

Monday, June 6, 2022

To: Board of Adjustments City of Austin 301 W 2nd St, Austin, TX 78701

Reference: - Supplemental Letter - 2715 Long Bow Trail - Case # C15-2022-0011

I am writing to provide you with the additional information requested by the Board of Adjustments during our meeting on April 11, 2022. I have attached a copy of the supporting documents for the comments below and answer the questions and concerns you had during the hearing. Directly below, you will see our justifications for approval, and below that is the backup information concerning the property and the reasoning for our justifications.

## Justifications for approval: - The less is more version

- 1. Based on the slope analysis, the current site only allows for 1,097.55 sf of IC. We are requesting 2,000 sf of impervious coverage to meet the Apache Shores POA minimum living area requirements, a two-car garage for proper parking, and the required driveway using ribbon designs.
  - a. This lot needs more IC than the adjacent one to protect the large tree in the center of the lot.
  - b. As an item of reference, this lot will only have 22% of the total site area, which is half of the standard IC allowed under typical zoning regulations.
- 2. The new design that the developer created reduced the originally requested IC by 40% by utilizing a single-car ribbon drive and reducing the house size and footprint.
- 3. Based on the engineering report and design provided by 3PX engineers, they created a drainage plan that will prevent any additional/adverse runoff created by the proposed development. This plan was created by using Vegetative Strips that are allowed under the ECM Section 1 1.6.7 (B)
- 4. Without this variance, we will not be able to develop any structure on this property that will meet the COA development regulations and the Apache Shores POA development requirements on the deed restrictions.

#### **Backup Information**

**Zoning Regulations:** The primary basis of our request is that the property has been zoned for both LA (Lake Austin) zoning and the Lake Austin overlay. As shown below, both regulations require a min. of I-acre lot size per the City of Austin development regulations. The application of the LA regulations on this lot makes it non-developable for reasonable use. The LA regulations are also shown as the strictest zoning regulations specified in 25-2-33 (b).

- 1. Per 25-2-492 site development regulations, the LA zoned lot must be a minimum of 43,560 SF in size (1 acre), and the lot in question is only 8,822.11 sf (.20 acres). In addition, all LA zone lots are governed by 25-2-551 (C)-3 Impervious coverage restrictions based on a slope analysis of the property.
- 2. Per 25-2-53 of the Land Development Code Lake Austin residence (LA) district is the designation for a low density single-family residential use on a lot that is a minimum of one acre, and that is located 1,000 feet or less, measured horizontally, from the 492.8-foot topographic contour line on either side of Lake Austin.
- 3. The City of Austin zoning guide published in September of 2016 in chapter II states the following.
  - a. The City of Austin has established twelve Zoning Principles to preserve the compatibility of land uses.
     City Staff, stakeholders, and property owners should use the following principles to evaluate all zoning requests.
    - i. Zoning should be consistent with the Future Land Use Map (FLUM) or adopted neighborhood plan.
      - 1. This item does not apply to our case

- ii. Zoning should satisfy a public need and not constitute a grant of special privilege to an individual owner; the request should not result in spot zoning.
  - 1. Within Apache Shores POA, less than 5% of the overall community has any form of zoning regulation. The current overlay unreasonably restricts the lot's development capabilities.
- iii. Granting a zoning request should result in equal treatment of similarly situated properties.
  - 1. Within Apache Shores POA, less than 5% of the overall community has any form of zoning regulation. The current overlay unreasonably restricts the lot's development capabilities.
  - 2. Lots as close as 100' away have no zoning regulations
- iv. Granting the zoning should not in any way set an undesirable precedent for other properties in the neighborhood or within other areas of the city.
  - This is a lot-specific request on a non-conforming lot and would not result in any negative precedent.
- v. Zoning should allow for reasonable use of the property.
  - 1. The current zoning does not allow for any reasonable use of the property.
- vi. Zoning changes should promote compatibility with adjacent and nearby uses and should not negatively impact the neighborhood character.
  - 1. The request that we are asking for does not put the development capabilities of this property above or beyond the adjacent properties.
- vii. Zoning should promote a transition between adjacent and nearby zoning districts, land uses, and development intensities.
  - 1. The request does not change the land use or density of the area.
- viii. Zoning should promote the policy of locating retail and more intensive zoning near the intersections of arterial roadways or at the intersections of arterials and major collectors.
  - 1. This section does not apply to our request.
- ix. The request should serve to protect and preserve places and areas of historical and cultural significance. Zoning should promote clearly identified community goals such as creating employment opportunities or providing affordable housing.
  - 1. The request for Impervious Coverage is being made to develop single-family homes that are desperately needed in the greater Austin area.
- x. A change in conditions has occurred within the area, indicating that there is a basis for changing the originally established zoning and/or development restrictions for the property.
  - Before 2014 this property did not have any zoning regulations. This zoning overlay was added to the property making the lots non-developable.
- xi. The rezoning should be consistent with the policies adopted by the City Council or Planning Commission/Zoning and Platting Commission.
  - 1. The City of Austin has been diligent in allowing for additional development of living units as it is necessary for future growth and the people who are currently here.

**Apache Shores HOA Regulations:** The following regulations are required by the deed restrictions within the community. These regulations were adopted on November 19, 1969, and recorded with Travis County document # 23-2467

1. Paragraph #3 states that no residence shall have less than 650 SF of living space on the ground or first floor exclusive of the porch area.

**Neighboring Properties:** It has come into question the size of the proposed homes compared to the adjacent houses. We have gone through the Travis County property records and have identified the following.

- 1. Based on the map attached to this report, 9 houses within a 1,000-foot radius of this lot are within the size range of the proposed projects. If you take the average size of all the houses shown on the map, you will get an average size of 2.443 SF.
  - a. A map showing the locations of the houses along with the TCAD information is attached to this packet.
- 2. On this map, you will also see II vacant lots on the same road (Long Bow Trail) that will be developed, and these lots are not within the COA LA zoning regulations, so they will most likely be constructed the same size larger than our proposed structure.

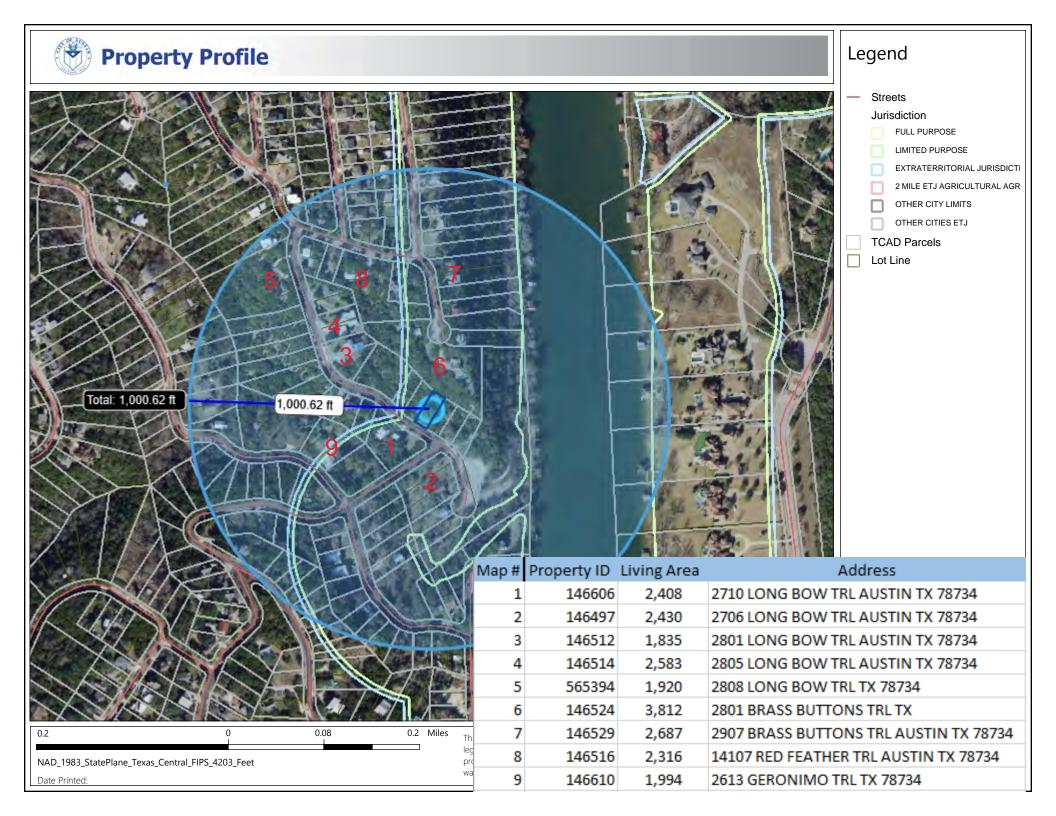
**Conclusion:** As you can see, based on the information provided in this report and the prior documentation, there are many reasons why this variance should be approved. I understand that the biggest concern of this area has to do with the Lake Austin watershed, and we have provided an engineered plan that will eliminate that concern.

Regards,

Jonathan Kaplan Managing Member

Urban Building Services of Texas LLC 512-768-2789 ext. 501

Jonathan Kaplan





The drawings, specifications, ideas, designs, and arrangements presented herein are and shall remain the property of Urban Designs. No part thereof shall be copied, disclosed to others or used in connection with any work or project other than the specific project for which they were prepared and developed without the written consent of Urban Designs. Visual contact with these drawings shall constitute conclusive evidence of acceptance of these restrictions.

2715 + 2717 Long Bow Trail, Austin Village Development Art

Site Analysis CONSTRUCTION DOCUMENTS

Site Plan - LA

22" X 34" SCALE: 1" = 10'-0" 11" X 17" SCALE:

HALF SCALE

6/6/2022 1:21:42 PM DRAWN BY: Author

S 89° 52' 22" E 60.11' 2715 Long Bow 2000 SF IC N 89° 57' 30" W 60.00'

1 2715 - Survey 1" = 10'-0"

2715 - Slope 1" = 10'-0"

2715 - Slope Analysis - Net Site Area					
Material: Range Material: Area					
0.545.05					
2,545 SF					
1,567 SF					
1,002 SF					
4,958 SF					

x 35% = 890.75 x 10% = 156.7 x 05% = 50.1 0

x 0% = 0.00Allowed IC = 1,097.55 SF Proposed IC = 2,045.6 SF

IC Breakdown Option 1

x 40% = 1,018

x 40% = 626.8

x 40% = 400.8

Proposed IC = 2,010.25 SF

IC Breakdown Option 2

x 40% = 1,018

x 30% = 470.1

x 15% = 150.3

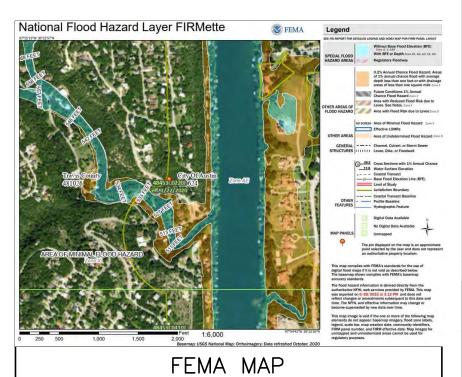
x 7.5% = 371.85

# **NEW SINGLE-FAMILY HOME**

**2715 LONGBOW TRAIL AUSTIN, TX 78734** 

SHEET	DESCRIPTION
1	TITLE SHEET
2	REMOVALS PLAN
3	PROPOSED SITE CONDITIONS
4	SITE GRADING PLAN
5	EXISTING DRAINAGE PLAN
6	PROPOSED DRAINAGE PLAN
7	UTILITY PLAN
8	EROSION CONTROL PLAN
9	GENERAL NOTES
10	DETAILS
11	DETAILS
12	DETAILS
	SHEET INDEX







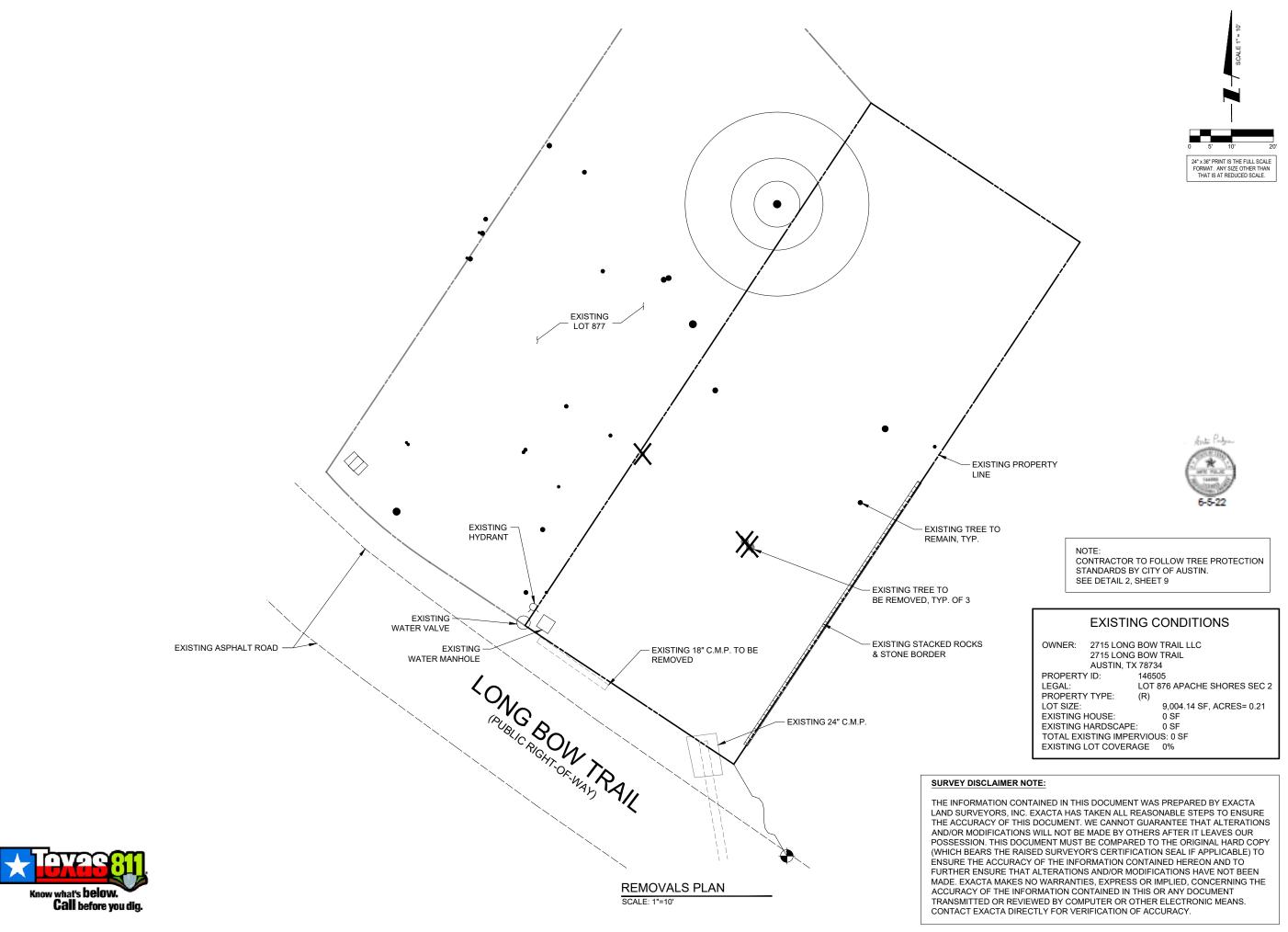


# **NEW SINGLE-FAMILY HOME 2715 LONGBOW TRAIL**

CHECKED BY:

