Attachment 12



D	IR	E	С	T	0	R	S:
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Christopher M. Mazzia	Donald J. Black	Michael Shklovsky
Daniel E. Post	Lisa Yoshida	Kenneth R. Cyphers
Catherine J. Banti	Robert S. Rutherfurd	Daniel J. Wilson

ASSOCIATES:

David G. Bjornstrom Laney C. Rooks Rose M. Zoia Kayla M. Grant

February 5, 2021

VIA E-MAIL only (pcisco@srcityorg, kweeks@srcity.org, ccarter@srcity.org, akalia@srcity.org, vduggan@srcity.org, jokrepkie@srcity.org, jpeterson@srcity.org)

Chair Patti Cisco and Commissioners City of Santa Rosa Planning Commission Santa Rosa City Hall 100 Santa Rosa Avenue Santa Rosa CA 95404

> Re: 1900 Brush Creek Road Building Permit B20-6871 Lichau, Amber and Daniel Hearing Date: February 25, 2021 Our File No.: 43501A

Dear Chair Cisco and Commissioners:

This firm represents Amber and Daniel Lichau in this matter. We would like to take this opportunity to inform the Commission on the background on the original construction of the addition of the residence at issue and removal of the tree, and emphasize the soundness of the Director's decision and reasoning and staff's recommendation.

Background

In July 2019, the Lichau's purchased their property at 1900 Brush Creek Road, Santa Rosa. The property is one-half acre and was developed with a 1,836 square foot residence and detached garage when they purchased it. It is part of a three-lot subdivision established by final Parcel Map No. 609 recorded on June 11, 2002 (the "final map"), a copy of which is attached as Exhibit A. This young family, consisting of Amber and Daniel, both first responders (Amber is a nurse and Daniel is a Napa Deputy Sherriff), and their two small children, purchased their dream property and wished to add on to the existing residence to accommodate their family.

> The Lichaus diligently hired consultants, including Ivan Rezvoy, and Mike Robertson, Robertson Engineering, Inc., to assist them with the process and assure compliance with city codes and procedures. In 2019, Mr. Rezvoy prepared a Site Plan depicting the 360 square foot (12'x30') master bath and bedroom addition to the north side of the home adjacent to a shared driveway easement. (Exhibit B) Also in October 2019, Mr. Rezvoy had a phone conversation with City Assistant Engineer Jesus McKeag and followed up with an email dated October 8, 2019, explaining that the building envelope shown on Sheet 4 of the final map (Exhibit A) does not define the distance of its northern boundary from the property line and Final Subdivision Report of June 21, 2000 does not mention this boundary at all. Sheet 4 is "for informational purposes only, describing conditions as of filing and is not intended to affect recording interest." (Note # 1, Exhibit A)

> In a response email dated October 9, 2019, Mr. McKeag wrote "[b]ased on the [final] Map and Site Plan I don't see that the Engineering division would object to the addition proposed. I am also addressing Monet who is our Counter Planner. Building setback lines are the purview of the Planning Division." In an email dated October 15, 2019, City Planner Monet Sheikhali responded that: "Planning has reviewed your request and it has been determined that the new addition needs to comply with the required setbacks for R-1-15-SR zoning district per Section 20-22.050. No need to apply the setbacks [aka building envelope] being shown on the supplemental sheet" of the final map. (A copy of this email thread is attached as Exhibit C.)

> Due to misinformation given the Lichaus, who had no prior experience with building a home or addition, seeking permits, or a governmental land use authority, they proceeded with construction of the addition, which also required the removal of a redwood tree, without seeking a building permit from the City. The Lichaus were told by a neighbor who presented as knowledgeable that they did not need a permit up front, that the City is very busy, and that they could build the addition according to code and obtain the permit afterwards. The Lichaus had no reason to believe otherwise, and fully intended on seeking the permit post-construction.

> Once the addition was nearly completed an individual submitted a complaint to code enforcement regarding the construction of the addition. A photo of the residence with the addition is attached as Exhibit D. The view is from the corner of Brush Creek Road and the driveway easement looking east. The addition starts approximately three (3) feet to the left of the light that is mounted next to the window and ends before the fence, thus seamlessly connecting to the original house.

In a letter to the City dated October 15, 2020, Mr. Robertson wrote, "'[p]er Monet's October 15, 2020 [sic – 2019] email: ...addition needs to comply with the

required setbacks for R-1-15-SR Zoning District per Section 20-22.050. No need to apply the setbacks being shown on the Supplemental Sheet.' [¶] ..., we have concluded that, in our professional opinion, and based upon our research that the addition meets City requirements." (Exhibit E)

The City agreed and in an email dated December 7, 2020, Jesse Oswald advised the Lichaus that the addition complies with all applicable Zoning Code regulations and, "to facilitate application for the legalization of the addition," planning staff determined the unpermitted addition can be permitted and the building setback lines (aka building envelope) placed on Sheet 4 of the final map are not enforceable. Mr. Oswald advised the Lichaus they were required to submit plans and specifications adhering to the "As-Built" process, pay additional fees due to the work without a permit, and pay a Stop Work Order Removal Fee. (Exhibit F)

Mr. Oswald further stated that planning staff determined that the tree that was removed would have been approved for removal in accordance with the Tree Ordinance and the Lichaus would be required to mitigate the loss of the tree either by planting 26 Coast Redwood trees, each a minimum of 15-gallon container size or, if the site cannot accommodate the replacement trees, the trees would be planted on public property or the City may accept an in-lieu payment of \$2,600 which payment would be used for tree-related educational projects and/or City planting programs.

The Lichaus were and are fully cooperative with all of these directives and, on December 8, 2020, submitted their extensive permit application including a site plan showing the addition within the setbacks required by city code.

On December 14, 2020, Kathleen Parnell filed an appeal of decision of the Planning and Economic Development Department's decision ostensibly made on December 4, 2020. There was no decision on December 4, 2020; presumably Ms. Parnell is referring to Mr. Oswald's December 7, 2020 email.

The grounds for appeal are framed as follows:

 Per CBO (J. Oswald), the unpermitted home addition on frontage Scenic Brush Creek Rd is now able to be permitted because "building setback lines placed on the Final Map Supplemental sheet are not enforceable." I disagree. This is a zoning code violation, whereby a property set-back (building envelope) is being voided to enable an illegal build.

- 2. A redwood heritage tree was removed on frontage Brush Creek in a scenic set-back and outside a building envelope to enable illegal build. Per CBO, this "would have been approved for removal in-accordance [sic] with the Tree Ordinance." I disagree.
- (No. 1 on second page) Zoning code violation Home addition of 12'x30' with 9'x30' through a building envelope. Per CBO (J. Oswald), the building envelope was removed by the City to enable the legalization of the unpermitted build and removal of a heritage tree.

Statement

In the first instance, the addition is not on the frontage of Brush Creek Road (# 1 above) and, thus, the redwood tree was not removed on the road frontage (# 2 above). The addition fronts the driveway easement on the north side of the Lichaus' property. Brush Creek Road lies on the west side of the property. Ms. Parnell's lot is on the east side of the Lichaus so that the Lichaus' lot is in between Ms. Parnell's and Brush Creek Road.

Second, the building envelope depicted on Sheet 4 of the final map was not "removed by the City" to allow permitting of the addition and removal of the tree. Sheet 4 is "for informational purposes only, describing conditions as of filing and is not intended to affect recording interest." (Note # 1) The Subdivision Map Act states that a city may

(a)... by ordinance, require additional information to be filed or recorded simultaneously with a final or parcel map. The *additional information shall be in the form of* a separate document or *an additional map sheet* which shall indicate its relationship to the final or parcel map, *and shall contain a statement that the additional information is for informational purposes*, describing conditions as of the date of filing, and is not intended to affect record title interest. The document or additional map sheet may also contain a notation that the *additional information is derived from public records or reports, and does not imply the correctness or sufficiency of those records or reports* by the preparer of the document or additional map sheet.

(b) Additional survey and map information may include, but need not be limited to: building setback lines, flood hazard zones, seismic lines and setbacks, geologic mapping, and archaeological sites.

(Gov. Code § 66434.2, emphasis supplied) City Code section 19-32.150 provides:

> Additional information, as set forth in this section, shall be required to be submitted on an additional map sheet which shall be identified as the information sheet and which shall indicate its relationship to the parcel map, and shall contain a statement that *the additional information is for informational purposes*, describing conditions as of the date of filing, and is not intended to affect record title interest.

[Emphasis supplied]

City Code section 20-22.050, on the other hand, sets forth the required setbacks for the R-1-15-SR Zoning District, and section 20-28.050 establishes the scenic road setbacks. The addition complies with all required setbacks.

The Lichaus are in agreement with and support the City's determination that the addition can be permitted and the loss of the tree mitigated. The Lichaus are prepared to move forward with finalizing the construction of their family home and respectfully request this Commission deny the appeal in its entirety.

Thank you for your considered attention to this matter.

Sincerely,

Rose M. Zoia

Rose M. Zoia

RMZ/tc Attachments cc: Amber and Daniel Lichau (via email) Andrew Trippel (via e-mail <u>atrippel@srcity.org</u>) Bill Rose (via email <u>wrose@srcity.org</u>) Jesse Oswald (via e-mail joswald@srcity.org)

CITY ENGINEER'S CERTIFICATE

I, Anthony A. Cabrera, City Engineer, in and for the City of Santa Rosa, State of California, have examined the map of this subdivision and found it to substantially conform to the tentative map approved June 21, 2000, and any approved alterations thereof, The applicable conditions of approval of the Tentative Map, the State Subdivision Map Act and and the applicable provisions of Title 19 of the Santa Rosa City Code and am satisfied that the map is technically correct. I hereby approve the subdivision shown upon this map and accept, subject to improvement, for public use the public utility easement, public sewer easement, and relinquishment of vehicular access rights, as shown on said map, within said subdivision, including all public facilities as shown on City Engineer drawing number 2002-30.

Dated 5/30 2002

Anthony A. Cabrera, P.L.S. 7332 City Engineer, City of Santa Rosa State of California Expires 12-31-2005

SURVEYOR'S STATEMENT

This map was prepared by me or under my direction and is based upon a field survey in conformance with the requirements of the Subdivision Map Act and local ordinance at the request of Michael G. Dehnert in July. 2000.

I hereby state that this parcel map substantially conforms to the approved or conditionally approved tentative map, if any, and monuments shown hereon will be set within one year from the date of filing of this map and said monuments are or will be sufficient to enable the survey to be retraced.

MIKE BUTI MIKE BUTI Licensed Land Surveyor LS 5092 Expires 6-30-03

COUNTY CLERK'S CERTIFICATE

I certify that all bonds, money or negotiable bonds required under the provisions of the Subdivision Map Act to secure payment of taxes and assessments have been filed with, and approved by, the Board of Supervisors of the County of Sonoma, namely; bond(s) under Government Code Sections 66493(a) and 66493(c) in the sums of \$5.600.00 and \$ - , respectively.

IN WITNESS THEREOF, I have hereunto set my hand and affixed my official seal this 7th day of June , 2002.

Clerk of the Board of Sapervisors County of Sonoma

State of California

CITY AUDITOR'S CERTIFICATE

I, Ronald L. Bosworth, Director of Administrative Services in and for the City of Santa Rosa, State of California, do hereby certify that there are no special assessments against said tract of land that are unpaid except for special assessments estimates to total \$ which constitute a lien against the property but which are not yet due and payable and can or maybe paid in full

Dated_____, 2002

Director of Administrative Service City of Santa Rosa State of California

RECORDER'S CERTIFICATE

Filed this 11th day of June, 2002, at 13:31P.m. in Book 1035 of Maps, Page 4-1, at the request of Anthony A. Cabrera, City Engineer, City of Santa Rosa.

	EEVE T. LEWIS
	County Recorder County of Sonoma, State of Califor
Fee: \$ 14 32	By: Detr Gilliam
Document No.	02-90208

FIRST AMERICAN TITLE COMPANY

COUNTY TAX COLLECTOR'S CERTIFICATE

According to the records in the office of the undersigned, there are no liens against this subdivision, or any part thereof, for unpaid state, county, municipal of local taxes or special assessments collected as taxes, except taxes or special assessments collected as taxes not yet payable. My estimate of taxes and special assessments collected as taxes not yet payable is ______

The land in said subdivision is not subject to special assessment or bond which may be paid in full.

Dated: 6/7/02

Lin. 47832



OWNER'S STATEMENT

We hereby state that we are the sole owners of and have the right, title and interest in and to the real property included within the subdivision shown upon this map and are the only persons whose consent is necessary to pass clear title to said property and we consent to the making and filing of said map of the subdivision shown within the border lines and hereby dedicate for public use the public utility easement, public sewer easement, and relinguishment of vehicular access rights, as shown on said map within said subdivision.

-

NOTARY PUBLIC CERTIFICATE State of California

S.S. County of Sonoma

On March 34, Low before me, E. Marting a Notary Public in and for said County and State, personally appeared

Michael G. Dehvert and SHARONT. DEHVENT

personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instruments and acknowledged to me that he/she/they executed the same in his/she/their authorized capacity(ies), and that by his/she/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand

RECORD TITLE INTEREST NOTE

Signatures of owners of the following easements have been omitted under the provisions of section 66445 of the Subdivision Map Act, their interest is such that it cannot ripen into a fee title and such signatures are not required by the governing body:

NAMES	RECORDED	NATURE OF EASEMENT
PG & E AND PACIFIC BELL	1993-0091035	UNDERGROUND UTILITIES
MARY DEADMAN	2001-149532	DRAINAGE, ROAD & UTILITIES
TIMOTHY FAWCETT	2002-016716	DRAINAGE

nonhallsin

County of Sonoma, State of California

Commission No. 1183 881 Commission Expires. 5/26/62

TRUSTEE'S CERTIFICATE

GOLDEN WEST SAVINGS ASSOCIATION SERVICE CO., a California corporation as trustee under Deed of Trust recorded December 31, 2001 as instrument No. 2001-181130, Official Records of Sonoma County. hereby consent to the making and filing of this map.

GOLDEN WEST SAVINGS ASSOCIATION SERVICE CO., a California corporation

By: nett Sandes and Nous Cormie

NOTARY PUBLIC CERTIFICATE

State of Galifornia BBXAR S.S. County of Sonoma

APRIL 30, 2002 before me.

JEAN CRIST YATES

a Notary Public in and for said County and State, personally appeared

NETT SANDERS DORIS CORMIER

personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instruments and acknowledged to me that he/she/they executed the same in his/she/their authorized capacity(ies), and that by his/she/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand

Commission No. 124074615 Commission Expires. 12-20-2005

PARCEL MAP NO. 609

LANDS OF MICHAEL G. DEHNERT AND SHARON T. DEHNERT. PER DOC. NO. 1998-0156979 SONOMA COUNTY RECORDS. BEING A PORTION OF RANCHO CABEZA DE SANTA ROSA

4 LOTS. 1.27 ACRES

CITY OF SANTA ROSA, COUNTY OF SONOMA STATE OF CALIFORNIA

> MIKE BUTI LAND SURVEYOR SONOMA, CALIFORNIA MAY 30, 2001

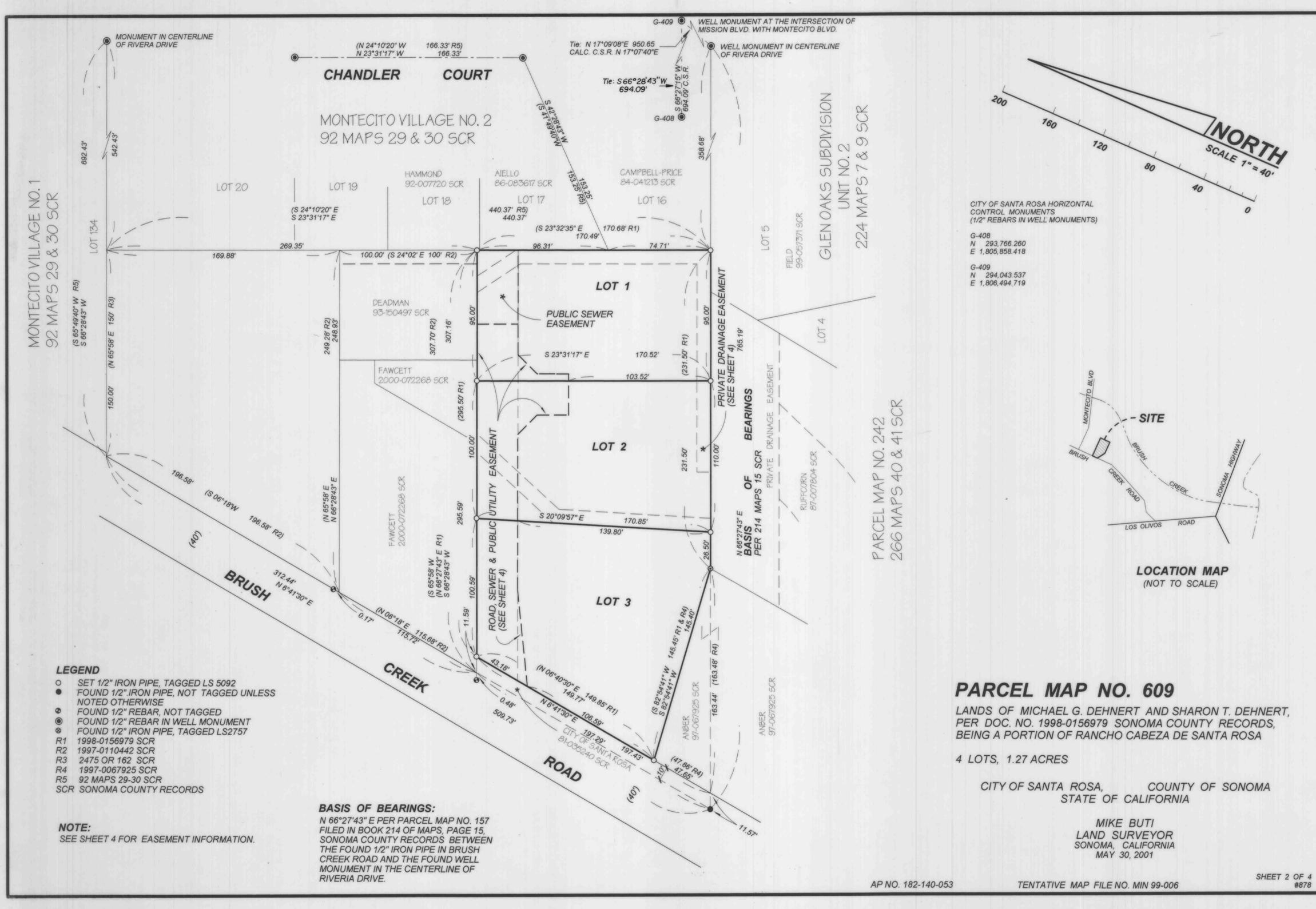
AP NO. 182-140-053

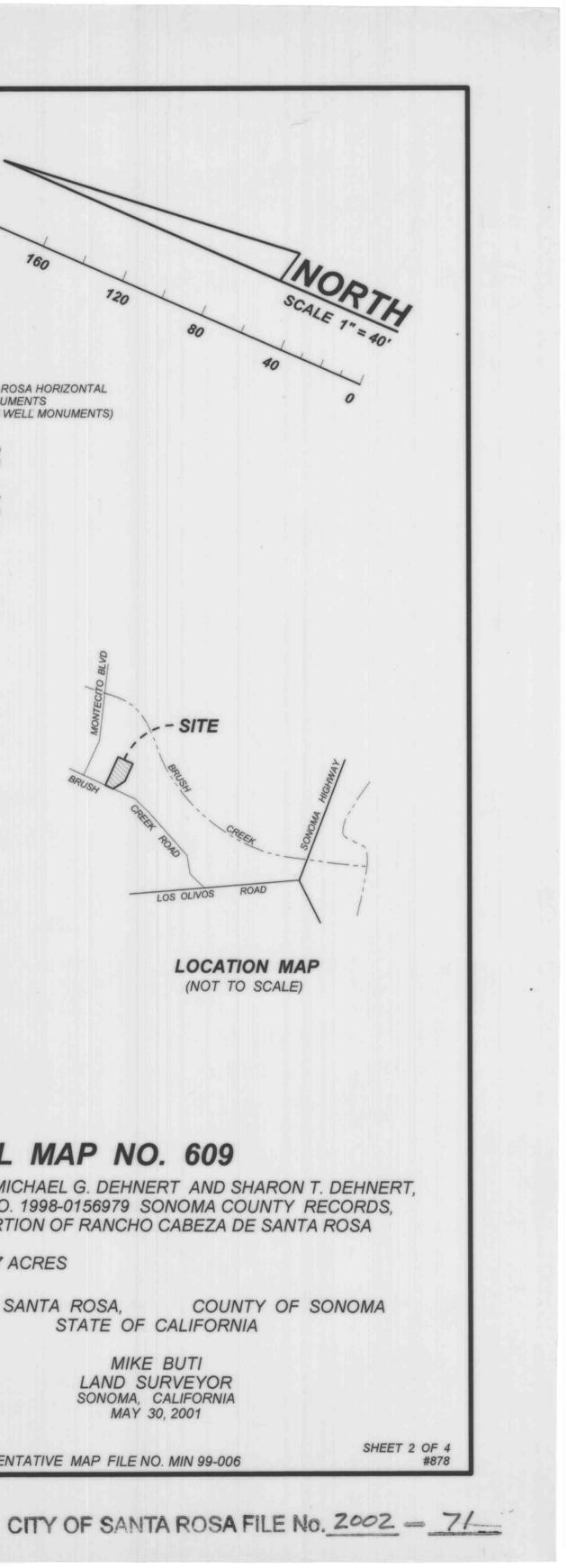
TENTATIVE MAP FILE NO. MIN 99-006

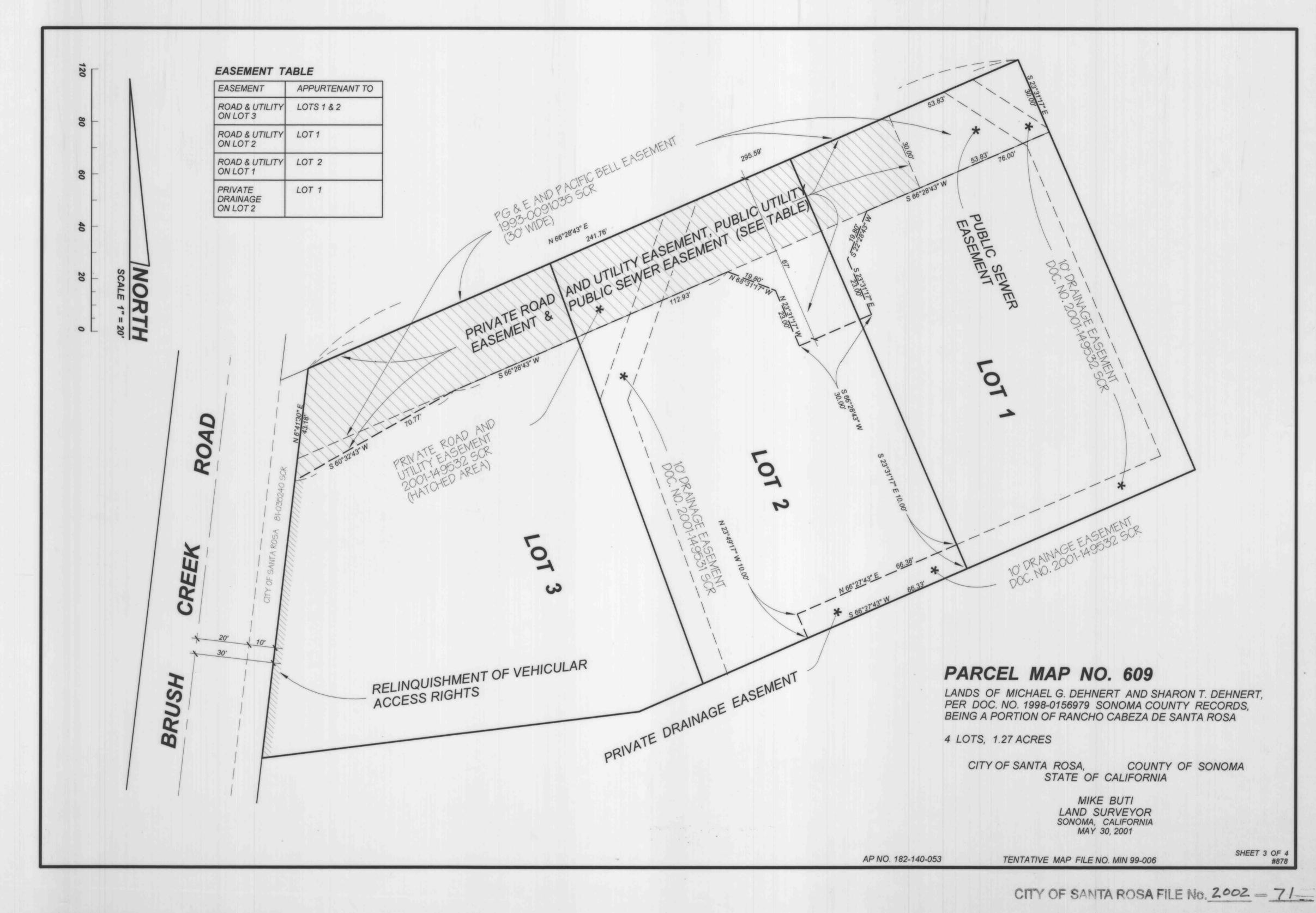
SHEET 1 OF 4

CITY OF SANTA ROSA FILE No. 2002 - 71-

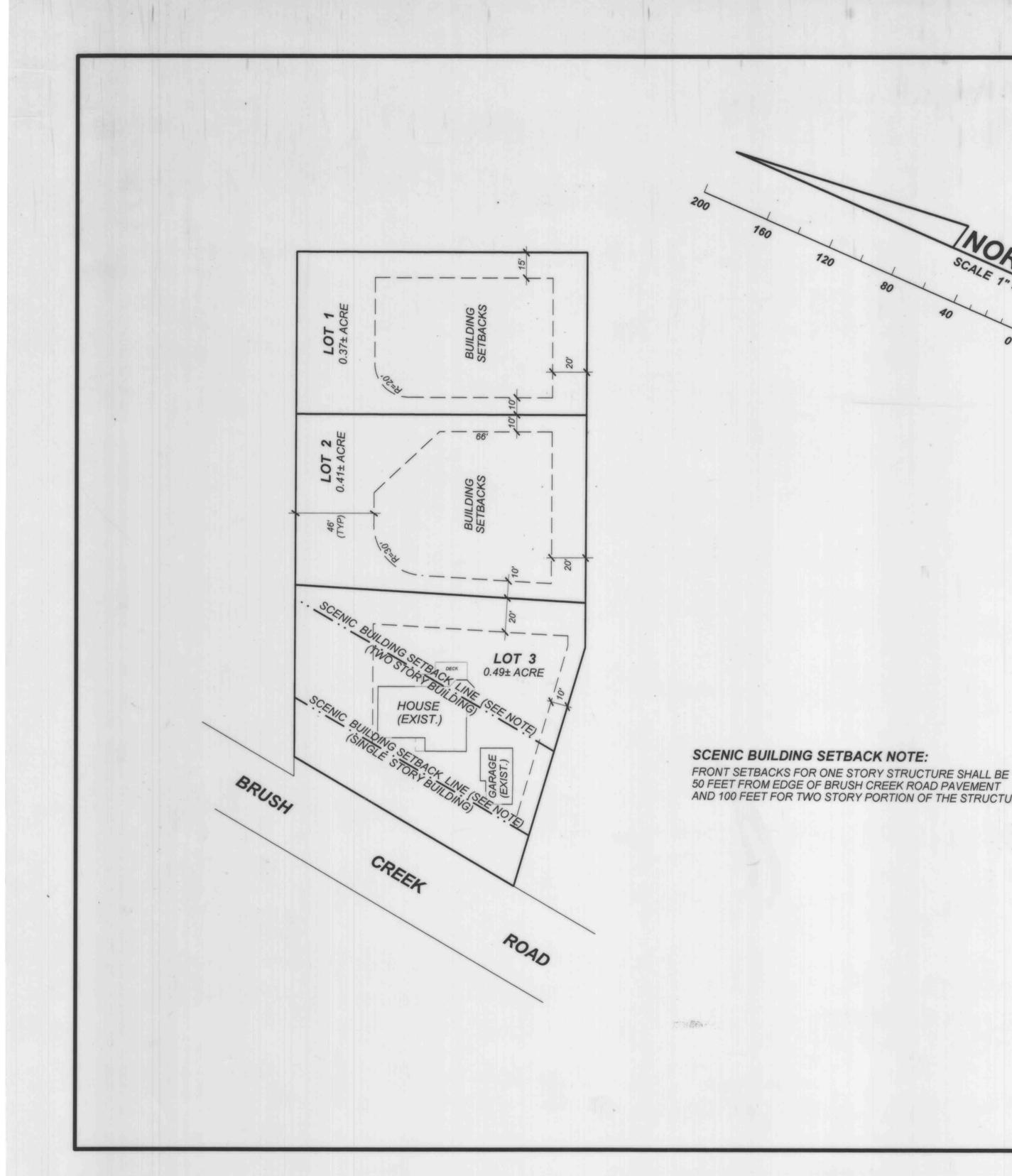












NOTES:

1) THIS SHEET IS FOR INFORMATION PURPOSES ONLY, DESCRIBING CONDITIONS AS OF FILING AND IS NOT INTENDED TO AFFECT RECORDING INTEREST.

2) DEMAND FEES, METER INSTALLATION FEES AND PROCESSING FEES REQUIRED BY THE CITY MUST BE PAID BY THE APPLICANT PRIOR TO ISSUANCE OF A BUILDING PERMIT.

3) THIS INFORMATION IS DERIVED RECORDS AND REPORTS AND DOES NOT IMPLY THE CORRECTNESS OF SUFFICIENCY OF THESE RECORDS BY THE PREPARER OF THIS DOCUMENT.

4) THIS PROJECT IS SUBJECT TO THE LATEST ADOPTED ORDINANCES, RESOLUTIONS, POLICES AND FEES, INCLUDING BUT NOT LIMITED TO SCHOOL IMPACT FEES, AND TRAFFIC SIGNAL PARTICIPATION FEES ADOPTED BY THE CITY COUNCIL AT THE TIME OF THE BUILDING PERMIT REVIEW AND APPROVAL.

5) A PUBLIC EASEMENT SHALL BE PROVIDED FOR PUBLIC UTILITY MAINS OUTSIDE OF THE PUBLIC RIGHT OF WAY. THE WIDTH OF THE EASEMENT SHALL BE EQUAL TO TWICE THE DEPTH OF THE MAIN OR 15 FEET WIDE FOR A SINGLE UTILITY AND 20 FEET FOR MULTIPLE UTILITIES, WHICHEVER IS GREATER, AND SHALL BE CENTERED OVER THE FACILITY. THE EASEMENT SHALL BE CONFIGURED TO INCLUDE ALL PUBLICLY MAINTAINED APPURTENANCES AND STRUCTURES. NO SURFACE STRUCTURE INCLUDING BUT NOT LIMITED TO ROOF EAVES, DECKS OR POOLS MAY ENCROACH INTO THE EASEMENT. FOOTING AND FOUNDATIONS MAY ENCROACH INTO THE ONE TO ONE LINE FROM THE PIPE DEPTH TO THE TOP OF GRADE IF APPROVED IN WRITING BY THE CHIEF BUILDING OFFICIAL AND THE DIRECTOR OF UTILITIES.

6) REDUCTION IN THE EASEMENT WIDTH MAY BE ALLOWED WITH WRITTEN APPROVAL BY THE DIRECTOR OF THE UTILITIES DEPARTMENT. TREES MAY NOT BE PLANTED WITHIN 10' OF A PUBLIC SEWER MAIN. THE CITY UTILITIES DEPARTMENT WILL NOT BE RESPONSIBLE FOR REPAIRS OR REPLACEMENT OF LANDSCAPING IN PUBLIC SEWER MAIN EASEMENTS.

7) THE STATIC WATER PRESSURE FOR THIS PROJECT IS APPROXIMATELY 80-90 PSI. INDIVIDUAL PRESSURE REGULATORS ARE REQUIRED ON ALL LOTS.

8) LOTS 1, 2 AND 3 ARE SUBJECT TO A JOINT MAINTENANCE AND ACCESS DECLARATION TO BE RECORDED CONCURRENTLY WITH THE MAP.

AND 100 FEET FOR TWO STORY PORTION OF THE STRUCTURE.

