



CITY OF WEST LAKE HILLS, TEXAS
NOTICE OF ZONING & PLANNING COMMISSION (ZAPCO) REGULAR MEETING
Wednesday, February 18, 2026 at 6:30 PM

Notice is hereby given that the Zoning and Planning Commission (ZAPCO) of the City of West Lake Hills, Texas, will hold a Regular Meeting on the 18th day of February, 2026 at 6:30 p.m., in the Council Chamber, Municipal Building, 4010 Bee Cave Road, West Lake Hills, Texas, at which time the following items will be discussed, to-wit:

REMOTE ACCESS - Join Zoom Meeting at <https://us02web.zoom.us/j/3499549035>
Or via telephone: Dial (346) 248-7799
Meeting ID: 349 954 9035

If you wish to speak during the meeting or provide written comments, please email your name, phone number, comments, and the item number you wish to speak on to planner@westlakehills.gov by 1:00 P.M. on February 18, 2026.

1. Call to Order. Chairman Robert Meisel.
2. Citizen Communications The Commission welcomes public comments at this point on any issue. If the issue is listed on the agenda, the speaker may choose to comment during the Public Comment period or when the specific agenda item is taken up by the Commission later in the meeting. The Commission cannot respond to or discuss matters not listed on the agenda. The Commission may provide factual information, refer the item to a staff member, or request the item be added to a future meeting agenda. Speakers shall limit their comments to five (5) minutes each.
3. Consent Agenda The following items are considered to be self-explanatory by the Commission and will be enacted with one motion. There will be no separate discussion of these item/s unless a Commission Member or citizen so requests.
 1. Approval of the January 21, 2026 Zoning and Planning Commission minutes
 2. Report of previous cases ZAPCO acted on by BOA/City Council

4. **Public Hearing 300 Block of Laurel Valley Rd.:** Discuss and make recommendations on proposed variances:
 1. Allow for a driveway height of 15 feet 10 inch above natural grade, where 6 feet above natural grade is the maximum (Section 22.03.175(e)(1))
 2. Allow building height of 35 feet, where 32 feet above natural grade on a slope of 25% or greater is the maximum (Section 22.03.279(b))
 3. Encroach 20 feet into the platted 50-foot front building setback along Yaupon Valley Road (Section 22.03.281)
 4. Encroach 10 feet into both 20-foot side setbacks (Section 22.03.281)
 5. Allow fills up to 15 feet 6 inches where the maximum allowed is 6 feet on slopes of less than 35% (Section 22.03.170(b) – Drainage and Erosion Control Design Manual Section 7.4.1)
 6. Allow for grading of up to 8 feet 3 inches in areas of slopes greater than 35% where none is allowed (Section 22.03.170(b) – Drainage and Erosion Control Design Manual Section 7.4.1)
 7. Allow grading up to 15 feet 6 inches in the setbacks, where 18 inches is the maximum (Section 22.03.170(f)).

Applicant: Matt Garcia, Matt Garcia Design

5. **Public Hearing 300 Block of Laurel Valley Rd.:** Discuss and make recommendations to City Council on a proposed variance to allow replacement trees for unpermitted removals to be planted at the end of the project, more than 601 days since final order (Section 22.03.304(c)(5)).

Applicant: Matt Garcia, Matt Garcia Design

6. **Public Hearing 101 Westhaven Dr.:** Discuss and make a recommendation to the Board of Adjustment on variances to allow for an accessory structure:
 1. To encroach 22 feet into the 30-foot front setback along Bee Cave Road (Section 22.03.276 and 22.03.281)
 2. To encroach 20 feet into the 25-foot rear setback (Section 22.03.276 and 22.03.281)

Applicant: Pramod Patil, Owner

7. **Public Hearing 102 Swiftcurrent Trl.:** Discuss and make a recommendation on a variance to allow a second driveway when a maximum of one is allowed (Section 22.03.175(e)(2)).

Applicant: Francisco Rios, Property Owner

8. Adjournment. Chairman Robert Meisel.

By Jennifer C. Bills, Director of Building &
Development Services

Certificate

I certify that the above Notice of the February 18, 2026 Zoning & Planning Commission Meeting was posted on the bulletin board at the Municipal Building, 4010 Bee Cave Road, West Lake Hills, Texas on Thursday, February 12, 2026 at 5:00 pm. and will remain posted continuously until said meeting is convened.

By Joel Sherrouse, Development Coordinator

The City of West Lake Hills is committed to compliance with the Americans with Disabilities Act. Reasonable accommodations and equal access to communications will be provided upon request.

All items on the agenda are for discussion and/or action. ZAPCO reserves the right to adjourn into executive session at any time during the course of this meeting to discuss any of the matters listed above, as authorized by Texas Government Code Sections 551.071 (Consultation with Attorney), 551.072 (Deliberations about Real Property), 551.073 (Deliberations about Gifts and Donations), 551.074 (Personnel Matters), 551.076 (Deliberations about Security Devices), and 551.086 (Economic Development).

City of West Lake Hills

MINUTES OF A ZONING & PLANNING COMMISSION (ZAPCO)

REGULAR MEETING

Wednesday, January 21, 2026 at 6:30 PM

1. **Call to Order: Chair Robert Meisel**

- a. Meeting begins at 6:30pm
- b. Roll Call
 1. Chair Robert Meisel: Present
 2. Vice-Chair Jim Pledger: Present
 3. Commissioner Julia Webber: Present
 4. Commissioner Karen Bartoletti: Present
 5. Commissioner Patrick Stewart: Present
 6. Commissioner Laurie Maccini: Present

2. **Citizen Communications:**

- a. No public comments

3. **Consent Agenda:** The following items are considered to be self-explanatory by the Commission and will be enacted with one motion. There will be no separate discussion of these item/s unless a Commission Member or citizen so requests.

- a. Approval of the November 14, 2025 Zoning and Planning Commission Workshop Minutes
- b. Approval of the November 19, 2025 Zoning and Planning Commission Meeting Minutes
- c. Approval of the January 7, 2026 Zoning and Planning Commission Workshop Minutes
- d. Report of previous ZAPCO cases acted on by the BOA/City Council

Action: Commissioner Stewart moves for approval of the Consent Agenda

- i. Commissioner Maccini Seconds
- ii. Motion carries unanimously (5–0)

4. **Public Hearing 109 Swiftcurrent Trl.:** Discuss and consider a recommendation to the City Council on variances for a fence:

1. To allow for a fence encroachment into the 30-foot front-yard fence setback (Section 22.03.173(d)(6)(B)(ii)).

2. To allow for the placement of fence posts within the ½ and ¼ critical root zones of protected trees (Section 22.03.3052 (b)).

Applicant: Sara Charles, Property Owner

The application was withdrawn by applicant shortly before the meeting.

5. **Public Hearing 4904 Old Bee Cave Rd:** Discuss and consider a recommendation to the City Council on the following variances for a fence:
 1. To allow for a fence encroachment into the 30-foot front-yard fence setback (Section 22.03.173(d)(6)(B)(ii)).
 2. To allow for the installation of a fence that does not allow 80% visibility through the fence (Section 2.03.173(d)(6)(A)(i)).
 3. To allow for a fence without the required minimum 80% landscaping screening (Section 22.03.173(d)(6)(A)(i)).
 4. To allow for the installation of a fence with a height of 7 feet above natural grade (Section 22.03.173(d)(9)(A)).

Applicant: Dylan Freytag, Property Owner

A. Staff Report:

- a. Director Bills describes fence that was installed without permits. The owner was misinformed by their contractor that they did not need permits for the fence. Director Bills describes the four areas of code where the fence, as installed, would require variances. Director Bills also explains that the location of the fence would require any screening to be located in the Right-of-Way.
- b. Commissioner Pledger points out that a written comment in opposition to the fence at 109 Swiftcurrent provided prior to the 4904 Old Bee Cave variance application also included this fence.
- c. Commissioner Bartoletti asks if there are two legal lots involved
 - i. Director Bills clarifies there are not two legal lots involved, just one
- d. Commissioner Webber asks Director Bills if there are any possible repercussions for contractors misinforming clients or violating code.
 - i. Director Bills explains that contractor registrations can be suspended for repeated violations and that citations can be issued to contractors.

- e. Commissioner Maccini asks about the right-of-way vegetation and who takes care of it.
 - i. Director Bills explains that homeowners are responsible for the vegetation from the property line to the street, but TXDOT and utility providers will sometimes maintain or clear the vegetation.

B. Public Comments:

- a. **Dylan Freytag, Applicant:** Shares prepared presentation and answers questions from commissioners
- b. **Lousia Cauvin, Neighbor:**
 - i. Spoke in opposition to variance

C. Discussion:

- a. Commissioner Stewart asks applicant about a gate and Knox box encroaching on the ROW.
- b. Commissioner Maccini indicates that the property has been between commercial property for decades but understands the increase in traffic along Bee Cave. Supportive of screening, but not in favor of proximity of fence to ROW.
- c. Chair Meisel points out that the deed is 3 months old, and that traffic has not increased substantially since the time at which the applicant chose to purchase the property, and also believes that the contractor is responsible, not the homeowner or the City.
- d. Commissioner Webber indicates they are not in favor of variance for location but may be willing to compromise on height or a certain percentage of transparency.

D. Action:

- a. Commissioner Pledger moves to forward the variances to City Council with a recommendation of **denial** based on a lack of hardship.
 - i. Commissioner Webber seconds
 - ii. Motion carries unanimously (5-0)

The variance request and recommendation will be forwarded to the February 11, 2026 City Council Meeting.

- 6. Public Hearing 116 Skyline Dr.: Discuss and make a recommendation to City Council on the following variances for a fence:

- 1. To allow for the installation of a fence without required landscaping visibly screening a minimum of 80% of the fence between the street and fence (Section 22.03.173(d)(6)(A)(i)).

2. To allow for the installation of a fence that does not allow 80% visibility through the fence (Section 22.03.173(d)(6)(A)(i)).

Applicant: Bryan Sharples, Property Owner

A. Staff Report:

- a. Director Bills describes the previous fence variance at the property approved in 2011 and describes the 80% transparency threshold with the new style of fence which is transparent from a specific angle, but becomes opaque when moving along the fence.
 - a. Director Bills also explains that while the variance request indicated that the fence met the height limits established in conditions for previous variance, that staff measured the fence at 6 feet prior to meeting, which would require an additional variance request.
- b. Commissioner Pledger asks about the screening of the fence with vines.
 - a. Commissioner Webber points out that there are no vines on the City's approved plant list.
- c. Commissioner Stewart asks about the 80% transparency rule at all angles
- d. Commissioner Webber asks if the previous variance addressed screening
 - a. Director Bills indicates the previous variance did not address screening directly, but that it specifically indicated all other ordinances related to fences should be followed.
- e. Commissioner Pledger indicates that he believes that the fence is compliant.

B. Public Comments:

- a. **Bryan Sharples, Applicant**
 - a. Shares presentation regarding fence
- b. **Jeffery Dochen, Neighbor**
 - a. Speaks in favor of variance

C. Discussion:

- a. Commissioner Maccini expresses sympathy due to lights, but that other solutions exist that do not require variances.
- b. Commissioners Stewart and Pledger express that they believe the fence is in compliance with the 80% rule.
- c. Commissioner Maccini states there are native vine plants that could be used to screen the fence.
- d. Commissioner Meisel recommends taking the 80% rule to council.

- e. Following discussion of whether or not the fence is in compliance with the 80% rule, Assistant City Attorney Thamm explains that the hearing is related to a variance to the code, not a review of staff determination.

D. Action:

- a. Commissioner Pledger moves to forward the variances to City Council with a recommendation of **approval**.
 - a. Commissioner Bartoletti seconds
 - b. Motion carries (3-2)
 - 1. Commissioners Webber and Maccini opposed

The variance request and recommendation will be forwarded to the February 11, 2026 City Council Meeting.

- 7. **1100 Block of Kennan Rd.** Discuss and consider a recommendation to City Council on a variance request to reduce the extent of the tree survey requirement for the entirety of a property for a new construction on an undeveloped lot.

Applicant: Paula Ables, Designer/Owner Representative

A. Staff Report:

- a. Director Bills describes that all new construction projects with no existing structure require a tree survey for the entire lot, but the applicant is requesting a reduction of the required survey.
- b. Commissioner Webber asks if the site plan has been submitted
 - 1. Director Bills explains that no site plans other than the exhibit in the packet have been made available for staff.

B. Public Comment:

- a. Paula Ables, Designer and Representative: Clarifies questions and concerns from commissioners

C. Discussion:

- a. Chair Meisel shares that the construction of the house is already expensive and that the expense of the tree survey should not be a hardship
- b. Commissioner Maccini believes the applicant is asking for full credit for impervious cover and drainage for the entirety of the lot without having to perform a full analysis of the lot.
- c. Chair Meisel states that the tree survey is required and needs to be part of the application as a historical document
 - 1. Commissioner Webber agrees and states that there must be context for the whole scope of the property for mitigation

D. Action:

- a. Commissioner Bartoletti moves to forward the variance request to City Council with a recommendation of **denial** based on lack of hardship.
 - 1. Commissioner Pledger seconds
 - 2. Motion carries (5-0)

The variance request and recommendation will be forwarded to the February 11, 2026 City Council Meeting.

- 8. **701 S Capital of Texas Highway (Sweetgreen):** Discuss and consider a recommendation to City Council for the following variances

- 1. For the installation of a wall sign exceeding the maximum 10-foot length (Section 32.03.009(2) West Lake Hills Code)
- 2. For the installation of a second sign for a restaurant with square footage of less than 5,000 square feet (Section II.B.1, Village at Westlake Uniform Signage Criteria)

Applicant: Jesus Sanchez, Santech Signs, LLC

A. Staff Report:

- a. Director Bills shares the history of the uniform sign agreement and describes the variances to the agreement and the City’s sign code.

B. Public Comment

- a. Jesus Sanchez, Applicant:
 - 1. Speaks in favor of the variance

C. Discussion:

- a. Bartoletti indicates approval for the request

D. Action:

- a. Commissioner Bartoletti moves that the variance request be forwarded to City Council with a recommendation of **approval**.
 - 1. Commissioner Maccini seconds
 - 2. Motion carries (5-0)

The variance request and recommendation will be forwarded to the February 11, 2026 City Council Meeting.

- 9. **603 Spurlock Valley Rd :** Discuss and make a recommendation to the Board of Adjustment on a variance to install a new septic tank encroaching on the 30-foot front building setback (Section 22.03.276 & Section 22.03.281)

Applicant: James Kuykendall, Sunset Construction & Excavation

A. Staff Report:

- a. Director Bills describes the variance for a septic tank location. The house had initially been permitted with the tank in a compliant location but requested a new location for the septic at a later date.
 - b. Commissioner Bartoletti asks about flooding issues
 - 1. Director Bills explains that there is no drainage easement or FEMA floodplain at location
 - c. Applicant did not attend meeting but provided comment via email that was read by commissioners on the dais (Exhibit B)
- B. Public Comment: No public comment**
- C. Discussion:**
- a. Meisel: ZAPCO shouldn't ratify decision to proceed without permit by approving after-the-fact variance
 - b. Webber asks why house is designed the way it is when the original plans showed the septic in a compliant location.
- D. Action:**
- a. Commissioner Webber moves that the variance request be forwarded to the Board of Adjustment with a recommendation of **denial**.
 - 1. Commissioner Pledger Seconds
 - 2. Motion carries (5-0)

The variance request and recommendation will be forwarded to the February 11, 2026 Board of Adjustment Meeting.

10. **300 Block of Laurel Valley Rd:** Discuss and make recommendations on proposed variances:

- 1. Allow for a driveway height greater than 6 feet above natural grade (Section 22.03.175(e)(1))
- 2. Allow building height greater than 32 feet above natural grade on a slope of 25% or greater (Section 22.03.279(b))
- 3. Encroach 20 feet into the platted 50-foot front building setback along Yaupon Valley Road (Section 22.03.281)
- 4. Encroach 15 feet into both 25-foot side setbacks (Section 22.03.281)
- 5. Allow fills up to 15 feet where the maximum allowed is 6 feet on slopes of less than 35% (Section 22.03.170(b)– Drainage and Erosion Control Design Manual Section 7.4.1)
- 6. Allow for grading in areas of slopes greater than 35% where none is allowed (Section 22.03.170(b)– Drainage and Erosion Control Design Manual Section 7.4.1)

7. Allow grading greater than 18 inches within setbacks (Section 22.03.170(f)).

Applicant: Matt Garcia

A. Staff Report:

- a. Director Bills describes the site and the requests for variances.
- b. Commissioner Stewart asks Director Bills how many variances are missing
 1. Director Bills states there are at least two missing for the currently proposed development
- c. Commissioner Webber asks if the rainwater collection tanks would also need an additional setback encroachment variance
- d. Commissioner Meisel calls for the item to be postponed for the other variances to be addressed, as the request is incomplete

B. Action:

- a. Commissioner Pledger moves to combine items 10 and 11 into a single item and postpone to the February 18 ZAPCO meeting
 1. Maccini seconds
 2. Motion carries (5-0)

The item was postponed to the February 18, ZAPCO Meeting.

11. **300 Block of Laurel Valley Rd:** Discuss and make recommendations on proposed variances

7. Allow replacement trees for unpermitted removals to be planted at the end of the project, more than 601 days since the final order (Section 22.03.304(c)(5)).

Applicant: Matt Garcia

This item was combined with item 10 and postponed to the February 18 Zoning and Planning Commission meeting.

12. **Adjournment** – Chair Robert Meisel

Chair Meisel adjourns the meeting at 8:38 pm

APPROVED:

Robert Meisel, Chair

ATTEST:

Joel Sherrouse, Development Coordinator

These minutes were approved on _____, 2026.

DRAFT



City of West Lake Hills
Zoning & Planning Commission

AGENDA REPORT

Meeting Date:	February 18, 2026	Item Number:	3b
	Building & Development Services		
Department:	Jennifer C. Bills	Cost / Budget:	None
Prepared By:	N/A	Source of Funds:	N/A
Exhibits:			

Subject

Report of Previous ZAPCO cases acted on by the BOA/City Council.

Discussion

Since the November 19, 2025 ZAPCO meeting, the following cases forwarded by ZAPCO were considered at City Council/BOA.

Board of Adjustment:

1. **603 Spurlock Valley:** Septic Setback Variance
 - a. At the February 11, 2026 Board of Adjustment meeting the variance was **denied**

City Council:

1. **4909 Old Bee Cave Road:** Variances to fence height, font yard fence setback, front yard fence transparency, and front yard fence screening
 - a. At the February 11, 2026 City Council meeting:
 - i. The variances for front yard fence setback, screening, and transparency were **denied**.
 - ii. The Variance for fence height was **conditionally approved**, but only for the portion of the side-yard fence abutting the commercial property on the West side of the lot.
2. **116 Skyline Drive:** Variances to fence transparency and vegetative screening
 - a. At the February 11, 2026 City Council meeting:
 - i. The variances were **conditionally approved**, with the condition the fence is 54-inches in height and is designed as presented to Council.
3. **1100 Block of Kennan:** Variance to tree survey requirements
 - a. At the February 11, 2026 City Council meeting the variance was **denied**
4. **700 S Capital of Texas Highway – “Sweetgreen”:** Variances to number of signs allowed by Uniform Sign Agreement and length of sign allowed by City code.
 - a. At the February 11, 2026 City Council meeting:
 - i. The variance for installing a second sign was **approved**.
 - ii. The variance for increased sign length was **denied**.



City of West Lake Hills
Zoning and Planning Commission

AGENDA REPORT

Meeting Date:	<u>February 18, 2026</u>	Item Number:	<u>4</u>
Department:	<u>Building & Development</u>		
Prepared By:	<u>Jennifer C. Bills</u>	Cost / Budget:	<u>None</u>
Exhibits:	<u>See Attached</u>	Source of Funds:	<u>N/A</u>

Subject

300 Block of Laurel Valley Rd.: Discuss and make recommendations on proposed variances:

1. Allow for a driveway height of 15 feet 10 inches above natural grade, where 6 feet above natural grade is the maximum (Section 22.03.175(e)(1))
2. Allow building height of 35 feet, where 32 feet above natural grade on a slope of 25% or greater is the maximum (Section 22.03.279(b))
3. Encroach 20 feet into the platted 50-foot front building setback along Yaupon Valley Road (Section 22.03.281)
4. Encroach 10 feet into both 20-foot side setbacks (Section 22.03.281)
5. Allow fills up to 15 feet 6 inches where the maximum allowed is 6 feet on slopes of less than 35% (Section 22.03.170(b) – Drainage and Erosion Control Design Manual Section 7.4.1)
6. Allow for grading of up to 8 feet 3 inches in areas of slopes greater than 35% where none is allowed (Section 22.03.170(b) – Drainage and Erosion Control Design Manual Section 7.4.1)
7. Allow grading up to 15 feet 6 inches in the setbacks, where 18 inches is the maximum (Section 22.03.170(f)).

Applicant: Matt Garcia, Matt Garcia Design

Recommendation

Discuss and provide a recommendation to the Board of Adjustment including the analysis of the following criteria:

1. The variance may violate the intent of this chapter or the goals of the city’s comprehensive plan; and
2. The variance may have an adverse effect on neighborhood properties or interfere with the respective owners’ enjoyment thereof.

The Zoning and Planning Commission, in performing their respective duties in reference to applications for variances, may be guided by the interpretative criteria listed in the variance criteria in the report.

The Zoning and Planning Commission can recommend imposition of reasonable conditions upon granting a variance if the conditions are related to the subject of the variance.

The applicant’s findings of facts are attached in Exhibit A.

This item will be forwarded to the March 11, 2026 Board of Adjustment meeting for consideration.

Discussion

Property Information, Zoning & Site Characteristics:

Owner: Graham Schmergel

Legal Description: Yaupon Valley Subdivision, Lot 8

Lot Size: 0.4371 acres

Zoning: R-1 One Family

Wastewater: On-site Sewage Facility (Septic)

The properties surrounding the subject property are zoned R-1, One Family Residential.

Background:

The applicant is proposing to build a new 3,988 sf house (Attachment 1). The site is 0.4371 acres in size, which was platted in 1962. The total impervious cover in the concept plan is 4,836.5 sf (24.9%). The property was issued a permit for new residential construction on March 12, 2022. The house was never started and due to more than six months of inactivity, the permit was marked as expired October 24, 2024. There is an additional variance that goes to City Council regarding the timing of tree replacement for trees that were illegally removed during the prior project. The previous approved project had the house located more central to the lot and took access from Yaupon Valley with a switch back driveway. The applicant is proposing to take access off Yaupon Valley and place the house on the top of the hill. The existing houses adjacent to this lot take access from Laurel Valley and are situated at bottom of the hill.

Analysis:

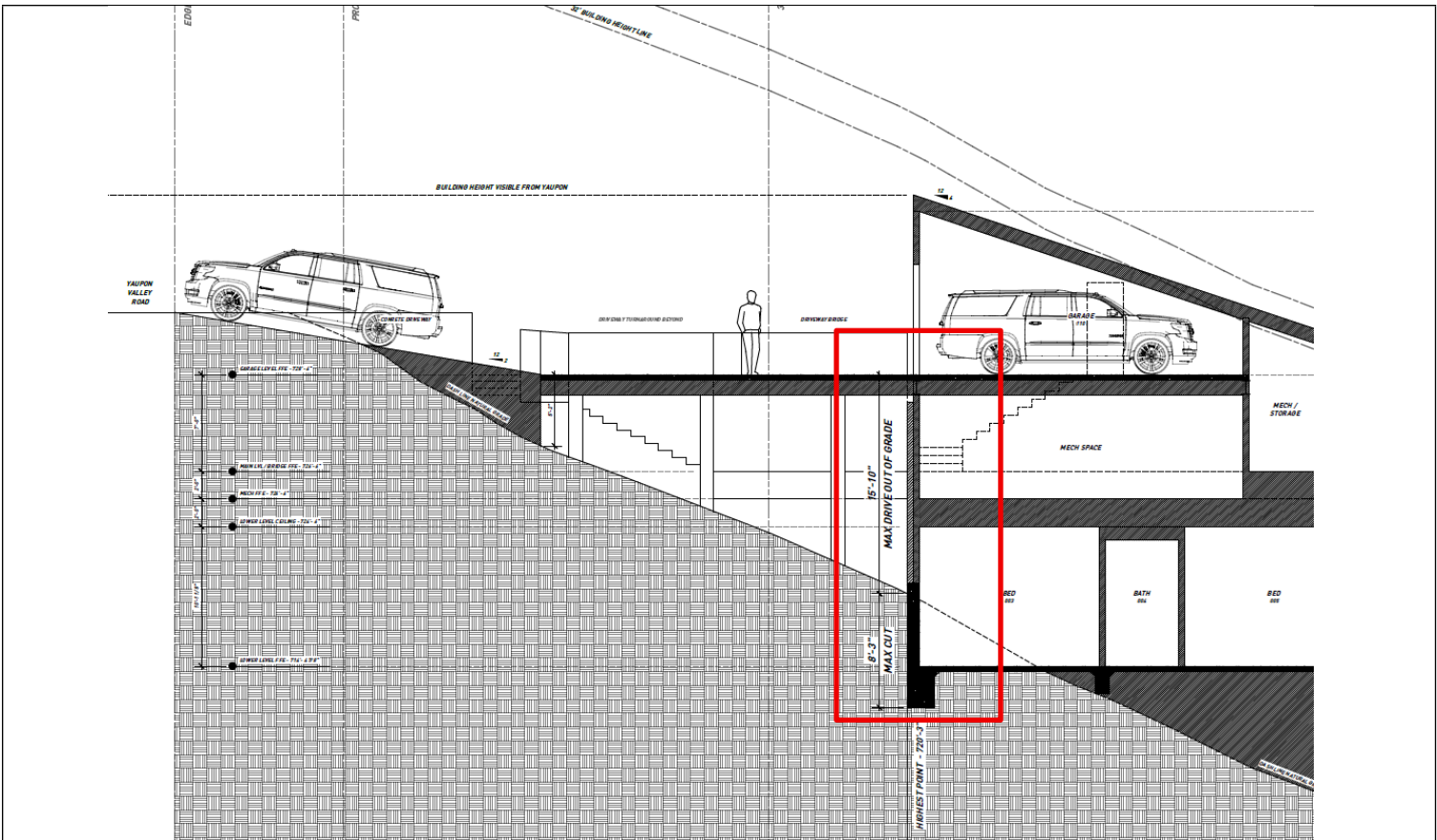
1. Driveway Height

Code Requirements

- 22.03.175. Off-street parking and parking pad requirements in residential areas.
- (e) Every driveway entrance/exit shall be at roadway grade level where the driveway intersects the city's right-of-way except as otherwise approved by the city inspector.
- (1) Each dwelling shall be on a lot abutting a public street or having access to an improved public street, and all structures shall be so located on lots as to provide safe, convenient access for servicing, police protection, fire protection and required off-street parking. Driveways shall not exceed a maximum of 20 percent grade at any point after construction. **No part of a driveway shall rise more than 6' above natural ground grade directly below.**

Request

The applicant is requesting a variance for a driveway 15 feet, 10 inches feet above natural grade where the maximum height is 6 feet.



2. Height of Structures

Code Requirements

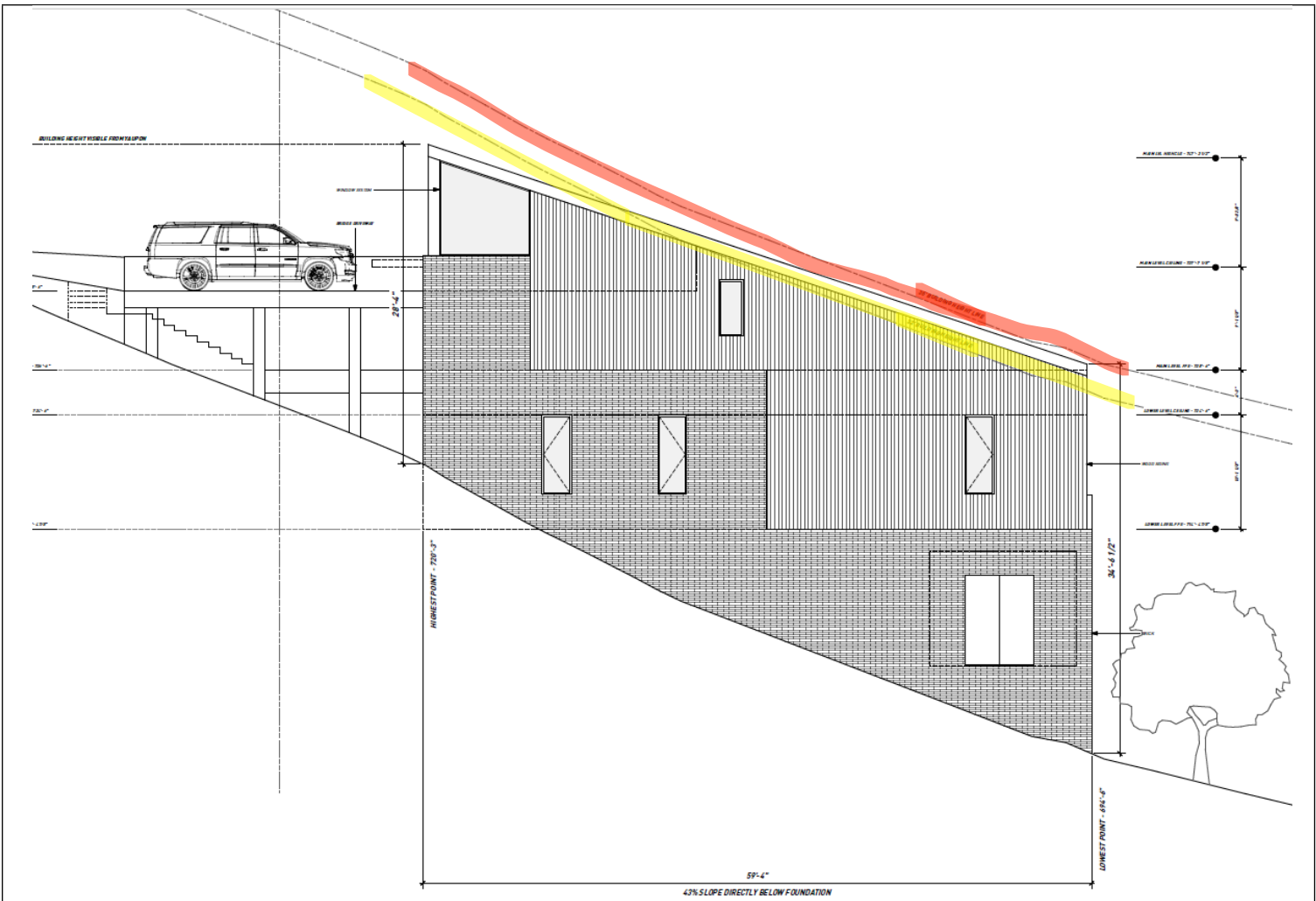
- Section 22.03.279

(b) *Measuring height.*

No part of any principal structure shall rise more than the maximum height shown on the schedule of regulations contained in section 22.03.281, above natural ground grade or original grade directly below. If the average natural slope in the area directly below the foundation of the principal structure is **25% or greater, than no part of any principal structure shall rise more than 32' above natural ground grade directly below.**

Request

The applicant is requesting a variance to increase the maximum height to 35 feet (3 feet over the maximum). The red line is 35 feet above natural grade. The yellow line is 32 feet.



3 & 4. Encroachment into Setbacks

Code Requirements

- Section 22.03.275

(a)

(1) No principal building shall have any front, side or rear setback distance less than that shown on the schedule of regulations as being required in the district in which the building is located, except that the minimum setback distance from Bee Cave Road shall be 50 feet regardless of which direction the building is facing. The setback distance from the Capital of Texas Highway shall be a minimum of 75 feet.

- Section 22.03.281 Schedule of Regulations

Minimum Building Setback Distance in Feet From Front Lot Line									
Lot Size/ Zoning	R-1	R-2	R-3	O	GUI	B-1	B-2	B-3	MU-1
Greater than or equal to .5 acre	50	50	50	50	50	50	50	(IV)(a)	(C)
Less than .5 acres	30	30	N/A	30	30	30	30	N/A	N/A

Minimum Building Setback Distance in Feet From Rear Lot Line									
Lot Size/ Zoning	R-1	R-2	R-3	O	GUI	B-1	B-2	B-3	MU-1
Greater than or equal to .5 acre	30	30	50	40	40	40	40	(IV)(c)	(C)
Less than .5 acres, greater than or equal to .375 acres	25	25	N/A	30	30	30	30	N/A	N/A
Less than .375 acres-zero	15 (F, E)/20	15 (F, E)/20	N/A	30	30	30	30	N/A	N/A

Minimum Building Setback Distance in Feet From Side Lot Lines									
Lot Size/ Zoning	R-1	R-2	R-3	O	GUI	B-1	B-2	B-3	MU-1
Greater than or equal to .5 acre	25	25	50	(I)	(I)	(I)	(I)	(IV)(c)	(C)
Less than .5 acres, greater than or equal to .375 acres	20	20	N/A	(II)	(II)	(II)	(II)	N/A	N/A
Less than .375 acres-zero	15 (F, E)/20	15 (F, E)/20	N/A	(II)	(II)	(II)	(II)	N/A	N/A

- Section 38.05.005 Provisions of chapter are minimum requirements; conflicting provisions

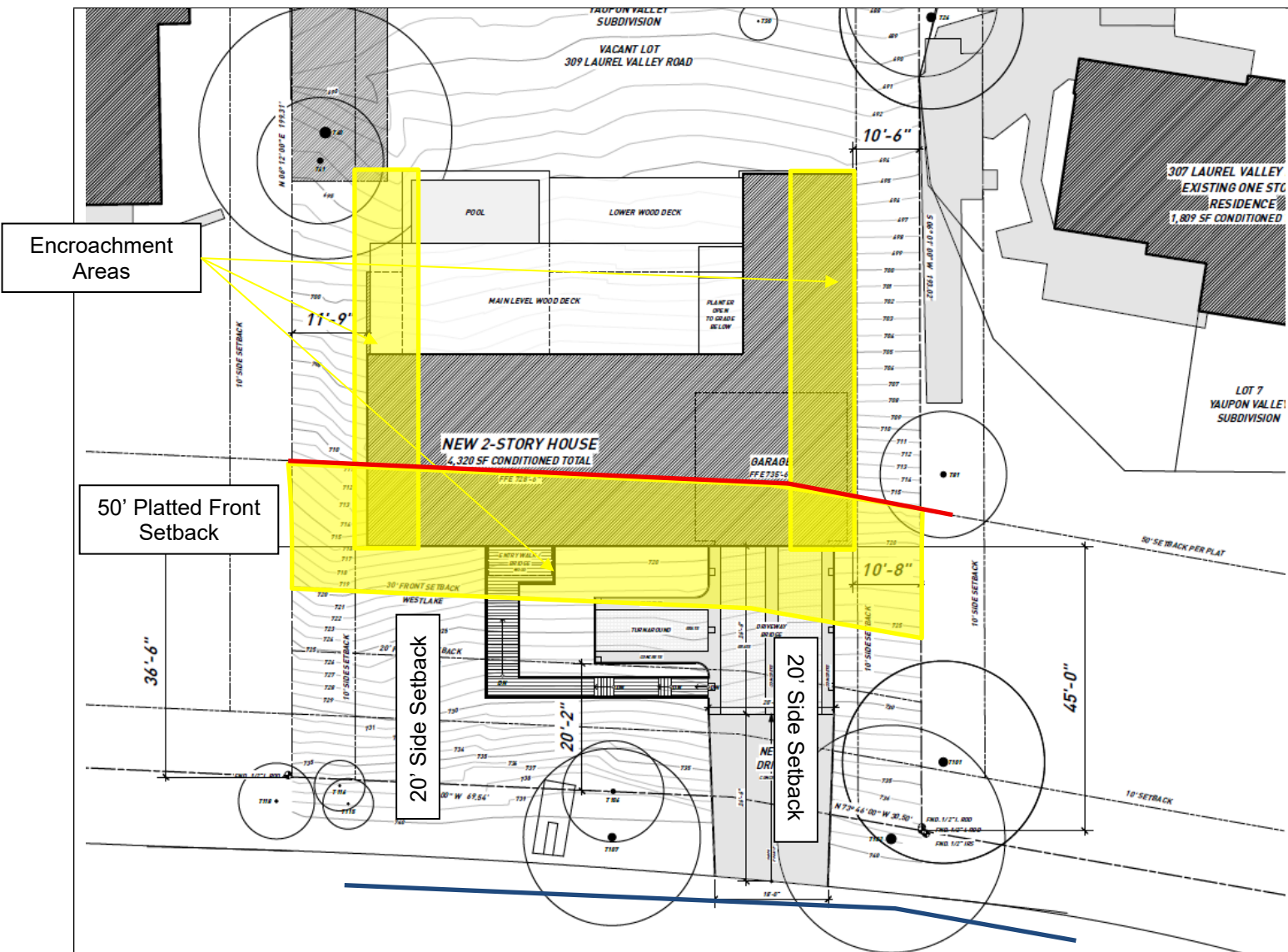
The provisions of this chapter shall be held to be minimum requirements adopted for the promotion of the public health, safety and general welfare. Wherever the requirements of any other applicable law are in conflict with the requirements of this chapter, the most restrictive requirement, or that imposing the higher standard, shall apply. The provisions of this chapter are not intended to repeal or interfere with private restrictions placed upon property by covenant, deed, easement or other private agreement.

- Section 36.01.019 Conflict with other ordinances

Whenever the standards and specifications in this article conflict with those contained in another ordinance, the most stringent or restrictive provision shall govern.

Request

- To encroach 20 feet into the 50-foot platted setback from Yaupon Valley Road
- To encroach 15 feet into both 25-foot side setbacks (required by zoning).



5 & 6. Maximum Grading on Slopes under 35% and over 35%

Code Requirements

- Drainage and Erosion Control Design Manual, Section 7.4.1 Cut/Fill Limits.

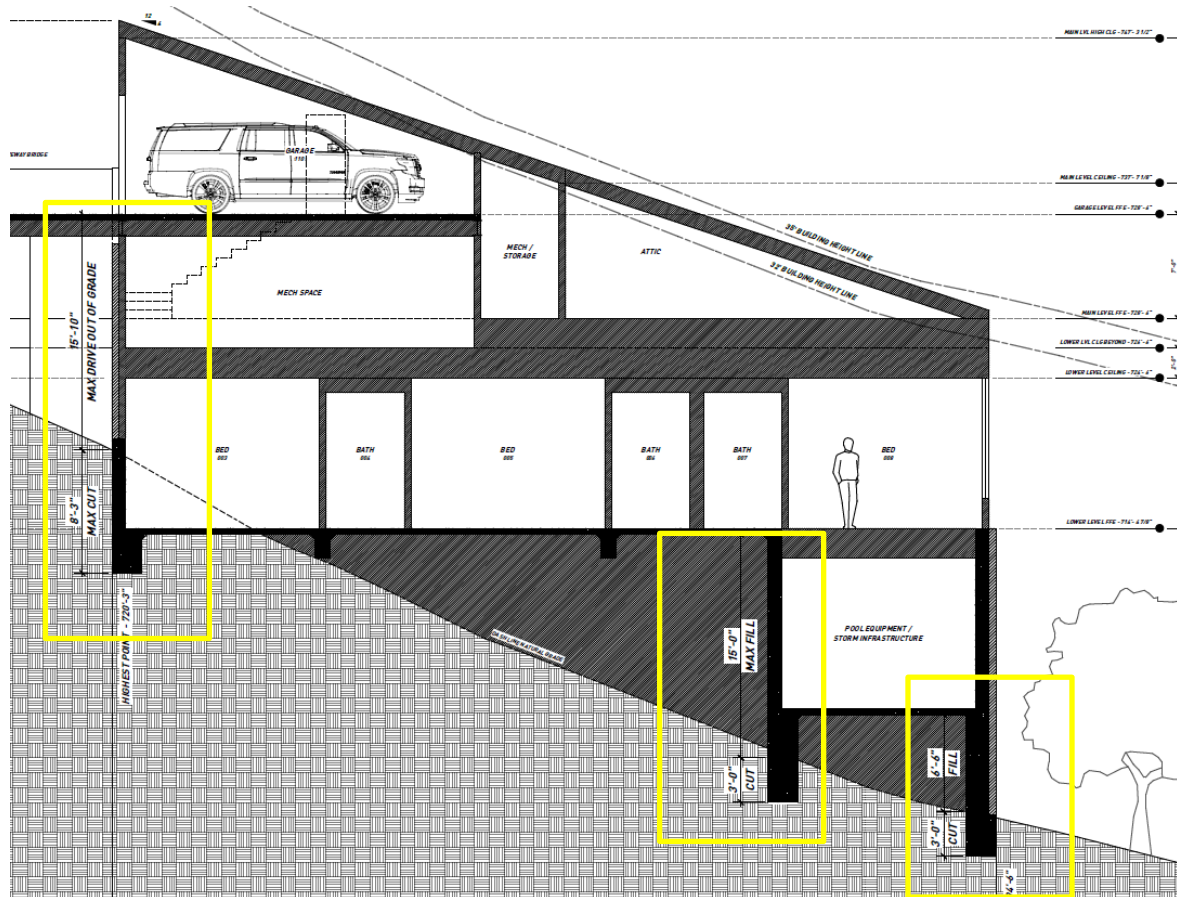
In order to reduce stormwater runoff, resulting in erosion, sedimentation and conveyance of nonpoint source pollutants, the layout of the street network, lots and building sites shall, to the greatest extent possible, be sited and aligned along natural contour lines, and shall minimize the amount of cut and fill on slopes in order to minimize the amount of land area disturbed during construction. The maximum cut and fill limits are shown in Table 7-1.

Table 7-1: Maximum Cut and Fill Limits

Slope	Open Cuts and Fills	Closed Cuts	Closed Fill
0 - 15%	3 feet	20 feet	6 feet
15 - 25%	1 foot	15 feet	6 feet
25% - 35%	0 feet	10 feet	6 feet
> 35%	0 feet	0 feet	0 feet

Request:

- Allow for fills of 15 feet, where 6 feet is the maximum on all grades under 35%. Slope of the property under the proposed house footprint is 43%.
- Allow for fills of 15 feet and cuts of up to 8 feet 3 inches maximum on all grades greater than 35%.



7. Grading in the setback

Code Requirements

- Section 22.03.170. Site disturbance (excavation, grading or filling).
- Excavating, grading or filling shall minimize the negative impacts of development on natural slopes and interfere as little as possible with the natural landscape by **minimizing the alteration of the natural terrain**.
- No excavation, grading or filling shall be permitted in setbacks except **for up to 18 inches in height or depth**.

Request

- The applicant's letter does not explicitly call out the grading/excavating within the setback, but

would be similar to maximums previously listed of 15 feet of fill and 8 feet 3 inches of cut, as they are also proposing to encroach into the side setbacks 10 feet with the house footprint.

Public Comment:

As of the date of the report, one written comment in opposition has been received (Attachment 7).

Variance Criteria Review:

Per Section 22.03.511 (c) Procedure and notice, Section 22.03.171: Site disturbance (residential buildings), and Section 22.03.276: Setbacks for accessory structures shall be administered in compliance with the rules established by sections 38.05.031 through 38.05.034.

- Section 38.05.031. Provisions subject to variance.

Variations may be granted by the board of adjustment to the provisions of this chapter in accordance with the rules and conditions of this division. A variance may not be granted, however, to authorize a change of use. Variations run with the land, but each variance is specific to the project for which it was granted.

- Section 38.05.032. Conditions required for granting variance.

No variance shall be granted unless the following conditions are fulfilled:

- The applicant has established by competent evidence that:
 - The strict or literal enforcement of the terms of this chapter, because of special conditions, will result in unnecessary hardship to the applicant.
 - There will not be unreasonable disruption of the natural terrain or unreasonable destruction of existing flora.
 - There is no reasonable alternative to the requisite variance that will alleviate the difficulty or hardship complained of.
 - The variance will not be greater than the minimum required to alleviate the difficulty or hardship complained of.
- The recommendation of zoning and planning commission shall include an analysis of whether:
 - The variance may violate the intent of this chapter or the goals of the city's comprehensive plan.
 - (Reserved).
 - (Reserved).
 - The variance may have an adverse effect on neighborhood properties, or interfere with the respective owners' enjoyment thereof.

- Section 38.0.033. Interpretative criteria.

The board of adjustment and the zoning and planning commission, in performing their respective duties in reference to applications for variances, may be guided by these interpretative criteria:

- Variances from the terms of this chapter should be granted sparingly.
 - Deviations from the requirements of this chapter are justified only where the hardship resulting from their application is substantial.
 - Usually, the granting of a variance must be predicated on a finding that the applicant's hardship arises from unusual conditions or circumstances, such as exceptional irregularity of shape or topography, which are peculiar to the parcel of land involved and not shared generally by other parcels in the neighborhood or district, or because no other reasonable alternative is available that will alleviate the unnecessary hardship complained of.
 - Normally, a variance is to be denied if conditions or circumstances relied on for a variance were self-created by the person having an interest in the property in disregard of city regulations.
 - The variance shall not violate the goals of the master plan for the city.
 - The variance shall not have an adverse effect on neighborhood properties or unreasonably interfere with the respective owners' enjoyment thereof.
 - The fact that lots, structures, uses or dimensional conditions on properties or structures within 200 feet of the property involved are, because they are nonconforming or because of previously granted variances, similar to the condition which would be created by the variance requested shall be relevant to, but not determinative of, the granting of the requested variance.
 - See section 22.03.009(c) for variances to enable the efficient use of solar energy devices.
 - When considering variance requests for nonresidential projects, whether granting the variance furthers achievement of the land planning principles set forth in the City's Master Plan, Attachment "B," as codified in the Code of Ordinances.
- Section 38.05.035. Conditions.

The city council can impose, and the zoning and planning commission can recommend imposition of reasonable conditions upon granting a variance if the conditions are related to the subject of the variance. When considering variance requests for nonresidential projects, whether, the City can recommend the imposition of reasonable conditions that are necessary to achieve one or more of the land planning principles set forth in the City's Master Plan, Attachment "B", as codified in chapter 28 of the Code of Ordinances.

Outdoor Lighting

Outdoor lighting is not proposed with this variance request. Any outdoor lighting will need to comply with the City's Code.

Compliance with Adopted International Building Code

The property and future construction will have to comply with all applicable City codes.

Subdivision

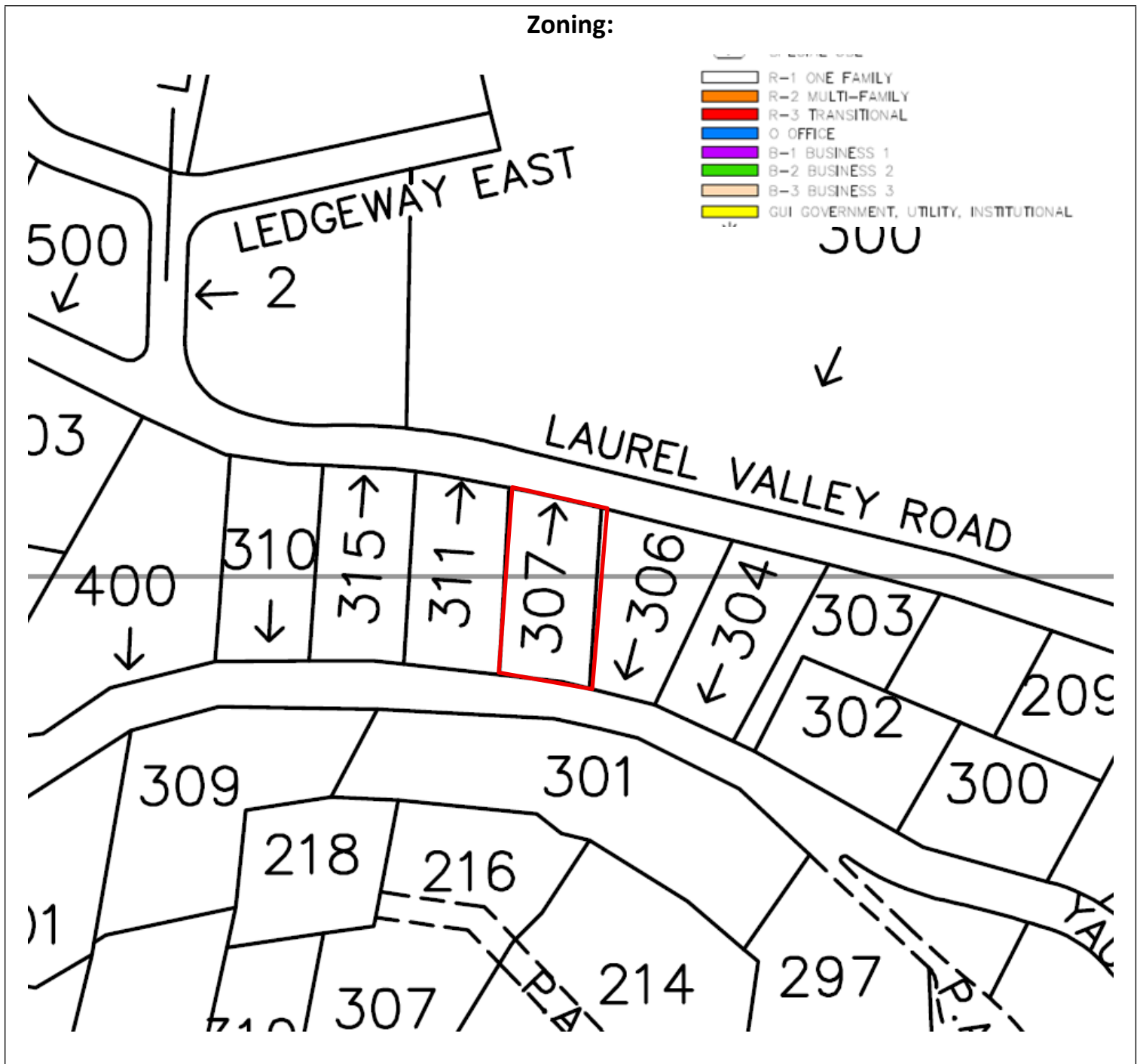
There is no change to the subdivision proposed with this application.

Comprehensive Planning Analysis

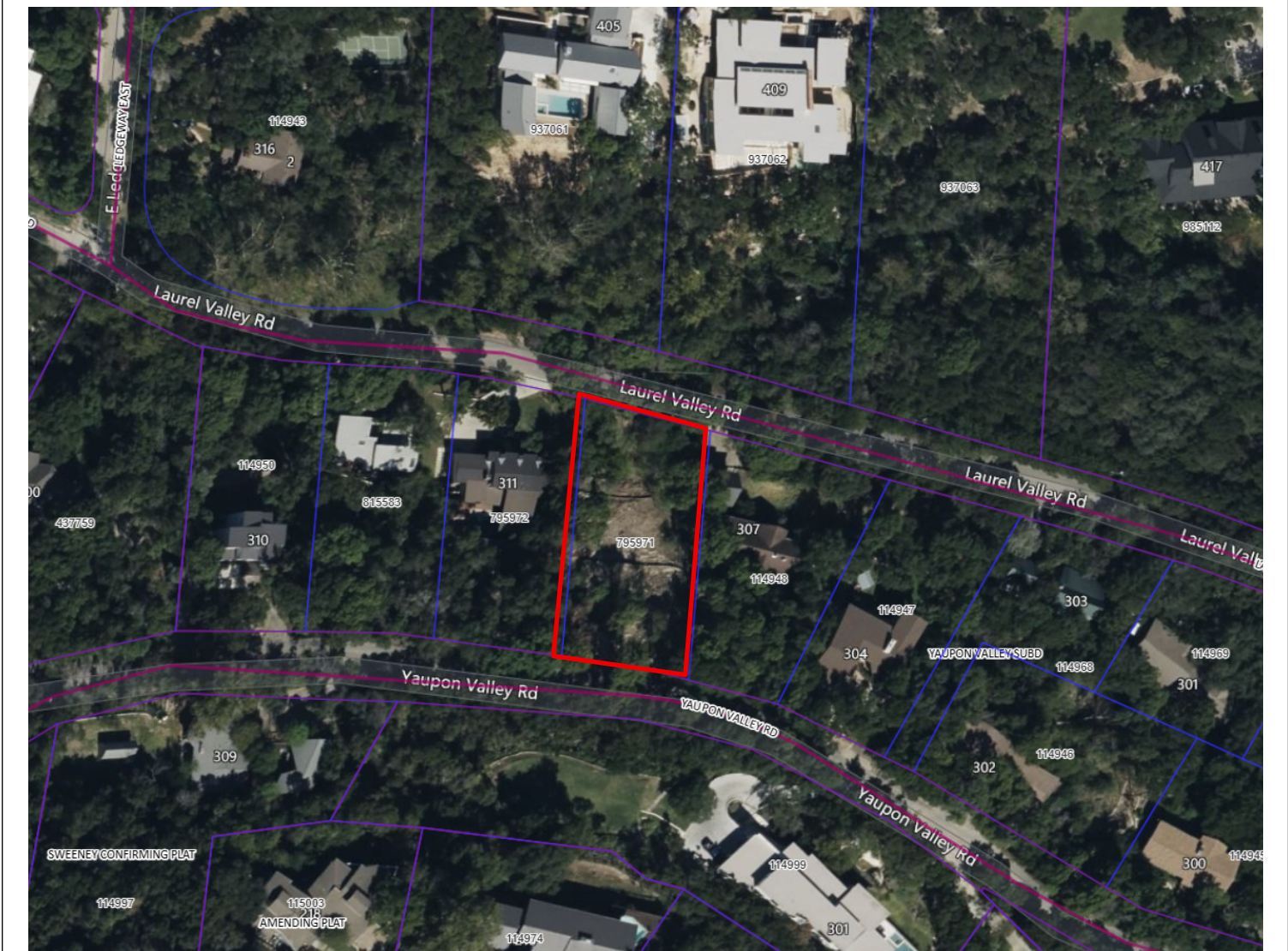
The existing and future land use is in conformance with the City of West Lake Hills Master Plan.

Links to Relevant Code:

- [Section 22.03.170 Site Disturbance \(Excavation, grading or filling\)](#)
- [Drainage and Erosion Control Manual](#)
- [Section 22.03.175 Driveway Height](#)
- [Section 22.03.279 Height of Structures](#)
- [Section 22.03.281 Schedule of Regulations](#)
- [Section 22.03.514 Criteria and process required for granting variance](#)
- [Section 38.05.031 Variances](#)



Aerial:



January 29, 2026

Schmergel Residence
309 Laurel Valley (R1, .4371 acres)

Zoning and Planning commission members,

A quick note to orient you, this lot is addressed as 309 Laurel Valley, we will be using Yaupon Valley for our main access, and the lot will be readdressed Yaupon Valley. City staff informed us this is normal and does not require any additional requests. Our setbacks are based on Yaupon Valley being our front and Laurel Valley, the back.

This lot provides exceptional challenges given its 33% average natural slope (43% under building foundation). The design of this proposed residence is centered around providing a safe driveway experience as requested by our clients, a young family. Multiple options were studied to limit these requests. We feel like our design solution accomplishes our goals while staying in line with the city's vision and goals.

My team has met with City of Westlake development staff 3 times to review our project and consider their feedback. We were able to eliminate 2 requests based on that feedback.

We understand that drainage is always a concern for the city and its neighbors. We have engaged a civil engineer, Millian Engineering to guide us along the way. They have put together an initial drainage study, concept plan and narrative, attached.

Literal enforcement of the requested code variances below will provide hardship to develop this project as-is and provide an unsafe driveway experience. I believe our requests are in line with the city's comprehensive plan goals and do not violate the intent of those goals. This is a modest project by size and scale and fits in with the neighboring houses in character and scale.

REQUEST #1 – TREES

There is an existing tree violation on this property that has come up in our reviews with development staff. This violation was inherited by my clients from the previous owner. An illegal, non-permitted extensive tree clearing occurred and there is a significant tree caliper mitigation required. As part of this submittal, we are showing all areas we intend to provide this mitigation (bubbled, see sheet 1). Staff has asked for this mitigation to happen now, which we understand as before construction would start. We are proposing providing this mitigation as part of the project, happening after the building is in place. There is general concern for planting trees before and bringing in heavy equipment after for foundation and framing erection, especially on the slope. A proposed tree species list is on sheet 1.

Not providing this variance will require us to plant, protect and work around many young trees. The risk for damage and death of these trees would be significant once construction begins. Heavy equipment will be required to work on this slope, there is little area for construction staging, working in and around the tree protection on slope provides incredible safety concerns for subcontractors. Our client is committed to providing the necessary mitigation and will do so as part of the end of project landscaping, typical for any construction project.

REQUEST #2 - DRIVEWAY (HIGHER THAN 6' OUT OF NATURAL GRADE) § 22.03.175 (E-1)

We are requesting the driveway variance to provide our clients with a useable, safe driveway first and foremost. Our driveway solution proposes a level bridge that connects street to garage. There is an initial 15% drop to the bridge driveway (see site/building section on page 2). Given the steepness of the lot, the bridge is higher out of grade than allowed. The proposed bridge driveway is raised on steel columns to provide a lighter, less heavy aesthetic as opposed to pouring concrete down to grade. The raised structure provides a way for sunlight and rainwater to reach the natural terrain below. Portions of the driveway will be open steel grate in another effort to allow sunlight and rainwater to reach natural terrain. A level turn around area has also been provided. This driveway approach significantly limits the impervious coverage and steepness that other driveway approaches do not.

Not providing this variance will require a much longer and steeper switch back driveway scheme to negotiate the slope, resulting in much more natural site disturbance, unnecessary impervious coverage and dangerous driveway conditions in future ice heavy weather events. The switchback scheme would also require a variance for driveway setback encroachment to achieve the minimum required driveway length.

REQUEST #3 - HEIGHT (35' ALLOWANCE) § 22.03.279 (B)

We are requesting a 36" height increase from the allowed 32' max at our site slope of 33%. The amount of slope within our building footprint is at 43%. We determined our building location and vertical positioning thru various studies of the bridge driveway concept. As you can see on page 2 our single shed roof line follows the site's natural topography to reduce the scale of this building and comply with code goals. Small variations in that topography create moments where our roof becomes noncompliant. The front, street side roof edge is compliant and moves into noncompliance to the back of the building. The building height visible from the street is only 8'-6". Along with the positioning of our building in relation to the neighbors (see sheet 3), we see low visual impact from their properties and from the street.

Not providing this variance will require us to lower our building, thus creating the need for a much steeper driveway approach. Lowering the building 36" will eliminate the level bridge area and create a slope greater than the code limit of 20%.

REQUEST #4 - BUILDING SETBACKS (front and sides) § 22.03.281

We are requesting to use a combination of City of Westlake required setbacks along with platted setbacks, in which, City of Westlake enforces the worse of the two. City of Westlake enforces a 30' front and 20' side setbacks on lots less than one acre. The platted setbacks are 50' front, 10' sides and 40' rear. We are requesting encroachments into the front and side setbacks. Specifically, 20' encroachment in the front setback and 10' encroachments into the side setbacks. The new 30' front complies with Westlake and allows us to provide the level driveway and turnaround as well as provide space downhill for our septic and tree mitigation requirements. The side setbacks allow us to provide a narrower building footprint front to back. Neighboring homes at 307 and 311 Laurel Valley are encroaching into the code prescribed side setbacks, see sheet 3. Our building is positioned significantly higher up the hill limiting the houses feeling too close together and hopefully limiting any changes in neighbor experience.

Not providing this variance will force us to reduce our building in width and add it to the depth. The further we push out on the site at a level elevation will push the building massing even further out of natural grade, making the building appear more massive. The tree mitigation and septic areas will be significantly limited with a deeper building.

REQUESTS #5 and 6 - CUT AND FILL (within and outside of code prescribed setbacks) § 22.03.170 (B) (F)

We are requesting variances for cut and fill within city code buildable area as well as outside city code buildable area. Our building has a 43% slope under foundation which has limit of zero feet for closed cuts and zero feet for closed fill. The cut is consistent along the entire front of the building limiting site disturbance. The greatest cut amount is 8'-3", see sheet 2. The max fill amount on site is 15'-0" in height. Given the extreme slope it is difficult to stay closer to natural grade while keeping a level floor area. Due to the side setback request we would be cutting more than 18" into a prescribed setback.

Not providing this variance will require us to add additional stairways at the lower level both interior and exterior, disrupting the flow between spaces better experienced on one level. The lower level is all bedrooms, three of them for children, adding additional stairs creates disconnection and safety issues.

REQUEST #7 – GRADING ON SLOPE GREATER THAN 35% § Drainage/Erosion Control Manual 7.4.1, table 7-1

We are requesting a variance for grading as our building has a 43% natural slope under our foundation. Not providing this variance will not allow us to proceed with development on much of this property given its natural topography.

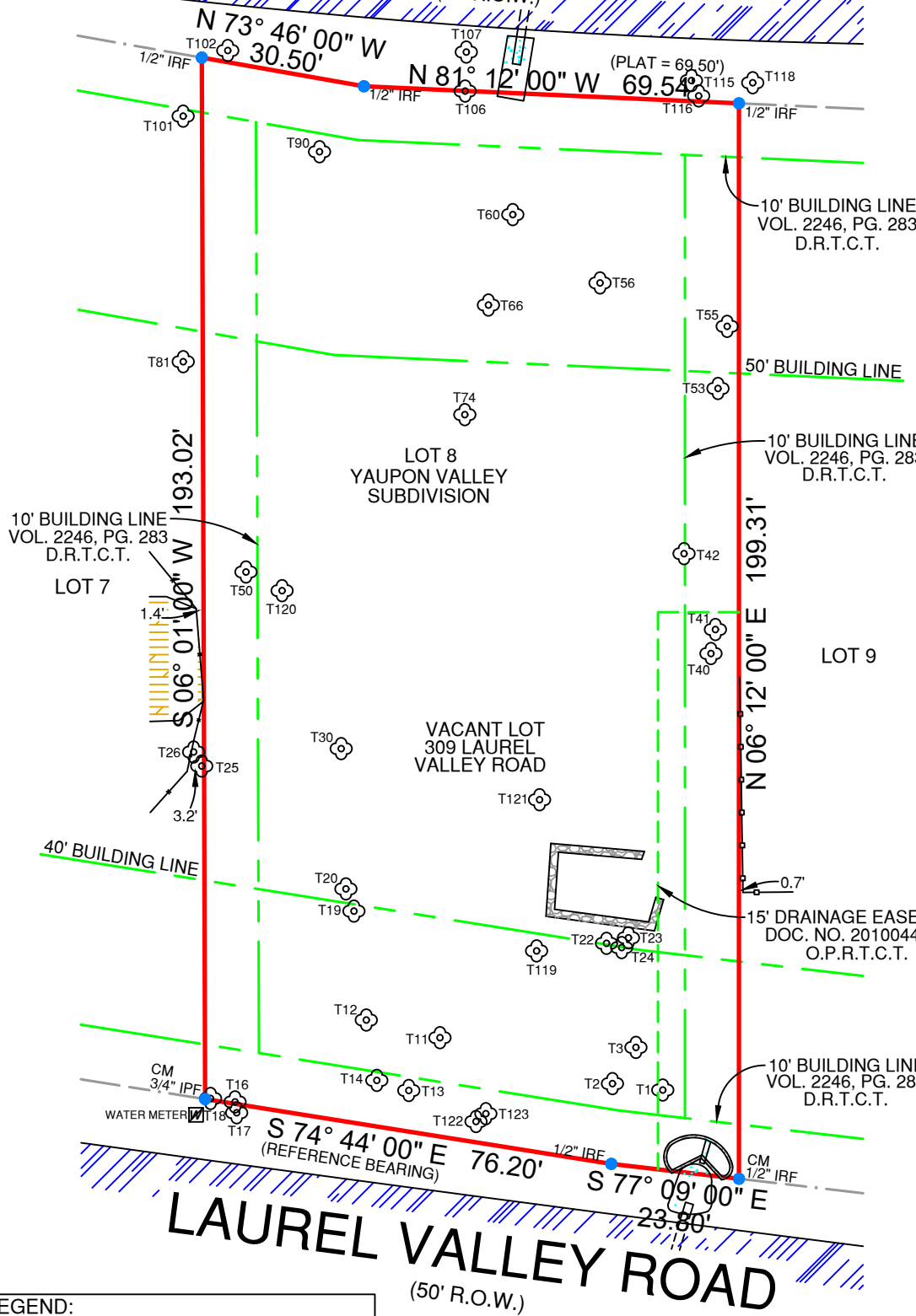
Thank you for the consideration.

A handwritten signature in black ink, appearing to read 'Matt Garcia', followed by a horizontal line extending to the right.

Matt Garcia
Principal, Matt Garcia Design

YAUPON VALLEY ROAD

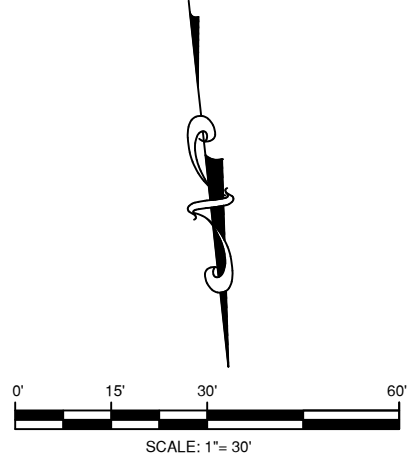
TREE TABLE			
T1	10" TREE	T50	3" ELM
T2	6" & 8" OAK	T53	8" CEDAR
T3	6" OAK	T55	4" CEDAR
T11	9" HACKBERRY	T56	8" OAK
T12	8" & 12" OAK	T60	12" OAK
T13	3" HACKBERRY	T66	6" ELM
T14	3" HACKBERRY	T74	6" ELM
T16	5" OAK	T81	10" OAK
T17	10" & 8" OAK	T90	8" HACKBERRY
T18	10" CEDAR	T101	8" & 12" OAK
T19	6" HACKBERRY	T102	12" & 12" CEDAR
T20	6" HACKBERRY	T106	8" ELM
T22	4" OAK	T107	14" OAK
T23	6" HACKBERRY	T115	4" HACKBERRY
T24	6" HACKBERRY	T116	4" HACKBERRY
T25	12" OAK	T118	6" HACKBERRY
T26	12" & 9" OAK	T119	12" MULTI-TRUNK OAK
T30	3" CEDAR	T120	6" MULTI-TRUNK LIGUSTRUM
T40	14" 6" & 6" OAK	T121	4" YAUPON
T41	10" CEDAR	T122	9" RED OAK
T42	6" CEDAR	T123	8" RED OAK



LEGEND:

—x—x— WIRE FENCE	ASPHALT = [Pattern]
—o—o— CHAINLINK FENCE	CONCRETE = [Pattern]
—□—□— METAL FENCE	GRAVEL = [Pattern]
—//—//— WOOD FENCE	TILE = [Pattern]
—v—v— VINYL FENCE	WOOD = [Pattern]
—E—E— ELECTRIC LINE	BRICK = [Pattern]
GM = GAS METER	STONE = [Pattern]
EM = ELECTRIC METER	(WOOD) RAILROAD TIE = [Pattern]
IPF = IRON PIPE FOUND	
IRS = IRON ROD SET WITH "PREMIER" CAP	
IRF = IRON ROD FOUND	
CM = CONTROLLING MONUMENT	

NOTES:
 BEARINGS ARE BASED ON THE RECORDED PLAT.
 BUILDING LINES ARE BASED ON THE RECORDED PLAT UNLESS OTHERWISE NOTED.