**3PX** 





No. REVISION / DESCRIPTION DATE: ISSUED FOR DRAINAGE REVIEW 5/27/

# NEW SINGLE-FAMILY HOME 2715 LONGBOW TRAIL REMOVALS PLAN

DRAWN BY: PP
CHECKED BY: AP

DATE: 05/27/2022

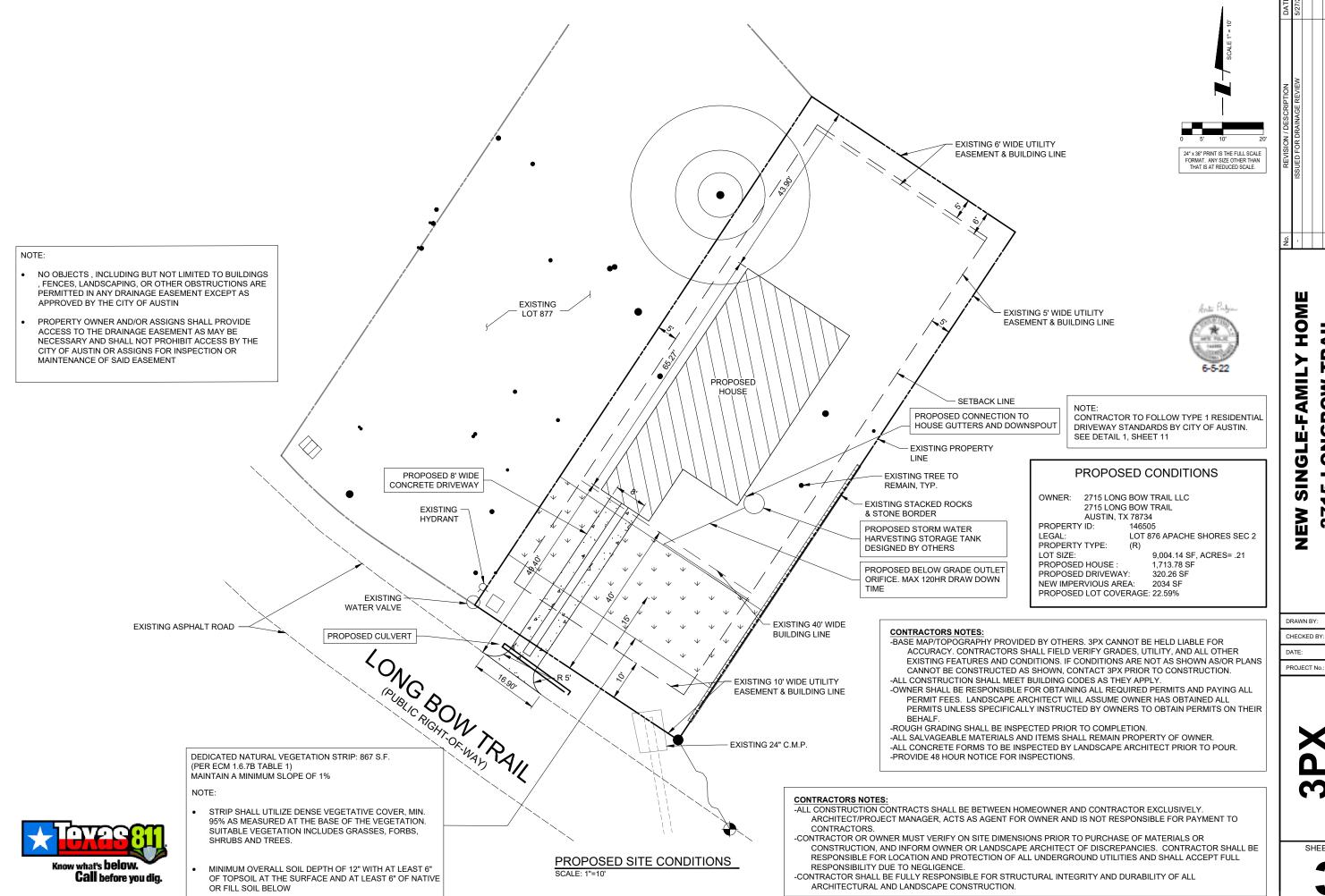
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3PX Engineering

SHEET NO.

2



CONDITIONS HOME **LONGBOW TRAIL** E-FAMILY SITE GL **PROPOSED** SIN 15

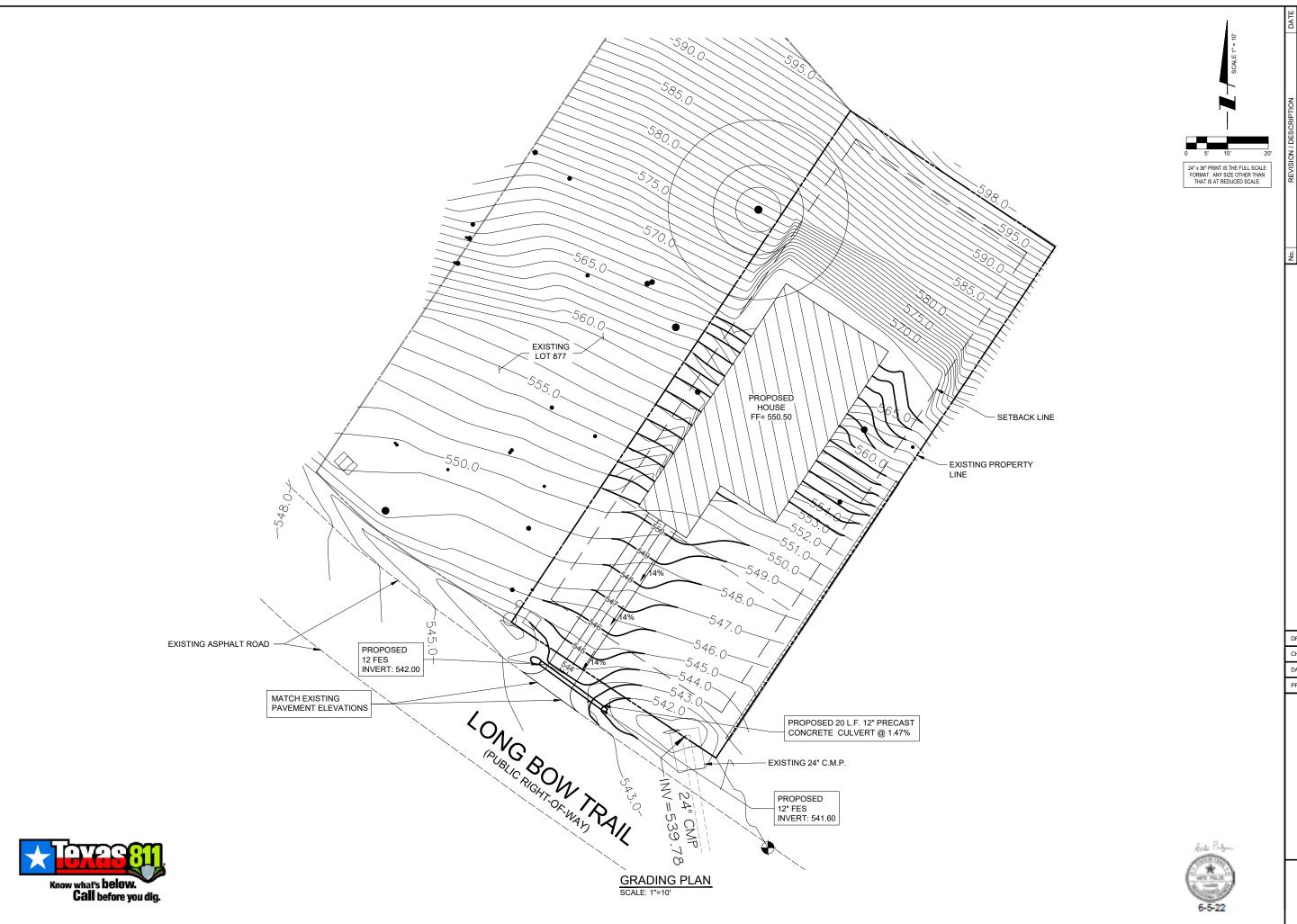
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PROJECT No.: TX-129-1