"SUPPLEMENTAL INFORMATION AFFECTING"

PARCEL MAP NO. 609

LANDS OF MICHAEL G. DEHNERT AND SHARON T. DEHNERT, PER DOC. NO. 1998-0156979 SONOMA COUNTY RECORDS, BEING A PORTION OF RANCHO CABEZA DE SANTA ROSA

4 LOTS, 1.27 ACRES

CITY OF SANTA ROSA, COUNTY OF SONOMA STATE OF CALIFORNIA

> MIKE BUTI LAND SURVEYOR SONOMA, CALIFORNIA MAY 30, 2001

AP NO. 182-140-053

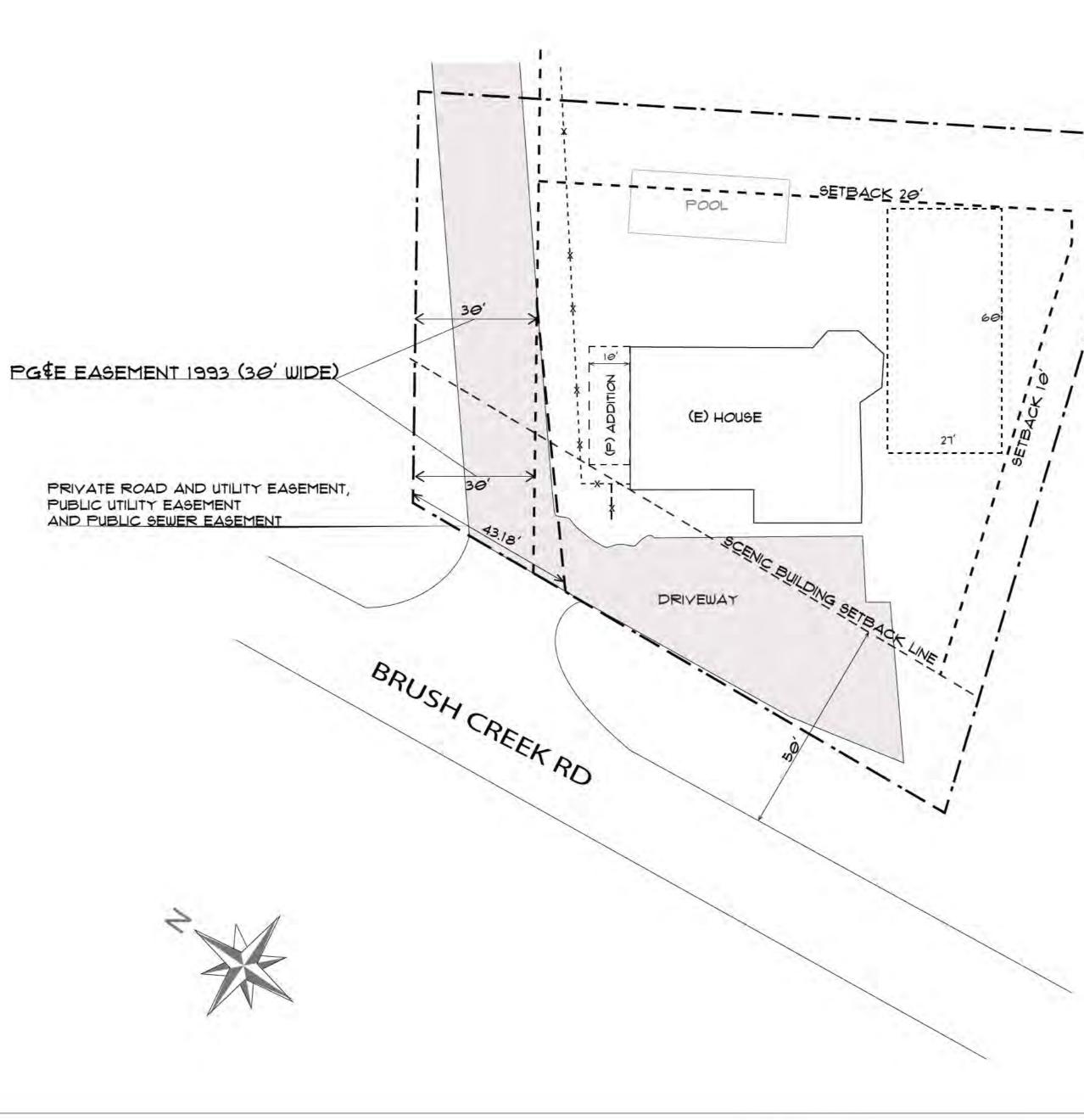
TENTATIVE MAP FILE NO. MIN 99-006

SHEET 4 OF 4

CITY OF SANTA ROSA FILE No. 2002 - 71



EXHIBIT B



SITE PLAN SCALE 1"=20"

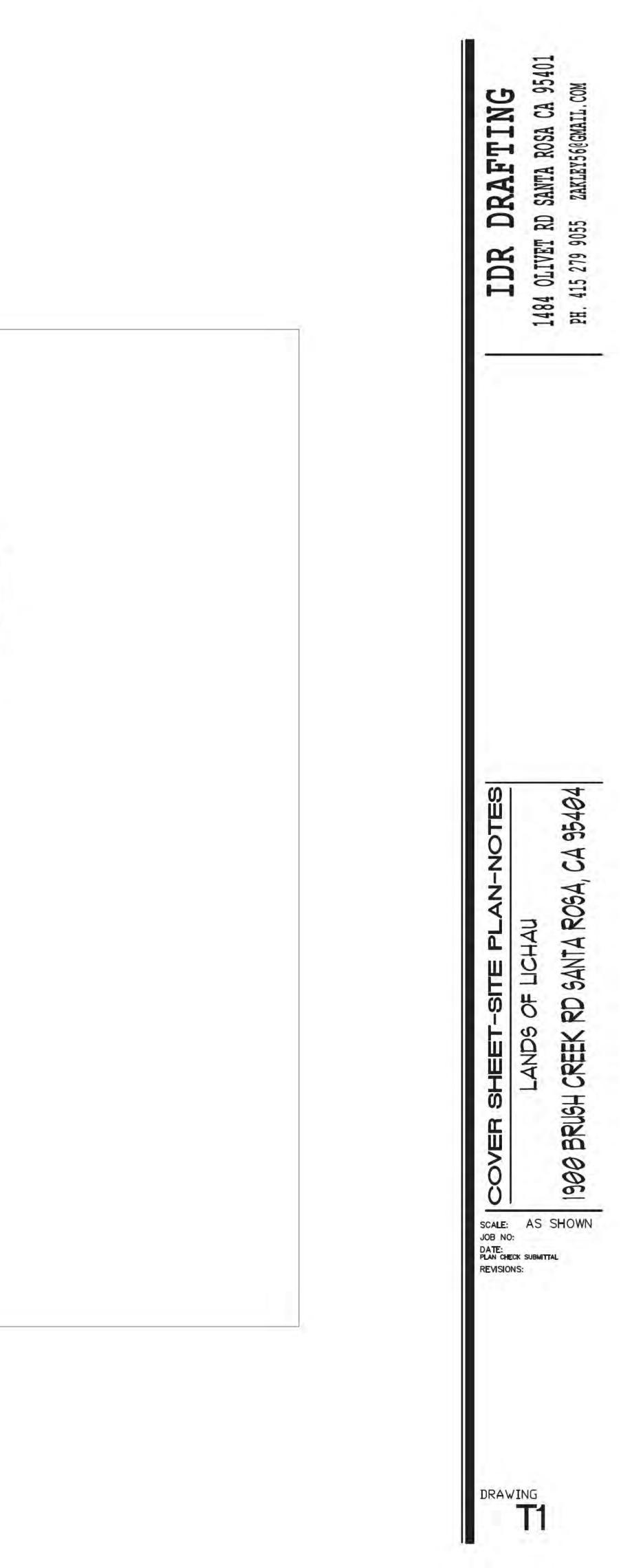


EXHIBIT C

From:Amber LichauTo:Rose M. ZoiaSubject:Fwd: [EXTERNAL] Setbacks at 1900 BRUSH CREEK RD, SANTA ROSA, 95404Date:Thursday, January 14, 2021 3:36:23 PMAttachments:image001.jpg

Sent from my iPhone

Begin forwarded message:

From: "Sheikhali, Monet" <msheikhali@srcity.org> Date: October 15, 2019 at 4:56:32 PM PDT To: "McKeag, Jesus" <JMcKeag@srcity.org>, "irezvoy@gmail.com" <irezvoy@gmail.com> Cc: Tom Lynch <tlynch@sonic.net>, Amber Lichau <Lichau.amber@gmail.com> Subject: RE: [EXTERNAL] Setbacks at 1900 BRUSH CREEK RD, SANTA ROSA, 95404

lvan,

Planning has reviewed your request and it has been determined that the new addition needs to comply with the required setbacks for R-1-15-SR zoning district per <u>Section</u> <u>20-22.050</u>. No need to apply the setbacks being shown on the supplemental sheet.

Let me know if you have any further questions,

Monet Sheikhali | City Planner

Planning and Economic Development |100 Santa Rosa Avenue, Room 3 | Santa Rosa, CA 95404

Tel. (707) 543- 4698 | Fax (707) 543-3269 | msheikhali@srcity.org



Counter Hours

Monday/Tuesday/Thursday: 8 a.m. – 4:30 p.m. Wednesday: 10:30 a.m. – 4:30 p.m. (No new permits are accepted after 3:30 p.m.) Friday: 8 a.m. to noon (No new permits are accepted after 11:00 a.m.)

From: McKeag, Jesus <JMcKeag@srcity.org>
Sent: Wednesday, October 09, 2019 1:35 PM
To: 'irezvoy@gmail.com' <irezvoy@gmail.com>; Sheikhali, Monet

<msheikhali@srcity.org>

Cc: 'Tom Lynch' <tlynch@sonic.net>; 'Amber Lichau' <lichau.amber@gmail.com> **Subject:** FW: [EXTERNAL] Setbacks at 1900 BRUSH CREEK RD, SANTA ROSA, 95404

Mr. Rezvoy,

Sorry for the delay in my response. Based on the Map and Site Plan I don't see that the Engineering division would object to the addition proposed. I am also addressing Monet who is our Counter Planner. Building setback lines are the purview of the Planning Division.

Monet,

Can you look at Mr. Rezvoy's Site Plan and comment?

From: Ivan Rezvoy [mailto:irezvoy@gmail.com]
Sent: Tuesday, October 8, 2019 6:27 PM
To: McKeag, Jesus <<u>JMcKeag@srcity.org</u>>
Cc: Tom Lynch <<u>tlynch@sonic.net</u>>; Amber Lichau <<u>lichau.amber@gmail.com</u>>
Subject: [EXTERNAL] Setbacks at 1900 BRUSH CREEK RD, SANTA ROSA, 95404

Hello, Mr. McKeag

This is to follow up on my phone call regarding the setbacks as they are shown on the Final Map for the property at 1900 Brush Creek Rd. AP# 182-140-056 The final map (see link below) shows the private road and utility easement of 30' from the northern property line of the parcel 182-140-056. This setback allows for 10'x29' footprint addition to the northern side of the existing house (see attached Site Plan).

The building envelope, established with the recordation of the final map (see sheet 4 of the Final Map) does not define the distance of its northern boundary from the property line. Final Subdivision Report of June 21, 2000 does not mention this boundary at all. Please advise whether we can proceed with planned improvements as they are shown on the Site Plan, or should we apply for the modification of the building envelopes designated on the parcel.

Here is the link for Final

Map: <u>http://imaps.srcity.org/img/PW_Docs/PDF_Combined/2002-0071.pdf</u> The property is zoned R-1-15-SR (Single Family Residential- Scenic Road).

Sincerely,

Ivan Rezvoy, 415 279 9055

EXHIBIT D



EXHIBIT E Type lext here



E-mail mike@robertsonengineering.net

October 13, 2020

CITY OF SANTA ROSA Mr. Jesse Oswald, Chief Building Official 100 Santa Rosa Avenue, Room #3 Santa Rosa, CA 95404

RE: 1900 BRUSH CREEK ROAD, SANTA ROSA REi PROJECT NO. 20056

City of Santa Rosa

DCT 14 2020 Planning & Economic Development Department





Sincerely, ROBERTSON ENGINEERING, inc.

GISTE Mike Robertson MBR/kebr Enc.

c: Daniel and Amber Licha



EXHIBIT F

From:	Amber Lichau
To:	Rose M. Zoia
Subject:	Fwd: 1900 Brush Creek Submittal Requirements
Date:	Thursday, January 14, 2021 7:50:18 PM
Attachments:	image002.jpg
	image003.jpg
	image004.jpg
	St20-003-Appeal Application w Amended Application.pdf
	image002.jpg
	image003.jpg
	image004.jpg

Please see copy of the neighbor's appeal application.

Sent from my iPhone

Begin forwarded message:

From: daniel lichau <daniel_lichau@yahoo.com>
Date: January 14, 2021 at 7:48:02 PM PST
To: Amber Lichau <Lichau.amber@gmail.com>
Subject: Fw: 1900 Brush Creek Submittal Requirements

----- Forwarded Message -----

From: Trippel, Andrew <atrippel@srcity.org> To: daniel_lichau@yahoo.com <daniel_lichau@yahoo.com> Cc: Oswald, Jesse <joswald@srcity.org>; Maystrovich, Mark <mmaystrovich@srcity.org>; Abel, Adam <aabel@srcity.org>; Tony <tony@cabreraassoc.com>; Garibaldi, Jill <jgaribaldi@srcity.org>; Rose, William <wrose@srcity.org> Sent: Monday, December 21, 2020, 05:21:10 PM PST Subject: RE: 1900 Brush Creek Submittal Requirements

Good afternoon,

Zoning Code Section 20-62.030(E)(4) only requires a public hearing of an Appeal if (1) A public hearing was required before making the decision appealed from; or (2) The review authority deems a public hearing desirable. The subject of the Appeal application (attached) is the Planning Director's determination following Planning Review of Building Permit B20-6871 for which no public hearing was held. Therefore, the appeal will move forward to Planning Commission as a report item, as opposed to a public hearing, and **a Public Hearing fee is not required**.

Planning staff are working to gather information and prepare required materials for review by the Planning Commission. The next regularly scheduled meeting of the Planning Commission is January 14, 2021. Planning staff is attempting to meet the necessary deadline to have this item included on the January 14, 2020 agenda. Prior to adding this item to the agenda, Planning staff will confirm availability for the meeting with both the property owner and appellant.

Best,

Andrew

?

Andrew Trippel | Acting Supervising Planner – Current Planning

Planning & Economic Development |100 Santa Rosa Ave Rm 3 | Santa Rosa, CA 95404

Tel. (707) 543-3223 | Fax (707) 543-3269 | atrippel@srcity.org

```
[EXTERNAL EMAIL] THIS EMAIL ORIGINATED OUTSIDE OF THE AZ EMAIL SYSTEM. Warning:
do not click any web links or attachments EXCEPT FROM VERIFIED SENDERS, and
never give out your user ID or password.
```

From: Trippel, Andrew Sent: Thursday, December 17, 2020 7:43 AM To: daniel_lichau@yahoo.com Cc: Oswald, Jesse <JOswald@srcity.org>; Maystrovich, Mark <MMaystrovich@srcity.org>; Abel, Adam <aabel@srcity.org>; Tony <tony@cabreraassoc.com>; Garibaldi, Jill <jgaribaldi@srcity.org> Subject: FW: 1900 Brush Creek Submittal Requirements

Good morning,

On December 7, 2020, Chief Building Official Jesse Oswald notified you that following Planning Review of Building Permit application B20-6871, the Planning Director determined that (1) the unpermitted addition complies with all applicable Zoning Code regulations, and (2) the unpermitted removal of a Heritage Tree can be approved, subject to required mitigation.

On December 14, 2020, the Planning & Economic Development Department received an Appeal Application from the property owner at 1888 Brush Creek Rd. appealing the Planning Director's determination. The review authority for this Appeal Application, which will be processed in accordance with Zoning Code Section 20-62.030, is the Planning Commission. In order for the appeal to proceed as required by §20-62.030, the Building Permit B20-6871 applicant/property owner must pay a Planning Commission Public Hearing fee of \$2,362.00.

If you choose to pay the Planning Commission Public Hearing fee, please contact Interim Building Permit Manager Jill Garibaldi at jgaribaldi@srcity.org to make payment. If you would like to discuss the Appeal Application and its processing in greater detail, please contact me to schedule a meeting. Thank you,

Andrew

Andrew Trippel | Acting Supervising Planner – Current Planning

Planning & Economic Development |100 Santa Rosa Ave Rm 3 | Santa Rosa, CA 95404

Tel. (707) 543-3223 | Fax (707) 543-3269 | atrippel@srcity.org

?

From: Oswald, Jesse <<u>JOswald@srcity.org</u>>
Sent: Monday, December 7, 2020 10:52 AM
To: daniel_lichau@yahoo.com
Cc: Tony <<u>tony@cabreraassoc.com</u>>; Maystrovich, Mark <<u>MMaystrovich@srcity.org</u>>
Subject: 1900 Brush Creek Submittal Requirements

Good morning,

To facilitate application for the legalization of the addition, please see the analysis below:

- Through Planning staff's research and analysis shows the unpermitted addition can be permitted. The building setback lines placed on the Final Map Supplemental sheet(s) are not enforceable.
- The applicant will be required to submit plans and specifications adhering to the attached "As-Built" process: <u>https://www.srcity.org/DocumentCenter/View/2199/-Handout-for-As-Built-Projects-PDF</u>. The applicant will be required to pay additional fees due to the work without a permit. The fee shall be equal to the permit fee as described on the bottom of page 28 of the fee schedule: <u>https://srcity.org/DocumentCenter/View/16129/Planning--Economic-Development-Department-Fee-Schedule?bidld=</u>. They will also be required to pay the Stop Work Order Removal Fee identified on page 43 (near the middle of the page) "Removal of Stop Work Order".
- Planning staff have determined that had the applicant applied: The tree that was removed without authorization would have been approved for removal in-accordance with the Tree Ordinance. In accordance with Subsection 17-24.050(C)(1), for each six inches or fraction thereof of the diameter of a tree

which was approved for removal, two trees of the same genus and species as the removed tree (or another species, if approved by the Director), each of a minimum 15-gallon container size, shall be planted on the project site, provided however, that an increased number of smaller size trees of the same genus and species may be planted if approved by the Director, or a fewer number of such trees of a larger size if approved by the Director. Mr. Robertson's letter reports that the total diameter of the removed tree is 74 inches (48+26). Under this criteria, the mitigation requirement is planting of 26 Coast Redwood trees, each a minimum of 15-gallon container size (74 / 6 = 12.33 6-inch increments, which rounds up to 13 sections). In accordance with Subsection 17-24.050(C)(3), If the development site is inadequate in size to accommodate the replacement trees, the trees shall be planted on public property with the approval of the Director of the City's Recreation and Parks Department. Upon the request of the developer and the approval of the Director, the City may accept an in-lieu payment of \$100.00 per 15gallon replacement tree on condition that all such payments shall be used for tree-related educational projects and/or planting programs of the City. The total payment in-lieu fee would be \$2,600.

4. The additional complaint for bright lights shining on adjacent properties will be required to be addressed with the building permit submittal.

Steps:

- Prepared a compete submittal utilizing any and all necessary documents sent to you here – following the "asbuilt" process: <u>https://www.srcity.org/DocumentCenter/View/2199/-</u> <u>Handout-for-As-Built-Projects-PDF</u> and the addition/alteration guidance: <u>https://www.srcity.org/DocumentCenter/View/18246/Construction-Documents-Submittal-Requirements-for-Remodel-and-or-Additions-to-Residential-Projects</u> (since electronic submittals are required – disregard the # of plan sets required).
- 2. Complete and submit a building permit application: <u>https://www.srcity.org/DocumentCenter/View/2614/Building-</u> <u>Permit-Application-PDF</u>
- 3. Address the additional lights installed that potentially shine on any neighboring properties
- 4. Include this email in the submittal
- Submit to" permitsubmittal@srcity.org If submittals exceed 15mB – provide a drop box or file transfer mechanism.

Regards,

That would be about right I think. Mike Robertson will look over my drawings and help me submit if he doesn't leave on vacation. My backup is Ivan who works for Tom Lynch, who also advised he would help me out.

Thank you for your time.

Dan

Sent from my iPhone

> On Aug 10, 2020, at 10:02 AM, Maystrovich, Mark <MMaystrovich@srcity.org> wrote:

>

> Good Morning Dan

>

> Just keep me in the loop on the progress. I will send you the links for submittals, permits. What are your thoughts? End of August or mid-September to submit?

>

> Mark

>

> Mark Maystrovich |Senior Code Enforcement Officer

> Planning and Economic Development |100 Santa Rosa Avenue | Santa Rosa, CA 95404

> Tel. (707) 543-3268 | Fax (707) 543-4315 | mmaystrovich@srcity.org

>

> Hello and thank you for your email. Please note: The City of Santa Rosa has closed most of its public counters until further notice to help curb a resurgence of coronavirus infections occurring in Sonoma County and statewide. Access to most City services remains available online, by phone, and in some instances in-person by appointment. For a current list of those services, visit srcity.org/ServiceFinder.

>

> For detailed information about the City of Santa Rosa's ongoing response the coronavirus public health emergency, please visit the City's website at srcity.org/PreventTheSpread

>

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>-----Original Message-----

> From: Mister Unknown <daniel_lichau@yahoo.com>

> Sent: Monday, August 10, 2020 9:44 AM

> To: Maystrovich, Mark </mastrovich@srcity.org>

> Subject: [EXTERNAL] 1900 Brush Creek

>

> Hi sir. >

> My friends father, Mike Robertson, is helping me with the steps I need to take for the permit process. I've started on the drawings and I'm printing out all the photos I have on 8X10s.

> PJC is coming out tomorrow to X-ray the foundation. The hole is dug and ready for them.

>

> I'm going to keep at it and knock out as much as I can. I was wondering if I am under any specific timeline that I need to have things completed by?

>

- > Thank you for your time sir.
- >
- > Dan Lichau
- >
- > Sent from my iPhone

Hi there.

So I had Mike Robertson help me with drawing up my plans and measuring setbacks. The only thing holding me up is I'm waiting for my T-24 report to come in. I'm hoping to turn it all in early next week.

Thank you for your time. Dan Lichau (707)953-0699 Sent from my iPhone

On Aug 10, 2020, at 1:42 PM, tlynch <tlynch@sonic.net> wrote:

I have added our associate Ivan Rezvoy to this thread...

Kindly

Tom Lynch

Sent from my Verizon, Samsung Galaxy smartphone

------ Original message ------From: "Anderson, Cassidy" <cganderson@srcity.org> Date: 8/10/20 1:24 PM (GMT-08:00) To: Mister Unknown <daniel_lichau@yahoo.com> Cc: tlynch@sonic.net, "Maystrovich, Mark" <MMaystrovich@srcity.org> Subject: RE: [EXTERNAL] 1900 Brush Creek

Hello Mr. Lichau,

Mark got me up to speed on his conversation with you and Mr. Lynch. I wanted reach out to you and give you my contact information and the City of Santa Rosa's Building and Permit Department submittal instructions:

PED In-Person Meeting by Appointment Only

We have limited appointments available between from 8:00 a.m. To 11:45 a.m. Mon. – Fri.

Please comply with all social distancing and hygiene protocols posted near the front door while at the City hall Complex.

Please schedule an appointment before arriving to help maintain social distancing. Instructions are below.

How to Schedule an Appointment:

•Our appointment queuing system (Qless) has a free App that can be downloaded to your mobile device from Google Play or the Apple Store. Once installed, follow the prompts for access and scheduling your City of Santa Rosa Counter Appointment.

•To access Qless via the internet (URL), go to: SRCity.org/QLess and follow the system prompts to schedule your City of Santa Rosa Counter Appointment.
•Telephone option - For staff assistance in scheduling an appointment, please leave a voicemail at our appointment request line at (707) 543-4623. Leave contact information so we can advise you of the date/time.

The City has launched a virtual permit counter and is accepting and processing all application types, permits can be submitted online at: https://srcity.org/3280/Permitting-Inspections-Entitlements

Should you have any questions do not hesitate to contact me,

Cassidy Anderson | Code Enforcement Officer Planning and Economic Development | 100 Santa Rosa Ave. Rm 3 | Santa Rosa, CA 95404 Tel. (707) 543-3229 | Fax (707) 543-3218 | cganderson@srcity.org

The City has launched a virtual permit counter and is accepting and processing all application types, permits can be submitted online at: https://srcity.org/3280/Permitting-Inspections-Entitlements

The City Building Department has received a large volume of applications since opening a virtual

counter, with limited resources. Staff will contact you directly with next steps in the process.

To check the status of your project go online to: https://citizen.srcity.org/CitizenAccess/Default.aspx

-----Original Message-----

From: Maystrovich, Mark <MMaystrovich@srcity.org> Sent: Monday, August 10, 2020 10:03 AM To: Mister Unknown <daniel_lichau@yahoo.com> Cc: Anderson, Cassidy <cganderson@srcity.org> Subject: RE: [EXTERNAL] 1900 Brush Creek

Good Morning Dan

Just keep me in the loop on the progress. I will send you the links for submittals, permits. What are your thoughts? End of August or mid-September to submit?

Mark

Mark Maystrovich |Senior Code Enforcement Officer Planning and Economic Development |100 Santa Rosa Avenue | Santa Rosa, CA 95404 Tel. (707) 543-3268 | Fax (707) 543-4315 | mmaystrovich@srcity.org

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For detailed information about the City of Santa Rosa's ongoing response the coronavirus public health emergency, please visit the City's website at srcity.org/PreventTheSpread

-----Original Message-----From: Mister Unknown <daniel_lichau@yahoo.com> Sent: Monday, August 10, 2020 9:44 AM To: Maystrovich, Mark <MMaystrovich@srcity.org> Subject: [EXTERNAL] 1900 Brush Creek

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PJC is coming out tomorrow to X-ray the foundation. The hole is dug and ready for them.

I'm going to keep at it and knock out as much as I can. I was wondering if I am under any specific timeline that I need to have things completed by?

Thank you for your time sir.

Dan Lichau

Sent from my iPhone

From:	daniel lichau
То:	Maystrovich, Mark; Anderson, Cassidy
Cc:	Ivan Rezvoy
Subject:	[EXTERNAL] 1900 Brush Creek Road Santa Rosa Addition Permit Application
Date:	Monday, August 24, 2020 9:38:27 PM
Attachments:	Brush Creek Road 1900-Plan Permit Application.pdf
	Brush Creek Road 1900-Plan T-24 Report.pdf
	Brush Creek Road 1900-Plan Foundations Report.pdf
	Brush Creek Road 1900-Plan Engineer Letter.pdf
	Brush Creek Road 1900-Plan Addition Plans.pdf
	Brush Creek Road 1900-Plan Electronic Disclosure.pdf

Hi all,

I hope this email finds you all well. My name is Amber Lichau, I am Daniel Lichau's wife. He's been feverishly working on getting all of the necessary documents for the permit application for our addition but has unfortunately been working 16 hour days at the Sheriff's office without a break for the past two weeks due the wildfires. He asked me to get the documents sent off to you all and mentioned you all are likely inundated as well. I went through all of the documents and then tried to navigate the SR city's website and noted that if the permit required plans then we are to submit them via email rather than submitting them on the website. I have renamed all the documents as specified but also included titles for each one in the heading. We thank you in advance for your consideration, time, and for all of your help and hope that this is all correct. Please let me know if there is anything else that I can do or need to submit and I will get it done ASAP.

Sincerely, Amber Lichau

Santa Ros	a
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BUILDING PERMIT APPLICATION

BUILDING PERMIT NO .:

Related Files:

Department Use Only

PLEASE PRINT CLEARLY

1900 BRUSH CRI			SUITE/UNIT NO.	DATE				
	EEK RD SANTA R	OSA 95404	N/A	8/18/2020				
OWNER	,		CELL HOME BUSINES					
DANIEL & AMBER L	LICHAU		(107)953-0699	(707) 889-6979				
OWNER ADDRESS	CITY	STATE	ZIP	E-MAIL ADDRESS				
	RD SANTA ROSA		95404	daniel_lichaue				
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DANIEL LICHAU			(107)953-0699	(707)889-6979				
CONTACT ADDRESS	CITY	STATE	ZIP	E-MAIL ADDRESS daniel_lichas@				
1900 BRUSH CREEK	. RD SANTA ROSI	<u>a ca</u>	95404	I Vanoo (om				
APPLICANT			CELL HOME BUSINES					
DANIEL LICHAU			(107)953-0699	107)889-6979				
APPLICANT ADDRESS	CITY	STATE	ZIP	E-MAIL ADDRESS Oraniel-lichand				
1900 BRUSH CREEK	RD SANTA ROSA	CA	95404	Vahod-com				
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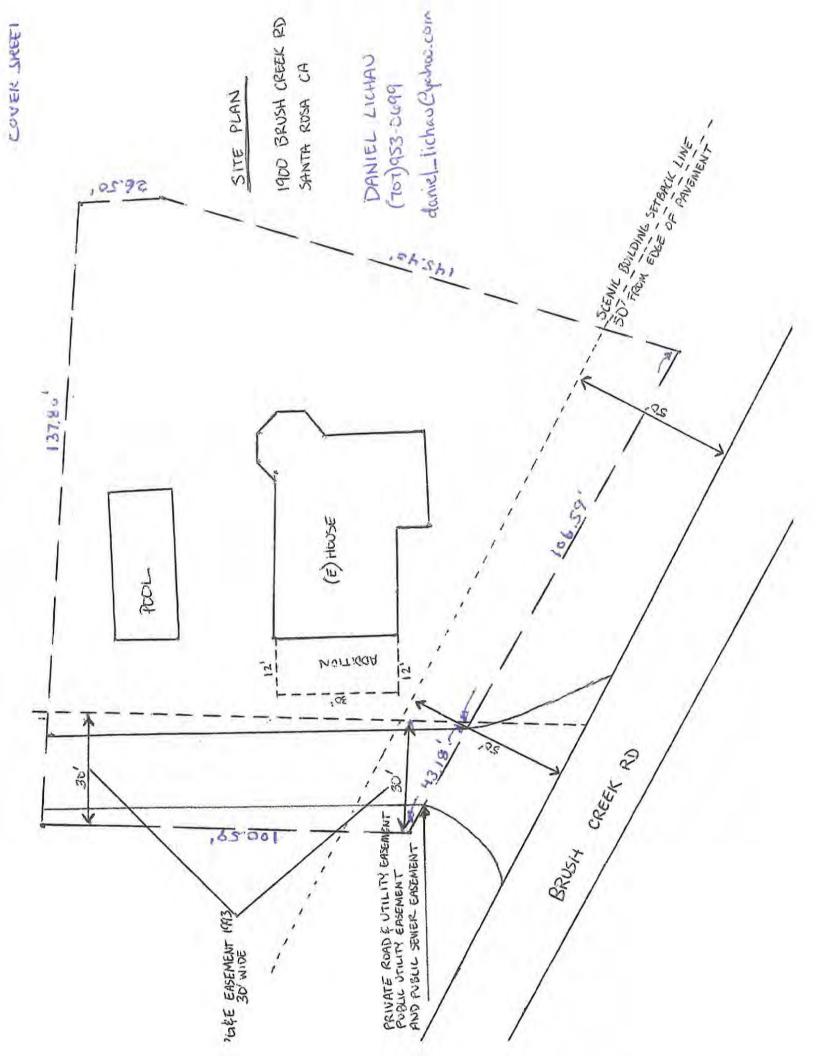
Electronic/Digital Signature Disclosure

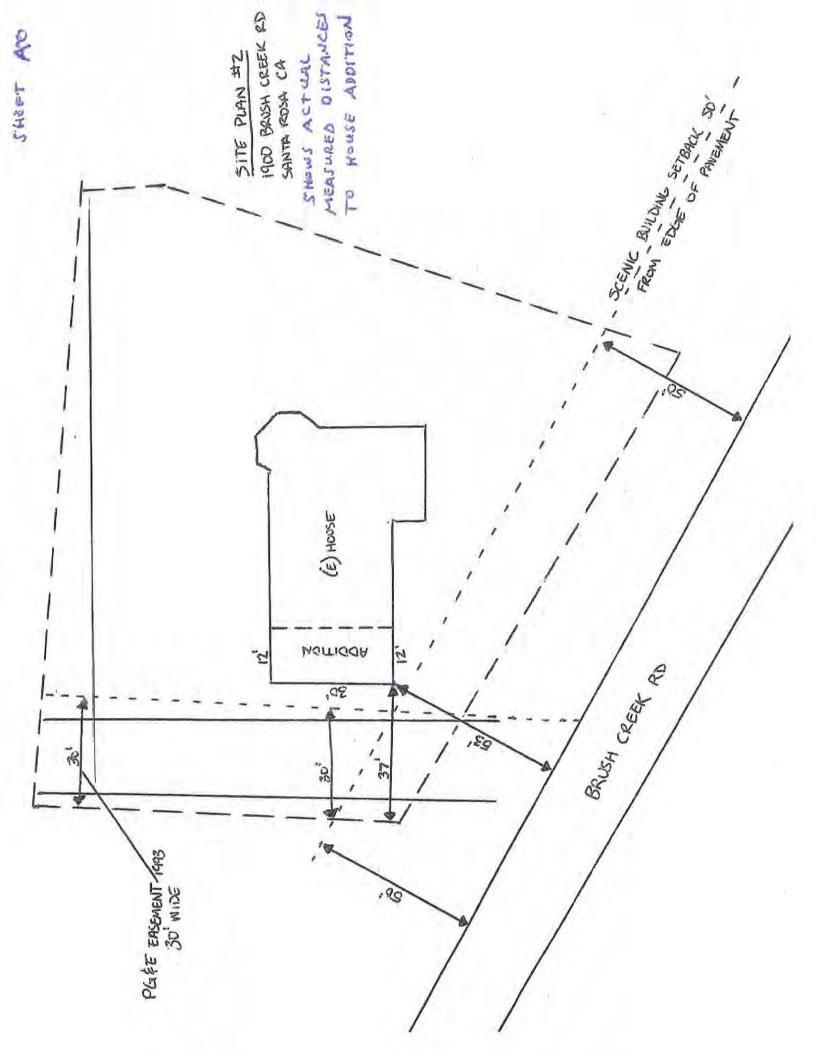
Project Address: 1902 Brush Creek Read Santa Rosa, CA 95404

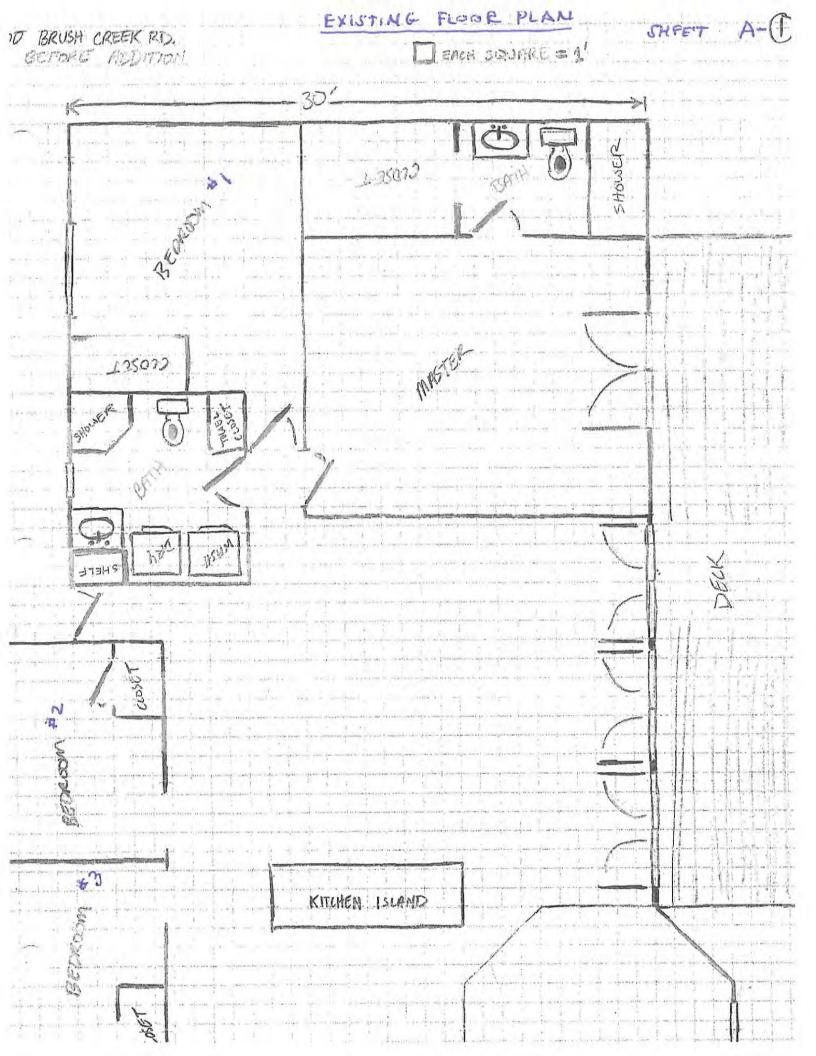
I understand and agree that (i) electronically signing and submitting any document(s) to the City of Santa Rosa legally binds me in the same manner as if I had signed in a nonelectronic or non-digital form, and (ii) the electronically stored copy of my signature, any written instruction or authorization and any other document provided to me by the City of Santa Rosa, is considered to be the true, accurate and legally enforceable record in any proceeding to the same extent as if such documents were originally generated and maintained in printed form. I agree not to contest the admissibility or enforceability of the City of Santa Rosa's electronically stored copy of any other documents.

