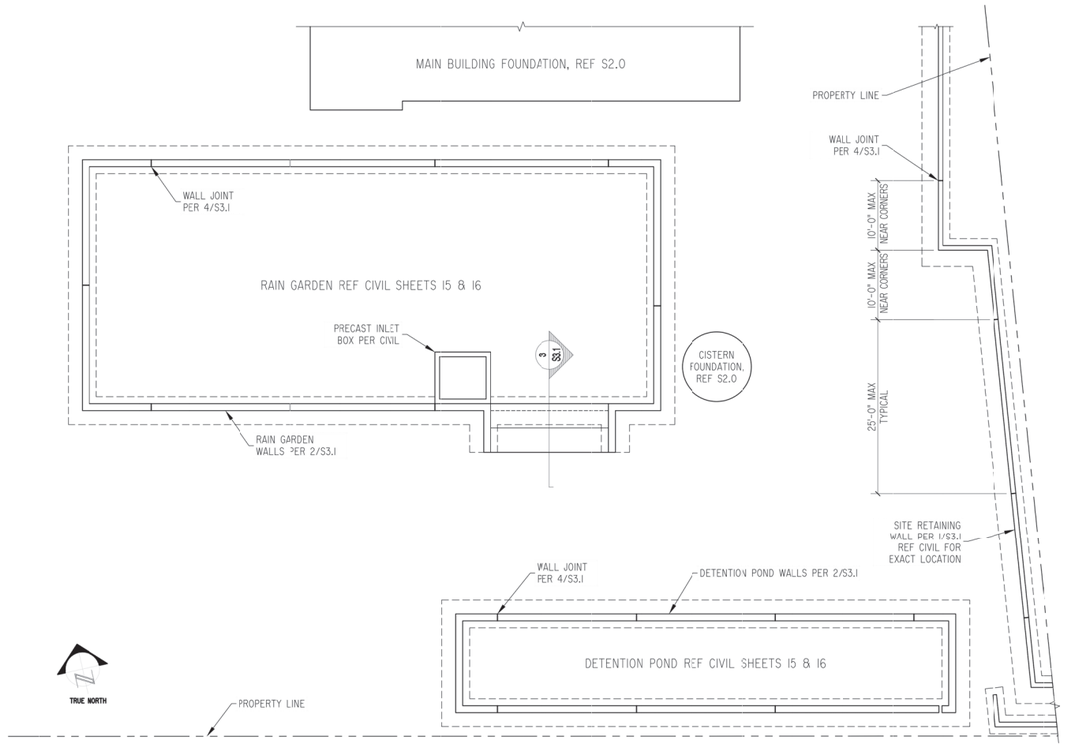
811 Know what's below. Call before you dig.

CAUTION!
IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES.

FOR CITY USE ONLY:

SHEET NO.
29 OF 41

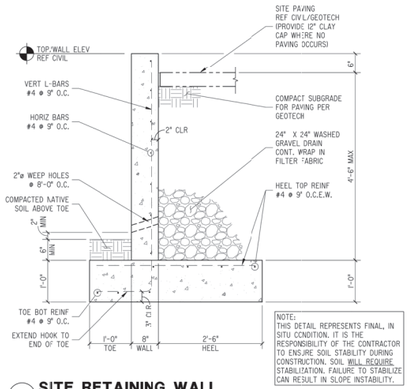
23-789-SNPS



RETAINING WALL DESIGN CRITERIA:	
ALLOWABLE BEARING PRESSURE	2500 PSF
ACTIVE PRESSURE, ASSUMED	40 PSF/FT COINCIDENT WITH SURCHARGE
AT-REST PRESSURE, ASSUMED	60 PSF/FT COINCIDENT WITH SURCHARGE
PASSIVE PRESSURE AT TOE, ASSUMED	360 PSF/FT, NEGLECTING TOP 6"
SURCHARGE PRESSURE	250 PSF AT FIRE LANE OR EQUIPMENT PAD
SAFETY FACTORS	1.5 FOR SLIDING & 2.0 FOR OVERTURNING

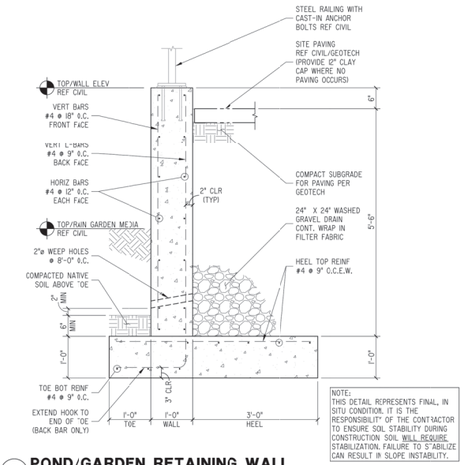
RAIN GARDEN AND DETENTION POND PLAN

1/8"=1'0"



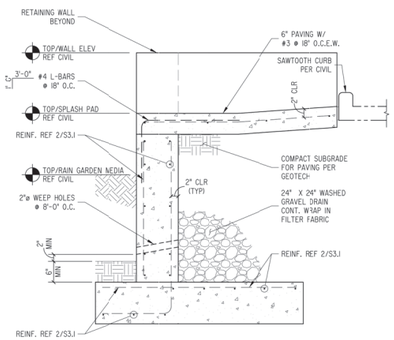
1 SITE RETAINING WALL

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



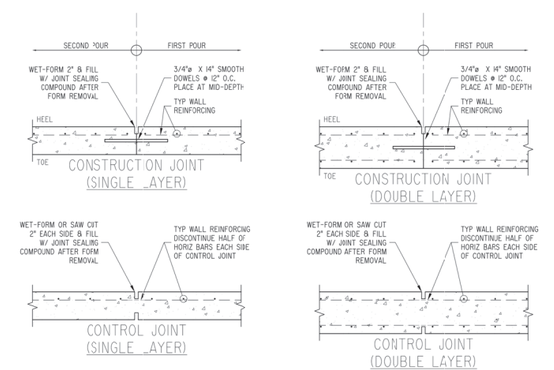
2 POND/GARDEN RETAINING WALL

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



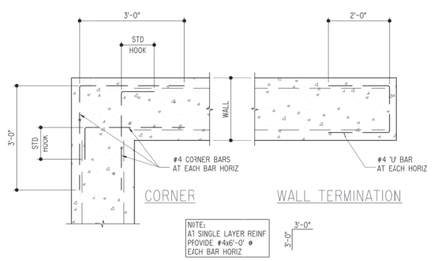
3 SPLASH PAD SECTION

N.T.S.



4 SITE WALL JOINT DETAIL

N.T.S.



5 WALL CORNER BAR DETAIL

N.T.S.

ATS Engineers Inspectors & Surveyors
www.ats-engineers.com
4810 W. Highway 290
AUSTIN, TEXAS 78735
TEL: (512) 329-0622
FAX: (512) 329-0666
REGISTR. #2487
ATS Project #: 22C9038.0

USE OF THESE DRAWINGS INDICATES AGREEMENT TO CONFORM WITH GENERAL NOTES. ALL DOCUMENTS AND COPYRIGHTS ARE PROPERTY OF ARCH TECHNICAL SERVICES, LLC, DBA ATS ENGINEERS, INSPECTORS AND SURVEYORS FIRM REGISTRATION NO. 2487

4942 HWY 290 W
AUSTIN, TEXAS
78735
(512) 476-0622

14211 W. Highway 71
Bee Cave, Texas

PROJECT

ENVIROPLAN
ARCHITECTS PLANNERS

2 ADDENDUM #2 11.14.23
4 ADDENDUM #4 2.02.24
6 ADDENDUM #6 3.15.24

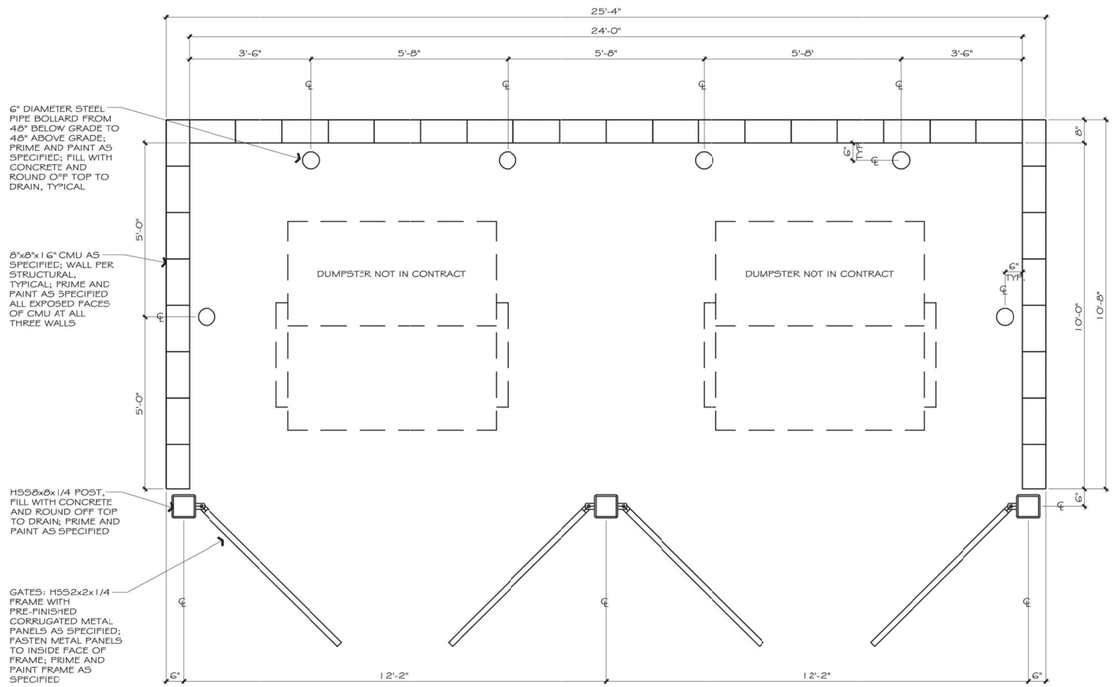
REVISIONS

03/15/2024 11:00 AM

STATE OF TEXAS
DAVID A. DUNKMAN
122387
LICENSED PROFESSIONAL ENGINEER

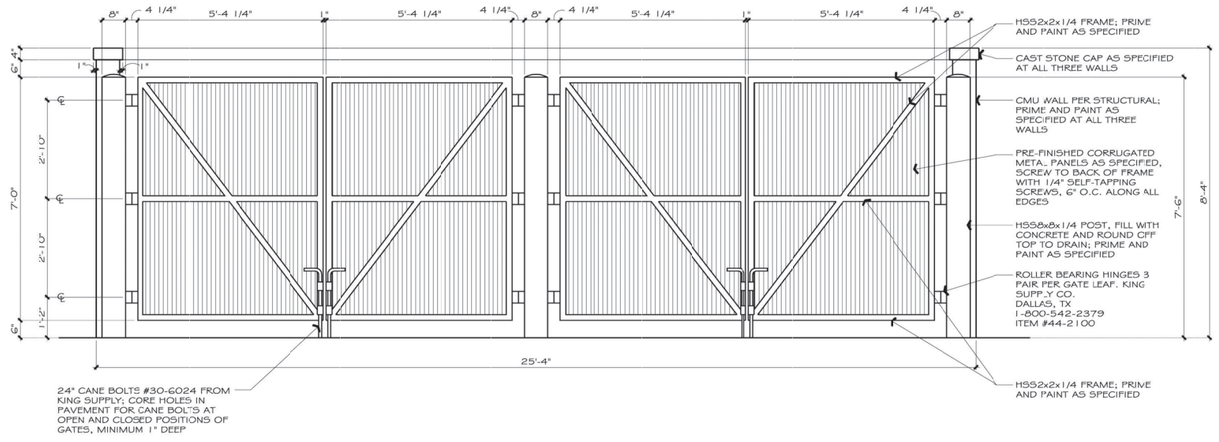
07.14.23
DATE

S3.1
30 OF 41



1 DUMPSTER ENCLOSURE PLAN

SCALE: 1/2" = 1'-0"



2 DUMPSTER ENCLOSURE ELEVATION

SCALE: 1/2" = 1'-0"