Engineering

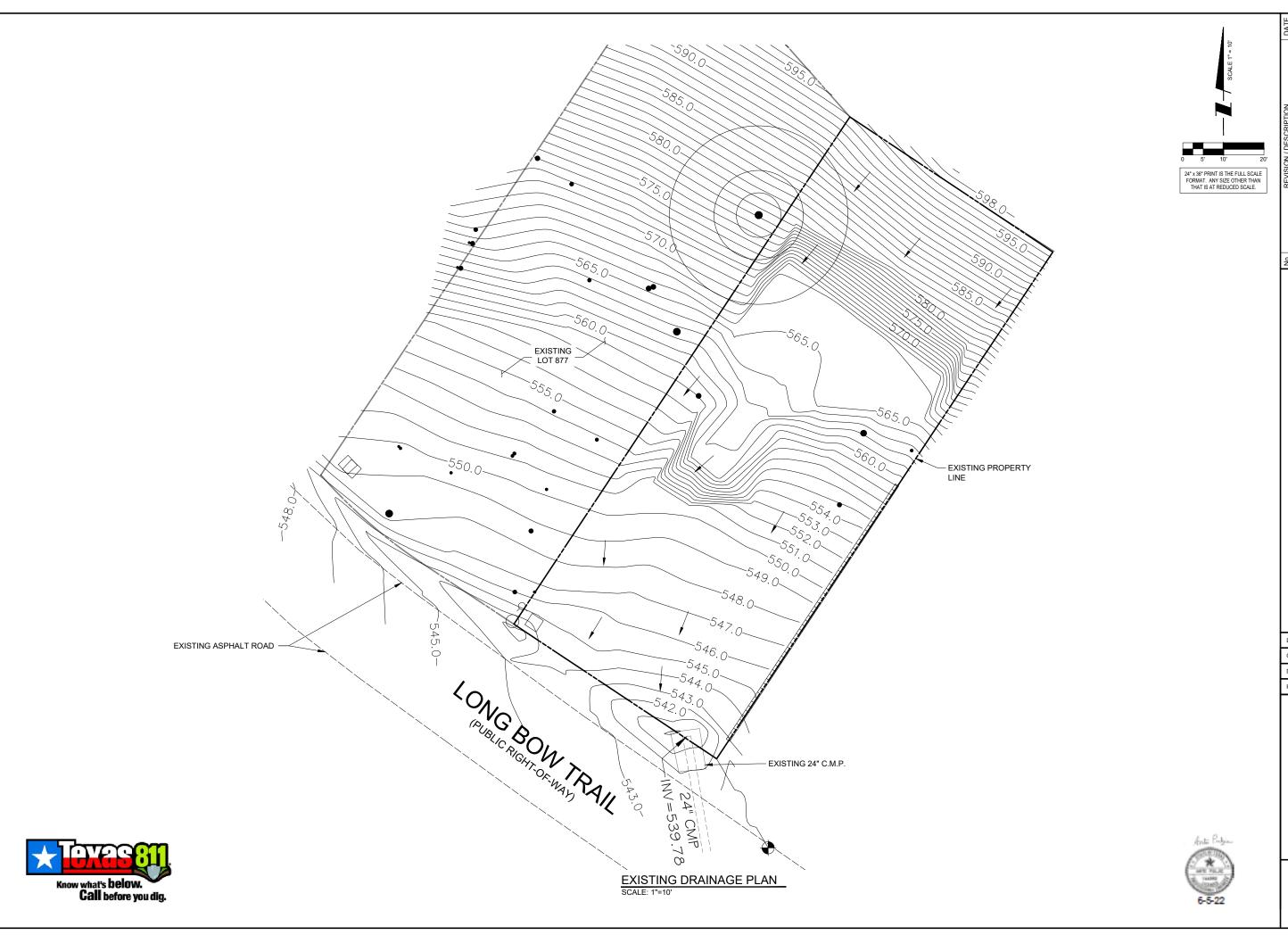


**NEW SINGLE-FAMILY HOME 2715 LONGBOW TRAIL GRADING PLAN** 

DRAWN BY: CHECKED BY: 05/27/2022

PROJECT No.: TX-129-1

Engineering 3PX



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NEW SINGLE-FAMILY HOME
2715 LONGBOW TRAIL
EXISTING DRAINAGE PLAN

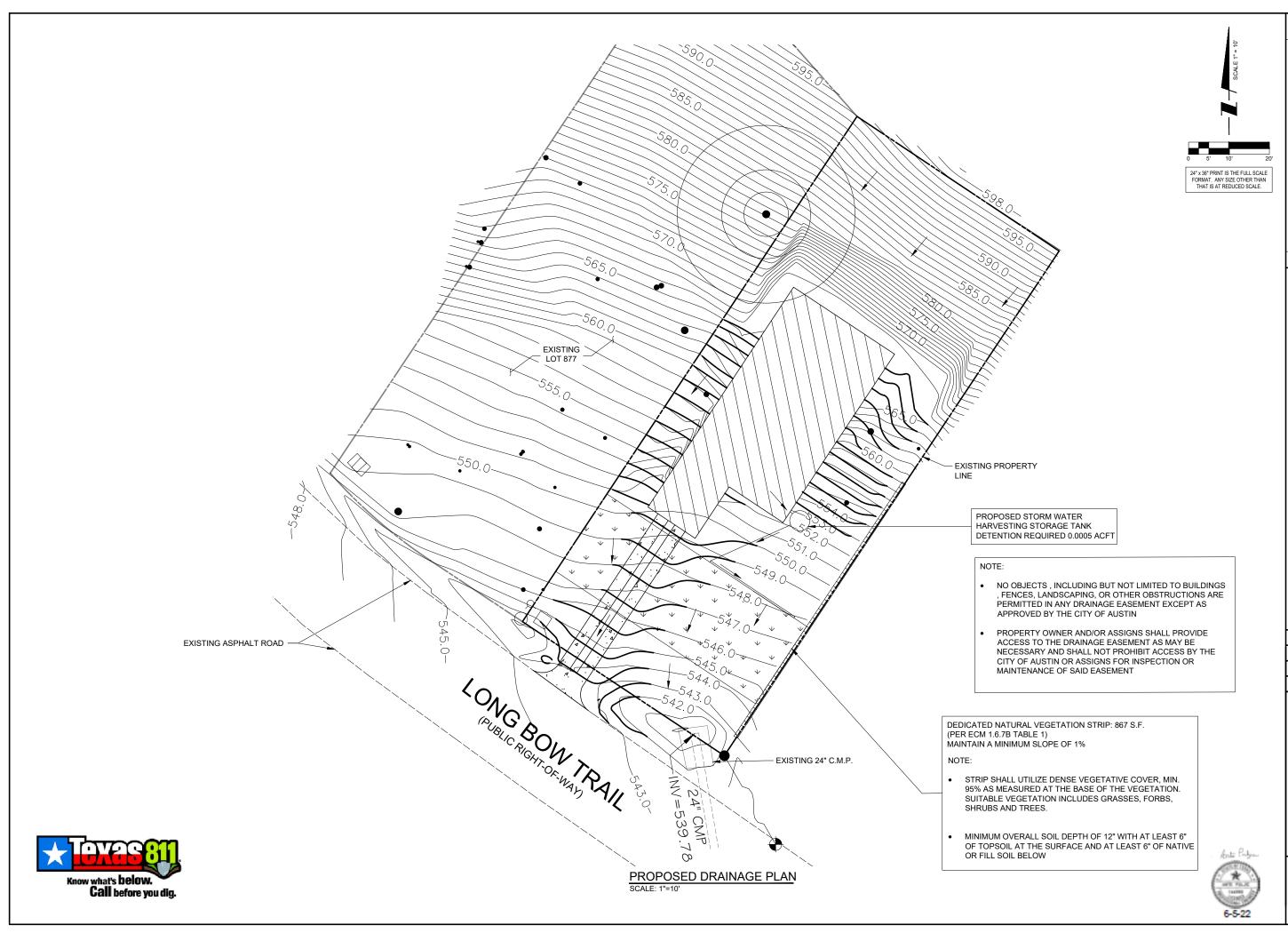
DRAWN BY: PP

CHECKED BY: AP

DATE: 05/27/2022

PROJECT No.: TX-129-1

3PX Engineering





# NEW SINGLE-FAMILY HOME 2715 LONGBOW TRAIL PROPOSED DRAINAGE PLAN

DRAWN BY: PP
CHECKED BY: AP

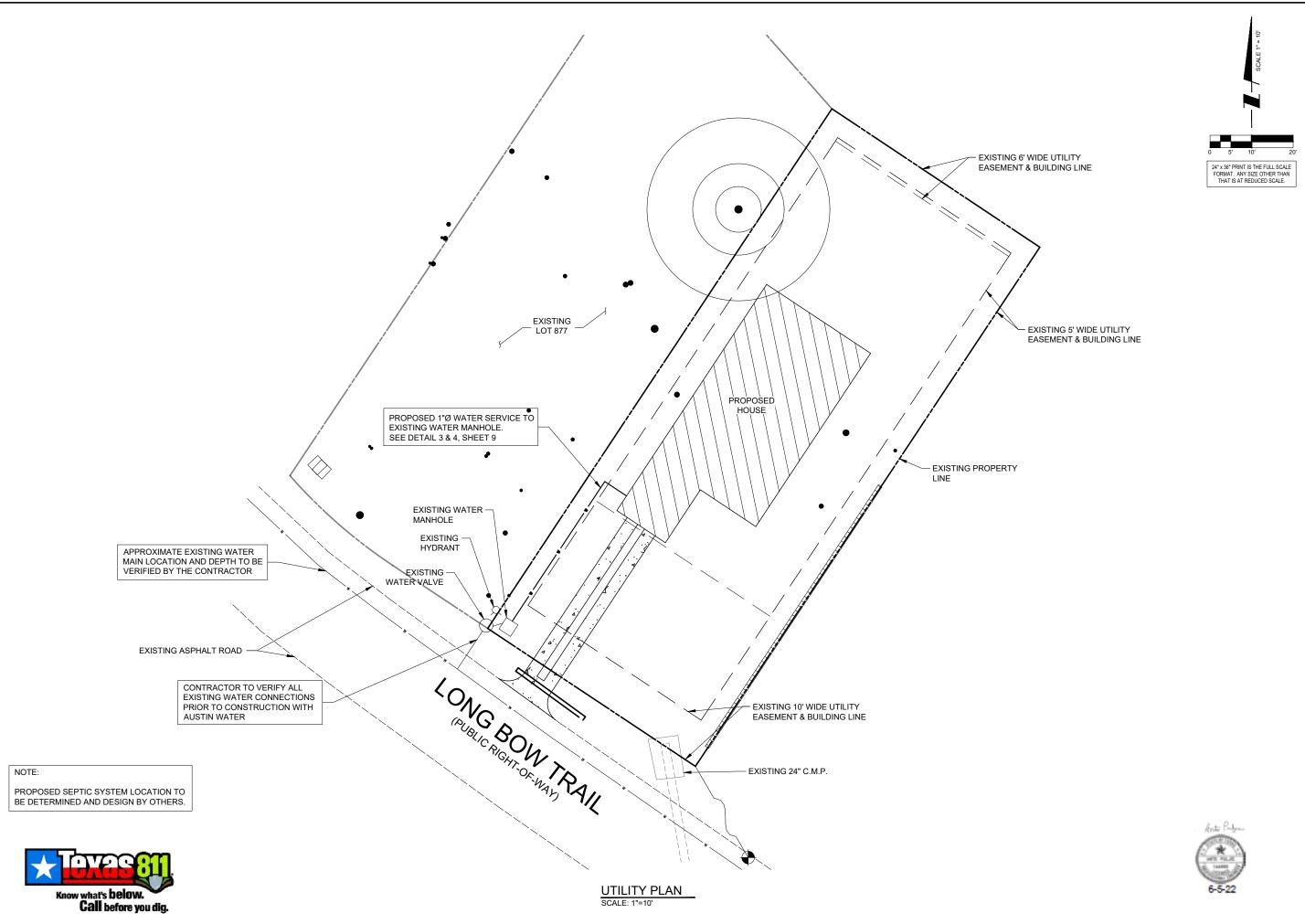
DATE: 05/27/2022

PROJECT No.: TX-129-1

PROJECT No.: 176-123

3PX Engineering





No. REVISION / DESCRIPTION DA ISSUED FOR DRAINAGE REVIEW 5/2

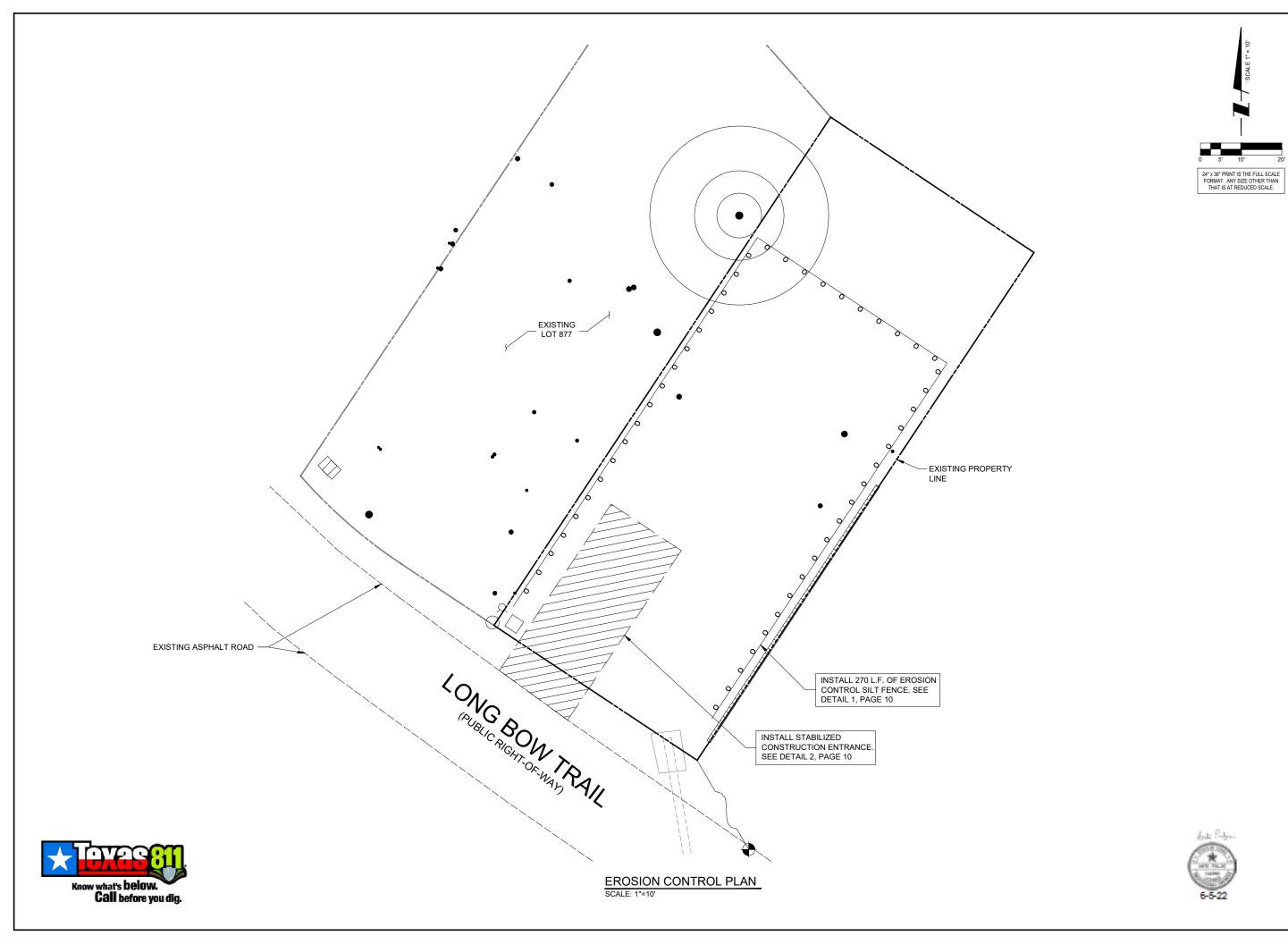
# NEW SINGLE-FAMILY HOME 2715 LONGBOW TRAIL UTILITY PLAN

DRAWN BY: PP
CHECKED BY: AP

DATE: 05/27/2022 PROJECT No.: TX-129-1

> 3PX Engineering

SHEET NO.





NEW SINGLE-FAMILY HOME 2715 LONGBOW TRAIL EROSION CONTROL PLAN

DRAWN BY: PP
CHECKED BY: AP

DATE: 05/27/2022
PROJECT No.: TX-129-1

3PX Engineering

SHEET NO.

8

#### CITY OF AUSTIN STANDARD TREE PROTECTION NOTES

#### BEFORE CONSTRUCTION

- ALL TREES AND NATURAL AREAS SHOWN ON PLAN TO BE PRESERVED SHALL BE PROTECTED PER ECM 3.6.1.
- 2. TREE PROTECTION SHALL BE INSTALLED PRIOR TO THE START OF ANY SITE WORK, INCLUDING DEMOLITION OR SITE PREPARATION. REFER TO ECM 3.6.1.4
- FENCING FOR TREE PROTECTION SHALL BE CHAIN-LINK MESH WITH A MINIMUM HEIGHT OF 5 FEET AND SHALL BE INSTALLED AROUND OR BEYOND THE CRITICAL ROOT ZONE EXCEPT AS ALLOWED IN ECM 3.6.1.B.4
- 4. UNFENCED SECTIONS OF THE CRITICAL ROOT ZONE SHALL BE COVERED WITH MULCH AT A MINIMUM DEPTH OF 8 INCHES AND A MAXIMUM DEPTH OF 12 INCHES PER ECM 3.6.1.C.
- 5. WHERE FENCING IS LOCATED 5 FEET OR LESS FROM THE TRUNK OF A PRESERVED TREE, TRUNK WRAPPING SHALL BE INSTALLED PER ECM
- 6. EROSION AND SEDIMENTATION CONTROLS SHALL BE INSTALLED AND MAINTAINED SO AS NOT TO CAUSE IMPACTS THAT EXCEED PRESERVATION CRITERIA LISTED IN ECM 3.5.3.D.