By using the system to electronically sign and submit any document, I agree to the terms and conditions of this Electronic/Digital Signature Disclosure.

Signature:	Date: 8 24 2020
Title: NIA	Relationship to Project: NUNEr builder
Company/Organization: NA	

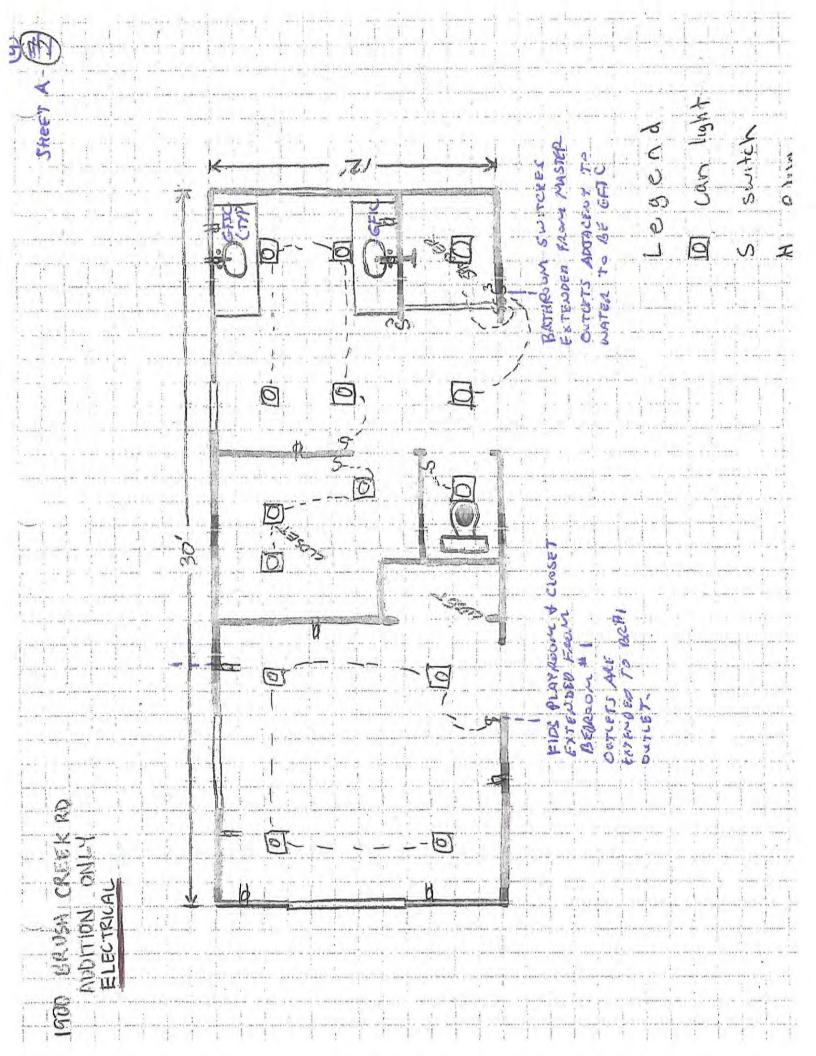


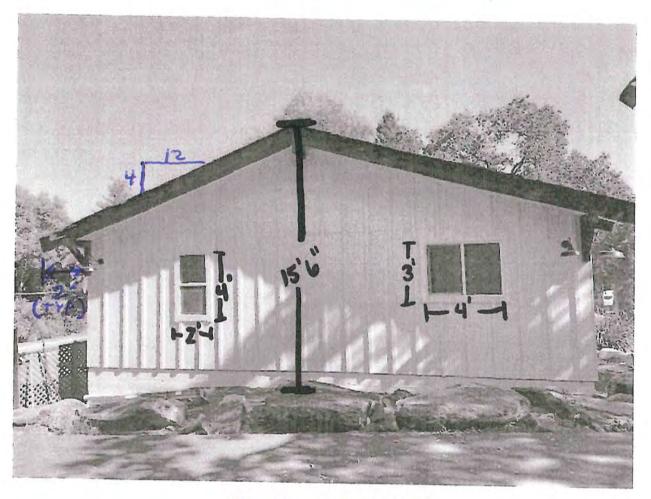




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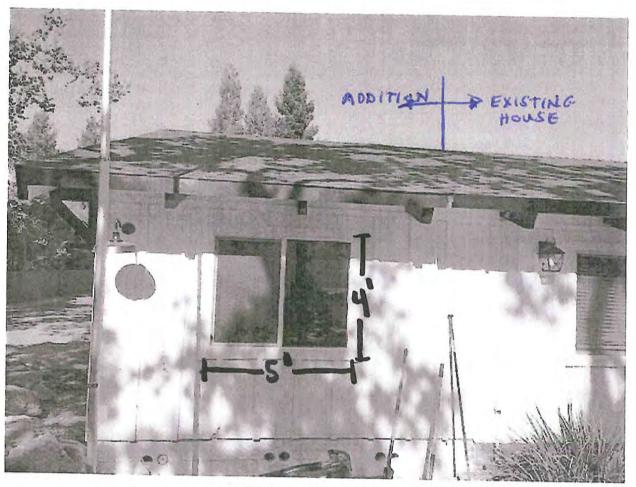
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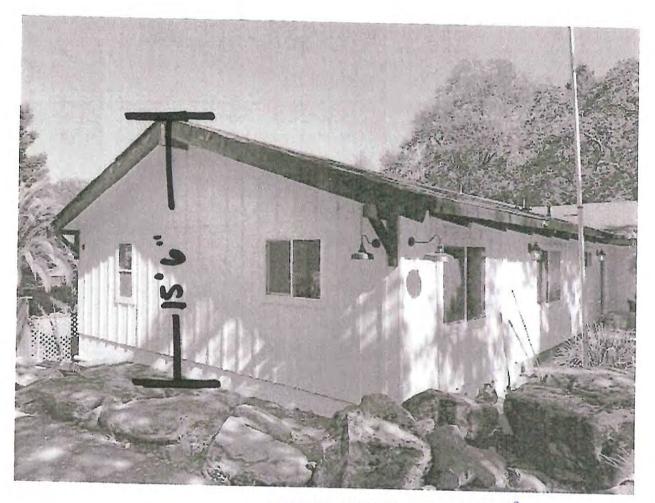
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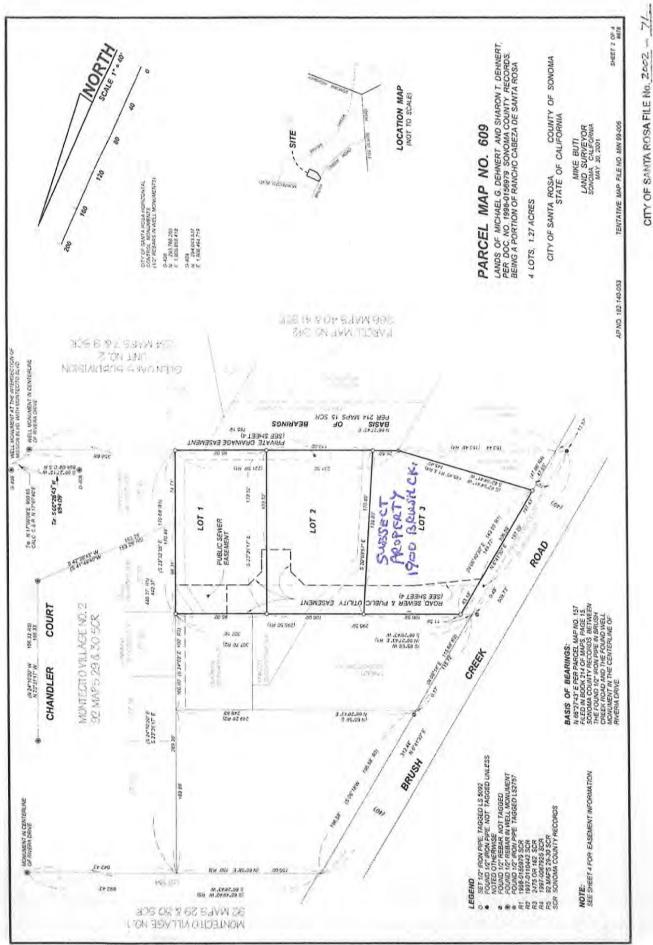
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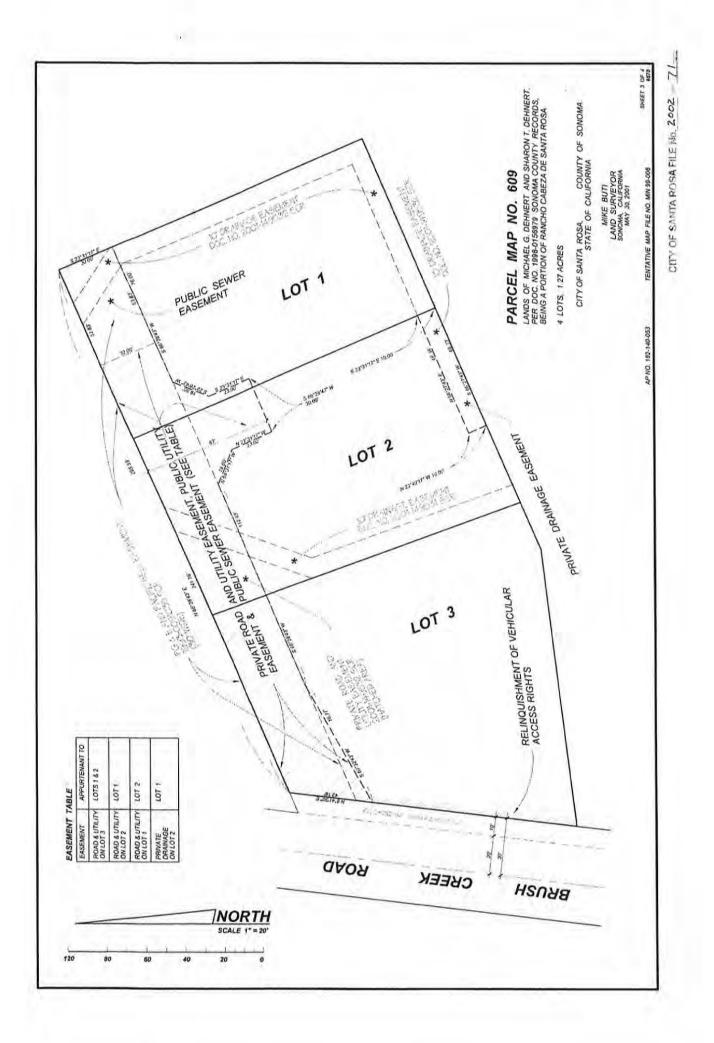
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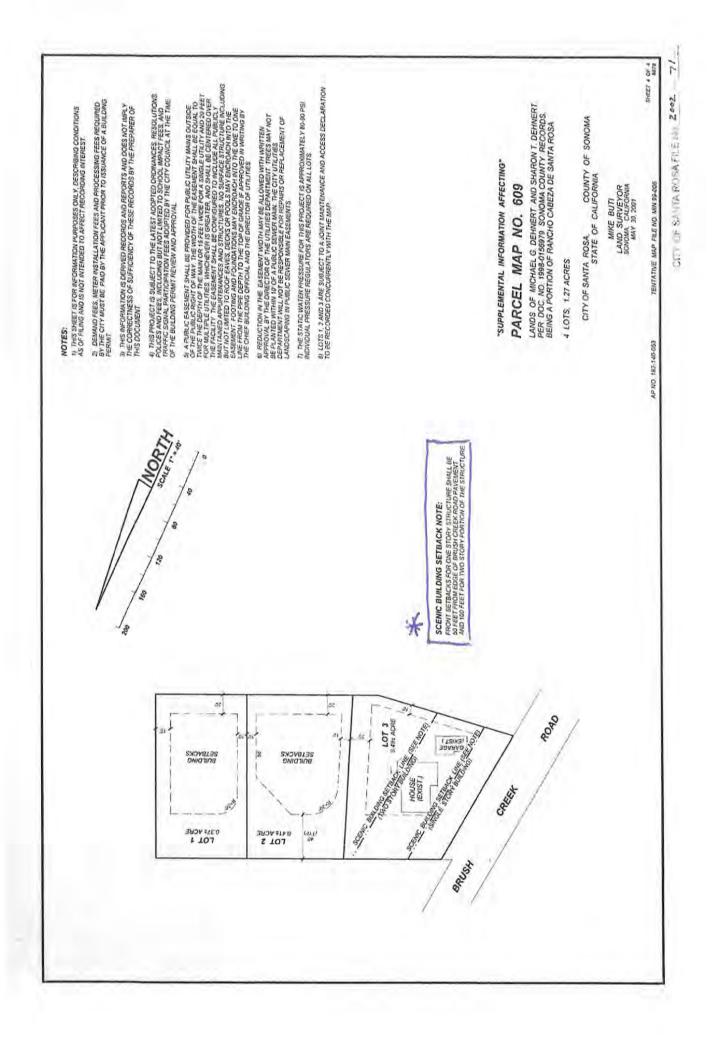


NORTHWEST ELEVATION

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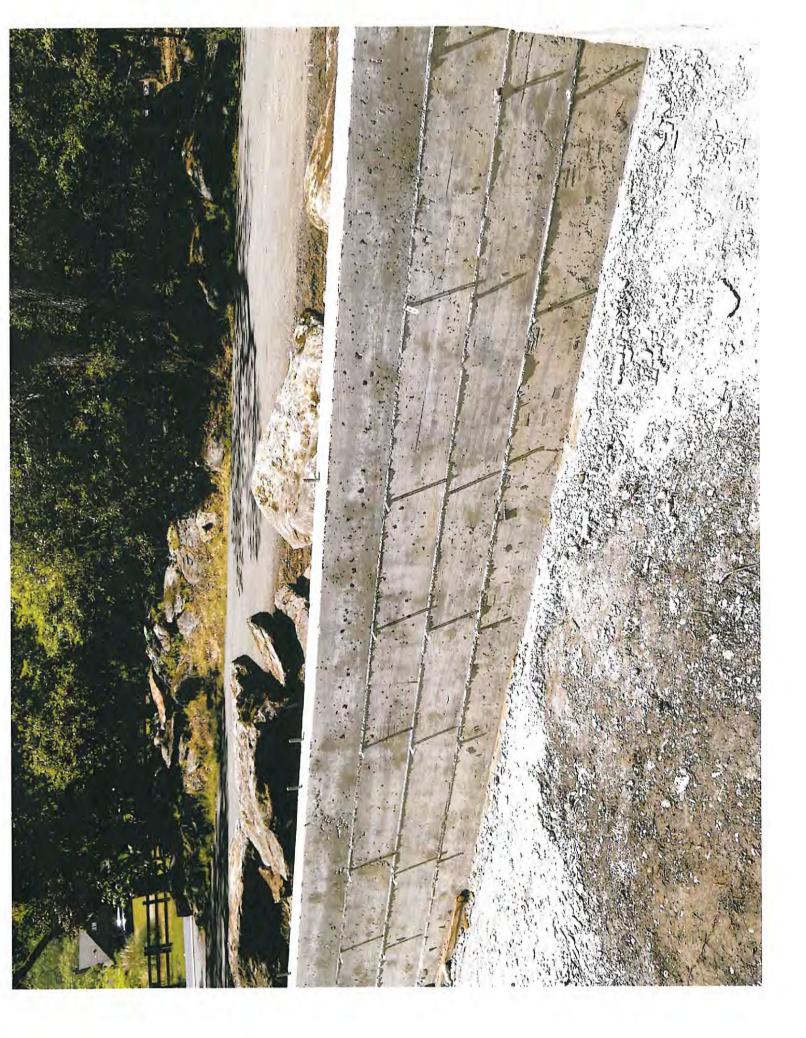