ENVIROPLAN
ARCHITECTS
•
PLANNERS
4942 HWY 290 W
AUSTIN, TEXAS
78735
(512) 476-0622

4211 W. Highway 71

Bee Cave, Texas

1427

PROJECT

REVISIONS

REGISTERED ARCHITECT
TIMOTHY S. FOWLER
1651
STATE OF TEXAS

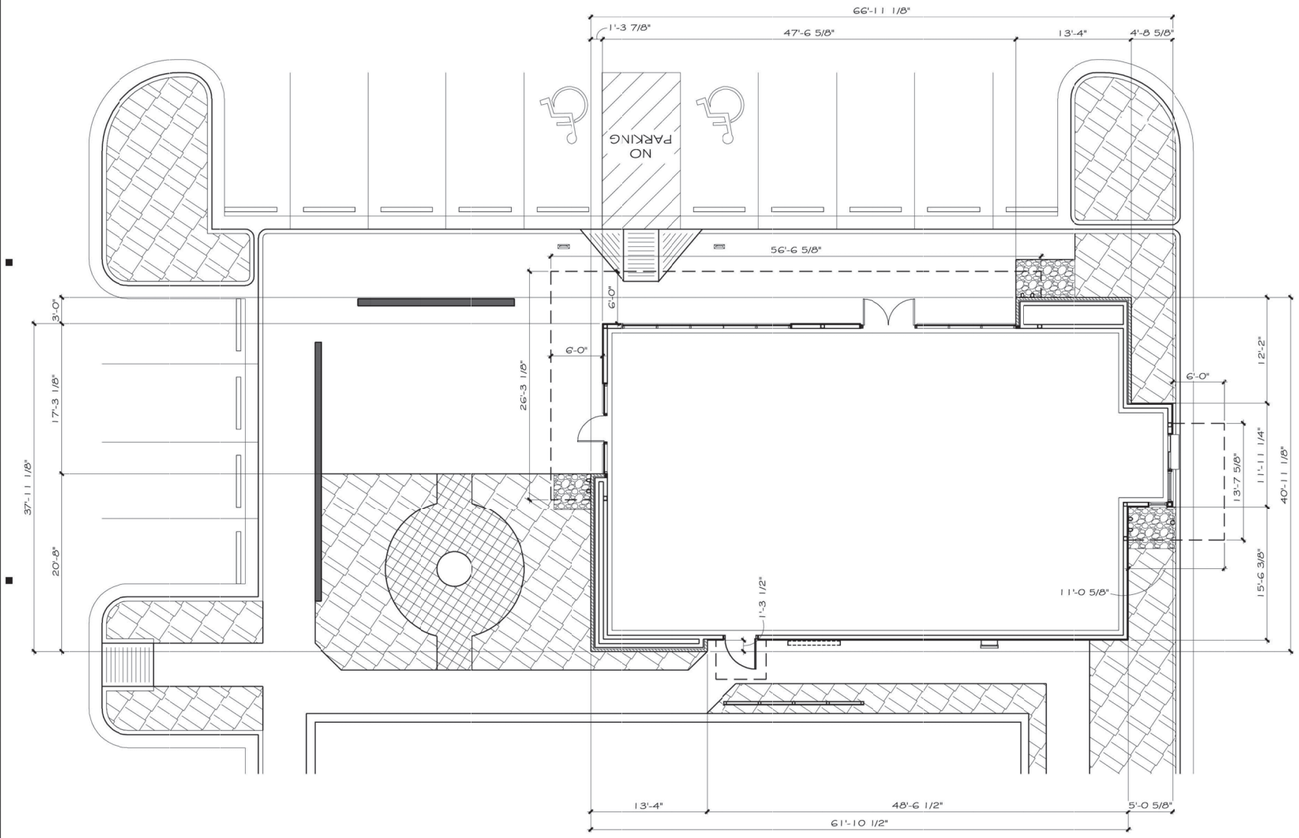
9.21.23

9.21.23

DATE

31 OF 41

A1



1 FLOOR PLAN

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

PLAN NORTH TRUE NORTH

LINEAR GLAZING FRONTAGE FOR NORTH ELEVATION FACING R.O.W. = 37'-3" (55.7%) LINEAR GLAZING

FACADE MATERIAL CALCULATIONS			
	TOTAL FACADE AREA	MASONRY (BRICK + STUCCO)	GLAZING
NORTH ELEVATION	1,222 S.F.	360 S.F. (29.5%)	327 S.F. (26.8%)
WEST ELEVATION	821 S.F.	538 S.F. (65.5%)	93 S.F. (11.9%)
SOUTH ELEVATION	1,282 S.F.	1,171 S.F. (91.3%)	10 S.F. (0.8%)
EAST ELEVATION	801 S.F.	599 S.F. (74.8%)	38 S.F. (4.7%)
ALL ELEVATIONS	4,126 S.F.	2,668 S.F. (64.7%)	468 S.F. (11.3%)

ARCHITECTURAL ELEMENTS:

HIGH-QUALITY DESIGN ELEMENTS:

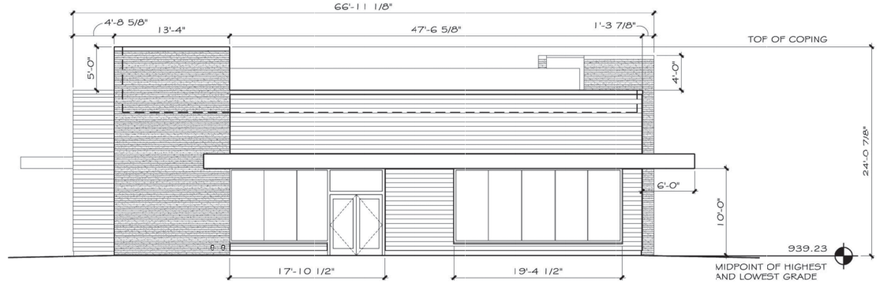
- CANOPIES WITH 6'-0" DEPTH.
- OUTDOOR PATIO AT LEAST 250 S.F. AND EXCLUSIVE OF SIDEWALKS.
- DISPLAY WINDOWS AT LEAST 7'-0" IN HEIGHT AND MEASURING NO MORE THAN 3'-0" FROM THE GROUND.
- INTEGRATED KNEE WALLS WITH LANDSCAPE AND SITTING AREA.

SITE DESIGN ELEMENTS:

- AT LEAST 50% OF THE PARKING AREA ON THE SAME LOT TO THE SIDE OR REAR OF ALL BUILDINGS.
- PATIO FOR OUTDOOR DINING EQUIVALENT TO 5% OF THE SITE OR 30% OF PLANNED RESTAURANT DINING AREA. THE OUTDOOR PATIO IS 500 S.F. WHICH IS 67% OF THE 750 S.F. INTERIOR RESTAURANT DINING AREA.
- ADDITIONAL OFF-STREET CONNECTION WITH NEIGHBORING PROPERTY.
- ALL DRIVE-THRU LANES AND WINDOWS LOCATED BEHIND OR TO THE SIDE OF ALL BUILDINGS AND NOT BETWEEN PUBLIC OR PRIVATE RIGHT-OF-WAY AND THE FRONT OF THE BUILDING OR AN OPEN SPACE.

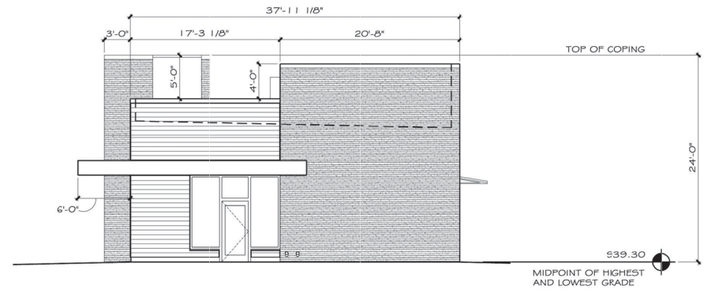
SUSTAINABILITY ELEMENTS:

- ALTERED TOPOGRAPHY AND ELEVATION OF THE SITE BY NO MORE THAN 4'-0" ACROSS 80% OF THE SITE.
- INCORPORATION OF A RAINWATER HARVESTING SYSTEM CAPABLE OF CAPTURING A ONE INCH RAINFALL EVENT FOR AT LEAST 25% OF THE ROOF AREA.