LEGAL DESCRIPTION:
 BEING LOT 8, YAUPON VALLEY SUBDIVISION, AN ADDITION TO TRAVIS COUNTY, TEXAS, ACCORDING TO THE MAP OR PLAT THEREOF RECORDED IN VOLUME 16, PAGE 44, PLAT RECORDS, TRAVIS COUNTY, TEXAS.

TECH	MSP
FIELD	TM

SURVEYOR'S CERTIFICATION:
 THIS IS TO CERTIFY THAT ON THIS DATE A SURVEY WAS MADE ON THE GROUND, UNDER MY SUPERVISION AND REFLECTS A TRUE AND CORRECT REPRESENTATION OF THE DIMENSIONS AND CALLS OF PROPERTY LINES AND LOCATION AND TYPE OF IMPROVEMENTS. THERE ARE NO VISIBLE AND APPARENT EASEMENTS, CONFLICTS, INTRUSIONS OR PROTRUSIONS, EXCEPT AS SHOWN. THIS SURVEY IS NOT TO BE USED FOR CONSTRUCTION PURPOSES AND WAS PREPARED WITHOUT THE BENEFIT OF A TITLE COMMITMENT PROVIDED BY A TITLE COMPANY. THERE MAY BE EASEMENTS AND OTHER MATTERS OF RECORD AFFECTING THE PROPERTY SHOWN HEREON THAT ONLY A PROPER TITLE SEARCH WOULD REVEAL. THIS SURVEY IS SUBJECT TO ANY AND ALL COVENANTS AND RESTRICTIONS PERTAINING TO THE RECORDED PLAT REFERENCED HEREON.

FLOOD INFORMATION:
 THE SUBJECT PROPERTY DOES NOT APPEAR TO LIE WITHIN THE LIMITS OF A 100-YEAR FLOOD HAZARD ZONE ACCORDING TO THE MAP PUBLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY, AND HAS A ZONE "X" RATING AS SHOWN BY MAP NO. 48453C0445 K, DATED JANUARY 22, 2020.

DATE: 08/31/22 JOB NO.: 19-02287TS
 FIELD: 08/25/22 REV.: 09/01/22

309 LAUREL VALLEY ROAD, WEST LAKE HILLS, TX 78746
 LOT 8, YAUPON VALLEY SUBDIVISION



Premier Surveying LLC
 5700 W. Plano Parkway Suite 1200
 Plano, Texas 75093
 972-612-3601 (O) | 855-892-0468 (F)
 www.premiersurveying.com
 premierorders@premiersurveying.com

Premier Surveying LLC
 5700 W. Plano Parkway Suite 1200
 Plano, Texas 75093
 Office: 972-612-3601
 Fax: 855-892-0468
 Firm Registration No. 10146200

DATE: _____
 ACCEPTED BY: _____



CONCEPTUAL RENDERING

**MATT GARCIA
DESIGN**
3609 BONNIE ROAD
AUSTIN, TEXAS, 78703
TELEPHONE 512.522.5401
www.mattgarcia.com

PROJECT
**SCHMERGEL
RESIDENCE**
309 LAUREL VALLEY RD
WEST LAKE HILLS, TEXAS 78746

CLIENTS
GRAHAM & PAIGE SCHMERGEL

DESIGN
MATT GARCIA DESIGN
CONTACT: MATT GARCIA
EMAIL: mattgarcia@gmail.com
PHONE: 210.861.0978



CONCEPTUAL RENDERING

ISSUE
VARIANCE SUBMITTAL - 2025 DEC 15
VARIANCE SUBMITTAL - 2026 JAN 30

TITLE
DATE JANUARY 30 2026
SHEET

PROJECT
SCHMERGEL
RESIDENCE

309 LAUREL VALLEY RD
WEST LAKE HILLS, TEXAS 78746

CLIENTS
GRAHAM & PAIGE SCHMERGEL

DESIGN
MATT GARCIA DESIGN
CONTACT: MATT GARCIA
EMAIL: mattgarcia@gmail.com
PHONE: 210.861.0978

PROJECT DATA

309 LAUREL VALLEY RD
WEST LAKE HILLS, TX 78746
JURISDICTION: WESTLAKE
ZONING: R-1
COUNTY: DISTRRICT 7
COUNTY: TRAVIS
MAP: GRID 7

LEGAL DESCRIPTION

777

AREA CALCULATIONS

LOT PER SURVEY 19,397 SF (1.44 ACRES)
IMPERVIOUS ALLOWED 25% (4,839 SF)

BUILDING COVERAGE

BUILDING FOOTPRINT (MAIN LEVEL) 2,291 SF
GARAGE 495 SF
MAIN LEVEL DECK 905 SF
POOL COPING 43 SF
LOWER WOOD DECK (B SON) 174 SF
TOTAL BUILDING COVERAGE 3,988 SF (20.6%)

IMPERVIOUS COVERAGE

BUILDING COVERAGE 3,988 SF
ENTRY STEPS / BRIDGE WOOD (B SON) 134.5 SF
DRIVEWAY (CONCRETE ONLY) 511 SF
POOL 203 SF
TOTAL IMPERVIOUS COVERAGE 4,836.5 SF (24.9%)
IMPERVIOUS COVERAGE ALLOWED 4,839 SF (25%)

SITE GENERAL NOTES

- NO UNDERGROUND UTILITY TRENCHES PERMITTED IN THE 1/2 CRITICAL ROOT ZONE OR WITHIN 12" OF THE TRUNK, WHICHEVER DISTANCE IS GREATER.
- TREE PROTECTION FENCING TO BE INSTALLED AT THE 1/2 CRZ OF TREES WITHIN THE AREAS OF CONSTRUCTION, STORAGE OR TRANSPORT IMPACT.
- CONTRACTOR TO SET UP ON-SITE PRE-CONSTRUCTION MEETING WITH ARBORIST AND MATT GARCIA DESIGN TO REVIEW TREE PROTECTION.
- NO PIERS WITHIN 5' OF TREE TRUNKS.
- NO ACCESS, PARKING OR MATERIAL STORAGE WITHIN LIMITS OF TREE PROTECTION FENCE.
- ALL ROOT CUTS TO BE CLEAN AND FRAYED EDGES.
- FERTILIZE TREE ROOTS AND PROVIDE IRRIGATION DURING CONSTRUCTION ON A REGULAR BASIS.
- APPLY MULCH AT CRITICAL ROOT ZONES OF ALL TREES.
- MINIMIZE DISTURBANCE OF EXISTING GRADE AND LANDSCAPE WHEREVER POSSIBLE, WHILE PROVIDING POSITIVE DRAINAGE AWAY FROM THE HOUSE.
- AFTER CONSTRUCTION, AIRSPADE ALL TREES WHERE CONSTRUCTION ACTIVITIES HAVE COMPACTED SOIL WITHIN THE CRITICAL ROOT ZONE.
- COORDINATE AREAS FOR MATERIAL STORAGE AND DELIVERY WITH MGD AND PREPARE SUCH AREAS SO THAT THEY CAN BE EFFECTIVELY USED FOR SOILWORK.
- CONTRACTOR IS RESPONSIBLE FOR MAINTAINING AND REGULARLY INSPECTING THE SILT FENCE DURING CONSTRUCTION/DEMOLITION INCLUDING THE REMOVAL AND PROPER DISPOSAL OF ANY ACCUMULATED SILT AND DEBRIS.
- CONTRACTOR WILL NOT BEGIN WORK UNTIL THE SILT FENCE AND TREE PROTECTION HAVE BEEN INSTALLED.
- NOTIFY "ONE-CALL" OR APPROPRIATE AUTHORITY TO LOCATE EXISTING UTILITY LINES AND PROTECT ALL UTILITIES FROM EXCAVATION OR SIMILAR HAZARDS.
- PROTECT STRUCTURES, SIDEWALKS, PAVEMENTS AND OTHER FACILITIES FROM DAMAGE CAUSED BY SETTLEMENT, LATERAL MOVEMENT, UNDERMINING, WASHOUT AND OTHER HAZARDS CREATED BY EARTHWORK OPERATIONS.
- LIMITS OF CONSTRUCTION - THIS SITE IS NOT SUBJECT TO LIMITS OF CONSTRUCTION. ALL AREAS OF THE SITE CAN BE UTILIZED FOR CONSTRUCTION ACTIVITY EXCEPT AREAS REQUIRED FOR TREE PROTECTION.

ABBREVIATIONS

TPF - TREE PROTECTION FENCE
PSRW - PLATE STEEL RETAINING WALL
TOW - TOP OF WALL

TREE PLAN NOTES

- PRIOR TO DEVELOPMENT, CONTRACTOR TO PROVIDE A ROOT ZONE MULCH LAYER AND MAINTAIN TREE PROTECTION FENCING (DOWN LINK FIVE FOOT TALL) FOR ALL PROTECTED TREES ON THE SITE FOR THE DURATION OF THE PROJECT. SEE DIAGRAM ABOVE.
2. A 6" LAYER OF MULCH WITHIN THE ENTIRE AVAILABLE ROOT ZONE AREA IS REQUIRED FOR TREES WHICH HAVE ANY DISTURBANCE INDICATED WITHIN ANY PORTION OF THE CRITICAL ROOT ZONE. SEE DIAGRAM BELOW.
3. THERE SHALL BE NO UTILITY ROUTES OR METERS WITHIN THE 1/2 CRZ OF PROTECTED TREES ON THE SITE.
4. THERE SHALL BE NO ACCESS ROUTES, MATERIAL STAGING, CONCRETE WASHOUTS, DUMPSTERS, SCAFFOLDING, OR PORTABLE TOILETS WITHIN THE CRZ OF PROTECTED TREES ON THE SITE.
5. 2x4 PLANKS, 4" TALL MIN. TO BE STRAPPED SECURELY AROUND ALL PROTECTED TREE TRUNKS AND ROOT FLARES WHEN PROTECTIVE FENCING DOES NOT ADEQUATELY PROTECT THE ENTIRE 1/2 CRZ FOR ANY REASON AT ANY TIME IN THE PROJECT. SEE DIAGRAM BELOW.
6. THERE SHALL BE NO PRUNING OF PROTECTED TREES WITHOUT THE ASSESSMENT BY A PRIVATE CERTIFIED ARBORIST AND RECEIPTS FOR ANY NEEDED WORK ON PROTECTED SIZE TREES WILL BE REQUIRED BY THE FINAL TREE INSPECTION.
7. AT LEAST 50% OF THE TOTAL AREA OF THE CRITICAL ROOT ZONE OF PROTECTED TREES MUST BE PRESERVED AT NATURAL GRADE WITH NATURAL GROUND COVER PER ECH SECTION 3.2.2.

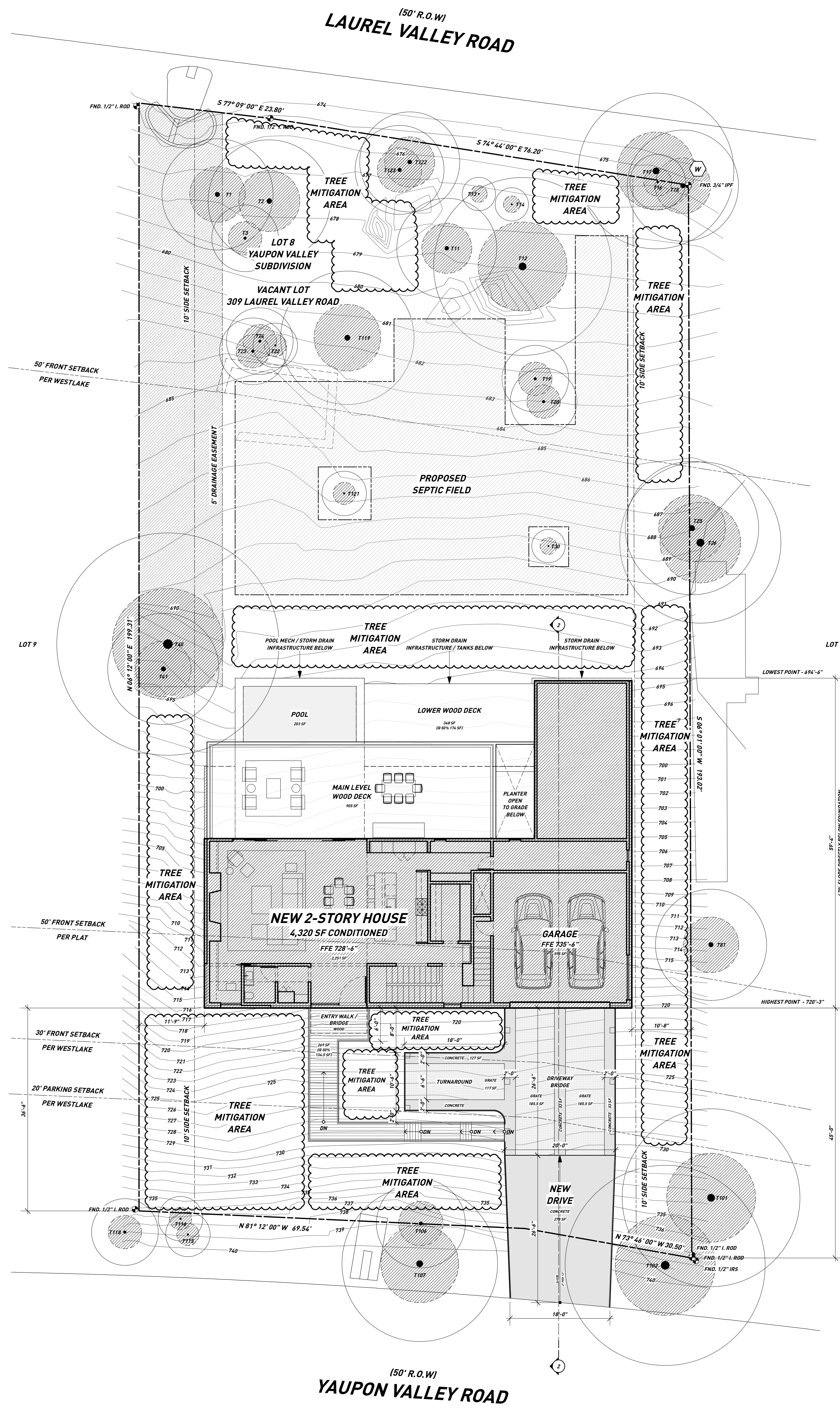
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7. AT LEAST 50% OF THE TOTAL AREA OF THE CRITICAL ROOT ZONE OF PROTECTED TREES MUST BE PRESERVED AT NATURAL GRADE WITH NATURAL GROUND COVER PER ECH SECTION 3.2.2.

TREE LIST

71	10" TREE	791	10" OAK
72	4" & 8" OAK	792	8" & 12" OAK
73	4" OAK	793	12" & 12" CEDAR
74	4" OAK	794	8" ELM
75	4" HACKBERRY	795	4" HACKBERRY
76	4" HACKBERRY	796	4" HACKBERRY
77	4" HACKBERRY	797	4" HACKBERRY
78	4" HACKBERRY	798	4" HACKBERRY
79	4" HACKBERRY	799	4" HACKBERRY
80	4" HACKBERRY	800	4" HACKBERRY
81	4" HACKBERRY	801	4" HACKBERRY
82	4" HACKBERRY	802	4" HACKBERRY
83	4" HACKBERRY	803	4" HACKBERRY
84	4" HACKBERRY	804	4" HACKBERRY
85	4" HACKBERRY	805	4" HACKBERRY
86	4" HACKBERRY	806	4" HACKBERRY
87	4" HACKBERRY	807	4" HACKBERRY
88	4" HACKBERRY	808	4" HACKBERRY
89	4" HACKBERRY	809	4" HACKBERRY
90	4" HACKBERRY	810	4" HACKBERRY
91	4" HACKBERRY	811	4" HACKBERRY
92	4" HACKBERRY	812	4" HACKBERRY
93	4" HACKBERRY	813	4" HACKBERRY
94	4" HACKBERRY	814	4" HACKBERRY
95	4" HACKBERRY	815	4" HACKBERRY
96	4" HACKBERRY	816	4" HACKBERRY
97	4" HACKBERRY	817	4" HACKBERRY
98	4" HACKBERRY	818	4" HACKBERRY
99	4" HACKBERRY	819	4" HACKBERRY
100	4" HACKBERRY	820	4" HACKBERRY
101	4" HACKBERRY	821	4" HACKBERRY
102	4" HACKBERRY	822	4" HACKBERRY
103	4" HACKBERRY	823	4" HACKBERRY
104	4" HACKBERRY	824	4" HACKBERRY
105	4" HACKBERRY	825	4" HACKBERRY
106	4" HACKBERRY	826	4" HACKBERRY
107	4" HACKBERRY	827	4" HACKBERRY
108	4" HACKBERRY	828	4" HACKBERRY
109	4" HACKBERRY	829	4" HACKBERRY
110	4" HACKBERRY	830	4" HACKBERRY
111	4" HACKBERRY	831	4" HACKBERRY
112	4" HACKBERRY	832	4" HACKBERRY
113	4" HACKBERRY	833	4" HACKBERRY
114	4" HACKBERRY	834	4" HACKBERRY
115	4" HACKBERRY	835	4" HACKBERRY
116	4" HACKBERRY	836	4" HACKBERRY
117	4" HACKBERRY	837	4" HACKBERRY
118	4" HACKBERRY	838	4" HACKBERRY
119	4" HACKBERRY	839	4" HACKBERRY
120	4" HACKBERRY	840	4" HACKBERRY
121	4" HACKBERRY	841	4" HACKBERRY
122	4" HACKBERRY	842	4" HACKBERRY
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144	4" HACKBERRY	864	4" HACKBERRY
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224	4" HACKBERRY	944	4" HACKBERRY
225	4" HACKBERRY	945	4" HACKBERRY
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278	4" HACKBERRY	998	4" HACKBERRY
279	4" HACKBERRY	999	4" HACKBERRY
280	4" HACKBERRY	1000	4" HACKBERRY

TREE MITIGATION LIST

- MEXICAN BUCKEYE
- YALPON HOLLY
- TEXAS MOUNTAIN LAUREL
- TEXAS PERSIMMON
- MEXICAN PLUM
- REDBUD



1 SITE PLAN
1" = 10 ft

TITLE SITE PLAN
DATE JANUARY 30 2026
SHEET

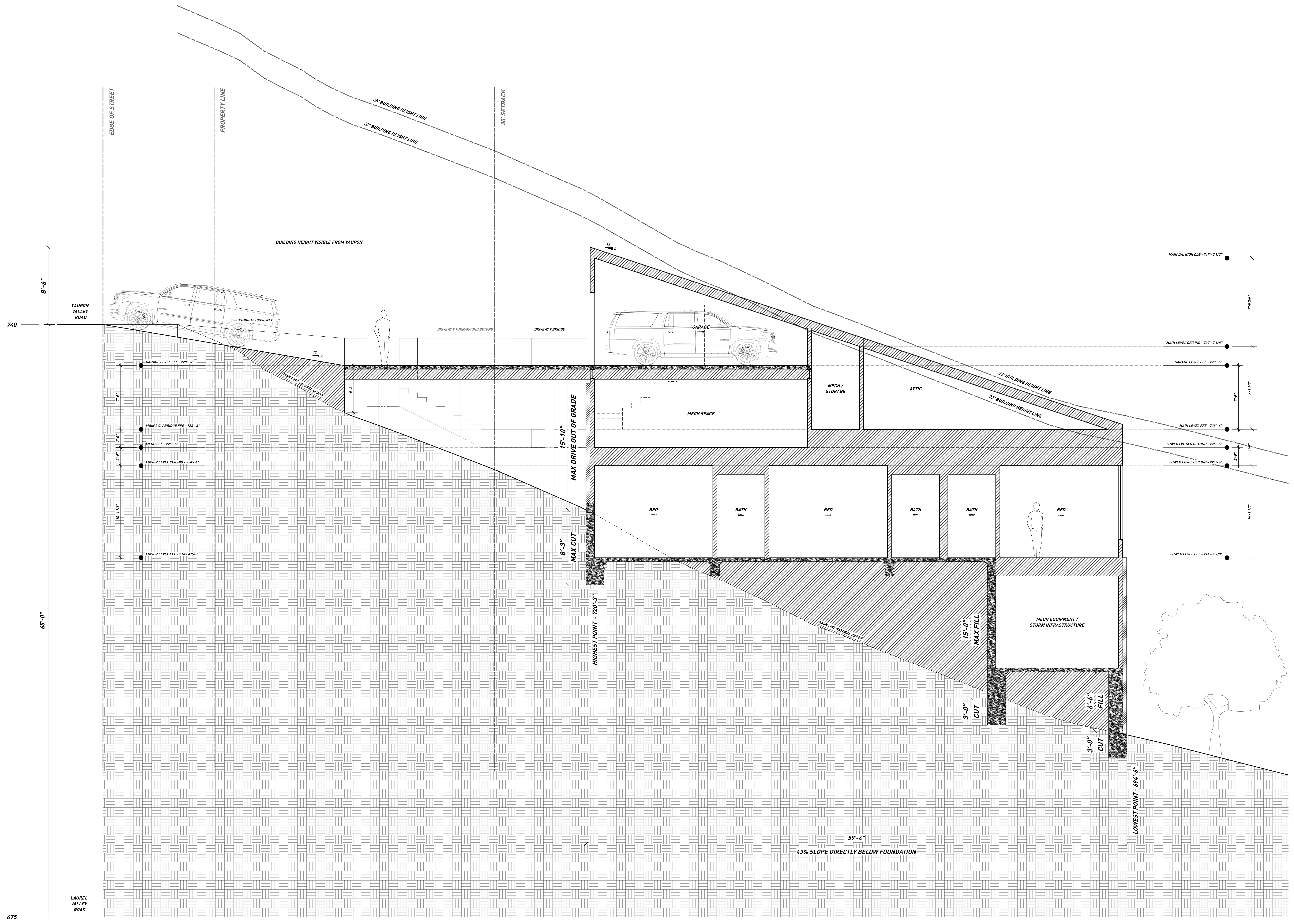
PROJECT
**SCHMERGEL
RESIDENCE**

309 LAUREL VALLEY RD
WEST LAKE HILLS, TEXAS 78746

CLIENTS
GRAHAM & PAIGE SCHMERGEL

DESIGN
MATT GARCIA DESIGN
CONTACT: MATT GARCIA
EMAIL: mattgarcia@gmail.com
PHONE: 210.861.0978

ISSUE
VARIANCE SUBMITTAL - 2025 DEC 15
VARIANCE SUBMITTAL - 2026 JAN 30



1 EAST SECTION
1/4" = 1'-0"

TITLE
DATE
SHEET

SECTION
JANUARY 30 2026

PROJECT
**SCHMERGEL
RESIDENCE**

309 LAUREL VALLEY RD
WEST LAKE HILLS, TEXAS 78746

CLIENTS
GRAHAM & PAIGE SCHMERGEL

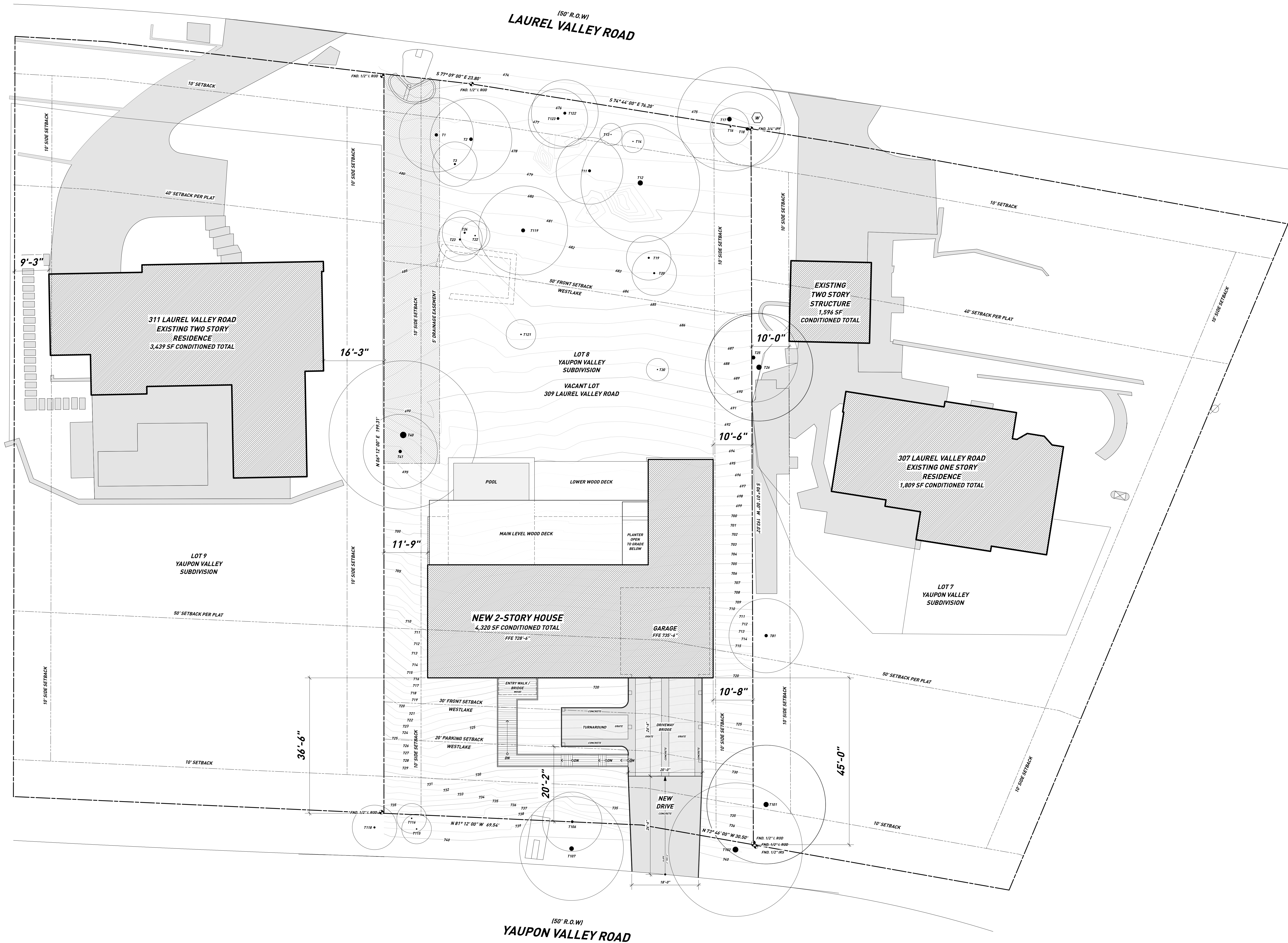
DESIGN
MATT GARCIA DESIGN
CONTACT: MATT GARCIA
EMAIL: mattgarcia@gmail.com
PHONE: 210.861.0978

ISSUE
VARIANCE SUBMITTAL - 2025 DEC 15
VARIANCE SUBMITTAL - 2026 JAN 30

TITLE SITE PLAN W/ NEIGHBOR PROP.

DATE JANUARY 30 2026

SHEET



1 SITE PLAN W/ NEIGHBORING PROPERTIES
1" = 10 ft

PROJECT
**SCHMERGEL
RESIDENCE**

309 LAUREL VALLEY RD
WEST LAKE HILLS, TEXAS 78746

CLIENTS
GRAHAM & PAIGE SCHMERGEL

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VARIANCE SUBMITTAL - 2025 DEC 15
VARIANCE SUBMITTAL - 2026 JAN 30

TITLE
DATE
SHEET

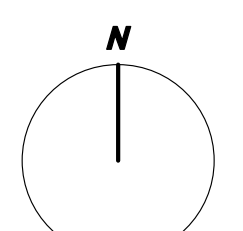
LOWER LEVEL PLAN

JANUARY 30 2026



1 LOWER FLOOR PLAN
1/4" = 1'-0"

MAIN LEVEL (CONDITIONED)	1,685 SF
LOWER LEVEL (CONDITIONED)	2,635 SF
GARAGE	595 SF
TOTAL CONDITIONED	4,915 SF
5 BEDROOM/5.5 BATH	



PROJECT
**SCHMERGEL
RESIDENCE**

309 LAUREL VALLEY RD
WEST LAKE HILLS, TEXAS 78746

CLIENTS
GRAHAM & PAIGE SCHMERGEL

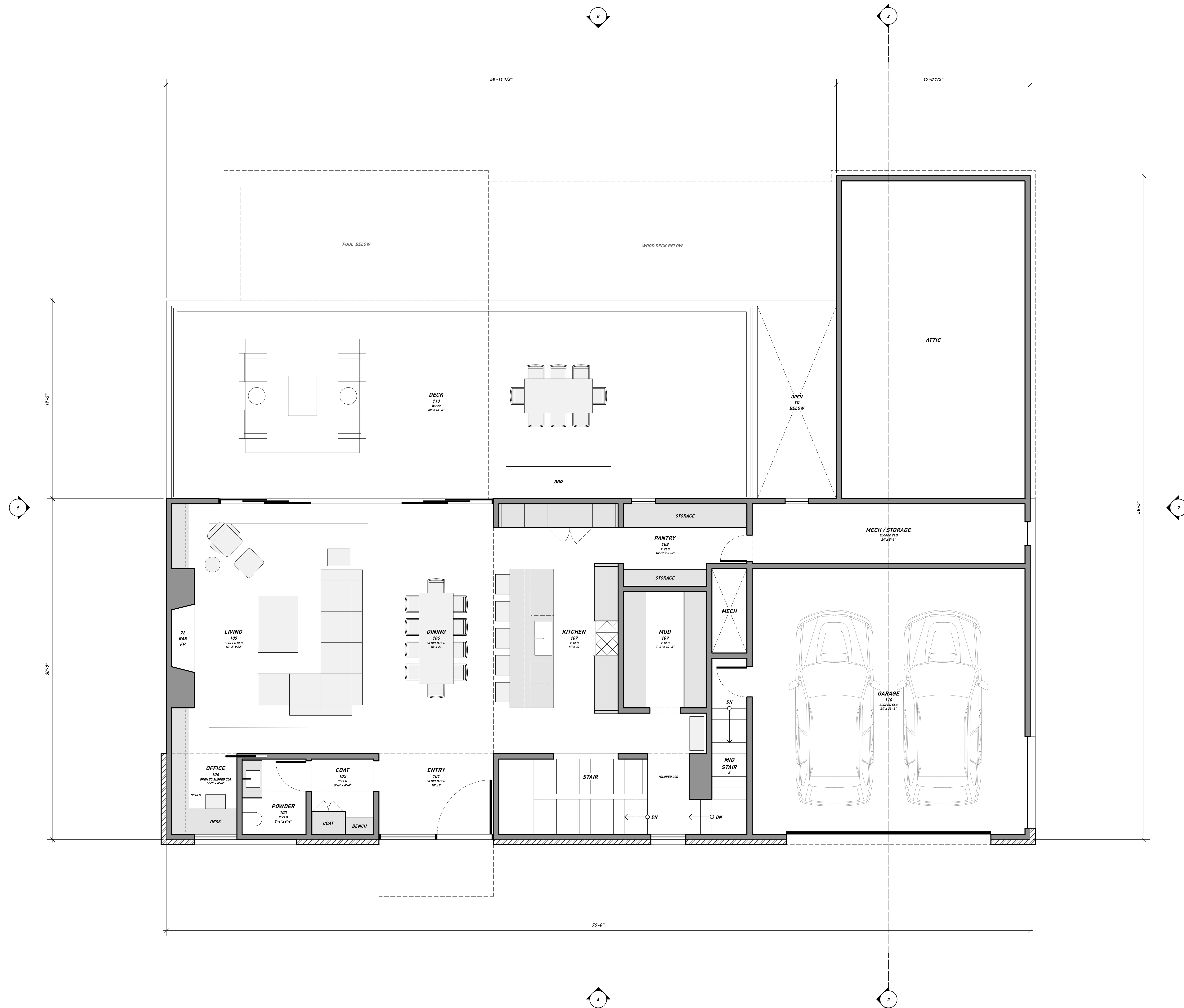
DESIGN
MATT GARCIA DESIGN
CONTACT: MATT GARCIA
EMAIL: mattgarcia@gmail.com
PHONE: 210.861.0978

ISSUE
VARIANCE SUBMITTAL - 2025 DEC 15
VARIANCE SUBMITTAL - 2026 JAN 30

TITLE **MAIN LEVEL PLAN**

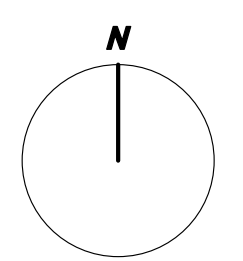
DATE **JANUARY 30 2026**

SHEET



1 MAIN FLOOR PLAN
1/4" = 1'-0"

MAIN LEVEL (CONDITIONED)	1,685 SF
LOWER LEVEL (CONDITIONED)	2,635 SF
GARAGE	595 SF
TOTAL CONDITIONED	4,915 SF
5 BEDROOM/5.5 BATH	



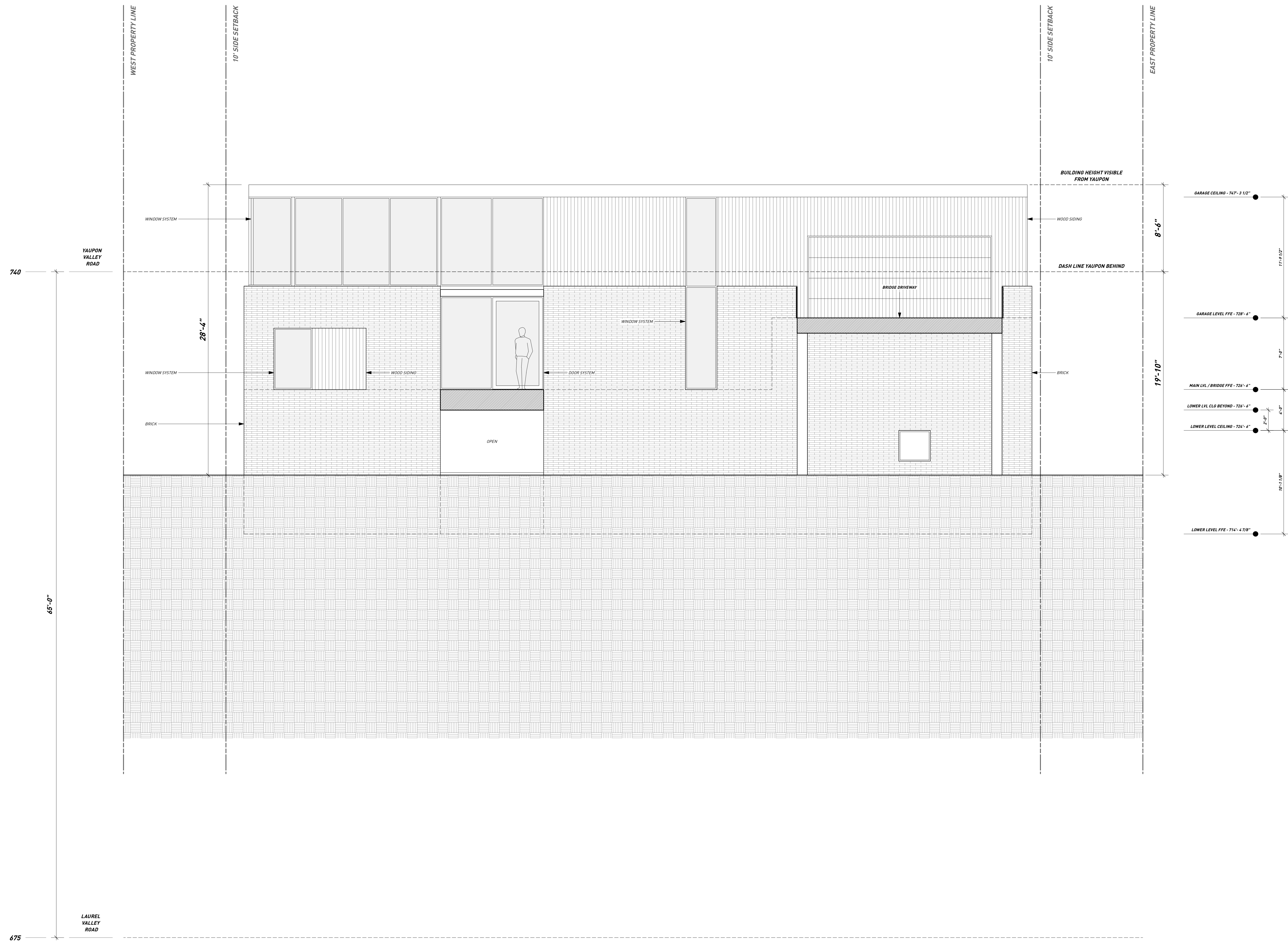
PROJECT
**SCHMERGEL
RESIDENCE**

309 LAUREL VALLEY RD
WEST LAKE HILLS, TEXAS 78746

CLIENTS
GRAHAM & PAIGE SCHMERGEL

DESIGN
MATT GARCIA DESIGN
CONTACT: MATT GARCIA
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PHONE: 210.861.0978

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VARIANCE SUBMITTAL - 2026 JAN 30



1 SOUTH ELEVATION
1/4" = 1'-0"

TITLE ELEVATIONS
DATE JANUARY 30 2026
SHEET

PROJECT
**SCHMERGEL
RESIDENCE**

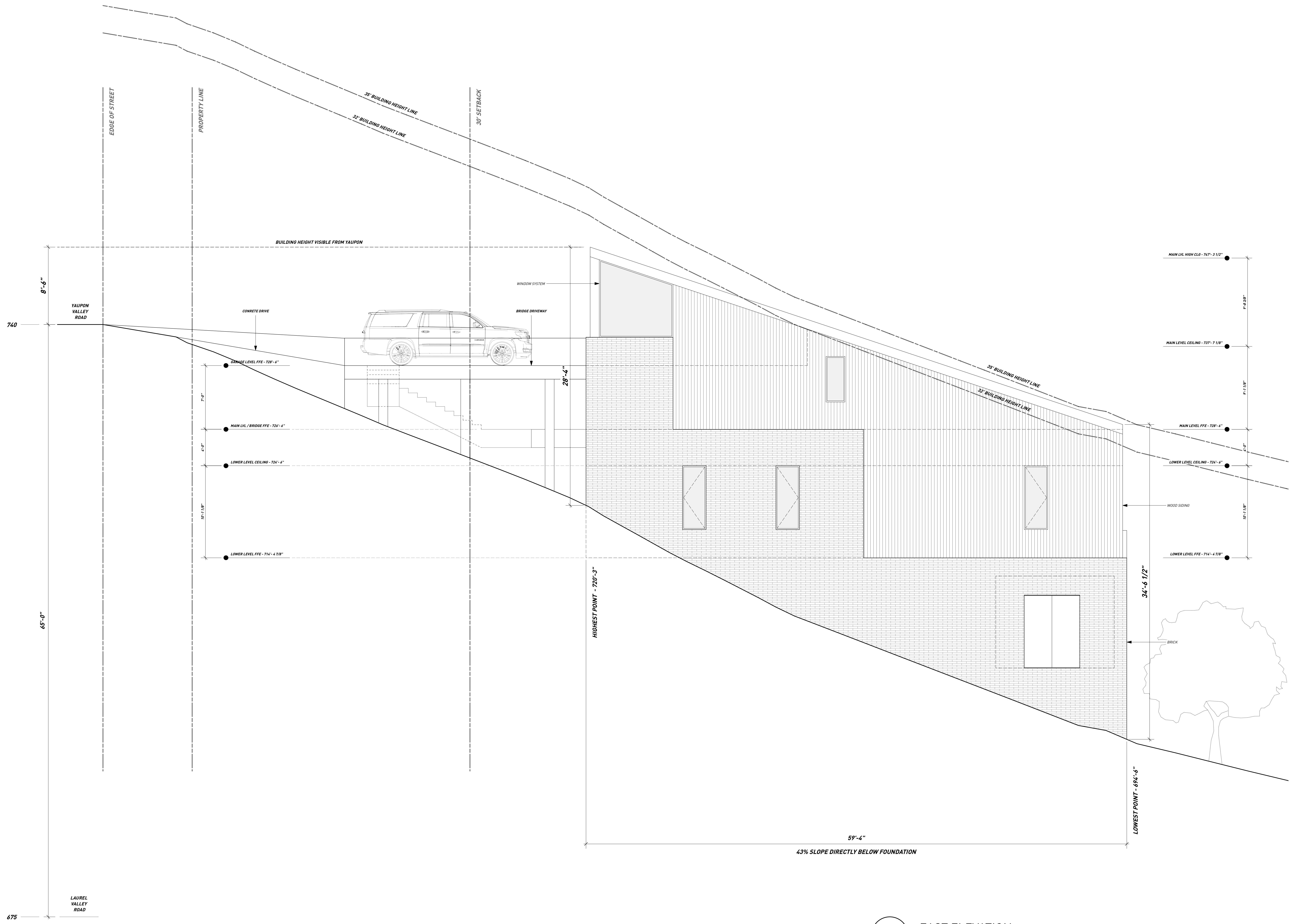
309 LAUREL VALLEY RD
WEST LAKE HILLS, TEXAS 78746

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ISSUE
VARIANCE SUBMITTAL - 2025 DEC 15
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TITLE ELEVATIONS
DATE JANUARY 30 2026
SHEET



1 EAST ELEVATION
1/4" = 1'-0"

PROJECT
**SCHMERGEL
RESIDENCE**

309 LAUREL VALLEY RD
WEST LAKE HILLS, TEXAS 78746

CLIENTS
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ISSUE
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VARIANCE SUBMITTAL - 2026 JAN 30



1 NORTH ELEVATION
1/4" = 1'-0"

TITLE
DATE
SHEET

ELEVATIONS
JANUARY 30 2026

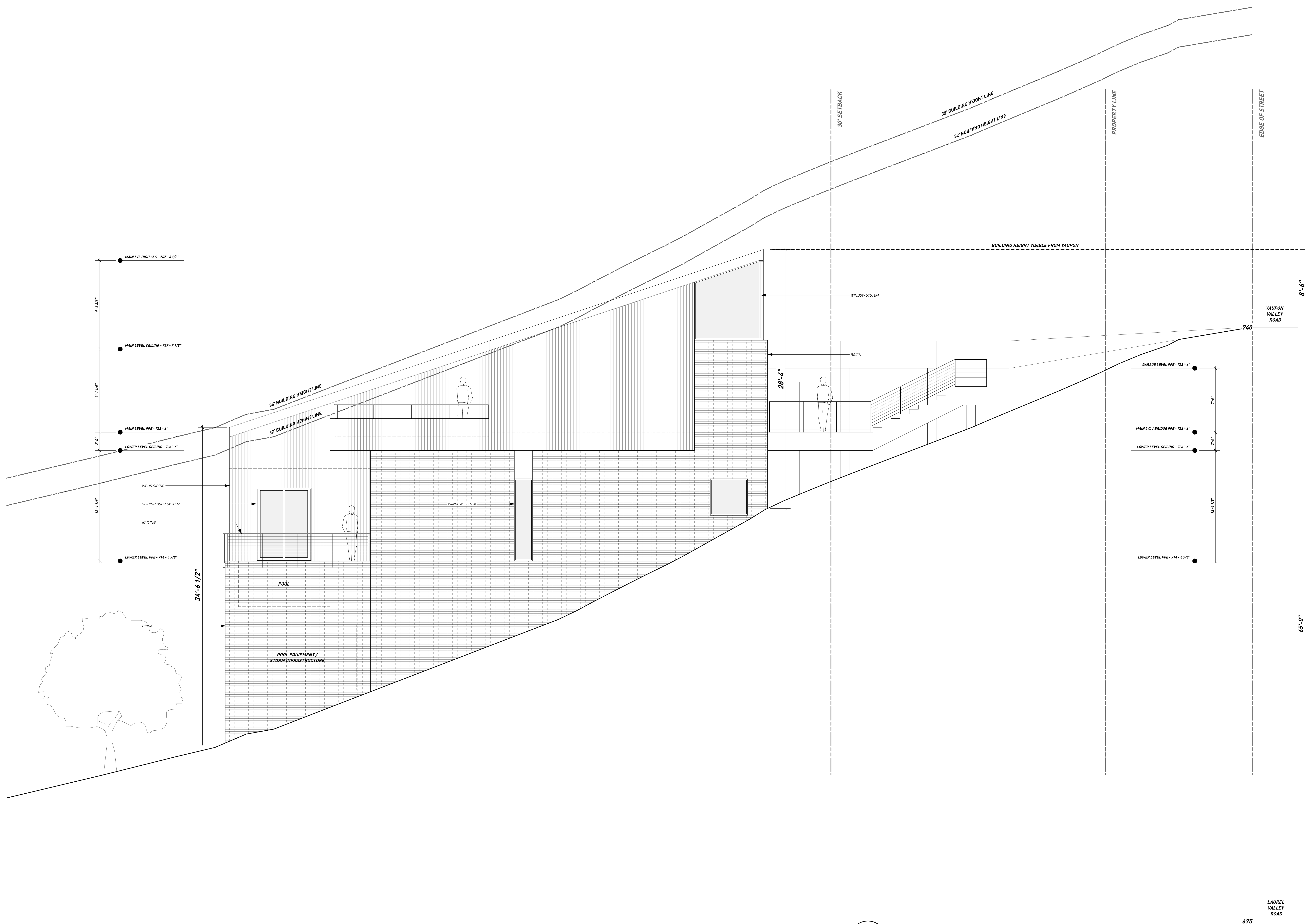
PROJECT
**SCHMERGEL
RESIDENCE**

309 LAUREL VALLEY RD
WEST LAKE HILLS, TEXAS 78746

CLIENTS
GRAHAM & PAIGE SCHMERGEL

DESIGN
MATT GARCIA DESIGN
CONTACT: MATT GARCIA
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PHONE: 210.861.0978

ISSUE
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VARIANCE SUBMITTAL - 2026 JAN 30



1 WEST ELEVATION
1/4" = 1'-0"

TITLE ELEVATIONS
DATE JANUARY 30 2026
SHEET



December 9, 2025

Ms. Jennifer C. Bills
City of Westlake Hills
Building & Development Services

RE: Drainage Plan Narrative

309 Laurel Valley Rd.
West Lake Hills, TX 78746

Dear Ms. Bills,

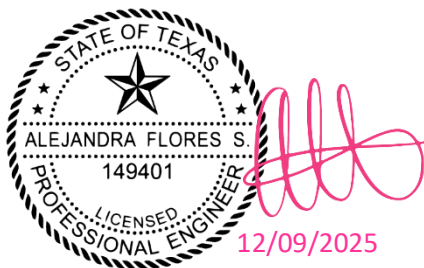
The subject project is currently undeveloped and proposes the construction of one single-family house with an outdoor deck, pool, and a driveway access. The property is zoned residential R-1, is located within the Edwards Aquifer Contributing Zone, but it is not within the FEMA floodplain per FEMA map no. 48453C0445K.

The topography indicates a noticeable drop in grade from the southern boundary of the lot towards the north, where an existing storm inlet collects runoff from surrounding area. Given these conditions, the drainage patterns around the property are well defined and can be effectively managed with appropriately designed stormwater controls.

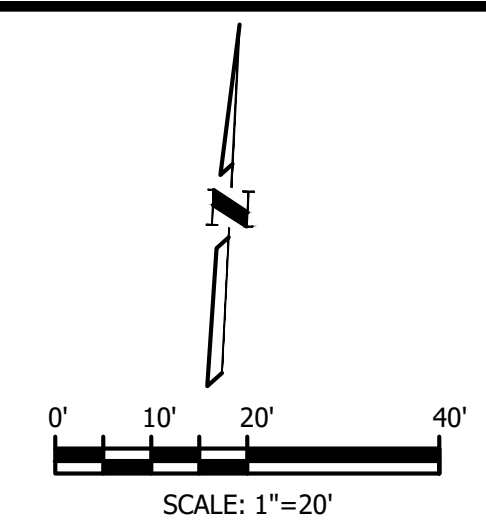
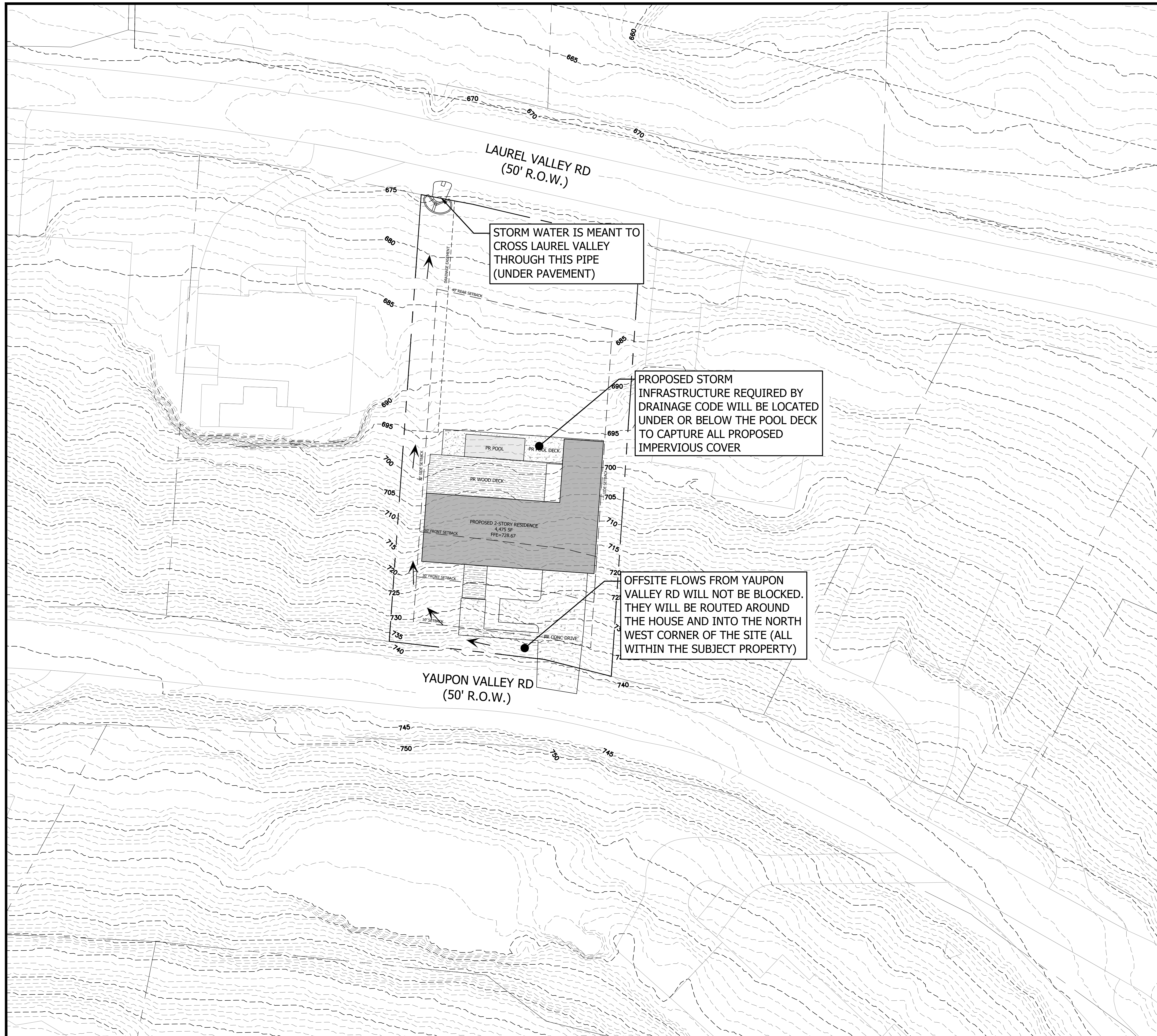
In accordance with the City of West Lake Hills Drainage and Erosion Control Design Manual, the project will provide both detention and permanent water quality measures. A detention pond and a rainwater harvesting system will be incorporated into the design to address stormwater mitigation and treatment requirements. Based on the site's natural drainage characteristics and the proposed improvements, the planned system can be designed and built in a manner that ensure no adverse impacts to adjacent or downstream properties. An exhibit of the proposed drainage plan has been included to accompany this letter.

If you have any questions, please do not hesitate to contact me at 830-513-9451.

Sincerely,



Alejandra Flores S., PE
Principal
Milian Engineering



LEGEND

	BOUNDARY / RIGHT OF WAY
	OVERHEAD UTILITY LINE
	PROPOSED BUILDING
	PROPOSED CONCRETE SIDEWALK
	PROPOSED PAVEMENT
	PROPOSED SOLID FENCE
	SURFACE FLOW DIRECTION
	ARROW

DESCRIPTION	
NO.	
DATE	

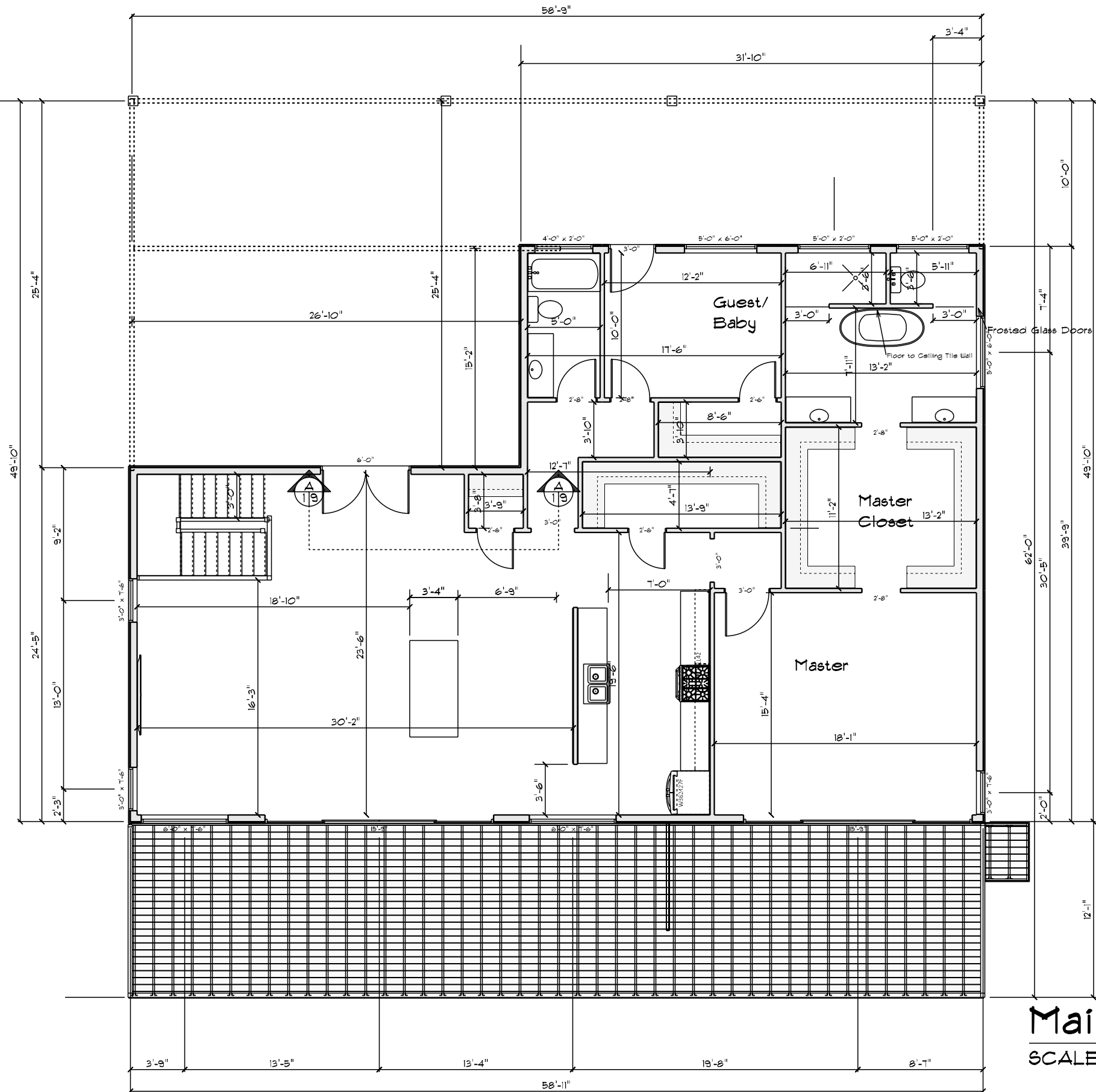
ALEJANDRA@MILANENGINEERING.COM
FIRM REG# F-22686
830.513.9451

STATE OF TEXAS
ALEJANDRA FLORES S.
149401
LICENSED PROFESSIONAL ENGINEER
12/09/2025

RESIDENTIAL DRAINAGE PLAN
309 LAUREL VALLEY RD
WEST LAKE HILLS, TRAVIS COUNTY, TEXAS 78746
DRAINAGE PLAN EXHIBIT

AREA SCHEDULE	
NAME	AREA
Main Floor	1929 sq ft.
First Floor	1069 sq ft.
Total Heated	2998 sq ft.
Slab	2964 sq ft.
Framing	4751 sq ft.
Roof	39 sq.
Stucco	3264 sq ft.
Window	325 sq ft.
Upper Deck	731 sq ft.
Driveway	2036 sq ft.
Covered Parking	1034 sq ft.

ELECTRICAL LEGEND		
ELECTRICAL	COUNT	SYMBOL
ceiling fan - haku	2	
can light 6inch	31	
ceiling dish round	7	
orbit	4	
fan 50 CFM	3	
outlet	28	
outlet gfi	13	
smoke detector	6	
vanity bar light 02	6	
light	2	
switch double - rocker style	5	
switch triple - rocker style	3	
switch quad - rocker style	2	
Superdome	3	
3 LED fixture with bracket 15745	4	
switch - rocker style	2	
switch 3 way - rocker style	4	



Main Floor
 SCALE: 1/8" = 1'-0"
 2015 IIRC
 It is the responsibility of the contractor to ensure all improvements are built to code in accordance with city standards.

These plans have been reviewed by ATS Engineers, Inspectors and Surveyors for code compliance and adopted jurisdictional ordinances. This stamp of review in no way alleviates the responsibility of the owner or contractor to comply with all codes, ordinances, State and Federal laws. Copy of plans bearing this stamp shall be available on the jobsite at all times.

309 Laurel Valley
 PHONE:
 FAX:
 MOBILE:

PAGE:
 1 / 14

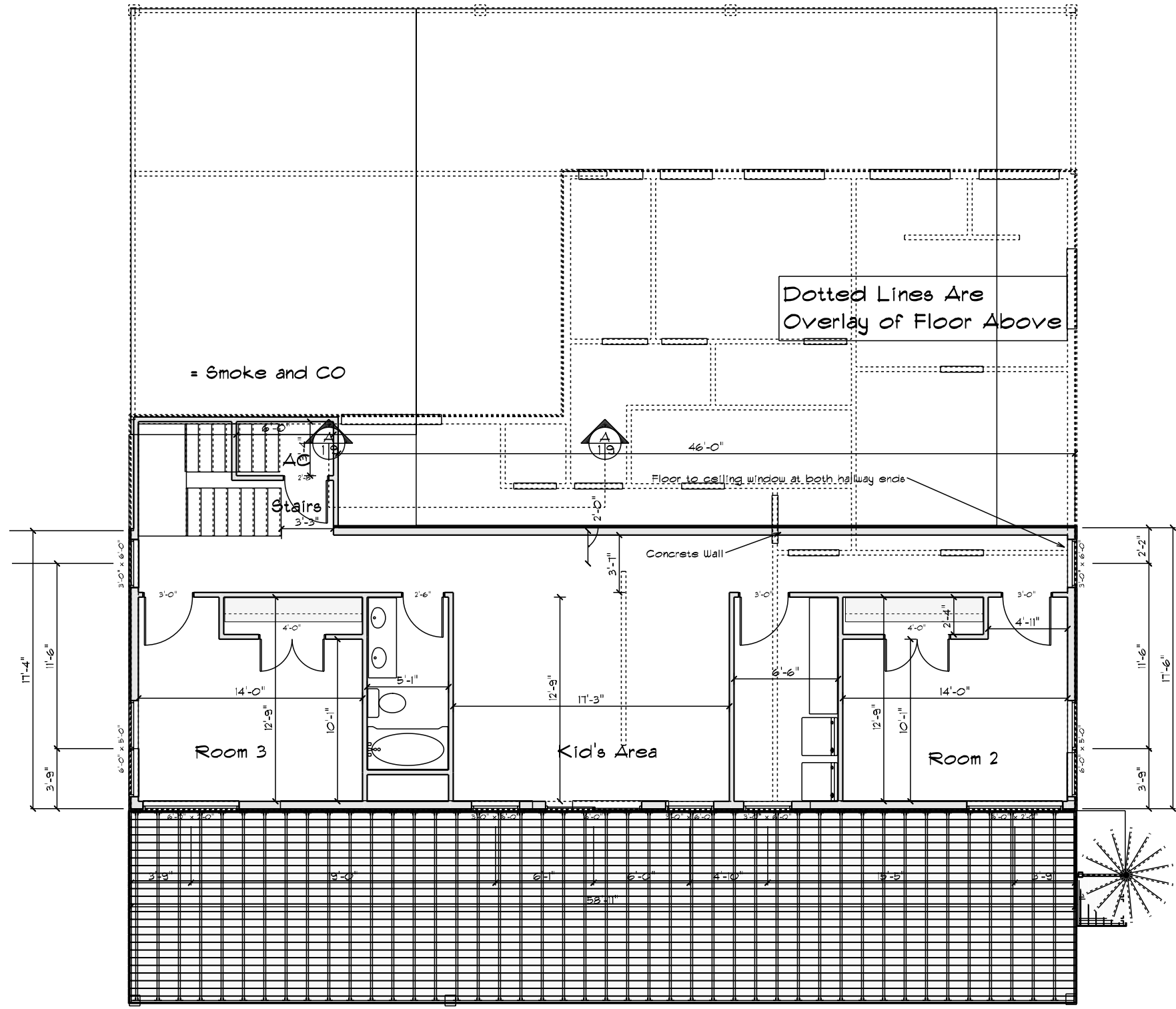
KLM DESIGN BUILD

PHONE:
 FAX:
 MOBILE: 512-927-7091
 TX
 78642
 Construction@KLMDESIGNBUILD

DRAWN BY:
 SCALE: 1/8" = 1'-0"
 DATE: Wednesday, January 27, 2021

Main Floor

ELECTRICAL LEGEND		
ELECTRICAL	COUNT	SYMBOL
can light 6inch	1	⊙
ceiling dish round	6	⊙
fan 50 CFM	2	⊙
smoke detector	6	⊙
vanity bar light 02	3	⊙
outlet	33	⊙
outlet gfi	4	⊙
switch double - rocker style	5	⊙
orbit	4	⊙
switch - rocker style	1	⊙
switch triple - rocker style	1	⊙
pull chain light	1	⊙



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

These plans have been reviewed by ATIS Engineers, Inspectors and Surveyors for code compliance and adopted jurisdictional ordinances. This stamp of review in no way absolves the responsibility of the owner or contractor to comply with all codes, ordinances, State and Federal laws. Copy of plans bearing this stamp shall be available on the jobsite at all times.

J. J. J.

309 Laurel Valley
 PHONE:
 FAX:
 MOBILE:

309 Laurel Valley

PAGE:
2 / 14

KLM DESIGN BUILD

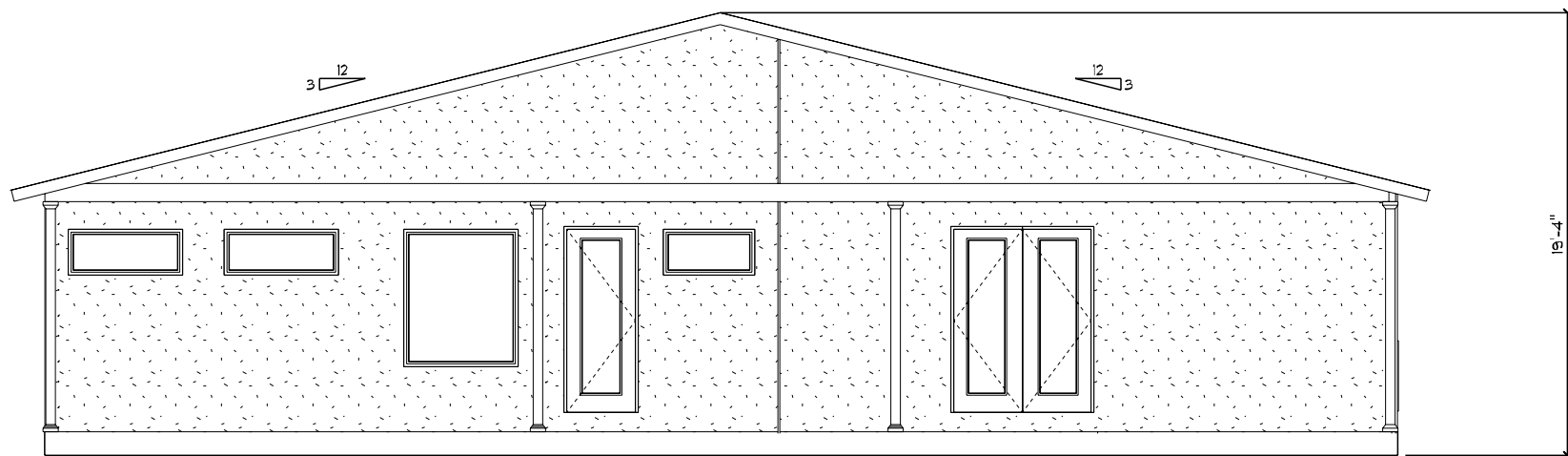
LIBERTY HILL TX 78642
 PHONE: 512-927-7091
 FAX: 512-927-7091
 MOBILE: 512-927-7091
 Construction@KLMDESIGNBUILD

DATE: Wednesday, January 27, 2021

First Floor



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



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

These plans have been reviewed by AYS Engineers, Inc. and approved for construction. This stamp of review in no way relieves the responsibility of the owner or contractor to comply with all codes, ordinances, State and Federal laws. Copy of plans bearing this stamp shall be available on the jobsite at all times.