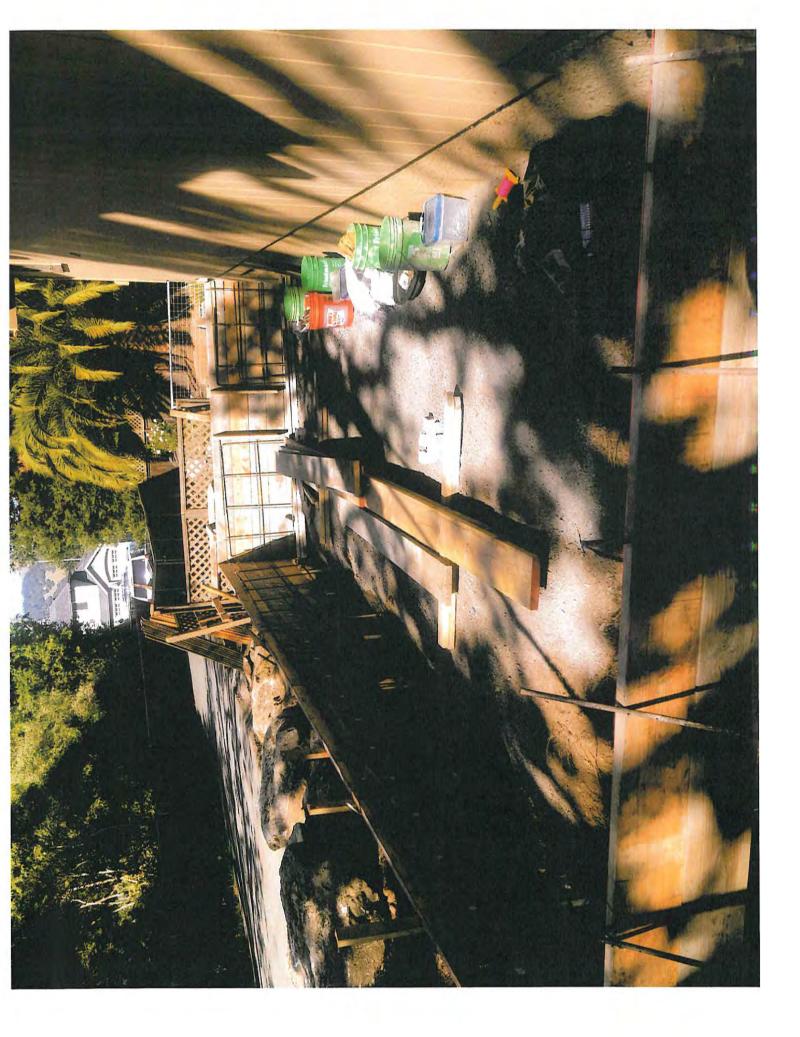




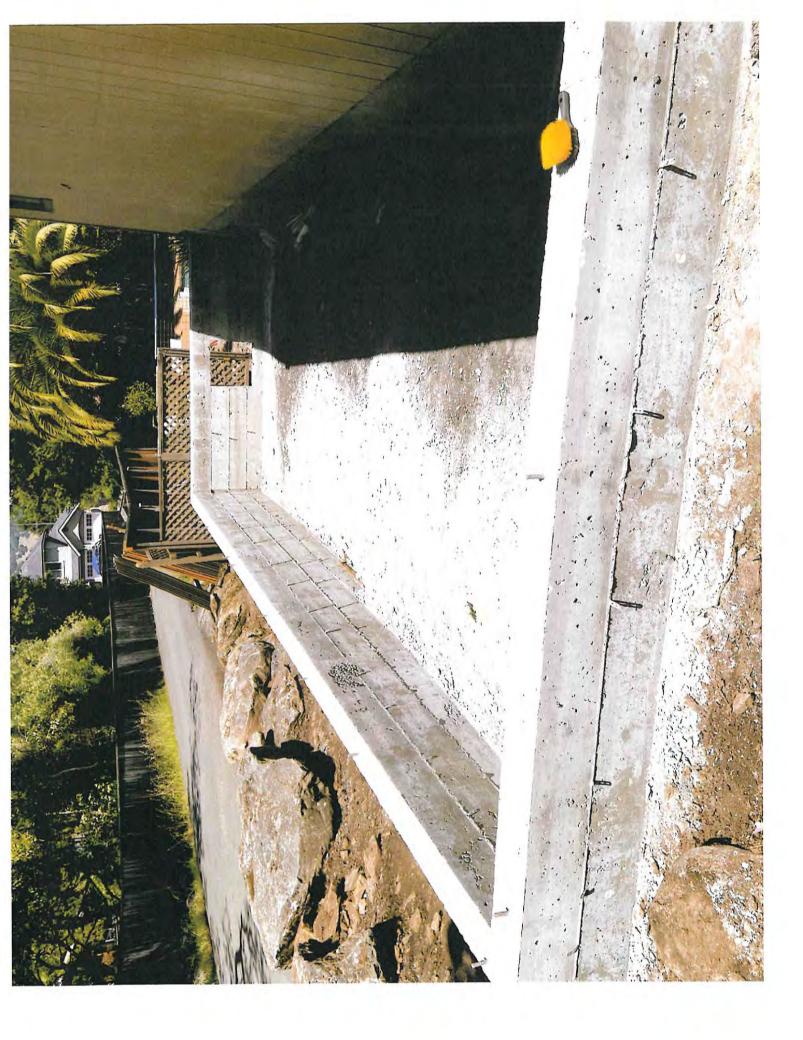




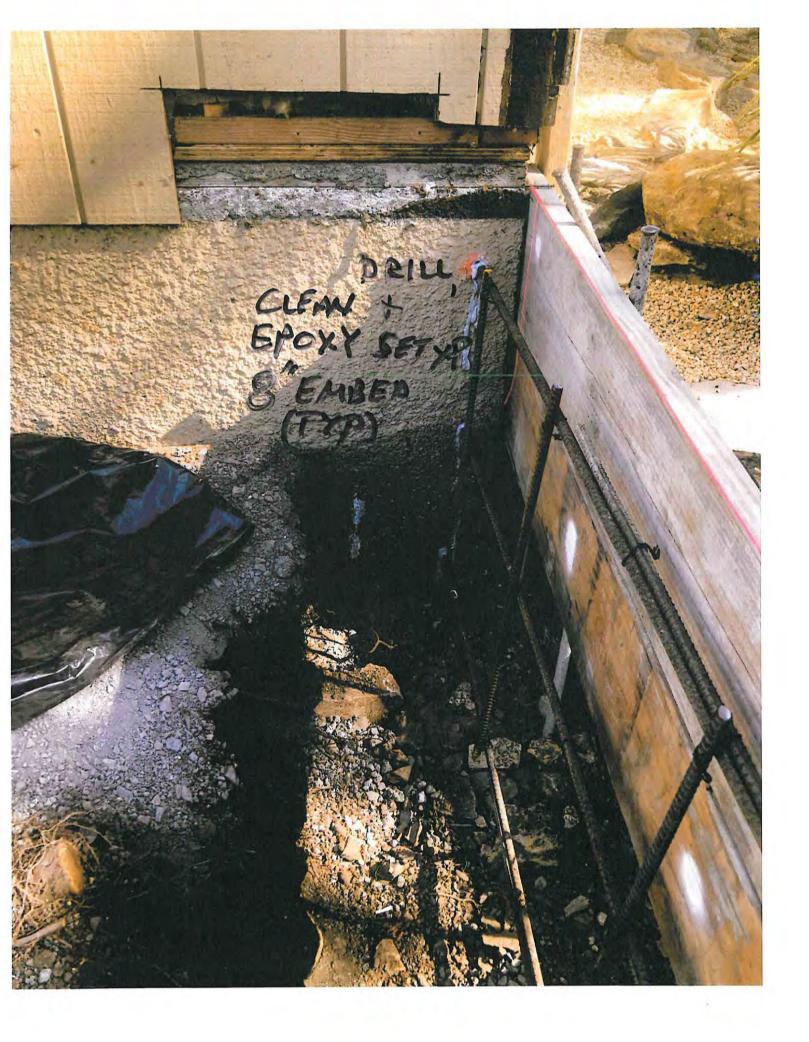


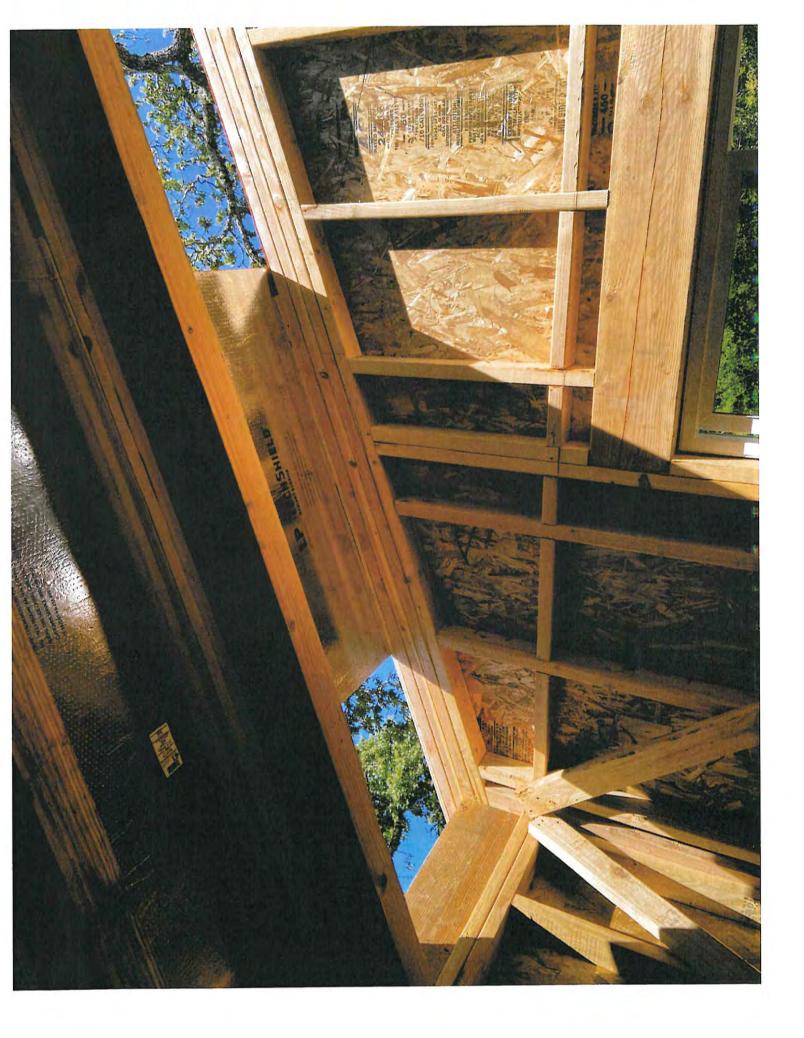


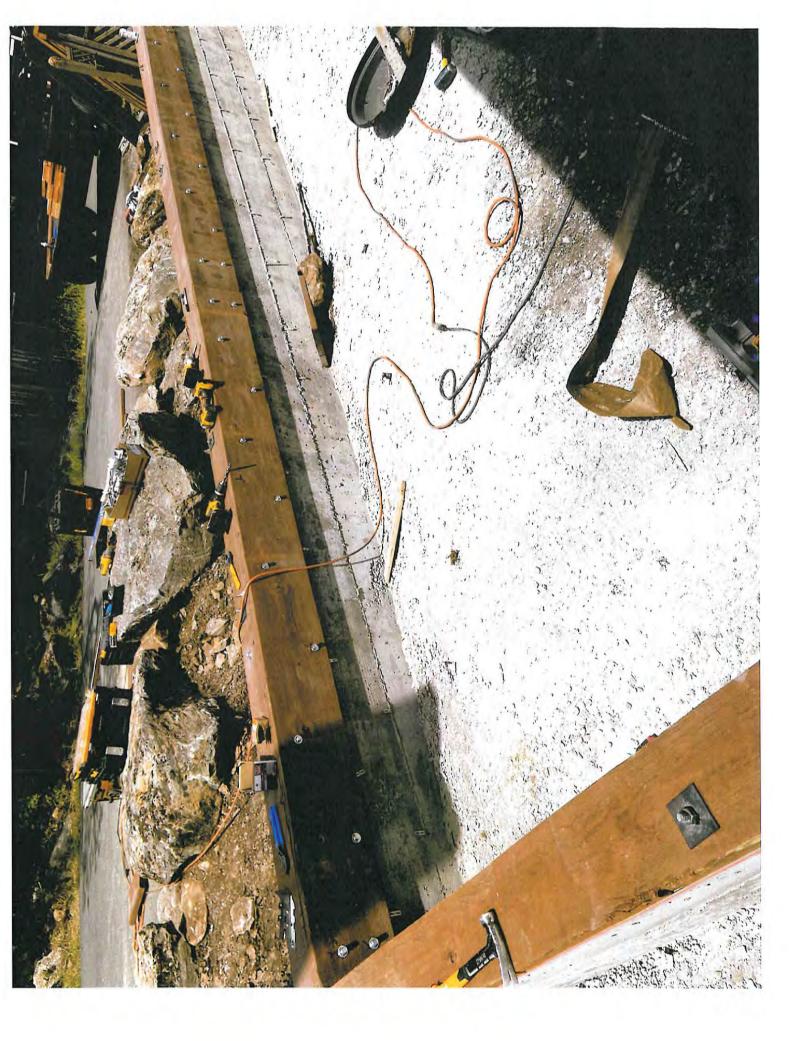




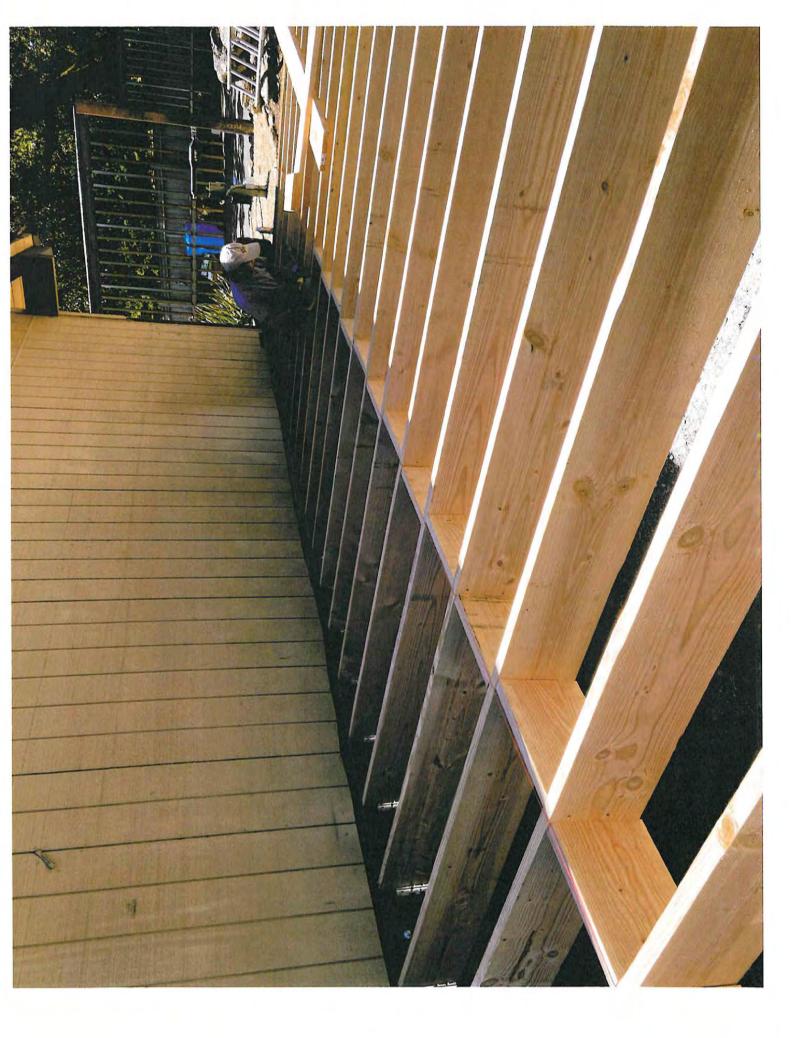




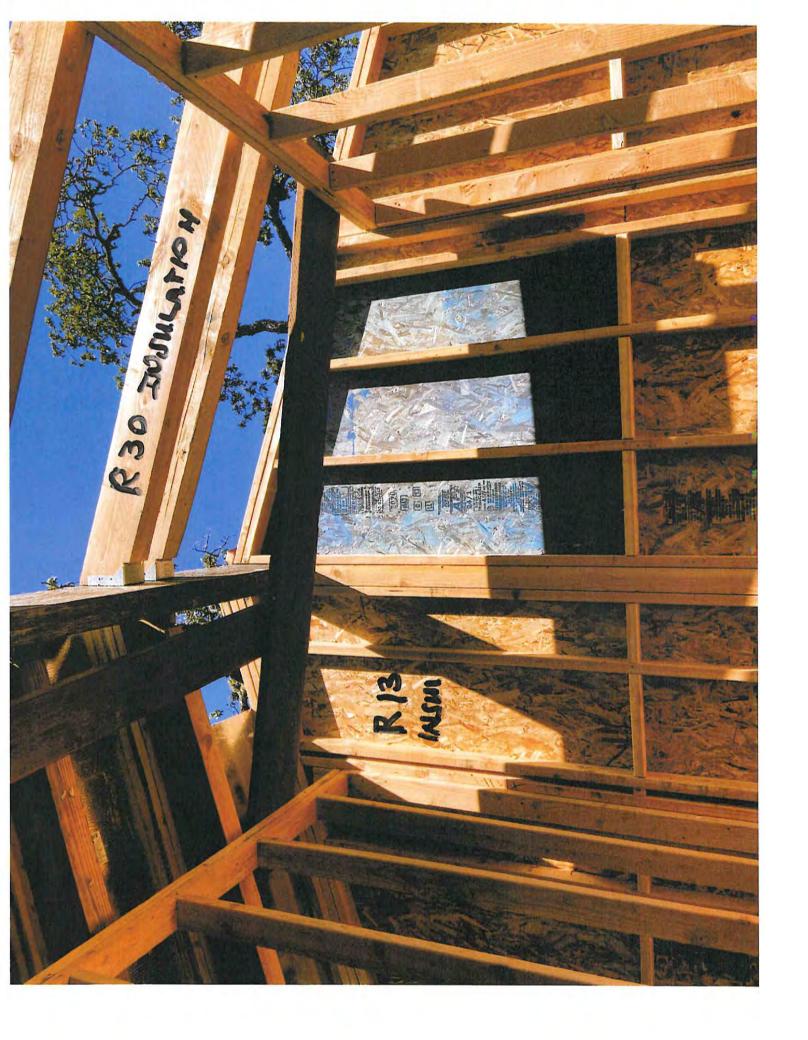


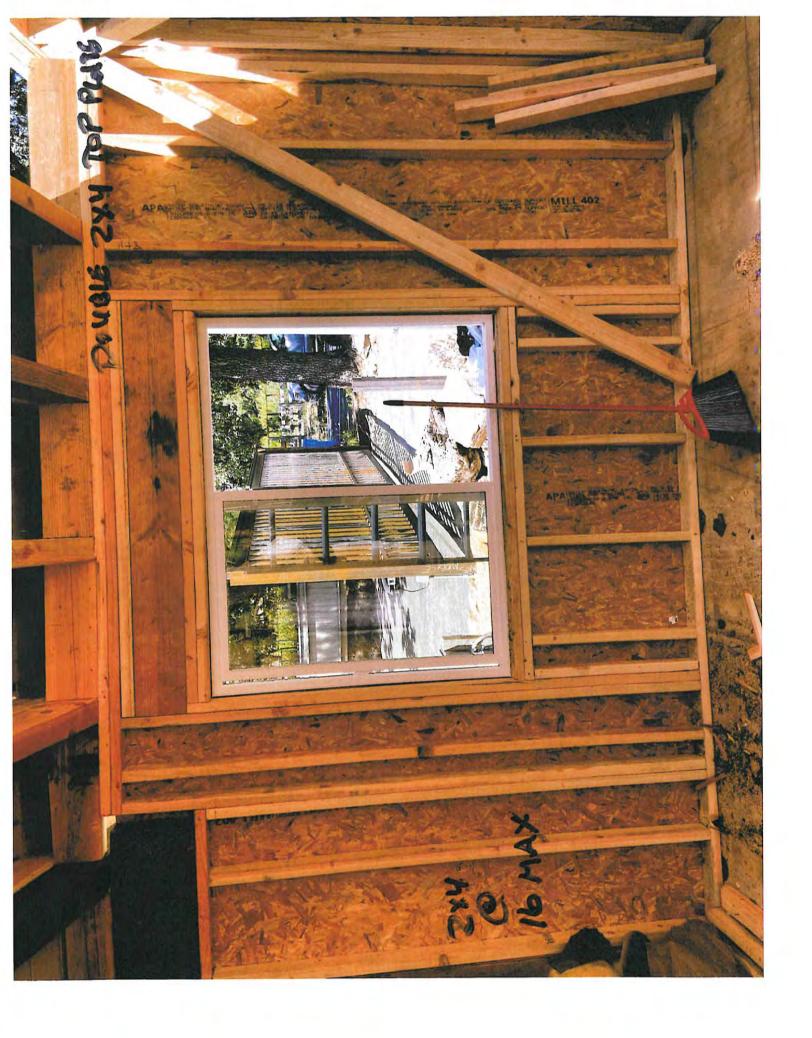


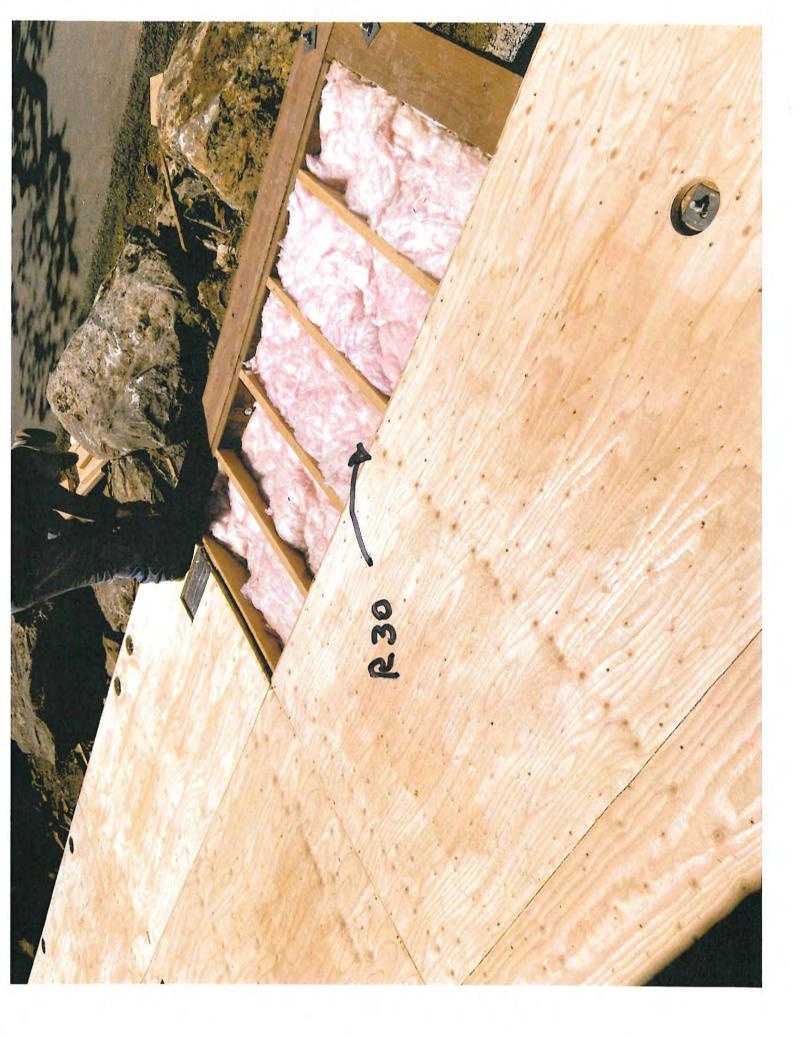












2300 Bethards Dr., Suite L, Santa Rosa, CA 95405 -Tel (707) 523-7490

OBERTSON

E-mail mike@robertsonengineering.net

August 12,2020 DANIEL LICHAU 1900 BRUSH CREEK RO SANTA ROSA, CA. 95404 RES OBSERVATION OF FOUNDATION FROM PHOTOS AND PERSOWALLY AT 1900 BRUSH CREEK ROAD SANTA ROSA Dear Damel, This letter confirms my personal site Observation of the foundation and footing for your house addition. The fosting was infalled a minimum of 24" into the ground, which from the p. fostos you provided appear to be in Solid ground. The forting width is a Minimum of 36" and appears that below the forms that were set ended with more than 48 in width. It is my profession opinion that the footing size is sufficient to adequately support the Miel / bla structure.

Page 1/1 PJC & Associates, Inc. Date 8-11-20 MOWTESS Proposed Addition Legalization 1900 Brush Creek ed Project Name 300.4 Project Address Santa Rosa, CA on site to do pachameter testing for the addition O location was exemusted located on the southwest (235°) perimeter on the opposite to expose the faction & the @ location original foundation to addition at the downhill side -toundation of the location, This is the fullest portion 81 7 #4-#5 2 NorthWest T 018°0C 18" SW (4) >0 w) 4 '0C #4-#5 for hist 1 K honz Verticals 14" @ 18 00 grade 24 D (3) #4-#5 horizontals Verticels @, 18" O.C. Twid Services Manager Signature Field Technician/Sp Thompson Printed Name Printed Name Main Dimos. 600 Murbit Ave- Suitz 210, Ratinert Park, CA 44928 707-584-4804 phone 707-584-4811 fax Bonnina Branchi PD Box 469, Schemes, CA 95476 707-684-4804 phone 707-935-3587 fax

BUILDING ENERGY ANALYSIS REPORT

PROJECT:

LICHAU ADITION ONLY 1900 BRUSH CREEK ROAD SANTA ROSA, CA 95404

Project Designer:

DANIEL LICHAU 1900 BRUSH CREEK ROAD SANTA ROSA, CA 95404 (707) 953-0699

Report Prepared by:

MINERVA TOPETE Title 24 Data Corporation 633 MONTEREY TRAIL (P.O. BOX 2199) FRAZIER PARK, CA 93225 (800) 237-8824

Job Number:

134590

Date:

8/14/2020

The EnergyPro computer program has been used to perform the calculations summarized in this compliance report. This program has approval and is authorized by the California Energy Commission for use with both the Residential and Nonresidential 2019 Building Energy Efficiency Standards.

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Form CF1R-PRF-01-E Certificate of Compliance	3
Form MF-1R Mandatory Measures Summary	11
HVAC System Heating and Cooling Loads Summary	15
Room Heating Peak Loads	16
Room Cooling Peak Loads	17

Project Name: LICHAU ADITION ONLY

Calculation Description: Title 24 Analysis

(Page 1 of 8)

Input File Name: 134590 -MMT-LICHAU.ribd19x

GENER	AL INFORMATION				
01	Project Name	LICHAU ADITION ONLY			
02	Run Title	Title 24 Analysis			
03	Project Location	1900 BRUSH CREEK ROAD			
04	City	SANTA ROSA	05	Standards Version	2019
06	Zip code	95404	07	Software Version	EnergyPro 8.1
08	Climate Zone	2	09	Front Orientation (deg/ Cardinal)	270
10	Building Type	Single family	11	Number of Dwelling Units	1
12	Project Scope	AdditionOnly	13	Number of Bedrooms	5
14	Addition Cond. Floor Area (ft ²)	360	15	Number of Stories	1
16	Existing Cond. Floor Area (ft ²)	1836	17	Fenestration Average U-factor	0.3
18	Total Cond. Floor Area (ft ²)	2196	19	Glazing Percentage (%)	13.33%
20	ADU Bedroom Count	0	21	ADU Conditioned Floor Area	0
22	Is Natural Gas Available?	Yes			

Addition Alone Project Analysis Parameters												
01	02	03	04	05	06							
Existing Area (excl. new addition) (ft2)	Addition Area (excl. existing) (ft2)	Total Area (ft2)	Existing Bedrooms	Addition Bedrooms	Total Bedrooms							
1836	360	2196	4	1	5							

COMPLIANCE RES	SULTS								
01	01 Building Complies with Computer Performance								
02	Building does not require field testing or HERS verification								
03	This building incorporates one or more Special Features shown below								

Registration Number:

Registration Date/Time:

HERS Provider:

CA Building Energy Efficiency Standards - 2019 Residential Compliance

Project Name: LICHAU ADITION ONLY

Calculation Description: Title 24 Analysis

Calculation Date/Time: 2020-08-14T17:29:47-07:00

Input File Name: 134590 -MMT-LICHAU.ribd19x

	ENERGY U	JSE SUMMARY		
Energy Use (kTDV/ft ² -yr)	Standard Design	Proposed Design	Compliance Margin	Percent Improvement
Space Heating	3.17	10.33	-7.16	-225.9
Space Cooling	34.36	26.3	8.06	23.5
IAQ Ventilation	0	0	0	
Water Heating	56.2	56.2	0	0
Self Utilization Credit	n/a	0	0	n/a
Compliance Energy Total	93.73	92.83	0.9	1

REQUIRED SPECIAL FEATURES

The following are features that must be installed as condition for meeting the modeled energy performance for this computer analysis.

- Insulation below roof deck
- New ductwork added is less than 40 ft. in length

HERS FEATURE SUMMARY

The following is a summary of the features that must be field-verified by a certified HERS Rater as a condition for meeting the modeled energy performance for this computer analysis. Additional detail is provided in the building tables below. Registered CF2Rs and CF3Rs are required to be completed in the HERS Registry

Building-level Verifications:

- -- None --
- Cooling System Verifications:
- -- None --

Heating System Verifications:

- -- None --
- HVAC Distribution System Verifications:
- -- None --
- Domestic Hot Water System Verifications:

• -- None --

ZONE INFORMATION						
01	02	03	04	05	06	07
Zone Name	Zone Type	HVAC System Name	Zone Floor Area (ft ²)	Avg. Ceiling Height	Water Heating System 1	Water Heating System 2
ADU	Conditioned	Res HVAC1	360	8	DHW Sys 1	N/A

Registration Number:

Registration Date/Time:

HERS Provider:

CA Building Energy Efficiency Standards - 2019 Residential Compliance

Project Name: LICHAU ADITION ONLY

Calculation Description: Title 24 Analysis

Calculation Date/Time: 2020-08-14T17:29:47-07:00

CF1R-PRF-01E

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Input File Name: 134590 -MMT-LICHAU.ribd19x

OPAQUE SURFACES																
01	02			03	04	05		06		07		08		09		10
Name	Zone		Cons	truction	Azimuth	Orientation	Orientation Gro		acc Aroa (ft-4)		and Door (ft2) Tilt		g) Wal	Wall Exceptions		Status
Add North Wall	ADU		R-1	.5 Wall 0		Left		390		20		90	E	xtension	nsion N	
Add East Wall	ADU		R-1	5 Wall	90	Back		96		8		90	E	xtension		New
Add West Wall	ADU		R-1	5 Wall	270	Front		96		20		90	E	xtension		New
Add Roof	ADU			0 High mance At	n/a	n/a		360		n/a		n/a				New
Add Raised Floor	ADU		R-19 Floo	or Crawlspace n/a		n/a		360		n/a		n/a				New
ATTIC																
01		02		()3	04		05			06		07			08
Name	C	onstruct	ion	Ту	/pe	Roof Rise (x in 12) Ro		Roof Reflec	tance	Roof	Emittan	ce	Radiant Ba	rier	С	ool Roof
Attic ADU	At	tic RoofA	ADU	Vent	ilated	4 0.1			0.85			No		No		
FENESTRATION / GLA	ZING															
01		02		03		04	05	5 06	07	08	09	10	11	12	13	14
Name	Name Type Surface			Orientation	Azim	width (ft)	Heigh (ft)	t Mult.	Area (ft ²)	U-factor	U-factor Source	SHGC	SHGC Sourc e	Exterior Shading		
Add N Window	ws	Windo	w	Add North	Wall	Left	0			1	20	0.3	NFRC	0.21	NFRC	Bug Screen
Add E Windov	vs	Windo	w	Add East V	Vall	Back	90	D		1	8	0.3	NFRC	0.21	NFRC	Bug Screer
Add W Windo	ws	Windo	w	Add West \	Wall	Front	27	0		1	20	0.3	NFRC	0.21	NFRC	Bug Screen

Registration Number:

Registration Date/Time:

HERS Provider:

Project Name: LICHAU ADITION ONLY

Calculation Description: Title 24 Analysis

Calculation Date/Time: 2020-08-14T17:29:47-07:00

CF1R-PRF-01E

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Input File Name: 134590 -MMT-LICHAU.ribd19x

OPAQUE SURFACE CONSTR	RUCTIONS						
01	02	03	04	05	06	07	08
Construction Name	Surface Type	Construction Type	Framing	Total Cavity R-value	Interior / Exterior Continuous R-value	U-factor	Assembly Layers
R-15 Wall	Exterior Walls	Wood Framed Wall	2x4 @ 16 in. O. C.	R-15	None / None	0.089	Inside Finish: Gypsum Board Cavity / Frame: R-15 / 2x4 Exterior Finish: Wood Siding/sheathing/decking
R-13 Wall	Interior Walls	Wood Framed Wall	2x4 @ 16 in. O. C.	R-13	None / None	0.092	Inside Finish: Gypsum Board Cavity / Frame: R-13 / 2x4 Other Side Finish: Gypsum Board
Attic RoofADU	Attic Roofs	Wood Framed Ceiling	2x4 @ 24 in. O. C.	R-13	None / None	0.078	Roofing: Light Roof (Asphalt Shingle) Roof Deck: Wood Siding/sheathing/decking Cavity / Frame: R-13.0 / 2x4 Around Roof Joists: R-0.0 insul.
R-19 Floor Crawlspace	Floors Over Crawlspace	Wood Framed Floor	2x6 @ 16 in. O. C.	R-19	None / None	0.049	Floor Surface: Carpeted Floor Deck: Wood Siding/sheathing/decking Cavity / Frame: R-19 / 2x6
R-30 High Performance At	Ceilings (below attic)	Wood Framed Ceiling	2x10 @ 16 in. O. C.	R-30	None / None	0.034	Over Ceiling Joists: R-6.0 insul. Cavity / Frame: R-24.1 / 2x10 Inside Finish: Gypsum Board

BUILDING ENVELOPE - HERS VERIFICATION			
01	02	03	04
Quality Insulation Installation (QII)	Quality Installation of Spray Foam Insulation	Building Envelope Air Leakage	CFM50
Not Required	Not Required	Not Required	n/a

Registration Number:

Registration Date/Time:

HERS Provider:

CA Building Energy Efficiency Standards - 2019 Residential Compliance

WATER HEATING SYSTEMS

Project Name: LICHAU ADITION ONLY

Calculation Description: Title 24 Analysis

Calculation Date/Time: 2020-08-14T17:29:47-07:00

CF1R-PRF-01E

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Input File Name: 134590 -MMT-LICHAU.ribd19x

						-													
01		02			03			04			05		06		07				
Nam	ne	System Type		Dist	ribution Type	e '	Water Hea	ater Name (#)) 5	Solar He	ating System	Comp	act Distributi	on	HERS V	erification			
DHW S	Sys 1	Domestic Hot W (DHW)	ater	Standa	ard Distributi System	on	DHW Heater 1 (1)			n/a			None		n/a				
WATER HEATI	ERS																		
01	02	03	04	05	06	07	08	09)	10	11		12		13	14			
Name	Heating Element Type	Tank Type	# Units	Tank Vol. (gal)	Energy Factor or Efficiency	Input Rating or Pilot	Tanl Insulat R-valu (Int/E	ion Loss ue Recov	or Rat /ery Elor	st Hr. ting or w Rate	NEEA Heat Pump Brand or Model		Tank Locatio or Ambient Condition		Status	Verified Existing Condition			
DHW Heater 1	Gas	Small Instantaneous	1	0.1	0.64-EF	<= 200 kBtu/hr	0	76	5	n/a n/a			n/a		Existing	n/a			
WATER HEATI	NG - HERS V	ERIFICATION																	
01		02		()3	04	ļ		05		06		07			08			
Nam	e	Pipe Insulation		Paralle	l Piping	Compact Di	stribution		Distribution ype	Reci	rculation Con	trol	Central DHV Distribution			Drain Wate Recovery			
DHW Sys 2	1 - 1/1	Not Required		Not Re	equired	Not Red	quired	N	one	1	Not Required		Not Require	d	Not	Not Required			
SPACE CONDI	TIONING SYS	STEMS																	
	01		02		03	0	4	05	06		07	08	09		10	11			
N	Name System Type		e	Heating L Name		~	Fan Name	Distributi Name	^{ion} т	Required Thermostat Type	Status	Verified Existing Condition	Equi	ating pment ount	Cooling Equipmen Count				
Res	HVAC1	Heating and C	coolin _i ther	g system	Heatin Compone 1	-	onent	HVAC Fan 1	Air Distributi System	-	n/a	Existing	NA		1	1			

Registration Number:

Registration Date/Time:

HERS Provider:

CA Building Energy Efficiency Standards - 2019 Residential Compliance

Project Name: LICHAU ADITION ONLY

Calculation Description: Title 24 Analysis

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Input File Name: 134590 -MMT-LICHAU.ribd19x

HVAC - HEAT		YPES														
	0	1				02					03				04	
	Na	me		System Type						N	umber of Uni	its		Неа	ting Efficiency	
	Heating Co	mponent	t 1		Ce	ntral gas f	urnace				1				AFUE-75	
HVAC - COO		TYPES														
01	L		02		03		04	4		05		06		07		08
Nan	ne	Sys	stem Type	Nur	Number of Units Efficiency EER				Effi	ciency SEE	R Zor	ally Controlle	d	Mulit-speed Compressor	HERS V	erification
Cooling Con	Cooling Component 1 Ductless mini-split AC				1		8	1		8		Not Zonal		Single Speed	-	Component ers-cool
HVAC - DIST		YSTEMS														
01	02		03	04	05	06	07	08	09	10	11	12	13	14	15	16
				Duct Ins.	R-value	Duct L	t Location Surface		e Area							
Name Type Design Type Supply Return					Supply	Return	Supply	Return	Bypass Duct	Duct Leakage	HERS Verification	Status	Verified Existing Condition	Existing Distribution system	New Ducts 40 ft	
Air Distributi on System 1	Uncondi [.] atti		Non- Verified	R-6	R-6	Attic	Attic	n/a	n/a	No Bypass Duct	Existing (not specified)	Air Distributi on System 1-hers- dist	Existing + New	n/a	n/a	n/a

HVAC FAN SYSTEMS - HERS VERIFICATION				
01	02	03		
Name	Verified Fan Watt Draw	Required Fan Efficacy (Watts/CFM)		
HVAC Fan 1-hers-fan	Not Required	0		

PROJECT NOTES

Registration Number:

Registration Date/Time:

HERS Provider:

CA Building Energy Efficiency Standards - 2019 Residential Compliance

Project Name: LICHAU ADITION ONLY

Calculation Description: Title 24 Analysis

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Registration Number:

Registration Date/Time:

Report Version: 2019.1.108 Schema Version: rev 20200101 HERS Provider:

Report Generated: 2020-08-14 17:29:59

CA Building Energy Efficiency Standards - 2019 Residential Compliance

Project Name: LICHAU ADITION ONLY

Calculation Description: Title 24 Analysis

CF1R-PRF-01E

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DOCUMENTATION AUTHOR'S DECLARATION STATEMENT				
1. I certi	fy that this Certificate of Compliance documentation is accurate and complete.			
Documer	ntation Author Name:	Documentation Author Signature:		
	MINERVA TOPETE	y muy		
Company	<i>r.</i>	Signature Date: 8/14/2020		
	Title 24 Data Corporation	8/14/2020		
Address:		CEA/ HERS Certification Identification (If applicable):		
	633 MONTEREY TRAIL (P.O. BOX 2199)			
City/State	e/Zip:	Phone:		
	FRAZIER PARK, CA 93225	(800) 237-8824		
RESPON	SIBLE PERSON'S DECLARATION STATEMENT			
I certify t	he following under penalty of perjury, under the laws of the State of California:			
1.				
2.	2. I certify that the energy features and performance specifications identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.			
3.	The building design features or system design features identified on this Certificate of Compliance calculations, plans and specifications submitted to the enforcement agency for approval with this	e are consistent with the information provided on other applicable compliance documents, worksheets, building permit application.		
Responsi	ble Designer Name:	Responsible Designer Signature:		
Company:		Date Signed:		
	DANIEL LICHAU			
Address:		License:		
	1900 BRUSH CREEK ROAD			
		Phone:		
	SANTA ROSA, CA 95404	(707) 953-0699		

Registration Number:

HERS Provider:



2019 Low-Rise Residential Mandatory Measures Summary

<u>NOTE:</u> Low-rise residential buildings subject to the Energy Standards must comply with all applicable mandatory measures, regardless of the compliance approach used. Review the respective section for more information. *Exceptions may apply. (01/2020)

Building Envelop	e Measures:
§ 110.6(a)1:	Air Leakage. Manufactured fenestration, exterior doors, and exterior pet doors must limit air leakage to 0.3 CFM per square foot or less when tested per NFRC-400, ASTM E283 or AAMA/WDMA/CSA 101/I.S.2/A440-2011.*
§ 110.6(a)5:	Labeling. Fenestration products and exterior doors must have a label meeting the requirements of § 10-111(a).
§ 110.6(b):	Field fabricated exterior doors and fenestration products must use U-factors and solar heat gain coefficient (SHGC) values from Tables 110.6-A, 110.6-B, or JA4.5 for exterior doors. They must be caulked and/or weather-stripped.
§ 110.7:	Air Leakage. All joints, penetrations, and other openings in the building envelope that are potential sources of air leakage must be caulked, gasketed, or weather stripped.
§ 110.8(a):	Insulation Certification by Manufacturers. Insulation must be certified by the Department of Consumer Affairs, Bureau of Household Goods and Services (BHGS).
§ 110.8(g):	Insulation Requirements for Heated Slab Floors. Heated slab floors must be insulated per the requirements of § 110.8(g).
§ 110.8(i):	Roofing Products Solar Reflectance and Thermal Emittance. The thermal emittance and aged solar reflectance values of the roofing material must meet the requirements of § 110.8(i) and be labeled per §10-113 when the installation of a cool roof is specified on the CF1R.
§ 110.8(j):	Radiant Barrier. When required, radiant barriers must have an emittance of 0.05 or less and be certified to the Department of Consumer Affairs
§ 150.0(a):	Ceiling and Rafter Roof Insulation. Minimum R-22 insulation in wood-frame ceiling; or the weighted average U-factor must not exceed 0.043. Minimum R-19 or weighted average U-factor of 0.054 or less in a rafter roof alteration. Attic access doors must have permanently attached insulation using adhesive or mechanical fasteners. The attic access must be gasketed to prevent air leakage. Insulation must be installed in direct contact with a continuous roof or ceiling which is sealed to limit infiltration and exfiltration as specified in § 110.7, including but not limited to placing insulation either above or below the roof deck or on top of a drywall ceiling."
§ 150.0(b):	Loose-fill Insulation. Loose fill insulation must meet the manufacturer's required density for the labeled R-value.
§ 150.0(c):	Wall Insulation. Minimum R-13 insulation in 2x4 inch wood framing wall or have a U-factor of 0.102 or less, or R-20 in 2x6 inch wood framing or have a U-factor of 0.071 or less. Opaque non-framed assemblies must have an overall assembly U-factor not exceeding 0.102. Masonry walls must meet Tables 150.1-A or B.*
§ 150.0(d):	Raised-floor Insulation. Minimum R-19 insulation in raised wood framed floor or 0.037 maximum U-factor.*
§ 150.0(f):	Slab Edge Insulation. Slab edge insulation must meet all of the following: have a water absorption rate, for the insulation material alone withou facings, no greater than 0.3 percent; have a water vapor permeance no greater than 2.0 perm per inch; be protected from physical damage and UV light deterioration; and, when installed as part of a heated slab floor, meet the requirements of § 110.8(g).
§ 150.0(g)1:	Vapor Retarder. In climate zones 1 through 16, the earth floor of unvented crawl space must be covered with a Class I or Class II vapor retarder. This requirement also applies to controlled ventilation crawl space for buildings complying with the exception to § 150.0(d).
§ 150.0(g)2:	Vapor Retarder. In climate zones 14 and 16, a Class I or Class II vapor retarder must be installed on the conditioned space side of all insulation in all exterior walls, vented attics, and unvented attics with air-permeable insulation.
§ 150.0(q):	Fenestration Products. Fenestration, including skylights, separating conditioned space from unconditioned space or outdoors must have a maximum U-factor of 0.58; or the weighted average U-factor of all fenestration must not exceed 0.58.*
Fireplaces, Deco	rative Gas Appliances, and Gas Log Measures:
§ 110.5(e)	Pilot Light. Continuously burning pilot lights are not allowed for indoor and outdoor fireplaces.
§ 150.0(e)1:	Closable Doors. Masonry or factory-built fireplaces must have a closable metal or glass door covering the entire opening of the firebox.
§ 150.0(e)2:	Combustion Intake. Masonry or factory-built fireplaces must have a combustion outside air intake, which is at least six square inches in area and is equipped with a readily accessible, operable, and tight-fitting damper or combustion-air control device.
§ 150.0(e)3:	Flue Damper. Masonry or factory-built fireplaces must have a flue damper with a readily accessible control.*
Space Conditioni	ng, Water Heating, and Plumbing System Measures:
§ 110.0-§ 110.3:	Certification. Heating, ventilation and air conditioning (HVAC) equipment, water heaters, showerheads, faucets, and all other regulated appliances must be certified by the manufacturer to the California Energy Commission.*
§ 110.2(a):	HVAC Efficiency. Equipment must meet the applicable efficiency requirements in Table 110.2-A through Table 110.2-K.*
§ 110.2(b):	Controls for Heat Pumps with Supplementary Electric Resistance Heaters. Heat pumps with supplementary electric resistance heaters must have controls that prevent supplementary heater operation when the heating load can be met by the heat pump alone; and in which the cut-on temperature for compression heating is higher than the cut-on temperature for supplementary heating, and the cut-off temperature for compression heating is higher than the cut-off temperature for supplementary heating."
§ 110.2(c):	Thermostats. All heating or cooling systems not controlled by a central energy management control system (EMCS) must have a setback thermostat.*
§ 110.3(c)4:	Water Heating Recirculation Loops Serving Multiple Dwelling Units. Water heating recirculation loops serving multiple dwelling units must meet the air release valve, backflow prevention, pump priming, pump isolation valve, and recirculation loop connection requirements of § 110.3(c)4.
§ 110.3(c)6:	Isolation Valves. Instantaneous water heaters with an input rating greater than 6.8 kBtu per hour (2 kW) must have isolation valves with hose bibbs or other fittings on both cold and hot water lines to allow for flushing the water heater when the valves are closed.
§ 110.5:	Pilot Lights. Continuously burning pilot lights are prohibited for natural gas: fan-type central furnaces; household cooking appliances (except appliances without an electrical supply voltage connection with pilot lights that consume less than 150 Btu per hour); and pool and spa heaters.
§ 150.0(h)1:	Building Cooling and Heating Loads. Heating and/or cooling loads are calculated in accordance with the ASHRAE Handbook, Equipment Volume, Applications Volume, and Fundamentals Volume; the SMACNA Residential Comfort System Installation Standards Manual; or the ACCA Manual J using design conditions specified in § 150.0(h)2.



ENERGY COMMISSION	
§ 150.0(h)3A:	Clearances. Air conditioner and heat pump outdoor condensing units must have a clearance of at least five feet from the outlet of any dryer
§ 150.0(h)3B:	Liquid Line Drier. Air conditioners and heat pump systems must be equipped with liquid line filter driers if required, as specified by the manufacturer's instructions.
§ 150.0(j)1:	Storage Tank Insulation. Unfired hot water tanks, such as storage tanks and backup storage tanks for solar water-heating systems, must have a minimum of R-12 external insulation or R-16 internal insulation where the internal insulation R-value is indicated on the exterior of the tank.
§ 150.0(j)2A:	Water Piping, Solar Water-heating System Piping, and Space Conditioning System Line Insulation. All domestic hot water piping must be insulated as specified in Section 609.11 of the California Plumbing Code. In addition, the following piping conditions must have a minimum insulation wall thickness of one inch or a minimum insulation R-value of 7.7: the first five feet of cold water pipes from the storage tank; all hot water piping with a nominal diameter equal to or greater than 3/4 inch and less than one inch; all hot water piping with a nominal diameter less than 3/4 inch that is: associated with a domestic hot water recirculation system, from the heating source to storage tank or between tanks, buried below grade, and from the heating source to kitchen fixtures.*
§ 150.0(j)3:	Insulation Protection. Piping insulation must be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind as required by Section 120.3(b). Insulation exposed to weather must be water retardant and protected from UV light (no adhesive tapes). Insulation covering chilled water piping and refrigerant suction piping located outside the conditioned space must include, or be protected by, a Class I or Class II vapor retarder. Pipe insulation buried below grade must be installed in a waterproof and non-crushable casing or sleeve.
§ 150.0(n)1:	Gas or Propane Water Heating Systems. Systems using gas or propane water heaters to serve individual dwelling units must include all of the following: A dedicated 125 volt, 20 amp electrical receptacle connected to the electric panel with a 120/240 volt 3 conductor, 10 AWG copper branch circuit, within three feet of the water heater without obstruction. Both ends of the unused conductor must be labeled with the word "spare" and be electrically isolated. Have a reserved single pole circuit breaker space in the electrical panel adjacent to the circuit breaker for the branch circuit and labeled with the words "Future 240V Use"; a Category III or IV vent, or a Type B vent with straight pipe between the outside termination and the space where the water heater is installed; a condensate drain that is no more than two inches higher than the base of the water heater, and allows natural draining without pump assistance; and a gas supply line with a capacity of at least 200,000 Btu per hour.
§ 150.0(n)2:	Recirculating Loops. Recirculating loops serving multiple dwelling units must meet the requirements of § 110.3(c)5.
§ 150.0(n)3:	Solar Water-heating Systems. Solar water-heating systems and collectors must be certified and rated by the Solar Rating and Certification Corporation (SRCC), the International Association of Plumbing and Mechanical Officials, Research and Testing (IAPMO R&T), or by a listing agency that is approved by the Executive Director.
Ducts and Fans	Measures:
§ 110.8(d)3:	Ducts. Insulation installed on an existing space-conditioning duct must comply with § 604.0 of the California Mechanical Code (CMC). If a contractor installs the insulation, the contractor must certify to the customer, in writing, that the insulation meets this requirement.
§ 150.0(m)1:	CMC Compliance. All air-distribution system ducts and plenums must meet the requirements of the CMC §§ 601.0, 602.0, 603.0, 604.0, 605.0 and ANSI/SMACNA-006-2006 HVAC Duct Construction Standards Metal and Flexible 3rd Edition. Portions of supply-air and return-air ducts and plenums must be insulated to a minimum installed level of R-6.0 or a minimum installed level of R-4.2 when ducts are entirely in conditioned space as confirmed through field verification and diagnostic testing (RA3.1.4.3.8). Portions of the duct system completely exposed and surrounded by directly conditioned space are not required to be insulated. Connections of metal ducts and inner core of flexible ducts must be mechanically fastened. Openings must be sealed with mastic, tape, or other duct-closure system that meets the applicable requirements of UL 181, UL 181A, or UL 181B or aerosol sealant that meets the requirements of UL 723. If mastic or tape is used to seal openings greater than ¼ inch, the combination of mastic and either mesh or tape must be used. Building cavities, support platforms for air handlers, and plenums designed or constructed with materials other than sealed sheet metal, duct board or flexible duct must not be used to convey conditioned air. Building cavities and support platforms may contain ducts. Ducts installed in cavities and support platforms must not be compressed to cause reductions in the cross-sectional area. ⁺
§ 150.0(m)2:	Factory-Fabricated Duct Systems. Factory-fabricated duct systems must comply with applicable requirements for duct construction, connections, and closures; joints and seams of duct systems and their components must not be sealed with cloth back rubber adhesive duct tapes unless such tape is used in combination with mastic and draw bands.
§ 150.0(m)3:	Field-Fabricated Duct Systems. Field-fabricated duct systems must comply with applicable requirements for: pressure-sensitive tapes, mastics, sealants, and other requirements specified for duct construction.
§ 150.0(m)7:	Backdraft Damper. Fan systems that exchange air between the conditioned space and outdoors must have backdraft or automatic dampers.
§ 150.0(m)8:	Gravity Ventilation Dampers. Gravity ventilating systems serving conditioned space must have either automatic or readily accessible, manually operated dampers in all openings to the outside, except combustion inlet and outlet air openings and elevator shaft vents.
§ 150.0(m)9:	Protection of Insulation. Insulation must be protected from damage, sunlight, moisture, equipment maintenance, and wind. Insulation exposed to weather must be suitable for outdoor service. For example, protected by aluminum, sheet metal, painted canvas, or plastic cover. Cellular foam insulation must be protected as above or painted with a coating that is water retardant and provides shielding from solar radiation.
§ 150.0(m)10:	Porous Inner Core Flex Duct. Porous inner core flex ducts must have a non-porous layer between the inner core and outer vapor barrier.
§ 150.0(m)11:	Duct System Sealing and Leakage Test. When space conditioning systems use forced air duct systems to supply conditioned air to an occupiable space, the ducts must be sealed and duct leakage tested, as confirmed through field verification and diagnostic testing, in accordance with § 150.0(m)11 and Reference Residential Appendix RA3.
§ 150.0(m)12:	Air Filtration. Space conditioning systems with ducts exceeding 10 feet and the supply side of ventilation systems must have MERV 13 or equivalent filters. Filters for space conditioning systems must have a two inch depth or can be one inch if sized per Equation 150.0-A. Pressure drops and labeling must meet the requirements in §150.0(m)12. Filters must be accessible for regular service.*
§ 150.0(m)13:	Space Conditioning System Airflow Rate and Fan Efficacy. Space conditioning systems that use ducts to supply cooling must have a hole for the placement of a static pressure probe, or a permanently installed static pressure probe in the supply plenum. Airflow must be \geq 350 CFM per ton of nominal cooling capacity, and an air-handling unit fan efficacy \leq 0.45 watts per CFM for gas furnace air handlers and \leq 0.58 watts per CFM for all others. Small duct high velocity systems must provide an airflow \geq 250 CFM per ton of nominal cooling capacity, and an air-handling unit fan efficacy \leq 0.62 watts per CFM. Field verification testing is required in accordance with Reference Residential Appendix RA3.3.*