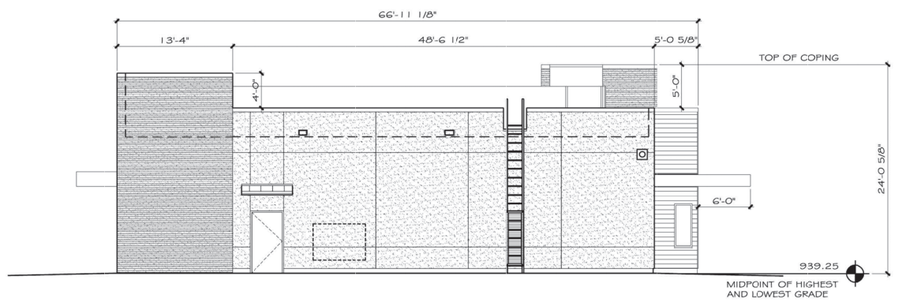
2 NORTH ELEVATION

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



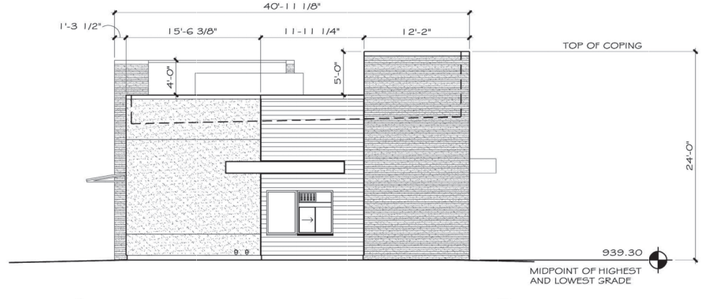
3 WEST ELEVATION

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



4 SOUTH ELEVATION

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



5 EAST ELEVATION

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

ENVIROPLAN
ARCHITECTS
•
PLANNERS
4942 HWY 290 W
AUSTIN, TEXAS
78735
(512) 476-0622

14211 W. Highway 71
Bee Cave, Texas

PROJECT

REVISIONS

REGISTERED ARCHITECT GARY L. FAGAN 16531 STATE OF TEXAS

1.22.24

1.22.24
DATE

A2
32 OF 41



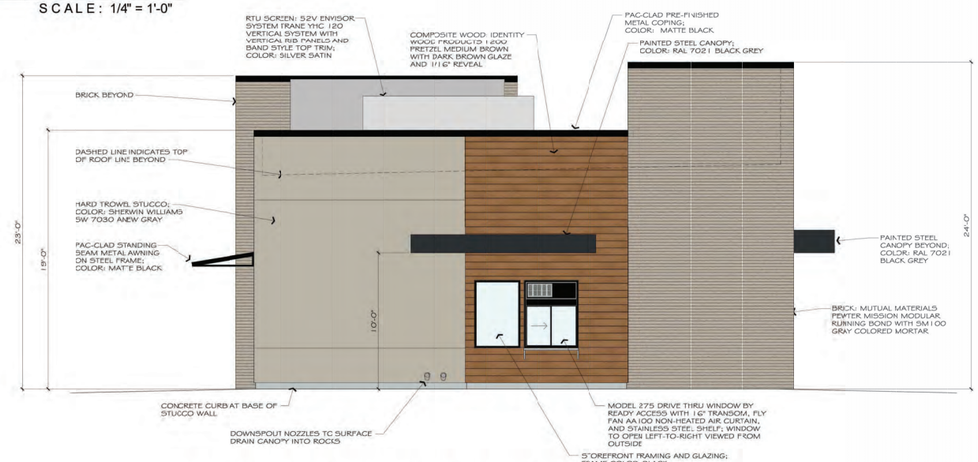
1 NORTH ELEVATION

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



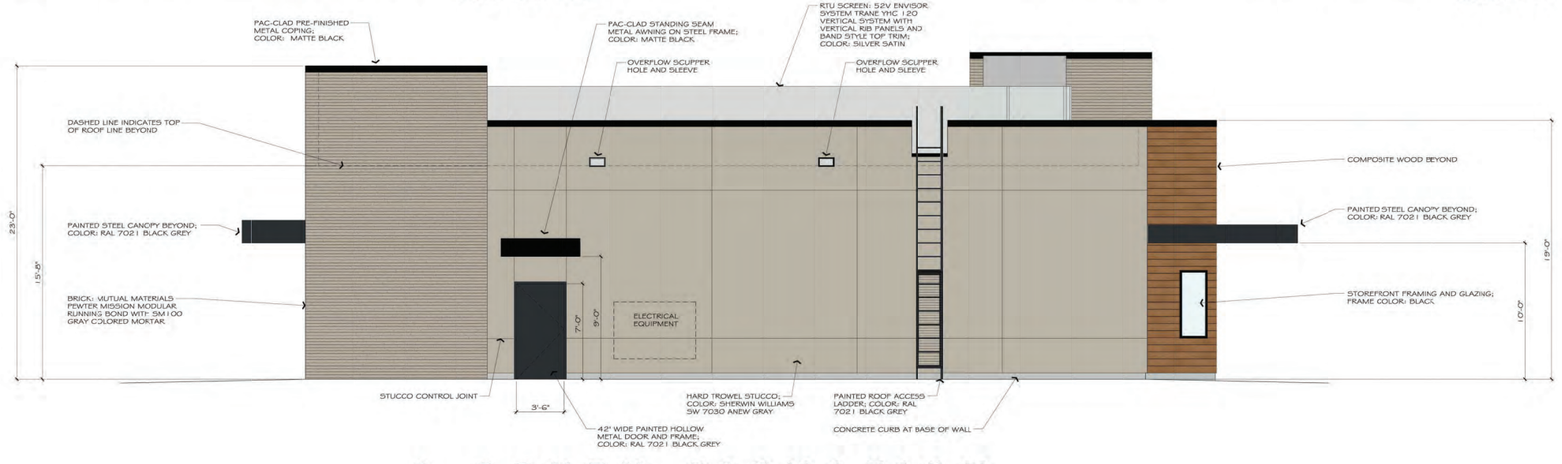
2 WEST ELEVATION

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



3 EAST ELEVATION

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



4 SOUTH ELEVATION

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

4942 HWY 290 W
AUSTIN, TEXAS
78735
(512) 476-0622

14211 W. Highway 71

Bee Cave, Texas

PROJECT

ENVIROPLAN
ARCHITECTS PLANNERS

REVISIONS

1.22.24

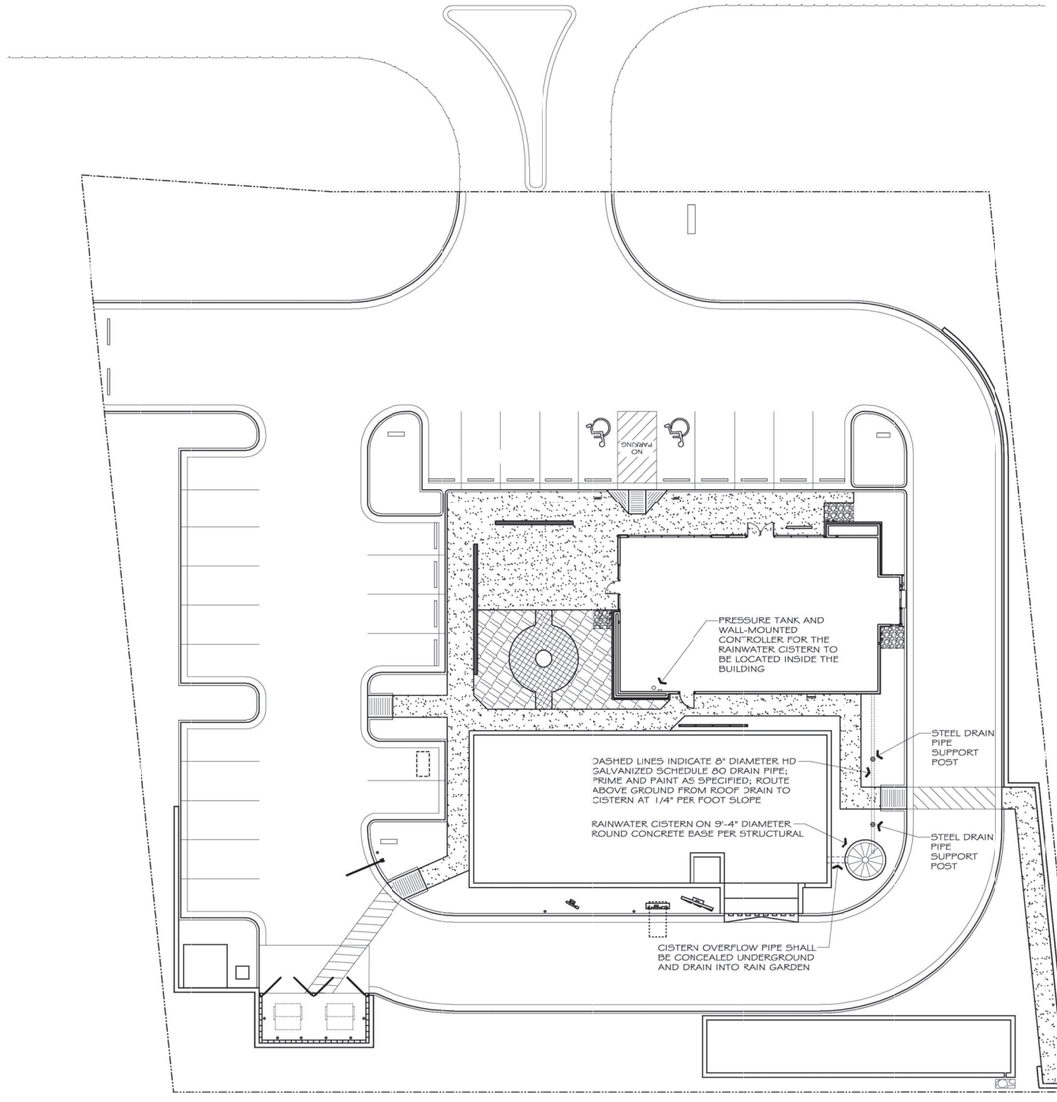
1.22.24

DATE

33 OF 41

A2.3

COLORED ELEVATIONS



1 ARCHITECTURAL SITE PLAN

SCALE: 1/16" = 1'-0"

PLAN NORTH

TRUE NORTH

NOTES:

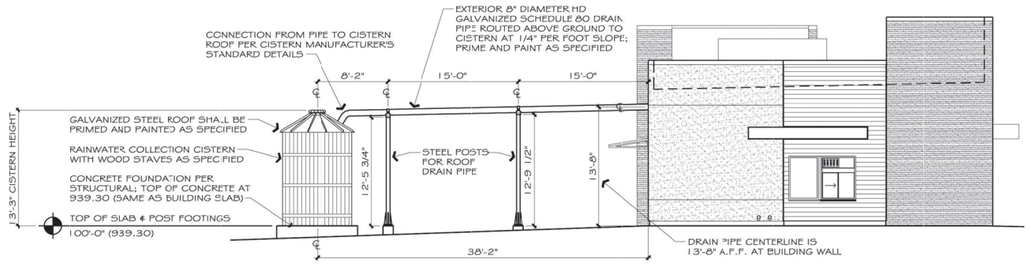
RAINWATER CISTERN SHALL BE 8'-0" DIAMETER TIMBERTANK WITH WOOD STAVES BY WATER STORAGE TANKS, INC.; https://waterstoragetanksinc.com/
CONTACT BRITTANY AT SPECIFIED WATER SYSTEMS
(512) 962-0954
bnttany@specwater.com

THE WATER STORAGE TANK SHALL BE A CORGAL MODEL 0803-WT-CHR WITH STANDARD 30 DEGREE CORRUGATED METAL ROOF HAVING A NOMINAL CAPACITY OF 4,000 GALLONS; NOMINAL TANK DIMENSIONS SHALL BE 8'-0" DIAMETER, 10'-9" EAVE HEIGHT, 13'-3" OVERALL HEIGHT.

CISTERN OVERFLOW PIPE SHALL BE CONCEALED UNDERGROUND AND DRAIN INTO RAIN GARDEN; CISTERN GALVANIZED STEEL ROOF SHALL BE PRIMED AND PAINTED AS SPECIFIED; CISTERN RAINWATER COLLECTION SYSTEM SHALL HAVE FILTER AND PUMP FOR IRRIGATION; INSTALL ALL COMPONENTS FOR A COMPLETE RAINWATER COLLECTION AND IRRIGATION SYSTEM PER MANUFACTURERS RECOMMENDED DETAILS.

IRRIGATION SYSTEM - FURNISH AND INSTALL IRRIGATION SYSTEM IN COMPLIANCE WITH LOCAL REGULATIONS. IRRIGATION SYSTEM SHALL BE TYPE DRIP OR MICRO SPRAY WITH WEATHER AND SOIL MOISTURE SENSOR AND SMRT LOGIC INTERNET COMPATIBLE. SYSTEM DESIGN SHALL MAXIMIZE DELIVERY OF WATER TO PLANT AREAS, INCLUDING PLANTERS, WHILE MINIMIZING OVER-SPRAY, RUNOFF AND CUSTOMER DISRUPTION. CONTROLS SHALL BE SET TO RUN AT OPTIMAL TIMES; EARLY MORNING AND EVENING, TO MINIMIZE EVAPORATION LOSS AND BUSINESS HOURS DISRUPTION. IRRIGATION SYSTEM SHALL BE SEPARATELY METERED AND INCLUDE AN INTEGRAL BACKFLOW PREVENTION DEVICE. VAULT TYPE CONTROL AND VALVES ARE PREFERRED AND MUST BE ACCESSIBLE BY TENANT.

THE WATER STORAGE TANK WILL BE MONITORED AND CONTROLLED BY THE INTELLITANK APP AND WIRELESS TANK MONITORING SYSTEM BY WELLSENSE TECHNOLOGIES. https://www.intelli-tank.com/



2 EAST ELEVATION

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

3 SOUTH ELEVATION

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

ENVIROPLAN
ARCHITECTS
•
PLANNERS
4942 HWY 290 W
AUSTIN, TEXAS
78735
(512) 476-0622

4211 W. Highway 71

Bee Cave, Texas

142

PROJECT

REVISIONS

REGISTERED ARCHITECT
TIMOTHY S. PARKER
13554
STATE OF TEXAS

1.22.24

1.22.24

DATE

A3

34 OF 41

Schedule									
Symbol	Label	QTY	Manufacturer	Catalog	Description	Number Lamps	Lamp Output	LLF	Input Power
	D	2	Indy	LLP4 08LM 30K MVOLT G4 80CRI ZT CONTROLS HW BD	INDY 4" DIA. 1-LED 08LM, 30K, 80CRI, GEN4 DOWNLIGHT WITH A BLACK DIFFUSE (BD) WIDE HYPERBOLIC REFLECTOR	1	520	0.9	7.5
	D(em)	2	Indy	LLP4 08LM 30K MVOLT G4 80CRI ZT BR CONTROLS HW BD	INDY 4" DIA. 1-LED 08LM, 30K, 80CRI, GEN4 DOWNLIGHT WITH A BLACK DIFFUSE (BD) WIDE HYPERBOLIC REFLECTOR	1	520	0.9	7.5
	D1	2	Indy	LLP4 15LM 30K MVOLT G4 80CRI ZT HM BD	INDY 4" DIA. 1-LED 15LM, 30K, 80CRI, GEN4 DOWNLIGHT WITH A BLACK DIFFUSE (BD) MEDIUM HYPERBOLIC REFLECTOR	1	1001	0.9	13.7
	SP1	5	Lithonia Lighting	DSX0 LED P1 30K 80CRI BLC4 MVOLT RPA PERS DBLXD DLL127F1.5JU	D-Series Size 0 Area Luminaire P1 Performance Package 3000K CCT 80 CRI Type 4 Extreme Backlight Control	1	3135	0.9	33.21
	SP4	1	Lithonia Lighting	DSX0 LED P1 30K 80CRI LCCO MVOLT RPA PERS DBLXD DLL127F1.5JU	D-Series Size 0 Area Luminaire P1 Performance Package 3000K CCT 80 CRI Left Corner Cutoff Extreme Backlight Control	1	3063	0.9	33.21
	SP5	2	Lithonia Lighting	DSX0 LED P1 30K 80CRI TFTM MVOLT RPA PERS HS DBLXD DLL127F1.5JU	D-Series Size 0 Area Luminaire P1 Performance Package 3000K CCT 80 CRI Forward Throw Houssside Shield	1	3577	0.9	33.21
	SP6	2	Landscape Forms	AI500-T5-80F 30K UV1 P2 x _10FT AJ550-10-01 (BLACK)	Black aluminum housing, frosted plastic lens enclosure	1	2761	0.9	31.8
	SP7	2	Landscape Forms Inc	AI100-T5 30K UV1 (BLACK)	Black aluminum housing, frosted plastic lens enclosure	1	1011	0.9	10.3
	W1(em)	1	Lithonia Lighting	WDGE1 LED P1 30K 83CRI VF MVOLT SRM EWH DBLXD	WDGE1 LED WITH P: - PERFORMANCE PACKAGE, 3000K, 80CRI, VISUAL COMFORT FORWARD OPTIC	1	1161	0.9	10
	W2	1	Lithonia Lighting	WDGE1 LED P1 30K 83CRI VW	WDGE1 LED WITH P: - PERFORMANCE PACKAGE, 3000K, 80CRI, VISUAL COMFORT WIDE OPTIC	1	1163	0.9	10

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Bldg. Entrances	+	3.1 fc	5.8 fc	0.5 fc	11.6:1	6.2:1
Bldg. Perimeter Site	+	1.1 fc	9.0 fc	0.3 fc	30.0:1	3.7:1
Drive Thru Cashier Window	+	10.4 fc	11.2 fc	9.2 fc	1.2:1	1.1:1
Parking / Drive	+	0.9 fc	5.5 fc	0.1 fc	55.0:1	9.0:1
Patio Area	+	3.6 fc	6.5 fc	1.5 fc	4.3:1	2.4:1
Property Line	+	0.0 fc	0.1 fc	0.0 fc	N/A	N/A
Service Door	+	6.2 fc	7.4 fc	5.3 fc	1.4:1	1.2:1
5' Offset Property Line	+	0.0 fc	0.1 fc	0.0 fc	N/A	N/A

SITE LIGHTING NOTES:

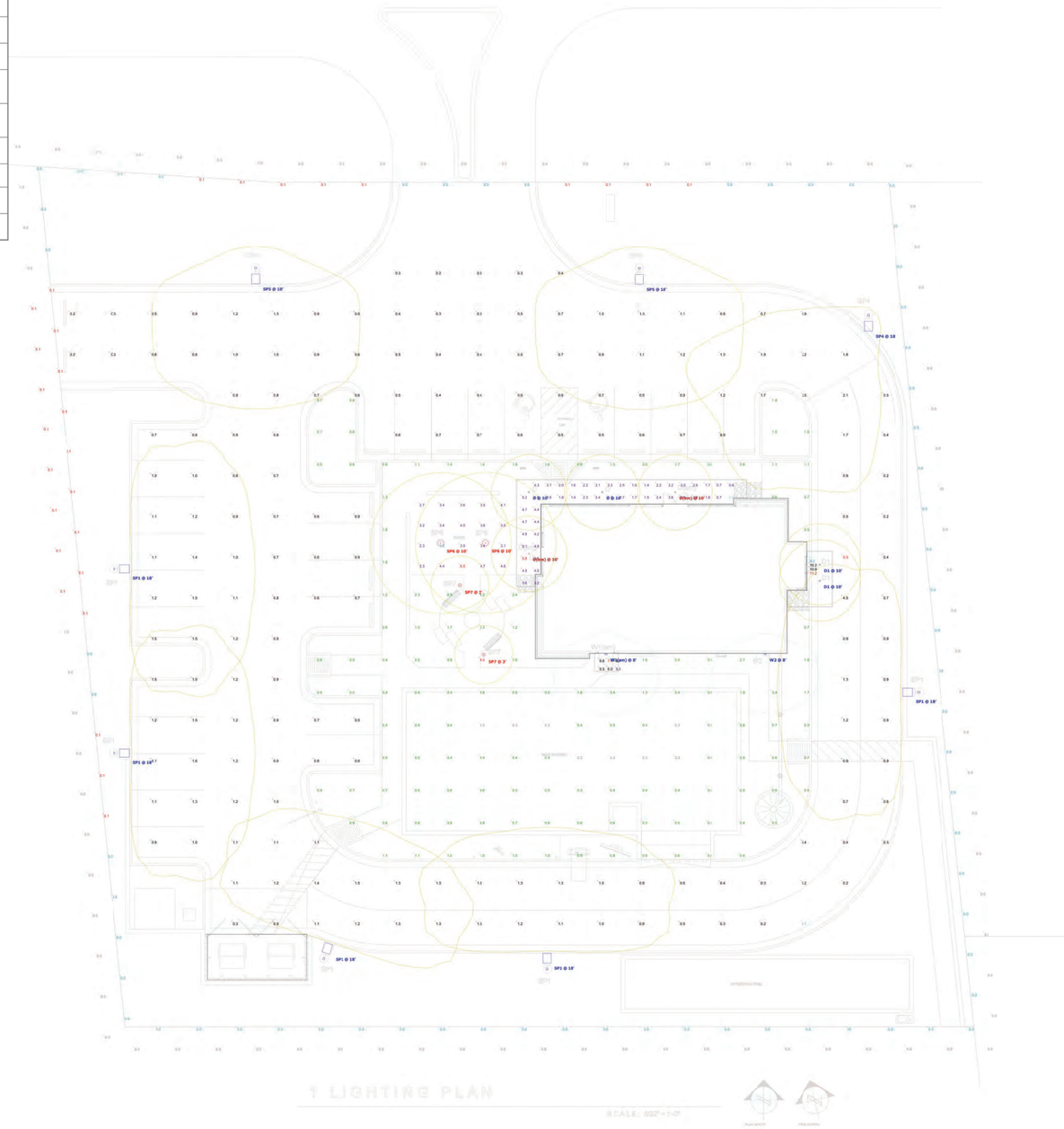
1). This site is zoned MU-N and is classified as IES Lighting Zone 2 which allows for a total site lumen limit of 2.5 lumens per square foot of hardscape using the Hardscape Area Method of the Prescriptive Method of Regulatory Compliance. 14,739 s.f. of hardscape x 2.5 lumens plus an additional allowance of 4,000 lumens for the drive-up window per section 6.2.9.C.2 equals an allowable lumen level of 40,847. This site is in lumen compliance with a total of 39,962.34 lumens."