J. J. J.

309 Laurel Valley

PHONE:
FAX:
MOBILE:

DRAWN BY:

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

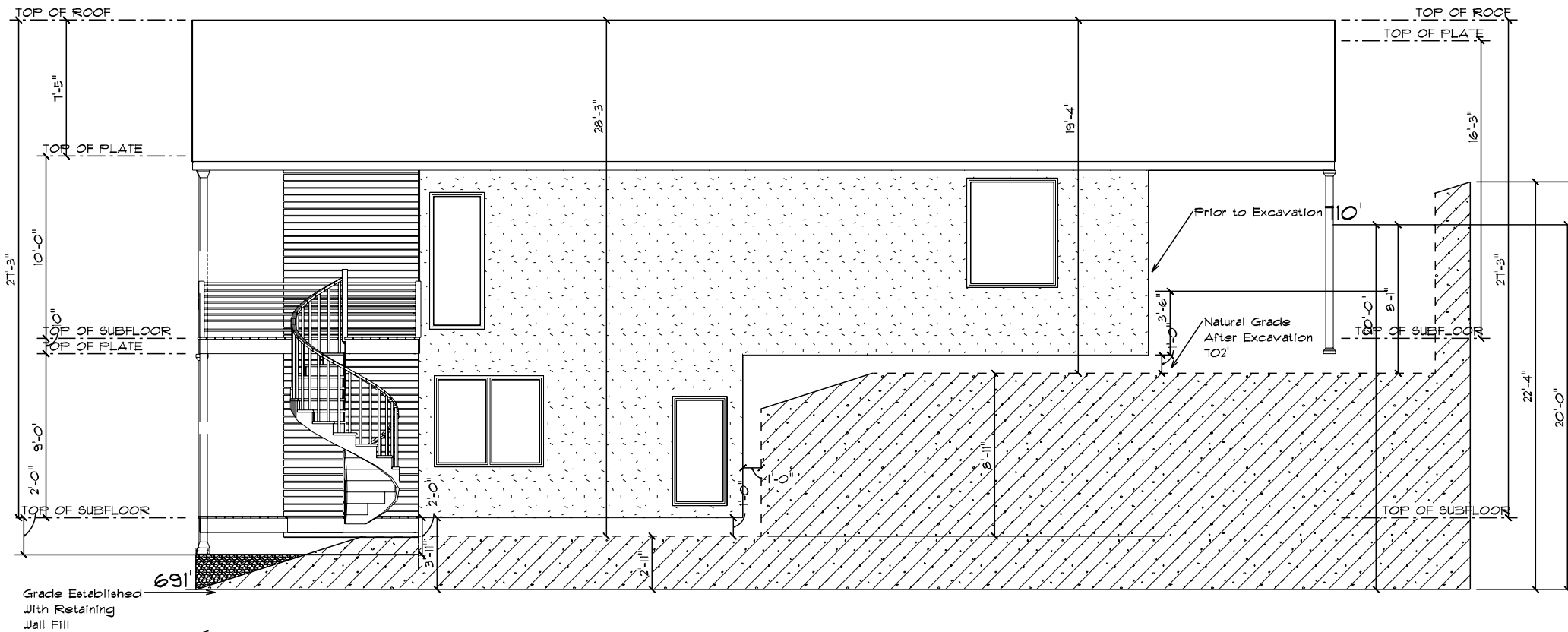
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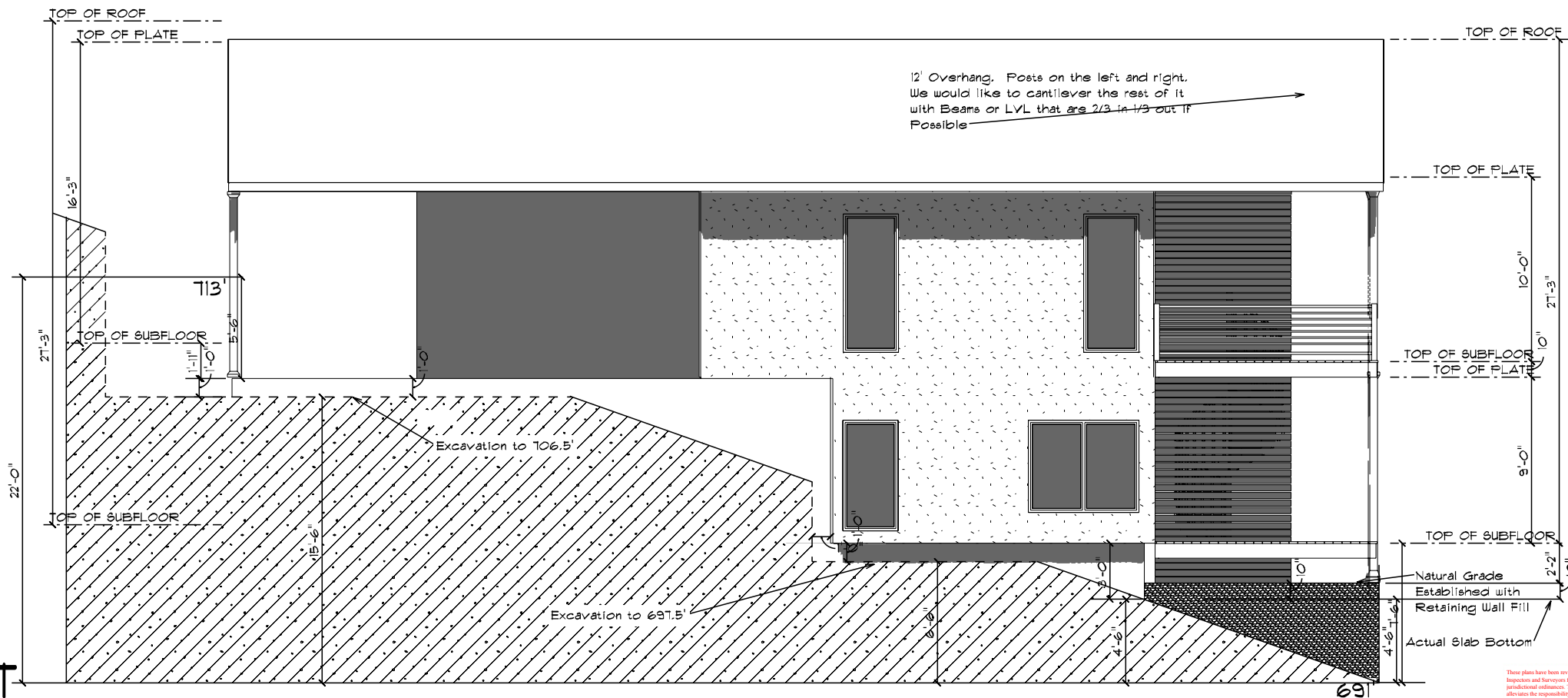
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ELEVATION LEFT

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



ELEVATION RIGHT

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

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

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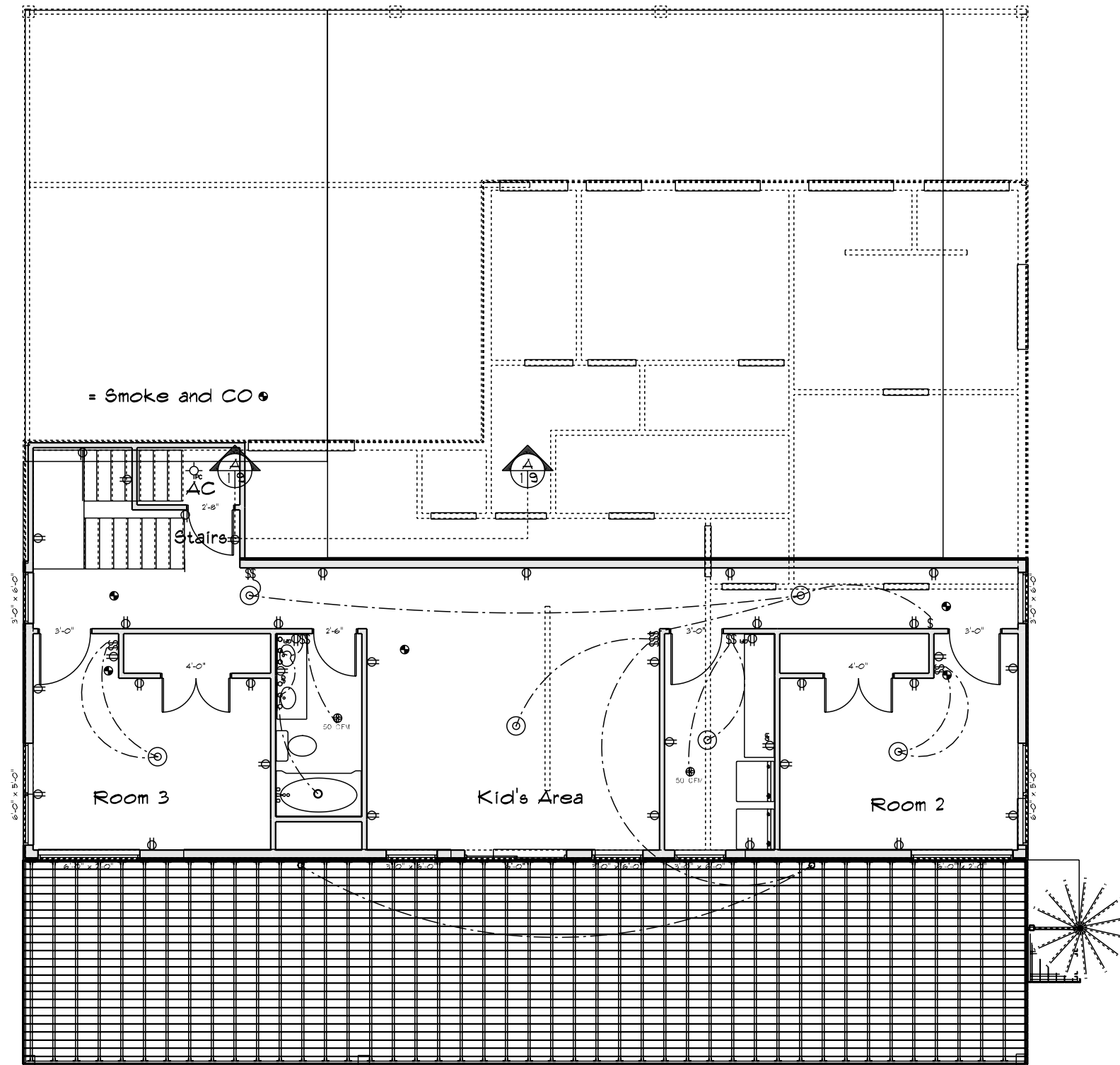
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J. J. J.

MAIN FLOOR - ELECTRICAL

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

ELECTRICAL LEGEND		
ELECTRICAL	COUNT	SYMBOL
can light 6inch	1	⊙
ceiling dish round	6	⊙
fan 50 CFM	2	⊙
smoke detector	6	⊙
vanity bar light 02	3	⊙
outlet	33	⊕
outlet gfi	4	⊕
switch double - rocker style	5	⊕
orbit	4	⊕
switch - rocker style	1	⊕
switch triple - rocker style	1	⊕
pull chain light	1	⊕



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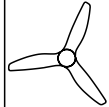
















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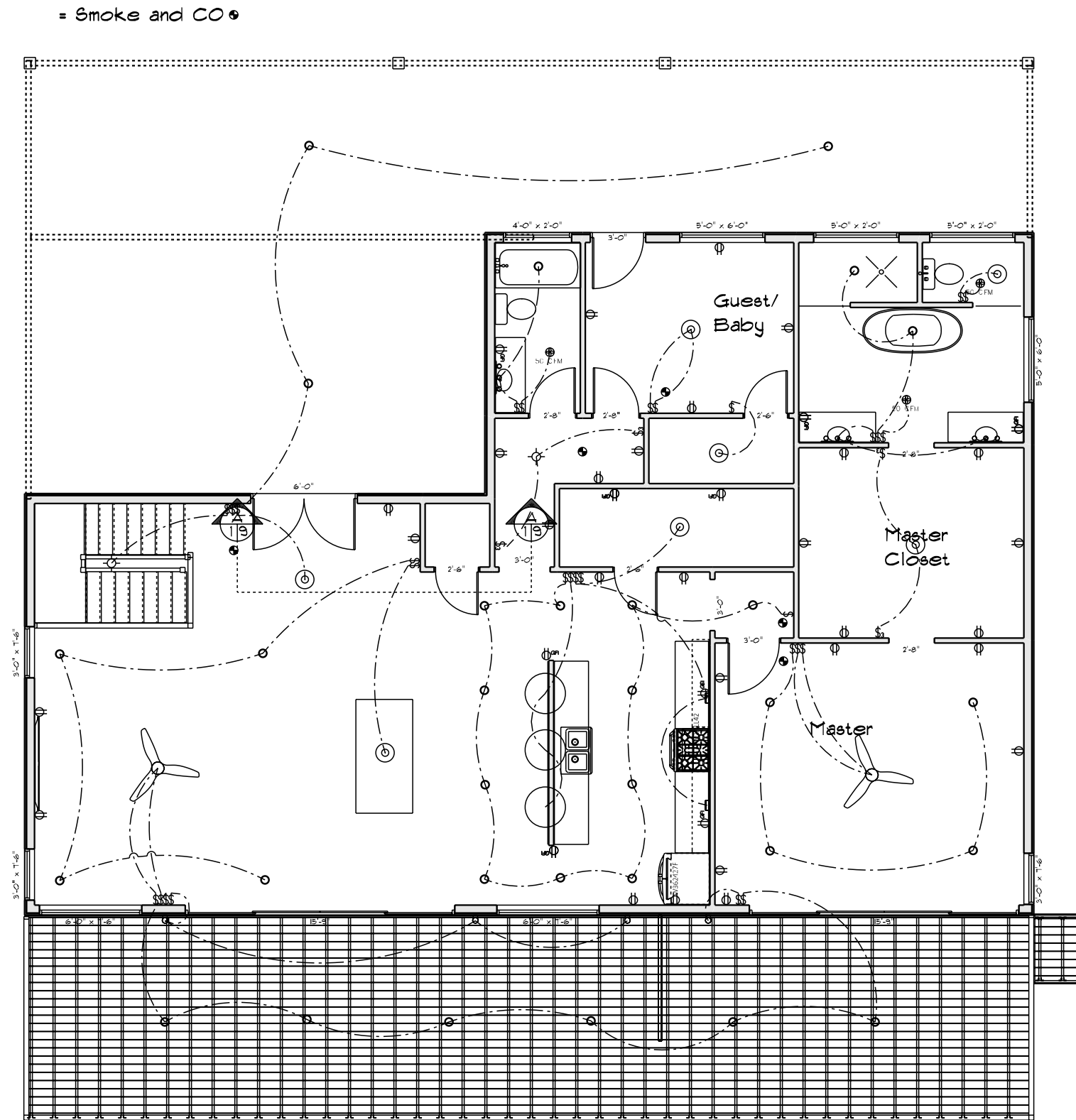
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ELECTRICAL LEGEND		
ELECTRICAL	COUNT	SYMBOL
ceiling fan - haiku	2	
can light girinch	31	
ceiling dish round	7	
orbit	4	
fan 50 CFM	3	
outlet	28	
outlet gfi	13	
smoke detector	6	
vanity bar light 02	6	
light	2	
switch double - rocker style	5	
switch triple - rocker style	3	
switch quad - rocker style	2	
Superdome	3	
3 LED fixture with bracket-15745	4	
switch - rocker style	2	
switch 3 way - rocker style	4	



ORIGINAL MAIN FLOOR LAYOUT - ELECTRICAL

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

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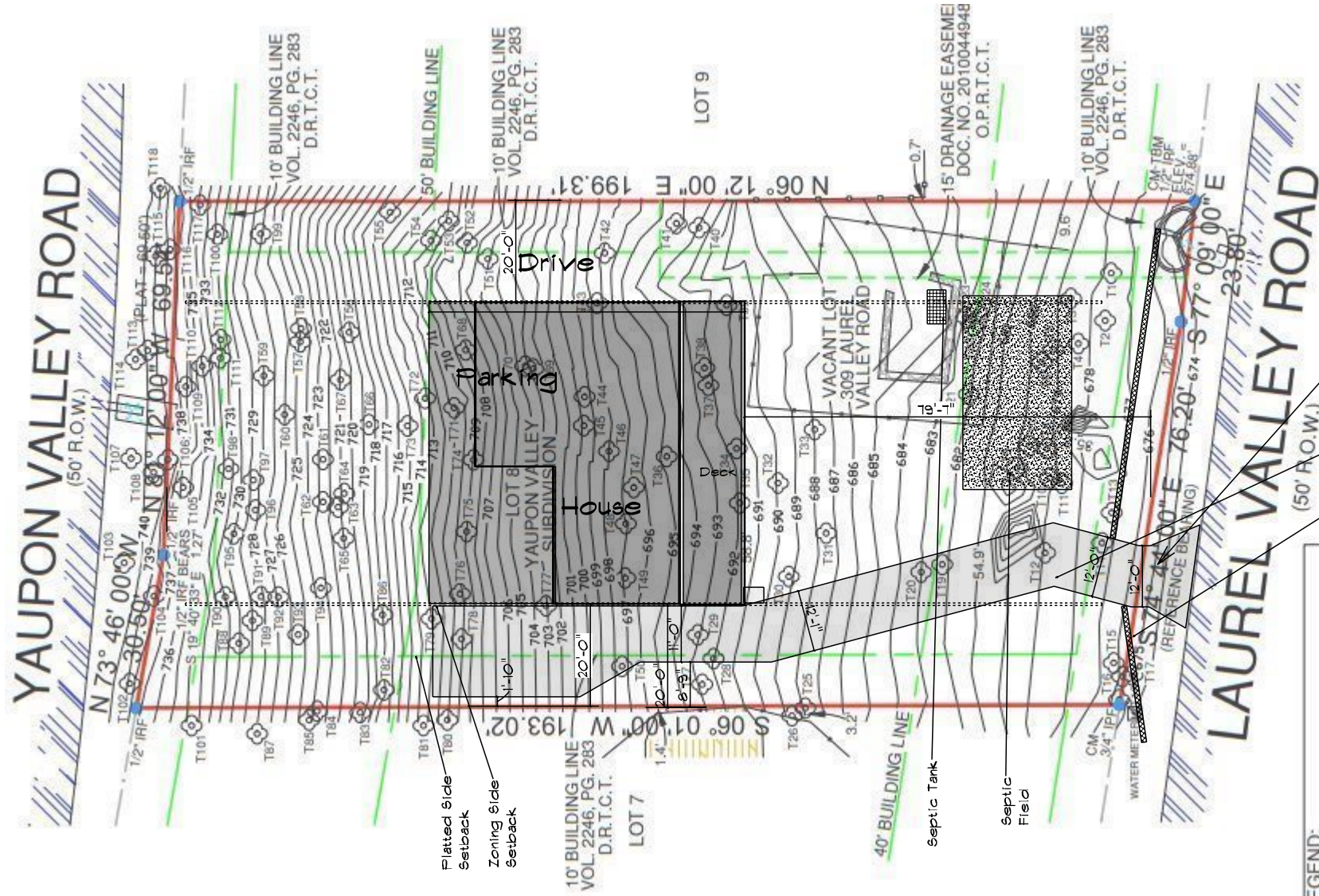
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Main Floor Electric

TOPO HOME PLACEMENT FLIP

SCALE: 1" = 30'-0"



TREE TABLE

T1	10" TREE	T60	12" OAK
T2	6" & 8" OAK	T61	6" CEDAR
T3	6" OAK	T62	8" CEDAR
T4	6" OAK	T63	8" CEDAR
T5	4" OAK	T64	4" CEDAR
T6	8" HACKBERRY	T65	6" & 8" CEDAR
T7	9" OAK	T66	6" ELM
T8	9" OAK	T67	6" & 4" CEDAR
T9	8" OAK	T68	6" & 4" CEDAR
T10	9" HACKBERRY	T69	8" OAK
T11	8" & 12" OAK	T70	3" OAK
T12	3" HACKBERRY	T71	8" & 8" CEDAR
T13	3" HACKBERRY	T72	12" CEDAR
T14	3" HACKBERRY	T73	6" CEDAR
T15	7" CEDAR	T74	6" ELM
T16	5" OAK	T75	3" ELM
T17	10" & 8" OAK	T76	10" CEDAR
T18	10" CEDAR	T77	10" & 12" CEDAR
T19	6" HACKBERRY	T78	8" CEDAR
T20	6" HACKBERRY	T79	9" CEDAR
T21	12" & 12" ELM	T80	10" CEDAR
T22	4" OAK	T81	10" OAK
T23	6" HACKBERRY	T82	12" CEDAR
T24	6" HACKBERRY	T83	6" CEDAR
T25	12" OAK	T84	8" CEDAR
T26	12" & 9" OAK	T85	7" CEDAR
T27	10" CEDAR	T86	10" CEDAR
T28	12" CEDAR	T87	8" CEDAR
T29	8" CEDAR	T88	11" CEDAR
T30	3" CEDAR	T89	5" CEDAR
T31	6" CEDAR	T90	8" HACKBERRY
T32	8" CEDAR	T91	7" CEDAR
T33	6" CEDAR	T92	8" CEDAR
T34	8" OAK	T93	10" CEDAR
T35	4" OAK	T94	4" OAK
T36	4" CEDAR	T95	12" CEDAR
T37	6" OAK	T96	8" CEDAR
T38	8" CEDAR	T97	4" CEDAR
T39	3" ELM	T98	8" CEDAR
T40	14" 6" & 6" OAK	T99	12" CEDAR
T41	10" CEDAR	T100	8" CEDAR
T42	6" CEDAR	T101	8" & 12" OAK
T43	8" CEDAR	T102	12" & 12" CEDAR
T44	8" CEDAR	T103	10" CEDAR
T45	5" CEDAR	T104	6" CEDAR
T46	8" CEDAR	T105	6" CEDAR
T47	8" HACKBERRY	T106	6" ELM
T48	4" HACKBERRY	T107	14" OAK
T49	16" CEDAR	T108	4" & 4" CEDAR
T50	3" ELM	T109	6" CEDAR
T51	12" CEDAR	T110	4" & 4" CEDAR
T52	8" CEDAR	T111	6" CEDAR
T53	8" CEDAR	T112	8 CEDAR
T54	14" CEDAR	T113	3" CEDAR
T55	4" CEDAR	T114	12" CEDAR
T56	8" OAK	T115	4" HACKBERRY
T57	6" CEDAR	T116	4" HACKBERRY
T58	10" CEDAR	T117	6" HACKBERRY
T59	6" CEDAR	T118	6" HACKBERRY

EGEND:

Impervious Schedule NAME	AREA
Total Impervious	4,999 sq ft.
Total Lot	19,036 sq ft.
Allowed Impervious %	28%
Actual Impervious %	26%

During Construction All Staging, Dumpster, and Deliveries Will Take Place Here. Septic will be done last.

Storm water drainage protection Silt Fence

Type I Driveway Detail on Page 14

PERMIT DOCUMENTS

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THIS SET TO REMAIN ON-SITE

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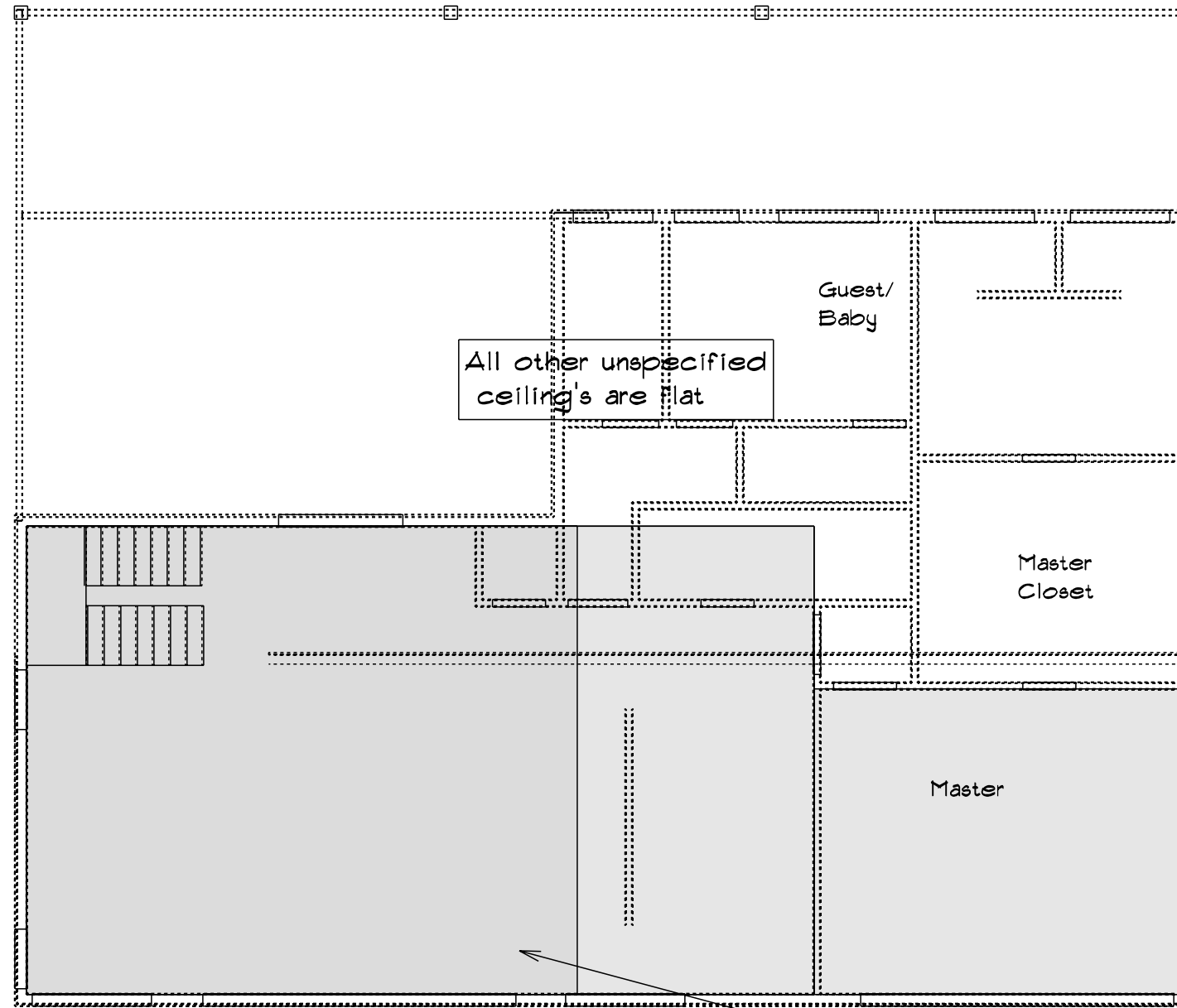
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3/12 Cathedral Continued
Into Master

3/12 Cathedral Ceiling

ORIGINAL MAIN FLOOR LAYOUT - CEILING

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

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DATE: Wednesday, January 27, 2021

Ceiling Plan

PAGE:

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R311.7 Stairways.

❖ The requirements for stairways are contained in Sections R311.7.1 through R311.7.9. The provisions address a wide variety of issues that must be considered when designing a stairway that is both safe and usable.

R311.7.1 Width. Stairways shall be not less than 36 inches (914 mm) in clear width at all points above the permitted handrail height and below the required headroom height. Handrails shall not project more than 4 1/2 inches (114 mm) on either side of the stairway and the clear width of the stairway at and below the handrail height, including treads and landings, shall be not less than 31 1/2 inches (787 mm) where a handrail is installed on one side and 27 inches (698 mm) where handrails are provided on both sides.

R311.7.5.1 Risers. The riser height shall be not more than 7 3/4 inches (196 mm). The riser shall be measured vertically between leading edges of the adjacent treads. The greatest riser height within any flight of stairs shall not exceed the smallest by more than 3/8 inch (9.5 mm). Risers shall be vertical or sloped from the underside of the nosing of the tread above at an angle not more than 30 degrees (0.51 rad) from the vertical. Open risers are permitted provided that the openings located more than 30 inches (762 mm), as measured vertically, to the floor or grade below do not permit the passage of a 4-inch-diameter (102 mm) sphere.

Exceptions:

1. The opening between adjacent treads is not limited on spiral stairways.
2. The riser height of spiral stairways shall be in accordance with Section R311.7.10.1.

R311.7.5.2 Treads. The tread depth shall be not less than 10 inches (254 mm). The tread depth shall be measured horizontally between the vertical planes of the foremost projection of adjacent treads and at a right angle to the tread's leading edge. The greatest tread depth within any flight of stairs shall not exceed the smallest by more than 3/8 inch (9.5 mm).

R311.7.5 Stair treads and risers. Stair treads and risers shall meet the requirements of this section. For the purposes of this section, dimensions and dimensioned surfaces shall be exclusive of carpets, rugs or runners.

R311.7.3 Vertical rise. A flight of stairs shall not have a vertical rise larger than 147 inches (3734 mm) between floor levels or landings.

R311.7.2 Headroom. The headroom in stairways shall be not less than 6 feet 8 inches (2032 mm) measured vertically from the sloped line adjoining the tread nosing or from the floor surface of the landing or platform on that portion of the stairway.

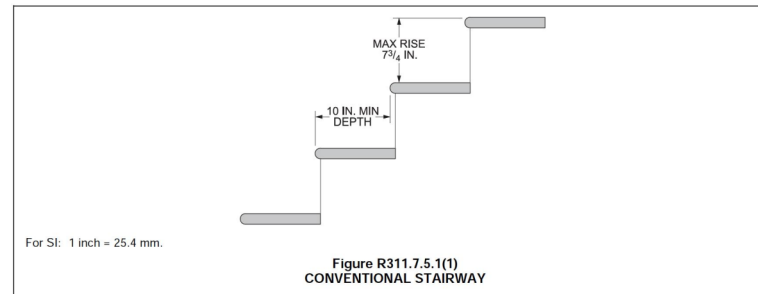
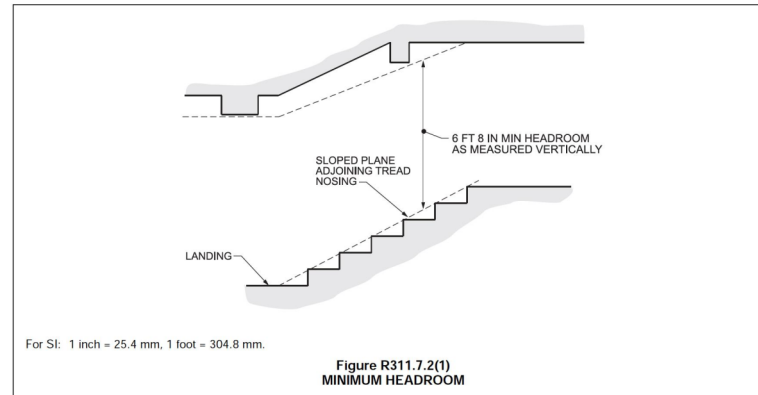
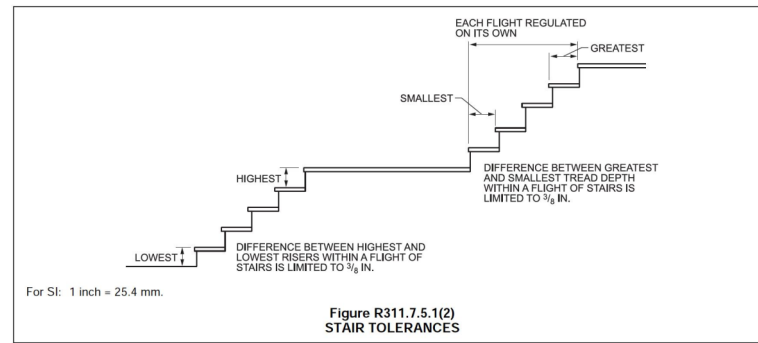
Exceptions:

1. Where the nosings of treads at the side of a flight extend under the edge of a floor opening through which the stair passes, the floor opening shall be allowed to project horizontally into the required headroom not more than 4 3/4 inches (121 mm).
2. The headroom for spiral stairways shall be in accordance with Section R311.7.10.1.

R311.7.6 Landings for stairways. There shall be a floor or landing at the top and bottom of each stairway. The width perpendicular to the direction of travel shall be not less than the width of the flight served. Landings of shapes other than square or rectangular shall be permitted provided that the depth at the walk line and the total area is not less than that of a quarter circle with a radius equal to the required landing width. Where the stairway has a straight run, the depth in the direction of travel shall be not less than 36 inches (914 mm).

Exception: A floor or landing is not required at the top of an interior flight of stairs, including stairs in an enclosed garage, provided that a door does not swing over the stairs.

R311.7.8 Handrails. Handrails shall be provided on not less than one side of each continuous run of treads or flight with four or more risers.



R311.7.5.3 Nosings. The radius of curvature at the nosing shall be not greater than 3/16 inch (14 mm). A nosing projection not less than 3/4 inch (19 mm) and not more than 1 1/4 inches (32 mm) shall be provided on stairways with solid risers. The greatest nosing projection shall not exceed the smallest nosing projection by more than 3/8 inch (9.5 mm) between two stories, including the nosing at the level of floors and landings. Beveling of nosings shall not exceed 1/2 inch (12.7 mm).

Exception: A nosing projection is not required where the tread depth is not less than 11 inches (279 mm).

R311.7.5.2 Treads. The tread depth shall be not less than 10 inches (254 mm). The tread depth shall be measured horizontally between the vertical planes of the foremost projection of adjacent treads and at a right angle to the tread's leading edge. The greatest tread depth within any flight of stairs shall not exceed the smallest by more than 3/8 inch (9.5 mm).

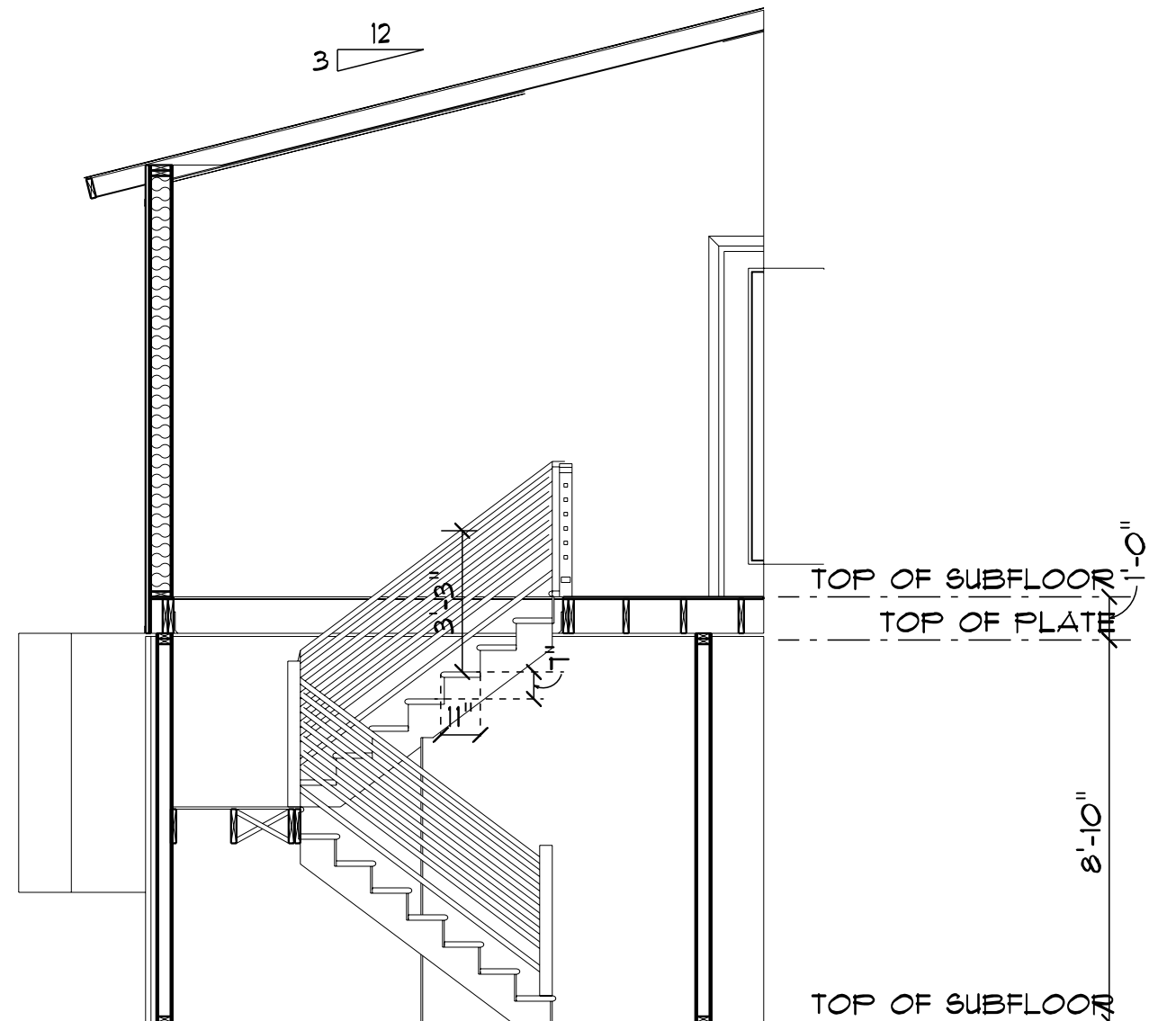
R311.7.8.1 Height. Handrail height, measured vertically from the sloped plane adjoining the tread nosing, or finish surface of ramp slope, shall be not less than 34 inches (864 mm) and not more than 38 inches (965 mm).

Exceptions:

1. The use of a volute, turnout or starting easing shall be allowed over the lowest tread.
2. Where handrail fittings or bendings are used to provide continuous transition between flights, transitions at winder treads, the transition from handrail to guard, or used at the start of a flight, the handrail height at the fittings or bendings shall be permitted to exceed 38 inches (956 mm).

R311.7.8.3 Grip-size. Required handrails shall be of one of the following types or provide equivalent graspability.

1. Type I. Handrails with a circular cross section shall have an outside diameter of not less than 1 1/4 inches (32 mm) and not greater than 2 inches (51 mm). If the handrail is not circular, it shall have a perimeter dimension of not less than 4 inches (102 mm) and not greater than 6 1/4 inches (160 mm) with a cross section of dimension of not more than 2 1/4 inches (57 mm). Edges shall have a radius of not less than 0.01 inch (0.25 mm).
2. Type II. Handrails with a perimeter greater than 6 1/4 inches (160 mm) shall have a graspable finger recess area on both sides of the profile. The finger recess shall begin within a distance of 3/4 inch (19 mm) measured vertically from the tallest portion of the profile and achieve a depth of not less than 3/16 inch (8 mm) within 7/8 inch (22 mm) below the widest portion of the profile. This required depth shall continue for not less than 3/8 inch (10 mm) to a level that is not less than 1 1/4 inches (45 mm) below the tallest portion of the profile. The width of the handrail above the recess shall be not less than 1 1/4 inches (32 mm) and not more than 2 3/4 inches (70 mm). Edges shall have a radius of not less than 0.01 inch (0.25 mm).



STAIR CROSS SECTION

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

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Stairs

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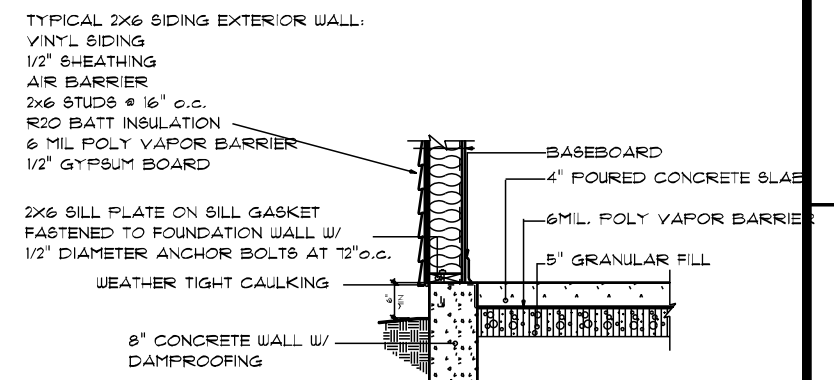
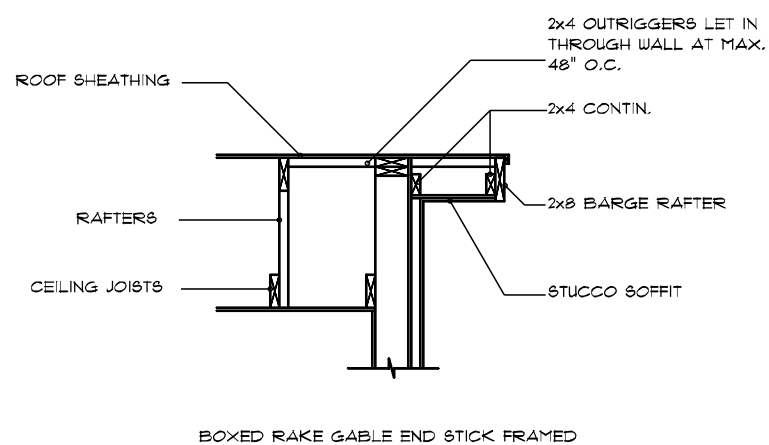
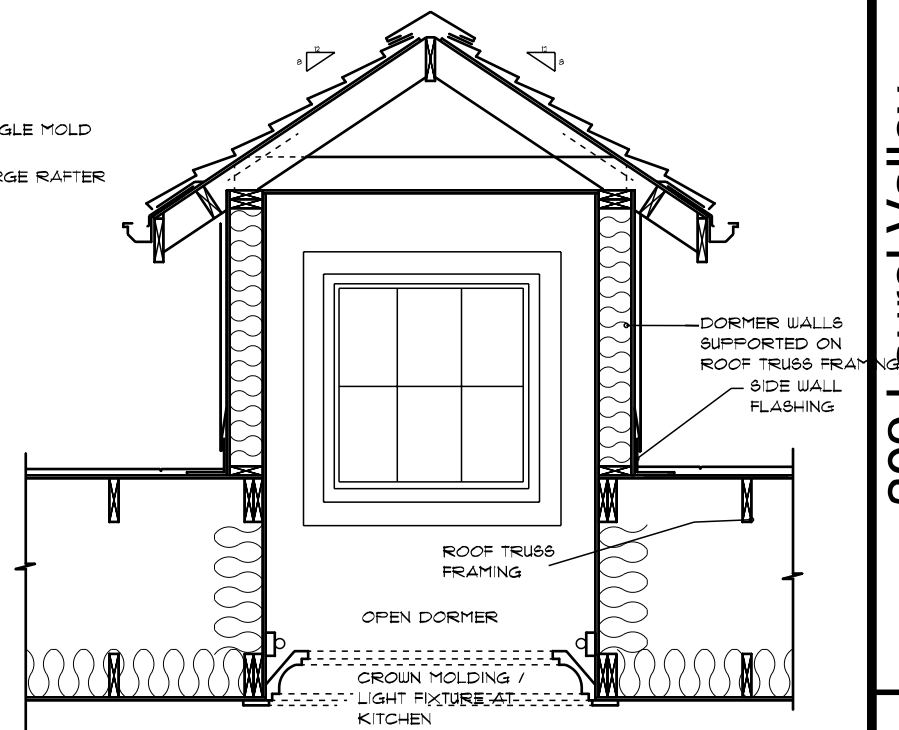
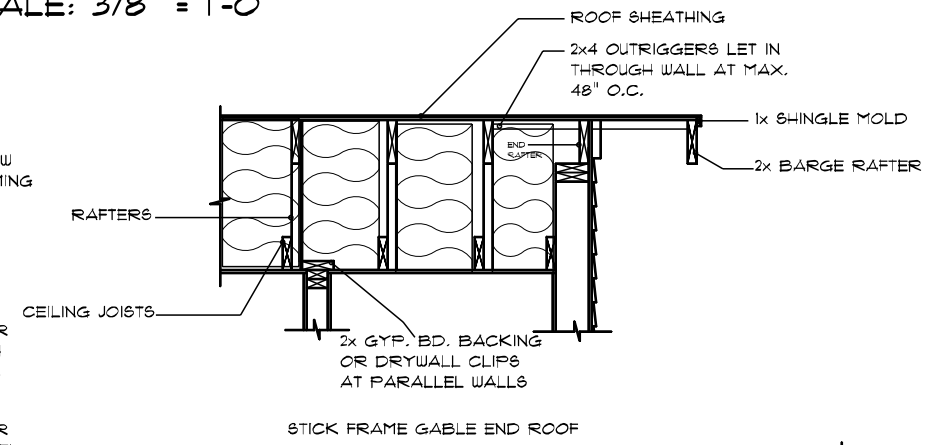
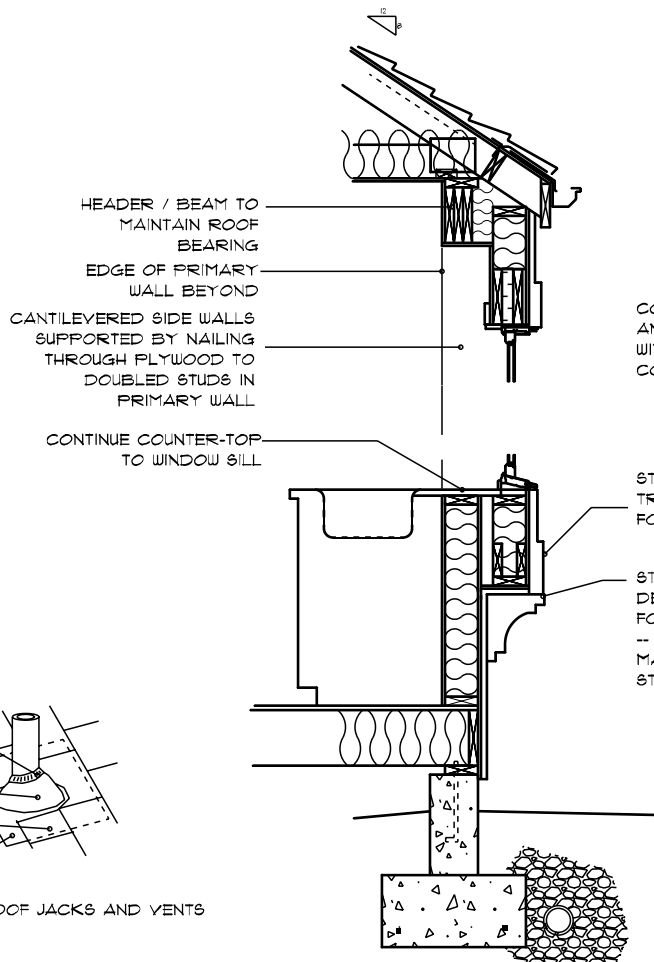
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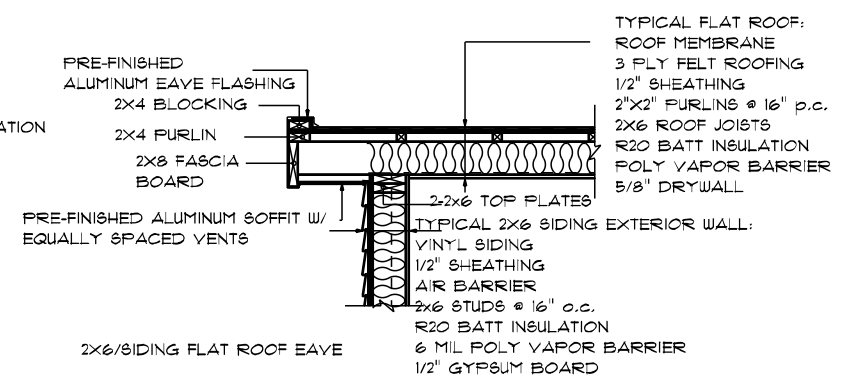
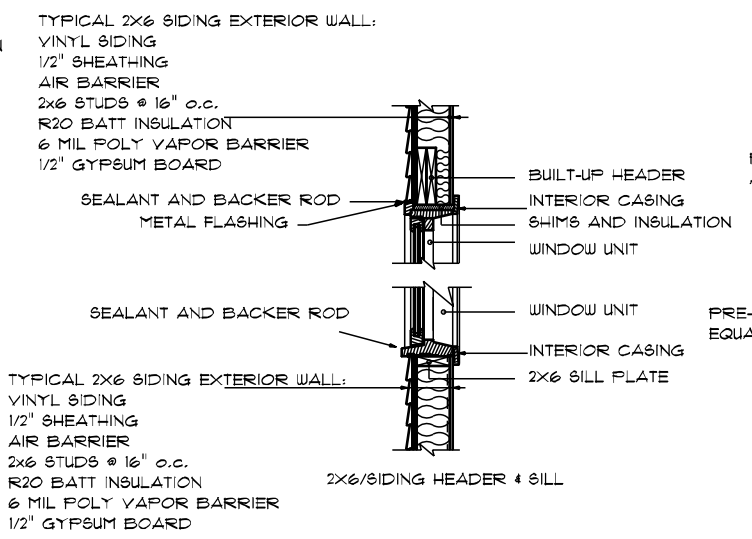
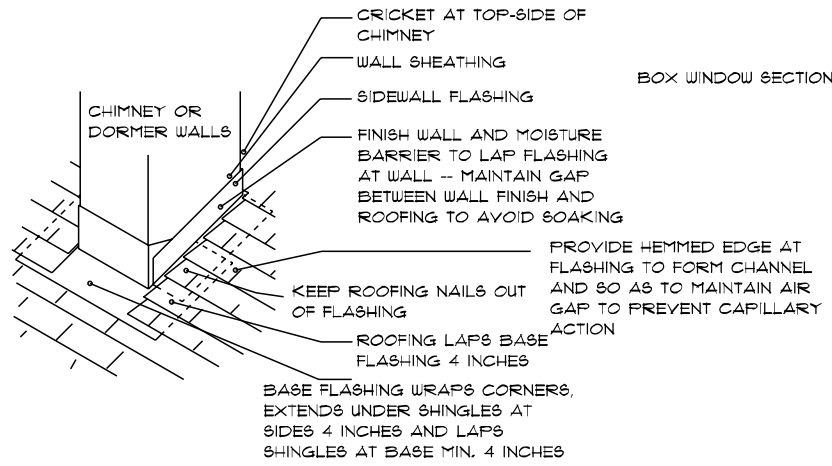
DETAIL PAGE

SCALE: 3/8" = 1'-0"



ASPHALT SHINGLE RIDGE, VALLEY AND HIP FLASHING AS PER MANUFACTURER'S INSTRUCTIONS -- PROVIDE 36 INCH ROLL ROOFING, MINIMUM 55 LB., CENTERED ON ALL HIPS AND VALLEYS

METAL FLASHING AT ALL EAVES, SIDEWALLS, AND RAKES -- PROVIDE HEMMED EDGES SO AS TO FORM DRAINAGE CHANNELS AND PREVENT CAPILLARY ACTION



FLASHING DETAILS / NOTES

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J. J. J.

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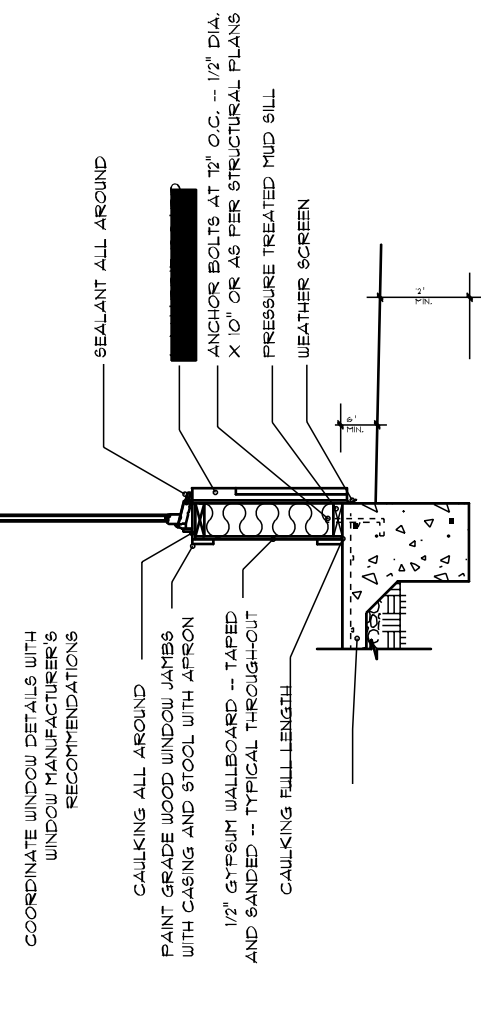
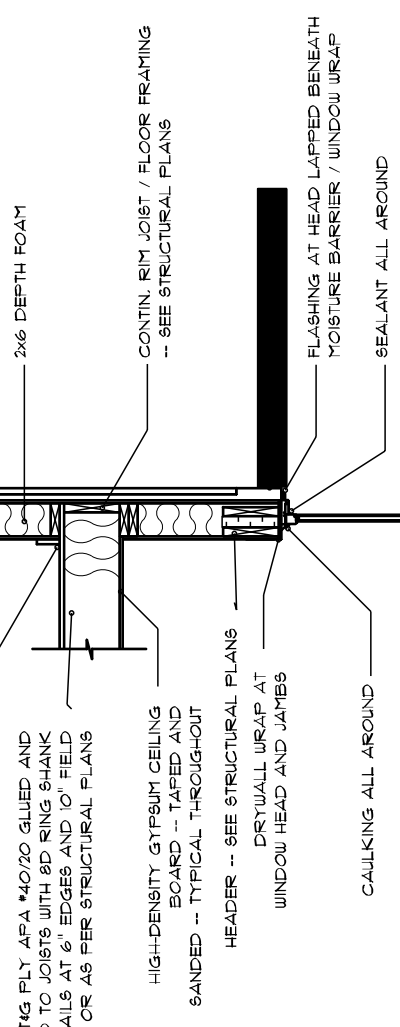
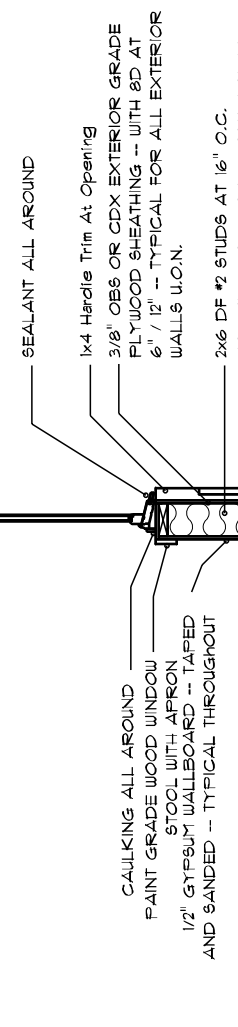
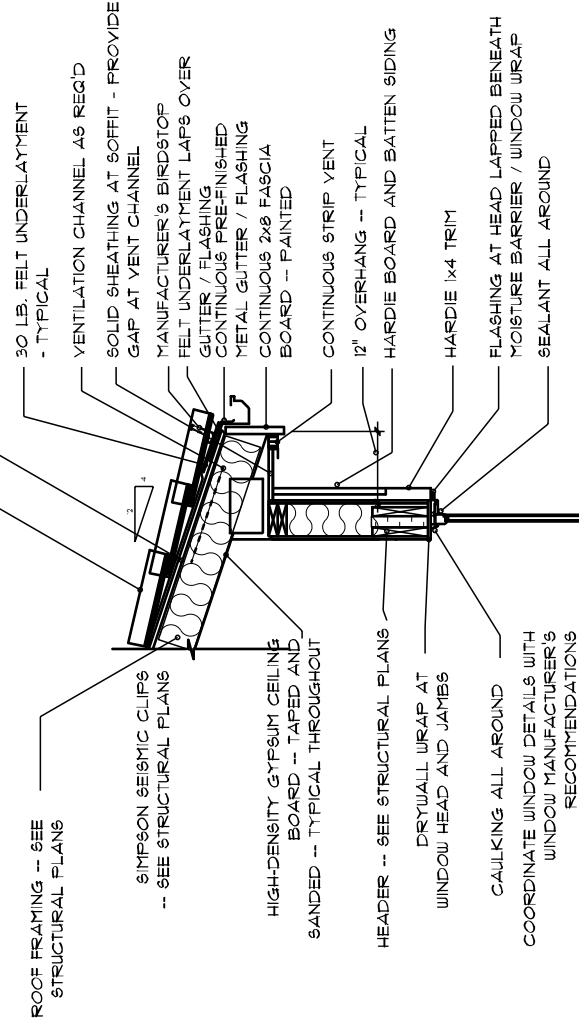
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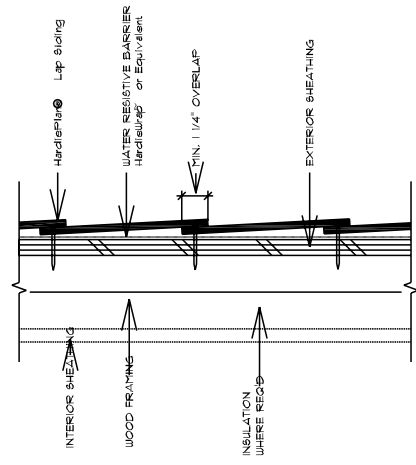
DETAILS 2

SCALE: 3/8" = 1'-0"

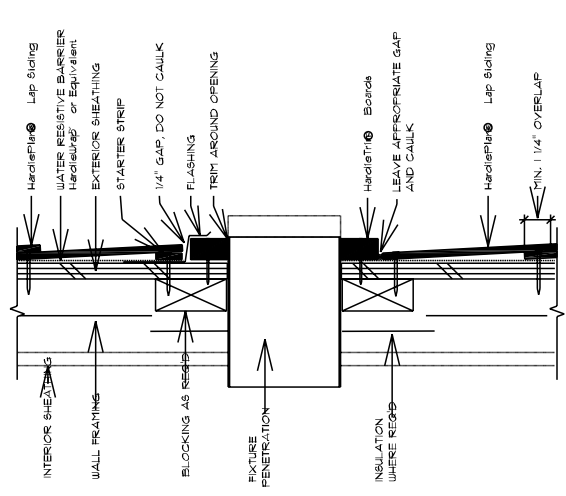
ROOFING SHINGLE -- INSTALL AS PER MANUFACTURER'S SPECIFICATIONS -- TYPICAL
 ROOF SHEATHING - 5/8" OSB OR CDX APA #24/16 MINIMUM WITH 8D AT 6" O.C. EDGE NAILING AND 8D AT 12" O.C. FIELD NAILING -- OR AS PER STRUCTURAL PLANS



2 STOREY WALL SECTION



5 HORIZONTAL LAP VIEW
SCALE: 3/4" = 1'-0"



7 FIXTURE PENETRATION
SCALE: 3/4" = 1'-0"

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SCALE: 3/8" = 1'-0"

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Julie

TABLE R802.5.1(1)—continued
 RAFTER SPANS FOR COMMON LUMBER SPECIES
 (Roof live load = 20 psf, ceiling not attached to rafters, L/Δ = 180)

RAFTER SPACING (inches)	SPECIES AND GRADE	DEAD LOAD = 10 psf				DEAD LOAD = 20 psf				
		2 x 4	2 x 6	2 x 8	2 x 10	2 x 4	2 x 6	2 x 8	2 x 10	
		Maximum rafter spans*								
		(feet - inches)	(feet - inches)	(feet - inches)	(feet - inches)	(feet - inches)	(feet - inches)	(feet - inches)	(feet - inches)	
24	Douglas fir-larch SS	9-1	14-4	18-10	23-9	Note b	9-1	13-3	16-10	20-7
	Douglas fir-larch #1	8-7	12-6	15-10	19-5	22-6	7-5	10-10	13-9	16-9
	Douglas fir-larch #2	8-2	11-11	15-1	18-5	21-4	7-0	10-4	13-0	15-11
	Douglas fir-larch #3	6-2	9-1	11-6	14-1	16-3	5-4	7-10	10-0	12-2
	Hem-fir SS	8-7	13-6	17-10	22-9	Note b	8-7	12-10	16-3	19-10
	Hem-fir #1	8-5	12-4	15-8	19-2	22-2	7-4	10-9	13-7	16-7
	Hem-fir #2	7-11	11-7	14-8	17-10	20-9	6-10	10-0	12-8	15-6
	Hem-fir #3	6-1	8-10	11-3	13-8	15-11	5-3	7-8	9-9	11-10
	Southern pine SS	8-11	14-1	18-6	23-8	Note b	8-11	13-10	17-6	20-10
	Southern pine #1	8-7	12-9	16-2	18-11	22-6	7-5	11-1	14-0	16-5
	Southern pine #2	7-4	11-0	14-11	18-6	19-6	6-4	9-6	12-1	14-4
	Southern pine #3	5-8	8-4	10-6	12-9	15-1	4-11	7-3	9-1	11-0
	Spruce-pine-fir SS	8-5	13-3	17-5	21-8	25-2	8-4	12-2	15-4	18-9
	Spruce-pine-fir #1	8-0	11-9	14-10	18-2	21-0	6-11	10-2	12-10	15-8
	Spruce-pine-fir #2	8-0	11-9	14-10	18-2	21-0	6-11	10-2	12-10	15-8
	Spruce-pine-fir #3	6-1	8-10	11-3	13-8	15-11	5-3	7-8	9-9	11-10

Check sources for availability of lumber in lengths greater than 20 feet.
 For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pound per square foot = 0.0479 kPa.
 a. The tabulated rafter spans assume that ceiling joists are located at the bottom of the attic space or that some other method of resisting the outward push of the rafters on the bearing walls, such as rafter ties, is provided at that location. Where ceiling joists or rafter ties are located higher in the attic space, the rafter spans shall be multiplied by the following factors:

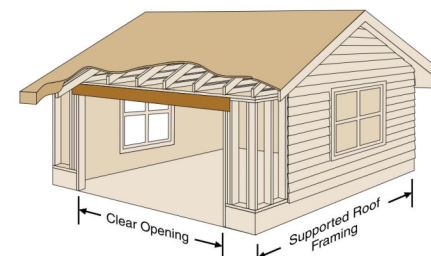
H ₂ /H ₁	Rafter Span Adjustment Factor
1/3	0.67
1/4	0.76
1/5	0.83
1/6	0.90
1/7.5 or less	1.00

TABLE R802.4(1)
 CEILING JOIST SPANS FOR COMMON LUMBER SPECIES
 (Uninhabitable attics without storage, live load = 10 psf, L/Δ = 240)

CEILING JOIST SPACING (inches)	SPECIES AND GRADE	DEAD LOAD = 5 psf				
		2 x 4	2 x 6	2 x 8	2 x 10	
		Maximum ceiling joist spans				
		(feet - inches)	(feet - inches)	(feet - inches)	(feet - inches)	
12	Douglas fir-larch SS	13-2	20-8	Note a	Note a	
	Douglas fir-larch #1	12-8	19-11	Note a	Note a	
	Douglas fir-larch #2	12-5	19-6	25-8	Note a	
	Douglas fir-larch #3	11-1	16-3	20-7	25-2	
	Hem-fir SS	12-5	19-6	25-8	Note a	
	Hem-fir #1	12-2	19-1	25-2	Note a	
	Hem-fir #2	11-7	18-2	24-0	Note a	
	Hem-fir #3	10-10	15-10	20-1	24-6	
	Southern pine SS	12-11	20-3	Note a	Note a	
	Southern pine #1	12-5	19-6	25-8	Note a	
	Southern pine #2	11-10	18-8	24-7	Note a	
	Southern pine #3	10-1	14-11	18-9	22-9	
	Spruce-pine-fir SS	12-2	19-1	25-2	Note a	
	Spruce-pine-fir #1	11-10	18-8	24-7	Note a	
	Spruce-pine-fir #2	11-10	18-8	24-7	Note a	
	Spruce-pine-fir #3	10-10	15-10	20-1	24-6	
	16	Douglas fir-larch SS	11-11	18-9	24-8	Note a
		Douglas fir-larch #1	11-6	18-1	23-10	Note a
Douglas fir-larch #2		11-3	17-8	23-4	Note a	
Douglas fir-larch #3		9-7	14-1	17-10	21-9	
Hem-fir SS		11-3	17-8	23-4	Note a	
Hem-fir #1		11-0	17-4	22-10	Note a	
Hem-fir #2		10-6	16-6	21-9	Note a	
Hem-fir #3		9-5	13-9	17-5	21-3	
Southern pine SS		11-9	18-5	24-3	Note a	
Southern pine #1		11-3	17-8	23-10	Note a	
Southern pine #2		10-9	16-11	21-7	25-7	
Southern pine #3		8-9	12-11	16-3	19-9	
Spruce-pine-fir SS		11-0	17-4	22-10	Note a	
Spruce-pine-fir #1		10-9	16-11	22-4	Note a	
Spruce-pine-fir #2		10-9	16-11	22-4	Note a	
Spruce-pine-fir #3		9-5	13-9	17-5	21-3	

EXAMPLE: Garage Door Header – Supporting Roof Loads Only
 (See Table 5 on page 10)

Live Load = 20 psf
 Dead Load = 10 psf
 Load Duration Factor = 1.25
 Span of Supported Roof Framing = 24'
 Clear Opening = 10'



Southern Pine Header Selected: No.1 Southern Pine Lumber - (2) 2x12s or
 (from Table 5) No.2 Southern Pine Lumber - (3) 2x10s or
 24F-1.7E (V4) Southern Pine Glulam - 3-1/2" x 9-1/4"

Note: Detailed bracing may be required for wall sections less than 4' in length adjacent to garage door openings. Refer to the *Braced Wall Detail for Garage Door Header* illustration on page 6.