#### **DURING CONSTRUCTION**

- TREES APPROVED FOR REMOVAL SHALL BE REMOVED IN A MANNER THAT DOES NOT EXCEED PRESERVATION CRITERIA FOR THE TREES TO REMAIN. REFER TO ECM 3.5.2 A.
- FENCING MAY NOT BE TEMPORARILY MOVED OR REMOVED DURING DEVELOPMENT WITHOUT PRIOR AUTHORIZATION. THE FENCED CRITICAL ROOT ZONE SHALL NOT BE USED FOR TOOL OR MATERIAL STORAGE OF ANY KIND AND SHALL BE KEPT FREE OF LITTER. REFER TO ECM 3.6.1.B.3.
- 3. PRUNING SHALL BE IN COMPLIANCE WITH THE CURRENT ANSI A300 STANDARD FOR TREE CARE.

### AFTER CONSTRUCTION

- TREE PROTECTION SHALL BE REMOVED AT THE END OF THE PROJECT AFTER ALL CONSTRUCTION AND FINAL GRADING IS COMPLETE, BUT BEFORE FINAL INSPECTION. REFER TO ECM 3.6.1.A.
- LANDSCAPE INSTALLATION WITHIN THE CRZ OF PRESERVED TREES, INCLUDING IRRIGATION, SOIL AND PLANTINGS, SHALL NOT EXCEED PRESERVATION CRITERIA LISTED IN ECM 3.5.2.
- 3. DOCUMENTATION OF TREE WORK PERFORMED MUST BE PROVIDED TO INSPECTOR PER ECM APPENDIX P-6.

THIS LIST IS NOT EXHAUSTIVE.
REFER TO APPROPRIATE ECM SECTIONS FOR FULL REQUIREMENTS.

**Call** before you dig.

### CITY OF AUSTIN EROSION CONTROL NOTES

- 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 COA 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 AUSTIN ENVIRONMENTAL INSPECTOR 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 COA EV PLAN REVIEWERS AS WELL AS COA EV INSPECTORS
- 3. THE PLACEMENT OF TREE/NATURAL AREA PROTECTIVE FENCING SHALL BE IN ACCORDANCE WITH THE CITY OF AUSTIN STANDARD NOTES FOR TREE AND NATURAL AREA PROTECTION AND THE APPROVED GRADING/TREE AND NATURAL APPA DI AN
- 4. A PRE-CONSTRUCTION CONFERENCE SHALL BE HELD ON-SITE WITH THE CONTRACTOR, DESIGN ENGINEER/PERMIT APPLICANT AND ENVIRONMENTAL INSPECTOR 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 DEVELOPMENT SERVICES DEPARTMENT, 512-974-2278 OR BY EMAIL AT ENVIRONMENTAL.INSPECTIONS@AUSTINTEXAS.GOV, AT LEAST THREE DAYS PRIOR TO THE MEETING DATE. COA APPROVED ESC PLAN AND TPDES SWPPP (IF REQUIRED) SHOULD BE REVIEWED BY COA EV INSPECTOR 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, ENVIRONMENTAL SPECIALIST OR CITY ARBORIST AS APPROPRIATE. MAJOR REVISIONS MUST BE APPROVED BY AUTHORIZED COA STAFF. MINOR CHANGES TO BE MADE AS FIELD REVISIONS TO THE EROSION AND SEDIMENTATION CONTROL PLAN MAY BE REQUIRED BY THE ENVIRONMENTAL INSPECTOR 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 (½) 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 AUSTIN ENVIRONMENTAL INSPECTOR 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:
- -ALL DISTURBED AREAS TO BE REVEGETATED ARE REQUIRED TO PLACE A MINIMUM OF SIX (6) INCHES OF TOPSOIL [SEE 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 STANDARD SPECIFICATION 6018 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.

# CITY OF AUSTIN STANDARD SEQUENCE OF CONSTRUCTION NOTES

- 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 STORMWATER 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).
- THE ENVIRONMENTAL PROJECT MANAGER OR SITE SUPERVISOR MUST CONTACT THE DEVELOPMENT SERVICES DEPARTMENT, ENVIRONMENTAL INSPECTION, AT 512-974-2278, 72 HOURS PRIOR TO THE SCHEDULED DATE OF THE REQUIRED ON-SITE PRECONSTRUCTION MEETING.
- 3. 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.
- 4. ROUGH GRADE THE POND(S) AT 100% PROPOSED CAPACITY. EITHER THE PERMANENT OUTLET STRUCTURE OR A TEMPORARY OUTLET MUST BE CONSTRUCTED PRIOR TO DEVELOPMENT OF EMBANKMENT OR EXCAVATION THAT LEADS TO PONDING CONDITIONS. THE OUTLET SYSTEM 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).
- 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.
- 6. BEGIN SITE CLEARING/CONSTRUCTION (OR DEMOLITION) ACTIVITIES.
- 7. IN THE BARTON SPRINGS ZONE, THE ENVIRONMENTAL PROJECT MANAGER OR SITE SUPERVISOR WILL SCHEDULE A MID-CONSTRUCTION CONFERENCE TO COORDINATE CHANGES IN THE CONSTRUCTION SCHEDULE AND EVALUATE EFFECTIVENESS OF THE EROSION CONTROL PLAN AFTER POSSIBLE CONSTRUCTION ALTERATIONS TO THE SITE. PARTICIPANTS SHALL INCLUDE THE CITY INSPECTOR, PROJECT ENGINEER, GENERAL CONTRACTOR AND ENVIRONMENTAL PROJECT MANAGER OR SITE SUPERVISOR. THE ANTICIPATED COMPLETION DATE AND FINAL CONSTRUCTION SEQUENCE AND INSPECTION SCHEDULE WILL BE COORDINATED WITH THE APPROPRIATE CITY INSPECTOR.
- 8. PERMANENT WATER QUALITY PONDS OR CONTROLS WILL BE CLEANED OUT AND FILTER MEDIA WILL BE INSTALLED PRIOR TO/CONCURRENTLY WITH REVEGETATION OF SITE
- 9. COMPLETE CONSTRUCTION AND START REVEGETATION OF THE SITE AND INSTALLATION OF LANDSCAPING.
- 10. 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 DEVELOPMENT SERVICES DEPARTMENT 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 INSPECTOR.
- 11. UPON COMPLETION OF LANDSCAPE INSTALLATION OF A PROJECT SITE, THE LANDSCAPE ARCHITECT SHALL SUBMIT A LETTER OF CONCURRENCE TO THE DEVELOPMENT SERVICES DEPARTMENT 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 INSPECTOR.
- 12. AFTER A FINAL INSPECTION HAS BEEN CONDUCTED BY THE CITY INSPECTOR AND WITH APPROVAL FROM THE CITY INSPECTOR, REMOVE THE TEMPORARY EROSION AND SEDIMENTATION CONTROLS AND COMPLETE ANY NECESSARY FINAL REVEGETATION RESULTING FROM REMOVAL OF THE CONTROLS. CONDUCT ANY MAINTENANCE AND REHABILITATION OF THE WATER QUALITY PONDS OR CONTROLS.



# NEW SINGLE-FAMILY HOME 2715 LONGBOW TRAIL GENERAL NOTES

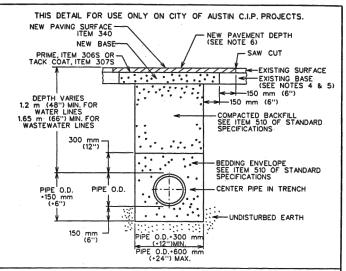
DRAWN BY: PF

DATE: 05/27/2022

PROJECT No.: TX-129-1

**3PX** Engineering

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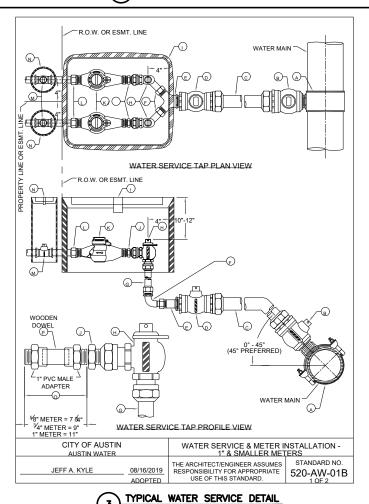


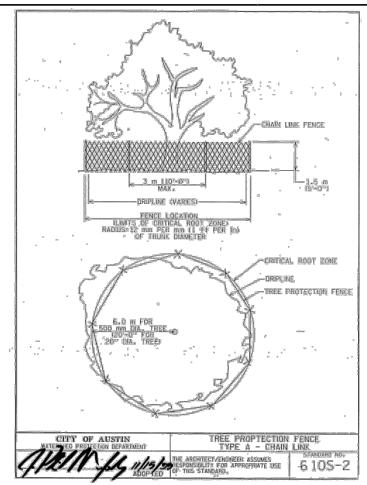
#### NOTES:

- THE EXISTING PAYING SURFACE SHALL BE SAW CUT IN A STRAIGHT LINE A MINIMUM OF 300 mm (12") WIDER THAN THE UNDISTURBED SIDES OF THE TRENCH, SYMETRICAL ABOUT THE CENTER LINE OF THE EXCAVATION.
- ANY CONCRETE PAYING SHALL BE SAW CUT 150 mm (6") WIDER THAN UNDISTURBED SIDES OF EXCAVATION.
- 3. IF EXCAVATION AREA IS OPEN FOR TEMPORARY PUBLIC USE, THE SURFACE SHALL BE MAINTAINED LEVEL WITH ADJACENT RIDING SURFACE WITH COLD MIX OR TEMPORARY HOT MIX ASPHALTIC CONCRETE.
- 4. ROAD BASE AND SURFACE MATERIALS IN THE TRENCH CUT SHALL BE REPLACED IN KIND OF EQUAL THICKNESS, OR MINIMUM BASE THICKNESS OF 250 mm (10"), WHICHEVER IS GREATER.
- 5. ALL DAMAGED AREAS OF PAVEMENT OUTSIDE THE TRENCH CUT SHALL BE REMOVED AND REPLACED WITH MINIMUM OF 200 mm (8") OF BASE OR MATCH EXISTING THICKNESS, WHICHEVER IS GREATER.
- 6. SURFACE PAVEMENT SHALL BE OF THE KIND AND THICKNESS AS EXISTING, OR MINIMUM 50 mm (2"), WHICHEVER IS GREATER.

CITY OF AUSTIN TYPICAL TRENCH WITH PAVED SURFACE THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. 510S-3







2 TYPICAL TREE PROTECTION DETAIL

- MATERIALS LIST: A. 2" SERVICE CLAMP, SPL WW-264 B. 2" CORPORATION STOP, SPL WW-68
- C. 2" HDPE WATER SERVICE TUBING, SPL WW-65 D. 2" BALL VALVE, SPL WW-68
- D. 2' BALL VALVE, SPL WW-68
  E SINGLE SERVICE: 2' MIP X 1' COPPER FLARE FITTING, SPL WW-68 OR
  DOUBLE SERVICE: 2' MIP X 1' COPPER FLARE WYE, SPL WW-68
  F. 1' SWIVEL NUT X 1' COMPRESSION 90' BEND, SPL WW-68
  G. 1' HOPE WATER SERVICE TUBING, SPL WW-65
  H. 1' ANGLE METER STOP, SPL WW-68
  I. METER BOX AND LID, SPL WW-145A;
  EOD DUILD, SPL WW-145A;
  EOD DUILD, 1' METERS USET TWO SINO! E METER BOXES

- FOR DUAL 1" METERS: USE TWO SINGLE METER BOXES

MATERIALS TO BE INSTALLED BY PLUMBER:

J. BRASS METER BUSHING - SIZE AS NEEDED TO CONNECT ANGLE METER STOP TO METER
K. WATER METER PURCHASED FROM AUSTIN WATER
L. BRASS WATER METER COUPLING MALE IPT x SWIVEL COUPLING NUT:

\*\*6" AND 6" METERS: 6"\* LONG x 6" DIA.
1" METERS: 8" 6"\* LONG x 1" DIA.
M. PROPERTY OWNERS CUT OFF VALVE. SPL WW-276
N. PROPERTY OWNERS CUT OFF VALVE BOX AND LID.

\*\*10" AUSTIN OWNERS CUT OFF VALVE BOX AND LID.

\*\*10" AUSTIN OWNERS CUT OFF VALVE BOX AND LID.

\*\*10" AUSTIN OWNERS CUT OFF VALVE BOX AND LID.

N. PROPERTY OWNERS CUT OFF VALVE BOX AND LID O. TEMPORARY METER SPACER (REQUIRED TO ASSURE METER WILL FIT APPROPRIATELY) P. 1" WOODEN DOWEL (SHOW ADDRESS ON DOWEL USING WATERPROOF MARKER)

- 1. SERVICE CLAMP SHALL BE WRAPPED COMPLETELY WITH 8 MIL. POLYETHYLENE FILM, SPL WW-27D. 2. BRANCH CONNECTIONS AND ALL ANGLE METER STOPS MUST BE INSTALLED PRIOR TO ANY METER
- INSTALLATION.
  3. TOP OF METER BOXES SHOULD BE 4" ABOVE GROUND.