2). Photocells shall be provided that automatically extinguish all outdoor lighting when sufficient daylight is available. A timer shall be provided to reduce the total outdoor lighting lumens by at least thirty percent (30%) from one (1) hour after business closing to one (1) hour before business opening.

3). The illuminated drive-thru sign will require a separate permit.

4). Lighting photometric calculations are an estimate of light levels. Site conditions may alter the levels indicated on this plan.

5). Light fixture symbols are diagramatic and shown for clarity. Refer to the fixture cut sheets for actual fixture dimensions and more detailed information.



1 LIGHTING PLAN
SCALE: 1/32" = 1'-0"

Plan View
Scale 1" = 10ft

14,739 S.F. OF HARDSCAPE

SPECTRUM LIGHTING

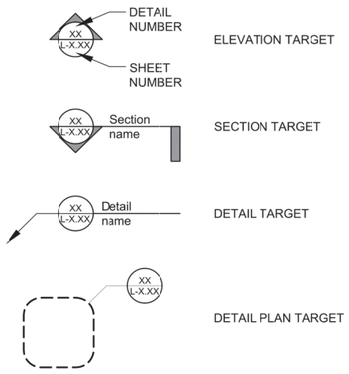
BEE CAVES, TX
STARBUCK'S SITE
LIGHTING PHOTOMETRICS
Revised 2023-12-21

Designer
mosaki
Date
03/28/2023
Scale
Not to Scale
Drawing No.

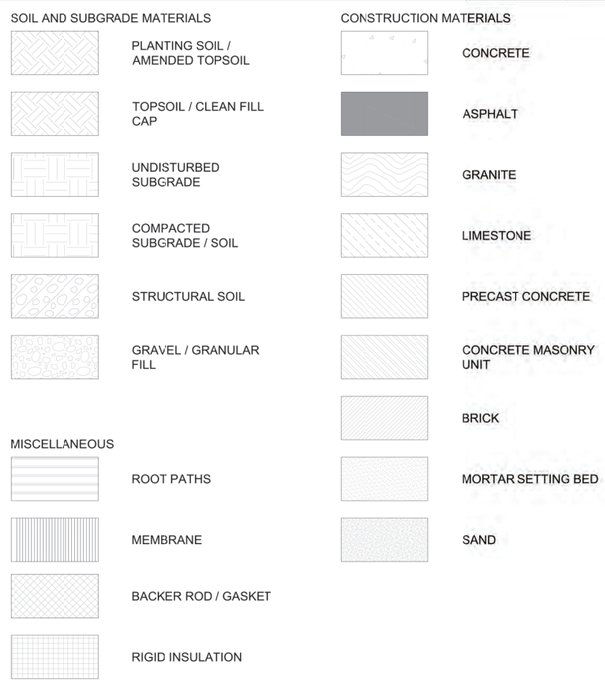
ABBREVIATIONS

&	And
@	At
AD	Area Drain
ADJ	Adjacent Finish
AFF	Above Finished Floor
ALS	Acrylic Latex Sealant
ALUM	Aluminum
ANOD	Anodized
AP	Access Panel
APPROX	Approximately
ARCH	Architectural
B-B	Back to Back
BC	Bottom of Curb
BJF	Bituminous Joint Filler
BLK	Block (Wood Blocking)
BMT	Butylmastic Tape Sealant
BRK	Brick
BRS	Butyl Rubber Sealant
BW	Bottom of Wall
C/C	Center to Center
CB	Catch Basin
CJ	Cold Joint
CJF	Cork Joint Filler
CL	Center Line
CLR	Clear Opening
COL	Column
CONC	Concrete
CONCP	Concrete Painted
CONST	Construction
CONTR	Contractor
CONT	Continuous
CMU	Concrete Masonry Unit
CMUP	Concrete Masonry Unit Painted
CO	Clean Out
DF	Drinking Fountain
DI	Ductile Iron
DIA	Diameter
DIM	Dimension
DN	Down
DTL	Detail
DWG	Drawing
EA	Each
EC	Exposed Construction
ECP	Exposed Construction Painted
EFTS	Expanding Foam Tape Sealant
EL	Elevation
EJ	Expansion Joint
EQ	Equal
EX	Existing
FFE	Finished Floor Elevation
FG	Finished Grade
GA	Gauge
GALV	Galvanized
GB	Glazed Block
GC	General Contractor
GL	Glass
GRND	Ground
G	Gutter
HDW	Hardware
HNCG	Hollow Neoprene Compression Gasket
HORIZ	Horizontal
HM	Hollow Metal
HP	High Point
HR	Hours
HT	Height
IV	Invert
ID	Inside Diameter
IN	Inch
INLET	Drain Inlet
INFO	Information
INSUL	Insulation
INT	Interior
LAM	Laminated
LBS, #	Pounds
LP	Low Point
MACH	Machine
MATL	Material
MAX	Maximum
MECH	Mechanical
MED	Medium
MFR	Manufacturer
MH	Manhole
MIN	Minimum
MISC	Miscellaneous
MO	Masonry Opening
MTL	Metal
NIC	Not In Contract
NO	Number
NOM	Nominal
NTS	Not To Scale
OA	Overall
OC	On Center
OD	Outside Diameter
OPNG	Opening
OPP	Opposite
PA	Planting Area
PC	Pool Coping
PCC	Portland Cement Concrete
PERP	Perpendicular
PLBG	Plumbing
PLWD	Plywood
POB	Point of Beginning
PR	Pair
PREFAB	Prefabricated
PSF	Pounds Per Square Foot
PSI	Pounds Per Square Inch
2-PUMS	Polyurethane Sealant (Two Part)
PTD	Painted Finish
QTY	Quantity
R	Radius
RD	Roof Drain
REF	Reference
REINF	Reinforced
REQ'D	Required
REV	Revision
RM	Room
RO	Rough Opening
SE	Steel Edge
SECT	Section
SHT	Sheet
SIM	Similar
SPEC	Specification
SQ	Square
SS	Stainless Steel
SRS	Silicone Rubber Sealant
ST	Sealant Tape
STD	Standard
STL	Steel
STOR	Storage
STRUCT	Structural
SUSP	Suspended
T	Tread
T/	Top Of
TC	Top of Curb
TEL	Telephone
TF	Top of Frame
THK	Thick
TC	Top of Curb
TP	Top of Pavement
TS	Top of Step
TT	Traffic Topping
TW	Top of Wall
TYP	Typical
UNO	Unless Noted Otherwise
VERT	Vertical
VIF	Verify in Field
W/	With
W/O	Without
WC	Water Closet
WD	Wood
WP	Work Point
WPR	Waterproofing
WT	Weight

ANNOTATIONS



MATERIAL SYMBOLS - DETAILS AND SECTIONS



GENERAL NOTES:

1.) Locate and verify the condition of existing utilities prior to excavation. Take responsibility of contacting line location services and any cost incurred for bodily injury and / or damage of owner's property or said utilities.

2.) The landscape architect shall be notified by the contractor of any discrepancies discovered between the contract documents and actual site conditions before proceeding with the work. The contractor shall be liable for all modifications and damages if work proceeds without this notification.

3.) The contractor is responsible for all aspects of maintaining a safe work site including, but not limited to, providing for traffic control, installation and placement of fencing and barricades, excavation and trench protection, and compliance with all federal and local regulations and codes. All safety exposures or violations shall be rectified immediately.

4.) The contractor is responsible for protection of all existing improvements both on site and adjacent to the work site and shall repair any damage to these improvements to the satisfaction of the owner.

5.) The contractor shall notify the owner and the landscape architect 48 hours prior to commencement of work to coordinate project inspection schedules.

6.) Any alternates and or substitutions proposed by the contractor shall be submitted to the landscape architect for approval. Changes to the scope of work and / or contract documents resulting from the acceptance of the contractor's alternates and / or substitutions shall be the responsibility of the contractor.

7.) The contractor is responsible for removal of trash on a daily basis.

8.) The contractor shall comply with all applicable codes, regulations and ordinances. Prior to construction, all permits and approvals required for construction of the project shall be paid for and obtained by the contractor (plan review fees are paid by owner) costs for permits shall be included in the bid. It is the contractor's responsibility to become aware of required inspections that are associated with permits issued for the work and to schedule these inspections at the appropriate stage of construction. Examples include but are not limited to rough-in electrical, rough-in plumbing, irrigation piping, foundation steel for structures (including walls), fire inspections related to entry gates and associated structures any required special inspections and others as may apply.

9.) Coordinate work with subcontractors to accomplish the scope of work as shown and noted in the contract documents, as well as coordinate construction with other contractors working on the site.

10.) The contractor shall coordinate the storing of materials, parking of vehicles, and restrictions of work and access with the owner. Under no circumstances shall any contractor store materials, park vehicles or equipment under the canopy of existing trees.

11.) Unless specified otherwise, the contractor is responsible for providing and paying all temporary utilities and services necessary to completely install all work as shown and noted in the contract documents.

12.) The contractor is responsible for providing and servicing temporary toilet facilities.

13.) The contractor is responsible for the legal off-site disposal of surplus material and debris.

14.) Upon completion of construction and prior to final approval, the contractor shall thoroughly clean the project site of all trash, repair all damage to finish grade, including tailings from excavations, wheel ruts and any settling or erosion that has occurred prior to completion. All areas of the project site shall be left in a neat and presentable condition satisfactory to the owner prior to submittal of the final payment.

15.) Contractor is responsible for providing and paying for all water and electricity required for construction. Owner will order and pay for permanent water and electrical services.

16.) The contractor shall prepare & keep current, for the landscape architects' review, a schedule of submittals which is coordinated w/ the contractor's construction schedule and allows the landscape architect reasonable time to review submittals. Submittals include but are not limited to shop drawings, material selections, plant photos with measuring device included in image.

HITCHCOCK DESIGN GROUP
creating better places
1601 Rio Grande Street
Suite 450
Austin, Texas 78701
T 512.770.4503
hitchcockdesigngroup.com

PREPARED FOR
Investcor Development
3001 RR 620 S, Suite #324
Austin, Texas 78738

CONSULTANTS

Civil Engineer
Miller Gray
7320 N MoPac Expy
Suite 203
Austin, TX, 78731
T 512.861.5300

Architect
Enviroplan Architects
4942 US 290 West
Austin, TX, 78735
T 512.476.0622

PROJECT
Starbucks Bee Cave
14211 W. Highway 71
Bee Cave, Texas 78738

REGISTERED LANDSCAPE ARCHITECT
BRYAN C. WARNER
2321
STATE OF TEXAS
03/13/2024

ISSUED
March 13, 2024

REVISIONS

No	Date	Issue

CHECKED BY
BW

DRAWN BY
JB & MP

SHEET TITLE
GENERAL NOTES

THIS DRAWING, AS AN INSTRUMENT OF SERVICE, IS AND SHALL REMAIN THE PROPERTY OF HITCHCOCK DESIGN GROUP AND SHALL NOT BE REPRODUCED, PUBLISHED OR USED IN ANY WAY WITHOUT THE PERMISSION OF HITCHCOCK DESIGN GROUP

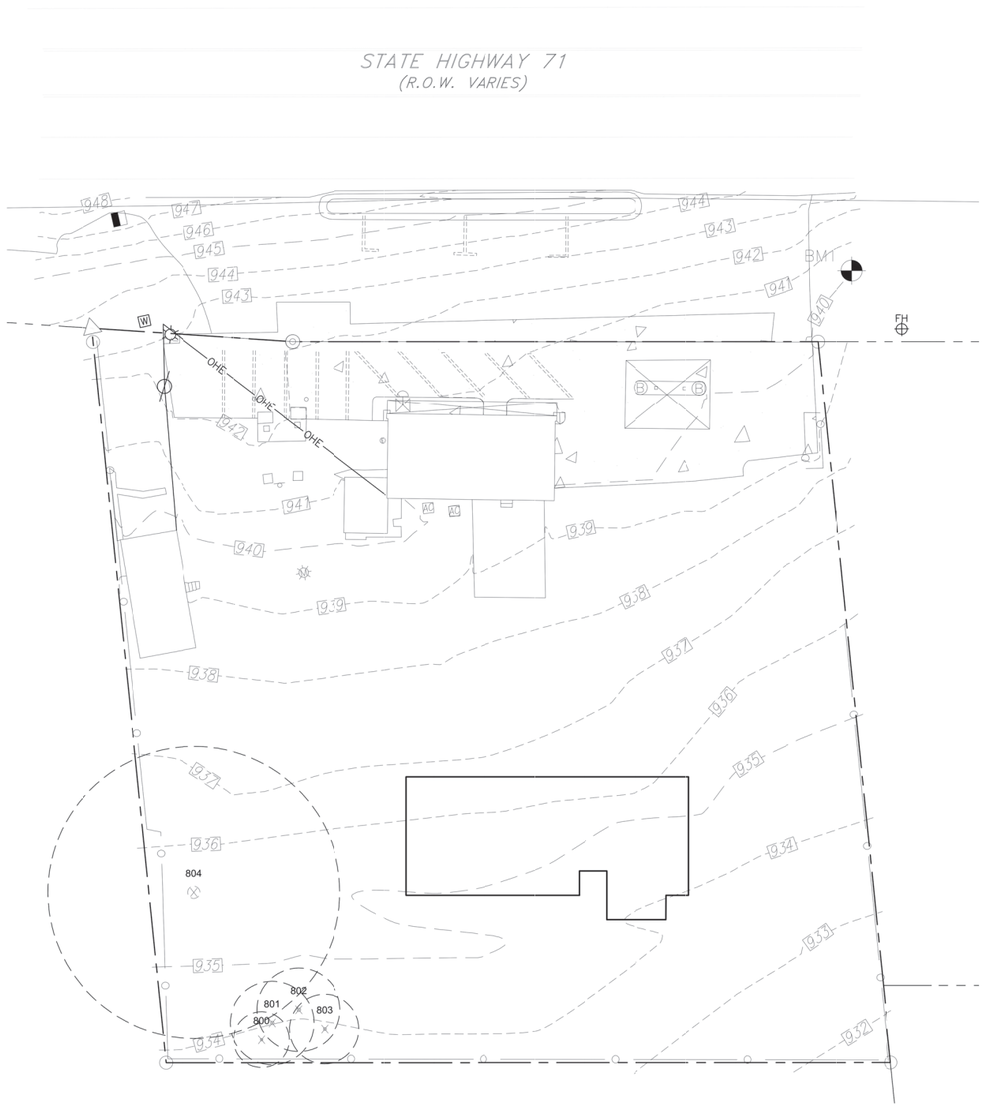
Texas 811 Know what's below. Call before you dig.