TABLE R802.4(1)—continued
 CEILING JOIST SPANS FOR COMMON LUMBER SPECIES
 (Uninhabitable attics without storage, live load = 10 psf, L/Δ = 240)

CEILING JOIST SPACING (inches)	SPECIES AND GRADE	DEAD LOAD = 5 psf				
		2 x 4	2 x 6	2 x 8	2 x 10	
		Maximum ceiling joist spans				
		(feet - inches)	(feet - inches)	(feet - inches)	(feet - inches)	
19.2	Douglas fir-larch SS	11-3	17-8	23-3	Note a	
	Douglas fir-larch #1	10-10	17-0	22-5	Note a	
	Douglas fir-larch #2	10-7	16-8	21-4	26-0	
	Douglas fir-larch #3	8-9	12-10	16-3	19-10	
	Hem-fir SS	10-7	16-8	21-11	Note a	
	Hem-fir #1	10-4	16-4	21-6	Note a	
	Hem-fir #2	9-11	15-7	20-6	25-3	
	Hem-fir #3	8-7	12-6	15-10	19-5	
	Southern pine SS	11-0	17-4	22-10	Note a	
	Southern pine #1	10-7	16-8	22-0	Note a	
	Southern pine #2	10-2	15-7	19-8	23-5	
	Southern pine #3	8-0	11-9	14-10	18-0	
	Spruce-pine-fir SS	10-4	16-4	21-6	Note a	
	Spruce-pine-fir #1	10-2	15-11	21-0	25-8	
	Spruce-pine-fir #2	10-2	15-11	21-0	25-8	
	Spruce-pine-fir #3	8-7	12-6	15-10	19-5	
	24	Douglas fir-larch SS	10-5	16-4	21-7	Note a
		Douglas fir-larch #1	10-0	15-9	20-1	24-6
Douglas fir-larch #2		9-10	15-0	19-1	23-3	
Douglas fir-larch #3		7-10	11-6	14-7	17-9	
Hem-fir SS		9-10	15-6	20-5	Note a	
Hem-fir #1		9-8	15-2	19-10	24-3	
Hem-fir #2		9-2	14-5	18-6	22-7	
Hem-fir #3		7-8	11-2	14-2	17-4	
Southern pine SS		10-3	16-1	21-2	Note a	
Southern pine #1		9-10	15-6	20-5	24-0	
Southern pine #2		9-3	13-11	17-7	20-11	
Southern pine #3		7-2	10-6	13-3	16-1	
Spruce-pine-fir SS		9-8	15-2	19-11	25-5	
Spruce-pine-fir #1		9-5	14-9	18-9	22-11	
Spruce-pine-fir #2		9-5	14-9	18-9	22-11	
Spruce-pine-fir #3		7-8	11-2	14-2	17-4	

Check sources for availability of lumber in lengths greater than 20 feet.
 For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pound per square foot = 0.0479 kPa.
 a. Span exceeds 26 feet in length.

Table 19 – 20 psf Live Load, 10 psf Dead Load, 1.25 Load Duration Factor

Grade	Clear Opening	Span of Supported Roof Framing (sum of rafter spans from both sides of beam)						
		16'	20'	24'	28'	32'	36'	40'
No. 1	10'	(1) 2 x 12	(2) 2 x 10s	(2) 2 x 12s	(2) 2 x 12s	(2) 2 x 12s	(3) 2 x 10s	(3) 2 x 10s
	12'	(2) 2 x 10s	(2) 2 x 12s	(3) 2 x 10s	(3) 2 x 10s	(4) 2 x 12s	(4) 2 x 12s	3-1/2 x 11-1/4
	14'	(3) 2 x 12s	(3) 2 x 10s	(3) 2 x 12s	(3) 2 x 12s	(4) 2 x 12s	(4) 2 x 12s	3-1/2 x 11-1/4
	16'	(3) 2 x 10s	(3) 2 x 12s	(4) 2 x 12s	(4) 2 x 12s	3-1/2 x 11-1/4	3-1/2 x 11-7/8	3-1/2 x 14
	18'	(3) 2 x 12s	(4) 2 x 12s	3-1/2 x 14	3-1/2 x 14	3-1/2 x 14	3-1/2 x 14	3-1/2 x 14
	20'	(4) 2 x 12s	3-1/2 x 14	3-1/2 x 14	3-1/2 x 14	3-1/2 x 14	3-1/2 x 16	3-1/2 x 16
No. 2	10'	(2) 2 x 10s	(2) 2 x 12s	(3) 2 x 10s	(3) 2 x 10s	(3) 2 x 12s	(3) 2 x 12s	(3) 2 x 12s
	12'	(2) 2 x 12s	(3) 2 x 10s	(3) 2 x 12s	(3) 2 x 12s	(4) 2 x 12s	(4) 2 x 12s	(4) 2 x 12s
	14'	(3) 2 x 10s	(3) 2 x 12s	(4) 2 x 12s	(4) 2 x 12s	3-1/2 x 11-1/4	3-1/2 x 11-1/4	3-1/2 x 11-1/4
	16'	(3) 2 x 12s	(4) 2 x 12s	3-1/2 x 11-1/4	3-1/2 x 11-1/4	3-1/2 x 11-1/4	3-1/2 x 11-7/8	3-1/2 x 14
	18'	(4) 2 x 12s	3-1/2 x 11-1/4	3-1/2 x 11-7/8	3-1/2 x 14	3-1/2 x 14	3-1/2 x 14	3-1/2 x 14
	20'	3-1/2 x 11-1/4	3-1/2 x 14	3-1/2 x 14	3-1/2 x 14	3-1/2 x 14	3-1/2 x 16	3-1/2 x 16
No. 3	10'	(3) 2 x 10s	(3) 2 x 12s	(3) 2 x 12s	(4) 2 x 12s	(4) 2 x 12s	3-1/2 x 9-1/4	3-1/2 x 9-1/4
	12'	(3) 2 x 12s	(4) 2 x 12s	(4) 2 x 12s	3-1/2 x 9-1/4	3-1/2 x 9-1/4	3-1/2 x 9-1/4	3-1/2 x 9-1/4
	14'	(4) 2 x 12s	3-1/2 x 9-1/4	3-1/2 x 9-1/4	3-1/2 x 9-1/4	3-1/2 x 11-1/4	3-1/2 x 11-1/4	3-1/2 x 11-1/4
	16'	3-1/2 x 9-1/4	3-1/2 x 11-1/4	3-1/2 x 11-1/4	3-1/2 x 11-1/4	3-1/2 x 11-1/4	3-1/2 x 11-7/8	3-1/2 x 14
	18'	3-1/2 x 11-1/4	3-1/2 x 11-1/4	3-1/2 x 11-7/8	3-1/2 x 14	3-1/2 x 14	3-1/2 x 14	3-1/2 x 14
	20'	3-1/2 x 11-1/4	3-1/2 x 14	3-1/2 x 14	3-1/2 x 14	3-1/2 x 16	3-1/2 x 16	3-1/2 x 16

(See Requirements for Use on page 7, Key (*) and Notes on page 19, and Example on page 22)

Requirements for Use of Size Selection Tables

- These tables are for gravity loads only. Consult a registered design professional for wind and seismic load analysis and design.
- All tables are based on uniformly distributed loads only. Other loads, such as concentrated or unbalanced snow loads, have not been considered and must be analyzed separately.
- These tables are only applicable to members used under dry-service conditions where the moisture content in use is a maximum of 19% for lumber and less than 16% for glued laminated timber.
- The compression edge of the header or beam must be laterally supported at intervals of 24" or less. In addition, lateral support must be provided at bearing points.
- Design loads used to select a header or beam must be equal to or greater than the actual applied loads.
- Multiple-member headers and beams must be properly connected together. See page 5 for connection guidelines.
- These tables assume unbalanced glued laminated timber combinations used in simple-span applications. Balanced beam combinations with equal or greater design values may be substituted and used in either simple-span or continuous-span applications.
- These tables are only applicable to members used under ordinary ranges of temperature and occasionally heated in use up to 150° F.

Southern Forest Products Association does not develop design values for either lumber or glued laminated timber. Accordingly, SFPA does not warrant the design values on which these tables are based, and assumes no liability for damage caused or contributed to by the use of such design values. In addition, SFPA and its members have no knowledge of the loads, spans, materials used, quality of workmanship, professional competence of the users, and other factors involved in specifying headers or beams for any given project, and accordingly, cannot, and do not, represent or warrant the performance in use of headers or beams incorporated into any particular construction project, and disclaim liability for injury or damage caused by the failure of a header or beam in use.

309 Laurel Valley

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 FAX:
 MOBILE:

DRAWN BY:

SCALE: As Noted

DATE: Wednesday, January 27, 2021

Span Notes

PAGE:

12 / 14

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 78642

These plans have been reviewed by ATY Engineers, Inspectors and Surveyors for code compliance and substantial jurisdictional ordinances. This stamp of review is in no way a guarantee of the responsibility of the owner or contractor to comply with all codes, ordinances, State and Federal laws. Copy of plans bearing this stamp shall be available on the public at all times.

John

R314.4 Interconnection. Where more than one smoke alarm is required to be installed within an individual dwelling unit in accordance with Section R314.3, the alarm devices shall be interconnected in such a manner that the actuation of one alarm will activate all of the alarms in the individual *dwelling unit*. Physical interconnection of smoke alarms shall not be required where listed wireless alarms are installed and all alarms sound upon activation of one alarm.

Exception: Interconnection of smoke alarms in existing areas shall not be required where *alterations* or repairs do not result in removal of interior wall or ceiling finishes exposing the structure, unless there is an *attic*, crawl space or *basement* available that could provide access for interconnection without the removal of interior finishes.

**SECTION R314
SMOKE ALARMS**

R314.1 General. Smoke alarms shall comply with NFPA 72 and Section R314.

❖ Section R314 provides the details of smoke detection and notification to alert occupants of potential problems. When asleep, the occupants of residential buildings will usually be unaware of a fire, and the fire will have an opportunity to spread before being detected. A majority of fire deaths occurring in residential buildings have occurred because of this delay in detection. It is for this reason that the code requires smoke alarms that comply with NFPA 72 and Section R314.

R314.1.1 Listings. Smoke alarms shall be *listed* in accordance with UL 217. Combination smoke and carbon monoxide alarms shall be *listed* in accordance with UL 217 and UL 2034.

❖ Smoke alarms must be listed to UL 217. Combination smoke and carbon monoxide alarms, if they are provided, must be listed in accordance with UL 217 and UL 2034.

R314.2 Where required. Smoke alarms shall be provided in accordance with this section.

❖ See commentary to Section R314.1.

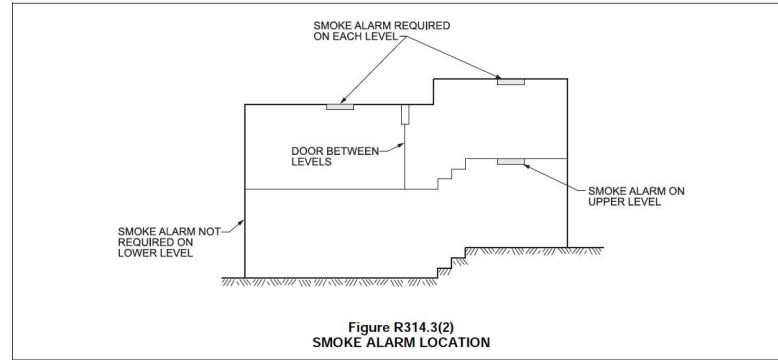
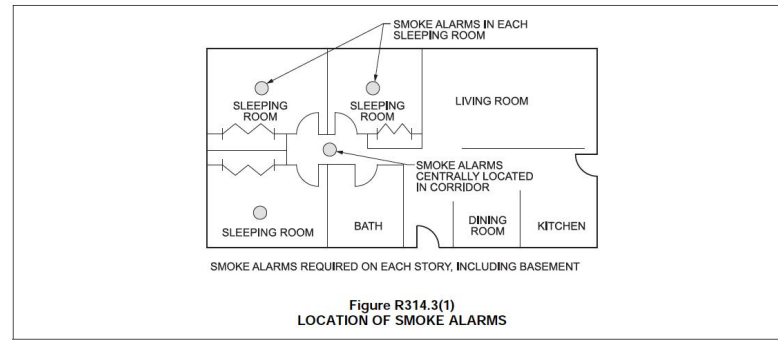
R314.2.1 New construction. Smoke alarms shall be provided in *dwelling units*.

❖ See commentary to Section R314.1.

R314.2.2 Alterations, repairs and additions. Where *alterations*, *repairs* or *additions* requiring a permit occur, or where one or more sleeping rooms are added or created in existing *dwellings*, the individual *dwelling unit* shall be equipped with smoke alarms located as required for new *dwellings*.

Exceptions:

1. Work involving the exterior surfaces of *dwellings*, such as the replacement of roofing or siding, the



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R314.5 Combination alarms. Combination smoke and carbon monoxide alarms shall be permitted to be used in lieu of smoke alarms.

❖ This section allows listed combination smoke and carbon monoxide alarms to be used in lieu of smoke alarms.

R314.6 Power source. Smoke alarms shall receive their primary power from the building wiring where such wiring is served from a commercial source and, where primary power is interrupted, shall receive power from a battery. Wiring shall be permanent and without a disconnecting switch other than those required for overcurrent protection.

Exceptions:

1. Smoke alarms shall be permitted to be battery operated where installed in buildings without commercial power.
2. Smoke alarms installed in accordance with Section R314.2.2 shall be permitted to be battery powered.

❖ Smoke alarms must use AC power as their primary source and battery power as a secondary source to enhance their reliability. For example, during a power outage, the probability of fire is increased because of the use of candles or lanterns for temporary light. Required backup battery power provides for continued performance of the smoke alarms. Smoke alarms are commonly designed to emit a recurring signal when batteries are low and need to be replaced. It is also for the reliability issue that the code does not permit the alarms to be on any type of circuit that could be disconnected or turned off, such as a lighting circuit with a switch. The only way to disconnect power to the smoke alarms should be through the electrical panel box by either flipping a circuit breaker or removing the circuit's fuse.

The exceptions acknowledge that the code does not require that smoke alarms in all existing buildings be served from a commercial power source. Battery-operated smoke alarms may be the only power source when a commercial power source is not available or when extensive alterations or repairs (see Section R314.2.2) are not being made. Where permanent building wiring can be installed without the removal of interior finishes, this section recognizes the increased reliability that the "hardwired" commercial power source with battery back-up can provide. Therefore, where feasible, permanent wiring is to be installed.

R314.7 Fire alarm systems. Fire alarm systems shall be permitted to be used in lieu of smoke alarms and shall comply with Sections R314.7.1 through R314.7.4.

❖ The detection and notification system requirements of Sections R314.7 through R314.7.4 provide early warning to occupants of the building in the event of a fire, thereby providing a greater opportunity for everyone in the building to evacuate or relocate to a safe area. Installation of a fire alarm system in accordance with this section is considered a viable alternative to the installation of required smoke alarms. Of all of the provisions for safety features that have been placed within the code over the past few decades other than fire sprinkler system requirements, the provisions for these detection and alarm devices have probably offered the greatest benefit in increasing safety and reducing the loss of life, and these benefits come at a comparatively minor expense.

Requiring the system to become a permanent fixture (see Section R314.7.3) of the occupancy and not be leased will prevent the system from being removed due to nonpayment. "Owned by the homeowner" is a good beginning and adds additional language that will ensure system reliability by requiring the owner to have the system electronically monitored and maintained in accordance with the referenced standard.

For larger homes, the only possible way to provide detection is through the use of a household fire warning system (see Section R314.7.1). NFPA 72, *National Fire Alarm Code*, has limits as to the number of smoke alarms that may be interconnected. Section 11.8.2.2 of the 2006 edition of the NFPA 72 allows only 12 smoke alarms to be interconnected if the interconnecting means is not supervised. Up to 42 smoke alarms may be interconnected if they are supervised. A number of homeowners prefer that their household fire warning systems be monitored by a supervising station. The requirement in Section R314.1.1 for listing of smoke alarms with UL 217, however, prohibits them from being monitored.

R314.7.1 General. Fire alarm systems shall comply with the provisions of this code and the household fire warning equipment provisions of NFPA 72. Smoke detectors shall be *listed* in accordance with UL 268.

❖ See the commentary to Section R314.7.

R314.7.2 Location. Smoke detectors shall be installed in the locations specified in Section R314.3.

❖ See the commentary to Section R314.7.

R314.7.3 Permanent fixture. Where a household fire alarm system is installed, it shall become a permanent fixture of the occupancy, owned by the homeowner.

❖ See the commentary to Section R314.7.

R314.7.4 Combination detectors. Combination smoke and carbon monoxide detectors shall be permitted to be installed in fire alarm systems in lieu of smoke detectors, provided that they are *listed* in accordance with UL 268 and UL 2075.

❖ See the commentary to Section R314.7.

**SECTION R315
CARBON MONOXIDE ALARMS**

R315.1 General. Carbon monoxide alarms shall comply with Section R315.

❖ Carbon monoxide (CO) is an odorless, colorless and toxic gas. Because it is impossible to see, taste or smell the toxic fumes, CO can kill occupants before they are aware it is in their home. At lower levels of

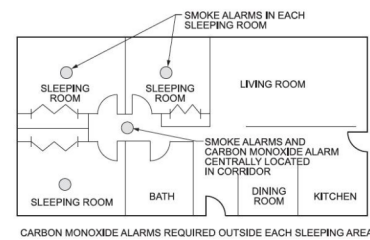


Figure R315.3
LOCATION OF CARBON MONOXIDE ALARMS

addition or replacement of windows or doors, or the addition of a porch or deck, are exempt from the requirements of this section.

2. Installation, alteration or repairs of plumbing or mechanical systems are exempt from the requirements of this section.

❖ This section contains a unique provision in the code, applying the smoke alarm provisions to existing buildings when an addition, alteration or repair is made that will require a permit, or if any sleeping rooms are added or created. See the commentary to Section R105.2 regarding what types of repairs or alterations require a permit. The smoke alarms in these existing buildings are to be installed in the same manner as required for new dwellings. This would not only require their installation in the same locations within the dwelling, but also that they be interconnected and receive their power from the building wiring. The commentary to Section R314.4 contains more discussion of the power source.

Two exceptions provide relief from the normal smoke alarm requirements in existing buildings that undergo some types of alteration, repair or addition.

The first exception exempts "exterior surface" repairs from initiating the requirement for smoke alarms being placed in an existing dwelling. This exception exempts work that is done on the exterior only. The final determination of what type of work is included is left to the building official, but this would generally be viewed as covering reroofing, siding repairs or siding replacement and could possibly include some window replacements.

The second exception exempts alterations that involve the replacement or repair of plumbing or mechanical equipment, fixtures or systems. This exception would allow replacement of items such as a furnace without expanding the project to include smoke alarms.

R314.3 Location. Smoke alarms shall be installed in the following locations:

1. In each sleeping room.
2. Outside each separate sleeping area in the immediate vicinity of the bedrooms.
3. On each additional *story* of the *dwelling*, including *basements* and *habitable attics* and not including crawl spaces and uninhabitable *attics*. In *dwellings* or *dwelling units* with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full *story* below the upper level.
4. Smoke alarms shall be installed not less than 3 feet (914 mm) horizontally from the door or opening of a bathroom that contains a bathtub or shower unless this would prevent placement of a smoke alarm required by Section R314.3.

❖ So that all areas have at least some level of protection, and so that sleeping areas are adequately protected,

Section R314.3 specifies where smoke alarms are to be installed. The code requires that alarms be located within each sleeping room, as well as outside each separate sleeping area in the immediate vicinity of the bedrooms. The device within the bedroom will provide protection should the fire begin within that sleeping room, while the device outside of the room will provide early notification and protection should a problem develop in the area that generally will serve as the egress path for the bedroom. In addition, Item 3 will require installation of at least one smoke alarm on each story of the dwelling, including basements and habitable attics. The code does not require the installation of alarms within crawl spaces or within attics that are not habitable. This provides detection and notification within the areas of general occupancy, but ignores spaces that are not occupied. See Commentary Figure R314.3(1) for an illustration of the required alarm locations.

Where split levels occur in a dwelling and the adjacent levels openly communicate with each other, the alarm may be placed on the upper portion of the split level if it is not more than one full story different in elevation. Commentary Figure R314.3(2) is an example of this provision. This requirement is based on the fact that any fire initiating on the lower portion of the level will send products of combustion up to the upper portion and that a detector there will provide a quick response and early warning.

Item 4 prohibits smoke alarms within 3 feet, as measured horizontally, from doors or openings to spaces that contain a tub or shower, except where it would interfere with the location of another smoke alarm required by this section.

R314.3.1 Installation near cooking appliances. Smoke alarms shall not be installed in the following locations unless this would prevent placement of a smoke alarm in a location required by Section R314.3.

1. Ionization smoke alarms shall not be installed less than 20 feet (6096 mm) horizontally from a permanently installed cooking *appliance*.
2. Ionization smoke alarms with an alarm-silencing switch shall not be installed less than 10 feet (3048 mm) horizontally from a permanently installed cooking *appliance*.
3. Photoelectric smoke alarms shall not be installed less than 6 feet (1828 mm) horizontally from a permanently installed cooking *appliance*.

❖ Ionization smoke alarms must not be installed within 20 feet, as measured horizontally, of a permanently installed cooking *appliance* except that, where the alarms are equipped with an alarm-silencing switch, they are permitted to be installed within 10 feet. Photoelectric smoke alarms must not be installed within 6 feet (1828 mm) of a permanently installed cooking *appliance*. These restrictions do not apply if they would prevent smoke alarm placement in accordance with Section R314.3.

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DATE: Wednesday, January 27, 2010

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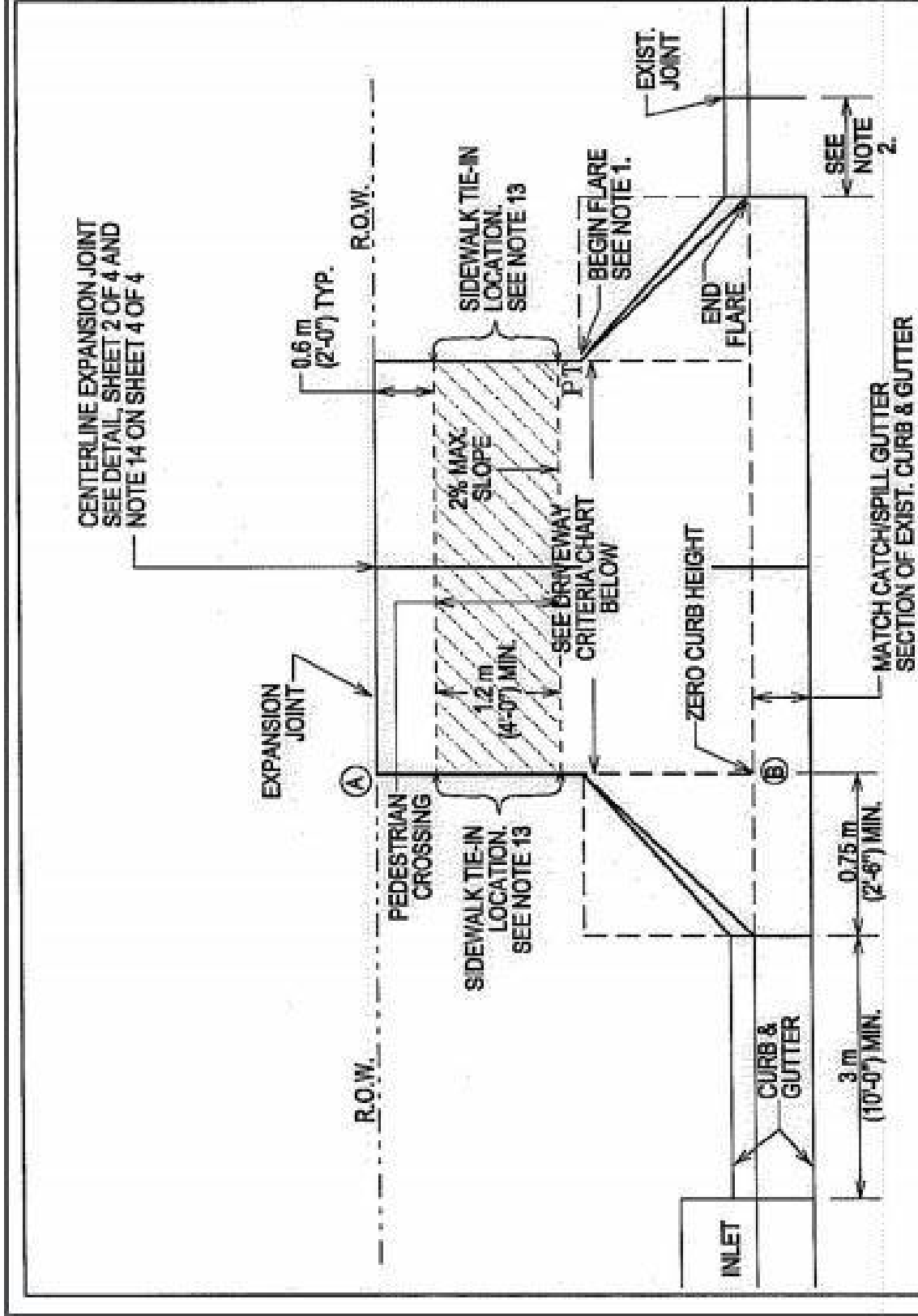
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KLM DESIGN BUILD

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These plans have been reviewed by ATS Engineers, Inspectors and Surveyors for code compliance and adopted jurisdictional requirements. This stamp of review in no way alleviates the responsibility of the owner or contractor to comply with all codes, ordinances, State and Federal laws. Copy of plans bearing this stamp shall be available on the job site at all times.

Jalala



PLAN

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 (1/4" RISE/FOOT) OVER DISTANCE "X" IN METERS (FEET).

DRIVEWAY CRITERIA	WIDTH METERS (FEET)		
	MIN.	*OPT.	MAX.
SINGLE FAMILY	3.66 (12)	5.50 (18)	11.80 (25)
DUPLEX	4.56 (15)	5.50 (18)	11.80 (25)
TOWN HOME	4.56 (15)	5.50 (18)	11.80 (25)

*OPTIMUM

CITY OF AUSTIN
DEPARTMENT OF PUBLIC WORKS

FLARED TYPE I DRIVEWAY
(1 & 2 FAMILY RESIDENTIAL USE ONLY)

[Signature] 10-19-09
ADOPTED

THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.
STANDARD NO.
433S-1A
1 OF 4

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309 Laurel Valley

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Type 1 Driveway

Framing General Notes

SECTION 1 GENERAL CONDITION AND STATEMENTS

- A. THESE NOTES SHALL APPLY UNLESS OTHERWISE INDICATED BY DRAWINGS OR SPECIFICATIONS.
- B. STRUCTURAL DRAWINGS ARE DIAGRAMMATIC IN NATURE. DO NOT SCALE THESE DRAWINGS. IN CASE OF DIMENSIONAL DISCREPANCIES, THE ARCHITECTURAL DRAWINGS SHALL GOVERN.
- C. CONTRACTOR TO VERIFY ALL DIMENSIONS AND CONDITIONS WITH ARCHITECTURAL DRAWINGS REPORT ANY DISCREPANCIES TO STRUCTURAL ENGINEER PRIOR TO PROCEEDING WITH WORK.
- D. STRUCTURAL DRAWINGS INDICATE TYPICAL AND CERTAIN SPECIFIC CONDITIONS ONLY. SHOP DRAWINGS SHALL DETAIL ALL CONDITIONS IN ACCORDANCE WITH SPECIFIED STANDARDS AND THE SPECIFIC REQUIREMENTS OF THIS PROJECT AS INDICATED ON THE DRAWINGS.
- E. NON-STRUCTURAL FRAMING REQUIREMENTS ARE NOT SPECIFIED ON STRUCTURAL DRAWINGS. SEE ARCHITECTURAL DRAWINGS FOR ANY ADDITIONAL FRAMING REQUIRED.
- F. THE USE OR REPRODUCTION OF THESE CONTRACT DRAWINGS BY ANY CONTRACTOR, SUBCONTRACTOR, ERECTOR, FABRICATOR, OR MATERIAL SUPPLIER IN LIEU OF PREPARATION OF SHOP DRAWINGS SIGNIFIES HIS ACCEPTANCE OF ALL INFORMATION SHOWN HEREON AS CORRECT, AND OBLIGATES HIMSELF TO ANY JOB EXPENSE, REAL OR IMPLIED, ARISING DUE TO ANY ERRORS THAT MAY OCCUR HEREON.
- G. THE STRUCTURE SHOWN ON THESE DRAWINGS IS STRUCTURALLY SOUND ONLY IN ITS COMPLETED FORM. THE CONTRACTOR SHALL TEMPORARILY BRACE ALL EARTH, FORMS, CONCRETE, STEEL, WOOD, MASONRY, TO RESIST GRAVITY, EARTH, WIND, SEISMIC, AND CONSTRUCTION LOADS DURING CONSTRUCTION.
- H. WHERE A DETAIL, TYPICAL DETAIL, SECTION, TYPICAL SECTION OR AS NOTED IS SHOWN FOR ONE CONDITION, IT SHALL APPLY FOR ALL LIKE OR SIMILAR CONDITIONS UNLESS OTHERWISE NOTED.
- I. THESE STRUCTURAL DRAWINGS HAVE BEEN PREPARED IN ACCORDANCE WITH THE JURISDICTION ADOPTED LOCAL VERSION OF THE INTERNATIONAL BUILDING CODE.

SECTION 2 CONCRETE MASONRY UNITS

- A. U.N.O. HOLLOW LOAD BEARING MASONRY UNITS SHALL CONFORM TO ASTM C90, LIGHTWEIGHT, WITH A MINIMUM COMPRESSIVE STRENGTH $f'_m = 1500$ PSI. ON THE NET BLOCK AREA.
- B. LOAD BEARING MASONRY USED IN AREAS REQUIRING SOUND TRANSMISSION RATING AND SOUND ABSORPTION RATING SHALL CONFORM TO ASTM C90, HEAVYWEIGHT, WITH A MINIMUM COMPRESSIVE STRENGTH $f'_m = 1500$ PSI. ON THE NET BLOCK AREA. CALCULATING REQUIRED MASONRY UNIT WEIGHT SHALL BE PER NCMA-TEK 69B BY THE NATIONAL CONCRETE MASONRY ASSOCIATION.
- C. MORTAR SHALL CONFORM TO ASTM C270 CEMENT-LIME TYPE M OR S. MINIMUM COMPRESSIVE STRENGTH TO BE 1500 PSI.
- D. COURSE MASONRY GROUT SHALL CONFORM TO ASTM C476 WITH MAXIMUM AGGREGATE SIZE OF 3/8". MINIMUM COMPRESSIVE STRENGTH SHALL BE 3000 PSI. AT 28 DAYS. PROVIDE CLEAN OUT OPENINGS WHERE GROUT LIFT EXCEEDS 4'-0".
- E. CONCRETE MASONRY QUALITY CONTROL:
 - 1. WORK IN PROGRESS SHALL BE INSPECTED FOR CONFORMANCE WITH SPECIFIED MATERIALS AND THAT WORKMANSHIP AND CONSTRUCTION IS IN COMPLIANCE WITH PLANS, SPECIFICATIONS AND INDUSTRY STANDARDS.
 - 2. WORK SHALL BE SAMPLED AND TESTED.
 - A. MORTAR: 2 X 4 CYLINDERS OR 2 INCH CUBES PER ASTM C780. 1 TEST OF 3 CYLINDERS OR CUBES PRIOR TO CONSTRUCTION, 1 TEST OF 3 CYLINDERS OR CUBES ON EACH OF THE FIRST DAYS OF CONSTRUCTION AND 1 TEST OF 3 CYLINDERS OR CUBES FOR EACH 5000 SF OF WALL AREA OR PER WEEK WHICHEVER OCCURS FIRST.
 - B. GROUT: TEST 3 X 3 X 6 SAMPLE CAST BETWEEN BLOCK UNITS (SEE NCMA TEK - 23A) CAP PER ASTM C617 AND TEST PER ASTM C39. TAKE 2 SPECIMENS PER TEST EACH 30 CUBIC YARDS OF GROUT OR FRACTION THEREOF PLACED EACH DAY AND WHEN MIX PROPORTIONS ARE CHANGED.
- F. HORIZONTAL REINFORCEMENT SHALL BE DUR-0-WALL, TRUSS TYPE, GALVANIZED OR EQUAL CONFORMING TO ASTM A82. PLACEMENT SHALL BE AT 16" O.C. IN CMU JOINT. SPLICES SHALL LAP AT LEAST 6" AND SHALL BE CONTINUOUS AROUND CORNERS.
- G. VERTICAL REINFORCEMENT SHALL BE A MINIMUM OF #5 BAR AT MAX. 48" O.C. IN FULLY GROUTED CELL U.N.O. ALL VERTICAL REINFORCEMENT IN MASONRY WALLS SHALL HAVE 48 BAR DIAMETER LAP SPLICES.
- H. PROVIDED 1-#5 OR 2-#4 BARS IN FULL GROUT CELL VERTICALLY AT CORNERS AND ENDS OF WALLS.
- I. BOND BEAMS TO BE PROVIDED @ EACH FLOOR AND TOP OF WALL. BOND BEAMS SHALL BE REINFORCED WITH MINIMUM (1) #5 CONTINUOUS FOR 8 INCH "U" BLOCKS, AND MINIMUM (2) #5 BOTTOM FOR 12 INCH "U" BLOCKS AND BE FULLY GROUTED.
- J. CONTROL JOINTS AT EXTERIOR WALLS SHALL BE PLACED AT THE LESSER OF 50 FT. OR THREE TIMES THE WALL HEIGHT. COORDINATE WITH ARCHITECT FOR EXACT PLACEMENT. USE SLOTTED CMU'S AND JOINT FILLER AT CONTROL JOINTS.
- K. COORDINATE WITH ARCHITECTURAL DRAWING FOR PLACEMENT OF EXPANSION AND CONTRACTION JOINTS IN WALLS.
- L. OPENINGS LESS THAN 6 FT. SHALL BE SPANNED WITH LINTEL BLOCK, GROUTED AND REINFORCED WITH 1 #5 BARS EXTENDING AT LEAST 8" INTO THE SUPPORT AT EACH END, UNLESS NOTED OTHERWISE.

SECTION 3 CONCRETE

- A. MIX DESIGNS FOR EACH TYPE OF CONCRETE SPECIFIED SHALL BE SUBMITTED FOR APPROVAL. ADMIXTURES, CURING COMPOUNDS AND HARDENERS INTENDED FOR USE ARE TO BE SUBMITTED FOR APPROVAL. NO MORE THAN 5% PERCENT AIR ENTRAINMENT MAY BE PROVIDED.
- B. TESTING LABORATORY SHALL SAMPLE AND TEST CONCRETE AS FOLLOWS:
 - 1. SAMPLING:
 - A. GENERAL: IN ACCORDANCE WITH ASTM C31.
 - B. NO.: 4 CYLINDERS FOR EACH 50 CUBIC YARDS, 5000 SQ. FT. OF SURFACE AREA, OR EACH PLACEMENT OF EACH MIX DESIGN OF CONCRETE PLACED IN ANY ONE DAY.
 - C. DESIGNATION: LABEL EACH CYLINDER IN EACH SET OF 4 CYLINDERS WITH AN ALPHANUMERIC DESIGNATION, E.G. THE FIRST SET SHALL BE NUMBERED 1A, 1B, 1C, AND 1D
 - 2. TESTING:
 - A. SLUMP: IN ACCORDANCE WITH ASTM C 143, TO BE TAKEN WHEN EACH SET OF CYLINDERS IS MADE.
 - B. AIR CONTENT: SEE SPECIFICATIONS.
 - C. COMPRESSIVE STRENGTH: IN ACCORDANCE WITH ASTM C 39 BREAK ONE CYLINDER AT 7 DAYS, 2 AT 28 DAYS, AND HOLD ONE IN RESERVE. EACH PAIR OF BREAKS FROM EACH SET OF CYLINDERS WILL BE CONSIDERED ONE TEST.
 - 3. TEST REPORTS SHALL BE AVAILABLE AT JOBSITE.
- C. CONCRETE FOR FOOTINGS, PIERS, SLABS, AND WALLS SHALL BE STANDARD WEIGHT 3000 PSI. COMPRESSIVE STRENGTH AT 28 DAYS.
- D. CONCRETE WORK SHALL CONFORM TO ACI 318 (REINF. CONCRETE) AND/OR 318.1 (PLAIN CONCRETE).
- E. REINFORCING BARS SHALL CONFORM WITH ASTM A 615. ALL BARS SHALL BE GRADE 60.
- F. ALL REINFORCING STEEL SHALL BE NEW DEFORMED BILLET STEEL CONFORMING TO A.S.T.M. DESIGNATION 1-615 GRADE 60 (60,000 PSI YIELD POINT). REINFORCEMENT TO BE WELDED SHALL BE WELDABLE GRADE REINFORCEMENT TO BE WELDED SHALL BE WELDABLE GRADE REINFORCEMENT CONFORMING TO THE REQUIREMENTS OF THE AMERICAN WELDING SOCIETY AWS D12.1-75.
- G. ALL POST-TENSIONING TENDONS AND ANCHORAGES SHALL CONFORM TO THE REQUIREMENTS OF THE GUIDE SPECIFICATIONS FOR POST-TENSIONING MATERIALS, POST-TENSIONING INSTITUTE 1980.
- H. TENDONS SHALL BE FABRICATED FROM 1/2" DIA., 270 KSI STRAND IN ACCORDANCE WITH A.S.T.M. A-416. TENDONS SHALL BE GREASED PLASTIC SHEATHED AND ANCHORAGE AT 289 KIPS. IF STRAND IS DAMAGED, IT SHOULD BE REPAIRED PER P.T.I. RECOMMENDATIONS. ANCHORAGES MUST CONFORM TO P.T.I. DESIGN SPECIFICATIONS.

CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI. AT 28 DAYS AND A MINIMUM OF 2000 PSI. AT THE TIME OF TENSIONING. SLAB SHOULD BE STRESSED WITHIN 7-10 DAYS.
- J. STRAND LENGTHS ARE THE RESPONSIBILITY OF THE POST TENSIONED MATERIAL SUPPLIER.
- K. CONTRACTOR SHALL SUBMIT INSPECTION REPORTS INDICATING STRESS IN TENDONS TO ENGINEER WITHIN 3 DAYS OF STRESSING OPERATION.
- L. ANCHOR BOLTS:
 - ASTM A 36 FOR MATERIAL; A 307 FOR OTHER PROPERTIES, WITH CUT THREADS. FURNISH WITH HEAVY HEX NUT AND WASHER.
- M. REBAR SUPPORT DEVICES:
 - CRSI MANUAL OF STANDARD PRACTICE.
- N. REINFORCING STEEL COVERAGE SHALL BE AS FOLLOWS:

CAST IN PLACE CONCRETE	
(A) PIERS	- 2" TO TIES
(B) GRADE BEAMS	- 3" SIDES AND BOTTOM, 2" TOP
(C) SLABS ABOVE GRADE	- 3/4" NOT EXPOSED TO WEATHER
(D) BEAMS ABOVE GRADE	- 1 1/2" NOT EXPOSED TO WEATHER
(E) CONCRETE JOINTS	- 3/4" NOT EXPOSED TO WEATHER
(F) WALLS	- 2" NOT EXPOSED TO EARTH & WEATHER
(G) FOOTINGS	- 3" SIDES AND BOTTOM, 2" TOP
- O. ALL CONTINUOUS BARS SHALL HAVE 42 BARS DIAMETER LAP SPLICE (26" FOR #5 BARS) PROVIDE CORNER BARS AT ALL WALL AND GRADE BEAM CORNERS. BARS SHALL BE THE SAME SIZE AND SPACING AS THE HORIZ. REINF. INTERSECTING WALLS OR GRADE BEAMS SHALL BE DOWELED IN THE SAME MANNER. PROVIDE TWO #4 TOP DIAGONAL BARS 4'-0" LONG AT ALL REENTRANT CORNERS IN ALL SLABS ON GRADE AND ELEVATED SLABS.
- P. CONFORM TO ACI 308R FOR COLD WEATHER CONCRETING AND ACI 305R WHEN ANY COMBINATION OF RELATIVE LOW RELATIVE HUMIDITY AND WIND VELOCITY TEND TO IMPAIR THE QUALITY OF THE CONCRETE. CONCRETE IS TO BE REJECTED IF ITS TEMPERATURE AT TIME OF PLACEMENT IS 90 DEG. F OR ABOVE. PROTECT SURFACES OF EXPOSED CONCRETE FROM PRECIPITATION DAMAGE UNTIL ADEQUATE STRENGTH IS GAINED TO PREVENT DAMAGE.
- Q. REFER TO ARCHITECTURAL, MECHANICAL AND ELECTRICAL EQUIPMENT ARRANGEMENT. CIVIL AND VENDOR'S DRAWINGS FOR EMBEDDED ITEMS NOT SHOWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING AND PLACING ALL EMBEDDED ITEMS SHOWN ON THE DRAWINGS OR REQUIRED BY THE VARIOUS TRADES.
- R. WATERPROOFING SHALL BE PLACED BETWEEN SOIL AND CONCRETE WHEREVER SOIL IS USED AS A FORM FOR CONCRETE, EXCEPT FOR FOOTINGS.
- S. SLEEVE ALL PIPES THRU SLABS INDIVIDUALLY: UNLESS APPROVED BY ENGINEER.
- T. CONCRETE SLABS SHALL BE PLACED AND FINISHED W/ IN A MINIMUM TOLERANCE OF 1/8 INCH EVERY 10 FEET AS DETERMINED BY PLACING A 10 FOOT STRAIGHT EDGE ON THE SLAB IN ANY DIRECTION. ANY DEVIATION FROM THIS WHICH REQUIRES ADDITIONAL CUTTING OF OTHER BUILDING COMPONENTS SHALL BE THE RESPONSIBILITY OF THE CONCRETE CONTRACTOR.
- U. AGGREGATES FOR CONCRETE OF NORMAL WEIGHT SHALL CONFORM TO "STANDARD SPECIFICATIONS FOR CONCRETE AGGREGATES" (ASTM C 33-82). THE NOMINAL MAXIMUM SIZE OF COARSE AGGREGATES SHALL NOT BE MORE THAN 3/4" INCH.
- V. NO ADMIXTURES, OTHER THAN AIR-ENTRAINING ADMIXTURE CONFORMING TO "STANDARD SPECIFICATIONS FOR AIR ENTRAINING ADMIXTURES FOR CONCRETE" (ASTM C 260-77) MAY BE USED WITHOUT THE WRITTEN APPROVAL FROM THE ENGINEER, THE USE OF CALCIUM CHLORIDE SHALL NOT BE PERMITTED.
- W. THE CONCRETE SHALL BE PROPORTIONED AND PRODUCED TO HAVE A SLUMP OF 5 INCHES OR LESS. A TOLERANCE OF 1 INCH ABOVE THIS AMOUNT SHALL BE PERMITTED FOR INDIVIDUAL BATCHES PROVIDED THE AVERAGE FOR ALL BATCHES DOES NOT EXCEED 5 INCHES. THE SLUMP SHALL BE DETERMINED BY "STANDARD TESTING METHOD FOR SLUMP OF PORTLAND CEMENT CONCRETE"(ASTM C143-78).
- X. CONCRETE SEALERS SHALL BE APPROVED BY ENGINEER PRIOR TO USE. APPLY IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- Y. ALL WELDED STEEL WIRE FABRIC FOR CONCRETE REINFORCEMENT SHALL CONFORM TO ASTM A-185 AND SHALL BE INSTALLED ONLY IN FLAT SHEETS.
- Z. WHEN REINFORCING STEEL IS INTERRUPTED BY OPENINGS OR EMBEDDED EQUIP. IN THE SLAB, AN EQUAL AMOUNT OF STEEL SHALL BE PLACED AT SIDES OF THE OPENING PARALLEL TO THE UNINTERRUPTED STEEL AND SHALL EXTEND A MIN. OF 40-BAR-DIA. PAST THE EDGE OF OPENING OR EQUIPMENT.
- AA. NO HORIZONTAL JOINTS WILL BE PERMITTED IN CONCRETE EXCEPT AS NOTED. VERTICAL CONSTRUCTION JOINT LOCATIONS, REQUIRED AT POINTS OTHER THAN SHOWN, SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER IN THE FORM OF SHOP DRAWINGS FOR APPROVAL A MIN. OF (30) DAYS PRIOR TO CONSTRUCTION.

SECTION 4 STRUCTURAL STEEL

- A. WELDER QUALIFICATIONS: QUALIFY WELDING PROCESSES AND WELDING OPERATORS IN ACCORDANCE WITH AWS "STANDARD QUALIFICATION PROCEDURE". OPERATORS SHALL CARRY PROOF OF QUALIFICATION ON THEIR PERSONS. ALL WELDING SHALL BE PERFORMED IN ACCORDANCE WITH THE "STRUCTURAL WELDING CODE" BY THE AMERICAN WELDING SOCIETY.
- B. TEST REPORTS: 2 COPIES, PLUS THE NUMBER CONTRACTOR WANTS RETURNED OF STEEL PRODUCER'S REPORT OF MILL ANALYSIS AND TENSILE AND BEND TESTS FOR STRUCTURAL STEEL MADE NO MORE THAN 60 DAYS BEFORE SHIPMENT.
- C. CERTIFICATES: TESTING LABORATORY'S CERTIFICATE THAT:
 - 1. STRUCTURAL STEEL HAS BEEN FURNISHED AND INSTALLED IN ACCORDANCE WITH CONTRACT DOCUMENTS.
 - 2. THE ON-SITE INSPECTIONS HAVE BEEN CONDUCTED AND INSTALLED IN ACCORDANCE WITH THE FIELD QUALITY CONTROL BELOW.
- D. TESTING LABORATORY SHALL INSPECT CONNECTIONS IN ACCORDANCE WITH REFERENCES AS FOLLOWS:
 - 1. WELDED CONNECTIONS: INSPECT ALL COMPLETE PENETRATION WELDS AND ALL BUTT WELDS MADE BY FABRICATOR. IF THE FABRICATOR USES THE FULL VALUE FOR FILLET WELDS, AS SPECIFIED IN THE REFERENCES, INSPECT 15% OF THESE WELDS. VISUALLY INSPECT 50% MINIMUM OF FIELD WELDS. SHOULD ANY WELDS FAIL, 100% SHALL BE INSPECTED.
 - 2. BOLTED CONNECTIONS: INSPECT AT LEAST 10% OF ALL HIGH STRENGTH BOLTS WHICH ARE WELL SCATTERED THROUGHOUT THE STRUCTURE. IF LESS THAN 95% OF THE BOLTS MEET DESIGN TENSION, THEN ALL BOLTS SHALL BE REWORKED. INSPECT 50% UNTIL ABOVE REQUIREMENTS ARE MET. LOAD INDICATOR WASHERS MAY BE USED TO TEST 100% OF ALL HIGH STRENGTH BOLTS.
 - 3. VISUALLY INSPECT ALL STEEL DECK ATTACHMENT.
- E. COPIES OF TEST RESULTS AND INSPECTION REPORTS SHALL BE SENT DIRECTLY TO THE ENGINEER.
- F. PRE-CONCRETE AND PRE-STEEL ERECTION CONFERENCES SHALL BE HELD BY THE CONTRACTOR WITH SUBCONTRACTORS, TESTING LAB PERSONNEL, ARCHITECT AS WELL AS ENGINEERS PRESENT. THESE CONFERENCES SHALL BE HELD WELL IN ADVANCE OF CONSTRUCTION TO INSURE PROPER INTERPRETATION OF DESIGN INTENT. STEEL ERECTOR SHALL FIELD VERIFY CORRECTNESS OF FOUNDATION, ANCHOR BOLTS, OR OTHER EXISTING WORK AFFECTING THE STEEL BEFORE STARTING ERECTION.
- G. STRUCTURAL STEEL DETAILING, FABRICATION, AND ERECTION TO BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "MANUAL OF STEEL CONSTRUCTION" OF THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION. SHOP DRAWINGS SHALL GIVE COMPLETE WELDING INFORMATION, BOTH SHOP AND FIELD, USING AWS SYMBOLS. WELDING ELECTRODES SHALL CONFORM TO AWS A5.1 OR A5.5 E-70XX. ALL CONNECTIONS, EXCEPT THOSE INDICATED ON THE DRAWINGS AS WELDED CONNECTIONS, ARE TO BE MADE USING 3/4" DIAMETER ASTM A-325 BOLTS (U.N.O.). STRUCTURAL STEEL BEAMS & GIRDSERS SHALL CONFORM TO ASTM A572 GR 50. TUBES TO BE ASTM A-500 GRADE B. PIPES TO BE ASTM A53.
- H. SUBMIT SHOP DRAWINGS FOR FABRICATION AND ERECTION OF ALL STEEL MEMBERS IN ACCORDANCE WITH AISC STANDARDS NOTED ABOVE.

FABRICATOR SHALL DESIGN ALL CONNECTIONS NOT SPECIFICALLY DETAILED ON DRAWINGS. REGARDLESS OF PROVISION TO THE CONTRARY IN AISC CODE OF STANDARD PRACTICE FOR BUILDINGS AND BRIDGES, ALL CONNECTIONS DESIGNED BY FABRICATOR SHALL BE HIS RESPONSIBILITY AND REVIEW OF SHOP DRAWINGS BY THE ENGINEER SHALL NOT RELIEVE FABRICATOR OF THIS RESPONSIBILITY.
- J. UNLESS OTHERWISE NOTED, ALL BEAM CONNECTIONS SHALL BE STANDARD FRAMED OR SEATED CONNECTIONS AS SHOWN IN PART 4 OF THE AISC MANUAL OF STEEL CONSTRUCTION (EIGHTH EDITION). UNLESS GREATER REACTIONS ARE NOTED ON THE DRAWINGS, CONNECTIONS SHALL DEVELOP AT LEAST ONE-HALF OF THE TOTAL UNIFORM LOAD CAPACITY OF THE BEAM. CONNECTIONS SHALL BE DESIGNED AS BEARING-TYPE CONNECTIONS WITH THREADS IN THE SHEAR PLANE, UNLESS OTHERWISE NOTED. IN NO CASE SHALL THE LENGTH OF FRAMED CONNECTIONS BE LESS THAN ONE-HALF THE "T" DISTANCE OF THE BEAM WEB.
- K. ALL BRACING CONNECTIONS SHALL DEVELOP EITHER THE FORCE NOTED ON THE DRAWINGS OR THE ALLOWABLE TENSION FORCE IN THE MEMBER, WHICHEVER IS LARGER, BRACING CONNECTIONS SHALL BE DESIGNED AND DETAILED SO THAT ALL FORCE COMPONENTS WILL BE TRANSMITTED DIRECTLY TO THE CENTER OF GRAVITY OF INTERSECTING MEMBERS. WHERE THIS IS NOT POSSIBLE, CONNECTIONS SHALL BE DESIGNED FOR ALL RESULTING ECCENTRICITIES, BOLTED BRACING CONNECTIONS SHALL BE CONNECTED TO A MINIMUM OF TWO BOLTS.
- L. IN GENERAL, CONNECTIONS SHALL BE FIELD BOLTED, WELDED CONNECTIONS SHALL BE MADE WITH E70 ELECTRODES, UNLESS OTHERWISE RECOMMENDED BY AWS. ALL BOLTED CONNECTIONS SHALL BE MADE WITH 3/4" DIAMETER A 325 OR A 490 HIGH STRENGTH BOLTS, UNLESS OTHERWISE NOTED ON DRAWINGS OR APPROVED BY ENGINEER. 3/4" DIAMETER A 307 PLAIN BOLTS MAY BE USED FOR SECONDARY CONNECTIONS SUCH AS GIRTS, STAIRS AND FRAMED ROOF OPENINGS.
- M. MINIMUM WELD SIZE SHALL BE 3/16" UNLESS OTHERWISE NOTED.
- N. GUSSET PLATES SHALL BE 3/8" MINIMUM THICKNESS.
- O. THE GENERAL CONTRACTOR SHALL VERIFY THE REQUIRED CAMBER IN THE FIELD PRIOR TO ERECTION OF EACH MEMBER.
- P. SPLICING OF STRUCTURAL STEEL MEMBERS IS PROHIBITED WITHOUT PRIOR APPROVAL OF THE ENGINEER AS TO LOCATION AND TYPE OF SPLICE TO BE MADE. ANY MEMBER HAVING A SPLICE NOT SHOWN AND DETAILED ON SHOP DRAWING WILL BE REJECTED.
- Q. THIS STRUCTURE IS NOT DESIGNED FOR EACH COLUMN LINE BENT TO RESIST LATERAL FORCES FROM WIND OR SEISMIC LOADS. THIS STRUCTURE DEPENDS ON THE DIAPHRAGM AND BRACING IN EACH DIRECTION DURING THE ERECTION PHASE. SUCH BRACING SHALL REMAIN IN PLACE UNTIL ALL DIAPHRAGM AND WIND BRACING ELEMENTS ARE IN PLACE IN THEIR ENTIRETY AND HAVE BEEN APPROVED BY THE STRUCTURAL ENGINEER.
- R. ALL DAMAGED JOISTS DELIVERED TO THE JOB SITE SHALL BE REJECTED OR REPAIRED BY THE JOIST MANUFACTURER. REPAIR METHODS SHALL BE SUBMITTED FOR APPROVAL AND SEALED BY A PROFESSIONAL ENGINEER.
- S. STRUCTURAL STEEL JOISTS AND JOIST GIRDSERS SHALL BE FABRICATED AND ERECTED IN STRICT CONFORMANCE TO THE LATEST EDITION OF THE STEEL JOIST INSTITUTE STANDARDS. JOIST AND JOIST GIRDER ERECTION PROCEDURE SHALL CONFORM STRICTLY TO S.J.I. STANDARDS. CONTRACTOR IS TO SUBMIT DESIGN CALCULATIONS FOR ALL JOISTS AND JOIST GIRDSERS WITH CONCENTRATED LOADS FROM OTHER STRUCTURAL COMPONENTS AND EQUIPMENT, AND UPLIFT LOADS. PROVIDE SPECIAL MARKINGS FOR THESE SPECIAL JOISTS. DESIGN CALCULATIONS ARE TO BE SUBMITTED WITH SHOP DRAWINGS.
- T. WHERE BAR JOISTS ARE UTILIZED, AND COLUMNS ARE NOT FRAMED IN AT LEAST TWO DIRECTIONS WITH STRUCTURAL STEEL MEMBERS, A BAR JOIST NEAREST TO THE COLUMN SHALL BE FIELD BOLTED (EACH END OF JOIST) TO PROVIDE LATERAL STABILITY DURING CONSTRUCTION. EXTEND BOTTOM CHORDS OF ALL JOISTS AT COLUMN LINES OR NEAR COLUMN IF JOIST IS NOT ON CENTERLINE COLUMN, AND WELD TO COLUMNS OR BEAM AFTER ALL DEAD LOAD IS IN PLACE. PROVIDE JOIST BRIDGING AND JOIST GIRDER BRACING PER ASTC AND SJI REQUIREMENTS. NOTHING SHALL BE SUSPENDED FROM THE DECK AND BRIDGING.

SECTION 5 WOOD

- A. DIMENSIONAL LUMBER FOR CEILING JOISTS, BEAMS, OR RAFTERS SHALL BE SOUTHERN YELLOW PINE #2 OR BETTER, 19% KD. DESIGN VALUES ARE AS FOLLOWS:

2X4's	Fb = 1100/1265 PSI FOR SINGLE/REPETITIVE USE, AND Fv = 175 PSI.
2X6's	Fb = 1000/1150 PSI FOR SINGLE/REPETITIVE USE, AND Fv = 175 PSI.
2X8's	Fb = 925/1063 PSI FOR SINGLE/REPETITIVE USE, AND Fv = 175 PSI.
2X10's	Fb = 800/920 PSI FOR SINGLE/REPETITIVE USE, AND Fv = 175 PSI.
2X12's	Fb = 750/862 PSI FOR SINGLE/REPETITIVE USE, AND Fv = 175 PSI.
- B. ALL LUMBER SHALL BE STAMPED WITH GRADE MARK OF AN APPROVED TESTING AGENCY.
- C. ALL WOOD IN CONTACT WITH CONCRETE OR EXPOSED TO WEATHER SHALL BE TREATED LUMBER.
- D. HEADER & BEAM SUPPORT: MINIMUM DOUBLE VERTICAL STUDS FOR SPANS LESS THAN 8'-0". TRIPLE STUDS FOR SPANS LARGER THAN 8'-0" CLEAR UNLESS NOTED OTHERWISE. ALL HEADERS TO BE A MINIMUM OF (2) 2 X 6 UNLESS NOTED OTHERWISE. BUILDER IS TO ENSURE THAT ALL LOADS TRANSFERRED BY HEADERS AND BEAMS TO THE STUDS ARE TRANSFERRED DOWN TO THE FOUNDATION.
- E. ALL FLUSH BEAMS AND JOISTS TO BE SUPPORTED WITH SIMPSON BEAM OR JOIST HANGER, USED TO SUPPORT THE DEAD AND LIVE LOADS AS DEFINED BY THE GOVERNING CODE.
- F. DEFLECTION DUE TO LIVE LOAD SHALL BE LIMITED TO L/360 AND DEFLECTION DUE TO LIVE LOAD + DEAD LOAD + CREEP SHALL BE LIMITED TO L/240.
- G. ALL MEMBERS SHALL BE CONTINUOUS UNLESS NOTED OTHERWISE.
- H. ROOF FRAMING LAYOUT IS PROVIDED TO ILLUSTRATE CONDITIONS OF CONSTRUCTION AND DO NOT NECESSARILY INDICATE SPECIFIC QUANTITIES OF MATERIALS OR COMPONENTS REQUIRED FOR CONSTRUCTION.
- I. CONSTRUCTION BRACING SHALL BE PROVIDED BY THE CONTRACTOR TO MAINTAIN THE BUILDING PLUMB AND TRUE, THIS BRACING SHALL REMAIN UNTIL THE SPECIFIED SHEAR WALLS ARE COMPLETELY INSTALLED.
- J. STRUCTURAL PANEL ROOF DECK SHALL BE 15/32" APA-RATED PLYWOOD SHEATHING OR 7/16" O.S.B. OR BETTER FOR 24" O.C. RAFTER SPACING OR LESS. ALL SHEATHING SHALL USE EXTERIOR GLUE. NAIL DECK TO SUPPORTS W/ 8d NAILS @ 6" O.C. AT PANEL EDGES AND AT 12" O.C. IN THE FIELD OR W/ 16 Gs. 1-1/2" LONG STAPLES W/ MIN 7/16" CROWN @ 4" O.C. AT PANEL EDGES AND AT 8" O.C. IN THE FIELD ALONG INTERMEDIATE FRAMING MEMBERS.
- K. EXTERIOR SHEATHING ON SHEAR WALLS SHALL BE A MINIMUM OF 15/32" THICK C-D PLYWOOD OR 7/16" OSB UNLESS NOTED OTHERWISE. NAIL SHEATHING TO VERTICAL STUDS WITH 8d NAILS, REFER TO SCHEDULE FOR SPACING.
- L. WOOD CONNECTORS SHALL BE SIMPSON OR BETTER.
- M. SILL ON CONCRETE SHALL BE FOUNDATION GRADE REDWOOD OR PRESSURE TREATED SOUTHERN PINE OR FIR, ANCHORED WITH 1/2 INCH DIAMETER ANCHOR BOLTS MIN. 7" INTO CONCRETE AT 22 INCHES O.C. OR WITH HILTI X-1 POWDER ACTUATED FASTENERS @ 16" O.C. UNLESS NOTED OTHERWISE ON SHEAR WALL SCHEDULE. MINIMUM OF 2 ANCHORS OR FASTENERS PER PIECE WITH ONE ANCHORS OR FASTENERS WITHIN 12 INCHES OF EACH END.
- N. PROVIDE STANDARD WASHERS FOR MACHINE BOLTS AND LAG SCREWS WITH HEADS OR NUTS BEARING ON WOOD, UNLESS NOTED OTHERWISE.
- O. MINIMUM NAILING SCHEDULE - ALL MEMBERS THROUGHOUT THIS PROJECT SHALL BE CONNECTED TOGETHER WITH NAILS LISTED IN THIS SCHEDULE UNLESS A GREATER NUMBER OR SIZE IS INDICATED ON DRAWINGS. ALL NAILS SHALL BE A COMMON WIRE AND STANDARD LENGTH EXCEPT AS OTHERWISE NOTED.

JOISTS OR RAFTERS TO ALL BEARING.....	2-8d TOENAILS EACH SIDE
STUDS TO BEARING.....	4-8d TOENAILS EACH SIDE
OR 2-16d END NAILS	
BLOCKING BETWEEN JOISTS OVER TOP PLATE....	2-8d TOENAILS EACH SIDE
HERRINGBONE AND STUD BLOCKING.....	2-8d NAILS EACH END MULTIPLE
STUDS AND BUILT-UP BEAMS.....	16d TOP & BOTTOM @ 12" O.C. MAX.
2X CEILING STRIPPING (FURRING).....	2-16d TO EACH BEARING
BLOCKING BETWEEN RAFTERS OVER TOP PLATE.....	10d TOENAILS @ 6" O.C.
DOUBLE TOP PLATES:	
LOWER PLATE TO TOP STUD.....	2-16d NAILS
UPPER PLATE TO LOWER PLATE.....	16d @ 6" O.C. (MIN. 8'-0") @ SPLICES
SHEATHING (UNLESS NOTED OTHERWISE).....	8d @ 6" O.C. PLYWOOD EDGES
	8d @ 12" O.C. FIELD
- P. ALL MASONRY TO BE SUPPORTED INDEPENDENTLY OF HEADERS BY STEEL LINTEL. CONSULT ENGINEER AS REQUIRED.

SECTION 6 ENGINEERED LUMBER

- A. ENGINEERED LUMBER SHALL HAVE THE FOLLOWING MINIMUM DESIGN PROPERTIES:

TYPE	Fb(Psi)	Fv(Psi)	E(Psi)
SYP GLUED LAMINATED TIMBER (24F-1.8E OR BETTER)	2400	200	1,800,000
MICROLAM LAMINATED VENEER LUMBER	2600	285	1,900,000
PARALLAM	2900	290	2,000,000
- B. QUALITY ASSURANCES: MATERIALS, MANUFACTURE AND QUALITY CONTROL SHALL BE IN CONFORMANCE WITH AMERICAN NATIONAL STANDARD ANSI/AITC A190.1 (LATEST EDITION).
- C. PROVIDE SIZES AND SHAPES SHOWN ON PLANS. FINAL DESIGN SIZES ARE SUBJECT TO THE MANUFACTURER. MANUFACTURER TO PROVIDE DESIGN CALCULATIONS AND TO DESIGN LAMINATED TIMBER MEMBERS IN ACCORDANCE WITH APPLICABLE PROVISIONS OF AITC 117, "DESIGN, STANDARD SPECIFICATIONS FOR STRUCTURAL GLUED LAMINATED TIMBER OF SOFTWOOD SPECIES".
- D. GLUED LAMINATED MANUFACTURER TO DESIGN AND FURNISH STEEL CONNECTIONS TO JOIN LAMINATED TO LAMINATED, AND LAMINATED TO SUPPORTS EXCLUSIVE OF ITEMS EMBEDDED IN CONCRETE OR WELDED TO STRUCTURAL STEEL OR CONNECTED TO STUD WALLS.
- E. EXPOSED MEMBERS SHALL BE AITC ARCHITECTURAL APPEARANCE GRADE. MEMBERS NOT EXPOSED SHALL BE USI INDUSTRIAL GRADE. ARCHITECTURAL APPEARANCE GRADE BEAMS SHALL BE FINISHED WITH A FACTORY APPLIED PENETRATING SEALER AND INDIVIDUALLY WRAPPED. DO NOT REMOVE WRAPPING ON INDIVIDUALLY WRAPPED MEMBERS UNTIL IT WILL SERVE NO USEFUL PURPOSE, INCLUDING PROTECTION FROM THE WEATHER, SOILING AND DAMAGE FROM WORK OF OTHER TRADES.
- F. BUILT-UP MEMBERS SHALL BE CONNECTED PER MANUFACTURER'S RECOMMENDATIONS.

SECTION 7 PRE-ENGINEERED WOOD TRUSSES

- A. PREFABRICATED WOOD TRUSSES SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER LICENSED IN THE STATE OF TEXAS. DESIGN TRUSSES IN ACCORDANCE WITH THE LATEST EDITION OF THE "NATIONAL DESIGNED SPECIFICATION FOR WOOD CONSTRUCTION" AS RECOMMENDED BY THE NATIONAL FOREST PRODUCTS ASSOCIATION.
- B. ROOF TRUSSES SHALL BE DESIGNED FOR THE FOLLOWING UNIFORM LOADS:

DESIGN LIVE LOADS:	
TOP CHORD	16 PSF
BOTTOM CHORD	20 PSF
DESIGN DEAD LOADS:	
TOP CHORD SHINGLE/METAL ROOF	9 PSF
TOP CHORD TILE ROOF	16 PSF
BOTTOM CHORD	5 PSF

SECTION 8 COLD FORMED METAL FRAMING

- A. COMPOSITE FLOOR DECK SHALL BE VULCRAFT 1.5F 20 GA. OR EQUIVALENT, APPROVED BY ENGINEER UNLESS NOTED OTHERWISE.
- B. DECKING SHALL BE INSTALLED IN LENGTHS TO PROVIDE A MINIMUM OF A 3' SPAN CONDITION. CONTACT ENGINEER FOR ADDITIONAL BRACING FOR OTHER CONDITIONS.
- C. DECK CONNECTIONS SHALL BE AS FOLLOWS:
 - AT SUPPORTS- 5/8" PUDDLE WELDS IN 3/4 LAYOUT OR #12 TEK SCREWS
 - AT SIDELAPS- MIN. (1) #10 TEK SCREW PER SPAN.
- ATTACH DECK PARALLEL @ EXTERIOR SIDES W/ 5/8" PUDDLE WELDS OR #12 TEK SCREWS @ 12" O.C.
- D. CONNECTIONS:
 - 1. WELDS: WELDING SHALL BE IN CONFORMANCE WITH AWS D 1.3-80. UTILIZING E70XX ELECTRODES. THE ENGINEER OF RECORD MAY REQUEST NONDESTRUCTIVE TESTING TO VERIFY PROPER WELDS. SCREWS: SELF DRILLING AND SELF TAPPING, CADMIUM PLATED ALL EXTERIOR USES, OF THE SIZE REQUIRED FOR LOADINGS. DARTS BRAND SCREWS OR EQUALLY APPROVED (ICBO #5202).
 - 2. POWDER DRIVEN SHOTS: SIZE AND SPACING AS REQUIRED TO PROPERLY ANCHOR THE FRAMING MEMBERS. USE CHARGE AS APPROPRIATED FOR ACTUAL USE. HILTI X-EDNI P.A.F. OR EQUALLY APPROVED (ICBO #2358).