JEFF A. KYLE

- I.O. MIC LEVIDACES STOCKED BY A MOVE OF CONCOUNT.
   PIPING AND TUBING IN STREET RIGHT-OF-WAY SHALL BE BEDDED IN GRANULAR MATERIALS AS REQUIRED BY SECTION \$13, (14) OF THE CITY OF AUSTIN STANDARD SPECIFICATIONS; BACKFILL ABOVE GRANULAR BEDDING AS REQUIRED BY SECTION 5103, (25)
- ABOVE GRANULAR BEDDING AS REQUIRED BY SECTION 9 10.3 (26).

  S. METER BOX MUST BE BEHIND CURB NEXT TO PROPERTY LINE OR EASEMENT AND OUT OF VEHICULAR TRAFFIC AREA AND SIDEWALK.

  BALL VALVE "O" SHALL NOT BE LOCATED UNDER SIDEWALK, CURB, OR PAVEMENT, AND NOT BE LOCATED MORE THAN 36" BELOW FINAL GRADE.

  7. METER SIZES TO BE SHOWN ON PLANS.

  8. METER BOX CUT OUTS SHALL NOT EXCEED TWO TIMES THE PIPE DIAMETER.

  9. INSTALL METALLIC TRACER TAPE, SPL WW-597, MINIMUM 1' ABOVE TUBING FROM SERVICE CLAMP "A"
  TO RAIL VALVE "D".

- TO BALL VALVE "D".

  10. TUBING SHALL BE PLACED IN A STRAIGHT ALIGNMENT AND ALLOWED TO RELAX AND "SNAKE"

  LOOSELY IN THE TRENCH. TUBING BEHIND CURB AND GUTTER SHALL BE INSTALLED WITH A MINIMUM 2' DEPTH OF COVER. 11. 1" TUBING, WHEN BENT, SHALL HAVE A RADIUS NO SMALLER THAN 3'. 2" TUBING, WHEN BENT, SHALL
- HAVE A RADIUS NO SMALLER THAN 5'. BRASS FITTINGS SHALL NOT BE CONNECTED TO A BENT 12. SOLID, TUBULAR STAINLESS STEEL INSERT STIFFENERS FOR HDPE TUBING SHALL BE USED AT ALL
- 12. SOLID, IDBURATS TAINLESS STEEL INSERT STIFFENERS FOR HIDFE TUBING SHALL BE USED AT ALL COMPRESSION FITTINGS. INSERT STIFFENERS SHALL BE FROM THE SAME MANUFACTURER AS THE COMPRESSION FITTINGS. INSERT STIFFENERS SHALL BE CANDED TUBING SHALL BE MANUFACTURED SOLID PURPLE, SPL WW-65A. ALL APPURTENANCES SHALL BE MANUFACTURED PURPLE IF AVAILABLE. ALL FITTINGS THAT ARE NOT AVAILABLE FROM THE MANUFACTURER IN PURPLE SHALL BE PAINTED PURPLE PER SPL WW-65. ALL METER BOX LIDS SHALL BE PURPLE AND HAVE "RECLAIMED WATER" CAST INTO THEM, SPL WW-145A.

WATER SERVICE & METER INSTALLATION -1" & SMALLER METERS CITY OF AUSTIN AUSTIN WATER

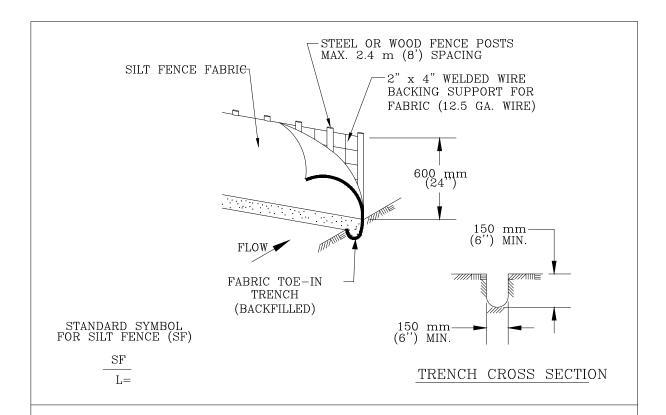
| THE ARCHITECT/ENGINEER ASSUMES | STANDARD NO. | S TYPICAL WATER SERVICE DETAIL

HOM **LONGBOW TRAIL** E-FAMILY DETAIL **G** SIN 15 EΚ 27 Z

DRAWN BY PP CHECKED BY 05/27/2022 DATE

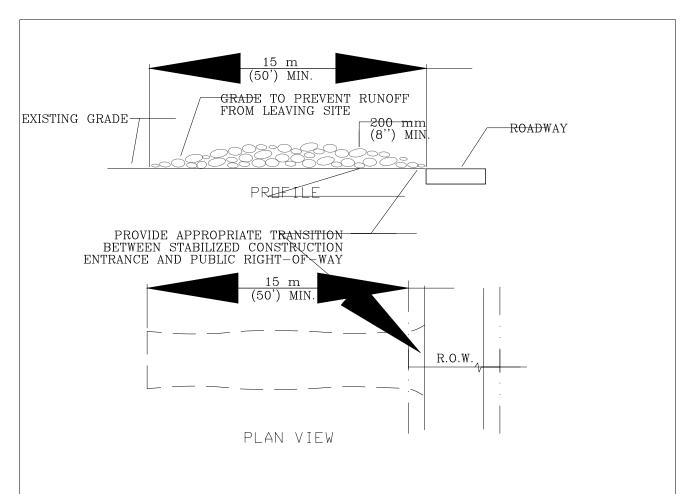
PROJECT No.: TX-129-1

Engineering Ω



- 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 AUST	<b>*</b> * \	SILT FENCE	
BT WORGAN BTARS	09/01/2011	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE UOF THIS STANDARD.	standard nd. se $6425-1$



#### IOTES.

- 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").

OTOTA ATTOORTS

- 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.

WATERSHED PROTECTION DEPA		STABILIZED CONSTRUCT	ION ENTRANCE
RECORD COPY SIGNED BY J. PATRICK MURPHY	0/20/00	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	standard nd. s 6415-1

TYPICAL DETAIL FOR CONSTRUCTION ENTRANCE

No. REVISION / DESCRIPTION DATE: ISSUED FOR DRAINAGE REVIEW 5/277

VEW SINGLE-FAMILY HOMI 2715 LONGBOW TRAIL DETAILS

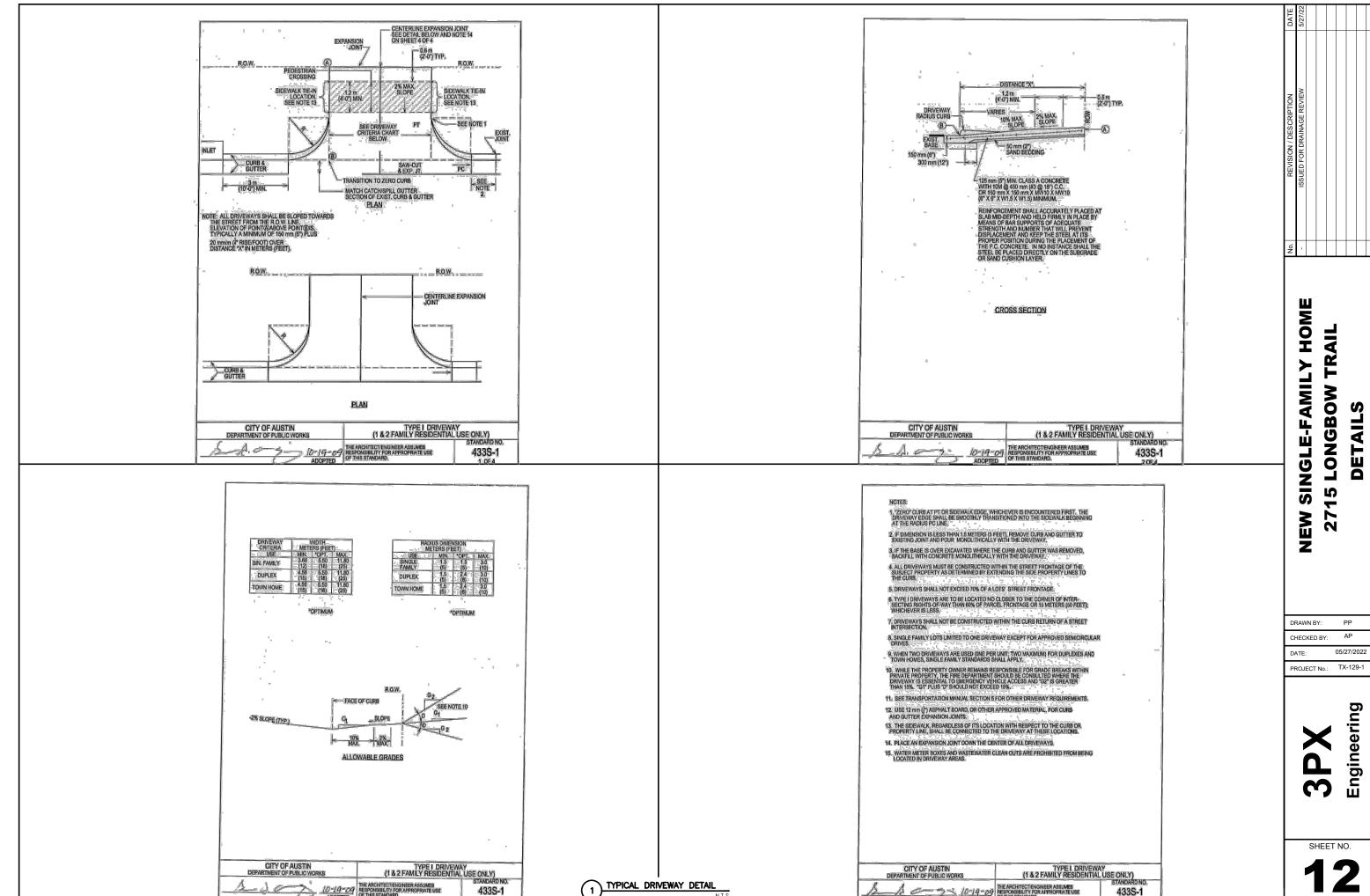
DRAWN BY: PP
CHECKED BY: AP

DATE: 05/27/2022
PROJECT No.: TX-129-1

**3PX** Engineering

SHEET NO.

11



10-19-09 THE ARCHITECTIENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.

433S-1

THE ARCHITECTENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.

433S-1

# **Stormwater Drainage report**

For

# Single Family Residence 2715 Longbow Trail, Austin TX

**Prepared By:** 

Tony Puljic, P.E. 3PX Engineering

May 27<sup>th,</sup> 2022





### INTRODUCTION:

The subject parcel is approximately 0.2607 s.f. and is wooded. There is no existing impervious area on the property. A new house and driveway are being proposed to be built on the site. As a result of the new improvements, thee new impervious area added to the site will be 2003.76 s.f.,

### FEMA FLOOD PLAIN INFO:

Based on FEMA maps the site is located within Zone X of the flood plain. See attached Firmette in appendix.

### TOPOGRAPHY:

The site is on a hill with a slope of approximately 37 % from the back of the property to the front of the property.

## **HYDROLOGIC PATTERNS:**

The site is being proposed within an existing residential subdivision. There are no features that will affect the drainage patterns of streams, wetlands, seeps, springs, closed depressions, or drainage swales and ditches.

## STORMWATER:

The natural flow of water flows from the back of the property to the front of the property north to south. The proposed grading plan does not alter the drainage pattern nor does it direct water into the neighbor's yards. The site is designed such that water flows into an underground basin.

### METHODOLOGY:

Based on the size of the development, the proposed residence, and the site will be required to discharge stormwater such that the post-development peak runoff is below the discharge rates for the 2,10, 25, and 100-year design storms. Calculations were made using the rational method.

The time of concentration was determined by equation 2-5 in the City Code and determined to be .63 min. Based on the result, the minimum time of concentration of 5 min. was used.

The amount of detention required was determined by determining the existing 2-year release rate and determining the post-development runoff for the 2,10 25, and 100-year storm events. Detention will be provided in a storage tank in front of the property. Also, a vegetative strip was designed based on Austin standards as a BMP prior to stormwater discharging from the property.

Sincerely, **3PX Engineering** 



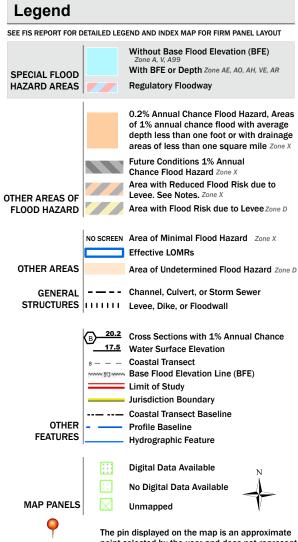
# **ATTACHMENTS**





# National Flood Hazard Layer FIRMette



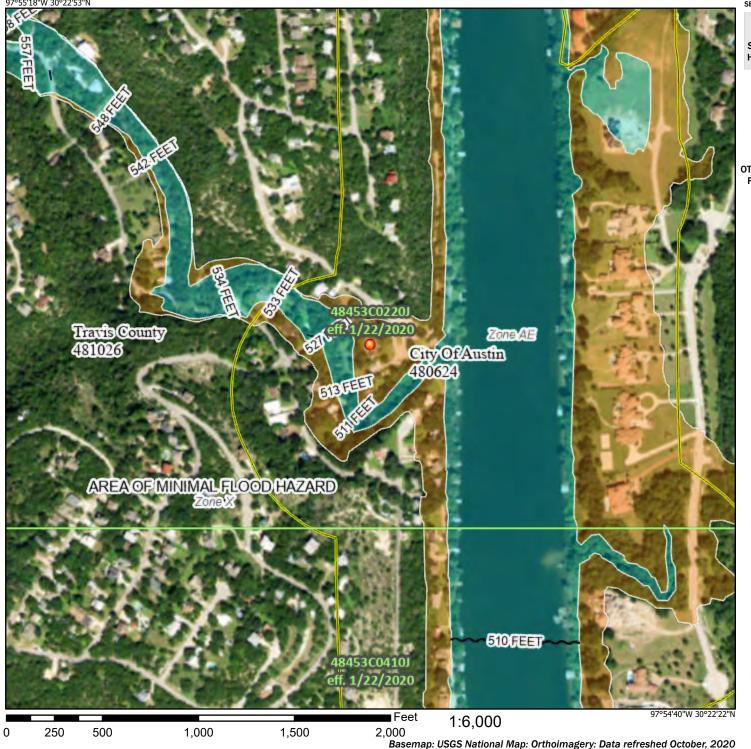


The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below.
The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 5/29/2022 at 4:56 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.