NOTE: BEWARE: UNDERGROUND UTILITIES IN PLACE INCLUDING ELECTRICAL, GAS, WATER, SEWER, TELEPHONE, AND OTHERS. CONSULT PROJECT ENGINEER PRIOR TO CONSTRUCTION. ALL UTILITIES TO BE FLAGGED AND IDENTIFIED. LANDSCAPE CONTRACTOR RESPONSIBILITY.

SHEET NUMBER
L0.01

©2024 Hitchcock Design Group

J:\Projects\Austin\Investcor\Starbucks Bee Cave\06 Drawings and Production\01 HDG CAD\00 Current\L0 General Notes.dwg

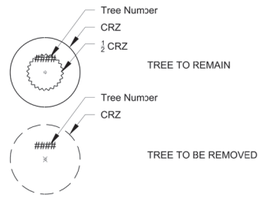


1 EXISTING TREE PLAN
1" = 20'

0' 10' 20' 40'

NORTH

EXISTING TREE LEGEND



EXISTING TREE SCHEDULE

HERITAGE	MULTI-TRUNK	TAG#	To Remove	Invasive	SPECIES	CAL 1	CAL 2
		800	x		Live Oak	8	
	x	801	x		Live Oak	9	6
		802	x		Live Oak	12	
		803	x		Live Oak	10	
	x	804	x		Cedar	42	

HITCHCOCK DESIGN GROUP
creating better places

1601 Rio Grande Street
Suite 450
Austin, Texas 78701
T 512.770.4503
hitchcockdesigngroup.com

PREPARED FOR
Investcor Development
3001 RR 620 S, Suite #324
Austin, Texas 78738

CONSULTANTS

Civil Engineer
Miller Gray
7320 N Mopac Expy
Suite 203
Austin, TX, 78731
T 512.861.5300

Architect
Enviroplan Architects
4942 US 290 West
Austin, TX, 78735
T 512.476.0622

PROJECT
Starbucks Bee Cave
14211 W. Highway 71
Bee Cave, Texas 78738

REGISTERED LANDSCAPE ARCHITECT
BRYAN C. WARNER
2321
STATE OF TEXAS
03/13/2024

ISSUED
March 13, 2024

REVISIONS

No	Date	Issue

CHECKED BY
BW

DRAWN BY
JB & MP

SHEET TITLE
EXISTING TREE PLAN

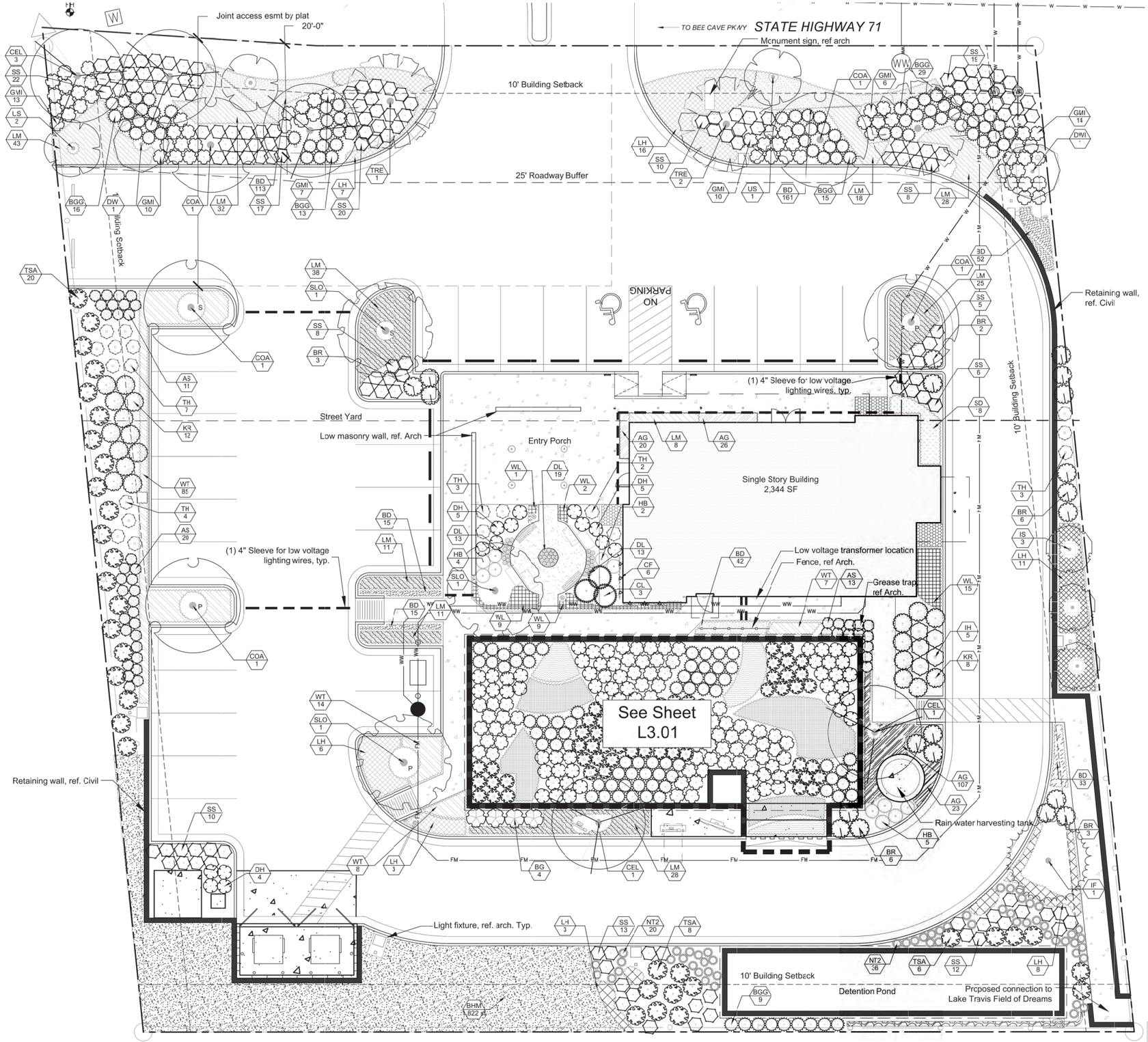
THIS DRAWING, AS AN INSTRUMENT OF SERVICE, IS AND SHALL REMAIN THE PROPERTY OF HITCHCOCK DESIGN GROUP AND SHALL NOT BE REPRODUCED, PUELISHED OR USED IN ANY WAY WITHOUT THE PERMISSION OF HITCHCOCK DESIGN GROUP

NOTE: BEWARE: UNDERGROUND UTILITIES IN PLACE. INCLUDING ELECTRICAL, GAS, WATER, SEWER, TELEPHONE, AND OTHERS. CONSULLT PROJECT ENGINEER PRIOR TO CONSTRUCTION. ALL UTILITIES TO BE FLAGGED AND IDENTIFIED. LANDSCAPE CONTRACTOR RESPONSIBILITY.

SHEET NUMBER
L0.02

©2024 Hitchcock Design Group

J:\Projects\Austin\Investcor\Starbucks Bee Cave\06 Drawings and Production\01 HDG CAD\00 Current\L3 Planting.dwg



1 LANDSCAPE PLAN
1" = 10'

0' 5' 10' 20'

NORTH

J:\Projects\Austin\Investcor\Starbucks Bee Cave\06 Drawings and Production\01 HDG CAD\00 Current\L3 Planting.dwg

PLANT LEGEND, REF. L3.03 FOR FULL SCHEDULE

PLANT LEGEND	
DECIDUOUS TREES	BOTANICAL / COMMON NAME
TRE	Cercis canadensis `texensis` Texas Redbud
DWI	Chilopsis linearis Desert Willow
COA	Quercus muehlenbergii Chinkapin Oak
CEL	Ulmus crassifolia Cedar Elm
US	Ungnadia speciosa Mexican Buckeye
EVERGREEN TREES	BOTANICAL / COMMON NAME
IF	Ilex x attenuata 'Fosteri' Foster's Holly
IS	Ilex x attenuata 'Savannah' Savannah Holly
CL	Prunus caroliniana 'Monus' Bright 'N Tight Carolina Laurel Cherry
SLO	Quercus virginiana Southern Live Oak
DECIDUOUS SHRUBS	BOTANICAL / COMMON NAME
FAC	Anisacanthus quadrifidus wrightii Flame Acanthus
EVERGREEN SHRUBS	BOTANICAL / COMMON NAME
CF	Ficus pumila Creeping Fig
DH	Ilex vomitoria `Nana` Dwarf Yaupon Holly
TSA	Leucophyllum frutescens Texas Sage
IH	Rhaphiolepis indica Indian Hawthorn
BR	Rosmarinus officinalis 'Upright Blue' Upright Blue Rosemary
SS	Scutellaria suffrutescens Pink Skullcap
BG	Teucrium fruticans 'Azureum' Azure Bush Germander
ORNAMENTAL GRASSES	BOTANICAL / COMMON NAME
BGG	Bouteloua gracilis 'Blonde Ambition' Blonde Ambition Blue Grama Grass
NT2	Nassella tenuissima Mexican Feather Grass
PERENNIALS	BOTANICAL / COMMON NAME
GMI	Conoclinium greggii Gregg's Mistflower
DL	Hemerocallis x 'Stella de Oro' Stella de Oro Daylily
HB	Nandina domestica 'Firepower' Firepower Heavenly Bamboo
KR	Rosa x `Radrazz` TM Knock Out Shrub Rose
AS	Salvia greggii Autumn Sage
SEMI-EVERGREEN SHRUBS	BOTANICAL / COMMON NAME
TH	Thryallis glauca Thryallis
EVERGREEN GROUNDCOVER	BOTANICAL / COMMON NAME
SD	Dichondra argentea Silver Dichondra
LM	Liriope muscari Lilyturf
BD	Melampodium leucarthum Blackfoot Daisy
AG	Ophiopogon intermedius Aztec Grass
NATIVE SEED MIX	BOTANICAL / COMMON NAME
BHM	Bee Happy Mix Native American Seed
ORNAMENTAL GRASS	BOTANICAL / COMMON NAME
TSE	Carex texensis Texas Sedge
PERENNIAL GROUNDCOVER	BOTANICAL / COMMON NAME
WT	Stemodia lanata Gray Woolly Twintip
SEMI-EVERGREEN GROUNDCOVER	BOTANICAL / COMMON NAME
WL	Lantana montevidensis 'Alba' White Trailing Lantara
LH	Lantana x 'New Gold' New Gold Lantana

S Proposed Street Yard Tree

P Proposed Parking Tree

THIS DRAWING, AS AN INSTRUMENT OF SERVICE, IS AND SHALL REMAIN THE PROPERTY OF HITCHCOCK DESIGN GROUP AND SHALL NOT BE REPRODUCED, PUBLISHED OR USED IN ANY WAY WITHOUT THE PERMISSION OF HITCHCOCK DESIGN GROUP

NOTE: BEWARE: UNDERGROUND UTILITIES IN PLACE. INCLUDING ELECTRICAL, GAS, WATER, SEWER, TELEPHONE, AND OTHERS. CONSULT PROJECT ENGINEER PRIOR TO CONSTRUCTION. ALL UTILITIES TO BE FLAGGED AND IDENTIFIED. LANDSCAPE CONTRACTOR RESPONSIBILITY.