SECTION 9 LIGHT GAUGE METAL

- A. COMPLY WITH THE PROVISIONS OF THE LATEST EDITION OF THE AISI "SPECIFICATION FOR THE DESIGN OF COLD-FORMED METAL FRAMING" EXCEPT WHERE MORE STRINGENT REQUIREMENTS ARE SHOWN OR SPECIFIED.
- B. FABRICATED METAL FRAMING COMPONENTS OF COMMERCIAL QUALITY SHEET COMPLYING WITH ASTM A446, A570, OR A611 PER THE FOLLOWING:
 - 1. 18 GAGE AND LIGHTER Fy=33KSI
 - 2. 16 GAGE AND HEAVIER Fy=50KSI
- C. ALL LIGHT GAGE METAL FRAMING MEMBERS INDICATED ON STRUCTURAL DRAWINGS ARE THE PRODUCTS OF DIETRICH INDUSTRIES, INC. OR APPROVED EQUAL. STUDS ARE 6" X 16 GAUGE CSW TYPE, WITH 1 5/8" FLANGE.
- D. INSTALL METAL FRAMING SYSTEMS IN ACCORDANCE WITH MANUFACTURER'S PRINTED OR WRITTEN INSTRUCTIONS AND RECOMMENDATIONS, UNLESS INDICATED.
- E. INSTALL CONTINUOUS TRACKS AT TOP AND BOTTOM OF WALL PANELS OF SIZE AND GAGE TO MATCH STUDS. ALIGN TRACKS ACCURATELY TO LAYOUT AT BASE AND TOPS OF STUDS. FABRICATE WALLS IN A FIXTURE TABLE CAPABLE OF COMPRESSING STUD ENDS INTO TOP AND BOTTOM TRACK SECTIONS RESULTING IN COMPLETE UNIFORM AND LEVEL BEARING.
- F. INSTALL SUPPLEMENTARY FRAMING, BLOCKING AND BRACING IN METAL FRAMING SYSTEM WHEREVER WALLS OR PARTITIONS ARE INDICATED TO SUPPORT FIXTURES, EQUIPMENT, CASEWORK AND SIMILAR WORK REQUIRING ATTACHMENT TO THE WALL OF PARTITION. WHERE TYPE OF SUPPLEMENTARY SUPPORT IS NOT OTHERWISE INDICATED, COMPLY WITH STUD MANUFACTURER'S RECOMMENDATIONS, CONSIDERING WEIGHT OR LOADING RESULTING FROM ITEM SUPPORTED.
- G. ALL WELDING SHALL COMPLY WITH AWS STANDARDS. ALL MEMBERS SHALL BE FITTED SO AS TO PROVIDE FULL CONTACT BEARING AT CONNECTIONS. SHIMS AND UNLEVEL BEARING SURFACES WILL NOT BE PERMITTED.

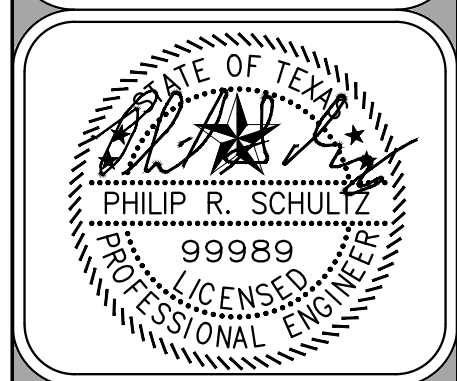
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DRWN BY CKD BY

SQ. FOOTAGE: #

SEE GENERAL NOTES

PROJECT NUMBER
2008041.1

SHEET NO.
S-3

PERMIT DOCUMENTS

2/12/2021 10:49 AM

GENERAL NOTES

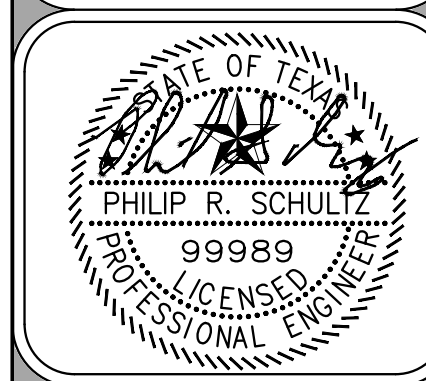
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DRWN BY: CKD BY: DB

SQ. FOOTAGE: 5500#
 SEE GENERAL NOTES

PROJECT NUMBER
 2008041.1

SHEET NO.

S-4

GENERAL NOTES

01. DESIGN IS BASED ON A MAXIMUM COMP. SHINGLE ROOF DEAD LOAD OF 500 LBS/SQUARE. CONSULT ENGINEER IF OTHER MATERIALS ARE USED.
02. ALL MEMBERS SHALL BE CONTINUOUS AND SYP. #2 UNLESS NOTED OTHERWISE.
03. ALL MASONRY TO BE SUPPORTED INDEPENDENTLY OF HEADERS BY STEEL LINTEL. CONSULT ENGINEER AS REQUIRED.
04. ALL JOISTS TO BE 2 X 6 @ 24" O.C. UNLESS NOTED OTHERWISE.
05. ALL HEADERS TO BE A MINIMUM OF (2) 2 X 6 UNLESS NOTED OTHERWISE.
06. ALL HANGERS TO BE SIMPSON OR BETTER UNLESS NOTED OTHERWISE.
07. PROVIDE MINIMUM HANGER FOR ALL BEAM TO BEAM CONNECTIONS UNLESS SPECIFIC HANGER SIZE IS CALLED OUT ON PLAN.
08. NOTCH BEAMS @ SLOPED ROOFS AND REPAIR WHERE INDICATED ON PLANS. BEAM TAPERS HAVE BEEN DESIGNED BASED ON A MINIMUM BEAM DEPTH EQUAL TO THE VERTICAL DEPTH OF THE RAFTERS AT THE INTERIOR FACE OF THE STUD WALL (i.e., THE DEPTH FROM THE ROOF DECK TO THE TOP OF THE TOP PLATE.)
09. (4) LVL BEAMS TO BE BOLTED W/ (2) ROWS OF 1/2" THROUGH BOLTS @ 12" O.C. ROWS SHOULD BE LOCATED 2" FROM THE TOP AND BOTTOM OF THE BEAM.
10. STUD SIZES AND SPACINGS TO BE IN ACCORDANCE WITH PROVISIONS OF IRC SECTION R602 AND/OR AWC WFCM 3.4.1.1 OF THE JURISDICTION'S ADOPTED VERSION OF THE APPLICABLE CODE. ENGINEER MAY BE CONTACTED FOR STUD WALL DESIGNS AT AN ADDITIONAL FEE.
11. ALL EXPOSED LUMBER TO BE TREATED FOR MOISTURE PROTECTION.
12. SQ. FOOTAGE IS INCLUSIVE OF FRAMED ATTICS, FLOORS, AND EXTERIOR DECKS.

FRAMING LEGEND

- TJI FLOOR JOIST
 - BEAM
 - ← ATD → ASSUMED TRUSS DIRECTION: TRUSS DESIGNER TO DESIGN TRUSSES TO SPAN PARALLEL TO THE ARROWS.
 - ▭ NON-LOAD BEARING WALLS
 - ▭ LOAD BEARING WALLS
- NOTE: NON-LOAD BEARING AND LOAD BEARING WALLS APPLY TO UPPER FLOOR WALLS ONLY. I.E. WALLS THAT DO NOT TIE INTO THE FOUNDATION.
- RIDGE OR VALLEY SUPPORT
 - SUPPORT AND LOCATION
 - /// ROOF SPLICE
 - × DENOTES UNFACTORED POINT LOAD (lbs) FROM FRAMING IN UPPER STORIES. FLOOR TRUSS MANUFACTURER TO SUPPORT A POINT LOAD OF DL_# , LL_# AT THIS LOCATION FROM BEAM(S) ABOVE.
 - || DENOTES UNFACTORED LINE LOAD (plf) FROM FRAMING IN UPPER STORIES. FLOOR TRUSS MANUFACTURER TO SUPPORT A LINE LOAD OF DL_# plf, LL_# plf AT THIS LOCATION FROM BEAM(S) ABOVE.
 - || DENOTES UNFACTORED LINE LOAD (plf) FROM LOAD BEARING WALL ABOVE AT THIS LOCATION.

LEGEND:

- 1** (2) 2 X 4 S.Y.P. #2
- 2** (3) 2 X 4 S.Y.P. #2
- 3** (4) 2 X 4 S.Y.P. #2
- 4** (5) 2 X 4 S.Y.P. #2
- 5** (2) 2 X 6 S.Y.P. #2
- 6** (3) 2 X 6 S.Y.P. #2
- 7** (4) 2 X 6 S.Y.P. #2

IRC 2006
IRC 2009
IRC 2012
IRC 2015
IRC 2018

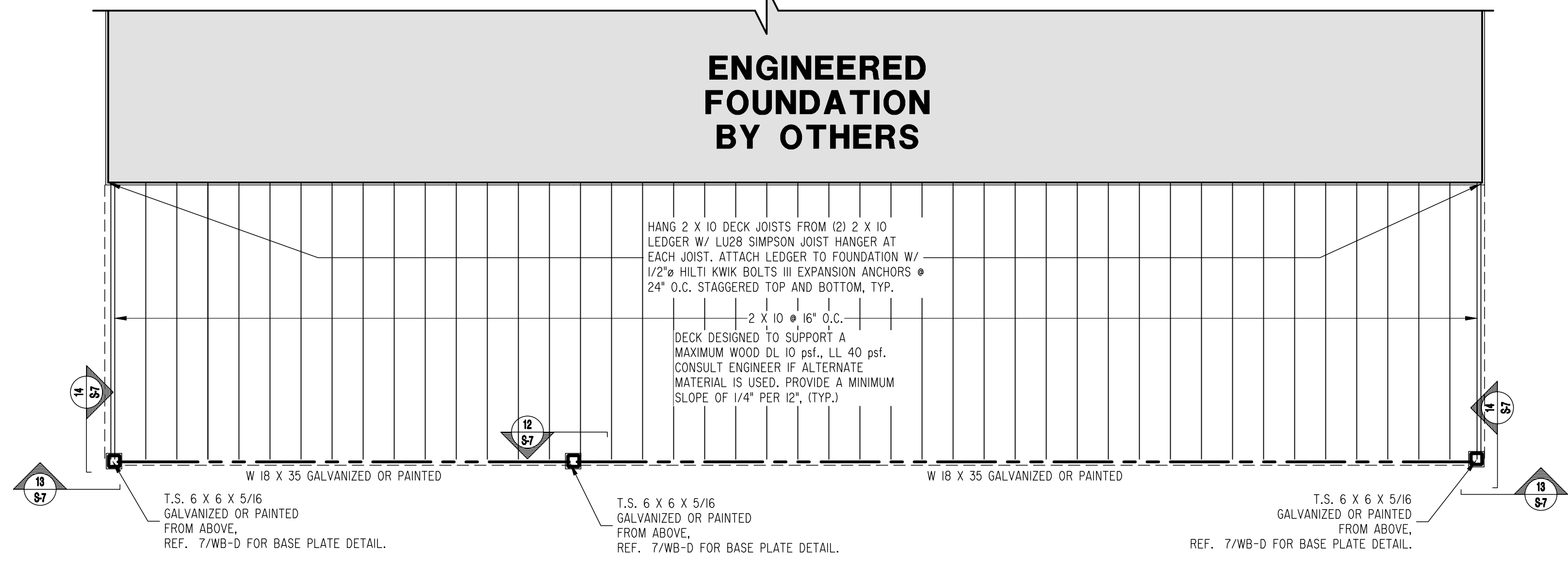
REPRESENTS MIN. # OF STUDS FOR END SUPPORT OF MEMBER.

Thank you for allowing ATS the opportunity to assist you on your home. To ensure the quality of our design we recommend an inspection prior to the placement of concrete. Inspections start at \$75.00 each. Please contact ATS at (512) 328-6995 at least 24 hours prior to the scheduled pour. Visit www.ats-engineers.com for additional inspection and engineering services offered.

NOTE:
 FRAMING PLANS BASED ON ARCHITECTURE RECEIVED ON 08/26/20. CONSULT ENGINEER FOR ANY STRUCTURAL CHANGES DUE TO ARCHITECTURAL CHANGES MADE AFTER DATE.

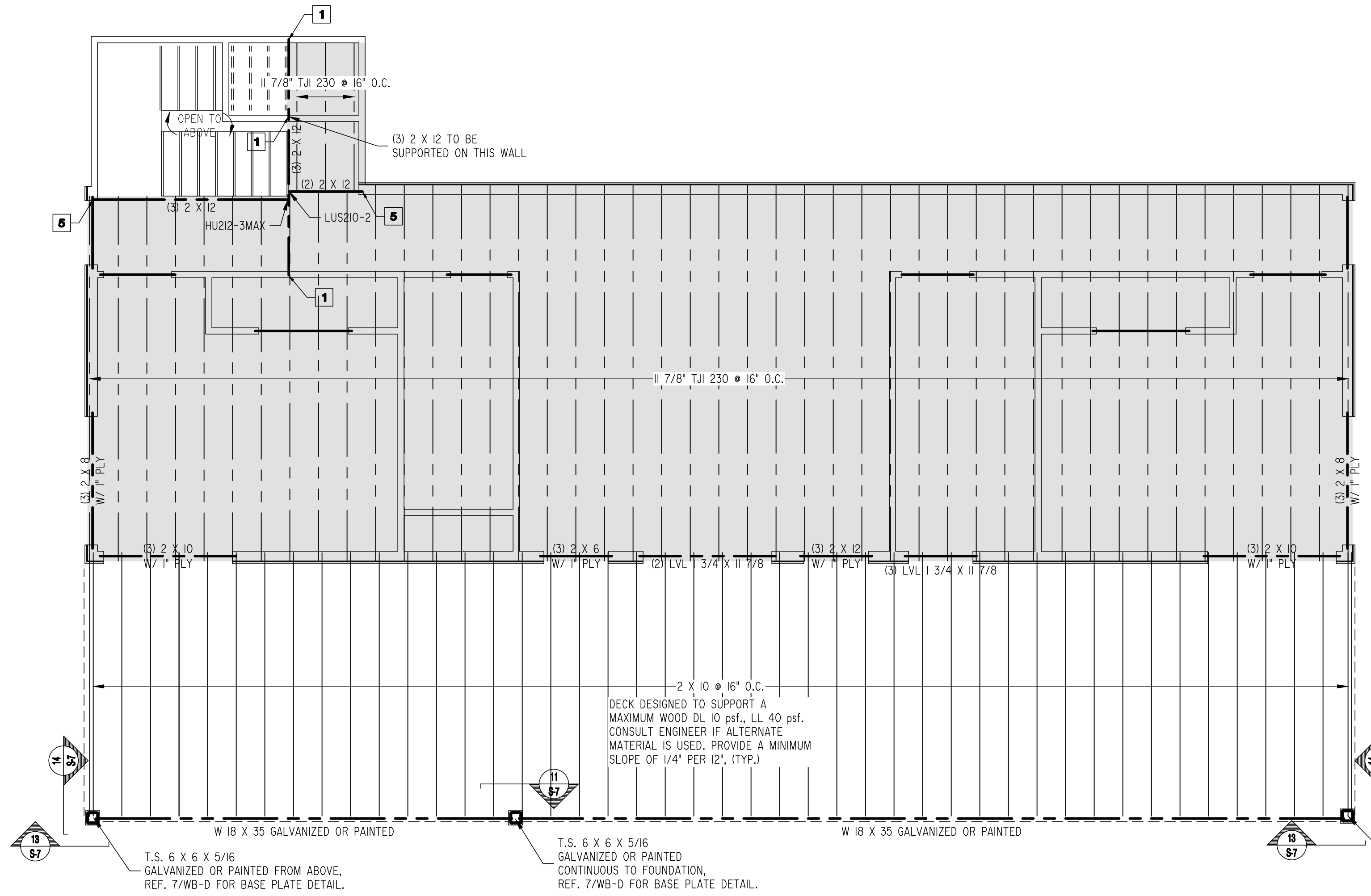
NOTE:
 THE 3RD PARTY FLOOR TRUSS DESIGNER MUST FOLLOW THE FLOOR TRUSS LAYOUT SHOWN ON THESE PLANS WITH NO EXCEPTION.

ENGINEERED FOUNDATION BY OTHERS



LOWER STORY DECK FRAMING PLAN

1/4" = 1'-0" FOR 22 X 34 SHEET (1/8" = 1'-0" FOR 11 X 17 SHEET) SQ. FOOTAGE - 1825



LOWER STORY CEILING FRAMING PLAN

1/4" = 1'-0" FOR 22 X 34 SHEET (1/8" = 1'-0" FOR 11 X 17 SHEET) SQ. FOOTAGE - 1825

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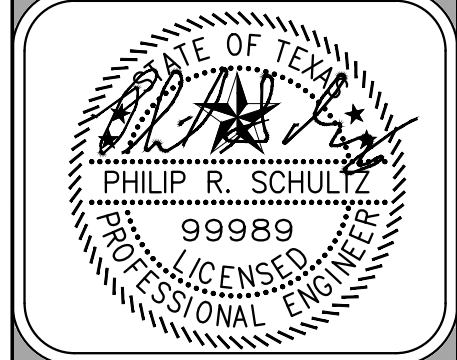
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SQ. FOOTAGE: 5500#
 SEE GENERAL NOTES

PROJECT NUMBER
 2008041.1

SHEET NO.
S-5

GENERAL NOTES

01. DESIGN IS BASED ON A MAXIMUM COMP. SHINGLE ROOF DEAD LOAD OF 500 LBS/SQUARE. CONSULT ENGINEER IF OTHER MATERIALS ARE USED.
02. ALL MEMBERS SHALL BE CONTINUOUS AND SYP. #2 UNLESS NOTED OTHERWISE.
03. ALL MASONRY TO BE SUPPORTED INDEPENDENTLY OF HEADERS BY STEEL LINTEL. CONSULT ENGINEER AS REQUIRED.
04. ALL JOISTS TO BE 2 X 6 @ 24" O.C. UNLESS NOTED OTHERWISE.
05. ALL HEADERS TO BE A MINIMUM OF (2) 2 X 6 UNLESS NOTED OTHERWISE.
06. ALL HANGERS TO BE SIMPSON OR BETTER UNLESS NOTED OTHERWISE.
07. PROVIDE MINIMUM HANGER FOR ALL BEAM TO BEAM CONNECTIONS UNLESS SPECIFIC HANGER SIZE IS CALLED OUT ON PLAN.
08. NOTCH BEAMS @ SLOPED ROOFS AND REPAIR WHERE INDICATED ON PLANS. BEAM TAPERS HAVE BEEN DESIGNED BASED ON A MINIMUM BEAM DEPTH EQUAL TO THE VERTICAL DEPTH OF THE RAFTERS AT THE INTERIOR FACE OF THE STUD WALL (i.e., THE DEPTH FROM THE ROOF DECK TO THE TOP OF THE TOP PLATE.)
09. (4) LVL BEAMS TO BE BOLTED W/ (2) ROWS OF 1/2" THROUGH BOLTS @ 12" O.C. ROWS SHOULD BE LOCATED 2" FROM THE TOP AND BOTTOM OF THE BEAM.
10. STUD SIZES AND SPACINGS TO BE IN ACCORDANCE WITH PROVISIONS OF IRC SECTION R602 AND/OR AWC WFCM 3.4.1.1 OF THE JURISDICTION'S ADOPTED VERSION OF THE APPLICABLE CODE. ENGINEER MAY BE CONTACTED FOR STUD WALL DESIGNS AT AN ADDITIONAL FEE.
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12. SQ. FOOTAGE IS INCLUSIVE OF FRAMED ATTICS, FLOORS, AND EXTERIOR DECKS.

FRAMING LEGEND

- TJ1 FLOOR JOIST
 - BEAM
 - ATD ----- ASSUMED TRUSS DIRECTION: TRUSS DESIGNER TO DESIGN TRUSSES TO SPAN PARALLEL TO THE ARROWS.
 - NON-LOAD BEARING WALLS
 - LOAD BEARING WALLS
- NOTE: NON-LOAD BEARING AND LOAD BEARING WALLS APPLY TO UPPER FLOOR WALLS ONLY. I.E. WALLS THAT DO NOT TIE INTO THE FOUNDATION.
- RIDGE OR VALLEY SUPPORT
 - SUPPORT AND LOCATION
 - /// ROOF SPLICE
 - × DENOTES UNFACTORED POINT LOAD (lbs) FROM FRAMING IN UPPER STORIES. FLOOR TRUSS MANUFACTURER TO SUPPORT A POINT LOAD OF DL_#_#, LL_#_# AT THIS LOCATION FROM BEAM(S) ABOVE.
 - || DENOTES UNFACTORED LINE LOAD (plf) FROM FRAMING IN UPPER STORIES. FLOOR TRUSS MANUFACTURER TO SUPPORT A LINE LOAD OF DL_#_#plf, LL_#_#plf FROM LOAD BEARING WALL ABOVE AT THIS LOCATION.

LEGEND:

- 1** (2) 2 X 4 S.Y.P. #2
- 2** (3) 2 X 4 S.Y.P. #2
- 3** (4) 2 X 4 S.Y.P. #2
- 4** (5) 2 X 4 S.Y.P. #2
- 5** (2) 2 X 6 S.Y.P. #2
- 6** (3) 2 X 6 S.Y.P. #2
- 7** (4) 2 X 6 S.Y.P. #2

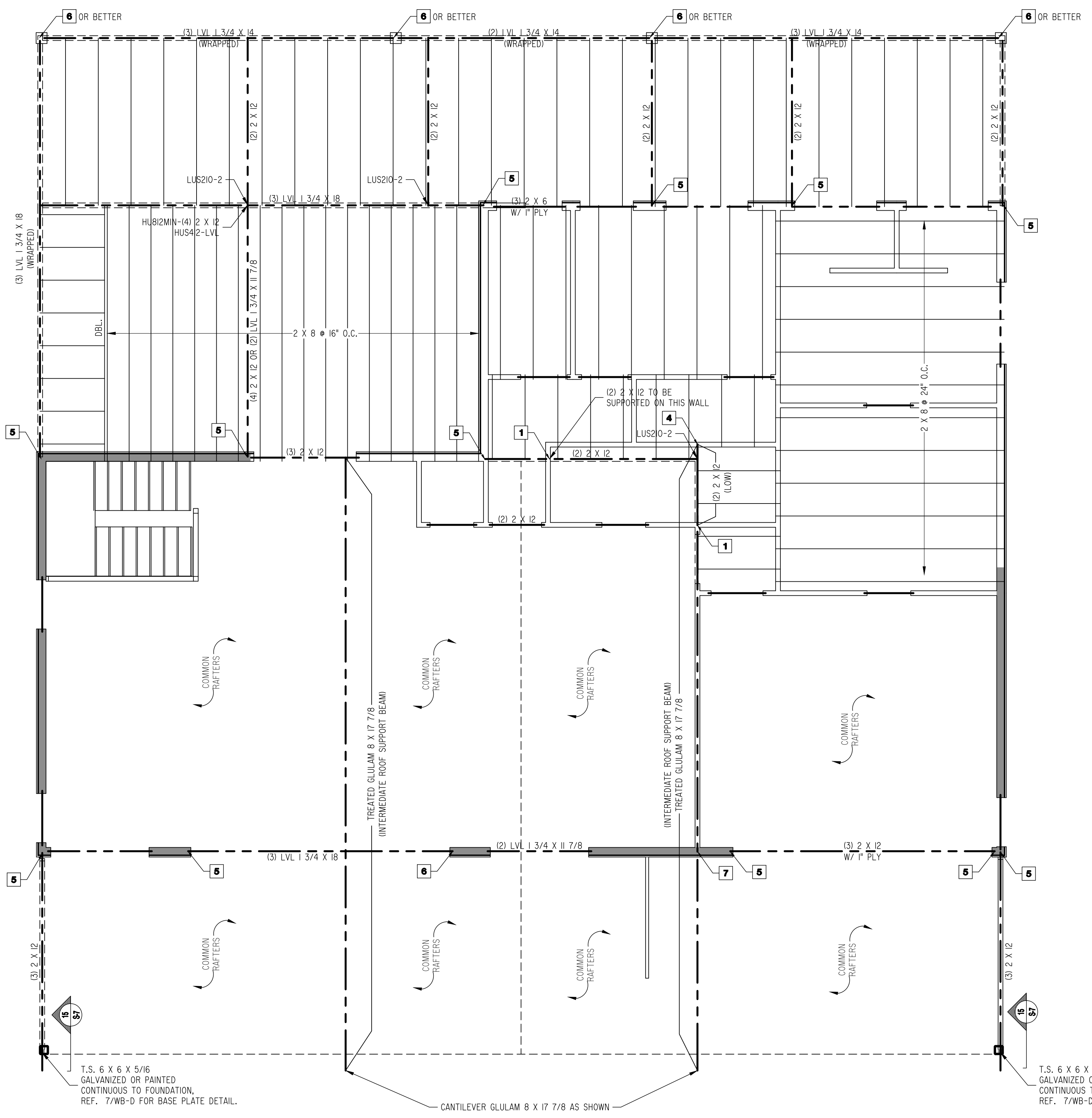
REPRESENTS MIN. # OF STUDS FOR END SUPPORT OF MEMBER.

IRC 2006
IRC 2009
IRC 2012
IRC 2015
IRC 2018

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NOTE:
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NOTE:
 THE 3RD PARTY FLOOR TRUSS DESIGNER MUST FOLLOW THE FLOOR TRUSS LAYOUT SHOWN ON THESE PLANS WITH NO EXCEPTION.



UPPER STORY CEILING FRAMING PLAN

1/4" = 1'-0" FOR 22 X 34 SHEET (1/8" = 1'-0" FOR 11 X 17 SHEET) SQ. FOOTAGE - 3675

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STATE OF TEXAS
 LUIS A. FRANCO
 119836
 PROFESSIONAL ENGINEER

DATE ISSUED
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DRWN BY: LAF
 CKD BY: LAF

SQ. FOOTAGE: #
 SEE GENERAL NOTES

PROJECT NUMBER
 2008041.1

SHEET NO.
WB-1

GENERAL

- SHEAR WALL DESIGN BASED UPON FOLLOWING ASSUMPTIONS U.N.O.
- ALL INTERIOR WALLS AND INTERIOR SIDES OF EXTERIOR WALLS SHEATHED W/ 1/2" THICK GYPSUM WALL BOARD, INCLUDING GARAGE. BLOCKING IS NOT REQUIRED BETWEEN STUDS. ATTACH W/5d NAILS (OR EQUAL) AT 7" O.C. AT TOP & BOTTOM PLATES AND STUDS. ****UNLESS NOTED OTHERWISE.****
 - THIS DESIGN RELIES ON THE FOLLOWING BRACING METHODS, WITHOUT CONTRIBUTION FROM CEILING DIAPHRAGMS:
 - GB (GYPSUM BOARD) - SEE (SW) AND NOTE 1 ABOVE.
 - WSP (STRUCTURAL SHEATHING) - SEE (A), (B) & (T).
 - THE MOST RESTRICTIVE PRESCRIPTIVE FASTENING REQUIREMENTS AND CONSTRUCTION METHODS OF IRC TABLE 602.3 OR IBC 2304.9.1 SHALL APPLY. ****UNLESS NOTED OTHERWISE.****
 - OSB ON PLAN TO BE CONTINUOUS FROM BOTTOM PLATE TO TOP PLATE OF THE FLOOR ON WHICH IT IS INDICATED.
 - THIS WINDBRACING PLAN IS VALID ONLY FOR LISTED ELEVATIONS AND OPTIONS.
 - ENGINEER HAS DESIGNED WINDBRACING ONLY.
 - ALL WALLS SHALL HAVE A CONTINUOUS TOP PLATE OR DRAG STRUT PER DETAIL 1,2/WB-D.
 - BLOCK AND NAIL ALL COFFERED CEILING LINES.
 - WINDBRACE PLANS HAVE BEEN DESIGNED TO WITHSTAND CENTRAL TEXAS AREA BASIC WIND SPEED OF 115 MPH AND EXPOSURE B.

ANCHORAGE

- ANCHORAGE TO FOUNDATION & FRAMING SHALL BE AS FOLLOWS:
- SHEAR WALL (A), (B) AND (T) SILL PLATES AT EXTERIOR ANCHORED TO FOUNDATION W/ 1/2" x 10" ANCHOR BOLTS @ 48" O.C. AND 12" FROM DOORS & ENDS. SHEAR WALL (A), (B) & (T) SILL PLATES AT INTERIOR ANCHORED TO FOUNDATION W/ HILTI X-U POWDER ACTUATED FASTENERS (P.A.F.) OR EQUAL @ 8" O.C. AND 12" FROM DOORS & ENDS.
 - STANDARD SILL PLATES AT EXTERIOR ANCHORED TO FOUNDATION W/ 1/2" x 10" ANCHOR BOLTS @ 72" O.C. AND 12" FROM DOORS & ENDS. STANDARD SILL PLATES AT INTERIOR ANCHORED TO FOUNDATION W/ HILTI X-U POWDER ACTUATED FASTENERS (P.A.F.) OR EQUAL @ 16" O.C. AND 12" FROM DOORS & ENDS.
 - ALL EXTERIOR WALLS & SHEAR WALLS DESIGNATED (SW) ARE CONSIDERED BRACED WALL PANELS. 2ND FLOOR SHEAR WALLS DESIGNATED (SW) SHALL BE DIRECTLY SUPPORTED BY FLOOR FRAMING MEMBERS OR 2x BLOCKING (FLAT) BETWEEN FLOOR TRUSSES, USING TOENAILING OR A PRODUCT SIMILAR TO THE SIMPSON TP57 TIE PLATE. FASTEN ALL SW SOLE PLATES W/ 3-16D NAILS 16" O.C.
 - ALL PATIO COLUMNS SHALL BE PROVIDED WITH POSITIVE ANCHORAGE TO FOUNDATION USING SIMPSON ABA OR USP PAE POST BASES FOR TIMBER OR BUILT-UP POSTS. BOXED COLUMNS SHALL BE PROVIDED WITH POSITIVE ANCHORAGE TO FOUNDATION USING SIMPSON DTT2Z OR USP DTB-TZ HOLD-DOWNS. SEE DETAIL 6/WB-D
- NOTE: ANCHOR BOLTS MAY BE SUBSTITUTED BY SIMPSON MASA MUDSILL OR USP FA4 FOUNDATION ANCHORS AT EQUIVALENT REQUIRED SPACING.

SHEATHING & BRACING SCHEDULE

- ALL NOTES ON WB-G FOR APPLY TO THIS WINDBRACING PLAN.
- ALL INTERIOR WALLS AND INTERIOR SIDES OF EXTERIOR WALLS SHEATHED W/ 1/2" THICK GYPSUM WALL BOARD, INCLUDING GARAGE. BLOCKING IS NOT REQUIRED BETWEEN STUDS. ATTACH W/5d NAILS (OR EQUAL) AT 7" O.C. AT TOP & BOTTOM PLATES AND STUDS. ****UNLESS NOTED OTHERWISE.****
- EXTERIOR SIDES OF EXTERIOR WALLS:
- (B) 15/32" CDX PLYWOOD OR 7/16" OSB RATED SHEATHING (ONE SIDE), BLOCKED, NAILED W/ 8d COMMON NAILS @ 6" O.C. ON EDGE AND 12" O.C. IN FIELD ****UNLESS NOTED OTHERWISE.****
 - (A) 15/32" CDX PLYWOOD OR 7/16" OSB RATED SHEATHING (ONE SIDE), BLOCKED, NAILED W/ 8d COMMON NAILS @ 4" O.C. ON EDGE AND 12" O.C. IN FIELD. ****ONLY WHERE INDICATED.****
 - (T) RED-STRUCTURAL GRADE THERMO-PLY (TER 1004-01) EXTERIOR SHEATHING FASTENED TO STUDS SPACED 16" O.C. USING MIN. 16GA, 1" CROWN STAPLES SPACED A MAX. OF 3" O.C. AT THE PANEL EDGES AND 3" O.C. IN THE FIELD. ROOFING NAILS (MIN. 0.120" X 1 1/4" W/ A 3/8" HEAD) ARE A PERMITTED ALTERNATE FASTENER.
- NOTE: (T) MAY BE USED IN LIEU OF (B) AND VICE-VERSA. ANCHOR BOLTS MAY BE SUBSTITUTED BY SIMPSON MASA MUDSILL OR USP FA4 FOUNDATION ANCHORS AT EQUIVALENT SPACING.

GARAGE STRAPS:

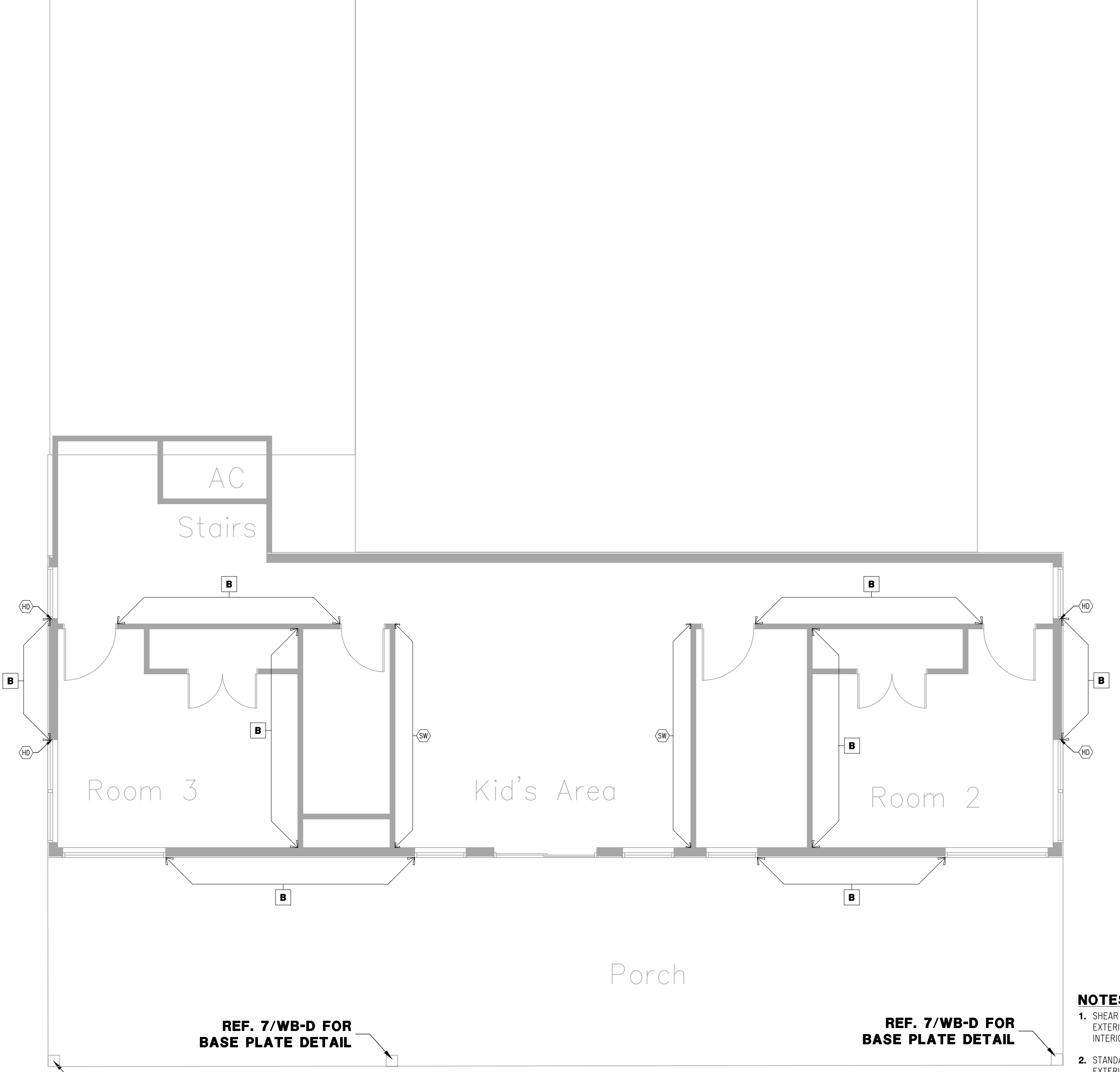
- (D) SIMPSON CS14 OR USP RS14-100 STRAP BRACING SPANNING DIAGONALLY ACROSS THE GARAGE CEILING. STRAP TO BE NAILED TO UNDERSIDE OF EACH CEILING JOIST AND EXTEND OVER THE WALL PLATES AND DOWN AND AROUND CORNER STUDS TO ENSURE MIN. 25" LAP WITH FULL NAILING AT EACH END.

CALLOUTS

- (SW) - SHEAR WALL PANEL
- (HD) - SIMPSON HDU5-SDS2.5 HOLD DOWN OR USP HTT5 HOLD DOWN. (ATTACH TO (2) 2x KING STUDS. EPOXY 5/8" THREADED ROD MIN. 6" INTO CONCRETE AT HOLD DOWN)
- (PA) - POSITIVE ANCHORAGE PER 13/WB-G AND 6/WB-D
 POSTS: SIMPSON ABA/USP PAE
 BOX COLUMNS: SIMPSON DTT2Z/USP DTB-TZ

ALL DIMENSIONS ARE THE SOLE RESPONSIBILITY OF THE ARCHITECT. HOWEVER, THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE DIMENSIONS PRIOR TO THE START OF CONSTRUCTION, AND SHALL NOTIFY THE ARCHITECT OF ANY DISCREPANCIES.

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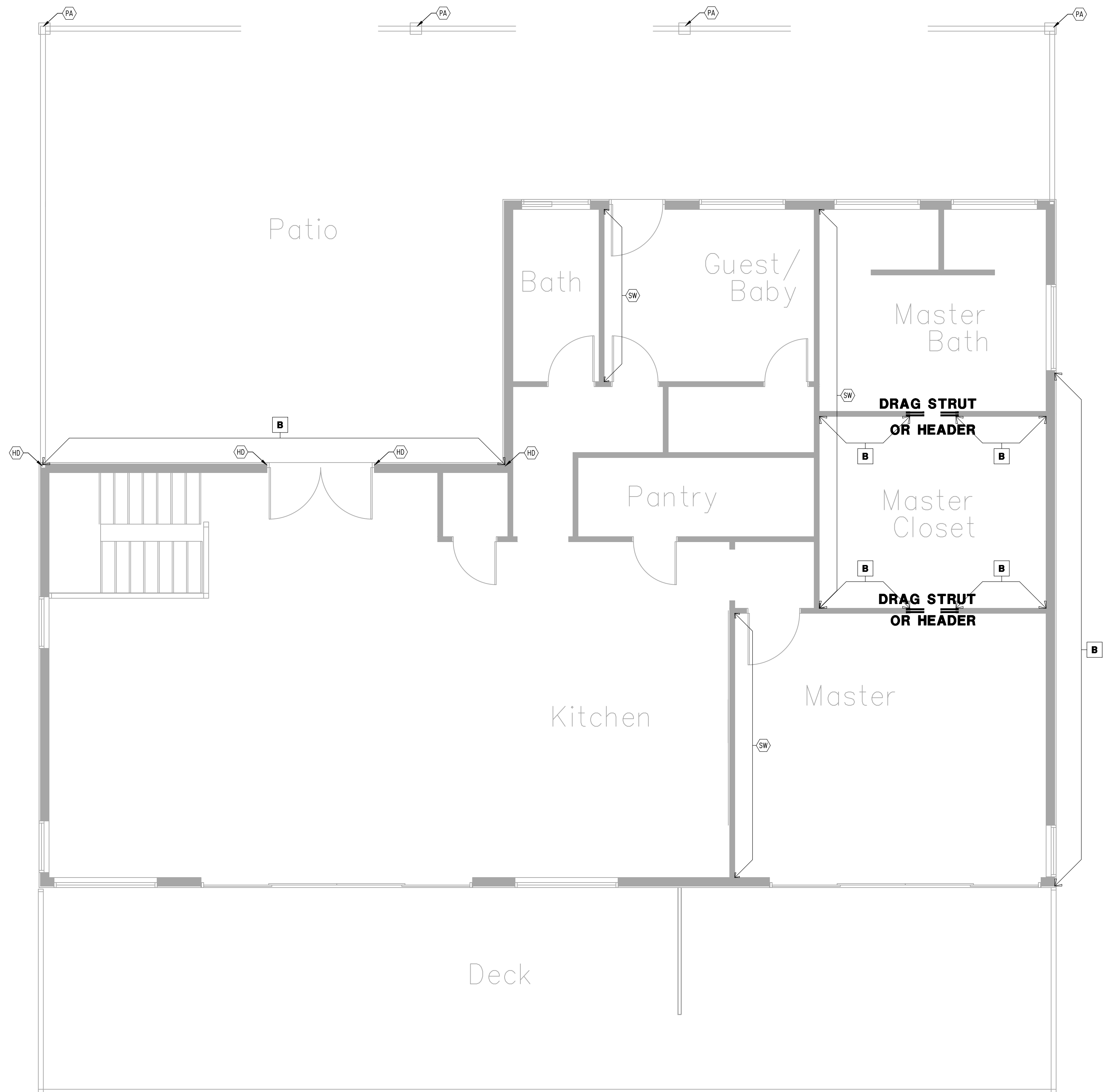
IRC 2012
IRC 2015
IRC 2018

NOTES:

- SHEAR WALL (A), (B) AND (T) SILL PLATE ANCHORAGE:
 EXTERIOR: 1/2" x 10" ANCHOR BOLTS @ 48" O.C.
 INTERIOR: HILTI X-U P.A.F. (OR EQUAL) @ 8" O.C.
- STANDARD SILL PLATE ANCHORAGE:
 EXTERIOR: 1/2" x 10" ANCHOR BOLTS @ 72" O.C.
 INTERIOR: HILTI X-U P.A.F. (OR EQUAL) @ 16" O.C.
 ALL WALLS: ANCHORS/P.A.F. 12" FROM DOORS & ENDS.
- ALL 2ND FLOOR EXTERIOR WALLS AND 2ND FLOOR (SW) WALLS:
 FASTEN W/ 3-16D NAILS @ 16" O.C. DIRECTLY TO FLOOR FRAMING MEMBERS OR 2x BLOCKING BETWEEN FLOOR MEMBERS, 2x BLOCKING TOE-NAILED TO FLOOR MEMBERS OR FASTENED USING SIMPSON TP57 TIE PLATE OR EQUIVALENT.
- POSITIVE ANCHORAGE REQUIRED AT ALL PORCH OR PATIO COLUMNS, WHETHER SINGLE OR BOX-COLUMNS.

LOWER STORY WINDBRACING PLAN

1/4" = 1'-0" FOR 22 X 34 SHEET (1/8" = 1'-0" FOR 11 X 17 SHEET)



GENERAL

- SHEAR WALL DESIGN BASED UPON FOLLOWING ASSUMPTIONS U.N.O.
- ALL INTERIOR WALLS AND INTERIOR SIDES OF EXTERIOR WALLS SHEATHED W/ 1/2" THICK GYPSUM WALL BOARD, INCLUDING GARAGE. BLOCKING IS NOT REQUIRED BETWEEN STUDS. ATTACH W/5d NAILS (OR EQUAL) AT 7" O.C. AT TOP & BOTTOM PLATES AND STUDS. ****UNLESS NOTED OTHERWISE.****
 - THIS DESIGN RELIES ON THE FOLLOWING BRACING METHODS, WITHOUT CONTRIBUTION FROM CEILING DIAPHRAGMS:
 - GB (GYPSUM BOARD) - SEE (SW) AND NOTE 1 ABOVE.
 - WSP (STRUCTURAL SHEATHING) - SEE (A), (B) & (T).
 - THE MOST RESTRICTIVE PRESCRIPTIVE FASTENING REQUIREMENTS AND CONSTRUCTION METHODS OF IRC TABLE 602.3 OR IBC 2304.9.1 SHALL APPLY. ****UNLESS NOTED OTHERWISE.****
 - OSB ON PLAN TO BE CONTINUOUS FROM BOTTOM PLATE TO TOP PLATE OF THE FLOOR ON WHICH IT IS INDICATED.
 - THIS WINDBRACING PLAN IS VALID ONLY FOR LISTED ELEVATIONS AND OPTIONS.
 - ENGINEER HAS DESIGNED WINDBRACING ONLY.
 - ALL WALLS SHALL HAVE A CONTINUOUS TOP PLATE OR DRAG STRUT PER DETAIL 1,2/WB-D.
 - BLOCK AND NAIL ALL COFFERED CEILING LINES.
 - WINDBRACE PLANS HAVE BEEN DESIGNED TO WITHSTAND CENTRAL TEXAS AREA BASIC WIND SPEED OF 115 MPH AND EXPOSURE B.

ANCHORAGE

- ANCHORAGE TO FOUNDATION & FRAMING SHALL BE AS FOLLOWS:
- SHEAR WALL (A), (B) AND (T) SILL PLATES AT EXTERIOR ANCHORED TO FOUNDATION W/ 1/2"x 10" ANCHOR BOLTS @ 48" O.C. AND 12" FROM DOORS & ENDS. SHEAR WALL (A), (B) & (T) SILL PLATES AT INTERIOR ANCHORED TO FOUNDATION W/ HILTI X-U POWDER ACTUATED FASTENERS (P.A.F.) OR EQUAL @ 8" O.C. AND 12" FROM DOORS & ENDS.
 - STANDARD SILL PLATES AT EXTERIOR ANCHORED TO FOUNDATION W/ 1/2"x 10" ANCHOR BOLTS @ 72" O.C. AND 12" FROM DOORS & ENDS. STANDARD SILL PLATES AT INTERIOR ANCHORED TO FOUNDATION W/ HILTI X-U POWDER ACTUATED FASTENERS (P.A.F.) OR EQUAL @ 16" O.C. AND 12" FROM DOORS & ENDS.
 - ALL EXTERIOR WALLS & SHEAR WALLS DESIGNATED (SW) ARE CONSIDERED BRACED WALL PANELS. 2ND FLOOR SHEAR WALLS DESIGNATED (SW) SHALL BE DIRECTLY SUPPORTED BY FLOOR FRAMING MEMBERS OR 2x BLOCKING (FLAT) BETWEEN FLOOR TRUSSES, USING TOENAILING OR A PRODUCT SIMILAR TO THE SIMPSON TP57 TIE PLATE. FASTEN ALL SW SOLE PLATES W/ 3-16D NAILS 16" O.C.
 - ALL PATIO COLUMNS SHALL BE PROVIDED WITH POSITIVE ANCHORAGE TO FOUNDATION USING SIMPSON ABA OR USP PAE POST BASES FOR TIMBER OR BUILT-UP POSTS. BOXED COLUMNS SHALL BE PROVIDED WITH POSITIVE ANCHORAGE TO FOUNDATION USING SIMPSON DT2Z OR USP DTB-TZ HOLD-DOWNS. SEE DETAIL 6/WB-D.
- NOTE: ANCHOR BOLTS MAY BE SUBSTITUTED BY SIMPSON MASA MUDSILL OR USP FA4 FOUNDATION ANCHORS AT EQUIVALENT REQUIRED SPACING.

SHEATHING & BRACING SCHEDULE

- ALL NOTES ON WB-G FOR APPLY TO THIS WINDBRACING PLAN.
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 - (A) 15/32" CDX PLYWOOD OR 7/16" OSB RATED SHEATHING (ONE SIDE), BLOCKED, NAILED W/ 8d COMMON NAILS @ 4" O.C. ON EDGE AND 12" O.C. IN FIELD. ****ONLY WHERE INDICATED.****
 - (T) RED-STRUCTURAL GRADE THERMO-PLY (TER 1004-01) EXTERIOR SHEATHING FASTENED TO STUDS SPACED 16" O.C. USING MIN. 16GA, 1" CROWN STAPLES SPACED A MAX. OF 3" O.C. AT THE PANEL EDGES AND 3" O.C. IN THE FIELD. ROOFING NAILS (MIN. 0.120" X 1 1/4" W/ A 3/8" HEAD) ARE A PERMITTED ALTERNATE FASTENER.
- NOTE: (T) MAY BE USED IN LIEU OF (B) AND VICE-VERSA. ANCHOR BOLTS MAY BE SUBSTITUTED BY SIMPSON MASA MUDSILL OR USP FA4 FOUNDATION ANCHORS AT EQUIVALENT SPACING.
- GARAGE STRAPS:
- (D) SIMPSON CS14 OR USP RS14-100 STRAP BRACING SPANNING DIAGONALLY ACROSS THE GARAGE CEILING. STRAP TO BE NAILED TO UNDERSIDE OF EACH CEILING JOIST AND EXTEND OVER THE WALL PLATES AND DOWN AND AROUND CORNER STUDS TO ENSURE MIN. 25" LAP WITH FULL NAILING AT EACH END.

NOTES:

- SHEAR WALL (A), (B) AND (T) SILL PLATE ANCHORAGE: EXTERIOR: 1/2"x 10" ANCHOR BOLTS @ 48" O.C. INTERIOR: HILTI X-U P.A.F. (OR EQUAL) @ 8" O.C.
- STANDARD SILL PLATE ANCHORAGE: EXTERIOR: 1/2"x 10" ANCHOR BOLTS @ 72" O.C. INTERIOR: HILTI X-U P.A.F. (OR EQUAL) @ 16" O.C. ALL WALLS: ANCHORS/P.A.F. 12" FROM DOORS & ENDS.
- ALL 2ND FLOOR EXTERIOR WALLS AND 2ND FLOOR (SW) WALLS: FASTEN W/ 3-16D NAILS @ 16" O.C. DIRECTLY TO FLOOR FRAMING MEMBERS OR FLAT 2x BLOCKING BETWEEN FLOOR MEMBERS, 2x BLOCKING TOE-NAILED TO FLOOR MEMBERS OR FASTENED USING SIMPSON TP57 TIE PLATE OR EQUIVALENT.
- POSITIVE ANCHORAGE REQUIRED AT ALL PORCH OR PATIO COLUMNS, WHETHER SINGLE OR BOX-COLUMNS.

CALLOUTS

- (SW) - SHEAR WALL PANEL
 - (HD) - SIMPSON HDU5-SDS2.5 HOLD DOWN OR USP HTTS5 HOLD DOWN. (ATTACH TO (2) 2x KING STUDS. EPOXY 5/8" THREADED ROD MIN. 6" INTO CONCRETE AT HOLD DOWN)
 - (PA) - POSITIVE ANCHORAGE PER 13/WB-G AND 6/WB-D: POSTS: SIMPSON ABA/USP PAE BOX COLUMNS: SIMPSON DT2Z/USP DTB-TZ
- 2-PLY DRAG STRUT REF. DETAIL SHEET

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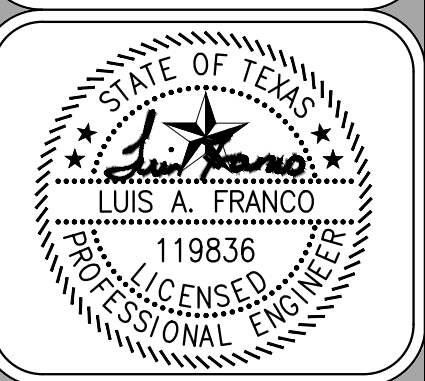
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WINDBRACING PLAN

DATE ISSUED: 09/21/2020

REVISIONS			
NO.	DATE	BY	CHK
1	02/12/21	DB	DB

DRWN BY: DB CKD BY: LAF

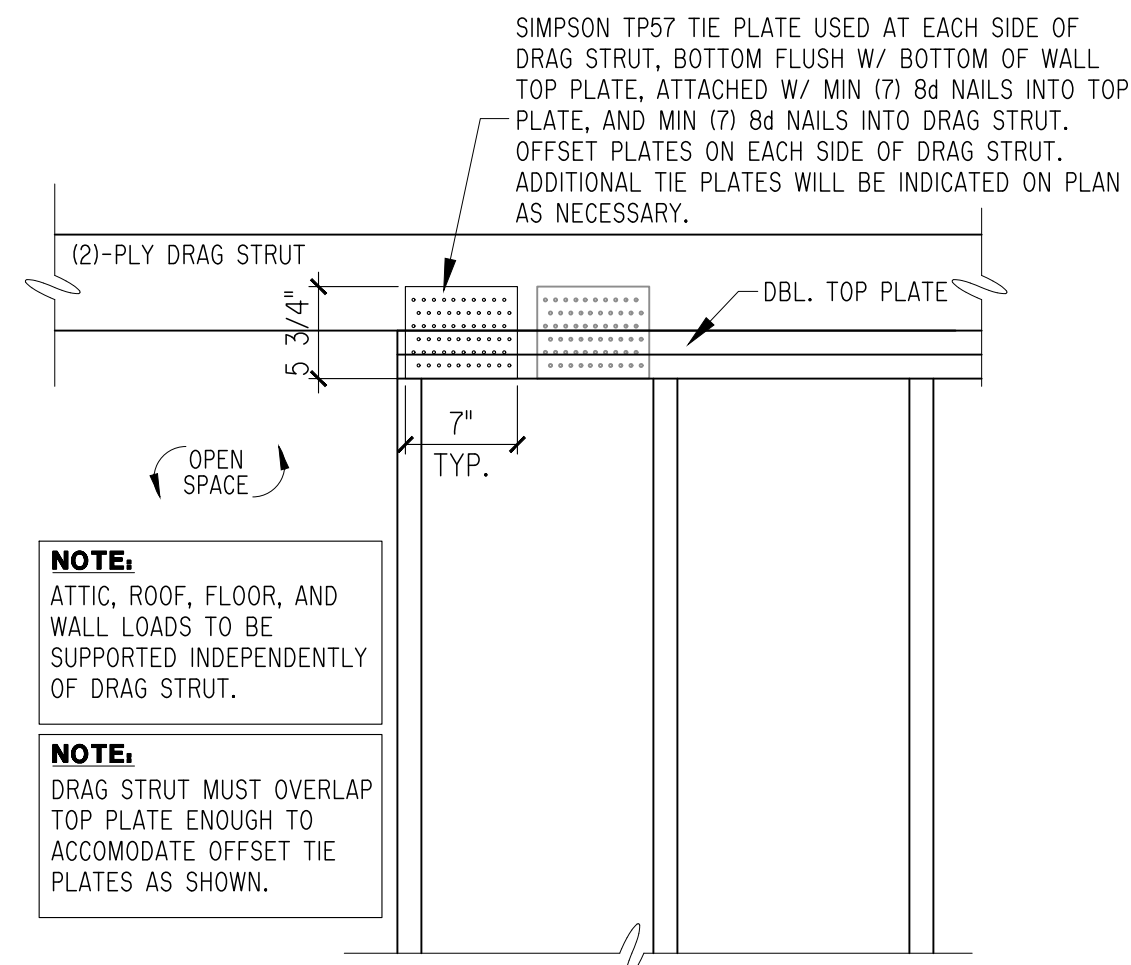
SQ. FOOTAGE: #
SEE GENERAL NOTES

PROJECT NUMBER: 2008041.1

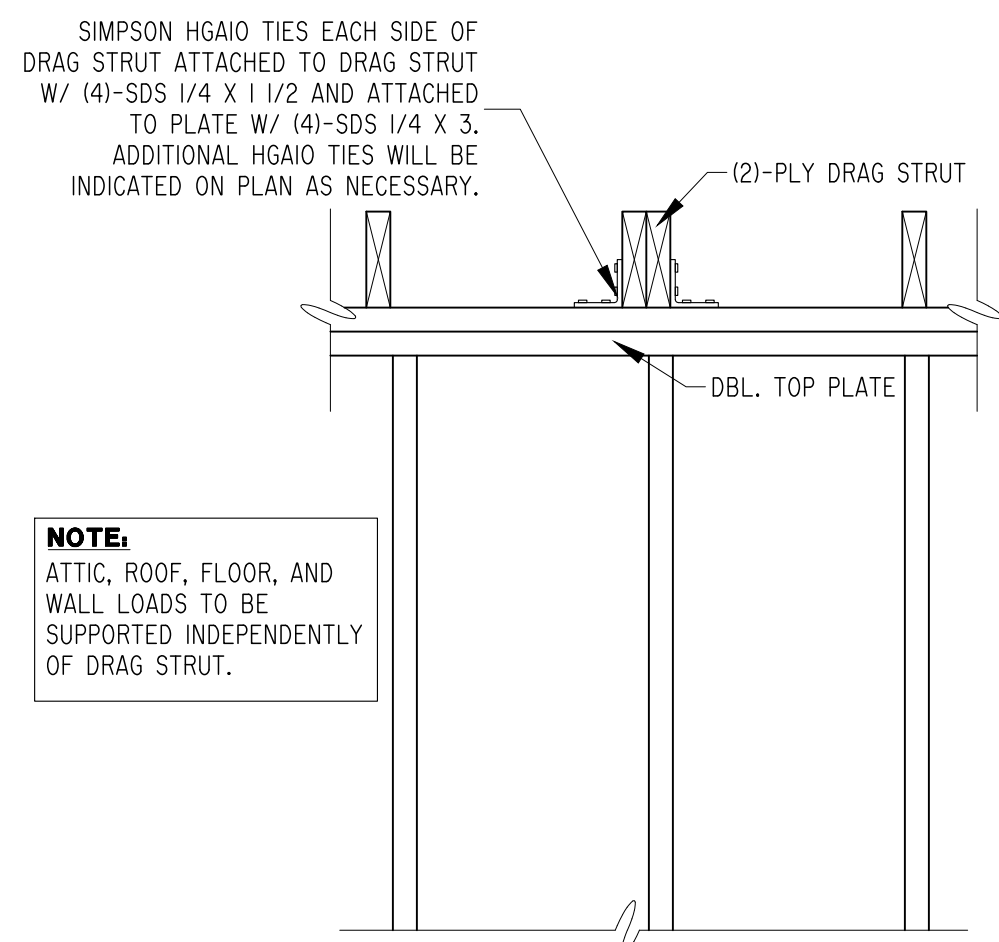
SHEET NO. **WB-2**

UPPER STORY WINDBRACING PLAN

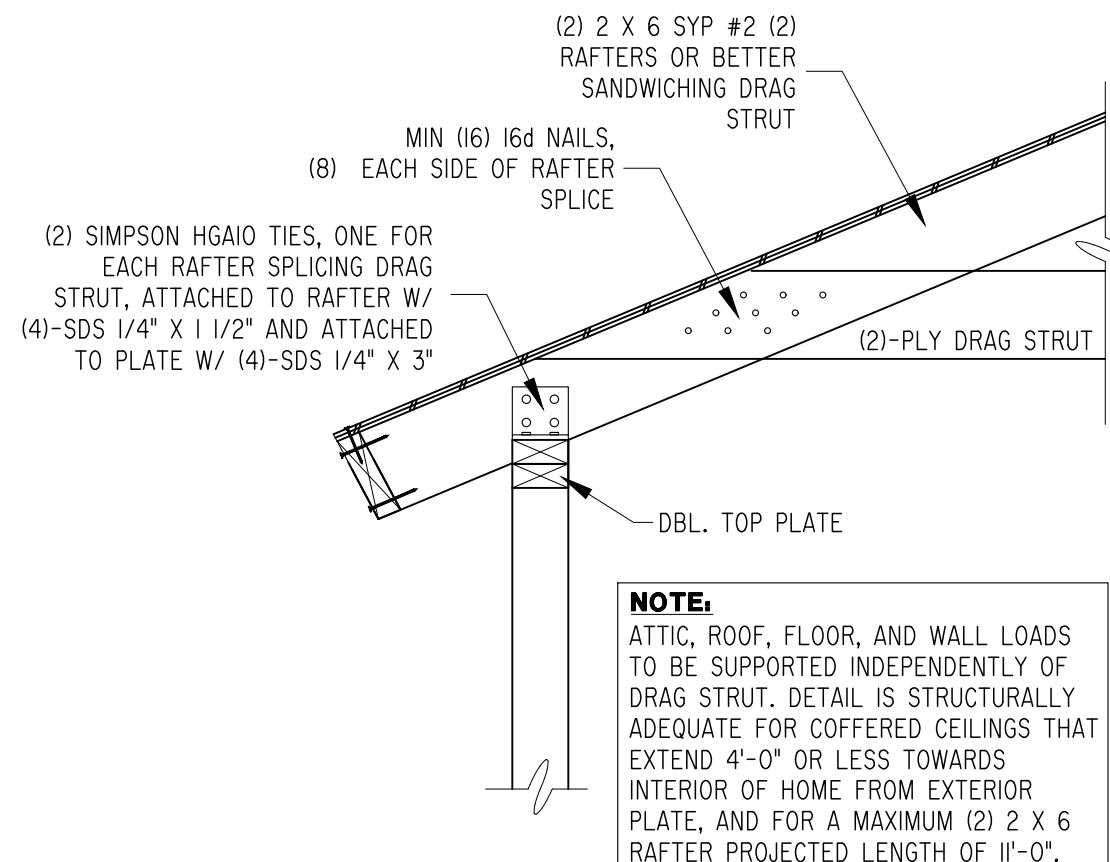
1/4" = 1'-0" FOR 22 X 34 SHEET (1/8" = 1'-0" FOR 11 X 17 SHEET)



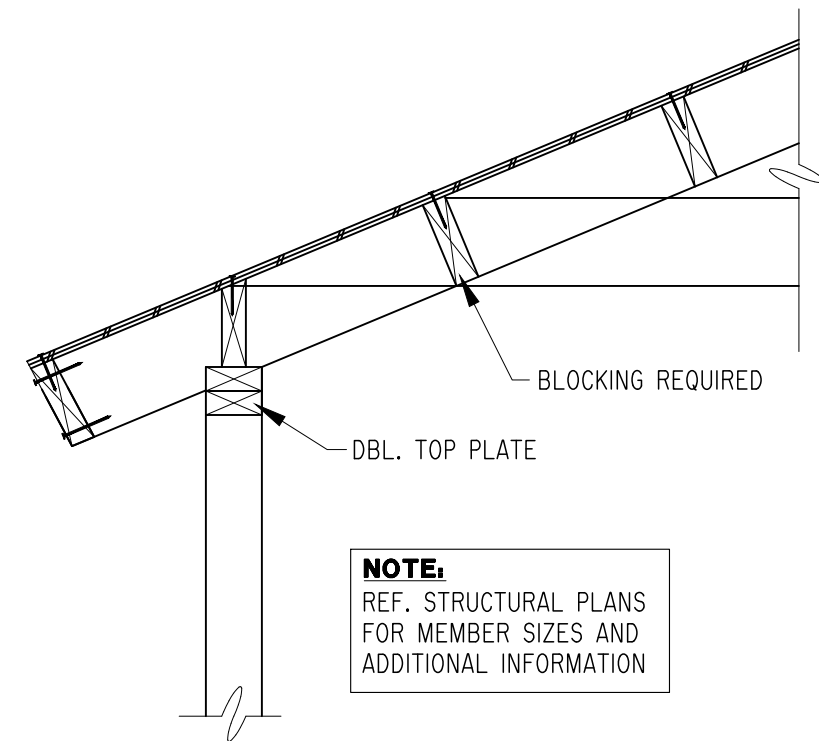
1 PARALLEL CONNECTION DRAG STRUT TO WALL
SCALE: 1" = 1'-0"



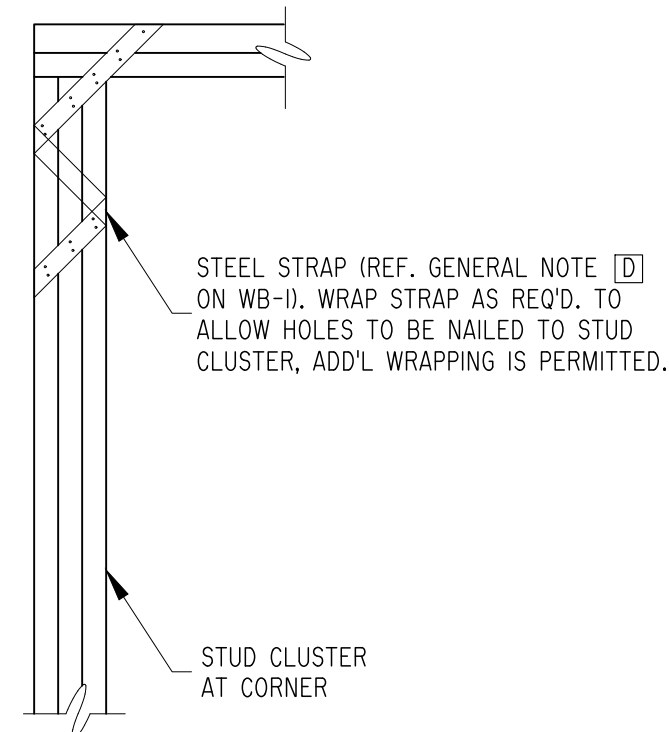
2 PERPENDICULAR CONNECTION DRAG STRUT TO WALL
SCALE: 1" = 1'-0"



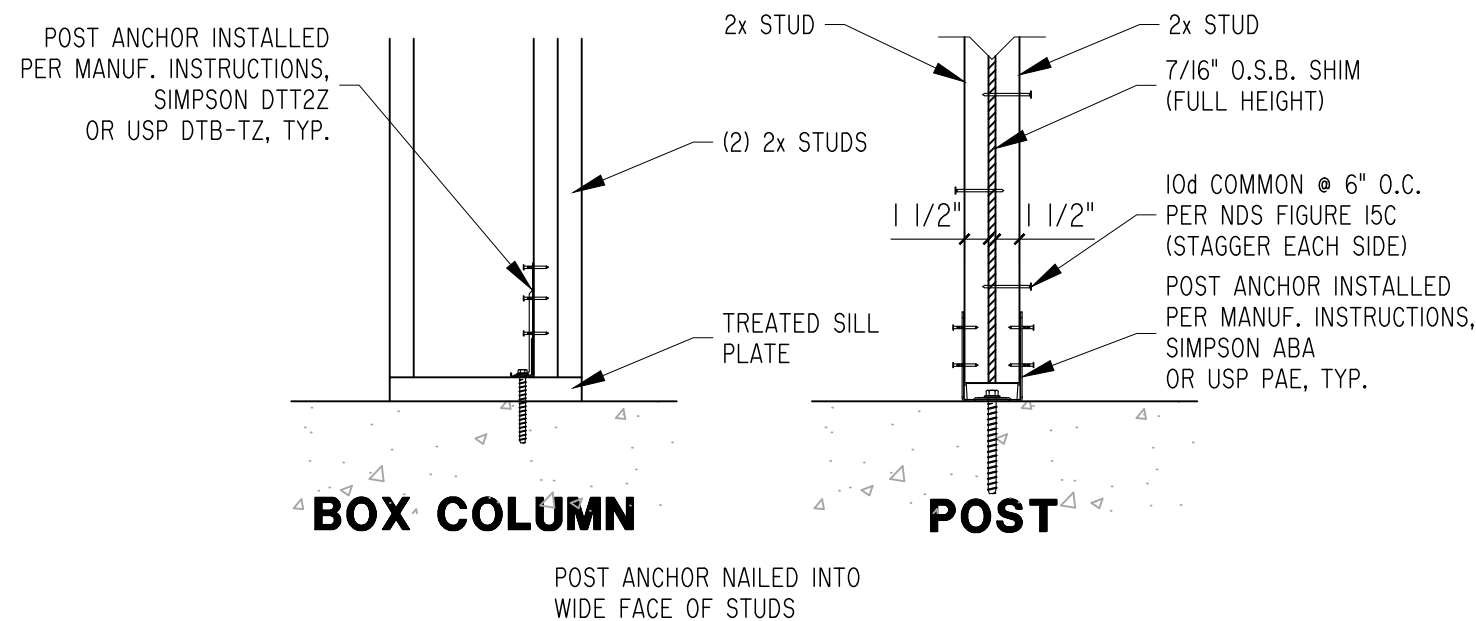
3 DRAG STRUT TO RAFTERS
SCALE: 1" = 1'-0"



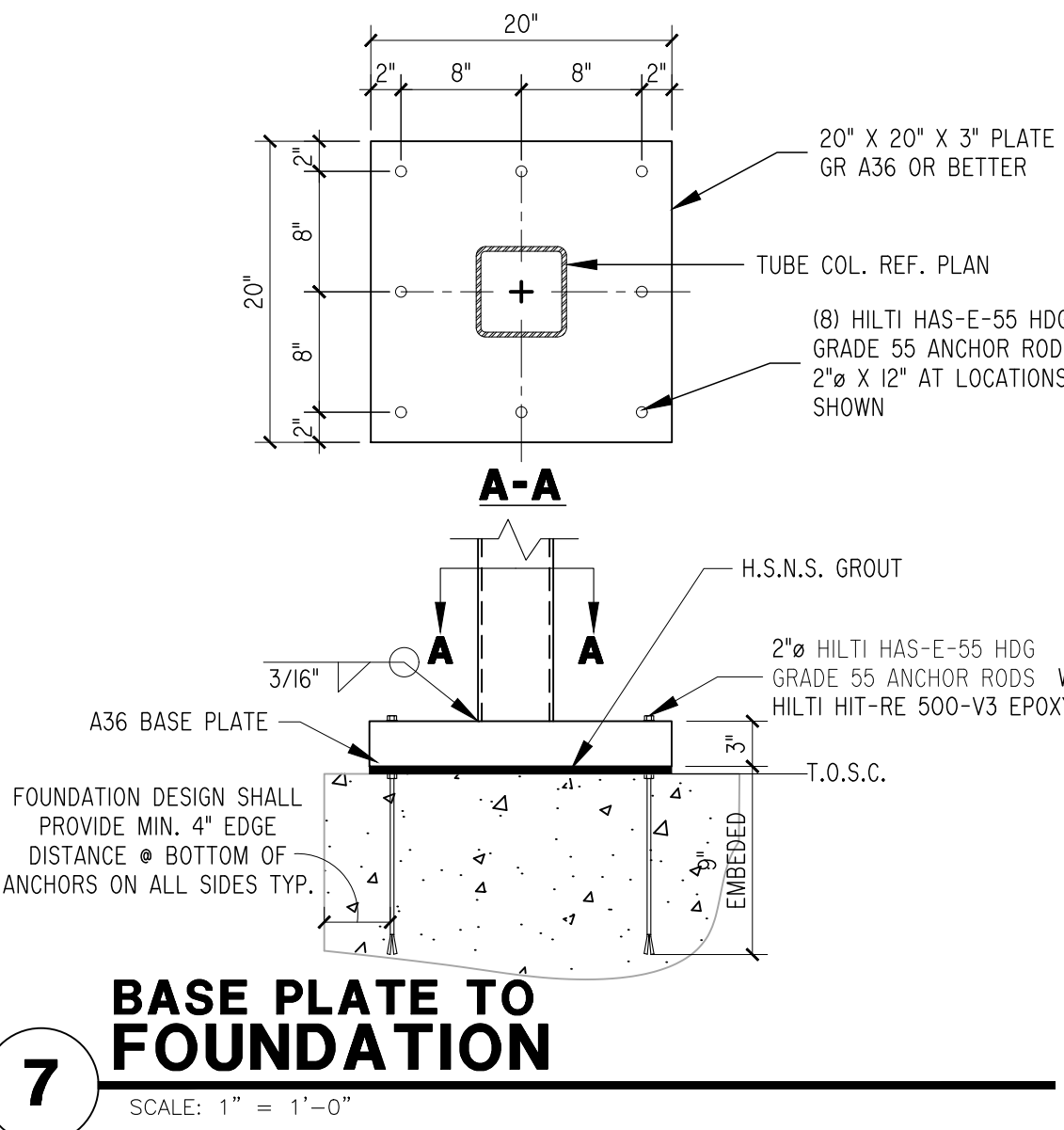
4 COFFERED CEILING BLOCKING
SCALE: 1" = 1'-0"



5 STRAP AT NARROW GARAGE WALL
SCALE: 1" = 1'-0"



6 POSITIVE ANCHORAGE
SCALE: 1" = 1'-0"



7 BASE PLATE TO FOUNDATION
SCALE: 1" = 1'-0"

WINDBRACING DETAILS

SCALE: 1" = 1'-0" FOR 22 X 34 SHEET (1/8" = 1'-0" FOR 11 X 17 SHEET)

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**IRC 2012
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IRC 2018**

NOTE:
THE DETAILS SHOWN ON THIS SHEET ARE GENERIC IN NATURE. ALL DETAILS MAY NOT APPLY. SEE WB-1 FOR SPECIFIC REFERENCES TO DETAILS.