Requirements for	or Ventilation and Indoor Air Quality:
§ 150.0(o)1:	Requirements for Ventilation and Indoor Air Quality. All dwelling units must meet the requirements of ASHRAE Standard 62.2, Ventilation and Acceptable Indoor Air Quality in Residential Buildings subject to the amendments specified in § 150.0(o)1.
§ 150.0(o)1C:	Single Family Detached Dwelling Units. Single family detached dwelling units, and attached dwelling units not sharing ceilings or floors with other dwelling units, occupiable spaces, public garages, or commercial spaces must have mechanical ventilation airflow provided at rates determined by ASHRAE 62.2 Sections 4.1.1 and 4.1.2 and as specified in § 150.0(o)1C.
§ 150.0(o)1E:	Multifamily Attached Dwelling Units. Multifamily attached dwelling units must have mechanical ventilation airflow provided at rates in accordance with Equation 150.0-B and must be either a balanced system or continuous supply or continuous exhaust system. If a balanced system is not used, all units in the building must use the same system type and the dwelling-unit envelope leakage must be \leq 0.3 CFM at 50 Pa (0.2 inch water) per square foot of dwelling unit envelope surface area and verified in accordance with Reference Residential Appendix RA3.8.
§ 150.0(o)1F:	Multifamily Building Central Ventilation Systems. Central ventilation systems that serve multiple dwelling units must be balanced to provide ventilation airflow for each dwelling unit served at a rate equal to or greater than the rate specified by Equation 150.0-B. All unit airflows must be within 20 percent of the unit with the lowest airflow rate as it relates to the individual unit's minimum required airflow rate needed for compliance.
§ 150.0(o)1G:	Kitchen Range Hoods. Kitchen range hoods must be rated for sound in accordance with Section 7.2 of ASHRAE 62.2.
§ 150.0(o)2:	Field Verification and Diagnostic Testing. Dwelling unit ventilation airflow must be verified in accordance with Reference Residential Appendix RA3.7. A kitchen range hood must be verified in accordance with Reference Residential Appendix RA3.7.4.3 to confirm it is rated by HVI to comply with the airflow rates and sound requirements as specified in Section 5 and 7.2 of ASHRAE 62.2.
Pool and Spa Sy	ystems and Equipment Measures:
§ 110.4(a):	Certification by Manufacturers. Any pool or spa heating system or equipment must be certified to have all of the following: a thermal efficiency that complies with the Appliance Efficiency Regulations; an on-off switch mounted outside of the heater that allows shutting off the heater without adjusting the thermostat setting; a permanent weatherproof plate or card with operating instructions; and must not use electric resistance heating."
§ 110.4(b)1:	Piping. Any pool or spa heating system or equipment must be installed with at least 36 inches of pipe between the filter and the heater, or dedicated suction and return lines, or built-in or built-up connections to allow for future solar heating.
§ 110.4(b)2:	Covers. Outdoor pools or spas that have a heat pump or gas heater must have a cover.
§ 110.4(b)3:	Directional Inlets and Time Switches for Pools. Pools must have directional inlets that adequately mix the pool water, and a time switch that will allow all pumps to be set or programmed to run only during off-peak electric demand periods.
§ 110.5:	Pilot Light. Natural gas pool and spa heaters must not have a continuously burning pilot light.
§ 150.0(p):	Pool Systems and Equipment Installation. Residential pool systems or equipment must meet the specified requirements for pump sizing, flow rate, piping, filters, and valves.*
Lighting Measur	res:
§ 110.9:	Lighting Controls and Components. All lighting control devices and systems, ballasts, and luminaires must meet the applicable requirements of § 110.9.*
§ 150.0(k)1A:	Luminaire Efficacy. All installed luminaires must meet the requirements in Table 150.0-A.
§ 150.0(k)1B:	Blank Electrical Boxes. The number of electrical boxes that are more than five feet above the finished floor and do not contain a luminaire or other device must be no greater than the number of bedrooms. These electrical boxes must be served by a dimmer, vacancy sensor control, or fan speed control.
§ 150.0(k)1C:	Recessed Downlight Luminaires in Ceilings. Luminaires recessed into ceilings must meet all of the requirements for: insulation contact (IC) labeling; air leakage; sealing; maintenance; and socket and light source as described in § 150.0(k)1C.
§ 150.0(k)1D:	Electronic Ballasts for Fluorescent Lamps. Ballasts for fluorescent lamps rated 13 watts or greater must be electronic and must have an output frequency no less than 20 kHz.
§ 150.0(k)1E:	Night Lights, Step Lights, and Path Lights. Night lights, step lights and path lights are not required to comply with Table 150.0-A or be controlled by vacancy sensors provided they are rated to consume no more than 5 watts of power and emit no more than 150 lumens.
§ 150.0(k)1F:	Lighting Integral to Exhaust Fans. Lighting integral to exhaust fans (except when installed by the manufacturer in kitchen exhaust hoods) must meet the applicable requirements of § 150.0(k).*
§ 150.0(k)1G:	Screw based luminaires. Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8.*
§ 150.0(k)1H:	Light Sources in Enclosed or Recessed Luminaires. Lamps and other separable light sources that are not compliant with the JA8 elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires.
§ 150.0(k)11:	Light Sources in Drawers, Cabinets, and Linen Closets. Light sources internal to drawers, cabinetry or linen closets are not required to comply with Table 150.0-A or be controlled by vacancy sensors provided that they are rated to consume no more than 5 watts of power, emit no more than 150 lumens, and are equipped with controls that automatically turn the lighting off when the drawer, cabinet or linen closet is closed.
§ 150.0(k)2A:	Interior Switches and Controls. All forward phase cut dimmers used with LED light sources must comply with NEMA SSL 7A.
§ 150.0(k)2A: § 150.0(k)2B:	
	Interior Switches and Controls. All forward phase cut dimmers used with LED light sources must comply with NEMA SSL 7A.
§ 150.0(k)2B:	Interior Switches and Controls. All forward phase cut dimmers used with LED light sources must comply with NEMA SSL 7A. Interior Switches and Controls. Exhaust fans must be controlled separately from lighting systems. [*] Interior Switches and Controls. Lighting must have readily accessible wall-mounted controls that allow the lighting to be manually
§ 150.0(k)2B: § 150.0(k)2C:	Interior Switches and Controls. All forward phase cut dimmers used with LED light sources must comply with NEMA SSL 7A. Interior Switches and Controls. Exhaust fans must be controlled separately from lighting systems.* Interior Switches and Controls. Lighting must have readily accessible wall-mounted controls that allow the lighting to be manually turned ON and OFF.*



2019 Low-Rise Residential Mandatory Measures Summary

ENERGY COMMILLION	
§ 150.0(k)2G:	Interior Switches and Controls. An energy management control system (EMCS) may be used to comply with control requirements if it: provides functionality of the specified control according to § 110.9; meets the Installation Certificate requirements of § 130.4; meets the EMCS requirements of § 130.0(e); and meets all other requirements in § 150.0(k)2.
§ 150.0(k)2H:	Interior Switches and Controls. A multiscene programmable controller may be used to comply with dimmer requirements in § 150.0(k) if it provides the functionality of a dimmer according to § 110.9, and complies with all other applicable requirements in § 150.0(k)2.
§ 150.0(k)2I:	Interior Switches and Controls. In bathrooms, garages, laundry rooms, and utility rooms, at least one luminaire in each of these spaces must be controlled by an occupant sensor or a vacancy sensor providing automatic-off functionality. If an occupant sensor is installed, it must be initially configured to manual-on operation using the manual control required under Section 150.0(k)2C.
§ 150.0(k)2J:	Interior Switches and Controls. Luminaires that are or contain light sources that meet Reference Joint Appendix JA8 requirements for dimming, and that are not controlled by occupancy or vacancy sensors, must have dimming controls.*
§ 150.0(k)2K:	Interior Switches and Controls. Under cabinet lighting must be controlled separately from ceiling-installed lighting systems.
§ 150.0(k)3A:	Residential Outdoor Lighting. For single-family residential buildings, outdoor lighting permanently mounted to a residential building, or to other buildings on the same lot, must meet the requirement in item § 150.0(k)3Ai (ON and OFF switch) and the requirements in either § 150.0(k)3Aii (photocell and either a motion sensor or automatic time switch control) or § 150.0(k)3Aii (astronomical time clock), or an EMCS.
§ 150.0(k)3B:	Residential Outdoor Lighting. For low-rise residential buildings with four or more dwelling units, outdoor lighting for private patios, entrances, balconies, and porches; and residential parking lots and carports with less than eight vehicles per site must comply with either § 150.0(k)3A or with the applicable requirements in Sections 110.9, 130.0, 130.2, 130.4, 140.7 and 141.0.
§ 150.0(k)3C:	Residential Outdoor Lighting. For low-rise residential buildings with four or more dwelling units, any outdoor lighting for residential parking lots or carports with a total of eight or more vehicles per site and any outdoor lighting not regulated by § 150.0(k)3B or § 150.0(k)3D must comply with the applicable requirements in Sections 110.9, 130.0, 130.2, 130.4, 140.7 and 141.0.
§ 150.0(k)4:	Internally illuminated address signs. Internally illuminated address signs must comply with § 140.8; or must consume no more than 5 watts of power as determined according to § 130.0(c).
§ 150.0(k)5:	Residential Garages for Eight or More Vehicles. Lighting for residential parking garages for eight or more vehicles must comply with the applicable requirements for nonresidential garages in Sections 110.9, 130.0, 130.1, 130.4, 140.6, and 141.0.
§ 150.0(k)6A:	Interior Common Areas of Low-rise Multifamily Residential Buildings. In a low-rise multifamily residential building where the total interior common area in a single building equals 20 percent or less of the floor area, permanently installed lighting for the interior common areas in that building must be comply with Table 150.0-A and be controlled by an occupant sensor.
§ 150.0(k)6B:	Interior Common Areas of Low-rise Multifamily Residential Buildings. In a low-rise multifamily residential building where the total interior common area in a single building equals more than 20 percent of the floor area, permanently installed lighting for the interior common areas in that building must: i. Comply with the applicable requirements in Sections 110.9, 130.0, 130.1, 140.6 and 141.0; and ii. Lighting installed in corridors and stairwells must be controlled by occupant sensors that reduce the lighting power in each space by at least 50 percent. The occupant sensors must be capable of turning the light fully on and off from all designed paths of ingress and egress.
Solar Ready Buil	dings:
§ 110.10(a)1:	Single Family Residences. Single family residences located in subdivisions with 10 or more single family residences and where the application for a tentative subdivision map for the residences has been deemed complete and approved by the enforcement agency, which do not have a photovoltaic system installed, must comply with the requirements of § 110.10(b) through § 110.10(e).
§ 110.10(a)2:	Low-rise Multifamily Buildings. Low-rise multi-family buildings that do not have a photovoltaic system installed must comply with the requirements of § 110.10(b) through § 110.10(d).
§ 110.10(b)1:	Minimum Solar Zone Area. The solar zone must have a minimum total area as described below. The solar zone must comply with access, pathway, smoke ventilation, and spacing requirements as specified in Title 24, Part 9 or other parts of Title 24 or in any requirements adopted by a local jurisdiction. The solar zone total area must be comprised of areas that have no dimension less than 5 feet and are no less than 80 square feet each for buildings with roof areas less than or equal to 10,000 square feet or no less than 160 square feet each for buildings with roof areas greater than 10,000 square feet. For single family residences, the solar zone must be located on the roof or overhang of the building and have a total area no less than 250 square feet. For low-rise multi-family buildings the solar zone must be located on the roof or overhang of the building project, and have a total area no less than 15 percent of the total roof area of the building any skylight area. The solar zone requirement is applicable to the entire building, including mixed occupancy."
§ 110.10(b)2:	Azimuth. All sections of the solar zone located on steep-sloped roofs must be oriented between 90 degrees and 300 degrees of true north.
§ 110.10(b)3A:	Shading. The solar zone must not contain any obstructions, including but not limited to: vents, chimneys, architectural features, and roof mounted equipment.*
§ 110.10(b)3B:	Shading. Any obstruction located on the roof or any other part of the building that projects above a solar zone must be located at least twice the distance, measured in the horizontal plane, of the height difference between the highest point of the obstruction and the horizontal projection of the nearest point of the solar zone, measured in the vertical plane. [*]
§ 110.10(b)4:	Structural Design Loads on Construction Documents. For areas of the roof designated as a solar zone, the structural design loads for roof dead load and roof live load must be clearly indicated on the construction documents.
§ 110.10(c):	Interconnection Pathways. The construction documents must indicate: a location reserved for inverters and metering equipment and a pathway reserved for routing of conduit from the solar zone to the point of interconnection with the electrical service; and for single family residences and central water-heating systems, a pathway reserved for routing plumbing from the solar zone to the water-heating system.
§ 110.10(d):	Documentation. A copy of the construction documents or a comparable document indicating the information from § 110.10(b) through § 110.10(c) must be provided to the occupant.
§ 110.10(e)1:	Main Electrical Service Panel. The main electrical service panel must have a minimum busbar rating of 200 amps.
§ 110.10(e)2:	Main Electrical Service Panel. The main electrical service panel must have a reserved space to allow for the installation of a double pole circuit breaker for a future solar electric installation. The reserved space must be permanently marked as "For Future Solar Electric".

LICHAU ADITION ONLY System Name						Date 8/* Floor	14/2020 Area
Res HVAC						-	360
ENGINEERING CHECKS		SYSTEM LOAD					
Number of Systems	1		COIL	COOLING P	EAK	COIL H	IG. PEAK
Heating System			CFM	Sensible	Latent	CFM	Sensible
Output per System	60,000	Total Room Loads	161	3,976	113	136	5,1
Total Output (Btuh)	60,000	Return Vented Lighting		0		-	
Output (Btuh/sqft)	166.7	Return Air Ducts		0			
Cooling System		Return Fan		0	·		·
Output per System	60,000	Ventilation	0	0	0	0	a
Total Output (Btuh)	60,000	Supply Fan		0			
Total Output (Tons)	5.0	Supply Air Ducts		0		214	
Total Output (Btuh/sqft)	166.7		- 1 G				
Total Output (sqft/Ton)	72.0	TOTAL SYSTEM LOAD		3,976	113		5,1
Air System							
CFM per System	1,500	HVAC EQUIPMENT SELECTION					
Airflow (cfm)	1,500	Existing FAU/AC Before 1978		48,679	6,468	1	60,0
Airflow (cfm/sqft)	4.17				-		
Airflow (cfm/Ton)	300.0						
Outside Air (%)	0.0%	Total Adjusted System Output		48,679	6,468	100	60,0
Outside Air (cfm/sqft)	0.00	(Adjusted for Peak Design conditions)					
			1.000				
Outside Air 0 cfm Supply Fan 1,500 cfm 70 °F		Coil ————————————————————————————————————	→ []		RC	MOO	05 °F

ROOM HEATING PEAK L	OADS						
Project Name						Da	ate
LICHAU ADITION ONLY							8/14/2020
ROOM INFORMATION	1011		SIGN CONDITIO	NS			
Room Name	ADU		e of Peak				Jan 1 AM
Floor Area	360.00 ft ²	Out	door Dry Bulb Te	mpe	erature		24 °F
Indoor Dry Bulb Temperature	70 °F						
	<u>.</u>				∆T [°] F		
Conduction R-19 Floor Crawlspace	Area	٦.,	U-Value				Btu/hr
	360.0		0.0469	X	46	=	776
R-15 Wall New Windows/Doors	534.0		0.0953		46	=	2,342
	48.0	~	0.3000	Х	46	=	662
R-30 High Performance Attic	360.0		0.0419	Х	46	=	694
		X		Х		=	
		X		Х		=	
	_	X		Х		=	
	_	X		Х		=	
		Х		Х		=	
		X		Х		=	
		X		Х		=	
		Х		Х		=	
		X		Х		=	
		Х		Х		=	
		X		Х		=	
		Х		Х		=	
		Х		Х		=	
		Х		Х		=	
		Х		Х		=	
		Х		Х		=	
		X		Х		=	
		Х		Х		=	
		Х		Х		=	
		х		Х		=	
		Х		х		=	
		Х		х		=	
		Х		х		=	
		Х		х		=	
		х		х		=	
		х		х		=	
		x		х		=	
Items shown with an asterisk (*) denote condu	ction through an interior surf	ace to	another room	I	Page To	otal	4,474
Infiltration: 1.00 X Air Ser	1.073 X 360 X nsible Area		8.00 X 0. ling Height AC	266 H	/ 60] X	4 Г	6 = 631
TOTAL HOURLY HEAT LOSS FOR	ROOM						5,105

RESIDENTIAL ROO	M COOLING L	OAD S	UM	M	ARY									
Project Name											[Date	14 4	/0.000
LICHAU ADITION ONLY ROOM INFORMATION			DEG			TI						8/	/14,	/2020
		ADU												96 °F
Room Name Floor Area		360.00 ft ²			or Dry Bull or Wet Bul		-							69 ⁰F
Indoor Dry Bulb Temperature		78 ⁰F			or Daily Ra		•	eratu	lie					35 °F
			Oute	100	Dully No	ing	0.							
Opaque Surfaces	Orientation	Area			U-Fa	cto	r			CLI	۲D ¹			Btu/hr
R-19 Floor Crawlspace		3	60.0	Χ		0.	0469	Х			9.6	=		162
R-15 Wali	(N)	3	70.0	Χ			0953	Х			9.0	=		317
R-15 Wall	(E)		88.0	Χ		0.	0953	Х			19.0	=		159
R-15 Wall	(W)		76.0	Χ			0953	Х			19.0	=		138
R-30 High Performance Attic	(N)	3	60.0	Х		0.	0419	Х			43.0	=		648
				Х				Х				=		
				Х				Х				=		
				Х				Х				=		
				Х				Х				=		4 405
Items shown with an asterisk (*) den	ote conduction through an	interior surfa	ice to a	anot	ther room.				Р	age	e Total			1,425
1. Cooling Load Temperature Diff	erence (CLTD)		Shade						Unsh	a d	ad			
Fenestration	Orientation	Area	Shaue	a	GLF			Area		lau	GLF			Btu/hr
Add N Windows	(N)		0.0 X		10.5	+				x		10.5	<u> </u>	211
Add E Windows	(E)		0.0 X	-	10.5	+			8.0	x			_	191
Add W Windows	(W)		0.0 X	-	10.5	+			20.0	x		00.0	_	477
			x	-		+				x			_	
			x	-		+				x			=	
			x			+				x			=	
			x			+				x			=	
			x			+				X			=	
			x			+				X			=	
										I	Page To	tal		878
Internal Cain														D411/ba
Internal Gain Occupants 1	.1 Occupants	s x					245	Dtub	n/occ			=		Btu/hr 265
Occupanto	⁶⁰ Floor Area						1.00	w/sc		•		=		1,229
								W/3C	111			-	<u> </u>	
Infiltration: 1.073 X	0.71 🗙	13.20 🗙			18 =									180
Air Sensible		ELA	·	Δ									<u> </u>	
TOTAL HOURLY SENSIBLE	HEAT GAIN FOR R													3,976
Latent Gain														Btu/hr
Occupants 1	.1 Occupants	s X					155	Btuh	l/occ.			=		167
	 		r										_	
Infiltration: 4,812 X	0.71 X	13.20 X			.00121 =									-54
Air Latent	CFM	ELA		ΔV	/V									
TOTAL HOURLY LATENT H	EAT GAIN FOR RO	ОМ												113

Maystrovich, Mark

From:	daniel lichau <daniel_lichau@yahoo.com></daniel_lichau@yahoo.com>
Sent:	Tuesday, August 25, 2020 6:38 PM
То:	Permit Submittal
Cc:	Maystrovich, Mark; Anderson, Cassidy; Ivan Rezvoy
Subject:	[EXTERNAL] 1900 Brush Creek Road Santa Rosa Permit Application
Attachments:	Brush Creek Road_1900-Plan Permit Application.pdf; Brush Creek Road_1900-Plan
	T-24 Report.pdf; Brush Creek Road_1900-Plan Foundations Report.pdf; Brush Creek
	Road_1900-Plan Engineer Letter.pdf; Brush Creek Road_1900-Plan .pdf; Brush Creek
	Road_1900-Plan Electronic Disclosure.pdf

To whom it may concern,

Please see attached permit application and supplemental documentation, including plans, for addition on our home at 1900 Brush Creek Road Santa Rosa. Please email or feel free to call with any questions or further required actions. Thank you for your time and we look forward to hearing from you.

Sincerely, Amber Lichau (707) 889-6979

City of			Ĩ	BUILDING PE	RMIT NO.:
Santa]	ROSA	LDING	ŀ	Related Files	;
	PE	RMIT			
1	APPLI	CATION		Dep	artment Use Only
	PLEASE P	RINT CLEARLY			
PROJECT ADDRESS (NOT MAILING ADD 1900 BRUSH CRE	RESS) EEK RD SANTA ROSI	A 95404	SUITE/UNIT NO		DATE 8/18/2020
DANIEL É AMBER L	,	ļ	NCELL I HOME		CELL HOME BUSINESS
OWNER ADDRESS			107)953- ZP	0699	107 889-6979 E-MAIL ADDRESS
1900 BRUSH CREEK		CA	9540	94	Idaniel lichaul
	ECT ONE: MOWNER LESSEE/TENANT				Well D HOME D BUSINESS
DANIEL LICHAU	LAGENT FOR OWNER CON	TRACTOR	107)953.	-D699 1	107)889-6979
CONTACT ADDRESS	CITY S'	TATE	ZIP	<u>~~</u>	E MAIL ADDRESS
1900 BRUSH CREEK	RD SANTA ROSA	<u></u>	95404		Caniel Jichase Valso: Com Becel D Home D Business
APPLICANT			CELL D HOME		k .
DANIEL LICHAU			107)953-	0699	107)889-6979
APPLICANT ADDRESS		TATE A.A	Zip		E-MAIL ADDRESS
CONTRACTOR'S NAME - IF OWNER/BU	RD SANTA ROSA	C F-	9540	VERIFICATION	Mahmin rang
OWNER-/BUILDER					
CONTRACTORS STATE LICENSE NUMB				D BUSINESS -	
CONTRACTOR ADDRESS	CITY ST.	ATE	Zip .	• •	E-MAIL ADDRESS
TYPE OF PERMIT (MARK ALL THAT APP BUILDING			[] GR	ADING	
TOTAL SQUARE FOOTAGE OF THIS PRO	DJECT:		ELTENANI	I IMPROVEM	ENT CREPAIR
COMMERCIAL/INDUSTRIAL: NA	RESIDENCE: 360 GARA	GE: NA	DECK:	N/A CO	OVERED PORCHES: NA
DESCRIPTION OF WORK:	D' MASTER BATH & B	EDROOM	ADDITIC	N	······································
	R SALE		VALUATIO APPLICAT		
I HEREBY CERTIFY THAT THE INFORMA	TION ON THIS APPLICATION IS TRUE AN	DCORRECT	·I	<u>1</u> 2	
SIGNATURE:			DATE: 8/	helpon -	~
	DF CONSTRUCTION CBC EDITION	USED N	O OF STORIES	10/2022	CHANGE OF OCCUPANCY FROM: TO:
NO. OF DWELLING UNITS	PRESENT USE Resa		PROPOS	sed use Rescl.	La.,
HIGH FIRE SEVERITY ZONE	FIRE SPRINKLERS		M SYSTEMS		
IS THIS A CODE ENFORCEMENT CASE?	OYES ONO IF YES, LIST CASE	E NO,;			
	FOR DEPARTME		3.5-5.7-		
			2010 - 2010 - 2010 2010 - 2010 - 2010 2010 - 2010 - 2010 - 2010		1
	FRONT SETBACK:	SIDE SETBACK	ATE: Exterior		SETBACK:
NO 🗉 👘 NO 🗆		[原言] 建设。 [2]			

3/15/2016

BUILDING ENERGY ANALYSIS REPORT

PROJECT:

LICHAU ADITION ONLY 1900 BRUSH CREEK ROAD SANTA ROSA, CA 95404

Project Designer:

DANIEL LICHAU 1900 BRUSH CREEK ROAD SANTA ROSA, CA 95404 (707) 953-0699

Report Prepared by:

MINERVA TOPETE Title 24 Data Corporation 633 MONTEREY TRAIL (P.O. BOX 2199) FRAZIER PARK, CA 93225 (800) 237-8824

Job Number:

134590

Date:

8/14/2020

The EnergyPro computer program has been used to perform the calculations summarized in this compliance report. This program has approval and is authorized by the California Energy Commission for use with both the Residential and Nonresidential 2019 Building Energy Efficiency Standards.

Cover Page	1
Table of Contents	2
Form CF1R-PRF-01-E Certificate of Compliance	3
Form MF-1R Mandatory Measures Summary	11
HVAC System Heating and Cooling Loads Summary	15
Room Heating Peak Loads	16
Room Cooling Peak Loads	17

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Project Name: LICHAU ADITION ONLY Calculation Description: Title 24 Analysis

Calculation Date/Time: 2020-08-14T17:29:47-07:00 Input File Name: 134590 -MMT-LICHAU.ribd19x

CF1R-PRF-01E (Page 1 of 8)

GENER	GENERAL INFORMATION						
5	Proje	ect Name	Project Name LICHAU ADITION ONLY				:
02		Run Title Ti	Run Title Title 24 Analysis	-			
8	Project	: Location 15	Project Location 1900 BRUSH CREEK ROAD				
8		City S4	city SANTA ROSA	05	Standards	Standards Version 2019	
90		Zip code 95404	5404	07	Software	Software Version EnergyPro 8.1	
80	Clim	Climate Zone 2		60	Front Orientation (deg/ Cardinal) 270	irdinal) 270	
10	Build	Building Type Single family	ngle family	11	Number of Dwelling Units 1	g Units 1	
12	Proje	Project Scope AdditionOnly	dditionOnly	13	Number of Bedrooms	drooms 5	
14	Addition Cond. Floor Area (ft ²) 360	Area (ft²) ³⁶	20	15	Number of Stories	Stories 1	
16	Existing Cond. Floor Area (ft ²) 1836	Area (ft ²) ¹⁶	336	17	Fenestration Average U-factor 0.3	I-factor 0.3	
18	Total Cond. Floor Area (ft ²) 2196	Area (ft ²) ²¹	196	19	Glazing Percentage (%)	age (%) 13.33%	
20	ADU Bedroo	ADU Bedroom Count 0		21	ADU Conditioned Floor Area	or Area 0	
22	Is Natural Gas Available? Yes	vailable? Ye	is				
Addîtiç	Addition Alone Project Analysis Parameters	2					
	10		02	03	4	8	90
							Total Dodacome

01	02	03	5	05	90
Existing Area (excl. new addition) (ft2)	Addition Area (excl. existing) (ft2)	Total Area (ft2)	Existing Bedrooms	Addition Bedrooms	Total Bedrooms
1836	360	2196	4	1	5

COMPLIANCE RESULTS	SULTS
01	Building Complies with Computer Performance
02	Building does not require field testing or HERS verification
8	This building incorporates one or more Special Features shown below

Registration Number:

CA Building Energy Efficiency Standards - 2019 Residential Compliance

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Registration Date/Time:

Report Version: 2019.1.108 Schema Version: rev 20200101

HERS Provider:

CERTIFICATE OF COMPLIANCE Project Name: LICHAU ADITION ONLY Calculation Description: Title 24 Analysis	I ANCE (DITION ONLY Title 24 Analysis		Calculation Input File N	Calculation Date/Time: 2020-08-14T17:29:47-07:00 Input File Name: 134590 -MMT-LICHAU.ribd19x	17:29:47-07:00 AU.ribd19x	CF1R-PRF-01E (Page 2 of 8)
			ENERGY USE SUMMARY			
Energy Us	Energy Use (kTDV/ft ² -yr)	Standard Design		Proposed Design	Compliance Margin	Percent Improvement
Space	Space Heating	3.17	-	10.33	-7.16	-225.9
Space	Space Cooling	34.36		26.3	8.06	23.5
IAQ V	IAQ Ventilation	o		0	0	
Wate	Water Heating	56.2		56.2	0	0
Self Utili	Self Utilization Credit	n/a		0	0	n/a
Complianc	Compliance Energy Total	93.73		92.83	6.0	1
REQUIRED SPECIAL FEATURES	(ES					
The following are features	that must be installed as con	The following are features that must be installed as condition for meeting the modeled energy performance for this computer analysis.	led energy performance for 1	this computer analysis.		
Insulation below roof deck New ductwork added is les	Insulation below roof deck New ductwork added is less than 40 ft. in length					
The following is a summary detail is provided in the bu	The following is a summary of the features that must be field-verified by detail is movided in the buildor tables below. Registered GF2Rs and CF3F	The following is a summary of the features that must be field-verified by a certified HERS Rater as a condition for meeting the detail is movided in the buildne tables below. Registered CF2Rs and CF3Rs are required to be completed in the HERS Registry	HERS Rater as a condition for red to be completed in the H	- meeting the modeled ener ERS Registry	a certified HERS Rater as a condition for meeting the modeled energy performance for this computer analysis. Additional is are required to be completed in the HERS Registry	outer analysis. Additional
Building-level Verifications:	,					
 – None – Cooling Surface 						
Outrig system vernication One						
Heating System Verifications: - None	ls:					
HVAC Distribution System Verifications: None	/erifications:					
Domestic Hot Water System Verifications: None	m Verifications:					
ZONE INFORMATION						
10	02	03	04	33	06	07
Zone Name	Zone Type	HVAC System Name	Zone Floor Area (ft ²)	Avg. Ceiling Height	Water Heating System 1	Water Heating System 2
ADU	Conditioned	Res HVAC1	360	Ø	DHW Sys 1	N/A
Registration Number:			Registration Date/Time:	ä	HERS Provider:	

Report Generated: 2020-08-14 17:29:59

Report Version: 2019.1.108 Schema Version: rev 20200101

CA Building Energy Efficiency Standards - 2019 Residential Compliance

Calculation Description: Title 24 Analysis Project Name: LICHAU ADITION ONLY

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OPAQUE SURFALES	~								1
01	02	60	04	05	06	07	08	60	10
Name	Zone	Construction	Azimuth	Orientation	Gross Area (ft ²)	Window and Door Area (ft2)	Tilt (deg)	Wall Exceptions	Status
Add North Wall	ADU	R-15 Wall	0	Left	390	20	90	Extension	New
Add East Wall	ADU	R-15 Wall	96	Back	96	80	06	Extension	New
Add West Wall	ADU	R-15 Wall	270	Front	96	20	90	Extension	New
Add Roof	ADU	R-30 High Performance At	n/a	n/a	360	n/a	n/a		New
Add Raised Floor	ADU	R-19 Floor Crawlspace	n/a	e/u	360	n/a	n/a		New

10	02	03	8	05	06	07	08	
Name	Construction	Type	Roof Rise (x in 12) Roof Reflectance	Roof Reflectance	Roof Emittance	Radiant Barrier	Cool Roof	_
Attic ADU	Attic RoofADU	Ventílated	4	0.1	0.85	No	No	

AZING	
ION / GL	
IESTRATI	
ΕN	

	14	Exterior Shading	creen	creen	creen
	1,		Bug Screen	Bug Screen	0.21 NFRC Bug Screen
	13	SHGC Sourc e	0.21 NFRC	0.21 NFRC	NFRC
	12	SHGC	0.21	0.21	0.21
	11	U-factor Source	NFRC	NFRC	NFRC
	10	U-factor	0.3	£.0	0.3
	60	Area (ft²)	20	8	20
	80	Mult.	۲	τ	н
	20	Width Height (ft) (ft)			
	06 07	Width (ft)			
	50	Azimuth	0	96	270
	5	Orientation	Left	Back	Front
	63	Surface	Add North Wall	Add East Wall	Add West Wall
	02	Type	Window	Window	Window
FENESIKALION / GLAZING	01	Лате	Add N Windows	Add E Windows	Add W Windows

Registration Number:

Registration Date/Time:

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CA Building Energy Efficiency Standards - 2019 Residential Compliance

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OPAQUE SURFACE CONSTRUCTIONS	IUCTIONS				:		
13	02	80	04	05	06	07	08
Construction Name	Surface Type	Construction Type	Framing	Total Cavity R-value	Interior / Exterior Continuous R-value	U-factor	Assembly Layers
R-15 Wall	Exterior Walls	Wood Framed Wall	2x4 @ 16 in. O. C.	R-15	None / None	0.089	Inside Finish: Gypsum Board Cavity / Frame: R-15 / 2x4 Exterior Finish: Wood Siding/sheathing/decking
R-13 Wall	Interior Walls	Wood Framed Wall	2x4 @ 16 in. O. C.	R-13	None / None	0.092	Inside Finish: Gypsum Board Cavity / Frame: R-13 / 2x4 Other Side Finish: Gypsum Board
Attic RoofADU	Attic Roofs	Wood Framed Ceiling	2x4 @ 24 in. O. C.	R-13	None / None	0.078	Roofing: Light Roof (Asphalt Shingle) Roof Deck: Wood Siding/sheathing/decking Cavity / Frame: R-13.0 / 2x4 Around Roof Joists: R-0.0 insul.
R-19 Floor Crawlspace	Floors Over Crawlspace	Wood Framed Floor	2x6 @ 16 in. O. C.	R-19	None / None	0.049	Floor Surface: Carpeted Floor Deck: Wood Siding/sheathing/decking Cavity / Frame: R-19 / 2x6
R-30 High Performance At	Ceilings (below attic)	Wood Framed Ceiling	2x10 @ 16 in. O. C.	R-30	None / None	0.034	Over Ceiling Joists: R-6.0 insul. Cavity / Frame: R-24.1 / 2x10 Inside Finish: Gypsum Board