HITCHCOCK DESIGN GROUP
creating better places
1601 Rio Grande Street
Suite 450
Austin, Texas 78701
T 512.770.4503
hitchcockdesigngroup.com

PREPARED FOR
Investcor Development
3001 RR 620 S, Suite #324
Austin, Texas 78738

CONSULTANTS
Civil Engineer
Miller Gray
7320 N Mopac Expy
Suite 203
Austin, TX, 78731
T 512.861.5300

Architect
Enviroplan Architects
4942 US 290 West
Austin, TX, 78735
T 512.476.0622

PROJECT
Starbucks Bee Cave
14211 W. Highway 71
Bee Cave, Texas 78738

REGISTERED LANDSCAPE ARCHITECT BRYAN C. WARNER 2321 STATE OF TEXAS
03/13/2024

ISSUED
March 13, 2024

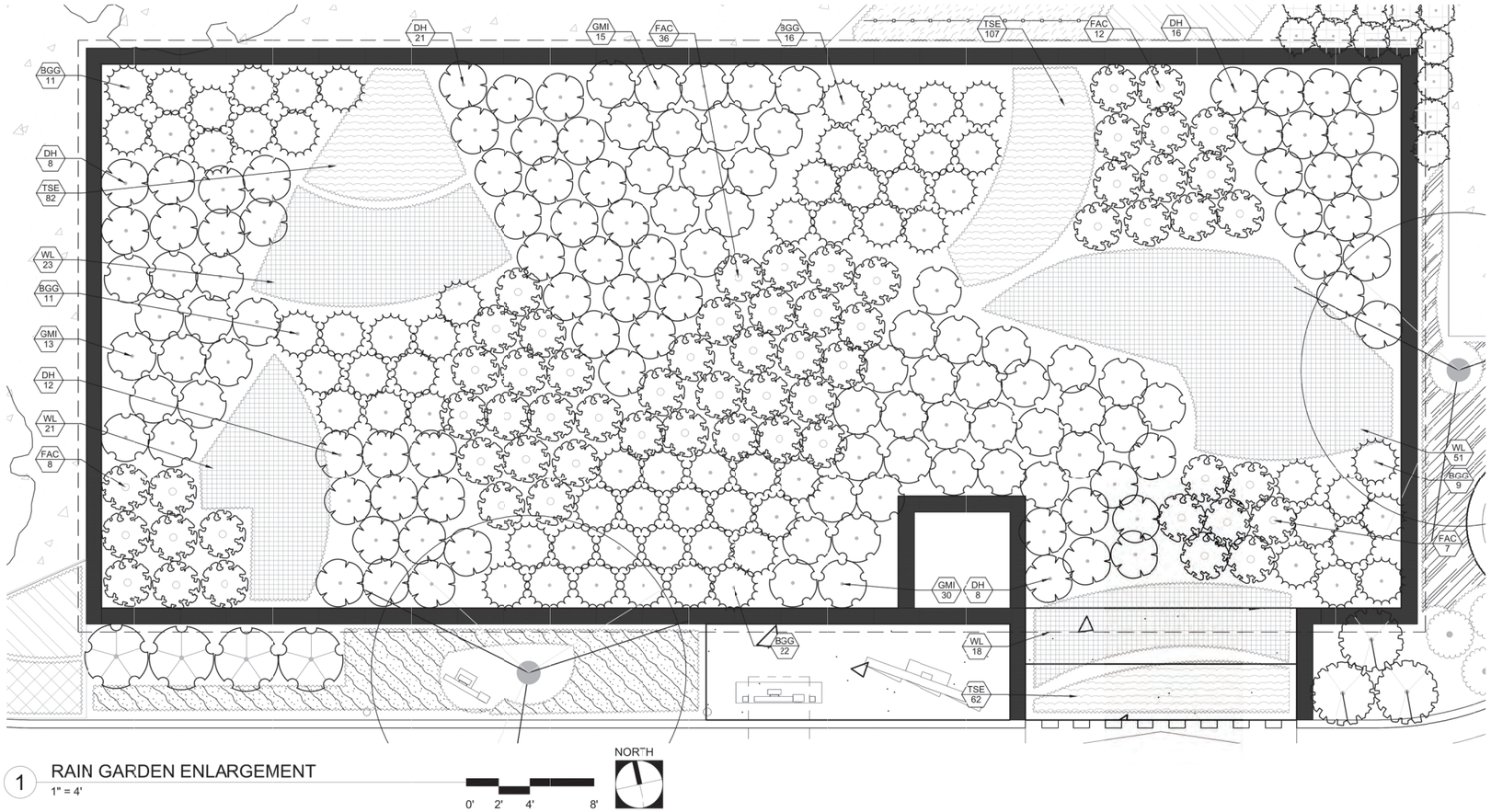
REVISIONS

No	Date	Issue

CHECKED BY BW
DRAWN BY JB & MP

SHEET TITLE
LANDSCAPE PLAN

©2024 Hitchcock Design Group



1 RAIN GARDEN ENLARGEMENT
1" = 4'

0' 2' 4' 8'

PLANT LEGEND, REF. L3.03 FOR FULL SCHEDULE

PLANT LEGEND RAIN GARDEN	
DECIDUOUS SHRUBS	BOTANICAL / COMMON NAME
FAC	Anisacanthus quadrifidus wrightii Flame Acanthus
EVERGREEN SHRUBS	BOTANICAL / COMMON NAME
DH	Ilex vomitoria 'Nana' Dwarf Yaupon Holly
ORNAMENTAL GRASSES	BOTANICAL / COMMON NAME
BGG	Bouteloua gracilis 'Blonde Ambition' Blonde Ambition Blue Grama Grass
PERENNIALS	BOTANICAL / COMMON NAME
GMI	Conoclinium greggii Gregg's Mistflower
ORNAMENTAL GRASS	BOTANICAL / COMMON NAME
TSE	Carex texensis Texas Sedge
SEMI-EVERGREEN GROUNDCOVER	BOTANICAL / COMMON NAME
WL	Lantana montevidensis 'Alba' White Trailing Lantana

Filtration Basin 2714 sq. ft. x 0.20 = 543 plants required				
Plant	Size	Spacing	Quantity	1 gallon equivalent
Flame Acanthus	5 Gal	36" O.C.	63	252
Dwarf Yaupon Holly	5 Gal	36" O.C.	65	260
Blonde Ambition Blue Grama Grass	5 Gal	36" O.C.	69	276
Gregg's Mistflower	5 Gal	24" O.C.	59	236
Texas Sedge	1 Gal	24" O.C.	251	251
White Trailing Lantana	3 Gal	48" O.C.	113	226
			TOTAL	1501

HITCHCOCK DESIGN GROUP
creating better places
1601 Rio Grande Street
Suite 450
Austin, Texas 78701
T 512.770.4503
hitchcockdesigngroup.com

PREPARED FOR
Investcor Development
3001 RR 620 S, Suite #324
Austin, Texas 78738

CONSULTANTS
Civil Engineer
Miller Gray
7320 N Mopac Expy
Suite 203
Austin, TX, 78731
T 512.861.5300

Architect
Enviroplan Architects
4942 US 290 West
Austin, TX, 78735
T 512.476.0622

PROJECT
Starbucks
Bee Cave
14211 W. Highway 71
Bee Cave, Texas 78738

REGISTERED LANDSCAPE ARCHITECT
BRYAN C. WARNER
2321
STATE OF TEXAS
03/13/2024

ISSUED
March 13, 2024

REVISIONS

No	Date	Issue

CHECKED BY
BW

DRAWN BY
JB & MP

SHEET TITLE
LANDSCAPE PLAN

THIS DRAWING, AS AN INSTRUMENT OF SERVICE, IS AND SHALL REMAIN THE PROPERTY OF HITCHCOCK DESIGN GROUP AND SHALL NOT BE REPRODUCED, PUBLISHED OR USED IN ANY WAY WITHOUT THE PERMISSION OF HITCHCOCK DESIGN GROUP

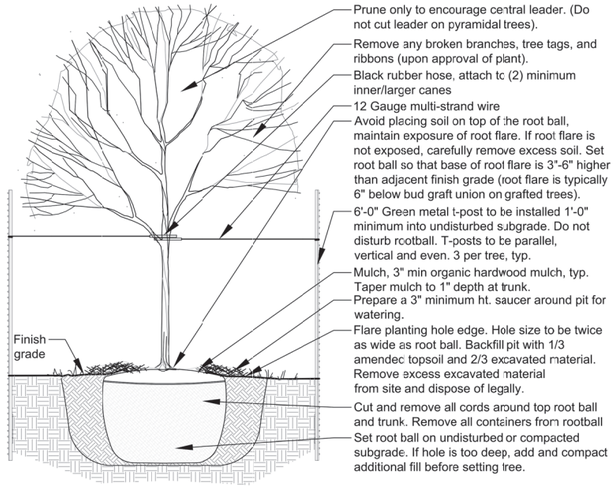
Texas 811 Know what's below. Call before you dig.

NOTE: BEWARE: UNDERGROUND UTILITIES IN PLACE. INCLUDING ELECTRICAL, GAS, WATER, SEWER, TELEPHONE, AND OTHERS. CONSULT PROJECT ENGINEER PRIOR TO CONSTRUCTION. ALL UTILITIES TO BE FLAGGED AND IDENTIFIED. LANDSCAPE CONTRACTOR RESPONSIBILITY.

SHEET NUMBER
L3.01

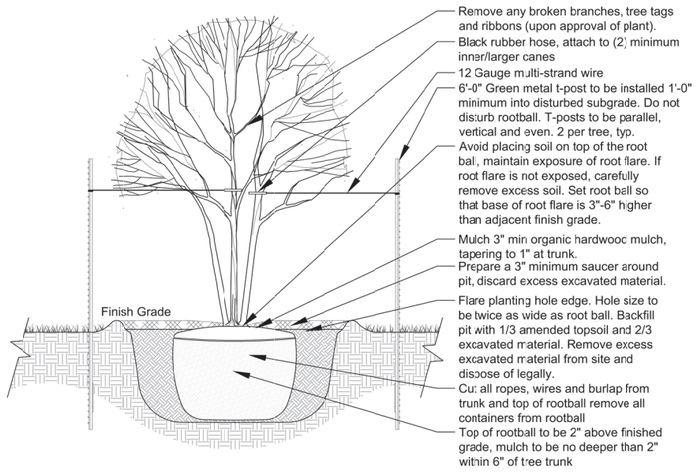
©2024 Hitchcock Design Group

J:\Projects\Austin\Investcor\Starbucks Bee Cave\06 Drawings and Production\01 HDG CAD\00 Current\L3 Planting.dwg



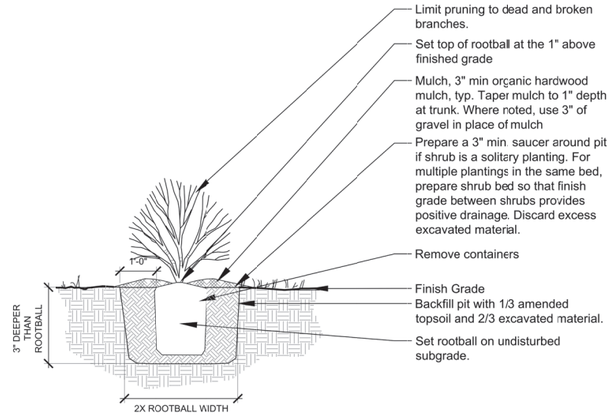
1 SHADE TREE

1/2" = 1'-0"



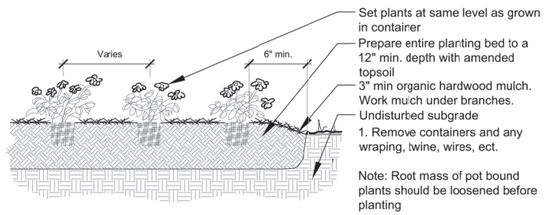
2 ORNAMENTAL TREE PLANTING

1/2" = 1'-0"



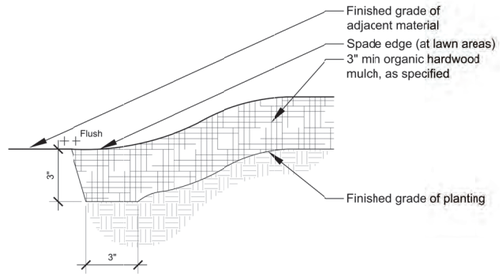
3 SHRUB PLANTING

1/2" = 1'-0"



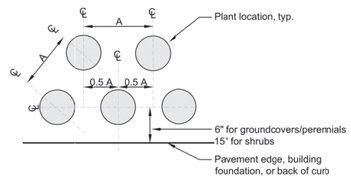
4 PERENNIAL PLANTING

1/2" = 1'-0"



5 MULCH TRENCH

3" = 1'-0"



NOTE:
Plant spacings vary per plant type. Ref. plant schedule for spacing requirements

6 TRIANGULAR PLANT SPACING

NOT TO SCALE

HITCHCOCK DESIGN GROUP
creating better places
1601 Rio Grande Street
Suite 450
Austin, Texas 78701
T 512.770.4503
hitchcockdesigngroup.com

PREPARED FOR
Investcor Development
3001 RR 620 S, Suite #324
Austin, Texas 78738

CONSULTANTS
Civil Engineer
Miller Gray
7320 N Mopac Expy
Suite 203
Austin, TX, 78731
T 512.861.5300

Architect
Enviroplan Architects
4942 US 290 West
Austin, TX, 78735
T 512.476.0622

PROJECT
Starbucks Bee Cave
14211 W. Highway 71
Bee Cave, Texas 78738

REGISTERED LANDSCAPE ARCHITECT
BRYAN C. WARNER
2321
STATE OF TEXAS
3/13/2024

ISSUED
March 13, 2024

REVISIONS

No	Date	Issue

CHECKED BY
BW

DRAWN BY
JB & MP

SHEET TITLE
PLANTING DETAILS

THIS DRAWING, AS AN INSTRUMENT OF SERVICE, IS AND SHALL REMAIN THE PROPERTY OF HITCHCOCK DESIGN GROUP AND SHALL NOT BE REPRODUCED, PUBLISHED OR USED IN ANY WAY WITHOUT THE PERMISSION OF HITCHCOCK DESIGN GROUP

Texas 811 Know what's below. Call before you dig.

NOTE: BEWARE: UNDERGROUND UTILITIES IN PLACE. INCLUDING ELECTRICAL, GAS, WATER, SEWER, TELEPHONE, AND OTHERS. CONSULT PROJECT ENGINEER PRIOR TO CONSTRUCTION. ALL UTILITIES TO BE FLAGGED AND IDENTIFIED. LANDSCAPE CONTRACTOR RESPONSIBILITY.