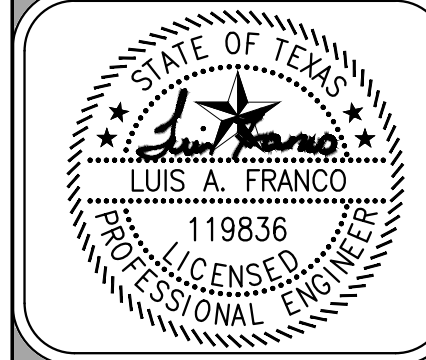
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DATE ISSUED
09/21/2020

REVISIONS			
NO.	DATE	BY	APP.
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DRWN BY: DB
CKD BY: LAF
SQ. FOOTAGE: #
SEE GENERAL NOTES
PROJECT NUMBER: 2008041.1
SHEET NO.

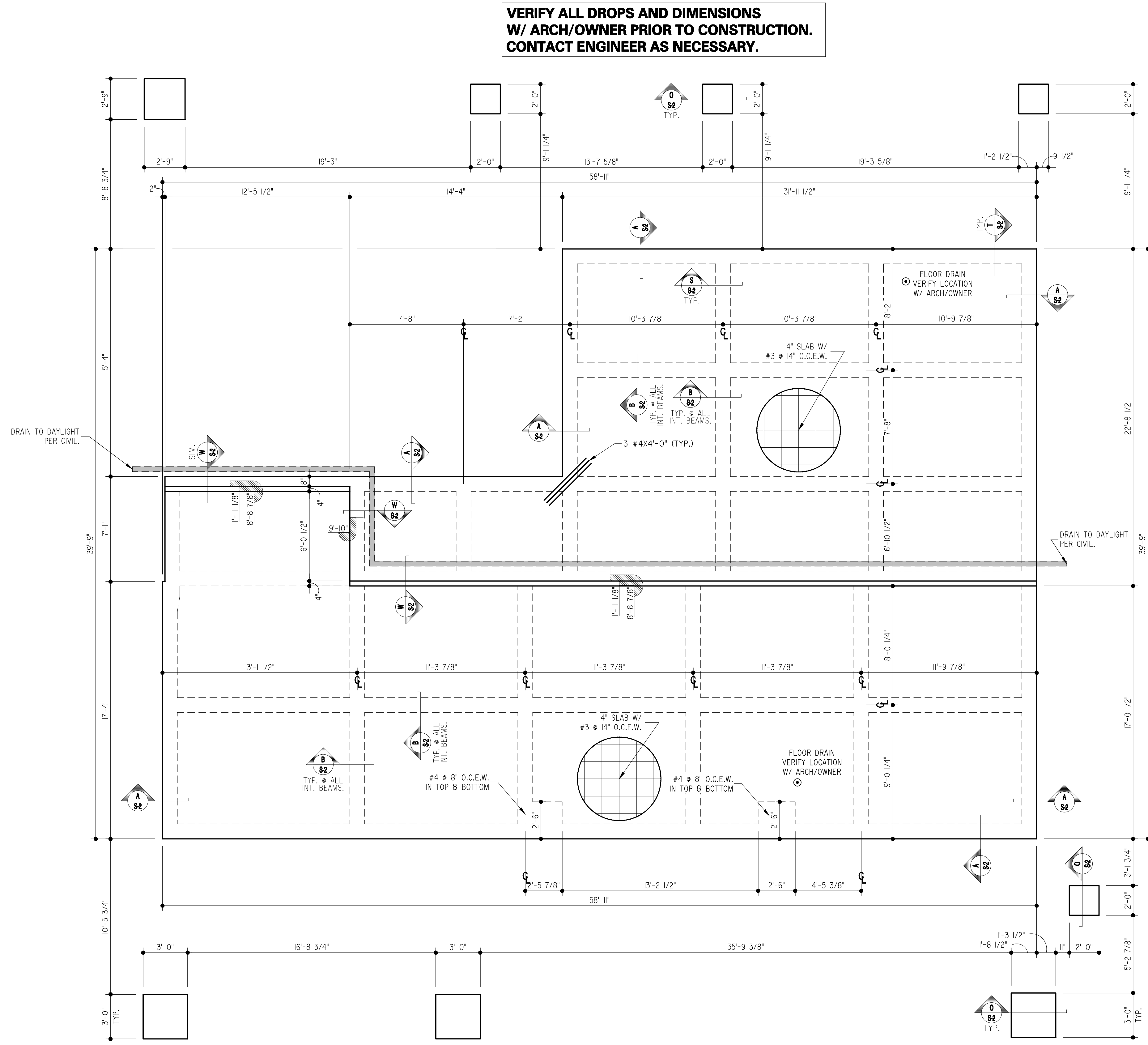
WB-D

2/12/2021 11:12 AM

WINDBRACING DETAILS

FOUNDATION PLAN

1/4" = 1'-0"



VERIFY ALL DROPS AND DIMENSIONS W/ ARCH/OWNER PRIOR TO CONSTRUCTION. CONTACT ENGINEER AS NECESSARY.

GENERAL PLAN NOTES

- BUILDER MUST VERIFY ALL DIMENSIONS WITH ARCHITECTURE PRIOR TO START OF CONSTRUCTION.
- CONTACT ENGINEER IF GROUNDWATER IS ENCOUNTERED OR OTHER SOIL CONDITIONS NOT IDENTIFIED IN GEOTECHNICAL REPORT ARE ENCOUNTERED.
- CONSULT ENGINEER FOR INTERIOR PIER LOCATIONS WHEN DEPTH OF FILL EXCEEDS 5'-0".
- GRADE BEAMS ARE TO BE EXTENDED 12" MIN. INTO EXISTING UNDISTURBED/NATIVE SOILS.
- GRADE BEAM DEPTHS MAY BE REDUCED WHEN BEARING ON LIMESTONE, CONTACT ENGINEER FOR ADDITIONAL INFORMATION.
- MINIMUM BEAM SIZES = 12 X 28

NOTE:
 CONDITIONS BASED ON A SOIL ANALYSIS PREPARED BY: TERRADYNE
 DATED: 10/13/20
 REPORT #: A201235
 AND RECOGNIZED ENGINEERING PRACTICES.
 Q.U. = 1.0 TONS/SQ. FT.
 E_m 9.0 CENTER, 5.8 EDGE
 γ_m 0.38 CENTER, 0.63 EDGE
 DESIGN P.I. = II

NOTE:
 A FINISHED FLOOR ELEVATION WAS NOT PROVIDED TO ATS. REFER TO DETAIL E/S-2 FOR ANY PERIMETER BEAMS OVER 48" AS NOTED ON DETAIL A/S-2 AND PROVIDE HARD POINTS PER DETAIL T/S-2 AT INTERIOR BEAM INTERSECTIONS WHERE THE DEPTH OF FILL EXCEEDS 5'-0". CONTACT ENGINEER AS NECESSARY.

Thank you for allowing ATS the opportunity to assist you on your home. To ensure the quality of our design we recommend a pre-pour inspection prior to the placement of concrete. Inspections start at \$85.00 each. Please contact ATS at (512) 328-6995 at least 24 hours prior to the scheduled pour. Visit www.ats-engineers.com for additional inspection and engineering services offered.

NOTE:
 FOUNDATION PLANS BASED ON ARCHITECTURE RECEIVED ON 08/28/20. CONSULT ENGINEER FOR ANY STRUCTURAL CHANGES DUE TO ARCHITECTURAL CHANGES MADE AFTER DATE.

***VISITABILITY NOTE:**
 ALL RELEVANT EGRESS SHALL COMPLY WITH CURRENT CITY OF AUSTIN VISITABILITY REQUIREMENTS. REFER TO ARCHITECTURE PLANS. BUILDER SHALL BE RESPONSIBLE FOR ADJUSTING DROPS SHOWN AS REQUIRED TO COMPLY WITH THIS REQUIREMENT.

LEGEND

1	3 - #4 X 4'-0" (TYP)
2	2 - #5 IN BOTTOM
3	#3 @ 14" O.C.
4	2 - #4 TOP & BOTTOM W/ #3 STIRRUPS @ 36" O.C.
5	2 - #5 TOP & BOTTOM W/ #3 STIRRUPS @ 36" O.C.
6	2 - #5 IN TOP W/ #3 STIRRUPS @ 36" O.C.

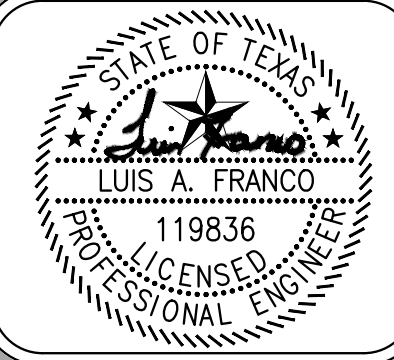
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DATE ISSUED
 11/30/2020

REVISIONS

NO.	DATE	BY	APP.
1	02/12/21	DB	DB

DRWN BY: CKD BY: CH DB

SQ. FOOTAGE: 1927 # SEE GENERAL NOTES

PROJECT NUMBER: 2008041.1

SHEET NO.

S-1

PERMIT DOCUMENTS

2/12/2021 11:05 AM

309 Laurel Valley Road

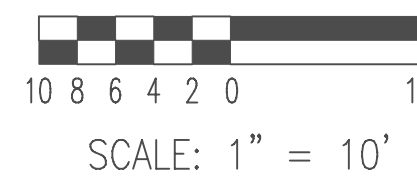
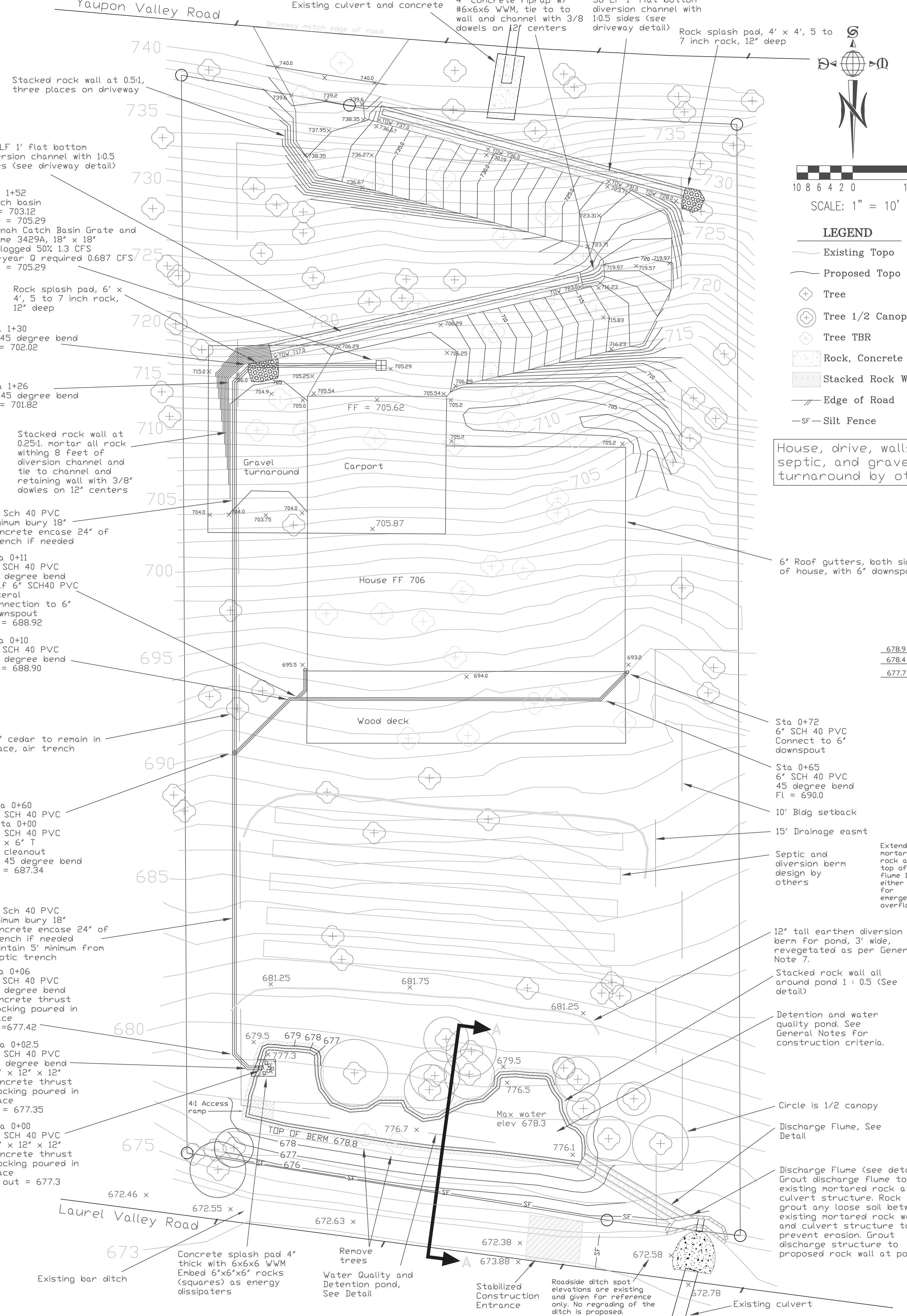
Stormwater Detention and Water Quality Treatment

Westlake Hills Notes

- Project is a Type 3 Development.
- No concentrated stormwater flows will leave this site in adjacent properties, unless they discharge directly into an approved channel that is within a drainage easement.
- No fences or structures are allowed across any drainage easement.
- The drainage designer is responsible for the adequacy of these plans. In accepting these plans, the City of West Lake Hills and all reviewers rely upon the adequacy of the design by the drainage designer.
- Per TPDES General Permit No. 150000, disturbed areas on which construction activities have ceased (temporarily or permanently) shall be stabilized within 14 days unless activity resumes within 21 days.
- The Owner of the property is responsible for cleaning and removing all sediment that is washed from the site in dedicated streets, alleys, waterways, or other properties.
- Stripping of vegetation from project sites shall be phased so as to expose the minimum amount of area to soil erosion for the shortest possible period of time per the West Lake Hills Drainage and Erosion Control Design Manual Sec. 7.1(i).
- No part of this project lies within any FEMA flood hazard zone as per FIRN Map 46453C049, Eff. 1/22/2009.
- The project is located within the Edwards Aquifer Conr Zone.
- Easements on this site plan are taken from the architectural drawings, KLM Design Build, sheet 7/14.
- All walls over three feet will be screened with landscaping materials.

GENERAL NOTES

- See Engineer's Report for full calculations.
- Full infiltration type rain garden requires no underdrain and utilizes existing, in-place soils.
- Remove top 12 inches of soil for reuse in revegetation.
- Place 12 inches of topsoil from note #3 above on bottom of rain garden pond.
- Place 6 inches of existing topsoil from note #3 above on all areas disturbed by construction for the Rain Garden including the pond area, berm and discharge structure area.
- For driveway and roof downspout storm drain, remove top 12 inches of soil before trench excavation for reuse with revegetation.
- Revegetate with native grass seed as follows: Canada Wild Ry, Elymus canadensis, 20 pounds per acre
Upland Sea Oats, Chasmanthium latifolium, 20 pounds per acre
- DO NOT REVEGETATE ANYWHERE ON THE SITE WITH NON-NATIVE plants or grasses, ESPECIALLY BERBERIS GRASS. This includes the house, driveway and septic system. Non-native plants and grasses, ESPECIALLY BERBERIS GRASS, will compromise the functionality of the rain garden.
- Place excelsior revegetation matting after seeding on all disturbed areas of: rain garden, berm, discharge structure and storm drain.



- ### LEGEND
- Existing Topo
 - Proposed Topo
 - Tree
 - Tree 1/2 Canopy
 - Tree TBR
 - Rock, Concrete
 - Stacked Rock Wall
 - Edge of Road
 - SF - Silt Fence

House, drive, walls, septic, and gravel turnaround by others.

6' Roof gutters, both sides of house, with 6' downspouts

Sta 0+72 6' SCH 40 PVC Connect to 6' downspout

Sta 0+65 6' SCH 40 PVC 45 degree bend FI = 690.0

10' Blog setback

15' Drainage easmt

Septic and diversion berm design by others

12' tall earthen diversion berm for pond, 3' wide, revegetated as per General Note 7.

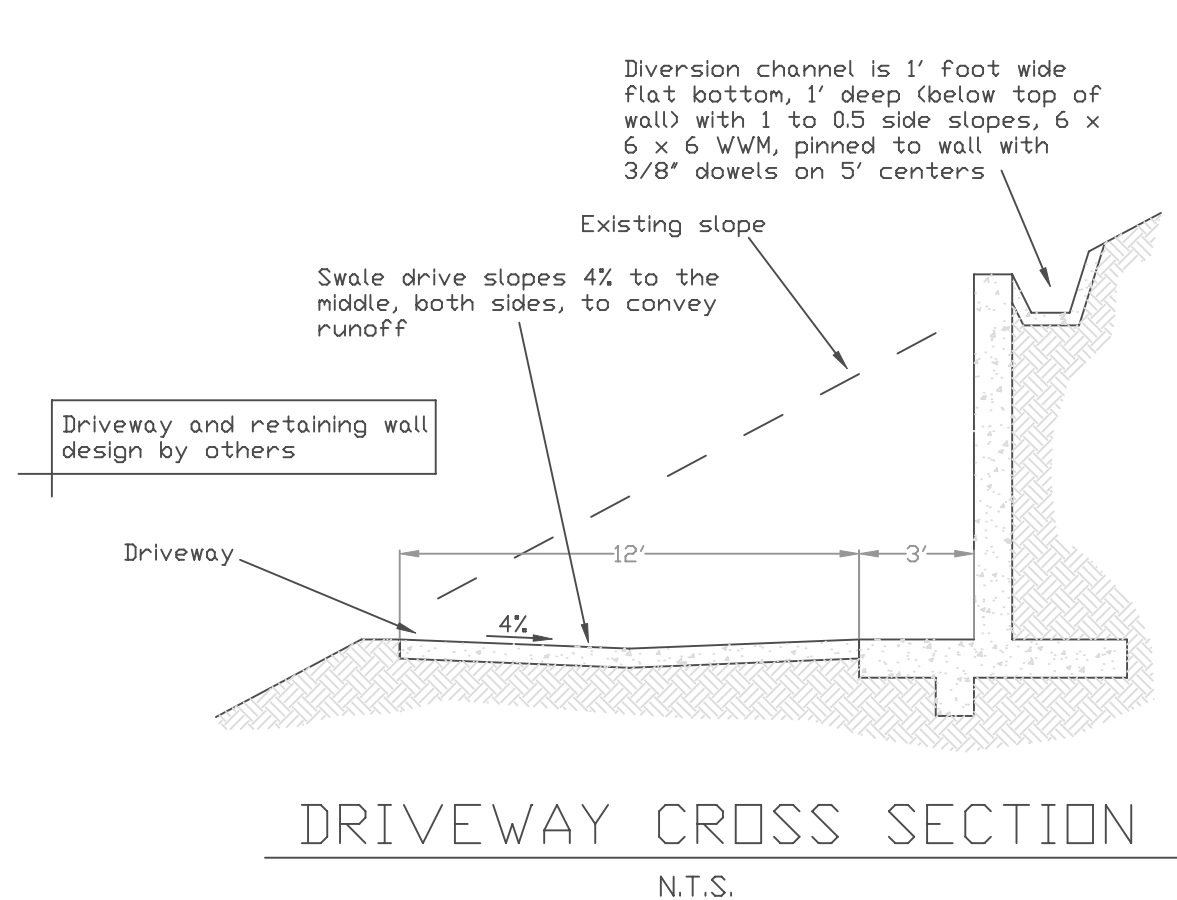
Stacked rock wall all around pond 1:0.5 (See detail)

Detention and water quality pond. See General Notes For construction criteria.

Circle is 1/2 canopy

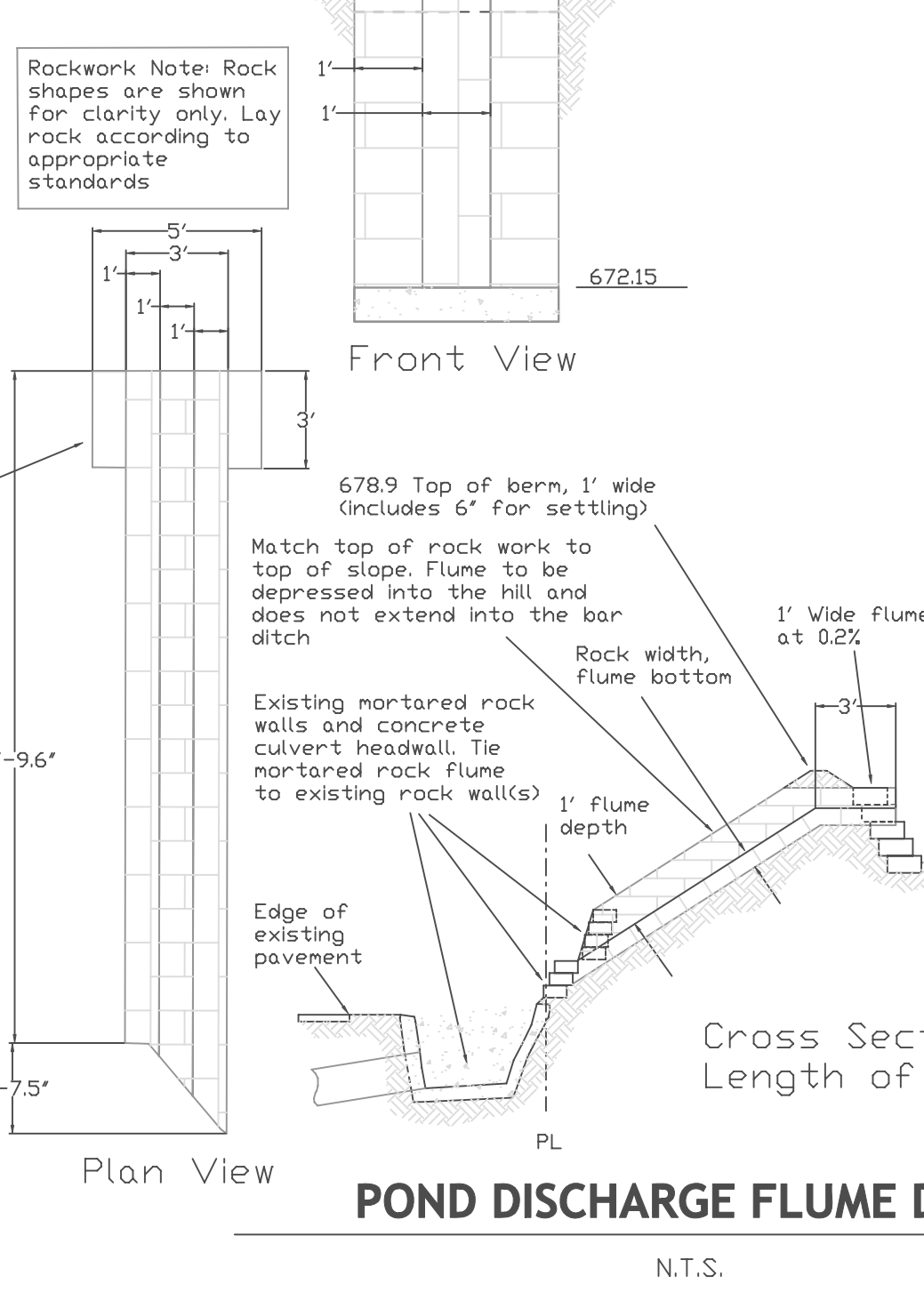
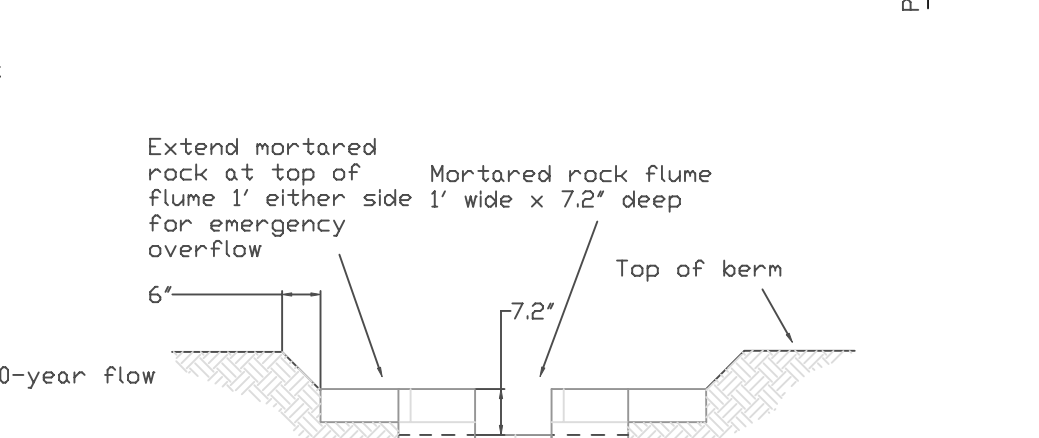
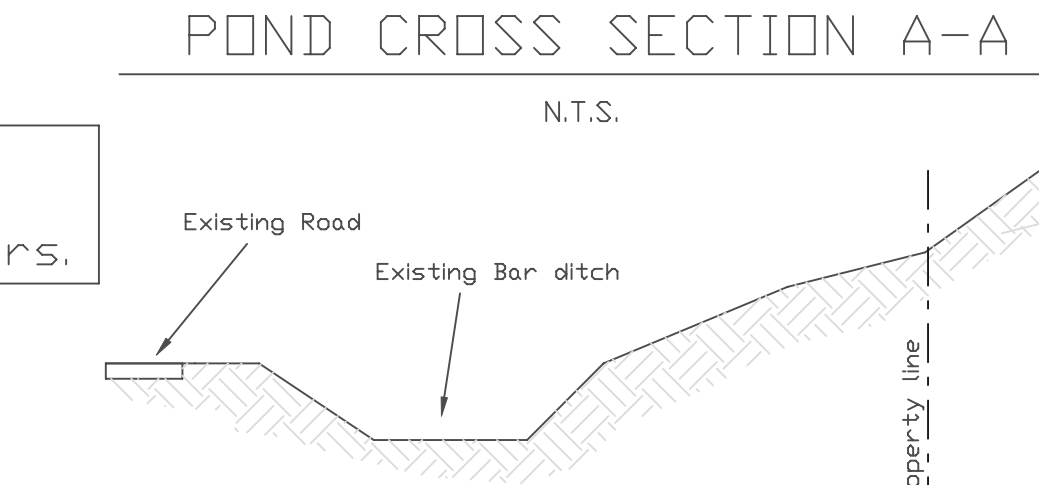
Discharge Flume, See Detail

Discharge Flume (see detail) Grout discharge flume to existing mortared rock at culvert structure. Rock and grout any loose soil between existing mortared rock walls and culvert structure to prevent erosion. Grout discharge structure to proposed rock wall at pond.



Pond Maintenance Notes:

- Pond inspection to be done at least annually.
- Repair any erosion around the inflow, the mortared rock walls of the pond, the outflow flume, the culvert headwall under Laurel Valley Road including its mortared rock walls, or at any other location associated with the pond.
- Remove excess accumulated sediments, woody debris, trash or organic material accumulation.
- Ensure pond vegetation is healthy. Reseed as required with the vegetation mix described in the General Notes on this construction plan, or with an appropriate native grass and plant mix. Irrigate seeding until plants are established.



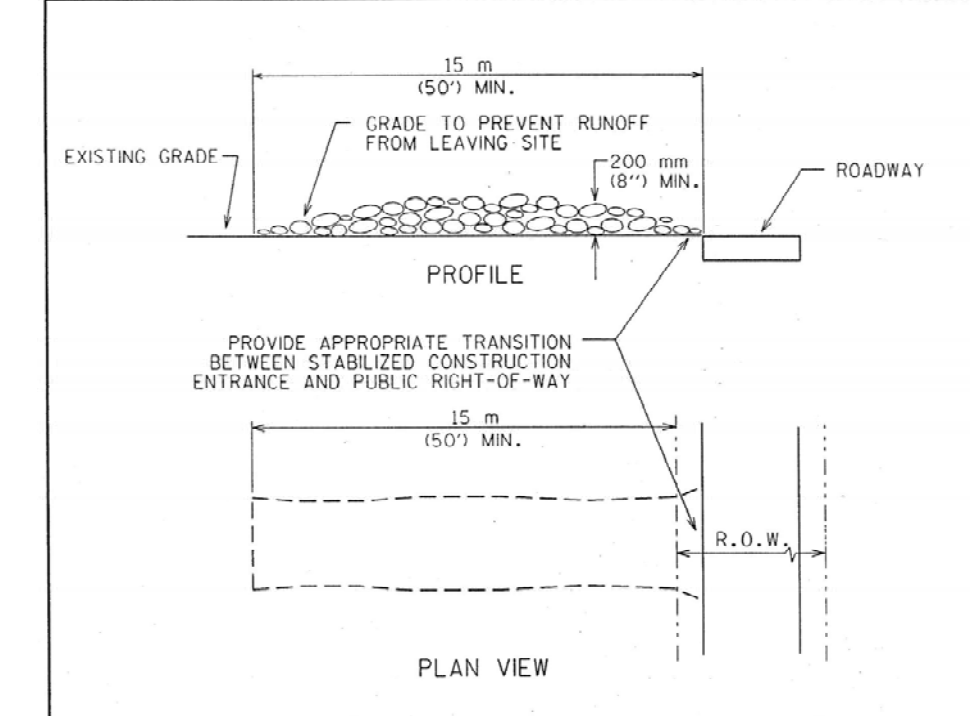
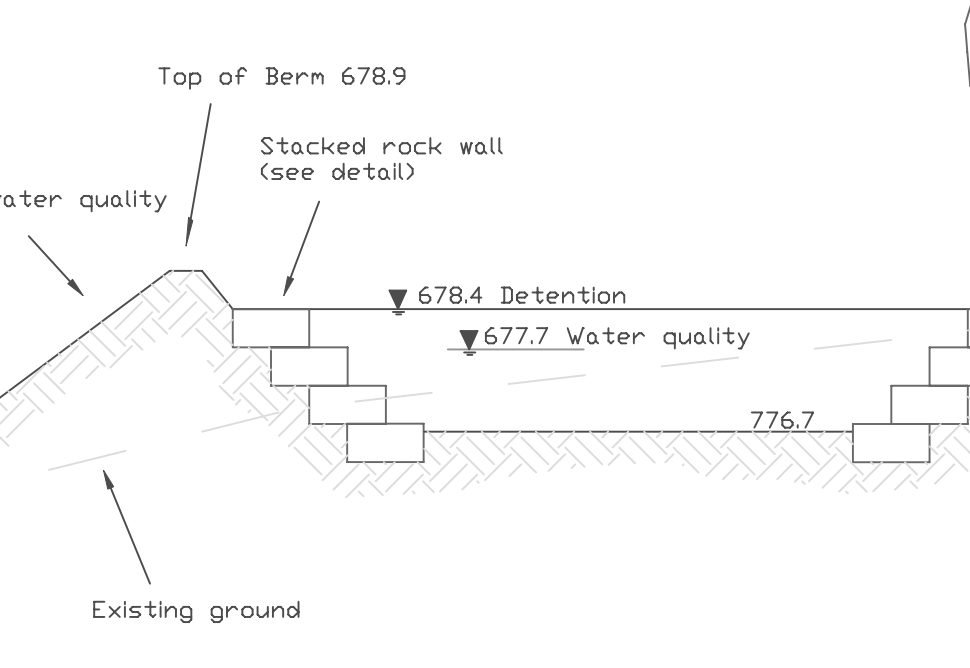
Summary of Detention Routing Results (CFS)

	2-year	10-year	25-year	100-year
Existing	8.677	13.097	16.944	20.955
Developed	8.006	12.083	14.780	19.335

Tree Removal Table

Tree ID	Tree Type
T13	3" hackberry
T14	3" hackberry

Note: for tree removal not associated with pond construction, see the architectural drawing, sheet 7.



- ### NOTES:
- STONE SIZE: 75-125 mm (3-5") OPEN GRADED ROCK.
 - LENGTH AS EFFECTIVE BUT NOT LESS THAN 15 m (50').
 - THICKNESS NOT LESS THAN 200 mm (8").
 - WIDTH NOT LESS THAN FULL WIDTH OF ALL POINTS OF INGRESS/EGRESS.
 - 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 DRAINAGE INTO AN APPROVED TRAP OR SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATERCOURSE USING APPROVED METHODS.
 - MAINTENANCE: THE ENTRANCES SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC ROADWAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH CRUSHED STONE AS CONDITIONS DEMAND, AS WELL AS REPAIR AND CLEAN OUT OF ANY MEASURE DEVICES USED TO TRAP SEDIMENT. ALL SEDIMENT SHALL BE REMOVED IMMEDIATELY.
 - DRAINAGE EMERGENCY MUST BE PROPERLY GRADED OR INCORPORATE A DRAINAGE SWALE TO PREVENT RUNOFF FROM LEAVING THE CONSTRUCTION SITE.

CITY OF AUSTIN WATERPROOF DEPARTMENT

STABILIZED CONSTRUCTION ENTRANCE

THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.

STANDARD NO. 641S-1

678.9 Top of berm, 1' wide (includes 6' for setting)

678.4 = 100-year flow

677.7

678.15

678.4 Top of detention, 100-year

677.7 Top of water quality, bottom of Flume

676.1 Bottom of Pond, 2% slope

Pond Stage/Storage/Discharge

Discharge is via a 1-foot channel, 0.00293 slope

Stage/Storage (CF)/Discharge	676.7	0.0	0.000
	676.75	25.0	0.000
	676.8	50.0	0.000
	676.85	75.0	0.000
	676.9	100.0	0.000
	676.95	125.0	0.000
	677	150.0	0.000
	677.05	175.0	0.000
	677.1	200.0	0.000
	677.15	225.0	0.000
	677.2	250.0	0.000
	677.25	275.0	0.000
	677.3	300.0	0.000
	677.35	325.0	0.000
	677.4	350.0	0.000
	677.45	375.0	0.000
	677.5	400.0	0.000
	677.55	425.0	0.000
	677.6	450.0	0.000
	677.65	475.0	0.000
	677.7	0.0	0.005 Wier Elevation
	677.71	5.0	0.010
	677.72	10.0	0.020
	677.73	15.0	0.030
	677.74	20.0	0.040
	677.75	25.0	0.110
	677.8	50.0	0.190
	677.85	75.0	0.290
	677.9	100.0	0.400
	677.95	125.0	0.530
	678	150.0	0.660
	678.05	175.0	0.800
	678.1	200.0	0.950
	678.15	225.0	1.100
	678.2	250.0	1.280
	678.25	275.0	1.480
	678.3	300.0	1.650
	678.35	325.0	1.850
	678.4	350.0	2.050

Rain Garden Calculations

Rain Garden Type: Full Infiltration

Drainage Area = 0.130 acres

Impervious Cover = 80%

Capture Depth = 12 inches

Water Quality Volume Required = 518 cubic feet

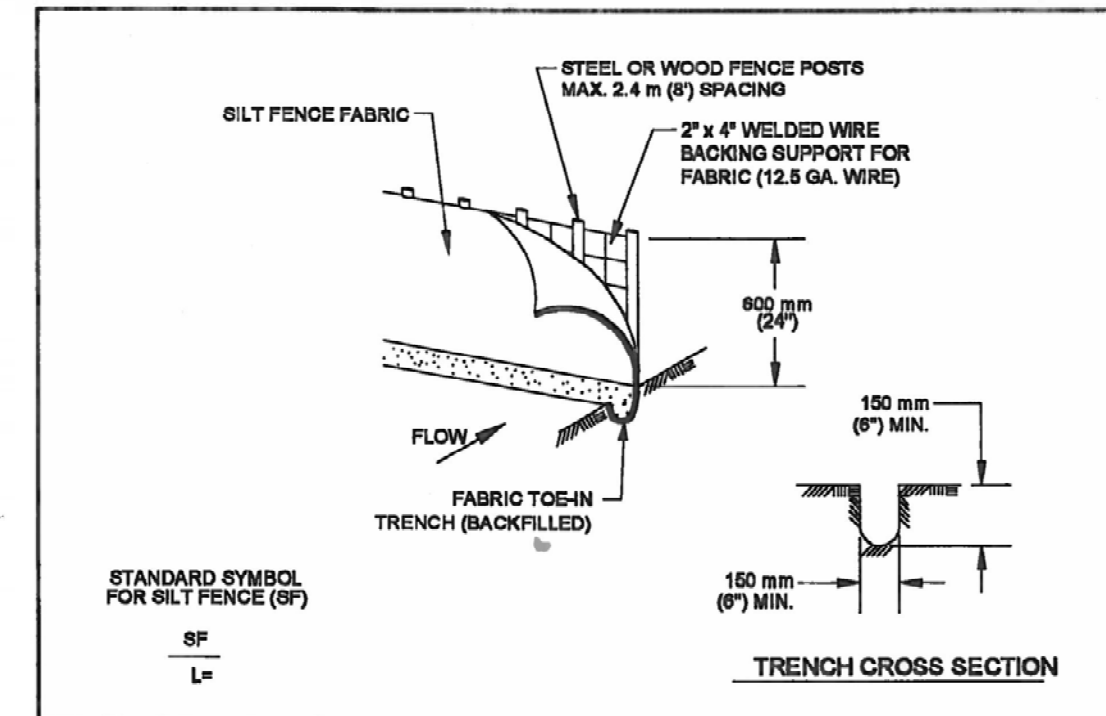
Water Quality Volume Provided = 541 cubic feet

Infiltration Rate = 0.45 inches/hour

Rain Garden Drawdown Time = 27 hours

Infiltration Area Required = 279 square feet

Infiltration Area Provided = 518 square feet



- 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.
- 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.
- 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.
- 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 SUPPORT POST.
- INSPECTION SHALL BE MADE WEEKLY OR AFTER EACH RAINFALL EVENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
- SILT FENCE SHALL BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
- 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 WATERPROOF DEPARTMENT

SILT FENCE

THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.

STANDARD NO. 642S-1

BRUCE C. MELTON 87097 LICENSED PROFESSIONAL ENGINEER

April 12, 2022

MESA ENGINEERING

8103 KIRKHAM, AUSTIN TEXAS 78736 (512) 799-7998

MELTON ENGINEERING SERVICES AUSTIN

Bruce Melton PE Bmelton@earthlink.net

From: [Jim McBride](#)
To: [Planner](#)
Subject: Variance request for 300 Laurel Valley
Date: Tuesday, January 6, 2026 12:07:11 PM

You don't often get email from [REDACTED]. [Learn why this is important](#)

I write in opposition to the subject variance request.

Having recently constructed a new home we had to compromise to comply with city regulations. The scope and the magnitude of these variances strikes me as unprecedented. We redesigned our home because we encroached above the setback (ie our soffit) by 24". Having lived here now for two years I better appreciate the need for these regulations. Additionally drainage is a critical issue along Little Bee Creek.

Jim

Jim McBride
Blue Sage Capital
2700 Via Fortuna, Suite 300
Austin, TX. 78746

[REDACTED] | www.bluesage.com

Exhibit A

309 Laurel Valley Spiller Lane – Multiple Variances

Applicant's Findings of Fact

1. The strict or literal enforcement of the terms of this chapter, because of special conditions, will result in unnecessary hardship to the applicant.

Literal enforcement of the requested code variances below will provide hardship to develop this project as-is and provide an unsafe driveway experience. I believe our requests are in line with the city's comprehensive plan goals and do not violate the intent of those goals. This is a modest project by size and scale and fits in with the neighboring houses in character and scale.

2. There will not be unreasonable disruption of the natural terrain or unreasonable destruction of existing flora.

Due to the extreme, illegal clearing on this property, there is very little flora to work around. We did work around all existing trees at the top and bottom of the lot. There are even less trees now than shown on the most recent tree survey provided.

3. There is no reasonable alternative to the requisite variance that will alleviate the difficulty or hardship complained of.

Please see requests 2, 3, 5 and 6.

4. The variance will not be greater than the minimum required to alleviate the difficulty or hardship complained of.

The variances requested are at the minimum amount required and are not excessive or greater than the city's comprehensive plan goals. Please see requests 3 and 4.

5. The variance does not violate the intent of the Zoning Ordinance or goals of the Comprehensive Plan.

Please reference requests 3 and 4.

6. The variance will not adversely affect neighboring properties or interfere with the enjoyment of these properties by their owners.

Please reference request 4.



City of West Lake Hills
Zoning and Planning Commission

AGENDA REPORT

Meeting Date:	<u>February 18, 2026</u>	Item Number:	<u>5</u>
Department:	<u>Building & Development</u>		
Prepared By:	<u>Jennifer C. Bills</u>	Cost / Budget:	<u>None</u>
Exhibits:	<u>See Attached</u>	Source of Funds:	<u>N/A</u>

Subject

300 Block of Laurel Valley Rd.: Discuss and make recommendations to City Council on a proposed variance to allow replacement trees for unpermitted removals to be planted at the end of the project, more than 601 days since the final order (Section 22.03.304(c)(5)).

Applicant: Matt Garcia, Matt Garcia Design

Recommendation

Discuss and make a recommendation to the City Council including an analysis of whether:

1. The variance may violate the intent of this chapter or the goals of the city’s comprehensive plan.
2. The variance may have an adverse effect on neighborhood properties or interfere with the respective owners’ enjoyment thereof.

The Zoning and Planning Commission can recommend imposition of, reasonable conditions upon granting a variance if the conditions are related to the subject of the variance.

The applicant’s findings of facts are attached in Exhibit A.

This item will be forwarded to the March 11, 2026 City Council meeting for consideration.

Discussion

Property Information, Zoning & Site Characteristics:

Owner: Graham Schmergel
 Legal Description: Yaupon Valley Subdivision, Lot 8
 Lot Size: 0.4371 acres
 Zoning: R-1 One Family
 Wastewater: On-site Sewage Facility (Septic)

The properties surrounding the subject property are zoned R-1, One Family Residential.

Background:

The applicant is proposing to build a new 4,320 sf house (Attachment 1). The site is 0.4371 acres in size, which was platted in 1962. The total impervious cover in the concept plan is 4836.5 sf (24.9%). The property was issued a permit for new residential construction on March 12, 2022. The house was never started, however

during site preparation, trees were illegally removed. Through the municipal court deferred adjudication, the owner was required to submit a plan for 408 caliper inches planted on site, to be completed with the previous permit. The tree plan was approved June 12, 2023. Due to more than six months of inactivity, the permit was marked as expired October 24, 2024. It has been more than 900 days since the final order in June 2023.

Analysis:

Violation of removal procedure

Code Requirements

- **Section 22.03.304. Tree and vegetation removal and replacement.**

(c) Violation of removal procedure

- (5) It is a separate offense to fail to replace trees or vegetation, or remit to the city cash-in-lieu, as provided in this code, within 601 days of issuance of a final order by the city.

Request

- To delay planting trees to an undetermined time at the end of the building project.

Public Comment:

As of the date of the report, one written comment has been received in opposition (Attachment 7 of Item 10).

Variance Criteria Review:

Trees follow the procedure and notice found in Section 22.03.511 Procedure and notice:

- (a) The city council, when petitioned for a variance, after 16 days' written notice to all property owners within 300 feet of the subject property, shall hold a hearing, and the city council may vary the application of any provision of this article to any particular case when, in its opinion, the enforcement thereof would do manifest injustice, and would be contrary to the spirit and purpose of this article or public interest, or when, in its opinion, the interpretation and recommendation of the zoning and planning commission should be modified or reversed.
- (b) A decision of the city council to vary the application of any provision of this article shall specify in what manner such variance is made, the conditions upon which it is made and the reasons thereof.

The criteria and process for granting a variance found in Section 22.03.514:

No variance shall be granted under this chapter unless the following criteria are fulfilled:

- **Findings.** The applicant has established by competent evidence that:
 - The strict or literal enforcement of the terms of this chapter, because of special conditions, will result in unnecessary hardship to the applicant.
 - There will not be unreasonable disruption of the natural terrain or unreasonable destruction of existing flora.
 - There is no reasonable alternative to the requisite variance that will alleviate the difficulty or hardship complained of.
 - The variance will not be greater than the minimum required to alleviate the difficulty or

hardship complained of.

- ZAPCO. The recommendation of zoning and planning commission shall include an analysis of whether:
 - The variance may violate the intent of this chapter or the goals of the city’s comprehensive plan; and
 - The variance may have an adverse effect on neighborhood properties, or interfere with the respective owners’ enjoyment thereof; and
 - When considering variance requests for nonresidential projects in the Commercial Overlay District, whether the variance, when considered as part of the proposed project (as a whole), furthers achievement of the land planning principles set forth in the city’s master plan, attachment B, as codified in article 28.02 of this code.
- Conditions. The city council can impose, and the zoning and planning commission can recommend imposition of, reasonable conditions upon granting a variance if the conditions are related to the subject of the variance. When considering variance requests for nonresidential projects in the commercial overlay district are necessary to achieve one or more of the land planning principles set forth in the city’s master plan, attachment B, as codified in article 28.02 of this code.

Outdoor Lighting

Outdoor lighting is not proposed with this variance request. Any outdoor lighting will need to comply with the City’s Code.

Compliance with Adopted International Building Code

The property and future construction will have to comply with all applicable City codes.

Subdivision

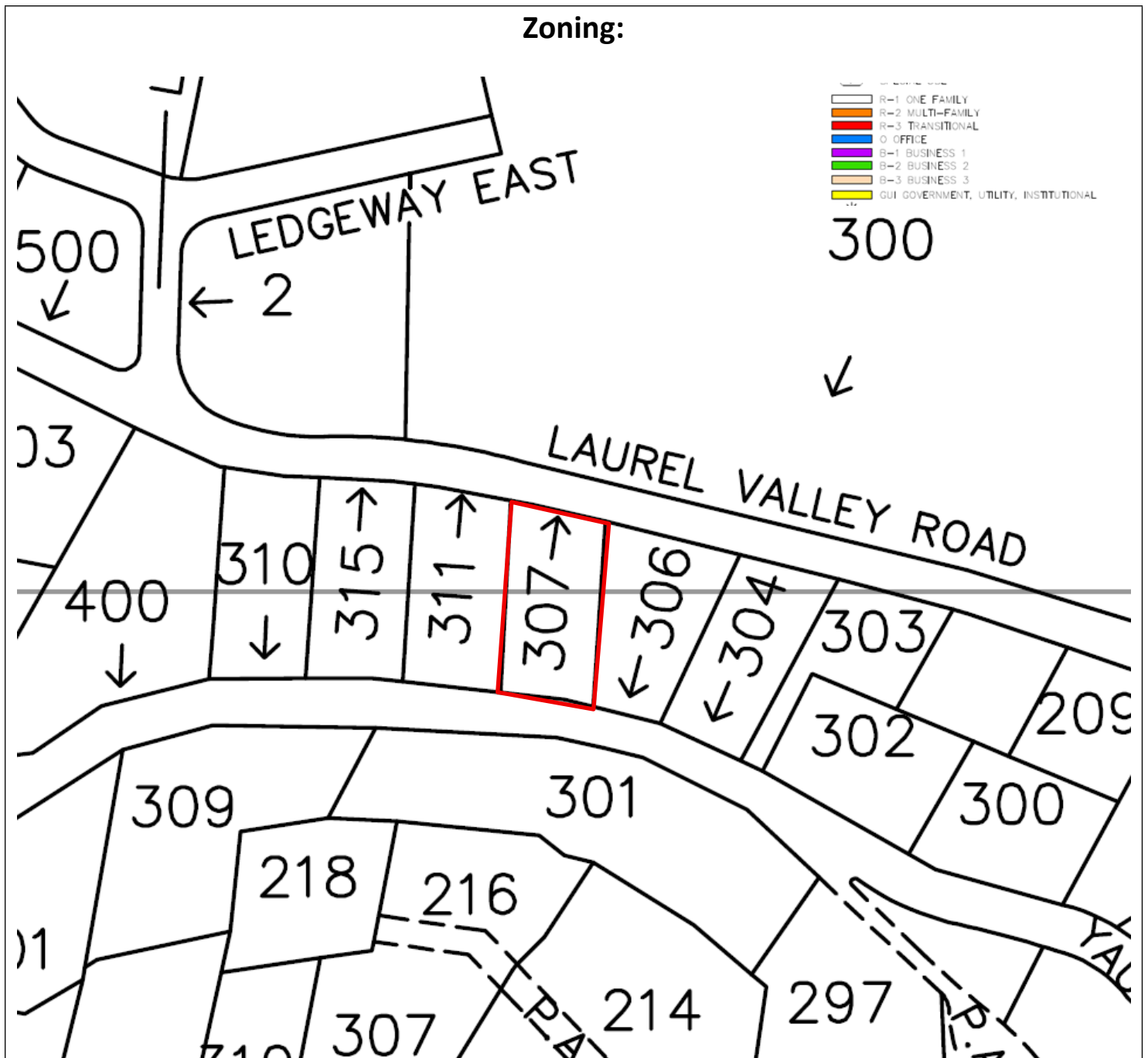
There is no change to the subdivision proposed with this application.

Comprehensive Planning Analysis

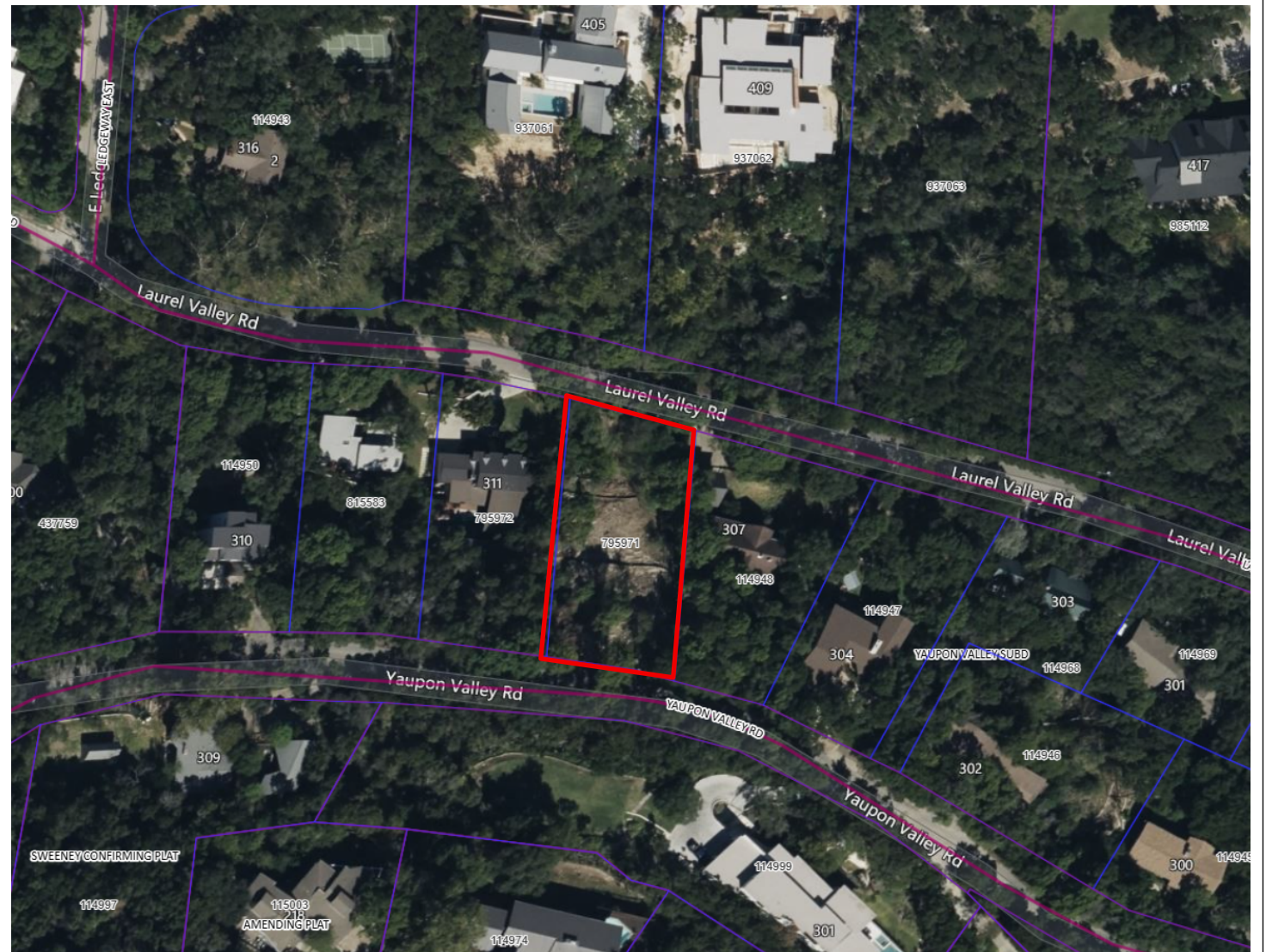
The existing and future land use is in conformance with the City of West Lake Hills Master Plan.

Links to Relevant Code:

- [Section 22.03.304. Tree and vegetation removal and replacement.](#)
- [Section 22.03.511 Procedure and notice \(for variance\).](#)
- [Section 22.03.514 Criteria and process required for granting a variance.](#)



Aerial:



January 29, 2026

Schmergel Residence
309 Laurel Valley (R1, .4371 acres)

Zoning and Planning commission members,

A quick note to orient you, this lot is addressed as 309 Laurel Valley, we will be using Yaupon Valley for our main access, and the lot will be readdressed Yaupon Valley. City staff informed us this is normal and does not require any additional requests. Our setbacks are based on Yaupon Valley being our front and Laurel Valley, the back.

This lot provides exceptional challenges given its 33% average natural slope (43% under building foundation). The design of this proposed residence is centered around providing a safe driveway experience as requested by our clients, a young family. Multiple options were studied to limit these requests. We feel like our design solution accomplishes our goals while staying in line with the city's vision and goals.

My team has met with City of Westlake development staff 3 times to review our project and consider their feedback. We were able to eliminate 2 requests based on that feedback.

We understand that drainage is always a concern for the city and its neighbors. We have engaged a civil engineer, Millian Engineering to guide us along the way. They have put together an initial drainage study, concept plan and narrative, attached.

Literal enforcement of the requested code variances below will provide hardship to develop this project as-is and provide an unsafe driveway experience. I believe our requests are in line with the city's comprehensive plan goals and do not violate the intent of those goals. This is a modest project by size and scale and fits in with the neighboring houses in character and scale.

REQUEST #1 – TREES

There is an existing tree violation on this property that has come up in our reviews with development staff. This violation was inherited by my clients from the previous owner. An illegal, non-permitted extensive tree clearing occurred and there is a significant tree caliper mitigation required. As part of this submittal, we are showing all areas we intend to provide this mitigation (bubbled, see sheet 1). Staff has asked for this mitigation to happen now, which we understand as before construction would start. We are proposing providing this mitigation as part of the project, happening after the building is in place. There is general concern for planting trees before and bringing in heavy equipment after for foundation and framing erection, especially on the slope. A proposed tree species list is on sheet 1.

Not providing this variance will require us to plant, protect and work around many young trees. The risk for damage and death of these trees would be significant once construction begins. Heavy equipment will be required to work on this slope, there is little area for construction staging, working in and around the tree protection on slope provides incredible safety concerns for subcontractors. Our client is committed to providing the necessary mitigation and will do so as part of the end of project landscaping, typical for any construction project.

REQUEST #2 - DRIVEWAY (HIGHER THAN 6' OUT OF NATURAL GRADE) § 22.03.175 (E-1)

We are requesting the driveway variance to provide our clients with a useable, safe driveway first and foremost. Our driveway solution proposes a level bridge that connects street to garage. There is an initial 15% drop to the bridge driveway (see site/building section on page 2). Given the steepness of the lot, the bridge is higher out of grade than allowed. The proposed bridge driveway is raised on steel columns to provide a lighter, less heavy aesthetic as opposed to pouring concrete down to grade. The raised structure provides a way for sunlight and rainwater to reach the natural terrain below. Portions of the driveway will be open steel grate in another effort to allow sunlight and rainwater to reach natural terrain. A level turn around area has also been provided. This driveway approach significantly limits the impervious coverage and steepness that other driveway approaches do not.

Not providing this variance will require a much longer and steeper switch back driveway scheme to negotiate the slope, resulting in much more natural site disturbance, unnecessary impervious coverage and dangerous driveway conditions in future ice heavy weather events. The switchback scheme would also require a variance for driveway setback encroachment to achieve the minimum required driveway length.

REQUEST #3 - HEIGHT (35' ALLOWANCE) § 22.03.279 (B)

We are requesting a 36" height increase from the allowed 32' max at our site slope of 33%. The amount of slope within our building footprint is at 43%. We determined our building location and vertical positioning thru various studies of the bridge driveway concept. As you can see on page 2 our single shed roof line follows the site's natural topography to reduce the scale of this building and comply with code goals. Small variations in that topography create moments where our roof becomes noncompliant. The front, street side roof edge is compliant and moves into noncompliance to the back of the building. The building height visible from the street is only 8'-6". Along with the positioning of our building in relation to the neighbors (see sheet 3), we see low visual impact from their properties and from the street.

Not providing this variance will require us to lower our building, thus creating the need for a much steeper driveway approach. Lowering the building 36" will eliminate the level bridge area and create a slope greater than the code limit of 20%.

REQUEST #4 - BUILDING SETBACKS (front and sides) § 22.03.281

We are requesting to use a combination of City of Westlake required setbacks along with platted setbacks, in which, City of Westlake enforces the worse of the two. City of Westlake enforces a 30' front and 20' side setbacks on lots less than one acre. The platted setbacks are 50' front, 10' sides and 40' rear. We are requesting encroachments into the front and side setbacks. Specifically, 20' encroachment in the front setback and 10' encroachments into the side setbacks. The new 30' front complies with Westlake and allows us to provide the level driveway and turnaround as well as provide space downhill for our septic and tree mitigation requirements. The side setbacks allow us to provide a narrower building footprint front to back. Neighboring homes at 307 and 311 Laurel Valley are encroaching into the code prescribed side setbacks, see sheet 3. Our building is positioned significantly higher up the hill limiting the houses feeling too close together and hopefully limiting any changes in neighbor experience.

Not providing this variance will force us to reduce our building in width and add it to the depth. The further we push out on the site at a level elevation will push the building massing even further out of natural grade, making the building appear more massive. The tree mitigation and septic areas will be significantly limited with a deeper building.

REQUESTS #5 and 6 - CUT AND FILL (within and outside of code prescribed setbacks) § 22.03.170 (B) (F)

We are requesting variances for cut and fill within city code buildable area as well as outside city code buildable area. Our building has a 43% slope under foundation which has limit of zero feet for closed cuts and zero feet for closed fill. The cut is consistent along the entire front of the building limiting site disturbance. The greatest cut amount is 8'-3", see sheet 2. The max fill amount on site is 15'-0" in height. Given the extreme slope it is difficult to stay closer to natural grade while keeping a level floor area. Due to the side setback request we would be cutting more than 18" into a prescribed setback.

Not providing this variance will require us to add additional stairways at the lower level both interior and exterior, disrupting the flow between spaces better experienced on one level. The lower level is all bedrooms, three of them for children, adding additional stairs creates disconnection and safety issues.

REQUEST #7 – GRADING ON SLOPE GREATER THAN 35% § Drainage/Erosion Control Manual 7.4.1, table 7-1

We are requesting a variance for grading as our building has a 43% natural slope under our foundation. Not providing this variance will not allow us to proceed with development on much of this property given its natural topography.

Thank you for the consideration.

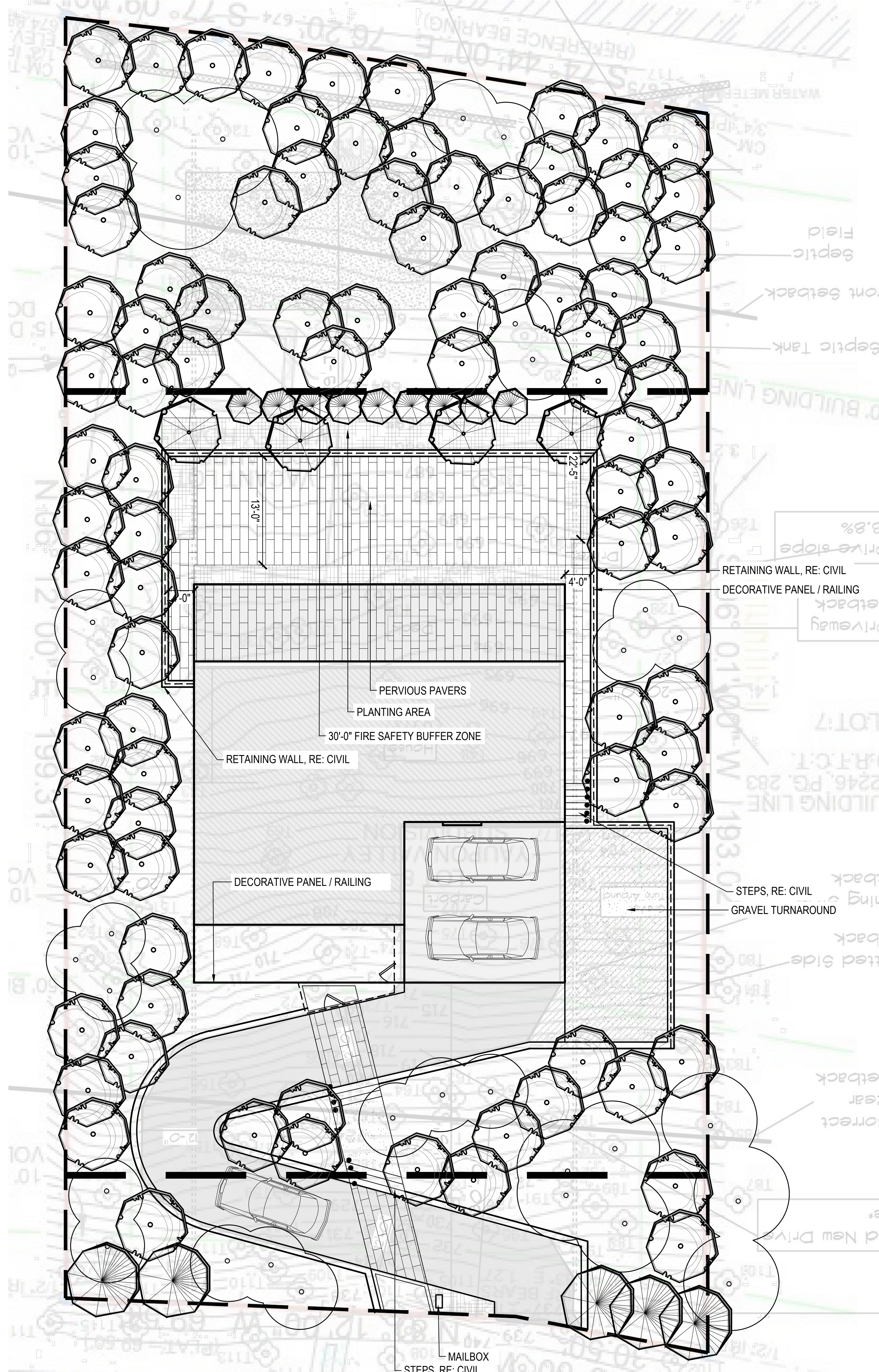
A handwritten signature in black ink, appearing to read 'Matt Garcia', followed by a horizontal line extending to the right.