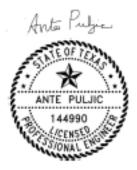
# New Residence, 2715 Longbow Trail Release rate and detention calculation for the 10-Yr. Storm Event Using the 2-Year release rate

5/28/2022

Calculate Composit	e "c" of Existing Area		
TOTAL	AREA =	0.2067 ACRE	
IMPERVIOUS	AREA =	0.0000 ACRE	"c" Value = 0.9
GRAVEL	AREA =	0.0000 ACRE	"c" Value = 0.85
PERVIOUS	AREA =	0.2067 ACRE	"c" Value = 0.45
COMPOSITE	"c" =	0.45	

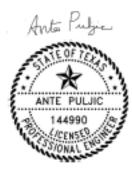
<b>Existing Release Rate</b>	from 2-Year Storm	Event
(See Exhibit of Existing	ng Drainage Area for	'S' &'Tc')
Q =C * I * A		
C	c = <b>0.45</b>	(From above calculation)
]	I = 6.30	inches/hour, (
A	0.21	acres
Q	9 = 0.5860	cfs (Max. release rate for proposed condition)

Calculate Composite	Calculate Composite "c" of proposed development					
TOTAL	AREA =	0.2067 ACRE				
IMPERVIOUS	AREA =	0.0460 ACRE	"c" Value = 0.9			
GRAVEL	AREA =	0.0000 ACRE	"c" Value = 0.85			
PERVIOUS	AREA =	0.1607 ACRE	"c" Value = 0.45			
COMPOSITE	"c" =	0.55				



# **DETENTION REQUIRED** (BASED City of Austin Data)

DURATIO (HOUR		I (IN/HR)	INFLOW (CFS)	STORED (CFS)	RESERVOIR (AC-FT)	
0.08	33	5.7600	0.655	0.069	0.0005	MAX
0.25	00	3.9200	0.446	-0.140	-0.0029	
0.50	00	2.6400	0.3002	-0.2858	-0.0119	]
1.00	00	1.7200	0.196	-0.390	-0.0325	
2.00	00	1.0800	0.123	-0.463	-0.0772	
3.00	00	0.7773	0.088	-0.498	-0.1244	
6.00	00	0.4450	0.051	-0.535	-0.2677	
12.00	00	0.2550	0.029	-0.557	-0.5570	
24.00	00	0.1430	0.016	-0.570	-1.1395	



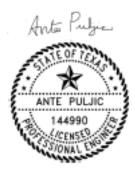
# New Residence, 2715 Longbow Trail Release rate and detention calculation for the 10-Yr. Storm Event Using the 2-Year release rate

5/28/2022

Calculate Composit	e "c" of Existing Area		
TOTAL	AREA =	0.2067 ACRE	
IMPERVIOUS	AREA =	0.0000 ACRE	"c" Value = <b>0.9</b>
GRAVEL	AREA =	0.0000 ACRE	"c" Value = 0.85
PERVIOUS	AREA =	<b>0.2067 ACRE</b>	"c" Value = <b>0.45</b>
COMPOSITE	"c" =	0.45	

<b>Existing Release Rate</b>	e from 2-Year Storm	Event
(See Exhibit of Existi	ng Drainage Area for	'S' &'Tc')
Q =C * I * A		
	C = <b>0.45</b>	(From above calculation)
	I = 6.30	inches/hour, (
A	$\mathbf{A} = 0.21$	acres
(	Q = 0.5860	cfs (Max. release rate for proposed condition)

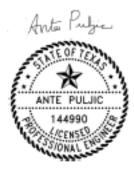
Calculate Composite	Calculate Composite "c" of proposed development					
TOTAL	AREA =	0.2067 ACRE				
IMPERVIOUS	AREA =	0.0460 ACRE	"c" Value = 0.9			
GRAVEL	AREA =	0.0000 ACRE	"c" Value = 0.85			
PERVIOUS	AREA =	0.1607 ACRE	"c" Value = 0.45			
COMPOSITE	"c" =	0.55				



# DETENTION REQUIRED

# (BASED City of Austin Data)

DURATION (HOURS)	I (IN/HR)	INFLOW (CFS)	STORED (CFS)	RESERVOIR (AC-FT)	
0.0833	8.5700	0.975	0.389	0.0027	MA
0.2500	5.8800	0.669	0.083	0.0017	
0.5000	3.9600	0.4503	-0.1357	-0.0057	<u>'</u>
1.0000	2.6800	0.305	-0.281	-0.0234	
2.0000	1.7100	0.194	-0.392	-0.0653	
3.0000	1.2400	0.141	-0.445	-0.1112	
6.0000	0.7020	0.080	-0.506	-0.2531	
12.0000	0.4010	0.046	-0.540	-0.5404	
24.0000	0.2540	0.029	-0.557	-1.1142	



# New Residence, 2715 Longbow Trail Release rate and detention calculation for the 25-Yr. Storm Event Using the 2-Year release rate

5/28/2022

Calculate Composit	e "c" of Existing Area		
TOTAL	AREA =	0.2067 ACRE	
IMPERVIOUS	AREA =	0.0000 ACRE	"c" Value = 0.9
GRAVEL	AREA =	0.0000 ACRE	"c" Value = 0.85
PERVIOUS	AREA =	0.2067 ACRE	"c" Value = 0.45
COMPOSITE	"c" =	0.45	

Existing Release Rate from 2-Year Storm Event					
(See Exhibit of Existing Drainage Area for	'S' &'Tc')				
Q =C * I * A					
C = 0.45	(From above calculation)				
I = 6.30	inches/hour, (				
$\mathbf{A} = 0.21$	acres				
Q = 0.5860 cfs (Max. release rate for proposed condition)					

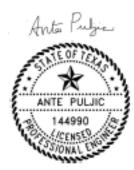
Calculate Composite "c" of proposed development						
TOTAL	AREA =	0.2067 ACRE				
IMPERVIOUS	AREA =	0.0460 ACRE	"c" Value = 0.9			
GRAVEL	AREA =	0.0000 ACRE	"c" Value = 0.85			
PERVIOUS	AREA =	0.1607 ACRE	"c" Value = 0.45			
COMPOSITE	"c" =	0.55				



# DETENTION REQUIRED

# (BASED City of Austin Data)

DURATION (HOURS)	I (IN/HR)	INFLOW (CFS)	STORED (CFS)	RESERVOIR (AC-FT)	
0.0833	10.1000	1.149	0.563	0.0039	
0.2500	7.0400	0.801	0.215	0.0045	MAX
0.5000	4.7200	0.5367	-0.0493	-0.0021	]
1.0000	3.2800	0.373	-0.213	-0.0178	
2.0000	2.1000	0.239	-0.347	-0.0579	
3.0000	1.5200	0.173	-0.413	-0.1033	
6.0000	0.8570	0.097	-0.489	-0.2443	
12.0000	0.4920	0.056	-0.530	-0.5300	
24.0000	0.3180	0.036	-0.550	-1.0997	



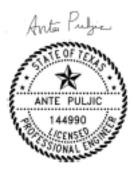
# New Residence, 2715 Longbow Trail Release rate and detention calculation for the 100-Yr. Storm Event Using the 2-Year release rate

5/28/2022

Calculate Composite "c" of Existing Area						
TOTAL	AREA =	0.2067 ACRE				
IMPERVIOUS	AREA =	0.0000 ACRE	"c" Value = 0.9			
GRAVEL	AREA =	0.0000 ACRE	"c" Value = 0.85			
PERVIOUS	AREA =	0.2067 ACRE	"c" Value = 0.45			
COMPOSITE	"c" =	0.45				

<b>Existing Release R</b>	Existing Release Rate from 2-Year Storm Event					
(See Exhibit of Ex	isting Drai	nage Area for 'S' &'Tc')				
$\mathbf{Q} = \mathbf{C} * \mathbf{I} * \mathbf{A}$						
	C =	0.45 (From above calculation)				
	I =	6.30 inches/hour, (				
	$\mathbf{A} =$	0.21 acres				
	<b>Q</b> =	0.5860 cfs (Max. release rate for proposed condition)				

Calculate Composite "c" of proposed development					
TOTAL	AREA =	0.2067 ACRE			
IMPERVIOUS	AREA =	0.0460 ACRE	"c" Value = 0.9		
GRAVEL	AREA =	0.0000 ACRE	"c" Value = 0.85		
PERVIOUS	AREA =	0.1607 ACRE	"c" Value = 0.45		
COMPOSITE	"c" =	0.55			



# **DETENTION REQUIRED** (BASED City of Austin Data)

DURATION (HOURS)	I (IN/HR)	INFLOW (CFS)	STORED (CFS)	RESERVOIR (AC-FT)	
0.0833	12.5000	1.421	0.835	0.0058	MAX
0.2500	6.0800	0.691	0.105	0.0022	
0.5000	2.4600	0.2797	-0.3063	-0.0128	]
1.0000	4.3700	0.497	-0.089	-0.0074	
2.0000	2.8300	0.322	-0.264	-0.0440	
3.0000	2.0400	0.232	-0.354	-0.0885	
6.0000	1.1400	0.130	-0.456	-0.2282	
12.0000	0.8060	0.092	-0.494	-0.4943	
24.0000	0.5640	0.064	-0.522	-1.0437	



## DRAINAGE AREA AND WATER QUALITY VOLUME DATA:

Drainage Area (DA)	.21	ac		
Drainage Area Impervious Cover (IC)	22.5	%	.046	ac
Capture Depth (CD)	12	in		_
Total Site Required Water Quality Volume (WQV=CD*DA*3630)	9,147.6	cf		
and COO A Country of the Country of	0.79 00.0	cf		

## VEGETATIVE FILTER STRIP CALCULATIONS:

Drainage Area to Proposed Vegetative Filter Strip	.095	ac
Impervious cover of area treated by Vegetative Filter Strip (Treated IC)	.04	ac
Soil Type (Type A, B, C, Amended C, or Amended D)	A/B	

	Required	<u> </u>	Provided	<u>.</u>
Size of Vegetative Filter Strip per ECM 1.6.7(B) - Table B-1	.02	ac	.02	ac
Width of Vegetative Filter Strip (VPSwidth)			17	n.
Hydraulic Loading Rate (HLR <sub>VFS</sub> - Q <sub>peak</sub> , VFS <sub>witth</sub> )			.004	cfs/ft

## WATER QUALITY CREDIT:

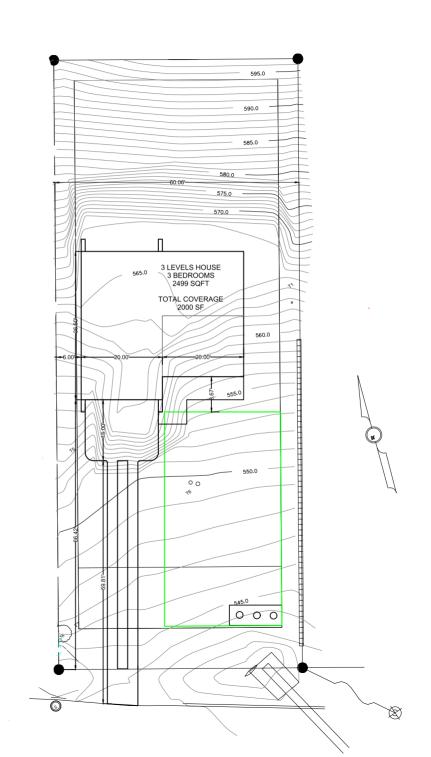
Impervious Area Factor (IAF = Treated IC / IC)	maximum 1.0	.84	
Percent Infiltration Provided by VFS (IVES) per ECM 1.6.7.5(B) - Table B-2		50	%
BMP Design Factor (BMPDF)			
For HLR<0.05 cfs/ft: BMPDF = $I_{VFS}$ / 65	maximum 1,0	.76	-
For HLR>0.05 and <0.15 cfs/ft: BMPDF = $(I_{VFS} / 65)*(0.05/HLR_{VFS})$	maximum 1.0	N/A	
Water Quality Credit (WQC = IAF * BMPDF)	maximum 1.0	.63	_
Water Quality Volume Reduction (WQV * WQC)		5762	cf





2715 LONG BOW TRAIL

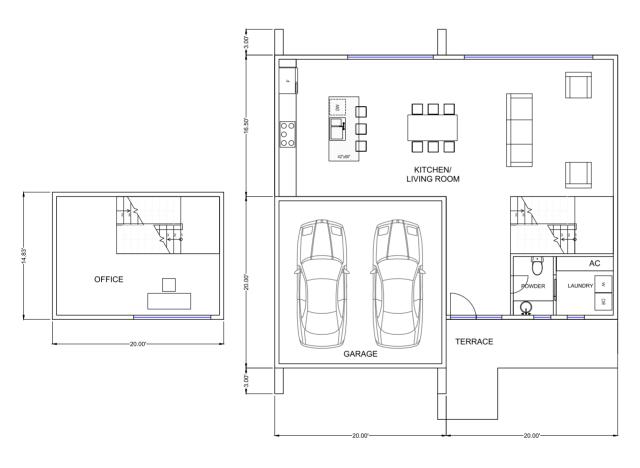
# SITE PLAN

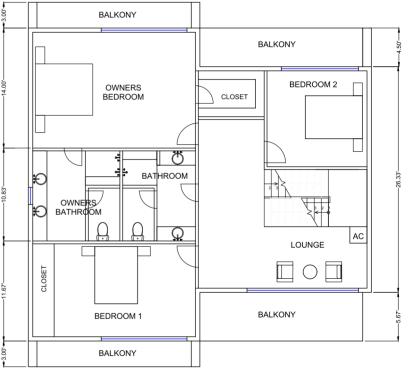




# 2715 FLOOR PLANS

# **HEATED AREA 2499 SF**







# **VISUALISATIONS**





# **VISUALISATIONS**







+15122994069 artvillageus@gmail.com www.artvillage.us 2202 Crazyhorse Pass, Austin TX 78734



February 24, 2022

Mr. Jon Kaplan C.P.B.D. - 44-752 ICC Combination Inspector - 9061592 Urban Building Services of Texas LLC 214 Sailors Run Lakeway, TX 78734

Re: Lot 876

2715 Longbow Trail Austin, TX 78734

Dear Mr. Kaplan,

This letter is in response to your request for a Tree Protection Plan for Lot 876 on Longbow Trail, TX 78734. I visited the site on February 22, 2022. I met with you to review the design plans and develop a tree condition report.