SHEET NUMBER
L3.02

©2024 Hitchcock Design Group

J:\Projects\Austin\Investcor\Starbucks Bee Cave\06 Drawings and Production\01 HDG CAD\00 Current\L3 Planting.dwg

PLANTING NOTES

1. Contractor shall receive site at approximately final grade. Any exceptions will be documented in the construction documents. The landscape contractor shall fill area around walls per typical wall section, plan, and landscape grading notes with backfill provided by contractor. All slopes shall be smooth and uniform with a maximum slope of 3:1 unless otherwise noted. Tie into existing adjacent grades smoothly and fine grade for positive drainage and prevent water from standing. Cut swales to direct water away from all structures and property lines and towards storm sewer inlets. Do not drain any water towards lots or easements. Final location and height of berms to be approved by Hitchcock Design Group (HDG) in the field. Provide a minimum of 8" of granular fill wrapped in filter fabric behind walls and to a depth below weeps holes to allow for proper drainage (reference typical wall section, planting detail sheet).

2. Shrub Beds: Reference specification and details for planting requirements, materials, and execution, including plant pit dimensions and backfill requirements. Shrubs and groundcovers to be triangularly spaced (spacing per plans and plant list). Ryerson 3/16" x 4" steel edging (dark green) shall be installed to separate all beds from turf areas. Reference planting bed detail for drainage requirement of all beds occurring directly at the back of curb. Backfill all shrub pits with specified planting mix. Incorporate 5 lbs of 13-13-13 fertilizer per cubic yard of mix into all planting beds. All beds shall receive a minimum of 3" deep organic hardwood mulch.

3. Tree Planting: Reference specifications and details for planting requirements, materials, and execution, including staking methods, plant pit dimensions, and backfill requirements. Guy all trees 4" in caliper and greater and stake all trees smaller than 4" in caliper unless machine moved. Stake all machine moved trees with three (3) metal "T" stakes per detail. Backfill all shrub pits with specified planting mix. Incorporate 5 lbs of 13-13-13 fertilizer per cubic yard of mix into all planting beds. All beds shall receive a minimum of 3" deep organic hardwood mulch.

4. Machine Moved Trees: All trees to be machine moved directly from grower shall be approved by HDG prior to relocation. Coordinate tree pruning to balance root loss with HDG. Trees to be mechanically transplanted using tree spade allowing 9" rootball per caliper inch of tree. Set tree straight and plumb and fill any air spaces around tree with specified sand or sandy loam topsoil, water in to displace air pockets. Install 3' high water retention basin per specifications with 3" deep organic mulch and water spaded trees the day of transplanting.

5. Trees shall be located a minimum of 5'-0" from walls, overheads, walks, edging, curbs and other trees within the project. If conflicts arise between size of areas and plans, contractor to contact HDG for resolution. Failure to make such conflicts known to HDG may result in contractor's liability to relocate materials.

6. All plant materials shall be approved by HDG prior to installation. Final location of all plant material shall be subject to the approval of HDG. Contractor shall notify HDG 48 hours prior to commencement of work to coordinate project inspection schedules.

7. Lawn Installation: Prior to application of hydromulch, contractor shall apply contact herbicide (recommended mixture of Image and Roundup) to remove all existing weeds as necessary, scarify existing soil to specified depths. Remove all lumps, clods, trash, and stick greater than 1". Fine grade to provide positive drainage and smooth lawn areas and cut swales as necessary to ensure no ponding of water. Lay specified sod strip along the back of curb and hydromulch per specifications within approximate limits shown on plans. Finished grade of lawn and planting areas to be minimum ½" below finished grade of adjacent pavement.

IRRIGATION NOTES

Automatic irrigation systems shall comply with TCEQ Chapter 344, as well as the following requirements:

1. These requirements shall be noted on the Site Development Permit and shall be implemented as part of the landscape inspection:
   A. the system must provide a moisture level adequate to sustain growth of the plant materials;
   B. the system does not include spray irrigation on areas less than ten (10) feet wide (such as medians, buffer strips, and parking lot islands);
   C. circuit remote control valves have adjustable flow controls;
   D. serviceable in-head check valves area adjacent to paved areas where elevation differences may cause low head drainage;
   E. a master valve installed on the discharge side of the backflow preventer;
   F. above-ground irrigation emission devices are set back at least six (6) inches from impervious surfaces;
   G. an automatic rain shut-off device shuts off the irrigation system automatically after more than a one-half inch (½") rainfall; and
   H. newly planted trees shall have permanent irrigation consisting of drip or bubblers.
2. The irrigation installer shall develop and provide an as-built design plan to the City at the time the final irrigation inspection is performed;
   A. unless fiscal security is provided to the City for the installation of the system, it must be operational at the time of the final landscape inspection.
3. The irrigation installer shall also provide exhibits to be permanently installed inside or attached to the irrigation controller, including:
   A. a laminated copy of the water budget containing zone numbers, precipitation rate, gallons per minute and the location of the isolation valve; and an as built plan.

SOIL CONDITIONING AND MULCHING

1. A minimum of 3 inches of organic mulch shall be added in non-turf areas to the soil surface after planting.
2. Non-porous material such as sheet plastic shall not be placed under the mulch.
3. A minimum of 6" permeable soil, native or imported and meeting the requirements of Standard Specification 601S, shall be required for turf and landscaped areas.
4. Tree planting areas are to be provided with a minimum of 12 inches of friable native loam soil meeting the requirements of Standard Specification 601S. Planting in relatively undisturbed existing native soils is encouraged. Soil to a minimum depth of 12 inches is required within the entire landscape median or peninsula. All other planting areas must have a minimum soil depth of 12 inches within a radius of six feet from the tree trunk. Trees are not to be planted in caiche, solid rock, or, in soils whose texture has been compacted by construction equipment. Areas of compaction which have been subsequently amended with 12 inches of friable native soil are suitable for planting.

REMEDIAL TREE CARE NOTES AERATION AND SUPPLEMENTAL NUTRIENT REQUIREMENTS FOR TREES WITHIN CONSTRUCTION AREAS

1. Preserved trees within the limits of construction may require soil aeration and supplemental nutrients. Soil and/or foliar analysis should be used to determine the need for supplemental nutrients. The City Arborist may require these analyses as part of a comprehensive tree care plan. Soil pH shall be considered when determining the fertilization composition as soil pH influences the tree's ability to uptake nutrients from the soil. If analyses indicate the need for supplemental nutrients, then humate/nutrient solutions with mycorrhizae components are highly recommended. In addition, soil analysis may be needed to determine if organic material or beneficial microorganisms are needed to improve soil health. Materials and methods are to be approved by the City Arborist (512-974-1876) prior to application. The owner or general contractor shall select a fertilization contractor and ensure coordination with the City Arborist.
2. Pre-construction treatment should be applied in the appropriate season, ideally the season preceding the proposed construction. Minimally, areas to be treated include the entire critical root zone of trees as depicted on the City approved plans. Treatment should include, but not limited to, fertilization, soil treatment, mulching, and proper pruning.
3. Post-construction treatment should occur during final revegetation or as determined by a qualified arborist after construction. Construction activities often result in a reduction in soil macro and micro pores and an increase in soil bulk density. To ameliorate the degraded soil conditions, aeration via water and/or air injected into the soil is needed or by other methods as approved by the City Arborist. The proposed nutrient mix specifications and soil and/or foliar analysis results need to be provided to and approved by the City Arborist prior to application. Construction which will be completed in less than 90 days may use materials at ½ recommended rates. Alternative organic fertilizer materials are acceptable when approved by the City Arborist.

TREE & NATURAL AREA PROTECTION

1. All trees and natural areas shown on plan to be preserved shall be protected during construction with temporary fencing.
2. Protective fences shall be erected according to City of Bee Cave Standards for Tree Protection.
3. Protective fences shall be installed prior to the start of any site preparation work (clearing, grubbing or grading), and shall be maintained throughout all phases of the construction project.
4. Erosion and sedimentation control barriers shall be installed or maintained in a manner which does not result in soil build-up within tree drip lines.
5. Protective fences shall surround the trees or group of trees, and will be located at the outermost limit of branches (drip line) , for natural areas, protective fences shall follow the Limit of Construction line, in order to prevent the following:
   A. Soil compaction in the root zone area resulting from vehicular traffic or storage of equipment or materials;
   B. Root zone disturbances due to grade changes (greater than 6 inches cut or fill), or trenching not reviewed and authorized by the City Aborist;
   C. Wounds to exposed roots, trunk or limbs by mechanical equipment;
   D. Other activities detrimental to trees such as chemical storage, cement truck cleaning, and fires.
6. Exceptions to installing fences at tree drip lines may be permited in the following cases:
   A. Where there is to be an approved grade change, impermeable paving surface, tree well, or other such site development, erect the fence approximately 2 to 4 feet beyond the area disturbed;
   B. Where permeable paving is to be installed within a tree's drip line, erect the fence at the outer limits of the permeable paving area (prior to site grading so that this area is graded separately prior to paving installation to minimizec root damage);
   C. Where trees are close to proposed buildings, erect the fence to allow 6 to 10 feet of work space between the fence and the building;
   D. Where there are severe space constraints due to tract size or other special requirements, contact the City Arborist to discuss alternatives.

Special Note: For the protection of natural areas, no exceptions to installing fences at the Limit of Construction line will be permitted.

7. Where any of the above exceptions result in a fence being closer than 4 feet to a tree trunk, protect the trunk with strapped-on planking to a height of 8 ft (or to the limits of lower branching) in addition to the reduced fencing provided.
8. Trees approved for removal shall be removed in a manner which does not impact trees to be preserved.
9. Any roots exposed by construction activity shall be pruned flush with the soil. Backfill root areas with good quality top soil as soon as possible. If exposed root areas are not backfilled within 2 days, cover them with organic material in a manner which reduces soil temperature and minimizes water loss due to evaporation.
10. Any trenching required for the installation of landscape irrigation shall be placed as far from existing tree trunks as possible.
11. No landscape topsoil dressing greater than 4 inches shall be permitted within the drip line of trees. No soil is permitted on the root flare of any tree.
12. Pruning to provide clearance for structures, vehicular traffic and equipment shall take place before damage occurs (ripping of branches, etc.).
13. All finished pruning shall be done according to recognized, approved standards of the industry (Reference the National Arborist Association Pruning Standards for Shade Trees available on request from the City Arborist).
14. Deviations from the above notes may be considered ordinance violations if there is substantial non-compliance or if a tree sustains damage as a result.

SPECIAL CONSTRUCTION TECHNIQUES

1. Prior to excavation within tree driplines or removal of trees adjacent to other trees that are to remain, make a clean cut between the disturbed and undisturbed root zones with a rock saw or similar equipment to minimize root damage.
2. In critical root zone areas that cannot be protected during construction with fencing and where heavy vehicular traffic is anticipated, cover those areas with a minimum of 12 inches of organic mulch to minimize soil compaction. In areas with high soil plasticity Geotextile fabric, per standard specification 620S, should be placed under the mulch to prevent excessive mixing of soil and mulch. Additionally, material such as plywood and metal sheets, could be required by the City Arborist to minimize root impacts from heavy equipment. Once the project is completed, all materials should be removed, and the mulch should be reduced to a depth of 3 inches.
3. Perform all grading within critical root zone areas by hand or with small equipment to minimize root damage.
4. Water all areas most heavily impacted by construction activities deeply once a wee during periods of hot, dry weather. Spray tree crowns with water periodically to reduce dust accumulation on the leaves.
5. When installing concrete adjacent to the root zone of a tree, use a plastic vapor barrier behind the concrete to prohibit leaching of lime into the soil.

VERTICAL CLEARANCE NOTES

1. All trees to be limbed up to provide a minimum vertical clearance of 80" (in) along accessible route.
2. For all drive ways and internal circulations areas on site where fire department access is required, a minimum clearance of 14' (ft) is required.

HERITAGE	MULTI-TRUNK	TAG#	To Remove	Invasive	SPECIES	CAL 1	CAL 2	CAL 3	CAL 4	CAL 5
		800	x		Live Oak	8				
	x	801	x		Live Oak	9	6			
		802	x		Live Oak	12				
		803	x		Live Oak	10				
x		804	x		Cedar	42				
Total caliper inch removed						87				

HW 71 Buffer: 25'		
134.8 LF of street frontage	Req	Provided
6 3" trees per 100 LF*	8	8
3 4" trees per 100 LF*	4	4
Total	12	12

Street Yard Landscape Requirements		
11,678 SF Total Street Yard	Req	Provided
20% landscape area	2336	1710
1 tree per 1,000 SF	2	2

Parking Lot Landscape		
7654 SF Parking Area	Req	Provided
25% minimum shaded SF	1914	2326

Parking Area Shade Calculation				
		Shaded Area	Quantity	Total SF
Quercus muhlenbergii	Chinquapin Oak	942	1	942
Quercus virginiana	Live Oak	942	2	1884
			total	2826

5' Landscape Buffer				
196 LF Building Perimeter				
	Required	980	SF	
112 LF	Provided	550	SF	57%
	Alternative Compliance Provided*	579	SF	59%
	1 tree per 1,000 SF	1 required	1 prcvided	

*Alternative compliance provided via planted area adjacent to entry porch.

PLANT SCHEDULE

DECIDUOUS TREES	BOTANICAL / COMMON NAME	CONTAINER	CALIPER	HEIGHT
TRE	Cercis canadensis `texensis` Texas Redbud	45 gal	3"-6" Cal.	12`
DWI	Chilopsis linearis Desert Willow	95 gal	3"	7` - 9`
COA	Quercus muehlenbergii Chinkapin Oak	100 gal	4"	16`
CEL	Ulmus crassifolia Cedar Elm	100 gal	4"	16`
US	Ungnadia speciosa Mexican Buckeye	95 gal	3"	8` - 9`

EVERGREEN TREES	BOTANICAL / COMMON NAME	CONTAINER	CALIPER	HEIGHT
IF	Ilex x attenuata 'Fosteri' Foster's Holly	30 gal	2" Cal.	7`
IS	Ilex x attenuata 'Savannah' Savannah Holly	45 gal	3"-6" Cal.	12`
CL	Prunus caroliniana 'Monus' Bright 'N Tight Carolina Laurel Cherry	30 gal	2" Cal.	7`
SLO	Quercus virginiana Southern Live Oak	100 gal	3"-4" Cal.	16`

DECIDUOUS SHRUBS	BOTANICAL / COMMON NAME	CONTAINER	HEIGHT	SPACING
FAC	Anisacanthus quadrifidus wrightii Flame Acanthus	5 gal	16"-18"	36" O.C.