Matt Garcia
Principal, Matt Garcia Design



Jennifer C. Bills

Director of Building & Development Services



LANDSCAPE LEGEND		
SYMBOL	DESCRIPTION	QTY.
	PROPERTY LINE	N/A
	30'-0" FIRE SAFETY BUFFER ZONE	N/A
	EXISTING TREE GROVE TO BE PRESERVED	N/A
	MEDIUM-LARGE TREES, OR APPROVED EQUIVALENT SPECIES (DECIDUOUS OR EVERGREEN) (4" CAL.)	89
	MEDIUM-LARGE TREES, OR APPROVED EQUIVALENT SPECIES (EVERGREEN ONLY) (3" CAL.)	5
	SMALL TREES/LARGE SHRUBS, OR APPROVED EQUIVALENT SPECIES (DECIDUOUS OR EVERGREEN) (3" CAL.)	4
	SMALL TREES/LARGE SHRUBS, OR APPROVED EQUIVALENT SPECIES (DECIDUOUS OR EVERGREEN) (3" CAL.)	9

TREE MITIGATION CALCULATIONS

DEFERRED ADJUDICATION MITIGATION REQUIREMENT *	408 CALIPER INCHES MITIGATION
TOTAL MITIGATION INCHES PLANTED ONSITE	408 CALIPER INCHES
MEDIUM-LARGE TREES, OR APPROVED EQUIVALENT SPECIES (DECIDUOUS OR EVERGREEN) - 4" CALIPER x 89 TREES = 356" REPLACEMENT	
MEDIUM-LARGE TREES, OR APPROVED EQUIVALENT SPECIES (EVERGREEN ONLY) - 3" CALIPER x 5 TREES = 15" REPLACEMENT	
SMALL TREES/LARGE SHRUBS, OR APPROVED EQUIVALENT SPECIES (DECIDUOUS OR EVERGREEN) - 3" CALIPER x 4 TREES = 12" REPLACEMENT	
SMALL TREES/LARGE SHRUBS, OR APPROVED EQUIVALENT SPECIES (DECIDUOUS OR EVERGREEN) - 3" CALIPER x 9 TREES = 27" REPLACEMENT	
TOTAL MITIGATION INCHES PAID INTO TREE FUND	\$0.00

NOTES:

* PER MUNICIPAL COURT CAUSE NO 2300128297, 2300128298
ALL REPLACEMENT TREE SPECIES ARE SELECTED FROM THE LIST ON APPENDIX A.

Exhibit A

309 Laurel Valley Spiller Lane – Tree Timing Variance

Applicant's Findings of Fact

1. The strict or literal enforcement of the terms of this chapter, because of special conditions, will result in unnecessary hardship to the applicant.

Literal enforcement of the requested code variances below will provide hardship to develop this project as-is and provide an unsafe driveway experience. I believe our requests are in line with the city's comprehensive plan goals and do not violate the intent of those goals. This is a modest project by size and scale and fits in with the neighboring houses in character and scale.

2. There will not be unreasonable disruption of the natural terrain or unreasonable destruction of existing flora.

Due to the extreme, illegal clearing on this property, there is very little flora to work around. We did work around all existing trees at the top and bottom of the lot. There are even less trees now than shown on the most recent tree survey provided.

3. There is no reasonable alternative to the requisite variance that will alleviate the difficulty or hardship complained of.

Please see requests 2, 3, 5 and 6.

4. The variance will not be greater than the minimum required to alleviate the difficulty or hardship complained of.

The variances requested are at the minimum amount required and are not excessive or greater than the city's comprehensive plan goals. Please see requests 3 and 4.

5. The variance does not violate the intent of the Zoning Ordinance or goals of the Comprehensive Plan.

Please reference requests 3 and 4.

6. The variance will not adversely affect neighboring properties or interfere with the enjoyment of these properties by their owners.

Please reference request 4.



City of West Lake Hills
Zoning and Planning Commission

AGENDA REPORT

Meeting Date:	February 18, 2026	Item Number:	6
Department:	Building & Development		
Prepared By:	Jennifer C. Bills	Cost / Budget:	None
Exhibits:	See Attached	Source of Funds:	N/A

Subject

101 Westhaven Dr.: Discuss and make a recommendation to the Board of Adjustment on variances to allow for an accessory structure:

1. To encroach 22 feet into the 30-foot front setback along Bee Cave Road (Section 22.03.276 and 22.03.281)
2. To encroach 20 feet into the 25-foot rear setback (Section 22.03.276 and 22.03.281)

Applicant: Pramod Patil, Owner

Recommendation

Discuss and make a recommendation including the analysis of the following criteria:

1. The variance may violate the intent of this chapter or the goals of the city's comprehensive plan; and
2. The variance may have an adverse effect on neighborhood properties or interfere with the respective owners' enjoyment thereof.

The Zoning and Planning Commission, in performing their respective duties in reference to applications for variances, may be guided by the interpretative criteria listed in the variance criteria in the report.

The Zoning and Planning Commission can recommend imposition of reasonable conditions upon granting a variance if the conditions are related to the subject of the variance.

The applicant's findings of facts are attached in Exhibit A.

This item will be forwarded to the March 11, 2026 Board of Adjustment meeting for consideration.

Discussion

Property Information, Zoning & Site Characteristics:

Owner: Pramod & Padmashree Patil
 Legal Description: Westlake Park, Lot 1
 Lot Size: 0.2766
 Zoning: R-1 One-Family Residential
 Wastewater: Septic

The properties surrounding the subject property are zoned R-1, One-Family Residential, and GUI, Government Utility and Institutional.

Background:

The applicant is requesting to rebuild an accessory structure (shed) in a similar location as the previous structure. The previous accessory structure was existing when the applicant purchased the property in 2006. In March 2025, the applicant stated a storm caused multiple trees to fall onto the shed, destroying it (picture below). The applicant began building an exterior portion of the shed without permits and a stop work order paused construction until building permits were received. The applicant is applying for a permit to build a shed of the same dimensions at the same location, but it is encroaching into the front and rear setbacks, as well as an electric easement at the rear of the property. There is an existing overhead electric line in the rear easement, so the building cannot encroach into that 5 foot area.

This lot is a corner lot on Westhaven Drive and Bee Cave Road, so it has two front setbacks. In 2014, the city acquired a 13.96-foot-wide strip along the Bee Cave frontage for the expansion of Texas Department of Transportation (TXDOT) road and sidewalk, thus reducing the existing front yard area.



** Picture provided by applicant.*

Analysis:

Setback Code Requirements

- Section 22.03.275. Building setback distances.

(1) No principal building shall have any front, side or rear setback distance less than that shown on the schedule of regulations as being required in the district in which the building is located, except that the minimum setback distance from Bee Cave Road shall be 50 feet regardless of which direction the building is facing. The setback distance from the Capital of Texas Highway shall be a minimum of 75 feet.

- Unroofed steps and ramps shall not be considered as part of the principal building when measuring the setback distance of such building.
- Roof overhangs and eaves a minimum of 8 feet above natural grade up to two (2) feet into the front, side or rear setback. All other building elements shall not encroach into setbacks.
- Allowed encroachments: Equipment slabs for pool equipment and/or mechanical equipment, generators and other similar equipment may encroach up to five (5) feet into side and rear setbacks after meeting all the following requirements:
 - Attached to the primary structure foundation;
 - Screened to appropriately dampen noise;
 - Slab is limited to 12 feet in length;
 - Equipment cannot be greater than five (5) feet in height measured from natural grade;
 - Screening must extend six (6) inches above the height of the equipment; and
 - Must be shown on the approved building plans.

- Section 22.03.276. Setbacks for accessory structures.

The minimum setback distances for accessory structures, other than unroofed steps, ramps, fences, walks, driveways, driveway gates, playscapes, and mailboxes, shall be the same as the setback distances applicable to a principal building under the appropriate category in section 22.03.281. Accessory structures, including overhangs and eaves, shall not encroach into setbacks. Propane tanks shall not be required to meet the setback requirements of this section so long as they are permitted and placed in accordance with the Liquefied Petroleum Gas Safety Rules adopted by the Railroad Commission of Texas in title 16, part 1, chapter 9, of the Texas Administrative Code, including any and all future amendments thereto.

- Section 22.03.281 Schedule of Regulations

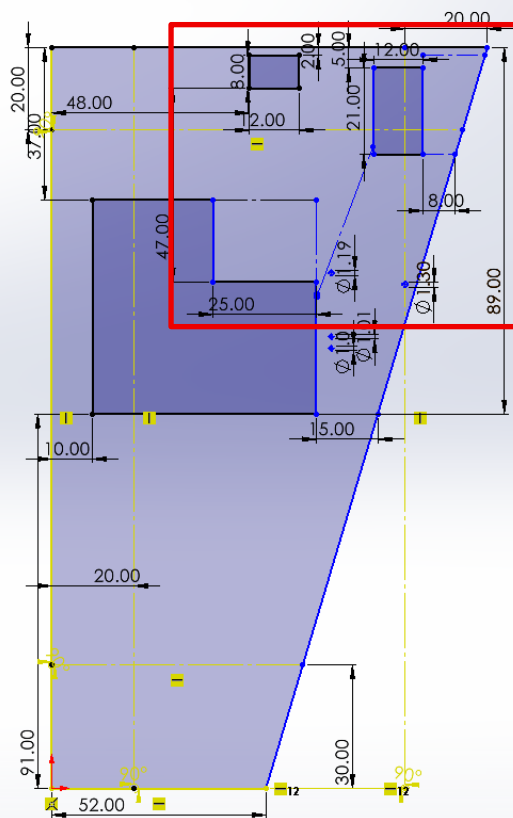
Minimum Building Setback Distance in Feet From Front Lot Line									
Lot Size/ Zoning	R-1	R-2	R-3	O	GUI	B-1	B-2	B-3	MU-1
Greater than or equal to .5 acre	50	50	50	50	50	50	50	(IV)(a)	(C)
Less than .5 acres	30	30	N/A	30	30	30	30	N/A	N/A

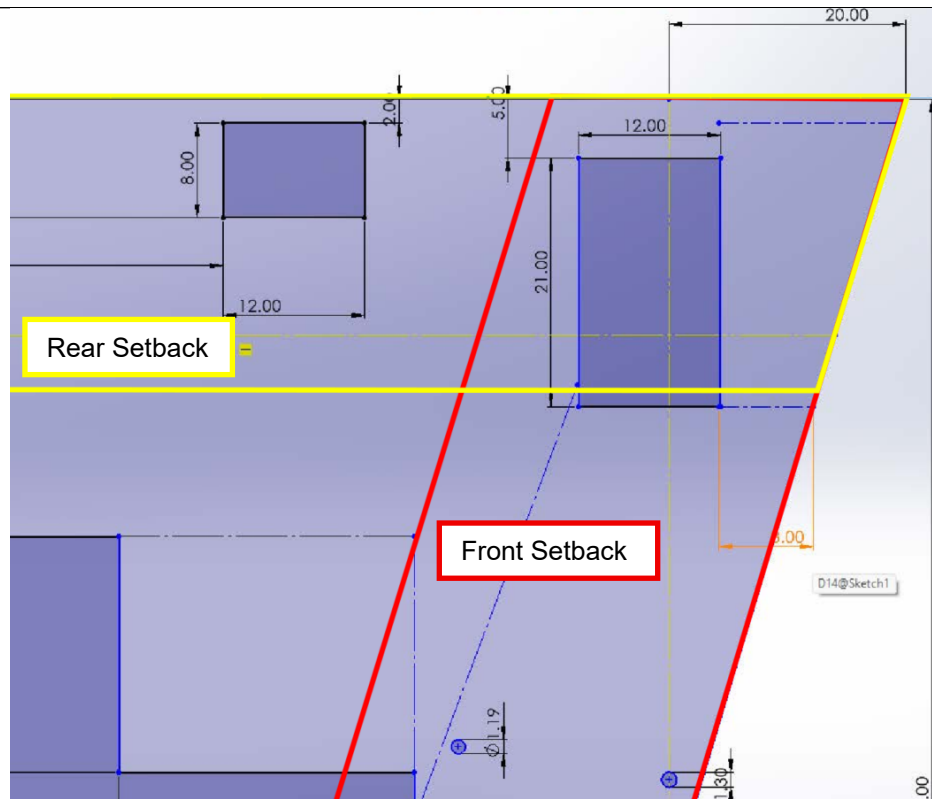
Minimum Building Setback Distance in Feet From Rear Lot Line

Lot Size/ Zoning	R-1	R-2	R-3	O	GUI	B-1	B-2	B-3	MU-1
Greater than or equal to .5 acre	30	30	50	40	40	40	40	(IV)(c)	(C)
Less than .5 acres, greater than or equal to .375 acres	25	25	N/A	30	30	30	30	N/A	N/A
Less than .375 acres-zero	15 (F, E)/20	15 (F, E)/20	N/A	30	30	30	30	N/A	N/A

Request:

The applicant is requesting to encroach 22 feet into the 30-foot front setback and 20 feet into the 25-foot rear setback for an accessory structure.





Variance Criteria Review:

Per Section 22.03.511 (c) Procedure and notice, Section 22.03.171: Site disturbance (residential buildings), and Section 22.03.276: Setbacks for accessory structures shall be administered in compliance with the rules established by sections 38.05.031 through 38.05.034.

- Section 38.05.031. Provisions subject to variance.

Variances may be granted by the board of adjustment to the provisions of this chapter in accordance with the rules and conditions of this division. A variance may not be granted, however, to authorize a change of use. Variances run with the land, but each variance is specific to the project for which it was granted.

- Section 38.05.032. Conditions required for granting variance.

No variance shall be granted unless the following conditions are fulfilled:

- (1) The applicant has established by competent evidence that:
 - (A) The strict or literal enforcement of the terms of this chapter, because of special conditions, will result in unnecessary hardship to the applicant.
 - (B) There will not be unreasonable disruption of the natural terrain or unreasonable destruction of existing flora.
 - (C) There is no reasonable alternative to the requisite variance that will alleviate the difficulty or hardship complained of.
 - (D) The variance will not be greater than the minimum required to alleviate the difficulty or hardship complained of.

- (2) The recommendation of zoning and planning commission shall include an analysis of whether:
- (A) The variance may violate the intent of this chapter or the goals of the city's comprehensive plan.
 - (B) (Reserved).
 - (C) (Reserved).
 - (D) The variance may have an adverse effect on neighborhood properties, or interfere with the respective owners' enjoyment thereof.

- Section 38.0.033. Interpretative criteria.

The board of adjustment and the zoning and planning commission, in performing their respective duties in reference to applications for variances, may be guided by these interpretative criteria:

- (1) Variances from the terms of this chapter should be granted sparingly.
- (2) Deviations from the requirements of this chapter are justified only where the hardship resulting from their application is substantial.
- (3) Usually, the granting of a variance must be predicated on a finding that the applicant's hardship arises from unusual conditions or circumstances, such as exceptional irregularity of shape or topography, which are peculiar to the parcel of land involved and not shared generally by other parcels in the neighborhood or district, or because no other reasonable alternative is available that will alleviate the unnecessary hardship complained of.
- (4) Normally, a variance is to be denied if conditions or circumstances relied on for a variance were self-created by the person having an interest in the property in disregard of city regulations.
- (5) The variance shall not violate the goals of the master plan for the city.
- (6) The variance shall not have an adverse effect on neighborhood properties or unreasonably interfere with the respective owners' enjoyment thereof.
- (7) The fact that lots, structures, uses or dimensional conditions on properties or structures within 200 feet of the property involved are, because they are nonconforming or because of previously granted variances, similar to the condition which would be created by the variance requested shall be relevant to, but not determinative of, the granting of the requested variance.
- (8) See section 22.03.009(c) for variances to enable the efficient use of solar energy devices.
- (9) When considering variance requests for nonresidential projects, whether granting the variance furthers achievement of the land planning principles set forth in the City's Master Plan, Attachment "B," as codified in the Code of Ordinances.

- Section 38.05.035. Conditions.

The city council can impose, and the zoning and planning commission can recommend imposition of reasonable conditions upon granting a variance if the conditions are related to the subject of the variance. When considering variance requests for nonresidential projects, whether, the City can recommend the imposition of reasonable conditions that are necessary to achieve one or more of the land planning principles set forth in the City's Master Plan, Attachment "B", as codified in chapter 28 of the Code of Ordinances.

Public Comments:

At the time of the report, one written comment in support was received for this request.

Outdoor Lighting

Outdoor lighting is not proposed with this variance request. Any outdoor lighting will need to comply with the City's Code.

Compliance with Adopted International Building Code

The property and future construction will have to comply with all applicable City codes.

Subdivision

There is no change to the subdivision proposed with this application.

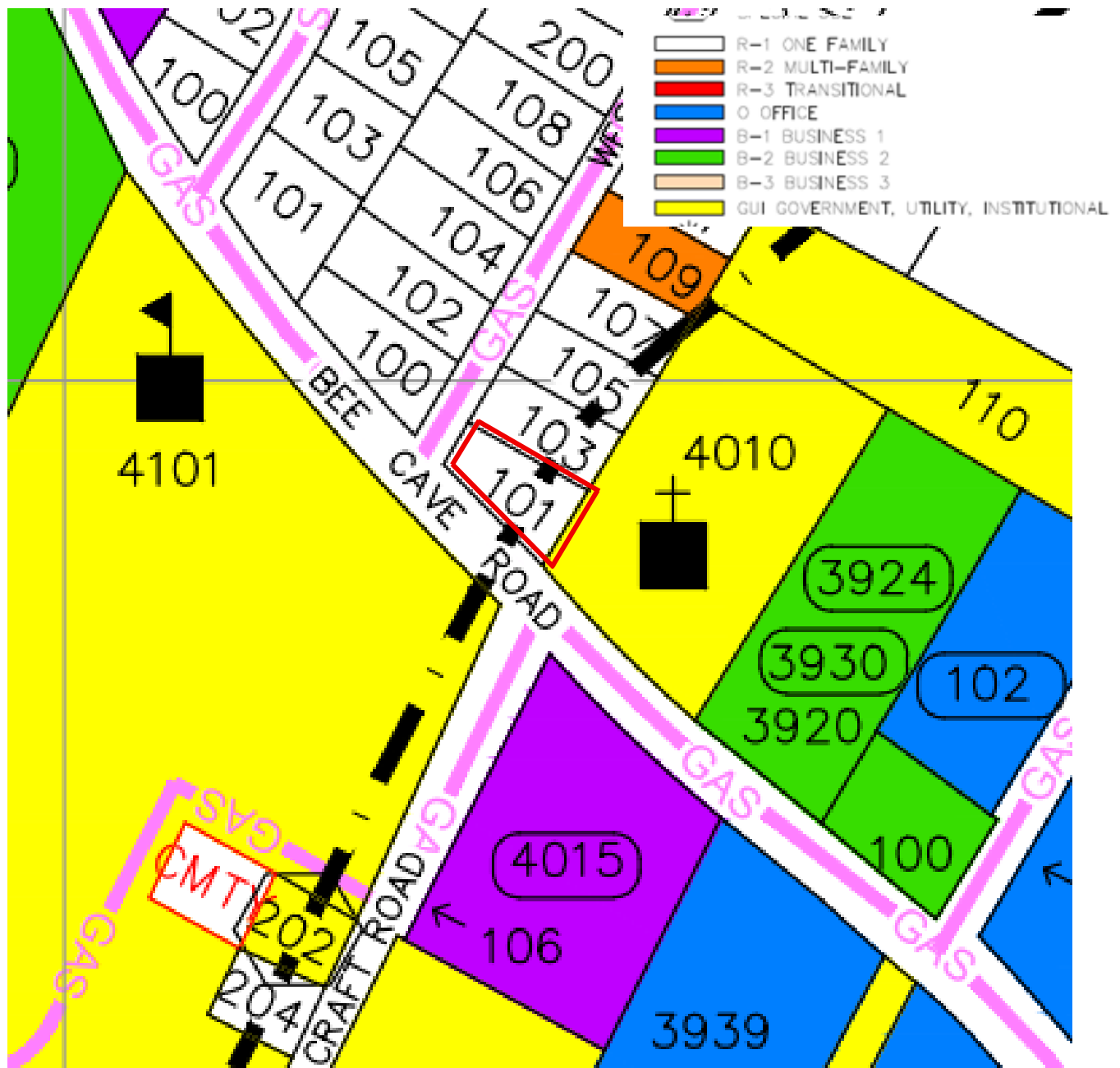
Comprehensive Planning Analysis

The existing and future land use is in conformance with the City of West Lake Hills Master Plan.

Links to Relevant Code:

- [Section 22.03.275 Building setback distances](#)
- [Section 22.03.281 Schedule of Regulations](#)
- [Section 38.05.031 Variances](#)
- [Section 22.03.514 Criteria and process required for granting a variance](#)

Zoning:



Aerial:



Pramod Patil

[REDACTED]
01/18/2026

To,

ZAPCO Chairperson

City of Westlake Hills

Westlake Hills, TX

Re: Variance Request for Storage Shed Rebuild at 101 Westhaven Dr. Westlake Hills, TX-78746

Dear Chairperson and Members of the Board,

I am writing to respectfully request consideration of my variance application related to rebuilding a storage shed on my property at 101 Westhaven Dr. Westlake Hills , TX 78746. The purpose of this request is to allow me to restore a long-standing accessory structure that existed on the property for many years and was destroyed due to circumstances beyond my control.

When I purchased the property in 2006, a storage shed was already in place and had been used continuously as part of the normal residential function of the home. In March 2025, a severe storm caused multiple trees to fall, completely destroying the shed. Because the structure was fully damaged, it cannot be repaired and must be rebuilt from scratch. In addition, a significant portion of my property has since been taken by TXDOT through eminent domain as part of the Bee Caves Road expansion, which has reduced the usable area of the lot and limited placement options for accessory structures.

The proposed shed will be rebuilt on the same existing platform, in the same location, and with a footprint and materials similar to the prior structure. The project does not increase impervious coverage, does not expand use, and does not introduce any new development impacts. The intended use of the shed remains strictly residential storage, consistent with its historical function and with the character of the neighborhood.

Due to updated zoning and permitting requirements adopted since I originally purchased the property, variances are now required simply to restore the property to its prior condition. My request is narrowly tailored to maintain reasonable use of the property and does not seek to exceed what previously existed.

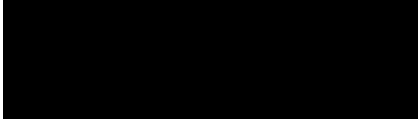
I respectfully ask the Board to consider the unique circumstances surrounding this request, including storm damage, loss of land through eminent domain, and the long-

standing nature of the structure. Granting the variance would allow me to restore a necessary and historically established feature of the property without creating adverse impacts to neighboring properties or the surrounding environment.

Thank you for your time and consideration. I appreciate the Board's service to the community and your thoughtful review of my request.

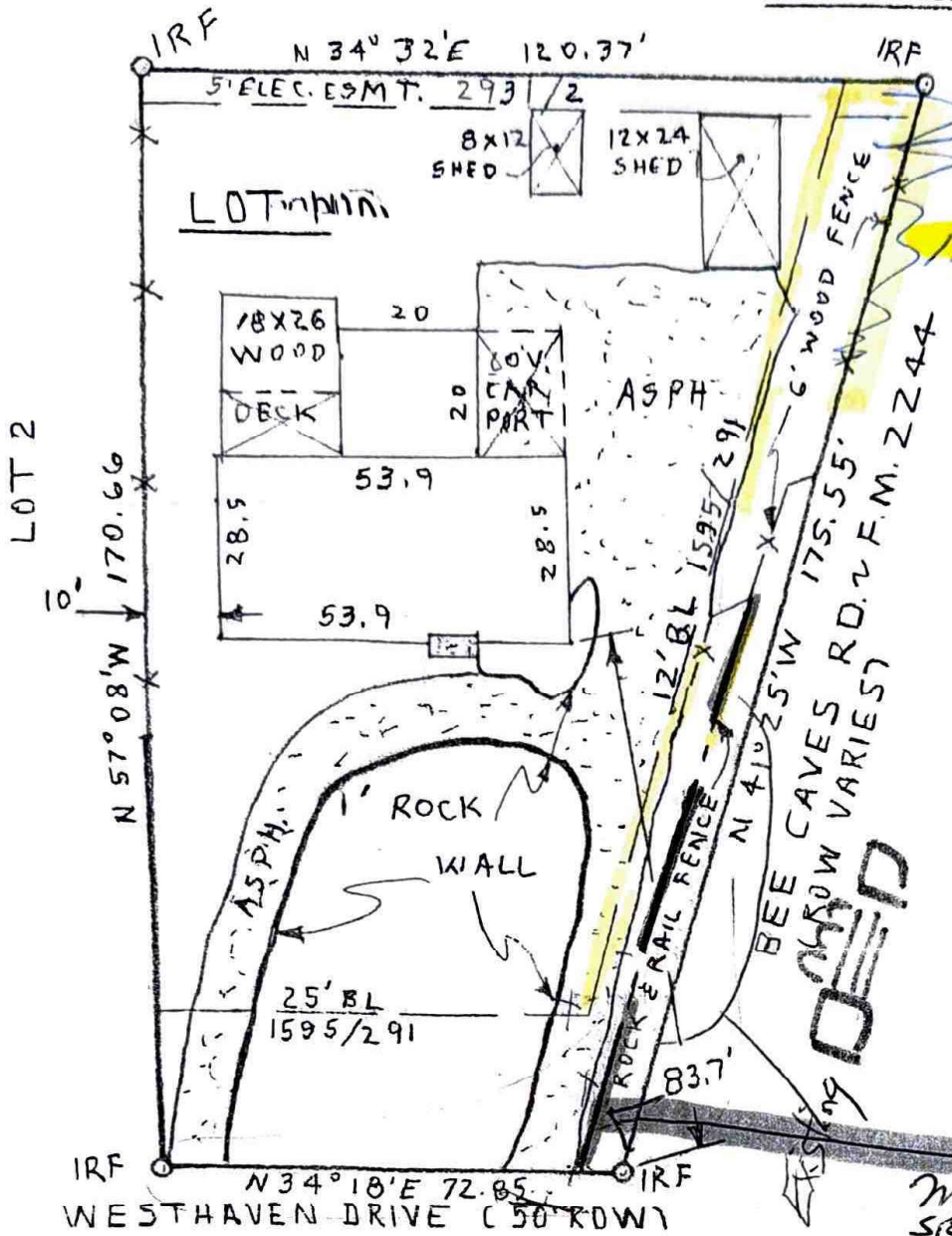
Sincerely,

Pramod Patil



LOT 1, WESTLAKE PARK, AN ADDITION IN TRAVIS COUNTY, TEXAS, ACCORDING TO THE MAP OR PLAT THEREOF RECORDED IN BOOK 7, PAGE 74, OF THE PLAT RECORDS OF TRAVIS COUNTY, TEXAS.

G.F. # 251200570Z



Repair
 6' Wooden Fence
 must be
 15' from property line
 1" = 30' Line

CITY OF WEST LAKE HILLS
 MAY 27 2008
 CITY OF WEST LAKE HILLS
 RECEIVED



Phillip M. Craft
 07/24/06

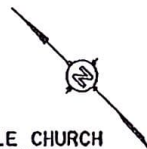
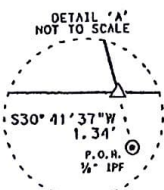
*Must be set back
 SEE ORDINANCE*

STATE OF TEXAS TO THE LIENHOLDERS AND/OR THE OWNERS AND TO COUNTY OF TRAVIS: STATE BANK AND TO LANDAMERICA COMMONWEALTH TITLE OF AUSTIN, INC. AND TO PRAMOD S. PATIL, THE UNDERSIGNED DOES HEREBY CERTIFY THAT THIS SURVEY WAS THIS DAY MADE ON THE GROUND OF THE PROPERTY LEGALLY DESCRIBED HEREON AND IS CORRECT, AND THAT THERE ARE NO DISCREPANCIES, CONFLICTS, SHORTAGES IN AREA, BOUNDARY LINE CONFLICTS, ENCROACHMENTS, OVERLAPPING OF IMPROVEMENTS, VISIBLE UTILITY LINES, OR ROADS IN PLACE, EXCEPT AS SHOWN HEREON, AND THAT SAID PROPERTY HAS ACCESS TO AND FROM A DEDICATED ROADWAY,

- LEGEND**
- X 3/4" CONCRETE FOUND
 - # TYPE I CONCRETE MONUMENT FOUND
 - II TYPE II CONCRETE MONUMENT FOUND
 - III TYPE III CONCRETE MONUMENT SET
 - 1/2" PIPE FOUND UNLESS NOTED
 - 1/2" IRON ROD SET W/ CAP UNLESS NOTED
 - 1/2" IRON ROD FOUND UNLESS NOTED
 - 60 D NAIL SET UNLESS NOTED
 - 60 D NAIL FOUND UNLESS NOTED
 - ▲ CALCULATED POINT
 - PROPERTY LINE
 - CENTER LINE
 - RECORD INFORMATION
 - P.O.B. POINT OF BEGINNING
 - P.O.C. POINT OF COMMENCING
 - P.O.R. POINT OF REFERENCE
 - IR IRON ROD FOUND
 - IPF IRON PIPE FOUND
 - HT NON-TANGENT CURVE

**JOHN SWESEY SURVEY NO. 506
A-702**

**TRAVIS COUNTY, TEXAS
SCALE 1"=50'**

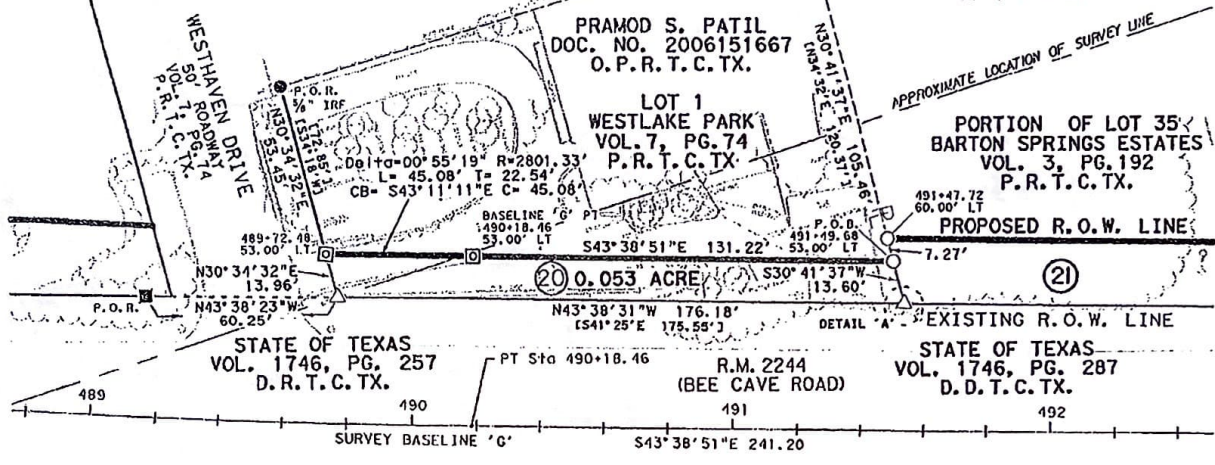


**WESTBANK BIBLE CHURCH
FORMERLY KNOWN AS
WESTLAKE HILLS BAPTIST CHURCH
VOL. 2889, PG. 447
CALLED 2 1/2 ACRES
D. R. T. C. TX.**

**PRAMOD S. PATIL
DOC. NO. 2006151667
O. P. R. T. C. TX.**

**LOT 1
WESTLAKE PARK
VOL. 7, PG. 74
P. R. T. C. TX.**

**PORTION OF LOT 35
BARTON SPRINGS ESTATES
VOL. 3, PG. 192
P. R. T. C. TX.**



SURVEY BASELINE 'G'
 PI STATION = 488+75.79
 NORTHING = 10076933.91
 EASTING = 3093034.32
 DELTA = 05° 43' 57" LT
 DEGREE OF CURVE = 02° 00' 26"
 TANGENT = 142.90'
 LENGTH = 285.57'
 RADIUS = 2854.33'
 PC STATION = 487+32.89
 PT STATION = 490+18.46

**A. L. D. BENHAM SURVEY NO. 239
A-75**

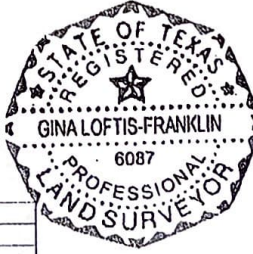
NOTES:

1. THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE REPORT. RECORD INFORMATION ON THIS DRAWING IS BASED ON A PUBLIC RECORDS SEARCH BY THE SURVEYOR AND MAY NOT INCLUDE ALL EASEMENTS OR INSTRUMENTS PERTAINING TO THIS PROPERTY.
 2. ALL BEARINGS ARE BASED ON THE TEXAS STATE PLANE COORDINATE SYSTEM, CENTRAL ZONE, NAD 83.
 3. IMPROVEMENTS SHOWN HEREON ARE BASED UPON ADS AERIAL SURVEY DIGITAL FILES RECEIVED FROM CARTER AND BURGESS. THERE MAY BE ADDITIONAL IMPROVEMENTS THAT ARE NOT SHOWN.
 4. VOLUME NUMBERS LESS THAN 8621 REFER TO THE DEED RECORDS OF TRAVIS COUNTY, TEXAS. ALL OTHERS REFER TO THE REAL PROPERTY RECORDS OF TRAVIS COUNTY, TEXAS, EXCEPT THOSE NOTED P. R. T. C. TX. WHICH REFERS TO THE PLAT RECORDS OF TRAVIS COUNTY, TEXAS, AND DOC. NO. REFERS TO THE OFFICIAL PUBLIC RECORDS OF TRAVIS COUNTY, TEXAS.
- ** AREA CALCULATED BY SAM.

I HEREBY CERTIFY THAT THIS SURVEY WAS MADE ON THE GROUND UNDER MY DIRECTION AND SUPERVISION, AND THAT THIS PLAT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

[Signature]
 GINA LOFTIS-FRANKLIN
 REGISTERED PROFESSIONAL LAND SURVEYOR
 NO. 6087, STATE OF TEXAS

8-19-14
 DATE



REVISIONS			
8-18-2014 Revised to decrease size			
EXISTING	x x 0.363 AC.	ACQUIRE	0.053 AC.
REMAINING	0.310 AC. LEFT		

PAGE 3 OF 3
 REF. FIELD NOTE NO. 1481_R1



4801 Southwest Parkway
 Building Two, Suite 100
 Austin, Texas 78735
 (512) 447-0575
 Fax: (512) 326-3029
 Texas Firm Registration No. 10064300

**RIGHT-OF-WAY SKETCH
 SHOWING PROPERTY OF
 PRAMOD S. PATIL
 PARCEL 20
 0.053 AC. (2,311 SQ. FT.)
 CSJ NO. 2102-01-023**

PP PP

101 Westhaven Dr, Storage shed project

We had an existing storage shed on the property at 101 Westhaven Dr, Austin, TX 78746. It was located towards the Southeast corner of the lot. The storage shed size was 12x 24 x8 feet.

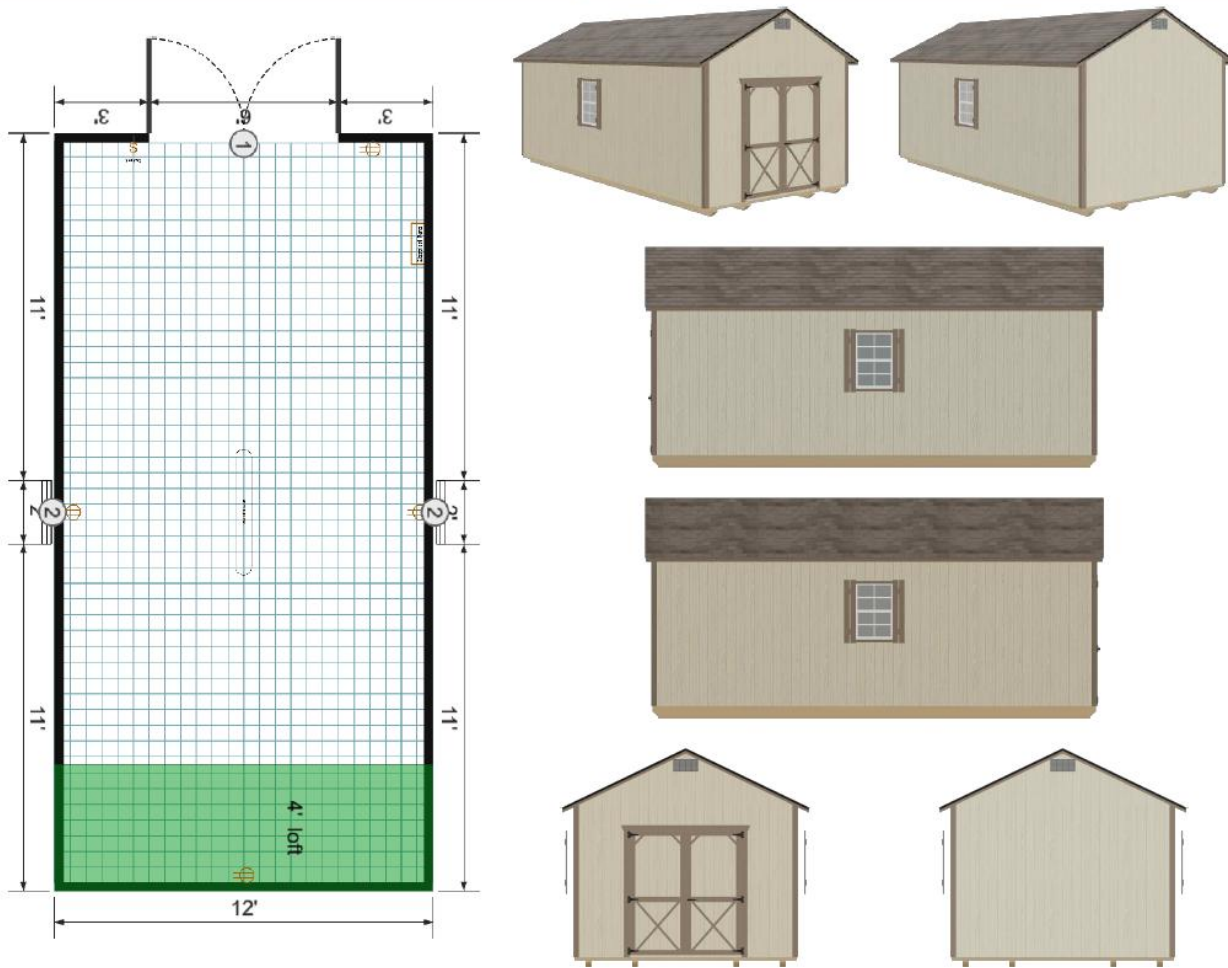
The shed broke because of the trees falling down on the shed from the storm in March 2025. See the picture below.



I am applying for the permit to build exactly similar dimension (12x 24 x8 feet) shed at the same location.

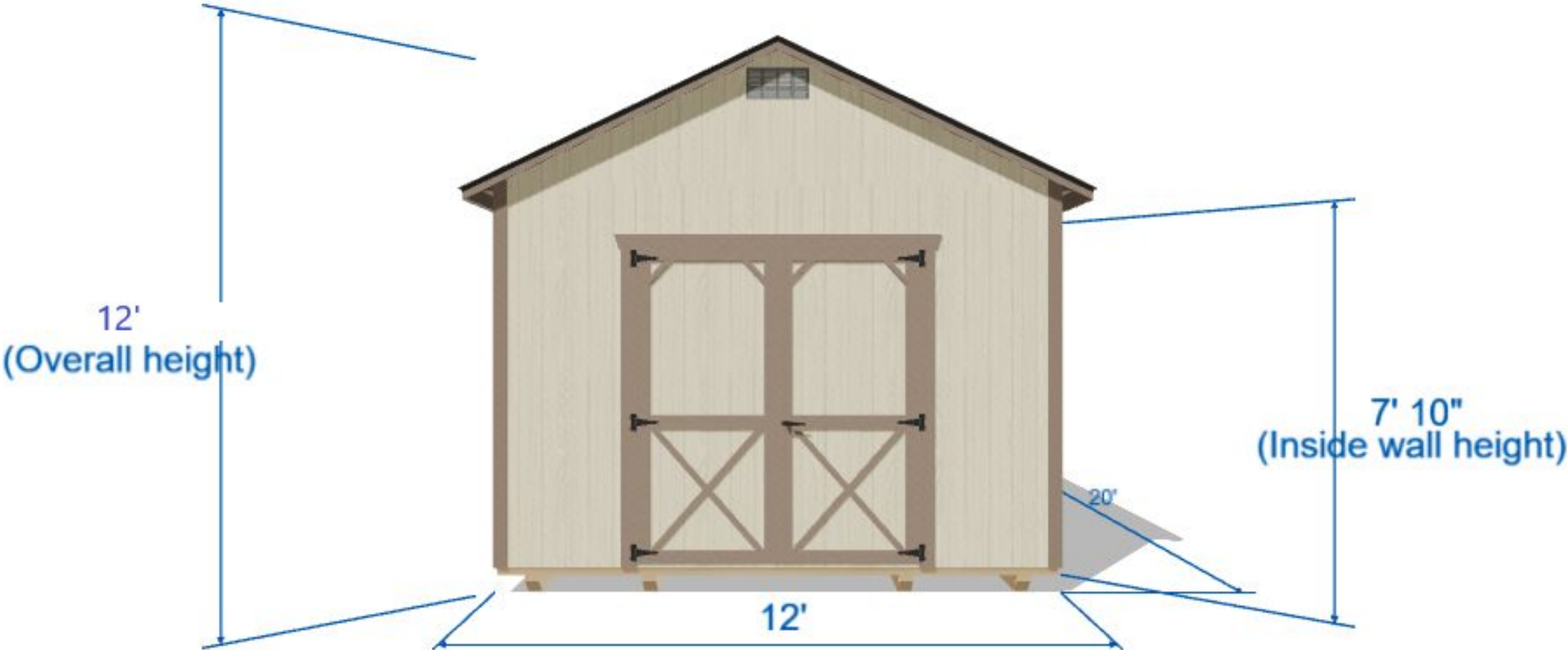
Here is the configuration of the shed.

Building Configuration



Here are the additional details on the materials to be used etc.

12x20 Elite Garden Shed

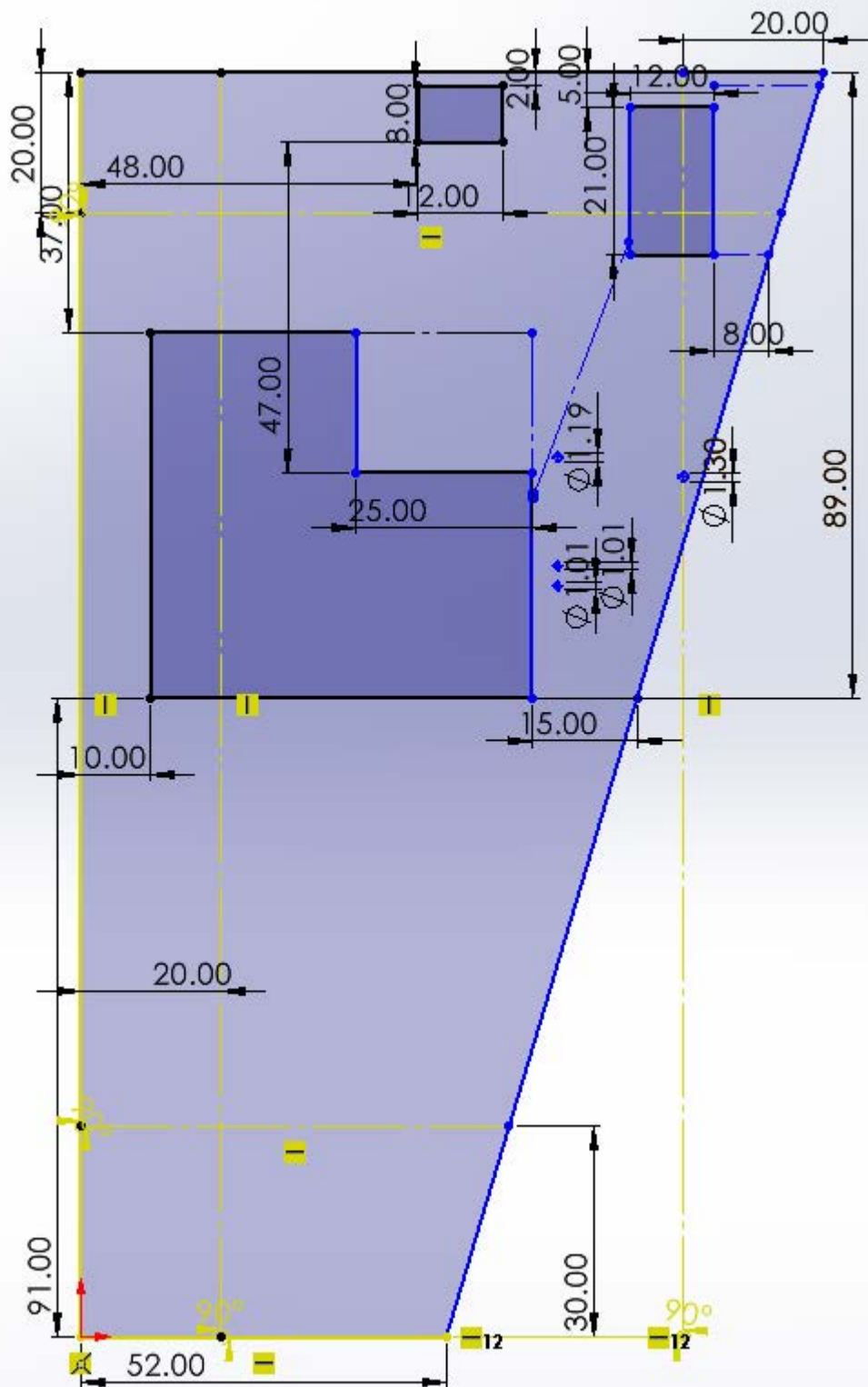


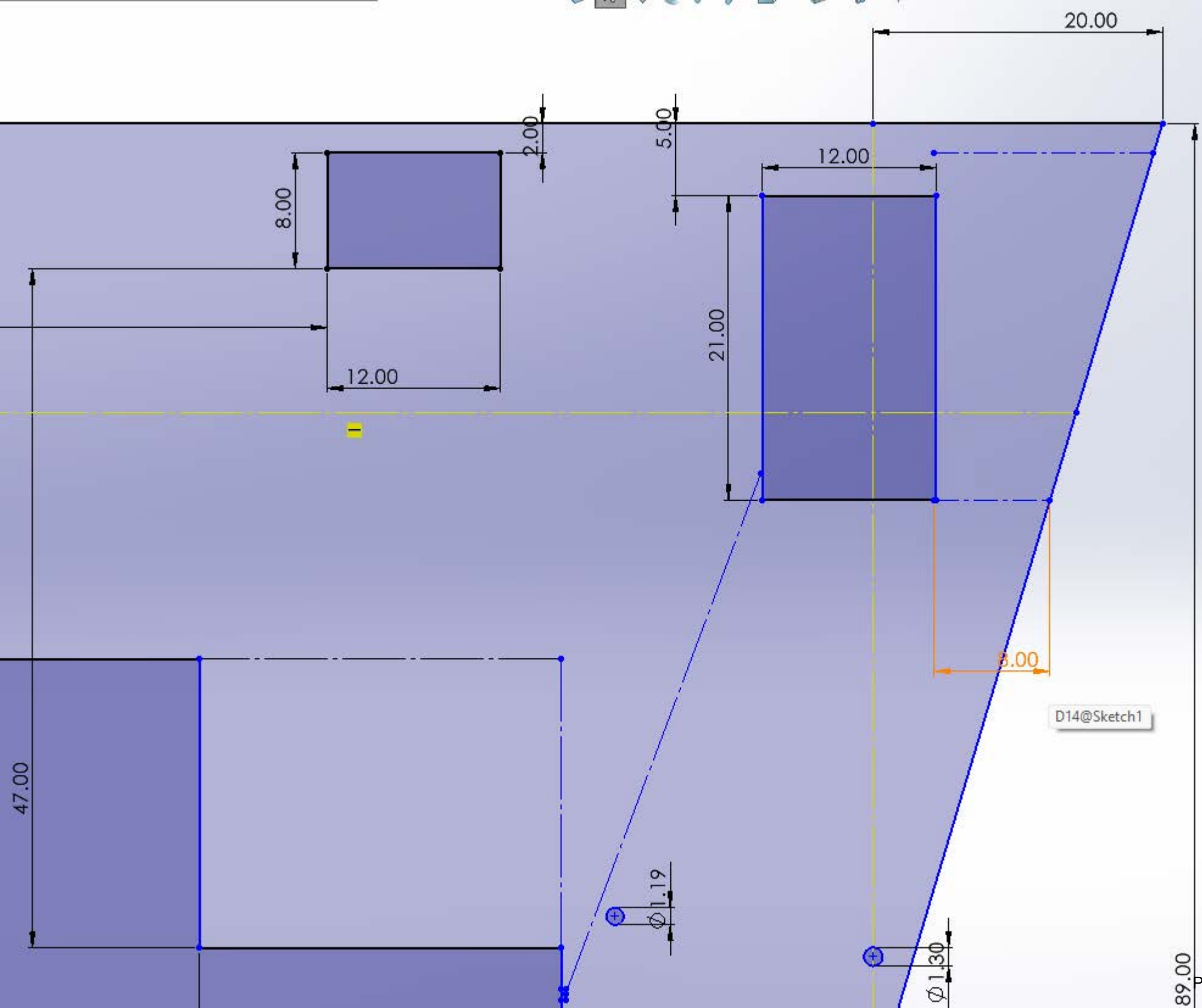
Order Information

Store	QSB Sales Center	Order Type	Sale
Sales Person	Ricky Scott P:(254) 687-9209	Product Type	Building
Order Date	06/20/2025	Product Build	Build to Order
Est. Delivery Period	07/11/2025 - 07/21/2025		

Bill To		Ship To	
Name	Pammu Patil	Name	Pammu Patil
Phone	(512) 350-7665	Phone	(512) 350-7665
Email	pammupatil@gmail.com	Email	pammupatil@gmail.com
Address	101 Westhaven Drive West Lake Hills, Texas 78746	Address	101 Westhaven Drive West Lake Hills, Texas 78746

Item	Color	Qty	Price
12x24 Elite Garden Shed		1	\$9,437.00
12x24x8 Elite Garden Shed		1	Included
LP Smartside Panel	Navajo White (Paint)	1	Included
LP Smartside Trim	Zook Tan (Paint)	1	Included
① 6-0x6-8 Double Shed Door		1	Included
② 2'x3' SP Window w/Shutters		2	Included
Loft (included loft in package)		4	Included
7/16 SilverTech Siding		1	Included
Gable Vent		2	Included
Standard Ridge Vent		1	Included
Dimensional Shingle Roof	Driftwood Oakridge (Shingles)	1	Included
110 Outlet Icon		4	\$0.00
Electrical Panel		1	\$0.00
Light Switch		1	\$0.00
Basic Electrical Package - Includes: 1- 6 slot breaker panel w/2-GFCI breakers, 4- outlets, 1 - 4'		1	\$1,095.00
4' LED Light		1	\$0.00
Custom Option		1415	\$1.00
Onsite Electrical Trip Charge \$5 per mile over 50 miles plus a \$50 cha...		550	\$1.00





From: [Caroline Peace](#)
To: [Planner](#)
Cc: [REDACTED]
Subject: Variance Request - 101 Westhaven Drive
Date: Friday, February 6, 2026 4:03:10 PM

You don't often get email from [REDACTED]. [Learn why this is important](#)

Good afternoon, Planner,

We would like to voice our complete support for our neighbor Pramod Patil's request to receive a variance for his property. We believe he should absolutely be granted the opportunity to make the improvements.

Thank you,
Jeff and Carrie Peace
102 Westhaven Drive

This electronic mail message, including any attachments, may be confidential or privileged under applicable law. This email is intended solely for the use of the individual or entity to which it is addressed. If you are not the intended recipient of this email, you are notified that any use, dissemination, distribution, copying, disclosure or any other action taken in relation to the content of this email including any attachments is strictly prohibited. If you have received this email in error, please notify the sender immediately and permanently delete the original and any copy of this email, including secure destruction of any printouts.

Exhibit A

101 Westhaven Dr – Multiple Variances

Applicant's Findings of Fact

1. The strict or literal enforcement of the terms of this chapter, because of special conditions, will result in unnecessary hardship to the applicant.

Strict or literal enforcement of the ordinance would create a significant and unnecessary hardship for me due to the unique conditions of my property and its long-standing use. My home does not have a separate garage, which makes on-site storage essential for normal, everyday living. The existing storage area has historically been used to safely store household items, tools, seasonal belongings, maintenance equipment, and emergency supplies that cannot reasonably be kept inside the home. Without this storage, I would be forced to overcrowd the living space, reduce the functionality of the home, or seek off-site storage, which creates ongoing expense, inconvenience, and security concerns.

In addition, the loss of functional storage would materially reduce the usability and desirability of the property, placing it at a disadvantage compared to similar homes in the area that have garages or adequate storage options. This would negatively affect both market value and rentability, as families reasonably expect sufficient storage when choosing a residence. Because a substantial portion of my land has already been taken through eminent domain for the Bee Caves Road expansion, my options for relocating or redesigning storage on the property are extremely limited. The strict application of current regulations, when combined with the loss of land and the absence of a garage, leaves me with no practical way to maintain the property's prior level of use.

Finally, denying the ability to rebuild this long-standing storage use would impose a financial burden that goes beyond inconvenience. The existing shed platform is already in place, and being forced to remove or repurpose it would require additional expense without any functional benefit. I purchased this property nearly twenty years ago as a long-term investment and a key part of my retirement planning. A permanent reduction in the property's functionality, value, and marketability caused by the inability to restore this storage would have a lasting and disproportionate impact on me, creating an unnecessary hardship that strict enforcement of the ordinance was not intended to impose.

2. There will not be unreasonable disruption of the natural terrain or unreasonable destruction of existing flora.

Granting the requested variance will not result in unreasonable disruption of the natural terrain or unreasonable destruction of existing flora. A storage shed has existed on my property for more than twenty years, and the proposed structure will be rebuilt on the exact same existing

platform and within the same footprint as the prior shed. The project does not involve expansion into undisturbed areas, additional grading, or removal of vegetation.

Because impervious coverage will remain unchanged and the rebuilt shed will maintain the historical use and location of the previous structure, there will be no alteration to existing drainage patterns, soil conditions, or native plant life. The proposed variance therefore maintains the existing environmental conditions of the site and is consistent with the City's intent to protect natural terrain and existing flora.

3. There is no reasonable alternative to the requisite variance that will alleviate the difficulty or hardship complained of.

I have evaluated reasonable alternatives, including relocating the storage shed to other areas of the property or reducing its size to comply with current ordinance requirements. However, no feasible alternative exists that would alleviate the difficulty or hardship. A substantial portion of my property has been taken by TXDOT through eminent domain for the Bee Caves Road expansion, which has significantly reduced the buildable and usable area of the lot.

As a result of these constraints, there is no other location on the property that can reasonably accommodate a storage shed of similar size without creating additional impacts or further limiting the reasonable use of the property. Reducing the size of the structure would not provide functional storage and would not resolve the hardship. As a result, there is no reasonable alternative that would address the difficulty or hardship other than granting the requested variance and the requested variance represents the only practical and reasonable means of maintaining the historical use of the property.

4. The variance will not be greater than the minimum required to alleviate the difficulty or hardship complained of.

I believe the variance I am requesting is the minimum required to alleviate the difficulty and hardship because it is limited strictly to restoring a storage shed that lawfully existed on the property for many years prior to its destruction. The proposed shed will be rebuilt on the same existing platform, in the same location, and with a footprint that closely matches the previous structure. I am not requesting any increase in size, height, impervious coverage, or intensity of use beyond what previously existed.

The request does not involve new development, expanded use, or a change in the character of the property. Instead, it is narrowly focused on maintaining the reasonable and established use of the property that was in place at the time I purchased it. Any further reduction in the structure's size or relocation to another area of the lot would either eliminate its functional purpose or create additional impacts due to the limited buildable area resulting from the TXDOT land acquisition.

Additionally, the variance is tailored to avoid unnecessary impacts on the site and surrounding area by utilizing an existing platform and previously disturbed area. This approach minimizes environmental impact, avoids additional construction disturbance, and ensures compliance with the overall intent of the ordinance to the greatest extent practicable. For these reasons, the variance requested represents the least amount of relief necessary to alleviate the hardship while preserving the character, function, and environmental conditions of the property.

5. The variance does not violate the intent of the Zoning Ordinance or goals of the Comprehensive Plan.

I believe the requested variance does not violate the intent of the Zoning Ordinance or the goals of the City's Comprehensive Plan because it does not introduce a new use or increase the intensity of development on the property. The request is limited to rebuilding a storage shed that lawfully existed on the property for many years and supported the established residential use. The proposed shed will be rebuilt in the same location, within the same general footprint, and with no increase in impervious coverage, density, or activity.

In addition, the shed will be constructed using materials similar to those of the previous structure, ensuring it remains compatible with the character and appearance of the property and surrounding area. Rebuilding the shed on the existing platform avoids additional site disturbance and preserves natural features, which aligns with the City's environmental and planning goals. Overall, the variance allows the property to continue functioning as it historically has while remaining consistent with the intent of the Zoning Ordinance and the City's Comprehensive Plan.

6. The variance will not adversely affect neighboring properties or interfere with the enjoyment of these properties by their owners.

I believe the requested variance will not adversely affect neighboring properties or interfere with the enjoyment of those properties because the storage shed is simply being rebuilt in the same location and footprint where it existed for many years. The shed is an accessory structure with no associated increase in activity, noise, traffic, or occupancy, and it does not change how the property is used.

The rebuilt shed will maintain a similar size, height, and appearance, using comparable materials, and will not create new visual, environmental, or privacy impacts for neighboring properties. Because the structure does not expand into new areas and does not increase impervious coverage or intensity of use, surrounding properties will experience no change from prior conditions. For these reasons, the variance will have no adverse effect on neighboring properties or on their owners' ability to enjoy them.



City of West Lake Hills
Zoning and Planning Commission

AGENDA REPORT

Meeting Date:	February 18, 2026	Item Number:	7
	Building & Development		
Department:	Services		
	Jennifer C. Bills, Director of		
Prepared By:	Building & Development	Cost / Budget:	None
Exhibits:	See Attached	Source of Funds:	N/A

Subject

102 Swiftcurrent Trl.: Discuss and make a recommendation on a variance to allow a second driveway when a maximum of one is allowed (Section 22.03.175(e)(2)).

Applicant: Francisco Rios, Owner

Recommendation

Discuss and make a recommendation to the Board of Adjustment including an analysis of whether:

1. The variance may violate the intent of this chapter or the goals of the city's comprehensive plan.
2. The variance may have an adverse effect on neighborhood properties or interfere with the respective owners' enjoyment thereof.

The Zoning and Planning Commission, in performing their respective duties in reference to applications for variances, may be guided by the interpretative criteria listed in the variance criteria in the report.

The Zoning and Planning Commission can recommend imposition of, reasonable conditions upon granting a variance if the conditions are related to the subject of the variance.

The applicant's findings of fact are in Exhibit A.

This item will be forwarded to the March 11, 2026 Board of Adjustments Meeting.

Discussion

Property Information, Zoning & Site Characteristics:

Owner: Francisco & Katie Rios

Legal Description: Mirkwood Subdivision, Lot 12

Lot Size: 1.018 acres

Zoning: R-1, One-Family Residential

Wastewater: On-site Sewer Facility (OSSF)

The properties surrounding the subject property are zoned R-1 One-Family Residential District.

Background & Analysis:

The applicant is requesting a second driveway for access to 100 Swiftcurrent Trail through 102 Swiftcurrent Trail (Attachment 1). 100 Swiftcurrent is a landlocked property that was created with the Edwards Hill Subdivision in 1975. At the time, Swiftcurrent Trail did not exist, so access was taken from Old Bee Cave Road (Attachment 2). There was a 15-foot Ingress-Egress and Utility Easement on the plat along the entire east boundary of what is now 98 and 100 Swiftcurrent. In 2013, an Amending Plat was approved that transferred acreage to 100 Swiftcurrent (Attachment 3). The amending plat abandoned the 15-foot easement and established a 25-foot Ingress/Egress & Utility Easement along a portion of the reconfigured lots which would provide access to Swiftcurrent Trail.

Construction on 98 Swiftcurrent was started in 2019 and completed in 2023. In the applicant's narrative, in 2022, during construction, the previous owner of 102 Swiftcurrent had a survey prepared that showed the surveys for 98 and 100 Swiftcurrent were incorrect and the proposed driveway for the new construction was going through the property at 102 Swiftcurrent. The driveway for 98 Swiftcurrent was moved further south during construction to the current location which is outside the surveyed Ingress/Egress easement (Attachment 4).

A1232

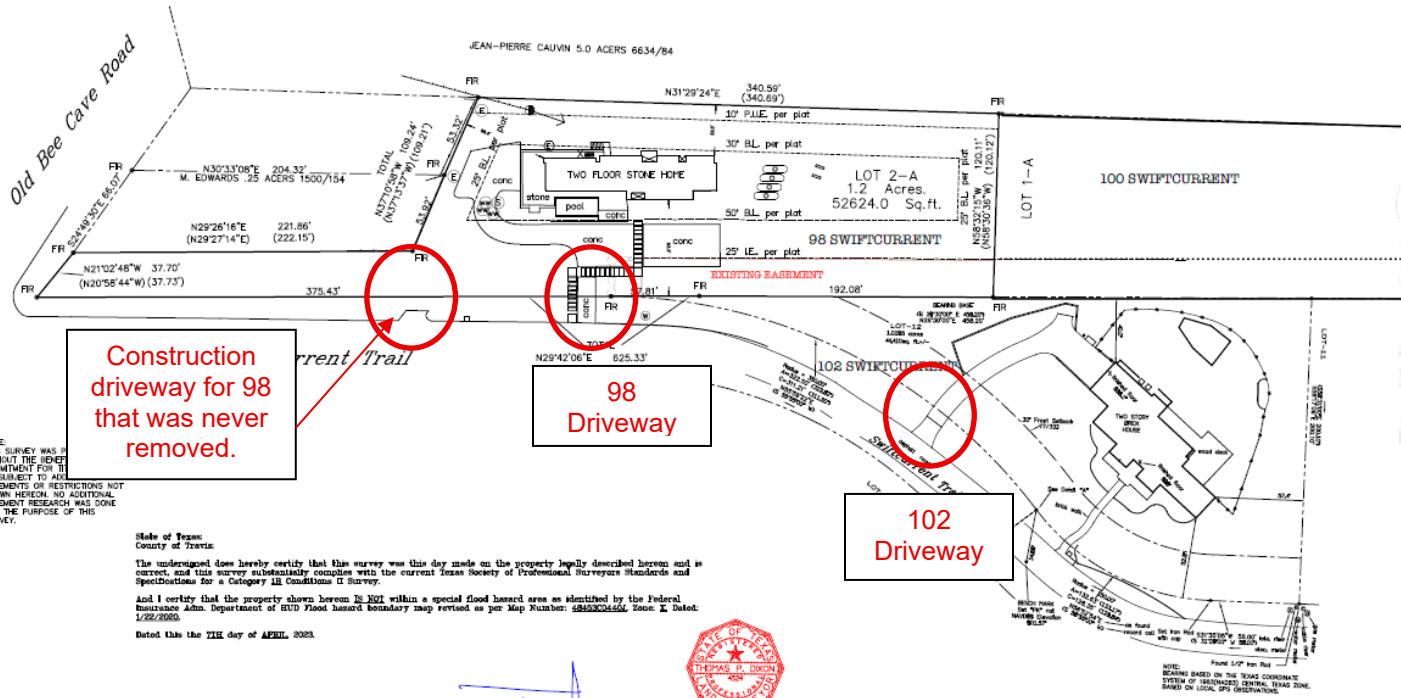
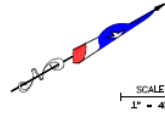
Waterloo Surveyors
SURVEY PLAT
As-Built Survey

OWNER:
CATHERINE MILKES & DAVID MILKES
ADDRESS:
98 SWIFTCURRENT TRAIL, 78746

LEGEND
RECORD CALL C
BALANCE SETBACK LINE BL
PUBLIC UTILITY EASEMENT P.U.E.
EGRESS / EGRESS EASEMENT LE
FOUR FOOT FENCE FR
WASTE WATER MAINLINE EW
ELECTRIC MAINLINE EM

ELECTRIC METER
WATER TANK
SEPTIC LID
UTILITY POLE/UTILITY ANCHOR
UTILITY LINE
WOOD FENCE
SEPTIC POST
WATER METER

LEGAL DESCRIPTION:
LOT 2-A, AMENDED PLAT OF EDWARDS HILL SUBDIVISION, A SUBDIVISION IN TRAVIS COUNTY, TEXAS, ACCORDING TO THE MAP OR PLAT THEREOF RECORDED AS DOCUMENT NO. 201302243, ORIGINAL PUBLIC RECORDS OF TRAVIS COUNTY, TEXAS.



Construction driveway for 98 that was never removed.