THE PRIME FULFI OPE - HERS VERIFICATION

BUILDING ENVELOPE - HEKS VERIFICATION			
01	02	03	04
Quality Insulation Installation (QII)	Quality Installation of Spray Foam Insulation	Building Envelope Air Leakage	CFM50
Not Required	Not Required	Not Required	n/a

Registration Number:

CA Building Energy Efficiency Standards - 2019 Residential Compliance

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System Type Domestic Hot Water	8	04	05	06	07
Domestic Hot Water	Distribution Type	Water Heater Name (#)	Solar Heating System	Compact Distribution	HERS Verification
	Standard Di str ibution System	DHW Heater 1 (1)	e/u	None	n/a

WATER HEATERS	ERS										-		
10	62	£0	8	SO	90	07	08	60	10	11	12	13	14
Name	Heating Element Type	Tank Type	# Units	# Tank Vol. Units (gal)	Energy Factor or Efficiency	Tank St Input Rating Insulation Lo or Pilot Revalue Re (Int/Ext)	Tank Insulation R-value (Int/Ext)	Standby Loss or Recovery Eff.	1st Hr. Rating or Flow Rate	NEEA Heat Pump Brand or Model	Tank Location or Ambient Condition	Status	Verified Existing Condition
DHW Heater 1	Gas	Small Instantaneous	1	0.1	0.64-EF	<= 200 kBtu/hr	0	76	n/a	n/a	n/a	Existing	n/a

WATER HEATING - HERS VERIFICATION	S VERIFICATION						
01	02	8	04	05	90	07	08
Name	Pipe Insulation	Parallel Piping	Compact Distribution	Compact Distribution Type	Recirculation Control	Central DHW Distribution	Shower Drain Water Heat Recovery
DHW Sys 1 - 1/1	Not Required	Not Required	Not Required	None	Not Required	Not Required	Not Required

SPACE CONDITIONING SYSTEMS	IS									ľ
01	02	03	8	05	90	6	88	8	10	11
Name	System Type	Heating Unit Name	g Unit Cooling Unit ne Name	Fan Name	Distribution Name	Required Thermostat Type	Status	Verified Existing Condition	id Heating g Equipment on Count	Cooling Equipment Count
Res HVAC1	Heating and cooling system other	Heating Component 1	Cooling Component 1	HVAC Fan 1	Air Di s tribution System 1	n/a	Existing	NA	г	L

Registration Number: CA Building Energy Efficiency Standards - 2019 Residential Compliance

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04	Heating Efficiency	AFUE-75
03	Number of Units	1
8	System Type	Central gas furnace
01	Name	Heating Component 1

HVAC - COOLING UNIT TYPES	TYPES	-					
10	02	03	04	05	06	07	80
Name	System Type	Number of Units	Efficiency EER	Efficiency SEER	Zonally Controlled	Mulit-speed Compressor	HERS Verification
Cooling Component 1	Cooling Component 1 Ductless mini-split AC	1	ø	8	Not Zonal	Single Speed	Cooling Component 1-hers-cool

AC - DISTE	HVAC - DISTRIBUTION SYSTEMIS												-		
10	03	ß	8	5	90	07	08	60	10	Ħ	12	13	14	15	16
			Duct Ins.	Duct Ins. R-value	Duct Lo	Location	Surface Area	e Area							
Name	Type	Design Type	Supplý	Supply Return Supply	Supply	Return	Supply	Return	Bypass Duct	Duct Leakage	HERS Verification	Status	Verified Existing Condition	Existing Distribution system	New Ducts 40 ft
Air Distributi U on 5ystem 1	Unconditioned attic	Non- Verified	R-6	R-6	Attic	Attic	n/a	n/a	No Bypass Duct	Existing (not specified)	Air Distributi on System 1-hers- dist	Existing + New	n/a	n/a	n/a

PROJECT NOTES

Registration Number:

CA Building Energy Efficiency Standards - 2019 Residential Compliance

Registration Date/Time:

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CERTIFICATE OF COMPLIANCE		CF1R-PRF-01E
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Calculation Description: Title 24 Analysis	Input File Name: 134590 -MMT-LICHAU.ribd19x	J.ribd19x
www.title24data.com e-mail: inbox@title24data.com "One Day Service" since 1978		
Registration Number:	Registration Date/Time:	HERS Provider:
CA Building Energy Efficiency Standards - 2019 Residential Compliance	Report Version: 2019.1.108 Schema Version: rev 20200101	Report Generated: 2020-08-14 17:29:59

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Calculation Description: Title 24 Analysis Project Name: LICHAU ADITION ONLY

Calculation Date/Time: 2020-08-14T17:29:47-07:00 Input File Name: 134590 -MMT-LICHAU.ribd19x

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1. I certify that this Certificate of Compliance documentation is accurate and complete.	te.
Documentation Author Name:	Documentation Author Signature:
MINERVA TOPETE	
Company:	Signature Date:
Title 24 Data Corporation	0707/1-1/0
Address:	CEA/ HERS Certification Identification (If applicable):
633 MONTEREY TRAIL (P.O. BOX 2199)	
City/State/Zip:	Phone:
FRAZIER PARK, CA 93225	(800) 237-8824
RESPONSIBLE PERSON'S DECLARATION STATEMENT	
certify the following under penalty of perjury, under the laws of the State of California:	
 I am eligible under Division 3 of the Business and Professions Code to accept responses 	Division 3 of the Business and Professions Code to accept responsibility for the building design identified on this Certificate of Compliance.
I certify that the energy features and performance specifications identified on this	nergy features and performance specifications identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Pa
alfaritation of the information	Identificant not have a set of the set of th

irt 6 of the California Code of Regulations. le compliance documents, worksheets, 'n

The building design features or system design features identified on this Certificate of Compliance are consistent with the into advantations above and supplied to the enforcement approved for approval with this building permit application

calculations, plans and specimentions summittee to the enhorcement agency for approval with this burnoung permit approach. Responsible Designer Name: Responsible Designer Signa Company: DANIEL LICHAU Address: Date Signed: 1900 BRUSH CREEK ROAD License: City/State/Zip: Phone: City/State/Zip: Contact C

Registration Number:

CA Building Energy Efficiency Standards - 2019 Residential Compliance

Registration Date/Time:

Report Version: 2019.1.108 Schema Version: rev 20200101

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HERS Provider:



<u>NOTE:</u> Low-rise residential buildings subject to the Energy Standards must comply with all applicable mandatory measures, regardless of the compliance approach used. Review the respective section for more information. *Exceptions may apply. (01/2020)

Building Envelop	e Measures:
§ 110.6(a)1:	Air Leakage. Manufactured fenestration, exterior doors, and exterior pet doors must limit air leakage to 0.3 CFM per square foot or less when tested per NFRC-400, ASTM E283 or AAMA/WDMA/CSA 101/I.S.2/A440-2011.*
§ 110.6(a)5:	Labeling. Fenestration products and exterior doors must have a label meeting the requirements of § 10-111(a).
§ 110.6(b):	Field fabricated exterior doors and fenestration products must use U-factors and solar heat gain coefficient (SHGC) values from Tables 110.6-A, 110.6-B, or JA4.5 for exterior doors. They must be caulked and/or weather-stripped.*
§ 110.7:	Air Leakage. All joints, penetrations, and other openings in the building envelope that are potential sources of air leakage must be caulked, gasketed, or weather stripped.
§ 110.8(a):	Insulation Certification by Manufacturers. Insulation must be certified by the Department of Consumer Affairs, Bureau of Household Goods and Services (BHGS).
§ 110.8(g):	Insulation Requirements for Heated Slab Floors. Heated slab floors must be insulated per the requirements of § 110.8(g).
§ 110.8(i):	Roofing Products Solar Reflectance and Thermal Emittance. The thermal emittance and aged solar reflectance values of the roofing material must meet the requirements of § 110.8(i) and be labeled per §10-113 when the installation of a cool roof is specified on the CF1R.
§ 110.8(j):	Radiant Barrier. When required, radiant barriers must have an emittance of 0.05 or less and be certified to the Department of Consumer Affairs
§ 150.0(a):	Ceiling and Rafter Roof Insulation. Minimum R-22 insulation in wood-frame ceiling; or the weighted average U-factor must not exceed 0.043. Minimum R-19 or weighted average U-factor of 0.054 or less in a rafter roof alteration. Attic access doors must have permanently attached insulation using adhesive or mechanical fasteners. The attic access must be gasketed to prevent air leakage. Insulation must be installed in direct contact with a continuous roof or ceiling which is sealed to limit infiltration and exfiltration as specified in § 110.7, including but not limited to placing insulation either above or below the roof deck or on top of a drywall ceiling.*
§ 150.0(b):	Loose-fill Insulation. Loose fill insulation must meet the manufacturer's required density for the labeled R-value.
§ 150.0(c):	Wall Insulation. Minimum R-13 insulation in 2x4 inch wood framing wall or have a U-factor of 0.102 or less, or R-20 in 2x6 inch wood framing or have a U-factor of 0.071 or less. Opaque non-framed assemblies must have an overall assembly U-factor not exceeding 0.102. Masonry walls must meet Tables 150.1-A or B.*
§ 150.0(d):	Raised-floor Insulation. Minimum R-19 insulation in raised wood framed floor or 0.037 maximum U-factor.*
§ 150.0(f):	Slab Edge Insulation. Slab edge insulation must meet all of the following: have a water absorption rate, for the insulation material alone without facings, no greater than 0.3 percent; have a water vapor permeance no greater than 2.0 perm per inch; be protected from physical damage and UV light deterioration; and, when installed as part of a heated slab floor, meet the requirements of § 110.8(g).
§ 150.0(g)1:	Vapor Retarder. In climate zones 1 through 16, the earth floor of unvented crawl space must be covered with a Class I or Class II vapor retarder. This requirement also applies to controlled ventilation crawl space for buildings complying with the exception to § 150.0(d).
§ 150.0(g)2:	Vapor Retarder. In climate zones 14 and 16, a Class I or Class II vapor retarder must be installed on the conditioned space side of all insulation in all exterior walls, vented attics, and unvented attics with air-permeable insulation.
§ 150.0(q):	Fenestration Products. Fenestration, including skylights, separating conditioned space from unconditioned space or outdoors must have a maximum U-factor of 0.58; or the weighted average U-factor of all fenestration must not exceed 0.58.*
Fireplaces, Deco	rative Gas Appliances, and Gas Log Measures:
§ 110.5(e)	Pilot Light. Continuously burning pilot lights are not allowed for indoor and outdoor fireplaces.
§ 150.0(e)1:	Closable Doors. Masonry or factory-built fireplaces must have a closable metal or glass door covering the entire opening of the firebox.
§ 150.0(e)2:	Combustion Intake. Masonry or factory-built fireplaces must have a combustion outside air intake, which is at least six square inches in area and is equipped with a readily accessible, operable, and tight-fitting damper or combustion-air control device."
§ 150.0(e)3:	Flue Damper. Masonry or factory-built fireplaces must have a flue damper with a readily accessible control.*
	ing, Water Heating, and Plumbing System Measures:
§ 110.0-§ 110.3:	Certification. Heating, ventilation and air conditioning (HVAC) equipment, water heaters, showerheads, faucets, and all other regulated appliances must be certified by the manufacturer to the California Energy Commission."
§ 110.2(a):	HVAC Efficiency. Equipment must meet the applicable efficiency requirements in Table 110.2-A through Table 110.2-K.
§ 110.2(b):	Controls for Heat Pumps with Supplementary Electric Resistance Heaters. Heat pumps with supplementary electric resistance heaters must have controls that prevent supplementary heater operation when the heating load can be met by the heat pump alone; and in which the cut-on temperature for compression heating is higher than the cut-on temperature for supplementary heating, and the cut-off temperature for compression heating is higher than the cut-on temperature for supplementary heating.
§ 110.2(c):	Thermostats. All heating or cooling systems not controlled by a central energy management control system (EMCS) must have a setback thermostat.
§ 110.3(c)4:	Water Heating Recirculation Loops Serving Multiple Dwelling Units. Water heating recirculation loops serving multiple dwelling units must meet the air release valve, backflow prevention, pump priming, pump isolation valve, and recirculation loop connection requirements of § 110.3(c)4.
§ 110.3(c)6:	Isolation Valves. Instantaneous water heaters with an input rating greater than 6.8 kBtu per hour (2 kW) must have isolation valves with hose bibbs or other fittings on both cold and hot water lines to allow for flushing the water heater when the valves are closed.
§ 110.5:	Pilot Lights. Continuously burning pilot lights are prohibited for natural gas: fan-type central furnaces; household cooking appliances (except appliances without an electrical supply voltage connection with pilot lights that consume less than 150 Btu per hour); and pool and spa heaters
§ 150.0(h)1:	Building Cooling and Heating Loads. Heating and/or cooling loads are calculated in accordance with the ASHRAE Handbook, Equipment Volume, Applications Volume, and Fundamentals Volume; the SMACNA Residential Comfort System Installation Standards Manual; or the ACCA Manual J using design conditions specified in § 150.0(h)2.



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§ 150.0(h)3A:	Clearances. Air conditioner and heat pump outdoor condensing units must have a clearance of at least five feet from the outlet of any dryer
§ 150.0(h)3B:	Liquid Line Drier. Air conditioners and heat pump systems must be equipped with liquid line filter driers if required, as specified by the manufacturer's instructions.
§ 150,0(j)1:	Storage Tank Insulation. Unfired hot water tanks, such as storage tanks and backup storage tanks for solar water-heating systems, must have a minimum of R-12 external insulation or R-16 internal insulation where the internal insulation R-value is indicated on the exterior of the tank.
§ 150.0(j)2A:	Water Piping, Solar Water-heating System Piping, and Space Conditioning System Line Insulation. All domestic hot water piping must be insulated as specified in Section 609.11 of the California Plumbing Code. In addition, the following piping conditions must have a minimum insulation wall thickness of one inch or a minimum insulation R-value of 7.7: the first five feet of cold water pipes from the storage tank; all hot water piping with a nominal diameter equal to or greater than 3/4 inch and less than one inch; all hot water piping with a nominal diameter less than 3/4 inch that is: associated with a domestic hot water recirculation system, from the heating source to storage tank or between tanks, buried below grade, and from the heating source to kitchen fixtures.*
§ 150.0(j)3:	Insulation Protection. Piping insulation must be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind as required by Section 120.3(b). Insulation exposed to weather must be water retardant and protected from UV light (no adhesive tapes). Insulation covering chilled water piping and refrigerant suction piping located outside the conditioned space must include, or be protected by, a Class I or Class II vapor retarder. Pipe insulation buried below grade must be installed in a waterproof and non-crushable casing or sleeve.
§ 150.0(n)1:	Gas or Propane Water Heating Systems. Systems using gas or propane water heaters to serve individual dwelling units must include all of the following: A dedicated 125 volt, 20 amp electrical receptacle connected to the electric panel with a 120/240 volt 3 conductor, 10 AWG copper branch circuit, within three feet of the water heater without obstruction. Both ends of the unused conductor must be labeled with the word "spare" and be electrically isolated. Have a reserved single pole circuit breaker space in the electrical panel adjacent to the circuit breaker for the branch circuit and labeled with the words "Future 240V Use"; a Category III or IV vent, or a Type B vent with straight pipe between the outside termination and the space where the water heater is installed; a condensate drain that is no more than two inches higher than the base of the water heater, and allows natural draining without pump assistance; and a gas supply line with a capacity of at least 200,000 Btu per hour.
§ 150.0(n)2:	Recirculating Loops. Recirculating loops serving multiple dwelling units must meet the requirements of § 110.3(c)5.
§ 150.0(n)3:	Solar Water-heating Systems. Solar water-heating systems and collectors must be certified and rated by the Solar Rating and Certification Corporation (SRCC), the International Association of Plumbing and Mechanical Officials, Research and Testing (IAPMO R&T), or by a listing agency that is approved by the Executive Director.
Ducts and Fans	Measures:
§ 110.8(d)3:	Ducts. Insulation installed on an existing space-conditioning duct must comply with § 604.0 of the California Mechanical Code (CMC). If a contractor installs the insulation, the contractor must certify to the customer, in writing, that the insulation meets this requirement.
§ 150.0(m)1:	CMC Compliance. All air-distribution system ducts and plenums must meet the requirements of the CMC §§ 601.0, 602.0, 603.0, 604.0, 605.0 and ANSI/SMACNA-006-2006 HVAC Duct Construction Standards Metal and Flexible 3rd Edition. Portions of supply-air and return-air ducts and plenums must be insulated to a minimum installed level of R-6.0 or a minimum installed level of R-4.2 when ducts are entirely in conditioned space as confirmed through field verification and diagnostic testing (RA3.1.4.3.8). Portions of the duct system completely exposed and surrounded by directly conditioned space are not required to be insulated. Connections of metal ducts and inner core of flexible ducts must be mechanically fastened. Openings must be sealed with mastic, tape, or other duct-closure system that meets the applicable requirements of UL 181, UL 181A, or UL 181B or aerosol sealant that meets the requirements of UL 723. If mastic or tape is used to seal openings greater than ¼ inch, the combination of mastic and either mesh or tape must be used. Building cavities, support platforms for air handlers, and plenums designed or constructed with materials other than sealed sheet metal, duct board or flexible duct must not be used to convey conditioned air. Building cavities and support platforms may contain ducts. Ducts installed in cavities and support platforms must not be compressed to cause reductions in the cross-sectional area."
§ 150.0(m)2:	Factory-Fabricated Duct Systems. Factory-fabricated duct systems must comply with applicable requirements for duct construction, connections, and closures; joints and seams of duct systems and their components must not be sealed with cloth back rubber adhesive duct tapes unless such tape is used in combination with mastic and draw bands.
§ 150.0(m)3:	Field-Fabricated Duct Systems. Field-fabricated duct systems must comply with applicable requirements for: pressure-sensitive tapes, mastics, sealants, and other requirements specified for duct construction.
§ 150.0(m)7:	Backdraft Damper. Fan systems that exchange air between the conditioned space and outdoors must have backdraft or automatic dampers.
§ 150.0(m)8:	Gravity Ventilation Dampers. Gravity ventilating systems serving conditioned space must have either automatic or readily accessible, manually operated dampers in all openings to the outside, except combustion inlet and outlet air openings and elevator shaft vents.
§ 150.0(m)9:	Protection of Insulation. Insulation must be protected from damage, sunlight, moisture, equipment maintenance, and wind. Insulation expose to weather must be suitable for outdoor service. For example, protected by aluminum, sheet metal, painted canvas, or plastic cover. Cellular foam insulation must be protected as above or painted with a coating that is water retardant and provides shielding from solar radiation.
§ 150.0(m)10:	Porous Inner Core Flex Duct. Porous inner core flex ducts must have a non-porous layer between the inner core and outer vapor barrier.
§ 150.0(m)11:	Duct System Sealing and Leakage Test. When space conditioning systems use forced air duct systems to supply conditioned air to an occupiable space, the ducts must be sealed and duct leakage tested, as confirmed through field verification and diagnostic testing, in accordance with § 150.0(m)11 and Reference Residential Appendix RA3.
§ 150.0(m)12:	Air Filtration. Space conditioning systems with ducts exceeding 10 feet and the supply side of ventilation systems must have MERV 13 or equivalent filters. Filters for space conditioning systems must have a two inch depth or can be one inch if sized per Equation 150.0-A. Pressure drops and labeling must meet the requirements in §150.0(m)12. Filters must be accessible for regular service.*
§ 150.0(m)13:	Space Conditioning System Airflow Rate and Fan Efficacy. Space conditioning systems that use ducts to supply cooling must have a hole for the placement of a static pressure probe, or a permanently installed static pressure probe in the supply plenum. Airflow must be ≥ 350 CFM per ton of nominal cooling capacity, and an air-handling unit fan efficacy ≤ 0.45 watts per CFM for gas furnace air handlers and ≤ 0.58 watts per CFM for all others. Small duct high velocity systems must provide an airflow ≥ 250 CFM per ton of nominal cooling capacity, and an air-handling unit fan efficacy ≤ 0.62 watts per CFM. Field verification testing is required in accordance with Reference Residential Appendix RA3.3.*



requirements in	or Ventilation and Indoor Air Quality:
§ 150.0(o)1:	Requirements for Ventilation and Indoor Air Quality. All dwelling units must meet the requirements of ASHRAE Standard 62.2, Ventilation and Acceptable Indoor Air Quality in Residential Buildings subject to the amendments specified in § 150.0(o)1.
§ 150.0(o)1C:	Single Family Detached Dwelling Units. Single family detached dwelling units, and attached dwelling units not sharing ceilings or floors with other dwelling units, occupiable spaces, public garages, or commercial spaces must have mechanical ventilation airflow provided at rates determined by ASHRAE 62.2 Sections 4.1.1 and 4.1.2 and as specified in § 150.0(o)1C.
§ 150.0(o)1E:	Multifamily Attached Dwelling Units. Multifamily attached dwelling units must have mechanical ventilation airflow provided at rates in accordance with Equation 150.0-B and must be either a balanced system or continuous supply or continuous exhaust system. If a balanced system is not used, all units in the building must use the same system type and the dwelling-unit envelope leakage must be ≤ 0.3 CFM at 50 Pa (0.2 inch water) per square foot of dwelling unit envelope surface area and verified in accordance with Reference Residential Appendix RA3.8.
§ 150.0(o)1F:	Multifamily Building Central Ventilation Systems. Central ventilation systems that serve multiple dwelling units must be balanced to provide ventilation airflow for each dwelling unit served at a rate equal to or greater than the rate specified by Equation 150.0-B. All unit airflows must be within 20 percent of the unit with the lowest airflow rate as it relates to the individual unit's minimum required airflow rate needed for compliance.
§ 150.0(o)1G:	Kitchen Range Hoods. Kitchen range hoods must be rated for sound in accordance with Section 7.2 of ASHRAE 62.2.
§ 150.0(o)2:	Field Verification and Diagnostic Testing. Dwelling unit ventilation airflow must be verified in accordance with Reference Residential Appendix RA3.7. A kitchen range hood must be verified in accordance with Reference Residential Appendix RA3.7.4.3 to confirm it is rated by HVI to comply with the airflow rates and sound requirements as specified in Section 5 and 7.2 of ASHRAE 62.2.
Pool and Spa S	ystems and Equipment Measures:
§ 110.4(a):	Certification by Manufacturers. Any pool or spa heating system or equipment must be certified to have all of the following: a thermal efficiency that complies with the Appliance Efficiency Regulations; an on-off switch mounted outside of the heater that allows shutting off the heater without adjusting the thermostat setting; a permanent weatherproof plate or card with operating instructions; and must not use electric resistance heating.
§ 110.4(b)1:	Piping. Any pool or spa heating system or equipment must be installed with at least 36 inches of pipe between the filter and the heater, or dedicated suction and return lines, or built-in or built-up connections to allow for future solar heating.
§ 110.4(b)2:	Covers. Outdoor pools or spas that have a heat pump or gas heater must have a cover.
§ 110.4(b)3:	Directional Inlets and Time Switches for Pools. Pools must have directional inlets that adequately mix the pool water, and a time switch that will allow all pumps to be set or programmed to run only during off-peak electric demand periods.
§ 110.5:	Pilot Light. Natural gas pool and spa heaters must not have a continuously burning pilot light.
§ 150.0(p):	Pool Systems and Equipment Installation. Residential pool systems or equipment must meet the specified requirements for pump sizing, flow rate, piping, filters, and valves.*
Lighting Measu	res:
§ 110.9:	Lighting Controls and Components. All lighting control devices and systems, ballasts, and luminaires must meet the applicable requirements of § 110.9.*
§ 150.0(k)1A:	Luminaire Efficacy. All installed luminaires must meet the requirements in Table 150.0-A.
§ 150.0(k)1B:	Blank Electrical Boxes. The number of electrical boxes that are more than five feet above the finished floor and do not contain a luminaire or other device must be no greater than the number of bedrooms. These electrical boxes must be served by a dimmer, vacancy sensor control, or fan speed control.
§ 150.0(k)1C:	Recessed Downlight Luminaires in Ceilings. Luminaires recessed into ceilings must meet all of the requirements for: insulation contact (IC) labeling; air leakage; sealing; maintenance; and socket and light source as described in § 150.0(k)1C.
§ 150.0(k)1D:	Electronic Ballasts for Fluorescent Lamps. Ballasts for fluorescent lamps rated 13 watts or greater must be electronic and must have an output frequency no less than 20 kHz.
§ 150.0(k)1E:	Night Lights, Step Lights, and Path Lights. Night lights, step lights and path lights are not required to comply with Table 150.0-A or be controlled by vacancy sensors provided they are rated to consume no more than 5 watts of power and emit no more than 150 lumens.
	Lighting Integral to Exhaust Fans. Lighting integral to exhaust fans (except when installed by the manufacturer in kitchen exhaust hoods)
§ 150.0(k)1F:	must meet the applicable requirements of § 150.0(k)."
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§ 150.0(k)1G:	must meet the applicable requirements of § 150.0(k)."
§ 150.0(k)1G: § 150.0(k)1H:	must meet the applicable requirements of § 150.0(k)." Screw based luminaires. Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8." Light Sources in Enclosed or Recessed Luminaires. Lamps and other separable light sources that are not compliant with the JA8 elevated
§ 150.0(k)1G: § 150.0(k)1H: § 150.0(k)1I:	must meet the applicable requirements of § 150.0(k)." Screw based luminaires. Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8." Light Sources in Enclosed or Recessed Luminaires. Lamps and other separable light sources that are not compliant with the JA8 elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires. Light Sources in Drawers, Cabinets, and Linen Closets. Light sources internal to drawers, cabinetry or linen closets are not required to comply with Table 150.0-A or be controlled by vacancy sensors provided that they are rated to consume no more than 5 watts of power, emit not comply with Table 150.0-A or be controlled by vacancy sensors provided that they are rated to consume no more than 5 watts of power, emit not comply with Table 150.0-A or be controlled by vacancy sensors provided that they are rated to consume no more than 5 watts of power, emit not comply with Table 150.0-A or be controlled by vacancy sensors provided that they are rated to consume no more than 5 watts of power, emit not comply with Table 150.0-A or be controlled by vacancy sensors provided that they are rated to consume no more than 5 watts of power.
§ 150.0(k)1G: § 150.0(k)1H: § 150.0(k)1I: § 150.0(k)2A:	must meet the applicable requirements of § 150.0(k)." Screw based luminaires. Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8." Light Sources in Enclosed or Recessed Luminaires. Lamps and other separable light sources that are not compliant with the JA8 elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires. Light Sources in Drawers, Cabinets, and Linen Closets. Light sources internal to drawers, cabinetry or linen closets are not required to comply with Table 150.0-A or be controlled by vacancy sensors provided that they are rated to consume no more than 5 watts of power, emit no more than 150 lumens, and are equipped with controls that automatically turn the lighting off when the drawer, cabinet or linen closet is closed.
§ 150.0(k)1G: § 150.0(k)1H: § 150.0(k)1I: § 150.0(k)2A: § 150.0(k)2B:	must meet the applicable requirements of § 150.0(k)." Screw based luminaires. Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8." Light Sources in Enclosed or Recessed Luminaires. Lamps and other separable light sources that are not compliant with the JA8 elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires. Light Sources in Drawers, Cabinets, and Linen Closets. Light sources internal to drawers, cabinetry or linen closets are not required to comply with Table 150.0-A or be controlled by vacancy sensors provided that they are rated to consume no more than 5 watts of power, emit no more than 150 lumens, and are equipped with controls that automatically turn the lighting off when the drawer, cabinet or linen closet is closed. Interior Switches and Controls. All forward phase cut dimmers used with LED light sources must comply with NEMA SSL 7A.
§ 150.0(k)1G: § 150.0(k)1H: § 150.0(k)1I: § 150.0(k)2A: § 150.0(k)2B: § 150.0(k)2C:	must meet the applicable requirements of § 150.0(k)." Screw based luminaires. Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8." Light Sources in Enclosed or Recessed Luminaires. Lamps and other separable light sources that are not compliant with the JA8 elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires. Light Sources in Drawers, Cabinets, and Linen Closets. Light sources internal to drawers, cabinetry or linen closets are not required to comply with Table 150.0-A or be controlled by vacancy sensors provided that they are rated to consume no more than 5 watts of power, emit n more than 150 lumens, and are equipped with controls that automatically turn the lighting off when the drawer, cabinet or linen closet is closed. Interior Switches and Controls. All forward phase cut dimmers used with LED light sources must comply with NEMA SSL 7A. Interior Switches and Controls. Exhaust fans must be controlled separately from lighting systems." Interior Switches and Controls. Lighting must have readily accessible wall-mounted controls that allow the lighting to be manually
§ 150.0(k)1F: § 150.0(k)1G: § 150.0(k)1H: § 150.0(k)11: § 150.0(k)2A: § 150.0(k)2B: § 150.0(k)2C: § 150.0(k)2C: § 150.0(k)2D: § 150.0(k)2E:	must meet the applicable requirements of § 150.0(k).* Screw based luminaires. Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8.* Light Sources in Enclosed or Recessed Luminaires. Lamps and other separable light sources that are not compliant with the JA8 elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires. Light Sources in Drawers, Cabinets, and Linen Closets. Light sources internal to drawers, cabinetry or linen closets are not required to comply with Table 150.0-A or be controlled by vacancy sensors provided that they are rated to consume no more than 5 watts of power, emit n more than 150 lumens, and are equipped with controls that automatically turn the lighting off when the drawer, cabinet or linen closet is closed. Interior Switches and Controls. All forward phase cut dimmers used with LED light sources must comply with NEMA SSL 7A. Interior Switches and Controls. Exhaust fans must be controlled separately from lighting systems.* Interior Switches and Controls. Lighting must have readily accessible wall-mounted controls that allow the lighting to be manually turned ON and OFF.*



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§ 150.0(k)2G:	Interior Switches and Controls. An energy management control system (EMCS) may be used to comply with control requirements if it: provides functionality of the specified control according to § 110.9; meets the Installation Certificate requirements of § 130.4; meets the EMCS requirements of § 130.0(e); and meets all other requirements in § 150.0(k)2.
§ 150.0(k)2H:	Interior Switches and Controls. A multiscene programmable controller may be used to comply with dimmer requirements in § 150.0(k) if it provides the functionality of a dimmer according to § 110.9, and complies with all other applicable requirements in § 150.0(k)2.
§ 150.0(k)2I:	Interior Switches and Controls. In bathrooms, garages, laundry rooms, and utility rooms, at least one luminaire in each of these spaces must be controlled by an occupant sensor or a vacancy sensor providing automatic-off functionality. If an occupant sensor is installed, it must be initially configured to manual-on operation using the manual control required under Section 150.0(k)2C.
§ 150.0(k)2J:	Interior Switches and Controls. Luminaires that are or contain light sources that meet Reference Joint Appendix JA8 requirements for dimming, and that are not controlled by occupancy or vacancy sensors, must have dimming controls."
§ 150.0(k)2K:	Interior Switches and Controls. Under cabinet lighting must be controlled separately from ceiling-installed lighting systems.
§ 150.0(k)3A:	Residential Outdoor Lighting. For single-family residential buildings, outdoor lighting permanently mounted to a residential building, or to other buildings on the same lot, must meet the requirement in item § 150.0(k)3Ai (ON and OFF switch) and the requirements in either § 150.0(k)3Aii (photocell and either a motion sensor or automatic time switch control) or § 150.0(k)3Aii (astronomical time clock), or an EMCS.
§ 150.0(k)3B:	Residential Outdoor Lighting. For low-rise residential buildings with four or more dwelling units, outdoor lighting for private patios, entrances, balconies, and porches; and residential parking lots and carports with less than eight vehicles per site must comply with either § 150.0(k)3A or with the applicable requirements in Sections 110.9, 130.0, 130.2, 130.4, 140.7 and 141.0.
§ 150.0(k)3C:	Residential Outdoor Lighting. For low-rise residential buildings with four or more dwelling units, any outdoor lighting for residential parking lots or carports with a total of eight or more vehicles per site and any outdoor lighting not regulated by § 150.0(k)3B or § 150.0(k)3D must comply with the applicable requirements in Sections 110.9, 130.0, 130.2, 130.4, 140.7 and 141.0.
§ 150.0(k)4:	Internally illuminated address signs. Internally illuminated address signs must comply with § 140.8; or must consume no more than 5 watts of power as determined according to § 130.0(c).
§ 150.0(k)5:	Residential Garages for Eight or More Vehicles. Lighting for residential parking garages for eight or more vehicles must comply with the applicable requirements for nonresidential garages in Sections 110.9, 130.0, 130.1, 130.4, 140.6, and 141.0.
§ 150.0(k)6A:	Interior Common Areas of Low-rise Multifamily Residential Buildings. In a low-rise multifamily residential building where the total interior common area in a single building equals 20 percent or less of the floor area, permanently installed lighting for the interior common areas in that building must be comply with Table 150.0-A and be controlled by an occupant sensor.
§ 150.0(k)6B:	Interior Common Areas of Low-rise Multifamily Residential Buildings. In a low-rise multifamily residential building where the total interior common area in a single building equals more than 20 percent of the floor area, permanently installed lighting for the interior common areas in that building must: i. Comply with the applicable requirements in Sections 110.9, 130.0, 130.1, 140.6 and 141.0; and ii. Lighting installed in corridors and stairwells must be controlled by occupant sensors that reduce the lighting power in each space by at least 50 percent. The occupant sensors must be capable of turning the light fully on and off from all designed paths of ingress and egress.
Solar Ready Bui	
§ 110.10(a)1:	Single Family Residences. Single family residences located in subdivisions with 10 or more single family residences and where the application for a tentative subdivision map for the residences has been deemed complete and approved by the enforcement agency, which do not have a photovoltaic system installed, must comply with the requirements of § 110.10(b) through § 110.10(e).
§ 110.10(a)2:	Low-rise Multifamily Buildings. Low-rise multi-family buildings that do not have a photovoltaic system installed must comply with the requirements of § 110.10(b) through § 110.10(d).
§ 110.10(b)1:	Minimum Solar Zone Area. The solar zone must have a minimum total area as described below. The solar zone must comply with access, pathway, smoke ventilation, and spacing requirements as specified in Title 24, Part 9 or other parts of Title 24 or in any requirements adopted by a local jurisdiction. The solar zone total area must be comprised of areas that have no dimension less than 5 feet and are no less than 80 square feet each for buildings with roof areas less than or equal to 10,000 square feet or no less than 160 square feet each for buildings with roof areas less than or equal to 10,000 square feet or no less than 10,000 square feet. For single family residences, the solar zone must be located on the roof or overhang of the building and have a total area no less than 250 square feet. For low-rise multi-family buildings the solar zone must be located on the roof or overhang of the building of the building, or on the roof or overhang of another structure located within 250 feet of the building, or on covered parking installed with the building project, and have a total area no less than 15 percent of the total roof area of the building any skylight area. The solar zone requirement is applicable to the entire building, including mixed occupancy.*
§ 110.10(b)2:	Azimuth. All sections of the solar zone located on steep-sloped roofs must be oriented between 90 degrees and 300 degrees of true north.
§ 110.10(b)3A:	Shading. The solar zone must not contain any obstructions, including but not limited to: vents, chimneys, architectural features, and roof mounted equipment.*
§ 110.10(b)3B:	Shading. Any obstruction located on the roof or any other part of the building that projects above a solar zone must be located at least twice the distance, measured in the horizontal plane, of the height difference between the highest point of the obstruction and the horizontal projection of the nearest point of the solar zone, measured in the vertical plane.*
§ 110.10(b)4:	Structural Design Loads on Construction Documents. For areas of the roof designated as a solar zone, the structural design loads for roof dead load and roof live load must be clearly indicated on the construction documents.
§ 110.10(c):	Interconnection Pathways. The construction documents must indicate: a location reserved for inverters and metering equipment and a pathway reserved for routing of conduit from the solar zone to the point of interconnection with the electrical service; and for single family residences and central water-heating systems, a pathway reserved for routing plumbing from the solar zone to the water-heating system.
§ 110.10(d):	Documentation. A copy of the construction documents or a comparable document indicating the information from § 110.10(b) through § 110.10(c) must be provided to the occupant.
§ 110.10(e)1:	Main Electrical Service Panel. The main electrical service panel must have a minimum busbar rating of 200 amps.
§ 110.10(e)2:	Main Electrical Service Panel. The main electrical service panel must have a reserved space to allow for the installation of a double pole circuit