My report is attached. Please feel free to contact me regarding specification details or with any other questions.

Respectfully,

Scott E. George

Austin Beautiful Trees - President

soit E beorg

American Society of Consulting Arborists – Registered Consulting Arborist # 752 International Society of Arboriculture Certified Arborist TX #3996-A

Risk Assessment Qualified Arborist

Oak Wilt Risk Assessment Qualified Arborist

Wildfire Risk Assessment Qualified Arborist



# Tree Condition Report - Lot 876 February 24, 2022

Prepared for: Jon Kaplan

Property Address: 2715 Long Bow Trail

Austin, Texas 78734

**Tree:** Live oak (Quercus fusiformis) **Location**: northeast side of lot

Tree Tag Number: T2

**DBH:** 20.25"

I measured the tree at four feet six inches from the high side of the grade. I did not observe obvious defects in the tree and consider the tree in good condition.

**Tree:** Live oak (Quercus fusiformis) **Location:** Southeast side of lot

Tree Tag Number: T6

**DBH:** 23.5"/22.5" twin trunked and combined measurement of 34.75"

The tree is designated as a "Heritage" tree by the City of Austin (see Appendix A, Photo 1). Heritage trees are a group of protected trees measuring 24" and larger. I observed multiple obvious defects in the tree and determined that the subject tree was in "Fair" condition. The eastern (or right side) leader of the tree has a significant column of dead wood protruding from the living leader (see Appendix A, Photo 2). This old column of dead wood was "Imminent" for failure. I observed another large column of dead wood that emerged from the upper canopy of the left trunk. This upper leader with the dead column of wood was also "imminent" for failure (see Appendix A, Photo 3).

I also observed numerous large scaffold branches with significant decay pockets in both trunks (see Appendix A, Photos 4 and 5). Most of the defects I observed were "Probable" for failure within an eighteen-month time frame.

The mitigation option with the lowest residual risk is removal of the large columns of dead wood. It is my opinion that the scaffold branches with the most significant decay pockets also need to be partially removed back to healthier sections of wood. I estimated that this could require pruning approximately fifty percent of the existing tree canopy and perhaps more. This would require a permit from the City of Austin and would exceed industry and municipal standards for pruning in a single year. Tree health



could be compromised by the scope of pruning required to reduce the likelihood of large branch failures.

I observed that the remaining surveyed trees on Lot 876 were not of protected size. Please feel to contact me with questions regarding this report.

Respectfully,

Scott E. George

Austin Beautiful Trees - President

Sarit E beorg

American Society of Consulting Arborists – Registered Consulting Arborist # 752

International Society of Arboriculture Certified Arborist TX #3996-A

Risk Assessment Qualified Arborist

Oak Wilt Risk Assessment Qualified Arborist

Wildfire Risk Assessment Qualified ArboristMember



Photo 1 - Live oak (Quercus fusiformis)

Location: Southeast side of lot

**Tree Tag Number:** T6

DBH: 23.5"/22.5" twin trunked and combined measurement of 34.75"

Note: General overview picture





Photo 2 - Live oak (Quercus fusiformis)

Location: Southeast side of lot

Tree Tag Number: T6

DBH: 23.5"/22.5" twin trunked and combined measurement of 34.75"

**Note:** The eastern (or right side) leader of the tree has a significant column of dead wood protruding from the living leader. This old column of dead wood was "Imminent"

for failure.

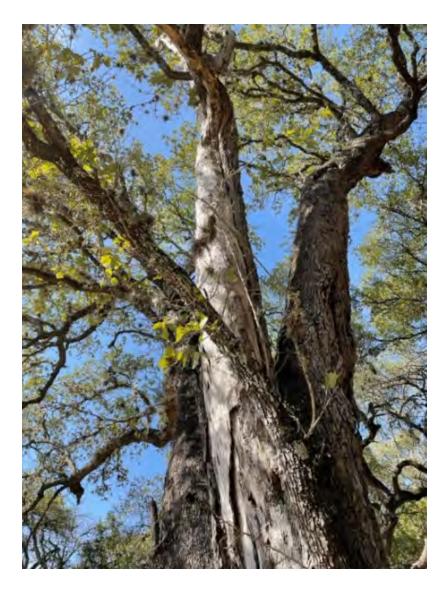




Photo 3 - Live oak (Quercus fusiformis)

Location: Southeast side of lot

**Tree Tag Number:** T6

DBH: 23.5"/22.5" twin trunked and combined measurement of 34.75"

**Note:** Another large column of dead wood that emerged from the upper canopy of the left trunk. This upper leader with the dead column of wood was also "imminent" for

failure.

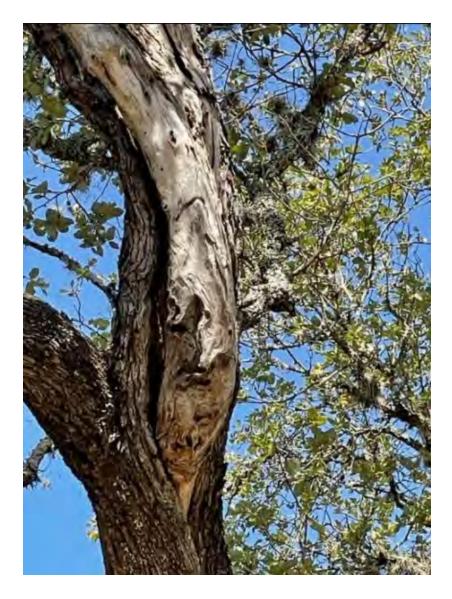




Photo 4 and 5 - Live oak (Quercus fusiformis)

Location: Southeast side of lot

**Tree Tag Number:** T6

DBH: 23.5"/22.5" twin trunked and combined measurement of 34.75"

**Note:** Numerous large scaffold branches with significant decay pockets in both trunks. Most of the defects I observed were "Probable" for failure within an eighteen-month time

frame.







#### **Appendix B - Assumptions and Limiting Conditions**

- 1. Loss or alteration of any part of this report invalidates the entire report.
- The report and the opinions expressed herein represent the professional opinion of the author. The fee generated from this report is not contingent upon any prior or future outcome or subsequent event. Any future work done by this author related to this tree or other trees of the client shall be billed separately from this work.
- 3. Possession of this report or a copy, therefore, does not imply the right of publication or use for any purpose by any other than the person to whom it is addressed, without the prior, expressed written or verbal consent of the author.
- 4. The author does not have any financial or business associations with any commercial arborist. Any future work done by a commercial arborist shall be performed via a separate contract between the client and the arborist.
- 5. Care has been taken to obtain information from reliable sources. The author cannot guarantee accuracy nor be responsible for the information provided by others.
- 6. Unless otherwise specified, the information contained in this report covers only those items that were examined and reflects the condition of those items at the time of inspection. The inspection is limited as stated in the text of this report. There is no warranty or guarantee that problems or deficiencies of the tree in question will not arise in the future.
- 7. The author and Austin Beautiful Trees cannot guarantee the health or safety of any tree, regardless of any examination given or care treatments recommended and/or employed. Even with the best of care, trees sometimes die and/or branches fail. Therefore, the author and Austin Beautiful Trees make no such guarantees and are at no fault if such occurs.
- 8. The author shall not be required to give testimony or attend court by reason of this report unless subsequent contractual arrangements are made, including payment of an additional fee for such services as described in a subsequent contract for services.



#### **Appendix C - Certificate of Performance**

- I, Scott George, certify that:
- I have personally inspected the subject trees of this report and I have stated my findings accurately;
- That the analysis, opinions, and conclusion stated herein are my own;
- That my analysis, opinions, and conclusions were developed and this report has been prepared according to commonly accepted arboricultural practices and standards;
- That no one provided significant professional assistance to the author, unless specified herein;
- That my compensation is not dependent upon the reporting of a predetermined conclusion or opinion that favors my cause, my client, or any other party;
- I have no current or prospective interest in the tree or the property that is the subject of this report and have no personal interest or bias with respect to the party(ies) involved.

I further certify that I am a member in good standing of the American Society of Consulting Arborists (ASCA) and the International Society of Arboriculture (ISA).

Scott E. George

February 24, 2022

and Ebeory



February 24, 2022

Mr. Jon Kaplan C.P.B.D. - 44-752 ICC Combination Inspector - 9061592 Urban Building Services of Texas LLC 214 Sailors Run Lakeway, TX 78734

Re: Lot 877

2717 Long Bow Trail Austin, TX 78734

Dear Mr. Kaplan,

This letter is in response to your request for a Tree Protection Plan for Lot 877 on Longbow Trail, TX 78734. I visited the site on February 22, 2022. I met with you to review the design plans and develop a tree condition report.

My report is attached. Please feel free to contact me regarding specification details or with any other questions.

Respectfully,

Scott E. George

Sarit E beorg

Austin Beautiful Trees - President

American Society of Consulting Arborists – Registered Consulting Arborist # 752 International Society of Arboriculture Certified Arborist TX #3996-A

Risk Assessment Qualified Arborist

Oak Wilt Risk Assessment Qualified Arborist

Wildfire Risk Assessment Qualified Arborist



# **Tree Condition Report - Lot 877 February 24, 2022**

Prepared for: Jon Kaplan

Property Address: 2717 Long Bow Trail

Austin, Texas 78734

Tree: Live oak (Quercus fusiformis)

Location: southwest side of lot closest to Long Bow Trail

Tree Tag Number: T13

**DBH**: 21"

I did not observe obvious defects in the tree and consider the tree in good condition.

**Tree:** Live oak (Quercus fusiformis)

**Location:** east side of lot **Tree Tag Number:** T23

**DBH:** 14"

Live oak number T23 is indicated as a single twin trunked tree, and the survey shows that each trunk measured 15." When I reviewed live oak number T23, I did not observe that the trees shared any common tissue, included bark, or juncture above grade. I performed minor excavation to the area between the trees, and still did not observe any common tissue (see Appendix A, Photos 1, 2, and 3). I measured each of these individual trees as 14" dbh and as such, they are not of protected size.

**Tree:** Live oak (Quercus fusiformis)

**Location:** east side of lot **Tree Tag Number:** T24

**DBH**: 21"

I observed a decay column in the trunk and basal area of the tree and a fungal fruiting body ordinarily associated with heartwood decay (see Appendix A, Photo 4). The tree has numerous long branches and poor form. The overall condition of this tree is fair to poor.

**Tree:** Live oak (Quercus fusiformis) **Location:** northeast side of lot

Tree Tag Number: T25

**DBH:** 20.75" measured from the high side of grade surrounding the tree



I observed several co-dominant branch junctures in this tree, and in general, the tree had fair form (see Appendix A, Photos 5 and 6). While I observed several leaning and over-extended branches, the canopy appeared to be evenly distributed (see Appendix A, Photo 7). The overall condition of the tree was good. Proper pruning can begin to correct form issues and should be within the protection limits of no more than 25% removed in a calendar year.

I observed that the remaining surveyed trees on Lot 877 were not of protected size.

Please feel to contact me with questions regarding this report.

Respectfully,

Scott E. George

Austin Beautiful Trees - President

Frit E beorg

American Society of Consulting Arborists – Registered Consulting Arborist # 752 International Society of Arboriculture Certified Arborist TX #3996-A

Risk Assessment Qualified Arborist

Oak Wilt Risk Assessment Qualified Arborist

Wildfire Risk Assessment Qualified ArboristMember



Photos 1-3 - Live oak (Quercus fusiformis)

**Location:** east side of lot **Tree Tag Number:** T23

**DBH**: 14"

**Note:** Live oak number T23 is indicated as a single twin trunked tree, and the survey shows that each trunk measured 15." When I reviewed live oak number T23, I did not observe that the trees shared any common tissue, included bark, or juncture above grade. I performed minor excavation to the area between the trees, and still did not observe any common tissue. I measured each of these individual trees as 14" dbh and as such, they are not of protected size.





Photo 4 - Live oak (Quercus fusiformis)

**Location:** east side of lot **Tree Tag Number:** T24

**DBH:** 21"

**Note:** Decay column in the trunk and basal area of the tree and a fungal fruiting body ordinarily associated with heartwood decay. The tree has numerous long branches and





Photos 5-6 - Live oak (Quercus fusiformis)

**Location:** northeast side of lot

**Tree Tag Number:** T25

**DBH:** 20.75" measured from the high side of grade surrounding the tree

Note: I observed several co-dominant branch junctures in this tree, and in general, the

tree had fair form.





Photo 7 - Live oak (Quercus fusiformis)

Location: northeast side of lot

**Tree Tag Number:** T25

DBH: 20.75" measured from the high side of grade surrounding the tree

**Note:** While I observed several leaning and over-extended branches, the canopy appeared to be evenly distributed. The overall condition of the tree was good. Proper pruning can begin to correct form issues and should be within the protection limits of no

more than 25% removed in a calendar year.