98 Driveway

102 Driveway

NOTE:
THIS SURVEY WAS MADE WITHOUT THE HIGHEST COMMITMENT FOR IT BE SUBJECT TO ALL EASEMENTS OR RESTRICTIONS NOT SHOWN HEREON. NO ADDITIONAL EASEMENT RESEARCH WAS DONE FOR THE PURPOSE OF THIS SURVEY.

State of Texas
County of Travis

The undersigned does hereby certify that this survey was this day made on the property legally described hereon and as correct, and this survey substantially complies with the current Texas Society of Professional Surveyors Standards and Specifications for a Category II Conditions II Survey.

And I certify that the property shown hereon is NOT within a special flood hazard area as identified by the Federal Insurance Administration Department of HUD Flood hazard boundary map revised as per Map Number: 68400K0460L Zone X, Dated: 1/22/2000.

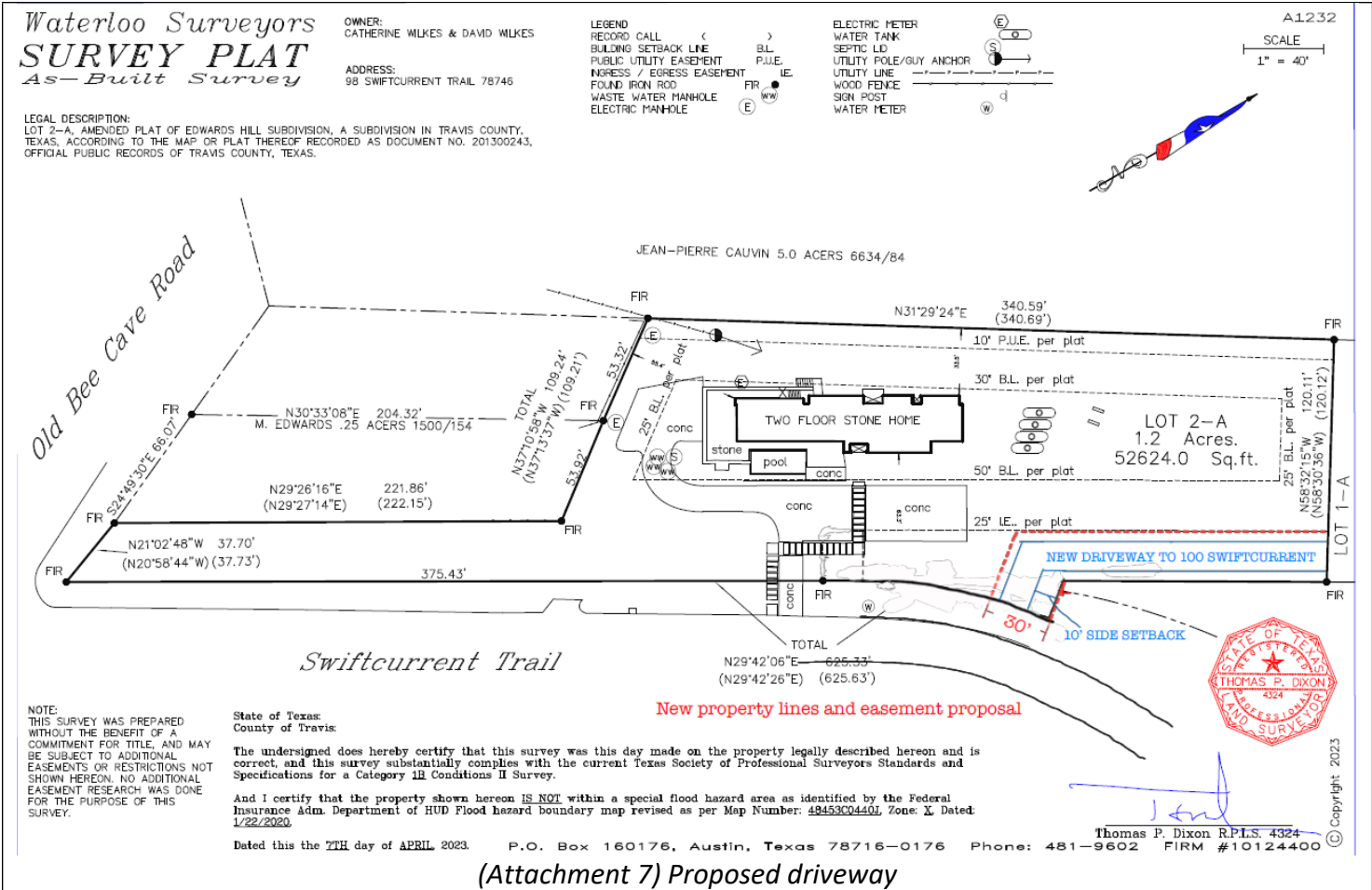
Dated this 7th day of APRIL, 2023.

Thomas P. Dixon
Thomas P. Dixon R.P.L.S. 4384



(Attachment 8) 2023 Survey - Existing easement and driveways for 98 and 102 Swiftcurrent Trail

The owners of 98 Swiftcurrent are looking to purchase a piece of 102 Swiftcurrent property to create an additional separate driveway for access to 100 Swiftcurrent.



Driveway Requirements in Residential Areas

Code Reference

22.03.175(e)(2) Off-street parking and parking pad requirements in residential areas

Every driveway entrance/exit shall be at roadway grade level where the driveway intersects the city’s right-of-way except as otherwise approved by the city inspector.

(2) Only one driveway is allowed per primary dwelling unit, regardless of the number of lots, frontage on more than one roadway, or character of accessory structures. The driveway entrance/exit shall not exceed 20 feet in width. The location of all driveways shall be approved by the city inspector. The parking spaces and driveway surfaces shall be those required in sections [22.03.241](#), [22.03.242](#), [22.03.244](#) and [22.03.247](#).

Request

The applicant is requesting a second driveway on a lot with only one dwelling unit where only one driveway is allowed per primary dwelling unit.

Public Comments:

As of the date of the report, no public comments have been received.

Variance Criteria Review:

Per Section 22.03.511 (c) Procedure and notice, Section 22.03.171: Site disturbance (residential buildings), and Section 22.03.276: Setbacks for accessory structures shall be administered in compliance with the rules established by sections 38.05.031 through 38.05.034.

- Section 38.05.031. Provisions subject to variance.

Variances may be granted by the board of adjustment to the provisions of this chapter in accordance with the rules and conditions of this division. A variance may not be granted, however, to authorize a change of use. Variances run with the land, but each variance is specific to the project for which it was granted.

- Section 38.05.032. Conditions required for granting variance.

No variance shall be granted unless the following conditions are fulfilled:

- (1) The applicant has established by competent evidence that:
 - (A) The strict or literal enforcement of the terms of this chapter, because of special conditions, will result in unnecessary hardship to the applicant.
 - (B) There will not be unreasonable disruption of the natural terrain or unreasonable destruction of existing flora.
 - (C) There is no reasonable alternative to the requisite variance that will alleviate the difficulty or hardship complained of.
 - (D) The variance will not be greater than the minimum required to alleviate the difficulty or hardship complained of.
- (2) The recommendation of zoning and planning commission shall include an analysis of whether:
 - (A) The variance may violate the intent of this chapter or the goals of the city's comprehensive plan.
 - (B) (Reserved).
 - (C) (Reserved).
 - (D) The variance may have an adverse effect on neighborhood properties, or interfere with the respective owners' enjoyment thereof.

- Section 38.0.033. Interpretative criteria.

The board of adjustment and the zoning and planning commission, in performing their respective duties in reference to applications for variances, may be guided by these interpretative criteria:

- (1) Variances from the terms of this chapter should be granted sparingly.
- (2) Deviations from the requirements of this chapter are justified only where the hardship resulting from their application is substantial.

- (3) Usually, the granting of a variance must be predicated on a finding that the applicant's hardship arises from unusual conditions or circumstances, such as exceptional irregularity of shape or topography, which are peculiar to the parcel of land involved and not shared generally by other parcels in the neighborhood or district, or because no other reasonable alternative is available that will alleviate the unnecessary hardship complained of.
- (4) Normally, a variance is to be denied if conditions or circumstances relied on for a variance were self-created by the person having an interest in the property in disregard of city regulations.
- (5) The variance shall not violate the goals of the master plan for the city.
- (6) The variance shall not have an adverse effect on neighborhood properties or unreasonably interfere with the respective owners' enjoyment thereof.
- (7) The fact that lots, structures, uses or dimensional conditions on properties or structures within 200 feet of the property involved are, because they are nonconforming or because of previously granted variances, similar to the condition which would be created by the variance requested shall be relevant to, but not determinative of, the granting of the requested variance.
- (8) See section 22.03.009(c) for variances to enable the efficient use of solar energy devices.
- (9) When considering variance requests for nonresidential projects, whether granting the variance furthers achievement of the land planning principles set forth in the City's Master Plan, Attachment "B," as codified in the Code of Ordinances.

- Section 38.05.035. Conditions.

The city council can impose, and the zoning and planning commission can recommend imposition of reasonable conditions upon granting a variance if the conditions are related to the subject of the variance. When considering variance requests for nonresidential projects, whether, the City can recommend the imposition of reasonable conditions that are necessary to achieve one or more of the land planning principles set forth in the City's Master Plan, Attachment "B", as codified in chapter 28 of the Code of Ordinances.

Outdoor Lighting

Outdoor lighting is not proposed with this variance request. Any outdoor lighting will need to comply with the City's Code.

Compliance with Adopted International Building Code

The property and future construction will have to comply with all applicable City codes.

Subdivision

There is no change to the subdivision proposed with this application.

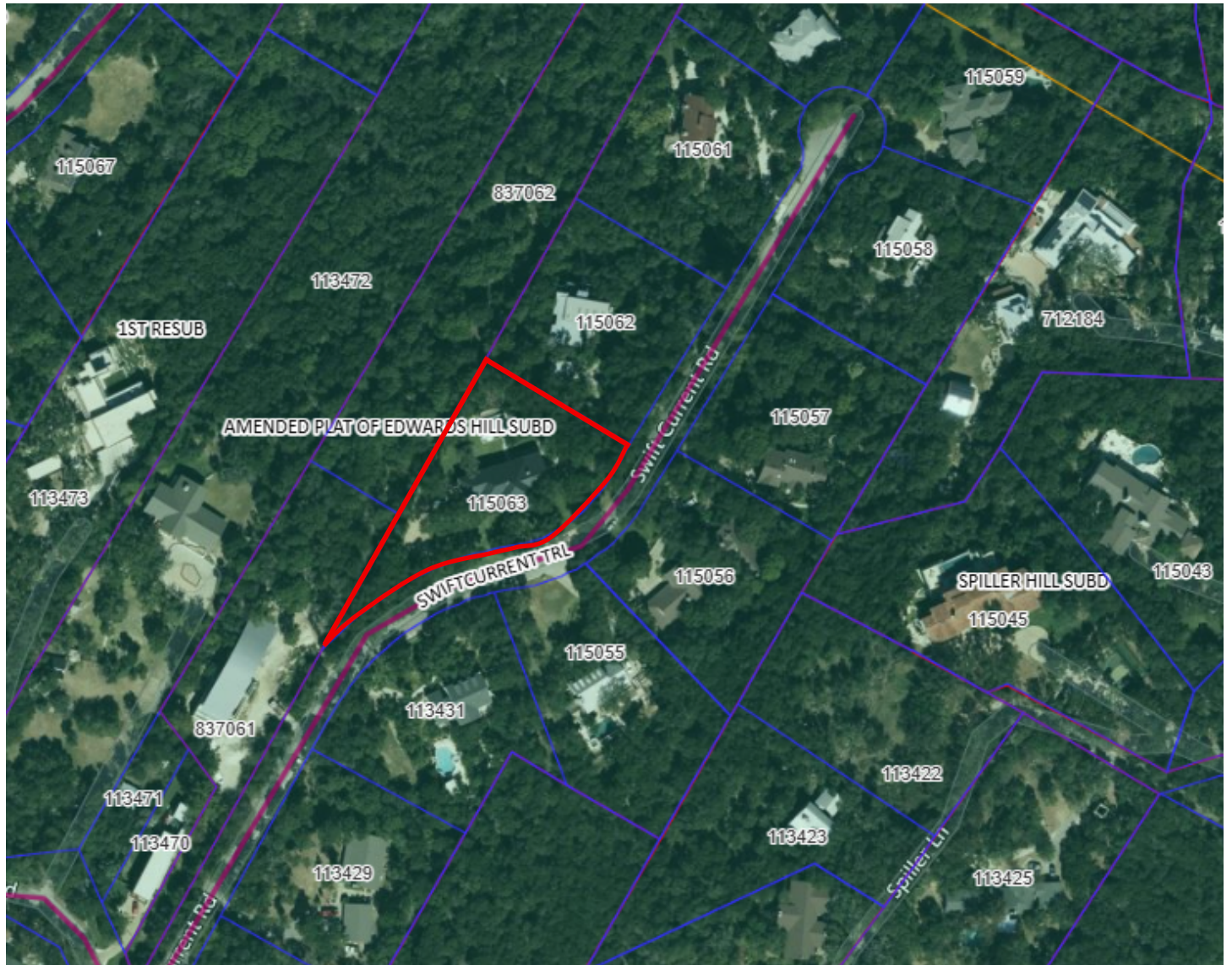
Comprehensive Planning Analysis

The existing and future land use is in conformance with the City of West Lake Hills Master Plan.

Links to Relevant Code:

- [Section 22.03.175 Off-street parking and parking pad requirements in residential areas](#)
- [Section 22.03.281 Schedule of Regulations](#)
- [Section 22.03.170 Site disturbance \(excavation, grading or filling\)](#)
- [Section 38.05.031 Variances](#)
- [Section 22.03.514 Criteria and process required for granting a variance](#)

Aerial:



1/23/26

Dear ZAPCO Chairperson –

My name is Francisco Rios and I am the owner of 102 Swiftcurrent.

Variance is being requested to construct a 2nd driveway for access to 100 Swiftcurrent Trail. The purpose of variance is to allow access to 100 Swiftcurrent Trail as 98 Swiftcurrent Trail is unable to provide driveway access to 100 Swiftcurrent Trail because of conditions of the real estate, as detailed below.

The west portion of 102 Swiftcurrent is relatively flat and the driveway would follow the existing contours. 98 Swiftcurrent has exhausted all options to provide an easement to 100 Swiftcurrent. Because of the construction and slope of the driveway, 98 Swiftcurrent is unable to provide an easement. Therefore, the driveway shall be provided on 102 Swiftcurrent.

The proposed variance would minimally disturb the vegetation and allow for the safest solution to providing an ingress and egress to 100 Swiftcurrent Trail. Furthermore, the variance maintains the aesthetic integrity of the property and the surrounding area.

The additional driveway will allow access to 100 Swiftcurrent. This will not disturb the neighbors or affect the enjoyment of their properties.

Thank you.

Best regards,

Francisco

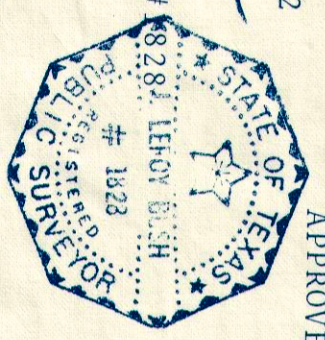
EDWARDS' HILL

-LEGEND-
● - IRON STAKE FOUND
○ - IRON STAKE SET

SCALE: 1" = 100'

T. J. CHAMBERS SURVEY # 50477
J. SWISSEY SURVEY # 5016
S 73° 15' E 57.48'

CLAUDE F. BUSH, JR.
Reg. Public Surveyor #202
By *J. Leroy Bush*
Leroy Bush
Reg. Public Surveyor #8281
April 6, 1975



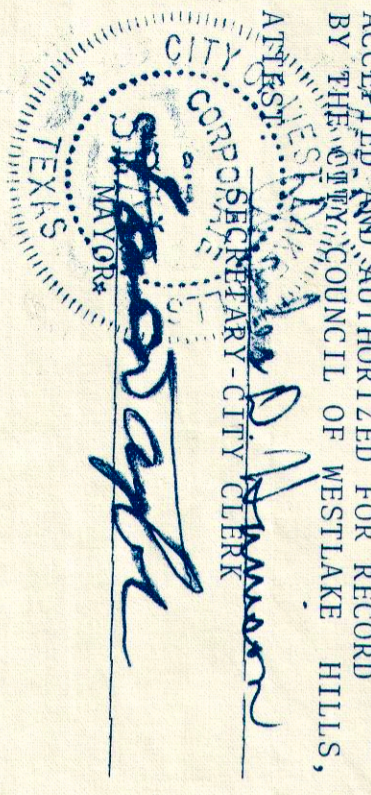
APPROVED: *Hammett Jackson*
CHAIRMAN, ZONING & PLANNING COMMISSION
CITY OF WESTLAKE HILLS
DATE: April 23 1975

THE STATE OF TEXAS
COUNTY OF TRAVIS
KNOW ALL MEN BY THESE PRESENTS THAT:
R. D. EDWARDS AND WIFE DELLA EDWARDS, OWNERS OF THE TRACT OF LAND SHOWN HEREON, LOCATED IN TRAVIS COUNTY, TEXAS, AND CONVEYED TO US BY DEED RECORDED IN VOLUME 1500, PAGE 151 OF THE DEED RECORDS OF TRAVIS COUNTY, TEXAS, AND BEING OUT OF THE JOHN SWISSEY SURVEY # 506 IN TRAVIS COUNTY, TEXAS, DO HEREBY SUBDIVIDE 3.32 ACRES OF LAND AND DO HEREBY ADOPT THIS PLAT OR MAP TO BE KNOWN AS "EDWARDS' HILL", AND DO HEREBY DEDICATE TO THE PUBLIC, THE STREETS AND EASEMENTS SHOWN HEREON.

WITNES OUR HANDS THIS THE 8TH DAY OF April A.D., 1975.
R. D. EDWARDS
R. D. Edwards
DELLA EDWARDS
Della Edwards

THE STATE OF TEXAS
COUNTY OF TRAVIS
BEFORE ME THE UNDERSIGNED, ON THIS DAY PERSONALLY APPEARED R. D. EDWARDS AND DELLA EDWARDS, KNOWN TO ME TO BE THE PERSONS WHOSE NAMES ARE SUBSCRIBED TO THE FOREGOING INSTRUMENT AND ACKNOWLEDGED TO ME THAT THEY EXECUTED SAME FOR THE PURPOSES AND CONSIDERATION THEREIN EXPRESSED AND IN THE CAPACITY THEREIN STATED.
GIVEN UNDER MY HAND AND SEAL OF OFFICE THIS THE 8TH DAY OF April A.D., 1975.

ACCEPTED AND AUTHORIZED FOR RECORD
BY THE CITY COUNCIL OF WESTLAKE HILLS, TEXAS, ON THE 12TH DAY OF May A.D., 1975.
ATTEST: *James D. Harmon*
CITY CLERK
NOTARY PUBLIC FOR TRAVIS COUNTY, TEXAS
J. Leroy Bush



NOTE: ALL LOTS IN THIS SUBDIVISION ARE TO BE SUBJECT TO PROVISIONS OF THE CITY OF WESTLAKE HILLS ORDINANCE NO. 108, DATED APRIL 5, 1974. ARTICLE 12.8 OF ORDINANCE NO. 108 GOVERNS THIS SUBDIVISION AS FOLLOWS: "SEPTIC TANKS (OR ANY OTHER PRIVATE SEWERAGE FACILITY) MAY NOT BE USED ON ANY LOT IN THIS SUBDIVISION UNLESS A LICENSE IS FIRST OBTAINED FROM THE CITY OF WESTLAKE HILLS FOR THE PARTICULAR SEPTIC TANK SYSTEM (OR OTHER PRIVATE SEWERAGE FACILITY) AND LOT."

NOTE: AT TIME OF APPLICATION FOR THE APPROVAL OF THIS SUBDIVISION, SATISFACTORY RESULTS HAVE BEEN ESTABLISHED ON THE EXISTING SEPTIC TANK.

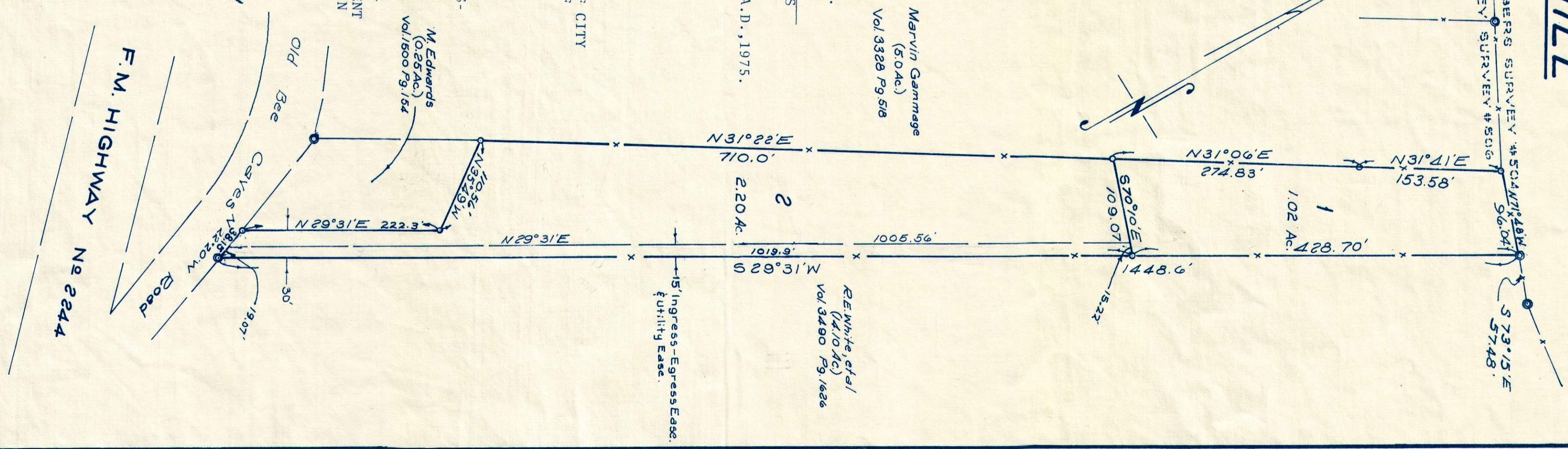
THE STATE OF TEXAS
COUNTY OF TRAVIS
I, DORIS SHROPSHIRE, CLERK OF THE COUNTY COURT WITHIN AND FOR THE COUNTY AND STATE AFORESAID, DO HEREBY CERTIFY THAT WITHIN AND FOREGOING INSTRUMENT OF WRITING WITH ITS CERTIFICATION OF AUTHENTICATION WAS FILE FOR RECORD IN MY OFFICE ON THE 14 DAY OF May A.D., 1975 AT 11:20 O'CLOCK A.M. AND DULY RECORDED ON THE 14 DAY OF May A.D., 1975 AT 11:50 O'CLOCK A.M. IN THE PLAT RECORDS OF SAID COUNTY IN BOOK 72, PAGE 35

WITNESS MY HAND AND SEAL OF THE COURT OF SAID COUNTY THE DATE LAST WRITTEN ABOVE
DEPUTY *Mike Kilgus*
DORIS SHROPSHIRE
CLERK, COUNTY COURT



FILED FOR RECORD ON THE 14 DAY OF May A.D., 1975 AT 11:30 O'CLOCK A.M.
DORIS SHROPSHIRE, CLERK COUNTY COURT, TRAVIS COUNTY, TEXAS.

BY *Mike Kilgus* DEPUTY
NOTE: ALL UNDEVELOPED LOTS IN THIS SUBDIVISION ARE SUBJECT TO ORDINANCE NO. 55 AS AMENDED.



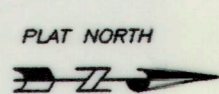
201300243

AMENDED PLAT OF EDWARDS HILL SUBDIVISION

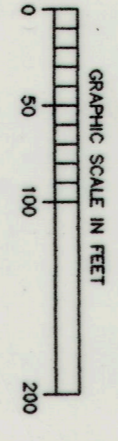
CITY OF WEST LAKE HILLS, TRAVIS COUNTY, TEXAS

THE ZONING CLASSIFICATION FOR THIS TRACT IS R-1

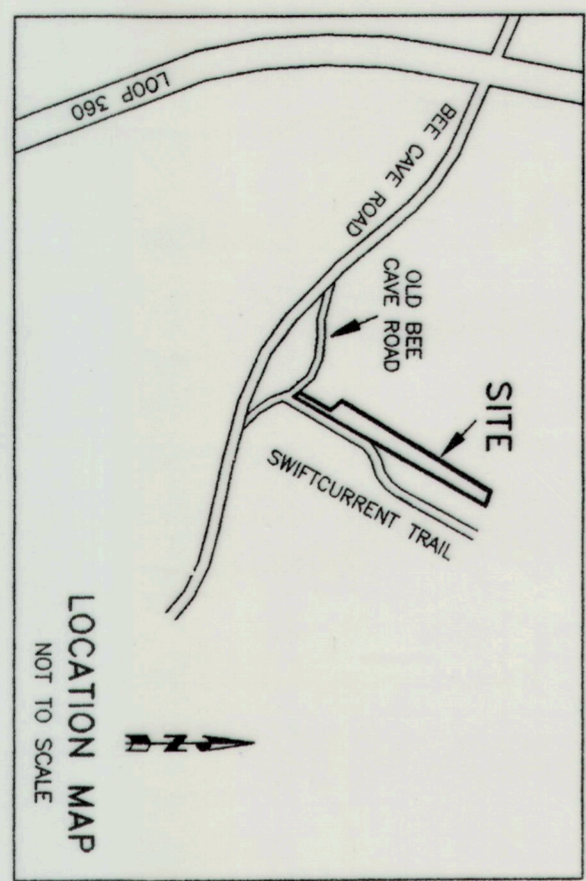
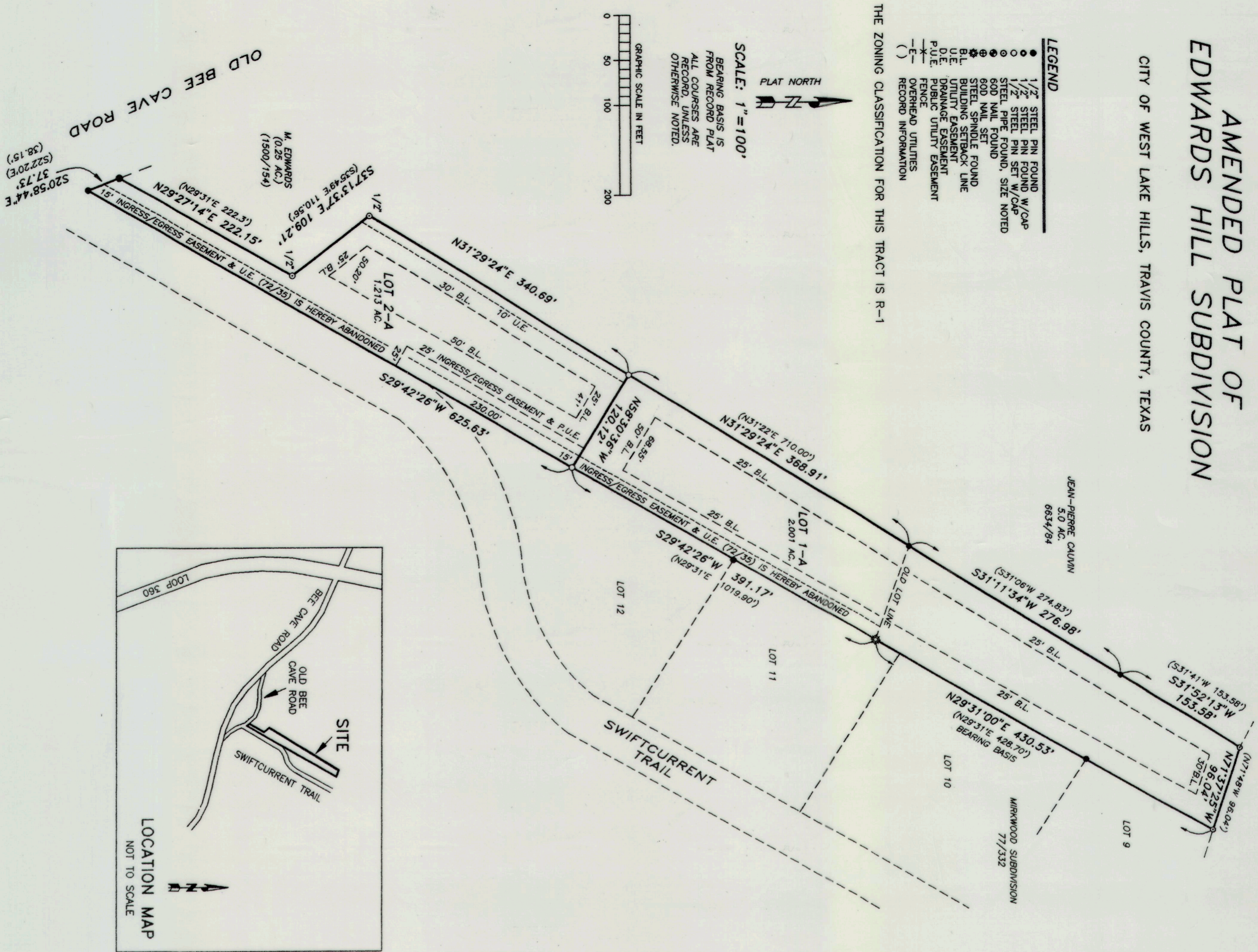
- LEGEND**
- 1/2" STEEL PIN FOUND W/CAP
 - 1/2" STEEL PIN FOUND W/CAP
 - STEEL NAIL FOUND, SIZE NOTED
 - STEEL NAIL FOUND
 - 60D NAIL SET
 - 60D NAIL SET
 - STEEL SPINDLE FOUND
 - BUILDING SETBACK FOUND
 - UTILITY EASEMENT
 - DRAINAGE EASEMENT
 - P.U.E. PUBLIC UTILITY EASEMENT
 - FENCE
 - OVERHEAD UTILITIES
 - RECORD INFORMATION



SCALE: 1" = 100'



BEARING BASIS IS FROM RECORD PLAT ALL COURSES ARE RECORD, UNLESS OTHERWISE NOTED.



STATE OF TEXAS: COUNTY OF TRAVIS: I, Dana Debeauvoir, Clerk of the County Court of Travis County, Texas, do hereby certify that on the _____ day of _____, 2013 A.D., the Commissioners Court of Travis County, Texas, passed an Order authorizing the filing for record of this plat, and that said Order has been entered into the Minutes of Said Court, as Document No. _____, 2013 A.D.

Witness my hand and seal of the office of the County Clerk, this _____ day of _____, 2013 A.D.
 Dana Debeauvoir, County Clerk
 Travis County Texas
 By: _____ Deputy

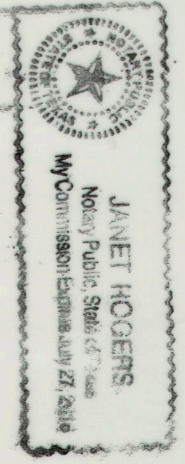
STATE OF TEXAS: COUNTY OF TRAVIS: WHEREAS, 4810 Swiftcurrent, LLC, a Texas Limited Liability Company, acting herein through its Managers, being the owner of 3.214 acres of land out of the John Swissey Survey No. 506, Travis County, Texas, being all of Lot 1 and Lot 2, EDWARDS HILL, a subdivision recorded in Volume 72, Page 35, Plat Records of Travis County, Texas, said Lot 1 being conveyed to it by deed recorded in Document No. 2013039685 and said Lot 2 being conveyed to it by deed recorded in Document No. 2013057823, of the Travis County Official Public Records, NOW, THEREFORE, KNOW ALL MEN BY THESE PRESENTS: That the undersigned owner of the land shown on this plat does hereby amend and rename said Lots 1 and 2 for the sole purpose of relocating the lot lines, pursuant to Section 212.014 of the Local Government Code, in accordance with the map as shown hereon, to be known as AMENDED PLAT OF EDWARDS HILL SUBDIVISION, and do hereby dedicate to the use of the public forever all streets, alleys, parks, watercourses, drains, public easements, and public places thereon shown.

Witness our hands, this 24 day of October 2013.
 4810 Swiftcurrent, LLC
 by: Robert Meisel Manager
 by: Eric Erickson Manager

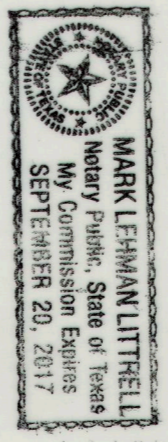
4810 Swiftcurrent, LLC, mailing address:
 800 Forest View Drive
 West Lake Hills, Texas 78746

STATE OF TEXAS: COUNTY OF TRAVIS: This instrument was acknowledged before me on the 24 day of October 2013, by Robert Meisel, as Manager of 4810 Swiftcurrent LLC, on behalf of said company.

Robert Meisel My commission expires 12/27/14
 Notary Public, State of Texas



STATE OF TEXAS: COUNTY OF TRAVIS: This instrument was acknowledged before me on the 24 day of October 2013, by Eric Erickson, as Manager of 4810 Swiftcurrent, LLC, on behalf of said company.
Eric Erickson My commission expires 9/27/17
 Notary Public, State of Texas

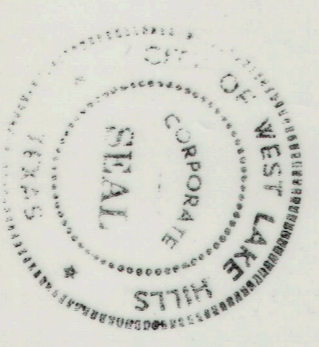


This plat has been submitted to and considered by the Zoning and Planning Commission of the City of West Lake Hills, Texas and is hereby recommended for approval by the City Council.
 Dated this 24 day of October, 2013 A.D.

ZAPCO Chairperson, Robert Meisel

Approved and authorized for record by the City Council of the City of West Lake Hills, Texas.
 Dated this 24 day of October, 2013 A.D.

Janet Hogers Attest: Janet Hogers, City Secretary
 Dave Claunch, Mayor, City of West Lake Hills, Texas



The tract of land described on this plat within the boundaries of Travis County Water Control and Improvement District (WCID) No. 10 and has no service available.
Robert Meisel 11.20.2013
 President of the Board
 Date

I, the undersigned, City Administrator of the City of West Lake Hills, Texas, hereby certify that this subdivision plat conforms to all requirements of the subdivision regulations of the City for which my approval is required.
Robert Wood 27 October 2013
 City Administrator
 City of West Lake Hills, Texas
 Date

I, Dana Debeauvoir, Clerk of the County Court of Travis County, Texas, hereby certify that the foregoing instrument with its Certification of Authentication was filed in my office at 11:04 o'clock A. M. on the 22 day of November, 2013, in the Plat Records of Travis County, Texas, as Document No. 201300243.
 Witness my hand and seal of the office of the County Clerk, this 22 day of November, 2013 A.D.

Dana Debeauvoir, County Clerk
 Travis County Texas
Dana Debeauvoir
 By: _____ Deputy

Timeline and narrative:

In 2013, 4810 Old Bee Caves Road was subdivided by 4810 Swiftcurrent LLC into 2 lots 98 Swiftcurrent and 100 Swiftcurrent. In order to allow access to 100 Swiftcurrent, an access easement was created on 98 Swiftcurrent. The intent was for a shared driveway for 98 and 100.

In December 2013, Catherine and David Wilkes purchased a lot at 98 Swiftcurrent Trail.

In early 2014, Joseph and Ebby Lucas purchased a lot at 100 Swiftcurrent Trail.

In 2019 Tom Edwards purchased a house at 102 Swiftcurrent.

October of 2019, Wilkes began construction on 98 Swiftcurrent.

May of 2022, in preparation for listing his house for sale, Edwards got a new survey of 102 Swiftcurrent. The new survey revealed that the survey used in the sale of 100 Swiftcurrent and 98 Swiftcurrent was incorrect. The permitted and under construction house at 98 Swiftcurrent's driveway now is on 102 Swiftcurrent's property. The Wilkeses approached Edwards to try to purchase the approximately 800 square feet of property to accommodate the original design for the driveway. Edwards would not sell this property to the Wilkes even though to him or future owners of 102 Swiftcurrent, this land was unusable and unbuildable.

The Wilkeses incurred numerous expenses due to the original incorrect survey including plumbing to re-route water lines, architectural fees to move the driveway, additional permit fees, construction management fees, surveys, additional trenching and legal fees. The house at 98 Swiftcurrent was also delayed in construction several months while the homeowners worked out details with the City of Westlake Hills, architects, etc.

Francisco and Katie Rios purchased the house at 102 Swiftcurrent from Edwards in mid-2022.

Today, the Lucases do not have access to the access easement on 98 Swiftcurrent.

All parties have exhausted all efforts to allow the Lucases access to 100 Swiftcurrent.

The current driveway for 98 Swiftcurrent is over 50 feet south of where the original shared driveway was supposed to be located. The Wilkeses designed the house based on an incorrect survey. The majority of the front of the house is glass. If the current driveway serves as access for both 100 and 98, there would be a driveway running parallel to the front of the house for almost the entire length of the house. This would be extremely

disruptive to the owners of 98 Swiftcurrent. It would also require much more paving and disruption to the natural vegetation along with some grading issues.

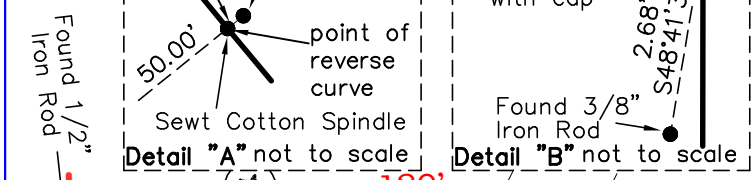
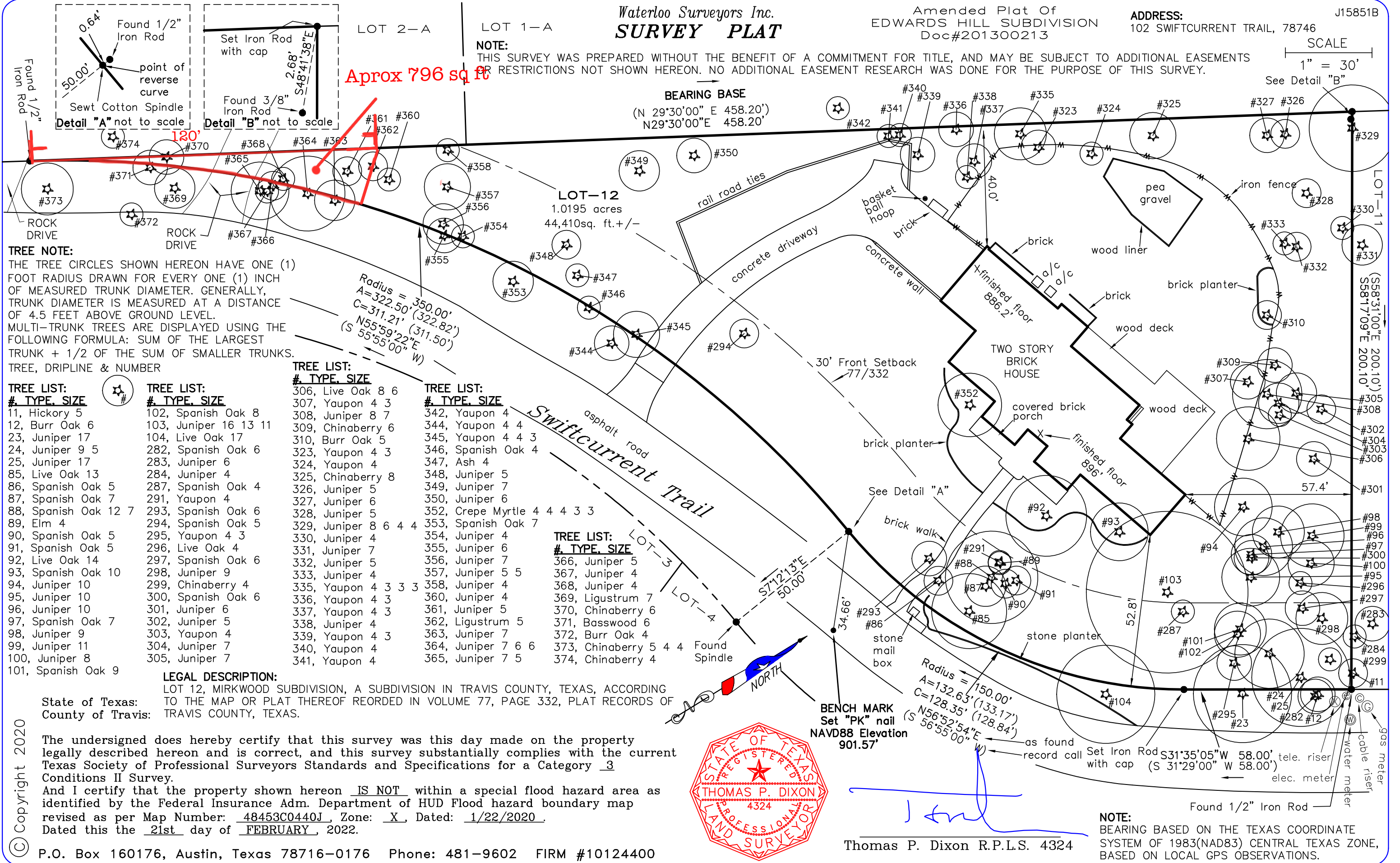
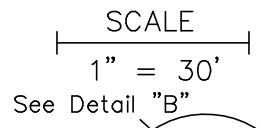
The optimal solution that will minimize grade disruptions and maximize the enjoyment and use of all of the homeowners is to allow for a second driveway for 98 Swiftcurrent. Mr. Rios has agreed to sell approximately 800 square feet to the Wilkeses on the condition that the Wilkeses can get a variance to use that property for a second driveway to allow access for the Lucas family to 100 Swiftcurrent.

Waterloo Surveyors Inc.
SURVEY PLAT

Amended Plat Of
EDWARDS HILL SUBDIVISION
Doc#201300213

ADDRESS:
102 SWIFTCURRENT TRAIL, 78746
J15851B

NOTE:
THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A COMMITMENT FOR TITLE, AND MAY BE SUBJECT TO ADDITIONAL EASEMENTS OR RESTRICTIONS NOT SHOWN HEREON. NO ADDITIONAL EASEMENT RESEARCH WAS DONE FOR THE PURPOSE OF THIS SURVEY.



TREE NOTE:
THE TREE CIRCLES SHOWN HEREON HAVE ONE (1) FOOT RADIUS DRAWN FOR EVERY ONE (1) INCH OF MEASURED TRUNK DIAMETER. GENERALLY, TRUNK DIAMETER IS MEASURED AT A DISTANCE OF 4.5 FEET ABOVE GROUND LEVEL. MULTI-TRUNK TREES ARE DISPLAYED USING THE FOLLOWING FORMULA: SUM OF THE LARGEST TRUNK + 1/2 OF THE SUM OF SMALLER TRUNKS. TREE, DRIPLINE & NUMBER

TREE LIST:

#	TYPE	SIZE
11	Hickory	5
12	Burr Oak	6
23	Juniper	17
24	Juniper	9 5
25	Juniper	17
85	Live Oak	13
86	Spanish Oak	5
87	Spanish Oak	7
88	Spanish Oak	12 7
89	Elm	4
90	Spanish Oak	5
91	Spanish Oak	5
92	Live Oak	14
93	Spanish Oak	10
94	Juniper	10
95	Juniper	10
96	Juniper	10
97	Spanish Oak	7
98	Juniper	9
99	Juniper	11
100	Juniper	8
101	Spanish Oak	9

TREE LIST:

#	TYPE	SIZE
102	Spanish Oak	8
103	Juniper	16 13 11
104	Live Oak	17
282	Spanish Oak	6
283	Juniper	6
284	Juniper	4
287	Spanish Oak	4
291	Yaupon	4
293	Spanish Oak	6
294	Spanish Oak	5
295	Yaupon	4 3
296	Live Oak	4
297	Spanish Oak	6
298	Juniper	9
299	Chinaberry	4
300	Spanish Oak	6
301	Juniper	6
302	Juniper	5
303	Yaupon	4
304	Juniper	7
305	Juniper	7

TREE LIST:

#	TYPE	SIZE
306	Live Oak	8 6
307	Yaupon	4 3
308	Juniper	8 7
309	Chinaberry	6
310	Burr Oak	5
323	Yaupon	4 3
324	Yaupon	4
325	Chinaberry	8
326	Juniper	5
327	Juniper	6
328	Juniper	5
329	Juniper	8 6 4 4
330	Juniper	4
331	Juniper	7
332	Juniper	5
333	Juniper	4
335	Yaupon	4 3 3 3
336	Yaupon	4 3
337	Yaupon	4 3
338	Juniper	4
339	Yaupon	4 3
340	Yaupon	4
341	Yaupon	4

TREE LIST:

#	TYPE	SIZE
342	Yaupon	4
344	Yaupon	4 4
345	Yaupon	4 4 3
346	Spanish Oak	4
347	Ash	4
348	Juniper	5
349	Juniper	7
350	Juniper	6
352	Crepe Myrtle	4 4 4 3 3
353	Spanish Oak	7
354	Juniper	4
355	Juniper	6
356	Juniper	7
357	Juniper	5 5
358	Juniper	4
360	Juniper	4
361	Juniper	5
362	Ligustrum	5
363	Juniper	7
364	Juniper	7 6 6
365	Juniper	7 5

TREE LIST:

#	TYPE	SIZE
366	Juniper	5
367	Juniper	4
368	Juniper	4
369	Ligustrum	7
370	Chinaberry	6
371	Basswood	6
372	Burr Oak	4
373	Chinaberry	5 4 4
374	Chinaberry	4

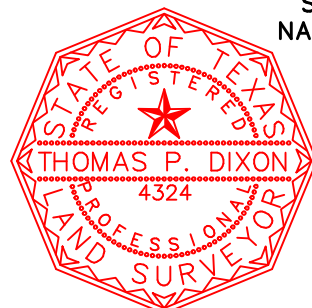
Radius = 350.00'
A = 322.50' (322.82')
C = 311.21' (311.50')
N55°59'22"E
(S 55°55'00" W)

Radius = 150.00'
A = 132.63' (133.17')
C = 128.35' (128.84')
N56°52'54"E
(S 56°55'00" W)

LEGAL DESCRIPTION:
LOT 12, MIRKWOOD SUBDIVISION, A SUBDIVISION IN TRAVIS COUNTY, TEXAS, ACCORDING TO THE MAP OR PLAT THEREOF RECORDED IN VOLUME 77, PAGE 332, PLAT RECORDS OF State of Texas: Travis County, Texas.

The undersigned does hereby certify that this survey was this day made on the property legally described hereon and is correct, and this survey substantially complies with the current Texas Society of Professional Surveyors Standards and Specifications for a Category 3 Conditions II Survey. And I certify that the property shown hereon IS NOT within a special flood hazard area as identified by the Federal Insurance Adm. Department of HUD Flood hazard boundary map revised as per Map Number: 48453C0440J, Zone: X, Dated: 1/22/2020. Dated this the 21st day of FEBRUARY, 2022.

P.O. Box 160176, Austin, Texas 78716-0176 Phone: 481-9602 FIRM #10124400



BENCH MARK
Set "PK" nail
NAVD88 Elevation
901.57'

Thomas P. Dixon R.P.L.S. 4324

NOTE:
BEARING BASED ON THE TEXAS COORDINATE SYSTEM OF 1983(NAD83) CENTRAL TEXAS ZONE, BASED ON LOCAL GPS OBSERVATIONS.

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Waterloo Surveyors

SURVEY PLAT

As-Built Survey

OWNER:
CATHERINE WILKES & DAVID WILKES

ADDRESS:
98 SWIFTCURRENT TRAIL 78746

LEGEND
 RECORD CALL ()
 BUILDING SETBACK LINE B.L.
 PUBLIC UTILITY EASEMENT P.U.E.
 INGRESS / EGRESS EASEMENT I.E.
 FOUND IRON ROD FIR ●
 WASTE WATER MANHOLE WW ●
 ELECTRIC MANHOLE E ●

ELECTRIC METER (E)
 WATER TANK (S)
 SEPTIC LID (S)
 UTILITY POLE/GUY ANCHOR (P)
 UTILITY LINE (P-P-P-P-P-P)
 WOOD FENCE (d)
 SIGN POST (W)
 WATER METER (W)

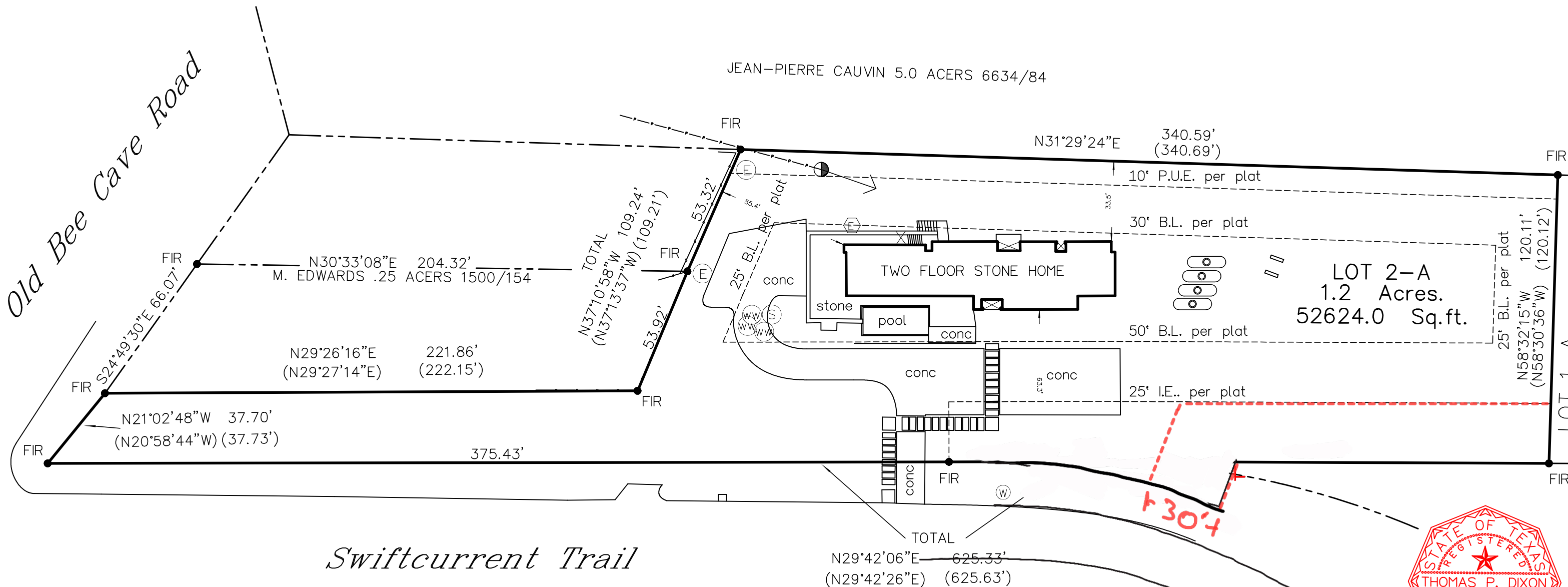
A1232

SCALE

1" = 40'

LEGAL DESCRIPTION:

LOT 2-A, AMENDED PLAT OF EDWARDS HILL SUBDIVISION, A SUBDIVISION IN TRAVIS COUNTY, TEXAS, ACCORDING TO THE MAP OR PLAT THEREOF RECORDED AS DOCUMENT NO. 201300243, OFFICIAL PUBLIC RECORDS OF TRAVIS COUNTY, TEXAS.



New property lines and easement proposal

NOTE:

THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A COMMITMENT FOR TITLE, AND MAY BE SUBJECT TO ADDITIONAL EASEMENTS OR RESTRICTIONS NOT SHOWN HEREON. NO ADDITIONAL EASEMENT RESEARCH WAS DONE FOR THE PURPOSE OF THIS SURVEY.

State of Texas:
County of Travis:

The undersigned does hereby certify that this survey was this day made on the property legally described hereon and is correct, and this survey substantially complies with the current Texas Society of Professional Surveyors Standards and Specifications for a Category 1B Conditions II Survey.

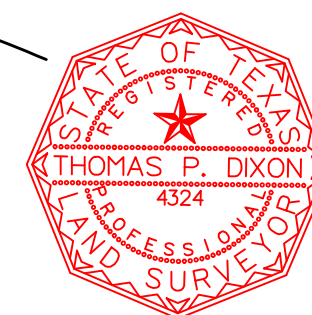
And I certify that the property shown hereon IS NOT within a special flood hazard area as identified by the Federal Insurance Adm. Department of HUD Flood hazard boundary map revised as per Map Number: 48453C0440J, Zone: X, Dated: 1/22/2020.

Dated this the 7TH day of APRIL, 2023.

P.O. Box 160176, Austin, Texas 78716-0176

Phone: 481-9602 FIRM #10124400

Thomas P. Dixon R.P.L.S. 4324



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Waterloo Surveyors

SURVEY PLAT

As-Built Survey

OWNER:
CATHERINE WILKES & DAVID WILKES

ADDRESS:
98 SWIFTCURRENT TRAIL 78746

LEGEND
 RECORD CALL ()
 BUILDING SETBACK LINE B.L.
 PUBLIC UTILITY EASEMENT P.U.E.
 INGRESS / EGRESS EASEMENT I.E.
 FOUND IRON ROD FIR ●
 WASTE WATER MANHOLE WW ●
 ELECTRIC MANHOLE E ●

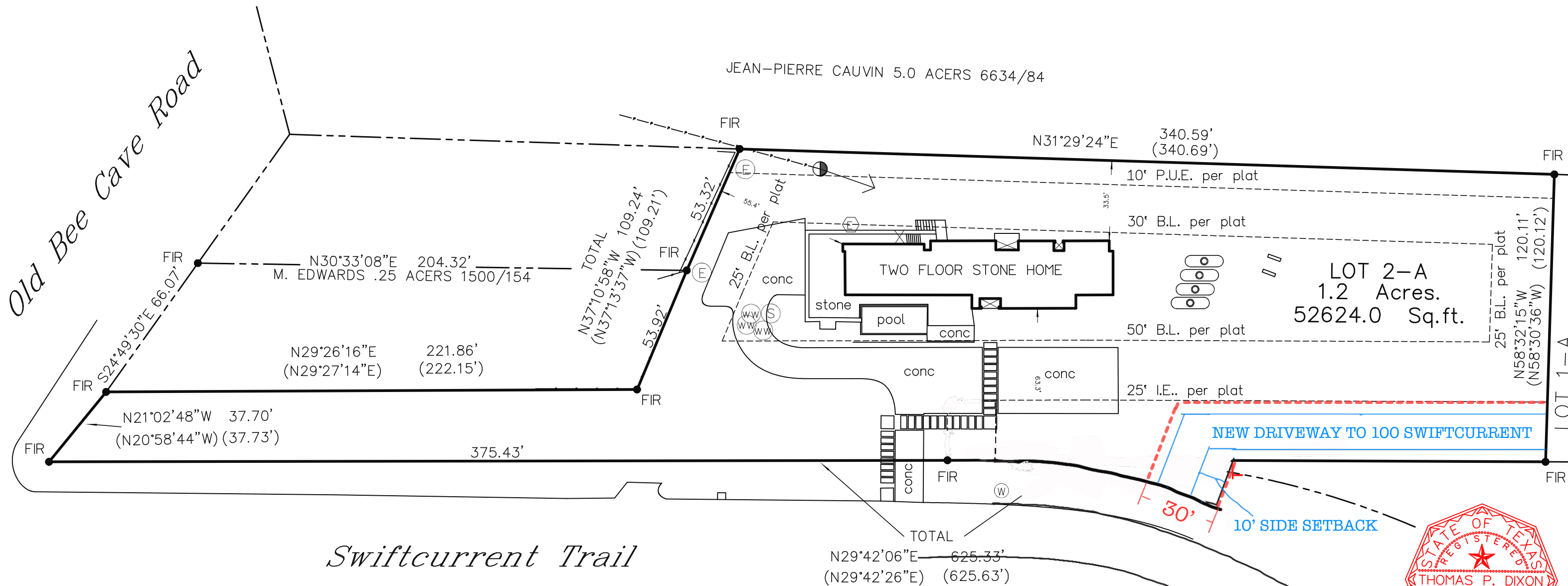
ELECTRIC METER (E)
 WATER TANK (S)
 SEPTIC LID (S)
 UTILITY POLE/GUY ANCHOR (P)
 UTILITY LINE (P-P-P-P-P-P)
 WOOD FENCE (dashed line)
 SIGN POST (W)
 WATER METER (W)

A1232

SCALE
1" = 40'

LEGAL DESCRIPTION:

LOT 2-A, AMENDED PLAT OF EDWARDS HILL SUBDIVISION, A SUBDIVISION IN TRAVIS COUNTY, TEXAS, ACCORDING TO THE MAP OR PLAT THEREOF RECORDED AS DOCUMENT NO. 201300243, OFFICIAL PUBLIC RECORDS OF TRAVIS COUNTY, TEXAS.



New property lines and easement proposal

NOTE:
THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A COMMITMENT FOR TITLE, AND MAY BE SUBJECT TO ADDITIONAL EASEMENTS OR RESTRICTIONS NOT SHOWN HEREON. NO ADDITIONAL EASEMENT RESEARCH WAS DONE FOR THE PURPOSE OF THIS SURVEY.

State of Texas:
County of Travis:

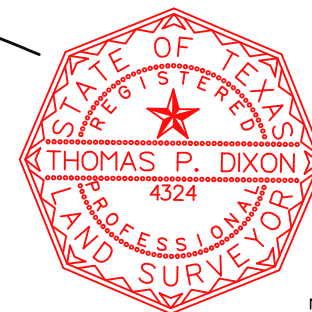
The undersigned does hereby certify that this survey was this day made on the property legally described hereon and is correct, and this survey substantially complies with the current Texas Society of Professional Surveyors Standards and Specifications for a Category 1B Conditions II Survey.

And I certify that the property shown hereon IS NOT within a special flood hazard area as identified by the Federal Insurance Adm. Department of HUD Flood hazard boundary map revised as per Map Number: 48453C0440J, Zone: X, Dated: 1/22/2020.

Dated this the 7TH day of APRIL, 2023.

P.O. Box 160176, Austin, Texas 78716-0176 Phone: 481-9602 FIRM #10124400

Thomas P. Dixon R.P.L.S. 4324



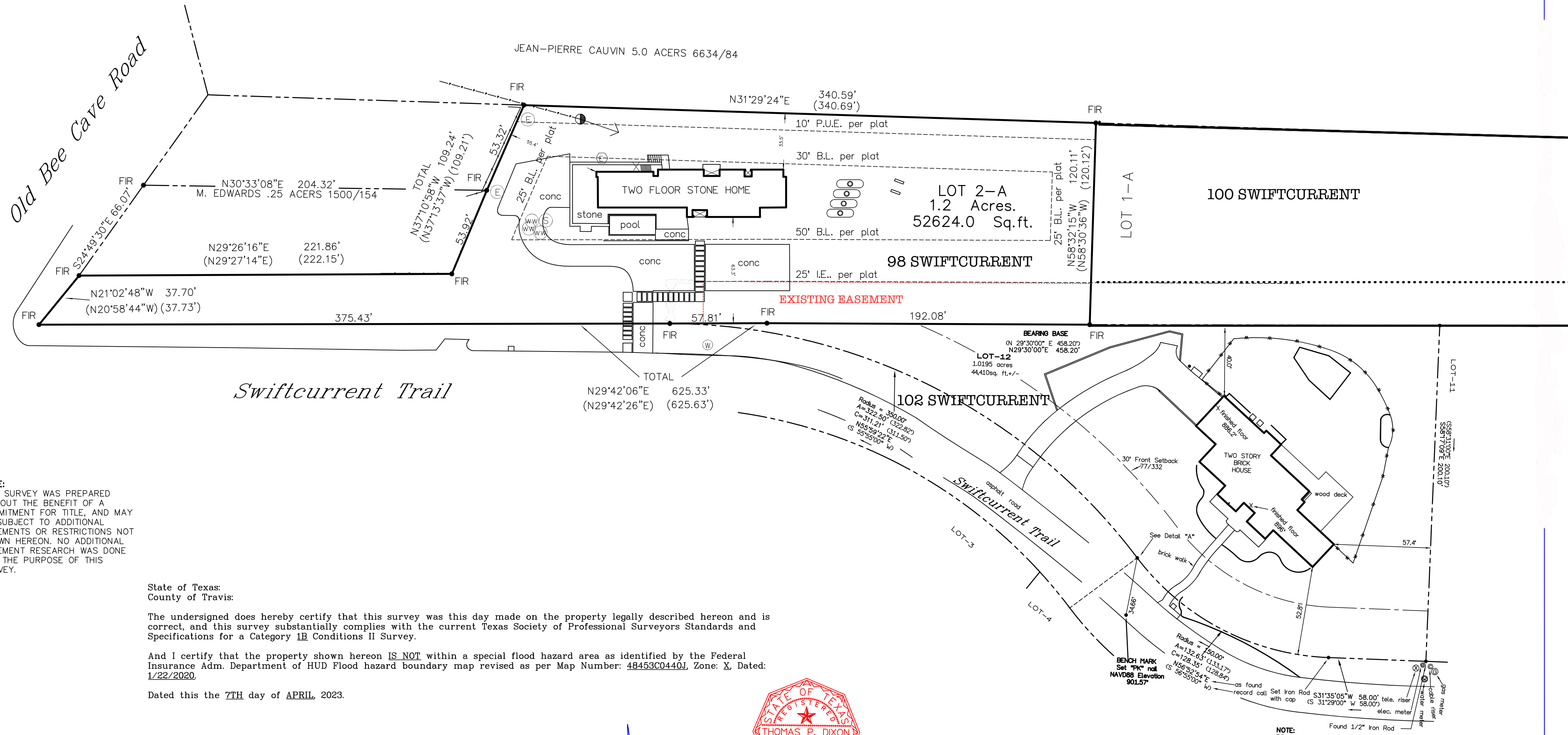
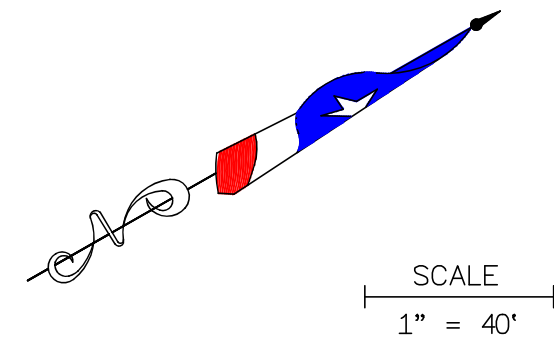
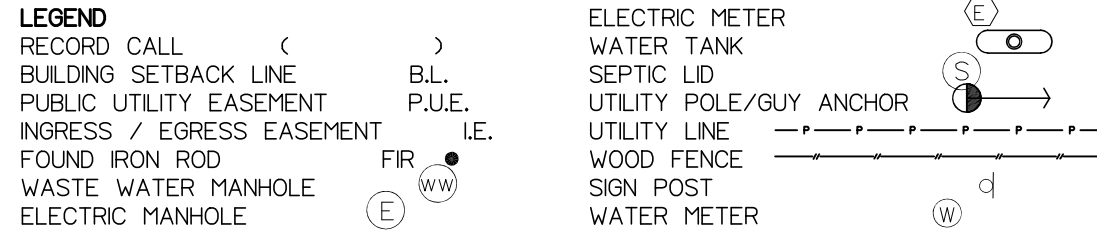
[Handwritten Signature]

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Waterloo Surveyors
SURVEY PLAT
As-Built Survey

OWNER:
 CATHERINE WILKES & DAVID WILKES

ADDRESS:
 98 SWIFTCURRENT TRAIL 78746



NOTE:
 THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A COMMITMENT FOR TITLE, AND MAY BE SUBJECT TO ADDITIONAL EASEMENTS OR RESTRICTIONS NOT SHOWN HEREON. NO ADDITIONAL EASEMENT RESEARCH WAS DONE FOR THE PURPOSE OF THIS SURVEY.

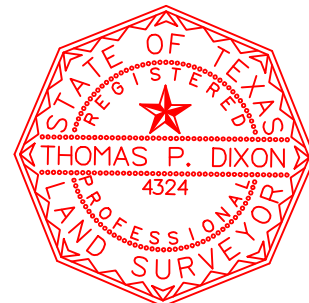
State of Texas:
 County of Travis:

The undersigned does hereby certify that this survey was this day made on the property legally described hereon and is correct, and this survey substantially complies with the current Texas Society of Professional Surveyors Standards and Specifications for a Category 1B Conditions II Survey.

And I certify that the property shown hereon is NOT within a special flood hazard area as identified by the Federal Insurance Adm. Department of HUD Flood hazard boundary map revised as per Map Number: 48453C0440J, Zone: X, Dated: 1/22/2020.

Dated this the 7TH day of APRIL, 2023.

[Signature]
 Thomas P. Dixon R.P.L.S. 4324



NOTE:
 BEARING BASED ON THE TEXAS COORDINATE SYSTEM OF 1983(NAD83) CENTRAL TEXAS ZONE, BASED ON LOCAL GPS OBSERVATIONS.

Exhibit A

102 Swiftcurrent Driveway Variance

Applicant's Findings of Fact

1. The strict or literal enforcement of the terms of this chapter, because of special conditions, will result in unnecessary hardship to the applicant.

Allow access to 100 Swiftcurrent Trail as 98 Swiftcurrent Trail is unable to provide driveway access to 100 Swiftcurrent Trail because of conditions of the real estate, as detailed below.

2. There will not be unreasonable disruption of the natural terrain or unreasonable destruction of existing flora.

The west portion of 102 Swiftcurrent is relatively flat and the driveway would follow the existing contours.

3. There is no reasonable alternative to the requisite variance that will alleviate the difficulty or hardship complained of.

98 Swiftcurrent has exhausted all options to provide an easement to 100 Swiftcurrent. Because of the construction and slope of the driveway, 98 Swiftcurrent is unable to provide an easement. Therefore, the driveway shall be provided on 102 Swiftcurrent

4. The variance will not be greater than the minimum required to alleviate the difficulty or hardship complained of.

The proposed variance would minimally disturb the vegetation and allow for the safest solution to providing an ingress and egress to 100 Swiftcurrent Trail.

5. The variance does not violate the intent of the Zoning Ordinance or goals of the Comprehensive Plan.

The variance maintains the aesthetic integrity of the property and the surrounding area.

6. The variance will not adversely affect neighboring properties or interfere with the enjoyment of these properties by their owners.

The additional driveway will allow access to 100 Swiftcurrent. This will not disturb the neighbors or affect the enjoyment of their properties.