Res HVAC 360 ENGINEERING CHECKS SYSTEM LOAD Number of Systems 1 Heating System COIL COOLING PEAK COIL HTG. PEAI Output per System 60,000 Total Output (Btuh) 60,000 Output (Btuh/sqft) 166.7 Cooling System 0 Output per System 60,000 Number of System 0 Output (Btuh/sqft) 166.7 Return Vented Lighting 0 Output per System 60,000 Ventilation 0 0 Total Output (Btuh) 60,000 Supply Fan 0 0 Total Output (Btuh) 60,000 Supply Fan Total Output (Btuh/sqft) 166.7 Supply Air Ducts Total Output (Btuh/sqft) 166.7 Supply Air Ducts Total Output (Btuh/sqft) 166.7 Supply Air Ducts 0 Total Output (Staft/Ton) 72.0 TOTAL SYSTEM LOAD 3,976 113 5, Air System 1,500 HVAC EQUIPMENT SELECTION Ital 5,	Project Name LICHAU ADITION ONLY							14/2020
ENGINEERING CHECKS SYSTEM LOAD Number of Systems 1 Heating System 60.000 Output per System 60.000 Total Output (Btuh) 60.000 Total Output (Btuh/sqft) 186.7 Total Output (Btuh/sqft) 186.7 Total Output (Btuh/sqft) 186.7 Total Output (Btuh/sqft) 186.7 Total Output (Sgft/Ton) 72.0 Total Output (sgft/Ton) 72.0 Total Algusted System Output 3.976 Airflow (cfm/Ton) 300.0 Outside Air (cfm/sqft) 41.17 Airflow (cfm/Ton) 300.0 Outside Air (cfm/sqft) 0.01 Outside Air (cfm/sqft) 0.01 Outside Air (cfm/sqft) 0.01 Outside Air (cfm/sqft) 0.00 <th>System Name Res HVAC</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th>Floor</th> <th></th>	System Name Res HVAC						Floor	
Number of Systems 1 Heating System 60,000 Output per System 60,000 Output (Btuh) 60,000 Output (Btuh/aqft) 166.7 Cooling System 0 Output (Btuh/aqft) 166.7 Cooling System 0 Output (Btuh/aqft) 166.7 Cooling System 0 Output (Btuh/aqft) 60,000 Total Output (Btuh/sqft) 60,000 Total Output (Btuh/sqft) 66.7 Total Output (Btuh/sqft) 166.7 Total Adjust de System Output 3.976 Airi System 1.500 CFM per System 1.500 Outside Air (cfm/sqft) 0.0.00	ENGINEERING CHECKS		SYSTEM LOAD					
Heating System Output per System 60,000 Total Output (Btuh) 60,000 Output (Btuh/sqft) 166.7 Cooling System 0 Output per System 60,000 Total Output (Btuh/sqft) 166.7 Return Vented Lighting 0 Return Air Ducts 0 Output per System 60,000 Total Output (Btuh/sqft) 66,000 Supply Fan 0 0 0 Total Output (Btuh/sqft) 166.7 Return Vented Lighting 0 0 0 Total Output (Btuh/sqft) 66,000 Supply Fan 0 0 Total Output (Btuh/sqft) 166.7 Supply Air Ducts 0 0 Total Output (Btuh/sqft) 166.7 Supply Air Ducts 0 0 Air System 1.500 HVAC EQUIPMENT SELECTION 3.976 113 5. Airflow (cfm/Ton) 300.0 Itsuing FAU/AC Before 1978 48,679 6,468 60, Outside Air (%) 0.0% Outside for Peak Design conditions) Total Adjusted System Output (Adjusted System Output		1		COIL	COOLING P	EAK	COIL H	G. PEAK
Output per System 60.000 Total Output (Btuh) 60.000 Output (Btuh/sqft) 166.7 Cooling System 0 Output (Btuh/sqft) 166.7 Cooling System 0 Output (Btuh/sqft) 166.7 Cooling System 0 Output Per System 60.000 Total Output (Btuh/sqft) 66.7 Total Output (Btuh/sqft) 166.7 Total Output (Staft/Ton) 5.0 Total Output (Staft/Ton) 72.0 Total Output (sqft/Ton) 72.0 TOTAL SYSTEM LOAD 3.976 Air System			-					C 1 0 C 1 C C C
Total Output (Btuh) 60,000 Output (Btuh/sqft) 186.7 Cooling System 0 0 0 0 Output per System 60,000 Return Air Ducts 0 0 0 0 Total Output (Btuh/sqft) 186.7 Return Fan 0		60,000	Total Room Loads					5,1
Cooling System Image: Cooling System <td></td> <td>60,000</td> <td>Return Vented Lighting</td> <td></td> <td>0</td> <td></td> <td></td> <td></td>		60,000	Return Vented Lighting		0			
County System 60,000 Output per System 60,000 Total Output (Buh/sqft) 60,000 Supply Air Ducts 0 Output (Styft/Ton) 5.0 Total Output (Styft/Ton) 72.0 TOTAL SYSTEM LOAD 3.976 Air System 1 CFM per System 1.500 Airflow (cfm) 1.500 Airflow (cfm/sqft) 4.17 Airflow (cfm/sqft) 0.007 Outside Air (%) 0.0% Outside Air (fm/sqft) 0.007 Total Adjusted System Output (Adjusted for Peak Design conditions) 0.007 TIME OF SYSTEM PEAK Aug 3 PM Jan 1 HEATING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Heating Peak) 105 %F Outside Air (Supply Fan 105 %F 105 %F Outside Air (Supply Fan 105 %F 105 %F	Output (Btuh/sqft)	166.7	Return Air Ducts		0			
Total Output (Btuh) 60,000 Total Output (Btuh)sqft) 166.7 Total Output (Stuh/sqft) 113 Air System 3.976 CFM per System 1.500 Airflow (cfm) 1.500 Airflow (cfm/sqft) 4.17 Airflow (cfm/sqft) 4.17 Airflow (cfm/sqft) 0.00 Outside Air (cfm/sqft) 0.00 Note: values above given at ARI conditions TIME OF SYSTEM PEAK HEATING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Heating Peak) 24 %F 70 %F 0 cfm Supply Fan 0 cfm Supply Fan 1,500 cfm 105 %F	Cooling System		Return Fan		0			
Total Output (Tons) 5.0 Total Output (Buh/sqft) 166.7 Total Output (sqft/Ton) 72.0 Total Output (sqft/Ton) 72.0 Air System	Output per System		Ventilation	0		0	0	
Total Output (Btuh/sqft) 166.7 Total Output (sqft/Ton) 72.0 Total Output (sqft/Ton) 72.0 Air System 1.500 Airflow (cfm) 1.500 Existing FAU/AC Before 1978 48,679 6,468 60, Airflow (cfm/sqft) 4.17 Airflow (cfm/Ton) 300.0 Outside Air (%) 0.0% Outside Air (cfm/sqft) 0.00 Note: values above given at ARI conditions TIME OF SYSTEM PEAK Airstow GYDER 70 °F Outside Air Supply Fan 0 cfm Supply Fan 105 °F 105 °F Outside Air Supply Fan 0 cfm Supply Fan 1,500 cfm 105 °F Outside Air Supply Fan 0 cfm Supply Fan 1,500 cfm 105 °F	Total Output (Btuh)		Supply Fan					
Total Output (sqft/Ton) 72.0 TOTAL SYSTEM LOAD 3.976 113 5, Air System 1,500 HVAC EQUIPMENT SELECTION Airflow (cfm) 1,500 Existing FAU/AC Before 1978 48,679 6,468 60, Airflow (cfm/Sqft) 4.17 4.17 1 5, Airflow (cfm/Ton) 300.0 100,00% Total Adjusted System Output (Adjusted System Output (Adjusted for Peak Design conditions) 48,679 6,468 60, Outside Air (%) 0.0% Total Adjusted System Output (Adjusted for Peak Design conditions) 11ME OF SYSTEM PEAK Aug 3 PM Jan 1 HEATING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Heating Peak) 24 °F 70 °F 70 °F 105 °F Outside Air Supply Fan Heating Coil 105 °F 105	Total Output (Tons)		Supply Air Ducts		0			
Air System 1,500 HVAC EQUIPMENT SELECTION Airflow (cfm) 1,500 Existing FAU/AC Before 1978 48,679 6,468 60, Airflow (cfm/Sqft) 4.17								
CFM per System 1,500 HVAC EQUIPMENT SELECTION Airflow (cfm) 1,500 Existing FAU/AC Before 1978 48,679 6,468 60, Airflow (cfm/sqft) 4.17 6,468 60, Airflow (cfm/Ton) 300.0 6,468 60, Outside Air (%) 0.0% Total Adjusted System Output 48,679 6,468 60, Outside Air (cfm/sqft) 0.00 Total Adjusted System Output 48,679 6,468 60, Note: values above given at ARI conditions TIME OF SYSTEM PEAK Aug 3 PM Jan 1 HEATING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Heating Peak) 24 °F 70 °F 70 °F 105 °F Outside Air Supply Fan Heating Coil 105 °F 105 °F 105 °F Outside Air Supply Fan Heating Coil 105 °F		72.0	TOTAL SYSTEM LOAD		3,976	113		5,1
Airflow (cfm) 1,500 Existing FAU/AC Before 1978 48,679 6,468 60, Airflow (cfm/sqft) 4.17 60, Airflow (cfm/sqft) 4.17 6,468 60, Airflow (cfm/sqft) 0.0% 0.0% Total Adjusted System Output (Adjusted for Peak Design conditions) 48,679 6,468 60, Outside Air (cfm/sqft) 0.00 Total Adjusted System Output (Adjusted for Peak Design conditions) 48,679 6,468 60, Note: values above given at ARI conditions TIME OF SYSTEM PEAK Aug 3 PM Jan 1 HEATING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Heating Peak) 24 °F 70 °F 70 °F 105 °F Outside Air O cfm Supply Fan Heating Coil 105 °F 105 °F 105 °F Outside Air 0 cfm Supply Fan Heating Coil 105 °F	Air System							
Airflow (cfm/sqft) 4.17 Airflow (cfm/sqft) 4.17 Airflow (cfm/Ton) 300.0 Outside Air (%) 0.0% Outside Air (cfm/sqft) 0.00 Note: values above given at ARI conditions TIME OF SYSTEM PEAK Aug 3 PM Jan 1 HEATING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Heating Peak) 24 °F 70 °F 70 °F 70 °F 105 °F Outside Air 0 cfm Supply Fan Heating Coil 105 °F (Airstream Coil 105 °F (Airstream Coil 105 °F) (Airstream Coil 105 °F)	CFM per System		THIS EGGI MENT DEELOTION					
Aintow (clm/sqlt) 300.0 Airflow (cfm/Ton) 300.0 Outside Air (%) 0.0% Outside Air (cfm/sqft) 0.00 Note: values above given at ARI conditions TIME OF SYSTEM PEAK HEATING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Heating Peak) 24 % 70 % Outside Air 70 % 0 cfm Supply Fan Heating Coil 105 % 1,500 cfm 105 %	a strength (and) det		Existing FAU/AC Before 1978		48,679	6,468	-	60,0
Aintow (chinron) 0.0% 0.0% Total Adjusted System Output (Adjusted for Peak Design conditions) 48,679 6,468 60, Outside Air (cfm/sqft) 0.00 TIME OF SYSTEM PEAK Aug 3 PM Jan 1 HEATING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Heating Peak) 24 °F 70 °F 70 °F 105 °F Outside Air Outside Air O cfm Supply Fan Heating Coil 105 °F 105 °F Outside Air O cfm Supply Fan Heating Coil 105 °F 105 °F		6.104					-	
Outside Air (cfm/sqft) 0.00 (Adjusted for Peak Design conditions) Note: values above given at ARI conditions TIME OF SYSTEM PEAK Aug 3 PM Jan 1 HEATING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Heating Peak) 24 °F 70 °F 70 °F 105 °F Outside Air O cfm Supply Fan Heating Coil 105 °F 105 °F Image: Supply Fan Heating Coil 105 °F 105 °F 105 °F		100000	TALAR ALO A		19 670	6 460	-	60.0
Outside Air (cm//sqit) 0.00 Note: values above given at ARI conditions TIME OF SYSTEM PEAK Aug 3 PM Jan 1 HEATING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Heating Peak) 24 °F 70 °F 105 °F Outside Air O cfm Supply Fan Heating Coil 105 °F 1,500 cfm 105 °F 105 °F 105 °F	- Marco Manager - The second				40,079	0,408	Ļ	60,0
HEATING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Heating Peak) 24 °F 70 °F 70 °F 105 °F Outside Air 0 cfm Supply Fan Heating Coil 1,500 cfm ROOM					-			lon 1
0 cfm Supply Fan Heating Coil 105 °F 1,500 cfm ROOM				of Heating	Peak)	Aug 5 F M		Jan I
1,500 cfm	HEATING SYSTEM PSYCHR 24 °F 70 °F →→● → ● ●	ROMETRICS	Airstream Temperatures at Time o	of Heating	Peak)			
ROOM	24 °F 70 °F Outside Air		(Airstream Temperatures at Time o 105 약	of Heating →	Peak)			Ţ
	24 °F 70 °F Outside Air 0 cfm Supply Fa	70 °F	(Airstream Temperatures at Time o 105 약	of Heating →	Peak)		1	Ţ
	24 °F 70 °F Outside Air 0 cfm Supply Fa	70 °F	(Airstream Temperatures at Time o 105 약	of Heating →	Peak)			Ţ
< <u> </u>	24 °F 70 °F Outside Air 0 cfm Supply Fa 1,500 cfn	70 °F	(Airstream Temperatures at Time o 105 약	of Heating →	Peak)		оом	105 °F
The second s	24 °F 70 °F Outside Air 0 cfm Supply Fa 1,500 cfn	70 °F	(Airstream Temperatures at Time o 105 약	of Heating →	Peak)		оом	105 °F
	24 °F 70 °F Outside Air 0 cfm Supply Fa 1,500 cfn	70 °F	(Airstream Temperatures at Time o 105 약	of Heating →	Peak)		оом	105 °F
	HEATING SYSTEM PSYCHR 24 °F 70 °F Outside Air 0 cfm Supply Fa 1,500 cfm 70 °F	70 °F	(Airstream Temperatures at Time o 105 약	→[]]			оом	105 °F
96/69 °F 78/62 °F 78/62 °F 55/54 °F	HEATING SYSTEM PSYCHR 24 °F 70 °F Outside Air 0 cfm Supply Fa 1,500 cfm 70 °F COOLING SYSTEM PSYCHR	70 °F	(Airstream Temperatures at Time of 105 %) Coil	→[]]			оом	105 °F
	HEATING SYSTEM PSYCHR 24 °F 70 °F Outside Air 0 cfm Supply Fa 1,500 cfm 70 °F COOLING SYSTEM PSYCHR	ROMETRICS 70 °F an Heating n ROMETRICS	(Airstream Temperatures at Time of 105 %) Coil	→[]]			оом	105 °F
	HEATING SYSTEM PSYCHR 24 °F 70 °F Outside Air 0 cfm Supply Fa 1,500 cfm 70 °F COOLING SYSTEM PSYCHR 96 / 69 °F 78 /	ROMETRICS 70 °F an Heating n ROMETRICS	(Airstream Temperatures at Time of 105 %) Coil	→[]]			оом	105 °F
Outside Air	HEATING SYSTEM PSYCHR 24 °F 70 °F Outside Air 0 cfm Supply Fa 1,500 cfm 70 °F COOLING SYSTEM PSYCHR 96 / 69 °F 78 / Outside Air	ROMETRICS 70 °F an Heating n ROMETRICS 62 °F 78 ©F	(Airstream Temperatures at Time of 105 °F Coil Coil (Airstream Temperatures at Time 3/62 °F 55/54 °F →	→[]]			MOC	↓ 105 °F 70 °F
Outside Air 0 cfm Supply Fan 1,500 cfm Cooling Coil	HEATING SYSTEM PSYCHR 24 °F 70 °F Outside Air 0 cfm Supply Fa 1,500 cfm 70 °F COOLING SYSTEM PSYCHR 96 / 69 °F 78 / Outside Air	ROMETRICS 70 °F an Heating n ROMETRICS 62 °F 78 Supply Fan	(Airstream Temperatures at Time of 105 °F Coil Coil (Airstream Temperatures at Time 3/62 °F 55/54 °F →	→[]]	g Peak)	R	DOM	↓ 105 °F 70 °F
Outside Air 0 cfm Supply Fan Cooling Coil 55 / 54 °F	HEATING SYSTEM PSYCHR 24 °F 70 °F Outside Air 0 cfm Supply Fa 1,500 cfm 70 °F COOLING SYSTEM PSYCHR 96 / 69 °F 78 / Outside Air	ROMETRICS 70 °F an Heating n ROMETRICS 62 °F 78 Supply Fan	(Airstream Temperatures at Time of 105 °F Coil Coil (Airstream Temperatures at Time 3/62 °F 55/54 °F →	→[]]	g Peak)	R	DOM	↓ 105 °F 70 °F
Outside Air 0 cfm Supply Fan 1,500 cfm Cooling Coil	HEATING SYSTEM PSYCHR 24 °F 70 °F Outside Air 0 cfm Supply Fa 1,500 cfm 70 °F COOLING SYSTEM PSYCHF 96 / 69 °F 78 / Outside Air 0 cfm	ROMETRICS 70 °F an Heating n ROMETRICS 62 °F 78 Supply Fan	(Airstream Temperatures at Time of 105 °F Coil Coil (Airstream Temperatures at Time 3/62 °F 55/54 °F →	→[]]	g Peak)	R	DOM 55	105 °F 70 °F 5/ 54 °F
Outside Air 0 cfm U Supply Fan 1,500 cfm U Supply Fan U	HEATING SYSTEM PSYCHR 24 °F 70 °F Outside Air 0 cfm Supply Fa 1,500 cfm 70 °F COOLING SYSTEM PSYCHF 96 / 69 °F 78 / Outside Air 0 cfm	ROMETRICS 70 °F an Heating n ROMETRICS 62 °F 78 Supply Fan	(Airstream Temperatures at Time of 105 °F Coil Coil (Airstream Temperatures at Time 3/62 °F 55/54 °F →	→[]]	g Peak)	R	DOM 55	105 °F 70 °F 5/ 54 °F

ROOM HEATING PEAK LO	ADS							n
Project Name							Da	
LICHAU ADITION ONLY				<u>. </u>				8/14/2020
			GIGN CONDITIO	NS				
Room Name	ADU		e of Peak					Jan 1 AM
Floor Area	360.00 ft²	Out	door Dry Bulb Te	mpe	erature			24 °F
Indoor Dry Bulb Temperature	70 °F							
						0		
Conduction	Area	1	U-Value		ΔΤ			Btu/hr
R-19 Floor Crawlspace	360.0	1	0.0469	Х		46	=	776
R-15 Wali	534.0	1	0.0953	Х		46	=	2,342
New Windows/Doors	48.0	X	0.3000	Х		46	=	662
R-30 High Performance Attic	360.0	X	0.0419	Х	·	46	Ħ	694
		X		Х			=	
		X		Х			=	
		X		Х		··	=	
		X		х			=	
	~	X		Х			=	
		X		Х			IJ	
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		x		X			=	
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		x		x			=	
		x		x			=	
		x		x			=	
		x		x			=	
Items shown with an asterisk (*) denote conduction	on through an interior surf		another room	1		Page To	otal	4,474
	073 x 360 x			.266	/ 60]	x	4	6 = 631
Schedule Air Sensil Fraction	ole Area	Ce	iling Height AC	Η		Δ٦	-	
TOTAL HOURLY HEAT LOSS FOR RO	DOM	··						5,105

			••••••••••••••••••••••••••••••••••••••			·····		

RESIDENTIAL ROO	M COOLING	LOAD S	UMN	IAR	R Y									
											ī	Date	1.1."	2020
LICHAU ADITION ONLY		<u> </u>	DEGI		ONDI	TIC)Ne					<i>8</i> /	14/,	2020
Room Name		ADU	• •		y Bulb				ITA				—	96 °F
Floor Area		360.00 ft ²			et Bult		-							69 °F
Indoor Dry Bulb Temperature		78 °F			aily Ra		-	Jau						35 °F
						<u></u>								
Opaque Surfaces	Orientation	Area		·	U-Fac				i	CL.	TD ¹		<u>1</u>	Btu/hr
R-19 Floor Crawlspace	······		60.0	- I—			0469	X	 		9.6	=		162
R-15 Wall	(N)		70.0				0953	X			9.0	=		317
R-15 Wall	(E)		88.0		L		0953	Х			19.0	=	<u> </u>	159
R-15 Wall	(W)		76.0				0953	X			19.0	=		138
R-30 High Performance Attic	(N)	3	60.0	-		0.0	0419	X			43.0	=	 	648
			>					X				=		
ļ			>					X				П	<u> </u>	
ļ			>					X				=	<u> </u>	
			>	([x				, =	<u> </u>	
Ifems shown with an astariate (*)	10te conduction throws t	an interior -	ine fe	other	100m				P	'ag	e Total		L	1,425
Items shown with an asterisk (*) den 1. Cooling Load Temperature Diff	ference (CLTD)				. oom.									
. ,	. ,		Shadeo						Unsh	had				
Fenestration	Orientation	Area		Gl		ſ	1	Area		· _	GLF		Г	Btu/hr
Add N Windows	(N)		0.0 X				 		20.0	1 1			=	211
Add E Windows	(E)		<u>0.0</u> X		10.5	+	 		8.0	1			=	191
Add W Windows	(W)		0.0 X		10.5	+	┞		20.0	1			=	477
			X			+	<u> </u>			X	<u> </u>		=	
			X			+		. <u></u>		X			=	, <u></u>
			X]	+	┝──			X			=	
			X			+	├		—	X			=	
			 X			+	├			X			=	
			x[+	L	·	i] X	L		=	
											Page To	otal	Ľ	878
Internal Gain														Btu/hr
	1.1 Occupan	nts X				_	245	Btu	ih/occ	۰.		=		265
	360 Floor Are						1.00	-				=		1,229
							•••••		• •				L	
Infiltration: 1.073 X		13.20	< 🗌		18 =									180
Air Sensible	CFM	ELA	·	ΔT									b	
		PAON												
TOTAL HOURLY SENSIBL	E NEAT GAIN FOR													3,976
Latent Gain														Btu/hr
Occupants	1.1 Occupan	nts X					155	Btu	ıh/occ.			=		167
					 								_	
Infiltration: 4,812 X			x 📃	-0.001	121 =									-54
Air Latent	CFM	ELA		ΔW										
TOTAL HOURLY LATENT I		OOM		.,. .										113
						_								

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Page PJC & Associates. Inc. Date 8-11-20 MOWTESS Proposed Addition Legalization Project Job Project 1900 Brush Creek Ed Address. Santa Rosa, CA for the addition Direction on site to do pachometer testing bated on the southwest (235°) perimeter was excavated to expose the footing & the @ location on the opposite downhill side at the original foundation to addition toundation of the This is the fallest portion location, 8" 7 #4-#5 2 Northwest T Q 18"0C 18" SW (4). 20 MP (w) 4 'oc. \$14-#5 for first 12 1 horiz 14" Verticals 18 00 6 1 THE grade 24 rom top of Q (3) #4-#5 horizontals 44 Stem Verticels @ 18" O.C. to the - advace orrade **Field Services Manager Sign** rompson Printed Name Main Office: 600 Mertin Avenue, Suite 210, Rohnert Park, CA 94928, 707-584-4804 phone 707-584-4811 fax Sonoma Branch: PO Box 469, Schome, CA 95476 707-584-4904 phone 707-935-3587 fax



2300 Bethards Dr., Suite L, Santa Rosa, CA 95405 Tel (707) 523-7490

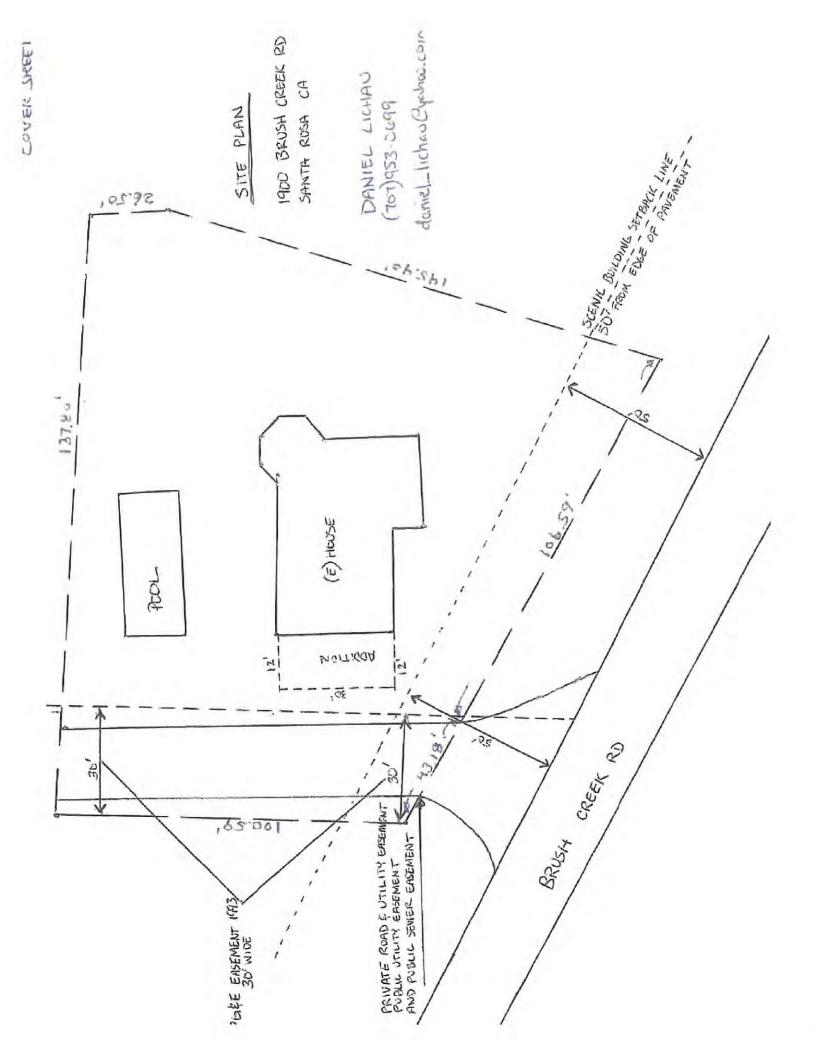
E-mail mike@robertsonengineering.net

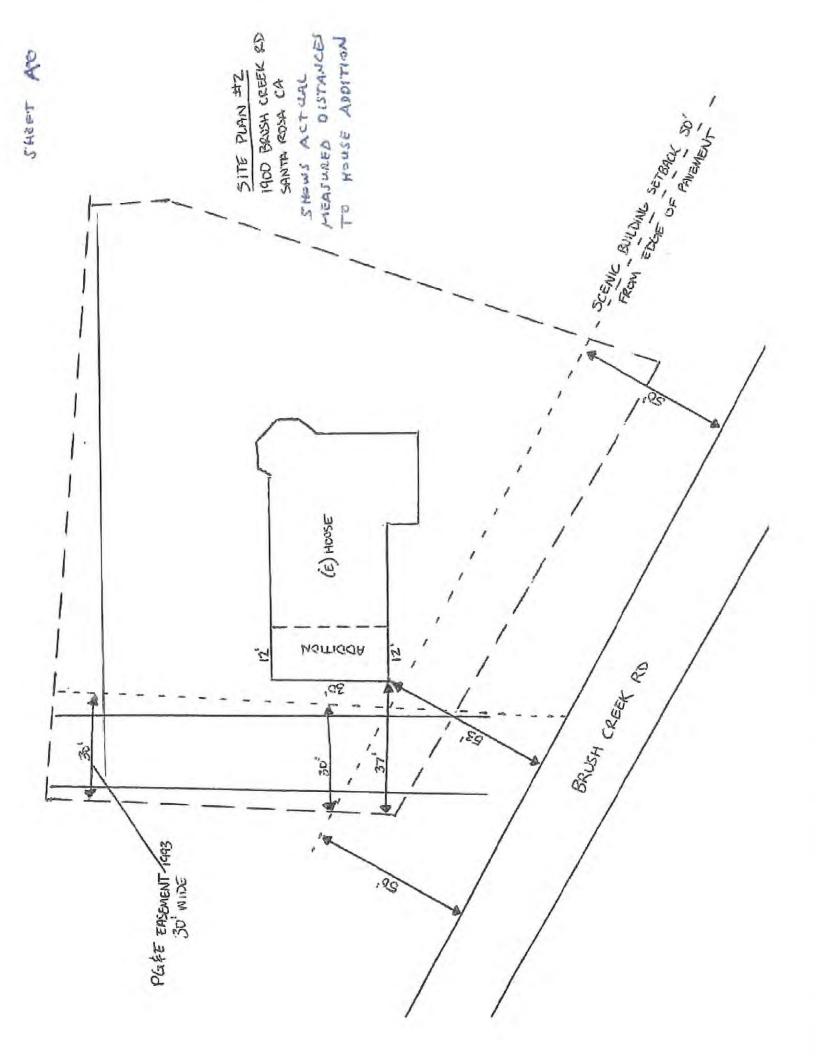
August 12,2020

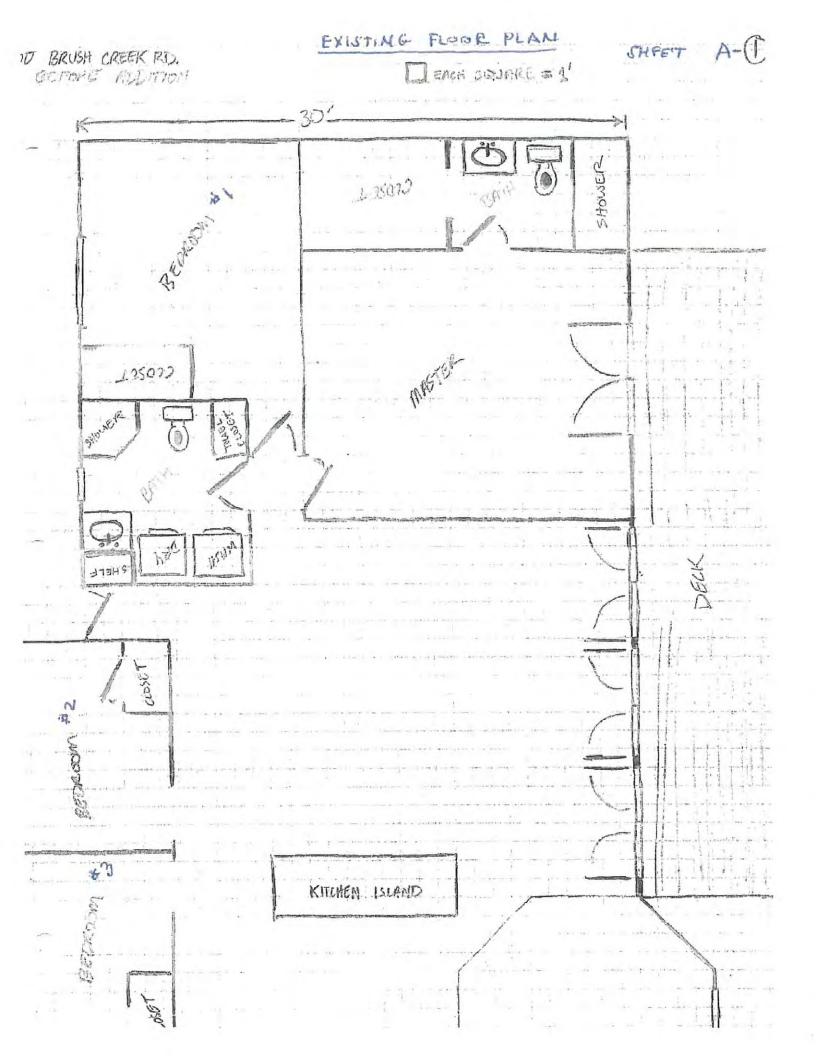
DANIEL LICHAU 1900 BRUSH CREEK RO SANTA ROSA, CA. 95404

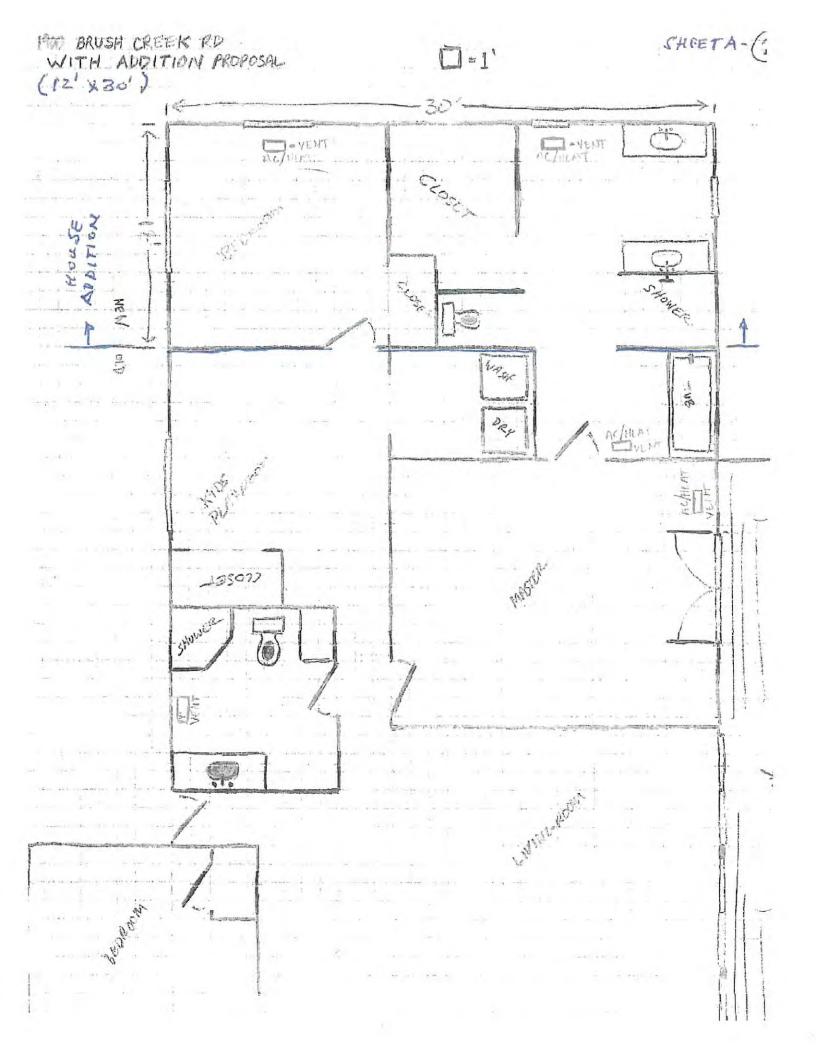
RES OBSERVATION OF FOUNDATION FROM PHOTOS AND NERSONALLY AT 1900 BRUSH CREEK ROAD, SANTA ROSA

Dear Damel, This letter confirms my personal site observation of the foundation and footing for your house addition. The fosting was installed a minimum of 24" into the ground, which from the phontos you provided appear to be in Solid ground. The forting width is a Minimum of 36" and appears that below the forms that were set ended with more than 48 in width. It is my profession opinion that the footing size is sufficient to adequately support the Meel / b/ler Aructure.