#### **Appendix B - Assumptions and Limiting Conditions**

- 1. Loss or alteration of any part of this report invalidates the entire report.
- 2. The report and the opinions expressed herein represent the professional opinion of the author. The fee generated from this report is not contingent upon any prior or future outcome or subsequent event. Any future work done by this author related to this tree or other trees of the client shall be billed separately from this work.
- 3. Possession of this report or a copy, therefore, does not imply the right of publication or use for any purpose by any other than the person to whom it is addressed, without the prior, expressed written or verbal consent of the author.
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- Care has been taken to obtain information from reliable sources. The author cannot guarantee accuracy nor be responsible for the information provided by others.
- 6. Unless otherwise specified, the information contained in this report covers only those items that were examined and reflects the condition of those items at the time of inspection. The inspection is limited as stated in the text of this report. There is no warranty or guarantee that problems or deficiencies of the tree in question will not arise in the future.
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- The author shall not be required to give testimony or attend court by reason of this report unless subsequent contractual arrangements are made, including payment of an additional fee for such services as described in a subsequent contract for services.



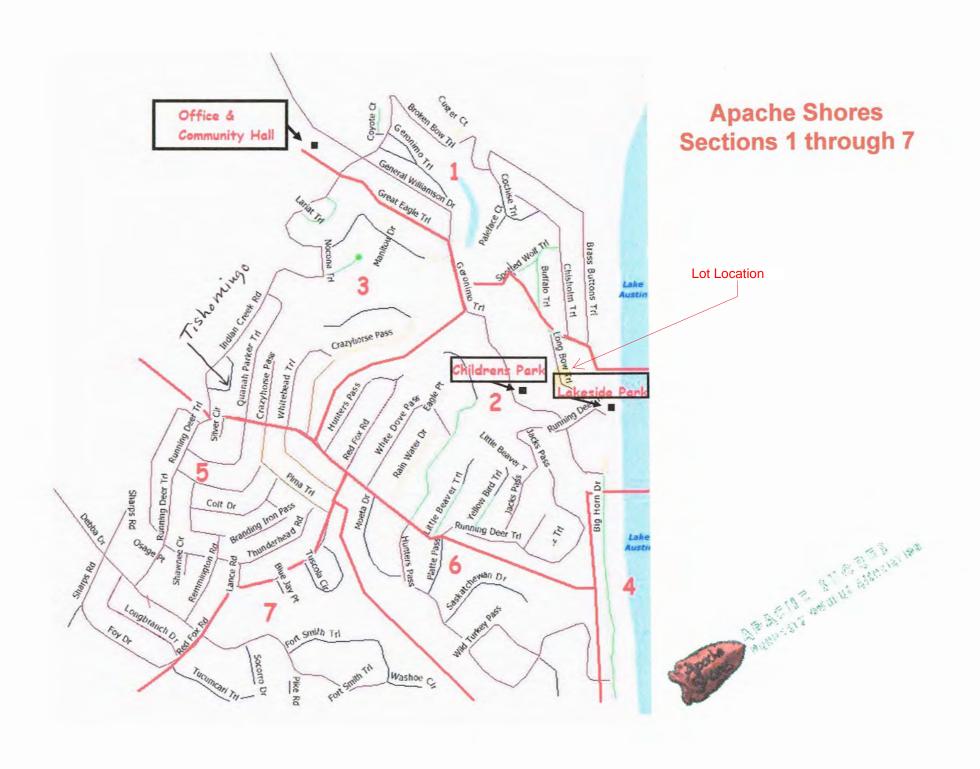
#### **Appendix C - Certificate of Performance**

- I, Scott George, certify that:
- I have personally inspected the subject trees of this report and I have stated my findings accurately;
- That the analysis, opinions, and conclusion stated herein are my own;
- That my analysis, opinions, and conclusions were developed and this report has been prepared according to commonly accepted arboricultural practices and standards;
- That no one provided significant professional assistance to the author, unless specified herein;
- That my compensation is not dependent upon the reporting of a predetermined conclusion or opinion that favors my cause, my client, or any other party;
- I have no current or prospective interest in the tree or the property that is the subject of this report and have no personal interest or bias with respect to the party(ies) involved.

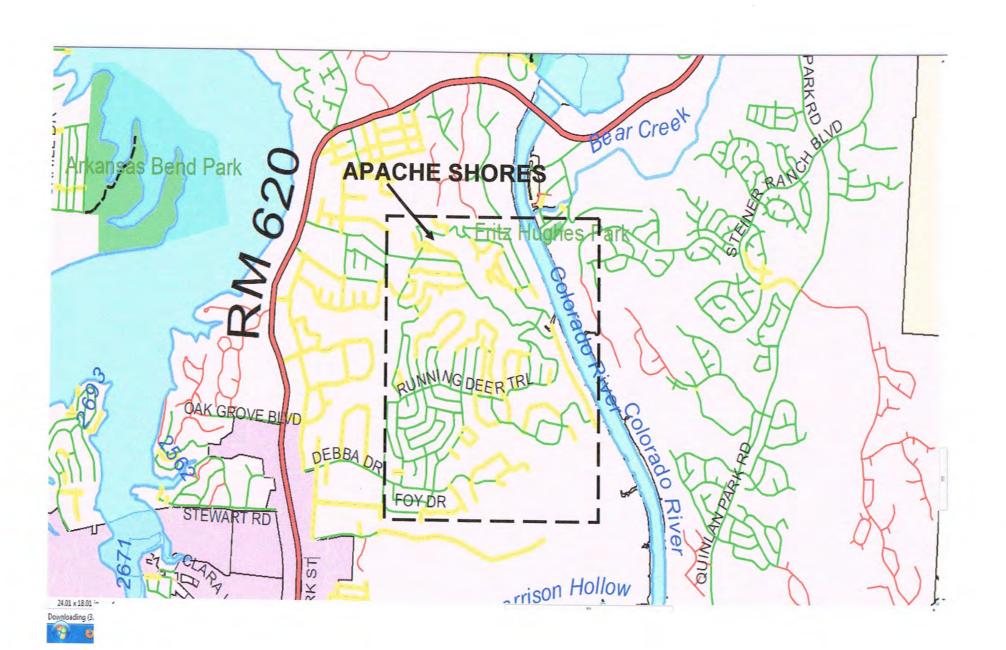
I further certify that I am a member in good standing of the American Society of Consulting Arborists (ASCA) and the International Society of Arboriculture (ISA).

Scott E. George February 24, 2022

and Ebeory



# Roads in GREEN are maintained by Travis County



Nevas-69 12 OH 13 6279 5-60

DECLARATION OF RESTRICTIONS FOR AFACHE SHORES, SECTION 2
TRAVIS COUNTY, TEXAS

23-2467 5

THE STATE OF TEXAS
COUNTY OF TRAVIS

KNOW ALL MEN BY THESE PRESNETS:

THAT APACHE SHORES, INC., as owner of all of the lots in APACHE SHORES, Section 2, a subdivision in Travis County, Texas, according to the map or plat thereof filed for record in Plat Book 48, Page 58, of the Plat Records of Travis County, Texas, does hereby declare that the above Section or Installment in the above subdivision shall from and after the date of this instrument be subject to the covenants, conditions, easements, restrictions and reservations hereinafter set out, as follows, to-wit:

- 1. Lots 852 and 899 shall not be subject to any of the hereinafter covenants, conditions, easements, restrictions or reservations. All of the rest of the lots are subject to the following, to-wit:
- 2. Not more than one single family dwelling may be erected or constructed on any one lot, nor more than one other building for garage or storage purposes and provided further that no building shall be eracted prior to the erection of a dwelling house. No accessory or temporary building shall be used or occupied as living quarters. No building shall be constructed or erected on any lot unless built of solid or permanent material. Wood exteriors shall be stained or painted with at least two coats of stain or paint. No structure shall have tar paper, roll brick siding or similar material on the outside walls. No house trailers, tents, shacks or other similar structures shall be erected, moved to, or placed upon any lot. All buildings must be completed within six (6) months from the date construction commences.

- 3. No residence shall have less that 650 square feet of.

  living space on the ground or first floor, exclusive of porch area.

  All building plans are subject to approval of APACHE SHORES, INC.,

  or its assigns. No porch or other projection of any building shall
  extend nearer than 10 feet from any road right—of—way, nor nearer
  than 5 feet from the property line of any abutting property owner,

  nor within 30 feet from the normal high water line of Lake Austin,
  without the written permission of APACHE SHORES, INC., its successors or assigns.
- 4. No noxious or offensive trade or activity shall be permitted on any lot, nor shall anything be done thereon which shall be or become an annoyance or nuisance to the neighborhood. No animals or fowl shall be kept or maintained on said lots except customary household pets. No signs of any kind shall be displayed on any lot without the written permission of APACHE SHORES, INC., or its successors or assigns. No septic tanks shall be installed on any lot without prior approval of all appropriate governmental authorities. Further, all lots abutting Lake Austin shall be subject to the terms and restrictions set out on the recorded plat with regard to septic and sewer systems.
- 5. No boat docks, floats, or other structures shall be constructed or placed into or on Lake Austin without having first complied with all the rules and regulations of the City of Austin,

  Texas, and/or the Lower Colorado River Authority, but in no event shall such structures extend into the Lake from the property line more than 20 feet.
- 6. APACHE SHORES, INC., for itself, its successors, assigns and licensees reservs a 10 foot wide easement along the road rights-of-way, a 6 foot wide easement along the rear line, and a 5 foot wide easement along the side line of each and every lot for the purpose of installing, operating and maintaining the utility lines and mains thereon, together with a right to trim and/or cut or remove any trees and/or brush and the right to locate guy wires, braces and anchors wherever for said installation,

operation or maintenance; together with the right to install, operate and maintain gas and water mains and appurtenances thereto; sewer lines, culverts and drainage ditches, reserving also the right of ingress and egress to such areas for any other purposes mentioned above; excepting, however, where an owner of two or more adjoining lots constructs a building which will cross over or through a common lot line, said common lot line shall not be subjected to the aforementioned side lot line easements. APACHE SHORES, INC., for itself, its successors, assigns and licensees also reserves the right to cause or permit drainage of surface waters over and /or through said lots. The cwners of said lots shall have no cuase of action against APACHE SHORES, INC., its successors, assigns or licensees either at law or in equity excepting in the case of willful negligence, by reason of any damage caused to said lots or improvements thereon in installing, operation or maintaining the above mentioned installations.

- 7. No dwelling shall be placed or erected on any tract of land or re-subdivided lots smaller than the lots as subdivided and shown on the recorded plat.
- 8. No oil drilling, oil development operations, oil refining, quarrying or mining operations of any kind shall be permitted upon or in any lot, nor shall oil wells, tanks, tunnels, mineral excavations or shafts be permitted upon or in any lot. No derrick or other structure designed for use in boring for oil or natural gas shall be erected, maintained or permitted on any lot.
- 9. No lot shall be used or maintained as a dumping ground for rubbish. Trash, garbage or other waste shall not be kept except in sanitary containers. All incinerators or other equipment for the storage or disposal of such material shall be kept in a clean and sanitary condition.
- 10. No individual water supply system shall be permitted on any lot. All water must be furnished by APACHE SHORES UTILITY CORP., its successors or assigns.

- These restrictions shall be considered as covenants running with the land, and shall bind the purchasers, their heirs, executors, administrators, and assigns, and if said owners, their heirs, executors, successors or assigns shall violate or attempt to violate any of the covenants or restrictions herein contained, it shall be lawful for any person or persons owning any such lots in the Subdivision to prosecute any proceeding at law or in equity against the person or persons violating or attempting to violate any such covenants or restrictions and either to prevent him or them from doing so by appropriate injunctive relief, or to recover damages for such occurrence. Further, APACHE SHORES Property Owner's Association, Inc., may in its name enforce these restrictions by any proceeding at law or in equity. These restrictions shall be in force and effect for a period of twenty-five (25) years from the date of the execution hereof, after which time said covenants and restrictions shall be automatically extended for successive periods of ten (10) years unless an instrument signed by a majority of the then owners of the lots has been recorded, agreeing to change said covenants and restrictions in whole or in part.
- 12. Invalidation of any one or more of these covenants and restrictions by judgment or court order shall in no wise affect any of the other provisions or restrictions which on the other hand shall remain in full force and effect.
- shall be subject to an annual maintenance fee charge of \$35.00, which each lot owner agrees to pay to APACHE SHORES Property Owner's Association, Inc., its successors and assigns, annually on the first day of March commencing in the year following the date of the purchase of a lot by an owner. To secure the payment of said maintenance fee APACHE SHORES Property Owners's Association, Inc., is hereby granted a lien upon each lot to secure the payment thereof. APACHE SHORES, INC., its successors and assigns, does hereby reserve a lien against each lot in APACHE SHORES, Section 2, to secure the

prompt payment of the water assessments imposed upon each lot at the time water is made available to each lot, which assessment is in the amount of \$3.00 per running foot, with a minimum assessment of \$180.00.

(CORPORATE SEAL) EXECUTED this 1914 day of November, 1969.

ATTEST:

APACHE SHORES, INC.

istant Secretary

President

THE STATE OF TEXAS

ĭ

COUNTY OF HARRIS

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BEFORE ME, the undersigned, on this day personally appeared JOHN M. PENNINGTON, Vice President of APACHE SHORES, INC., known to me to be the person and officer whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed, and in the capacity therein stated as the act and deed of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this 14 th day of Neveriber , A.D., 1969.

> Notary Public in and for Harris County, Texas

INDTARY SEAL

STATE OF TEXAS COUNTY OF TRAVIS I hereby certify that this instrument was FiLED on the date and at the lime stamped hereon by me; and was duly RECORDED, in the Volume and Fare of the named RECORDS Of Trayls County, Texas, as Stomped hercon by me, on

NOV 25 1969

COUNTY CLERK THAYIS COUNTY, TEXAS

1307