EVERGREEN SHRUBS	BOTANICAL / COMMON NAME	CONTAINER	HEIGHT	SPACING
CF	Ficus pumila Creeping Fig	3 gal	10"	36" O.C.
DH	Ilex vomitoria `Nana` Dwarf Yaupon Holly	5 gal	48"	36" O.C.
TSA	Leucophyllum frutescens Texas Sage	7 gal	14"	48" O.C.
IH	Rhaphiolepis indica Indian Hawthorn	7 gal	14"	36" O.C.
BR	Rosmarinus officinalis 'Upright Blue' Upright Blue Rosemary	5 gal	12"	36" O.C.
SS	Scutellaria suffrutescens Pink Skullcap	1 gal	6"	36" O.C.
BG	Teucrium fruticans 'Azureum' Azure Bush Germander	5 gal	12"	48" O.C.

ORNAMENTAL GRASSES	BOTANICAL / COMMON NAME	CONTAINER	HEIGHT	SPACING
BGG	Bouteloua gracilis 'Blonde Ambition' Blonde Ambition Blue Grama Grass	5 gal	36"	24" O.C.
NT2	Nassella tenuissima Mexican Feather Grass	7 gal	14"	24" O.C.

PERENNIALS	BOTANICAL / COMMON NAME	CONTAINER	HEIGHT	SPACING
GMI	Conoclinium greggii Gregg's Mistflower	5 gal	24"	24" O.C.
DL	Hemerocallis x 'Stella de Oro' Stella de Oro Daylily	5 gal	12"	12" O.C.
HB	Nandina domestica 'Firepower' Firepower Heavenly Bamboo	7 gal	14"	36" O.C.
KR	Rosa x `Radrazz` TM Knock Out Shrub Rose	10 gal	17"	48" O.C.
AS	Salvia greggii Autumn Sage	5 gal	12"	48" O.C.

SEMI-EVERGREEN SHRUBS	BOTANICAL / COMMON NAME	CONTAINER	HEIGHT	SPACING
TH	Thryallis glauca Thryallis	15 gal	3`	36" O.C.

EVERGREEN GROUNDCOVER	BOTANICAL / COMMON NAME	CONTAINER	HEIGHT	SPACING
SD	Dichondra argentea Silver Dichondra	1 gal	6"	24" O.C.
LM	Liriope muscari Lilyturf	5 gal	12"	24" O.C.
BD	Melampodium leucanthum Blackfoot Daisy	3 gal	10"	12" O.C.
AG	Ophiopogon intermedius Aztec Grass	3 gal	10"	12" O.C.

NATIVE SEED MIX	BOTANICAL / COMMON NAME	CONTAINER	HEIGHT	SPACING
BHM	Bee Happy Mix Native American Seed	seed		

ORNAMENTAL GRASS	BOTANICAL / COMMON NAME	CONTAINER	HEIGHT	SPACING
TSE	Carex texensis Texas Sedge	1 gal	12"-15"	10" O.C.

PERENNIAL GROUNDCOVER	BOTANICAL / COMMON NAME	CONTAINER	HEIGHT	SPACING
WT	Stemodia lanata Gray Woolly Twintip	1 gal	6"	24" O.C.

SEMI-EVERGREEN GROUNDCOVER	BOTANICAL / COMMON NAME	CONTAINER	HEIGHT	SPACING
WL	Lantana montevidensis 'Alba' White Trailing Lantana	3 gal	10"	24" O.C.
LH	Lantana x 'New Gold' New Gold Lantana	3 gal	10"	48" O.C.

THIS DRAWING, AS AN INSTRUMENT OF SERVICE, IS AND SHALL REMAIN THE PROPERTY OF HITCHCOCK DESIGN GROUP AND SHALL NOT BE REPRODUCED, PUBLISHED OR USED IN ANY WAY WITHOUT THE PERMISSION OF HITCHCOCK DESIGN GROUP

Texas 811 Know what's below. Call before you dig.
NOTE: BEWARE: UNDERGROUND UTILITIES IN PLACE INCLUDING ELECTRICAL, GAS, WATER, SEWER, TELEPHONE, AND OTHERS. CONSULT PROJECT ENGINEER PRIOR TO CONSTRUCTION. ALL UTILITIES TO BE FLAGGED AND IDENTIFIED. LANDSCAPE CONTRACTOR RESPONSIBILITY.

HITCHCOCK DESIGN GROUP
creating better places
1601 Rio Grande Street
Suite 450
Austin, Texas 78701
T 512.770.4503
hitchcockdesigngroup.com

PREPARED FOR
Investcor Development
3001 RR 620 S, Suite #324
Austin, Texas 78738

CONSULTANTS
Civil Engineer
Miller Gray
7320 N Mopac Expy
Suite 203
Austin, TX, 78731
T 512.861.5300

Architect
Enviroplan Architects
4942 US 290 West
Austin, TX, 78735
T 512.476.0622

PROJECT
Starbucks Bee Cave
14211 W. Highway 71
Bee Cave, Texas 78738

REGISTERED LANDSCAPE ARCHITECT BRYAN C. WARNE 2321 STATE OF TEXAS
3/13/2024

ISSUED
March 13, 2024

REVISIONS

No	Date	Issue

CHECKED BY BW
DRAWN BY JB & MP

SHEET TITLE
PLANTING NOTES & TABLES

41 OF 41
SHEET NUMBER
L3.03

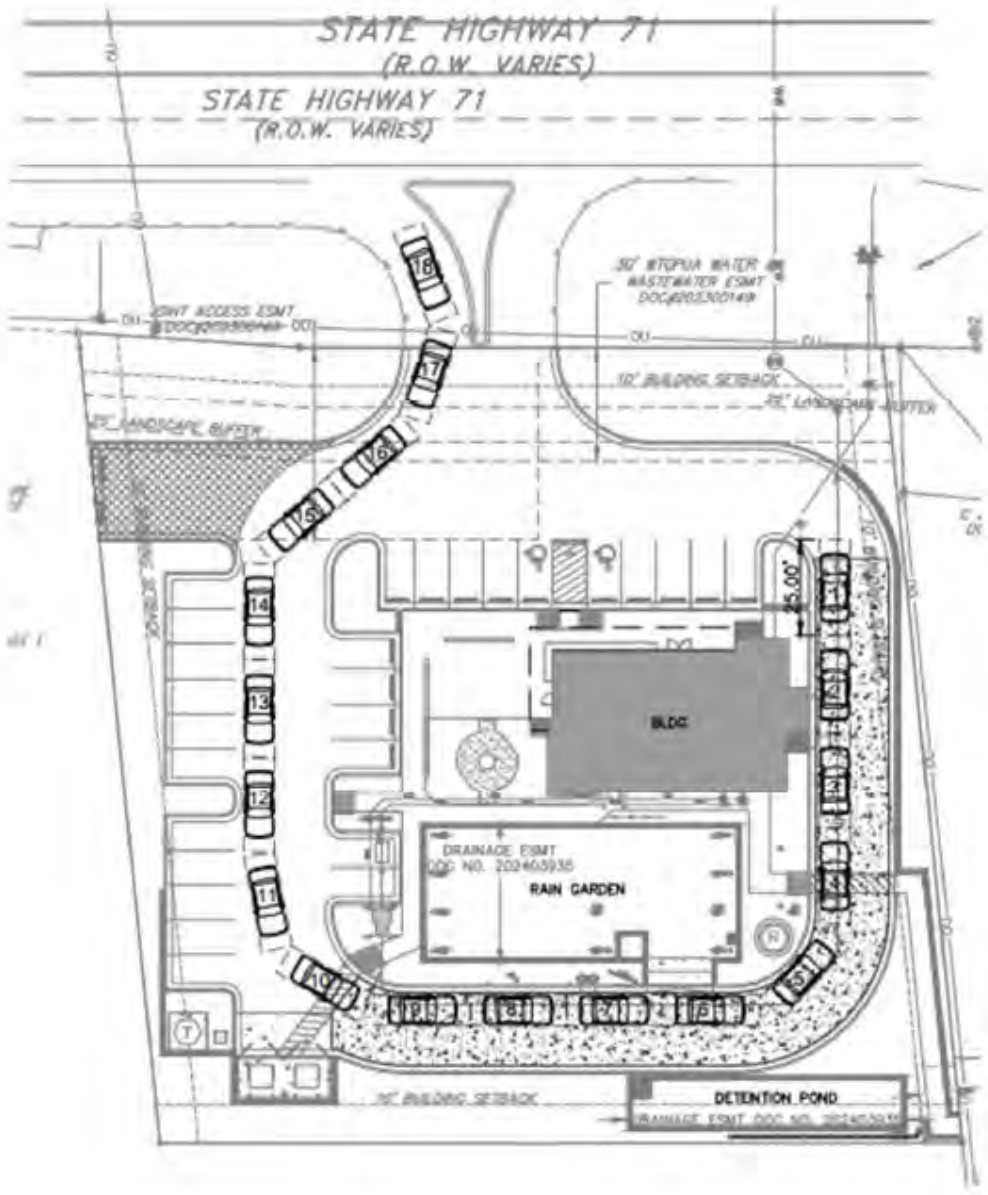
©2024 Hitchcock Design Group

J:\Projects\Austin\Investcor\Starbucks Bee Cave\05 Drawings and Production\01 HDG CAD\00 Current\L3 Planting.dwg

EXHIBIT "B"

QUEUING PLAN

Figure 8: Queue Stacking Capacity



MillerGRAY
Consulting. Engineering. Infrastructure.

May 13, 2024

Logan Maurer, EIT
Staff Engineer
City of Bee Cave
4000 Galleria Pkwy
Bee Cave, Texas 78738

Delivered Electronically

Re: **Starbucks Bee Cave – Site Plan Permit**
14211 State HWY 71
Austin, Texas 78738
City of Bee Cave Permit No. 23-786-SNPS
Waiver Request for use of pavement type requirements

Dear Logan,

Please accept this letter as our formal request for a waiver from the pavement type requirements regarding the above-referenced project. The Unified Development Code Section 7.3.3(I)1(i) states that a waiver request must address seven conditions as stipulated below:

1) *That undue hardships will result from strict compliance with one or more provisions of this Section 7.3.*
Response: Applicant's proposal shows calculated capture of 10,013 square feet of land runoff from offsite (coming from ST HWY 71), which would otherwise be untreated. TxDOT has stated that they are unwilling and unable to treat this runoff onto the applicant's site, and this has therefore caused an increase in Water Quality facilities required and proposed on applicant's site and is a significant benefit to the City in water quality treatment. In return, applicant requests a waiver to use of standard pavement and approval of use of pervious pavement for the drive-thru lane and the escape lane, which would equal a total of 4,625 sf of pervious pavement. This brings the total proposed site Impervious Cover to 19,560 (sf), which is 45.0%. Applicant will submit to the City Engineer as part of their Water Quality Maintenance Plan an annual maintenance plan of the pervious pavement in addition to the other WQ features.

2) *That the purposes of these regulations may be served to a greater extent by an alternative proposal.*
Response: These regulations may be served to a greater extent with the removal of the existing decommissioned and unattended gas station and the redevelopment of the site into a higher and better use. There is no stormwater quality control for any of the existing site. The proposed site development includes water quality treatment not only for the site but also for the untreated runoff from TXDOTs Hwy 71.

3) *The waiver does not have the effect of nullifying the intent and the purpose of these regulations.*
Response: The proposed permeable pavement, RainCrete, is a product that is functionally indifferent than regular concrete, and visually almost identical to the standard eye. It is approved by Texas Commission of Environmental Quality (TCEQ), and it is equally as strong,

allowing commercially rated vehicles, such as garbage trucks or firetrucks use with no difference in performance or specs.

4) *Granting the waiver will not be detrimental to the public safety, health or welfare, and will not be injurious to other property or to the owners of other property, and the waiver will not prevent the orderly development or use of other property in the vicinity.*
Response: The property is currently a defunct gas station. The proposed Starbucks site is more compatible with the nearby businesses as well as the adjacent Field of Dreams. It also supports the removal of old underground storage tanks and a building that has asbestos. The approval of this waiver will be a benefit to the public safety, health and welfare of the community. There is no stormwater quality control for any of the existing site. The proposed site development includes water quality treatment not only for the site but also for the untreated runoff from TxDOTs Hwy 71. Furthermore, this development includes a pedestrian connection to the Field of Dreams, which does not currently have on-site concessions.

5) *The conditions upon which the request for a waiver is based are unique to the property for which the waiver is sought, and are not applicable generally to other property.*
Response: This property is unique due to the fact that it is a redevelopment of the defunct gas station site. None of the site is runoff is currently treated to any stormwater quality standard (i.e., there is no water quality facility). The proposed Starbucks site includes a rainwater harvesting tank as well as a rain garden to treat 100% of the impervious cover on the site. This is a dramatic improvement from current conditions.

6) *Because of the particular physical surroundings, shape or topographical conditions of the specific property involved, a particular hardship to the property owner would result, as distinguished from a mere inconvenience, of the strict letter of these regulations is carried out.*
Response: The recent TxDOT ROW acquisition when the site was functioning as a gas station left the site with less than one acre of land. A large portion of the land and parking lot for the gas station site is actually within current TxDOT ROW. This constraint makes the current site geometry non-viable to redevelop, especially when taking into account that it is treating runoff from the adjacent TxDOT land.

7) *An alternate design will generally achieve the same result or intent as the standards and regulations prescribed in this Section 7.3.*
Response: We believe the current site layout as designed is the highest and best use for this property and that it is consistent with the intent of Section 7.3.

Please review this waiver request at your earliest convenience. If you have any questions or need additional information, please contact me at (512) 861-5300 or travis.wilson@miller-gray.com.

Sincerely,

MillerGRAY
TBPE Firm Reg. No. F-16302

J. Travis Wilson, P.E., CFM
Principal

P:|00323 Investcor|001 Starbucks Bee Cave|06_ENG|Documents|Waiver Request - Pavement Type.docx