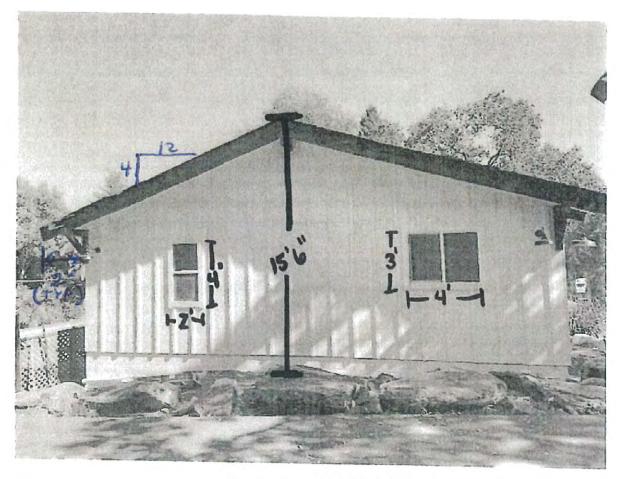




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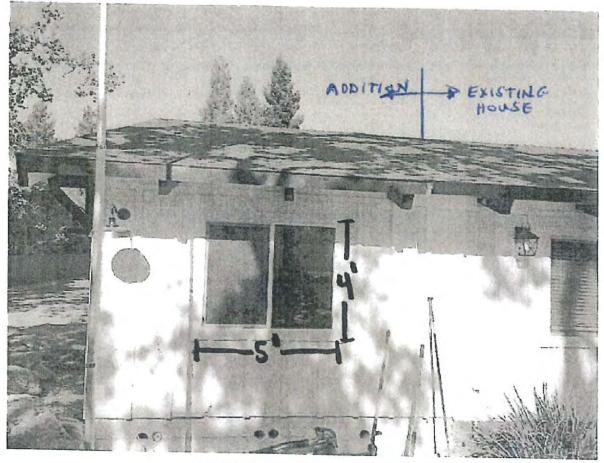
FROM MASTE d. WING C 2 ES ADTACENT . 5) SULTO Ex TENDER BATHROOM CUTOTIS WATER 1 1 30 D EXTENDED BERRON いいのしんとも Oarter DUTLE FIDS RUDITION (ELECTRICAL GRUSMI 900





NORTH ELEVATION

SHEET A.G



WEST ELEVATION

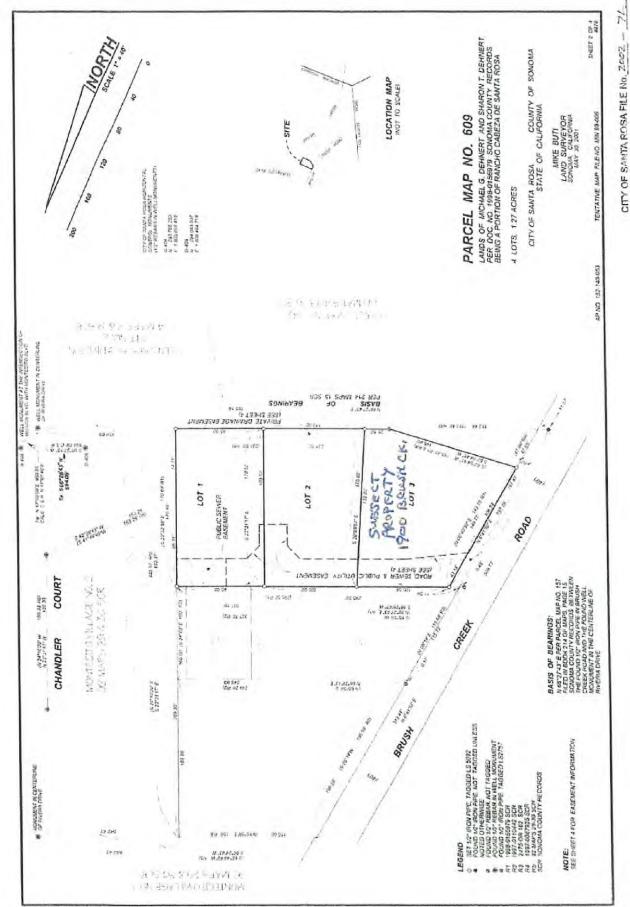
.

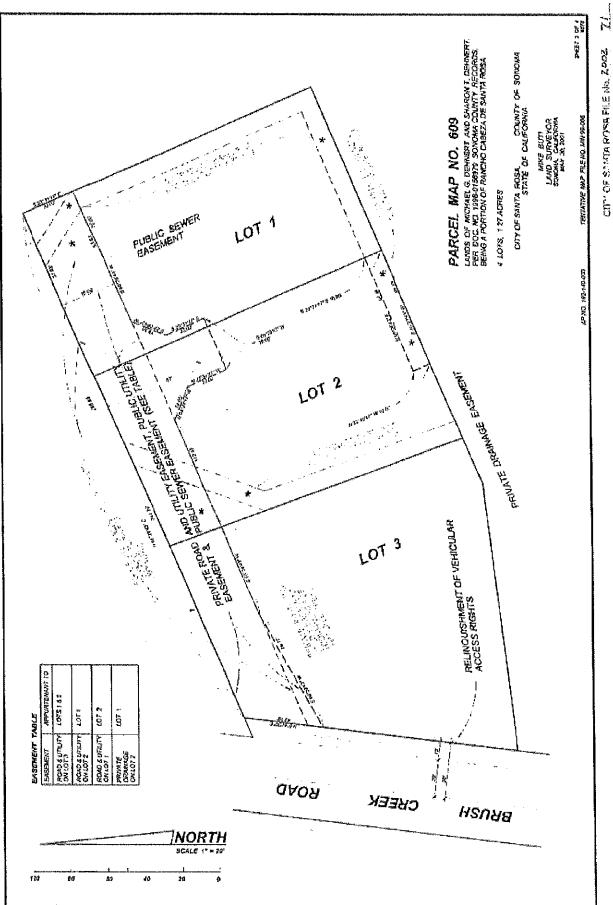
SHEET A.(1)



NORTHWEST ELEVATION

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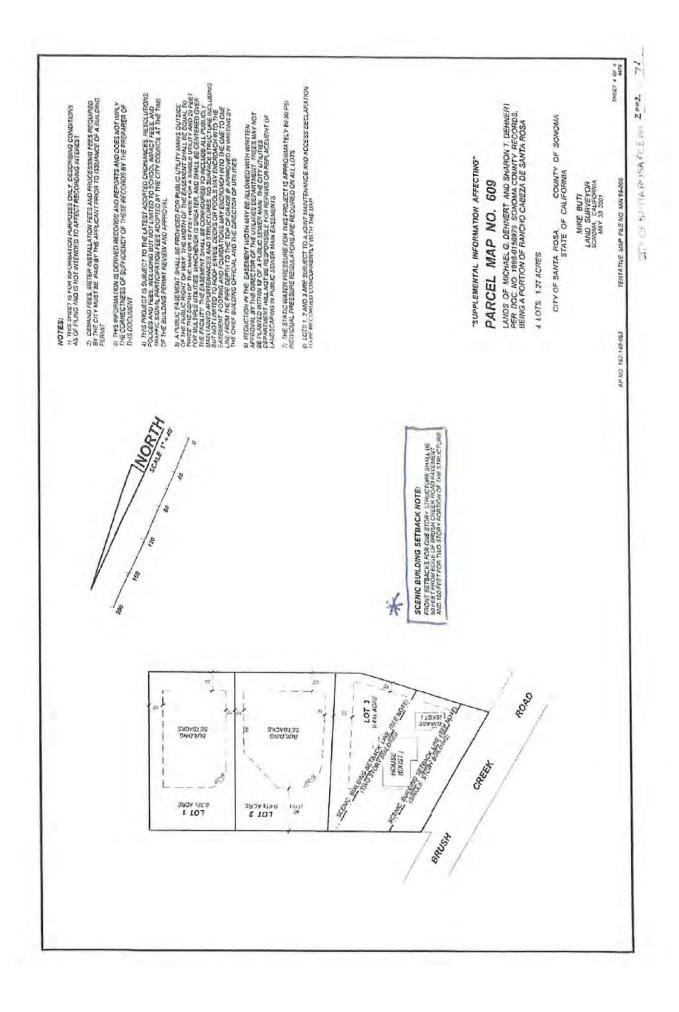




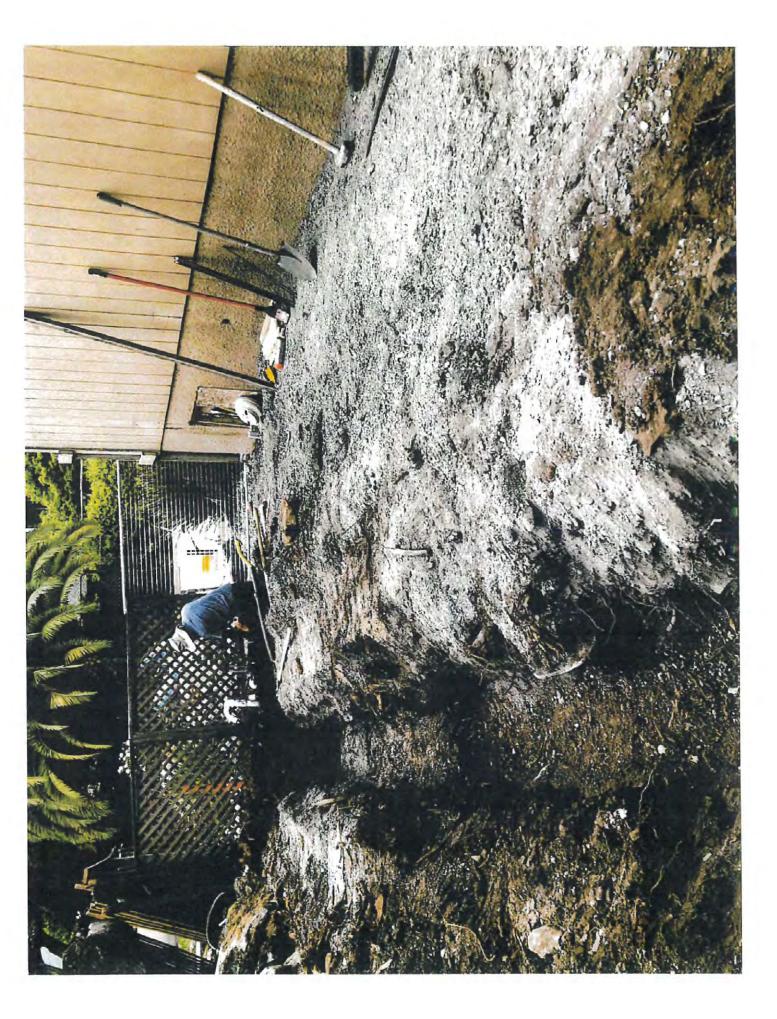
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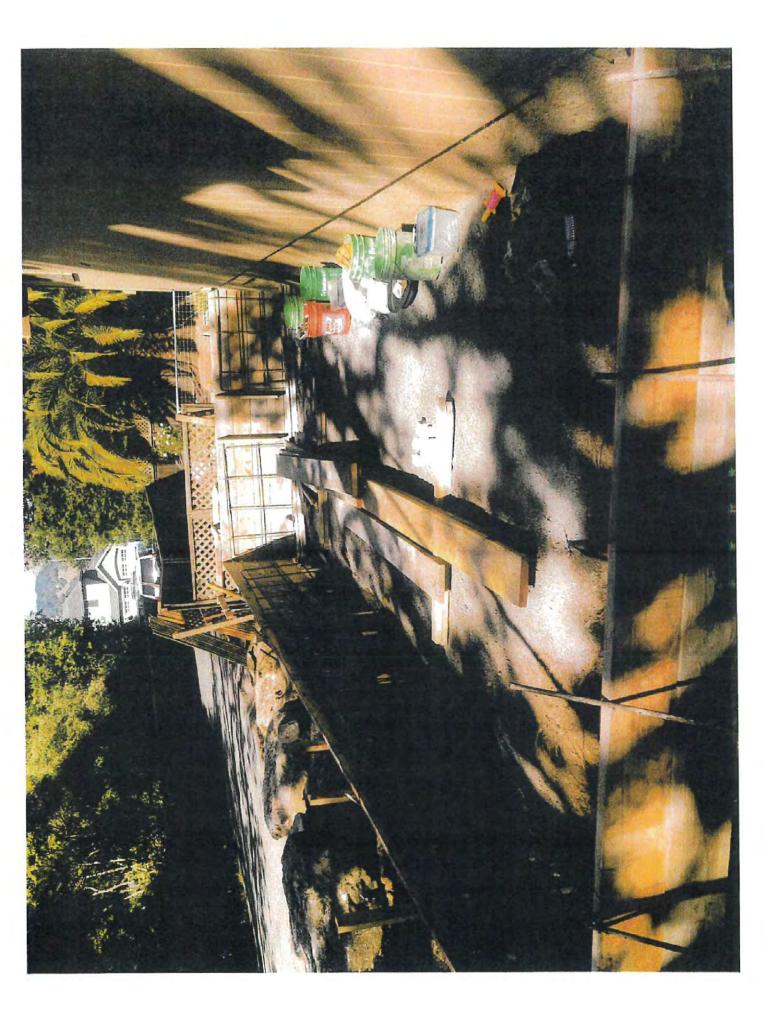




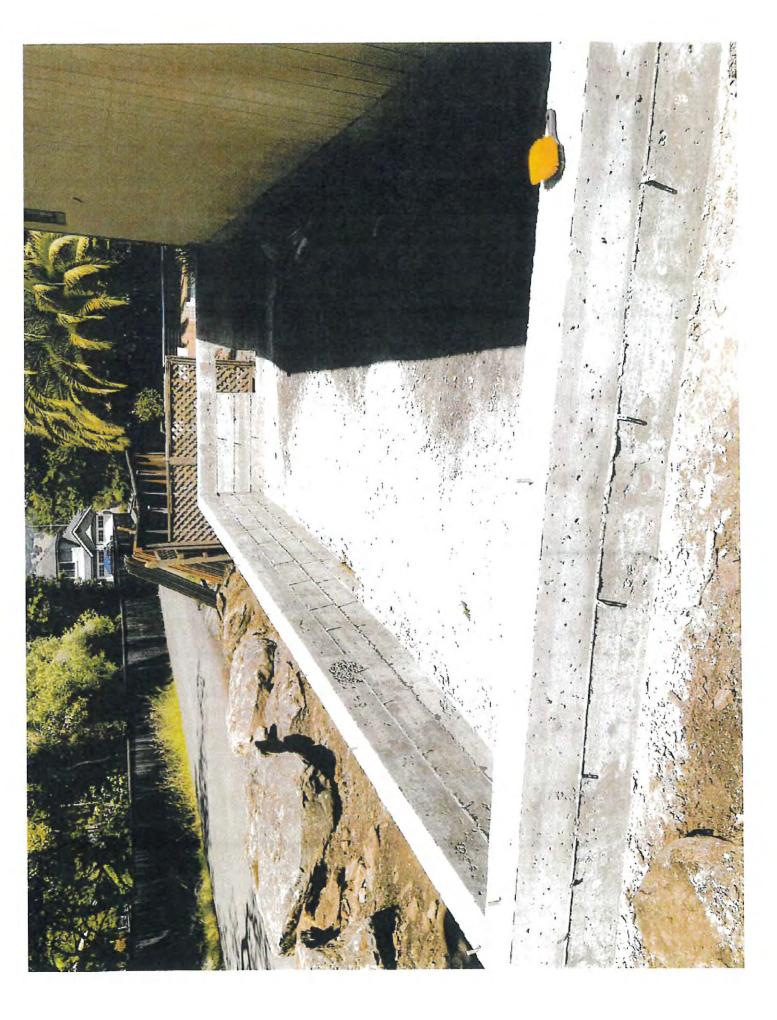






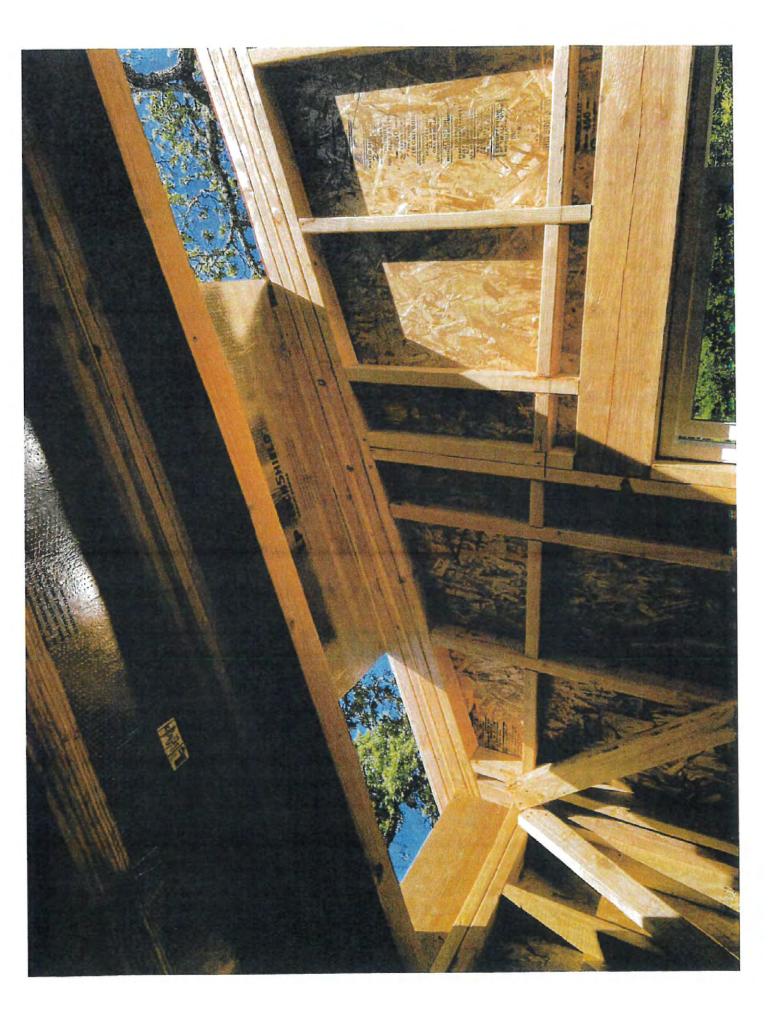






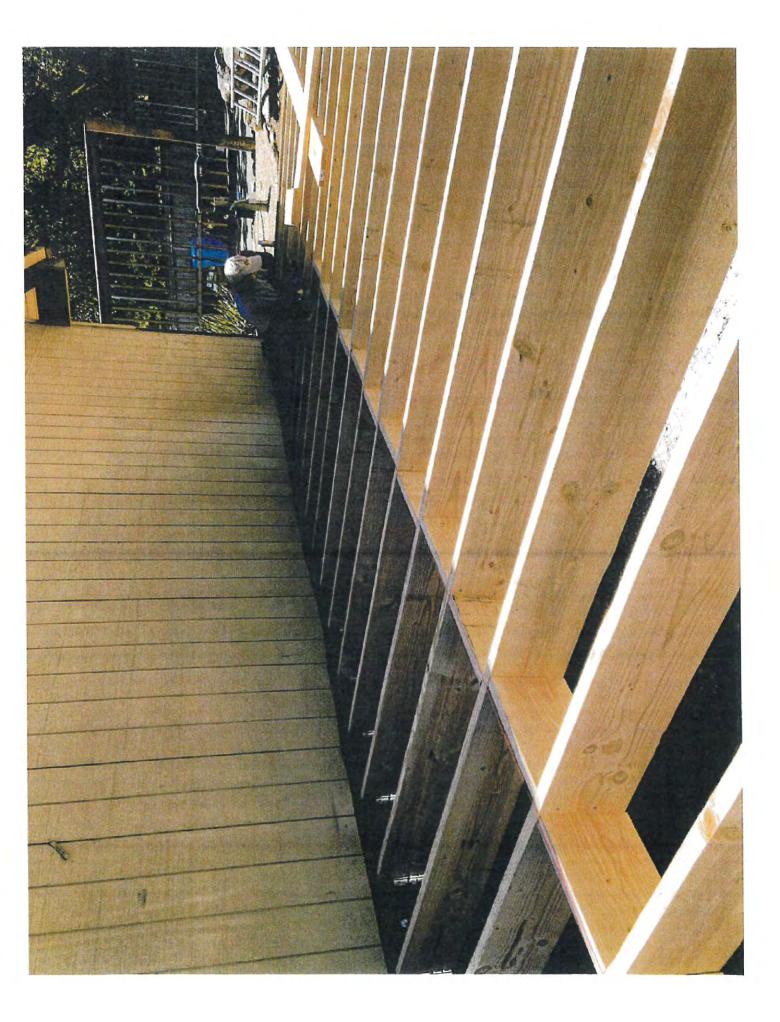


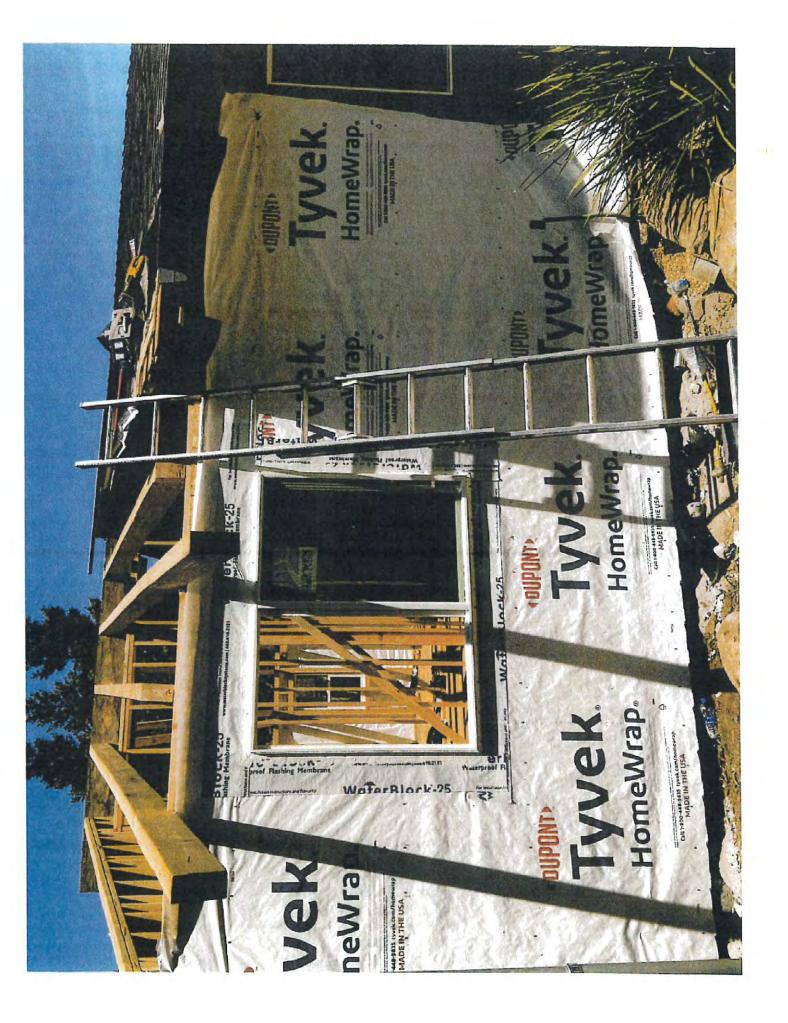


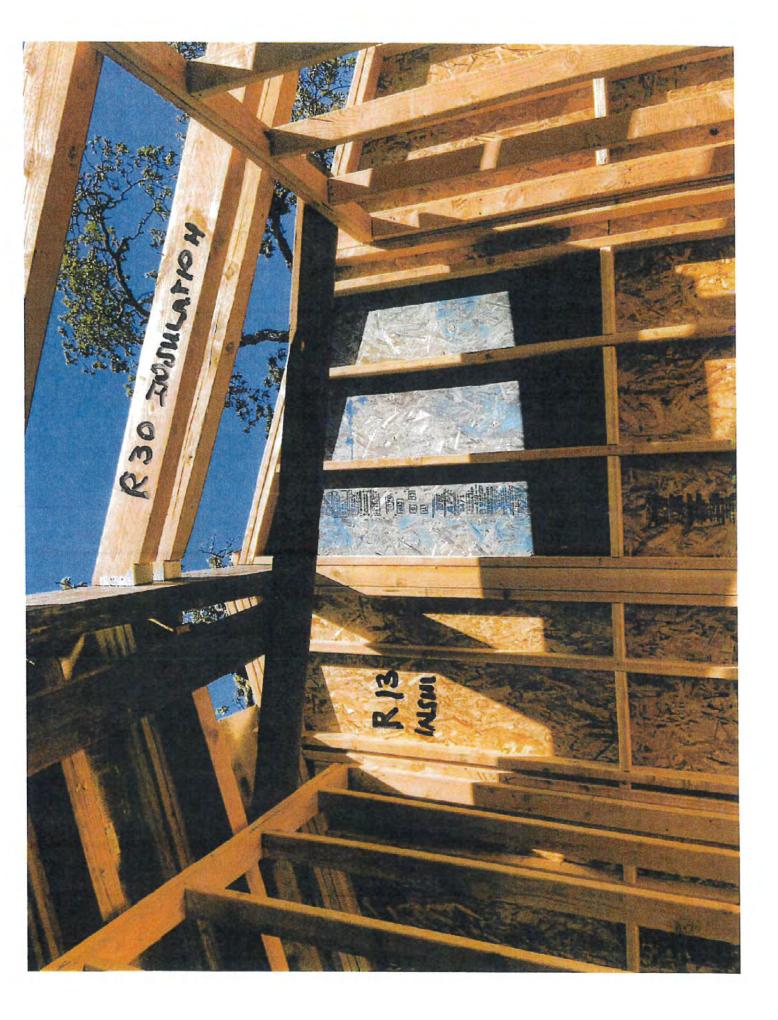


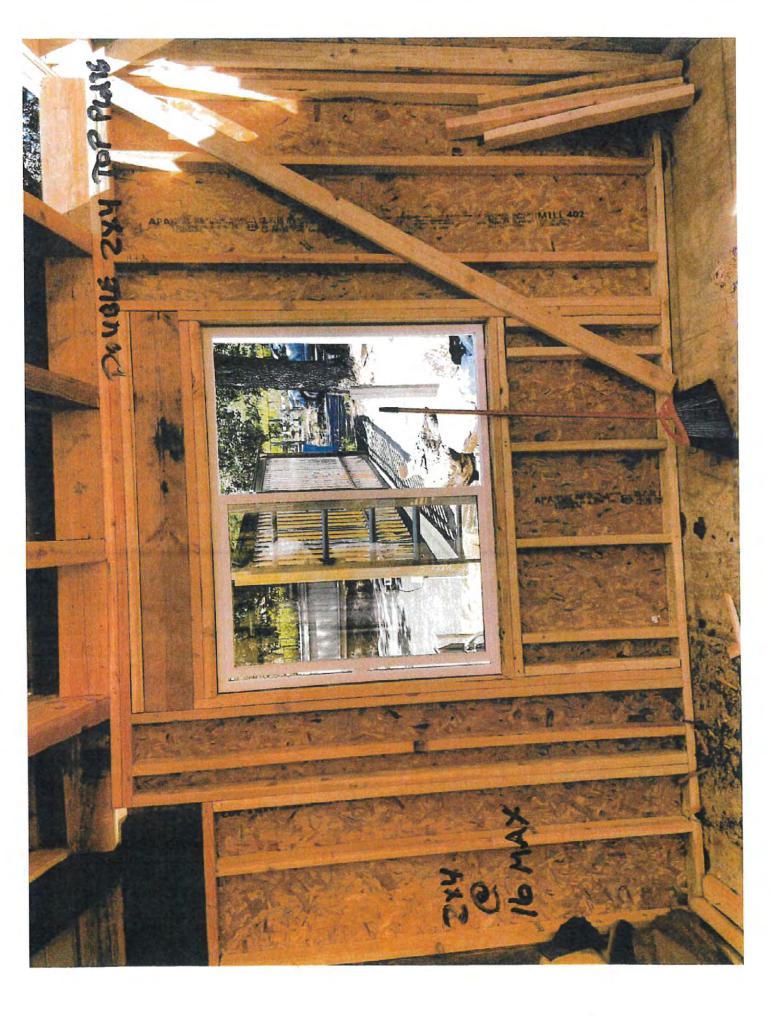


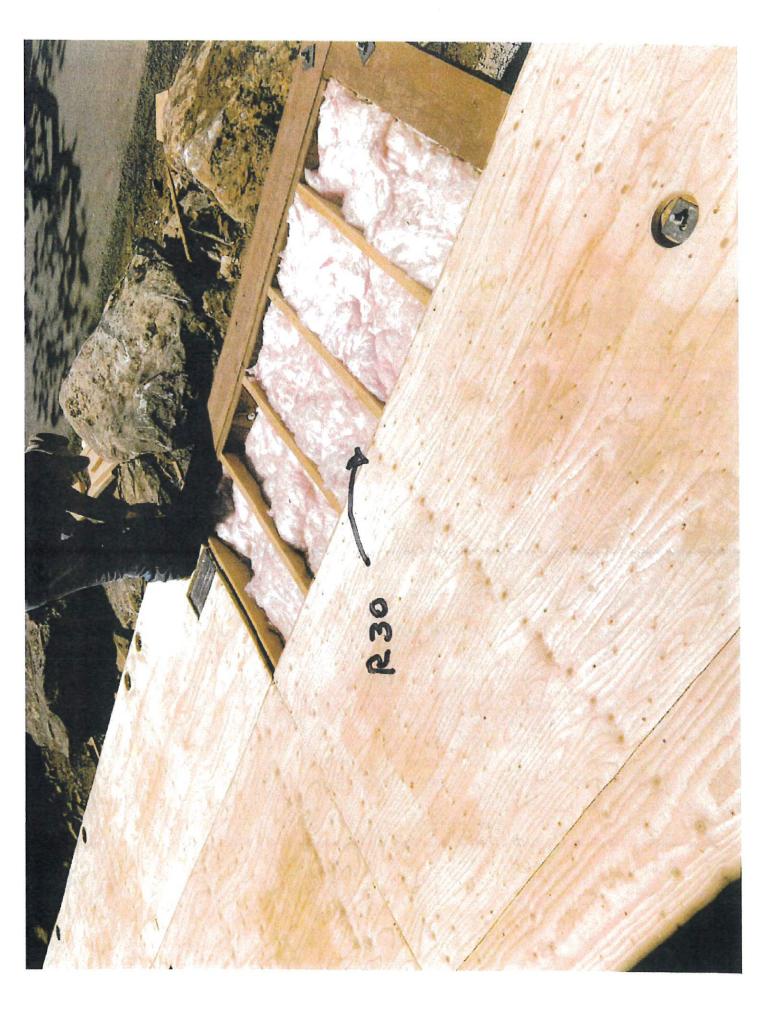














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Electronic/Digital Signature Disclosure

Project Address: 1902 Brush Creek Road Santa Rosa, CA 95404

I understand and agree that (i) electronically signing and submitting any document(s) to the City of Santa Rosa legally binds me in the same manner as if I had signed in a nonelectronic or non-digital form, and (ii) the electronically stored copy of my signature, any written instruction or authorization and any other document provided to me by the City of Santa Rosa, is considered to be the true, accurate and legally enforceable record in any proceeding to the same extent as if such documents were originally generated and maintained in printed form. I agree not to contest the admissibility or enforceability of the City of Santa Rosa's electronically stored copy of any other documents.

By using the system to electronically sign and submit any document, I agree to the terms and conditions of this Electronic/Digital Signature Disclosure.

Signature:	Date: 8 24 2020
Title: NIA	Relationship to Project: NUNEr builder
Company/Organization: NIA	

From:	daniel lichau
То:	Permit Submittal
Cc:	Maystrovich, Mark; Anderson, Cassidy
Subject:	[EXTERNAL] 1900 Brush Creek Road Santa Rosa Permit Application
Date:	Wednesday, September 16, 2020 6:36:06 PM
Attachments:	Brush Creek Road 1900-Plan Permit Application.pdf
	Brush Creek Road 1900-Plan T-24 Report.pdf
	Brush Creek Road 1900-Plan Foundations Report.pdf
	Brush Creek Road 1900-Plan Engineer Letter.pdf
	Brush Creek Road 1900-Plan .pdf
	Brush Creek Road 1900-Plan Electronic Disclosure.pdf
	Brush Creek Road 1900- Plan CALGreen Checklist.pdf
	Brush Creek Road 1900- Plan CALGreen Inspection Verification Letter.pdf
	Brush Creek Road 1900- Plan Foundation and flooring detail plans.pdf
	Brush Creek Road 1900-Plan Foundation detail.pdf
	Brush Creek Road 1900-Plan Roof framing and beam connection detail.pdf

To whom it may concern,

Please see attached permit application and supplemental documentation, including plans, for addition on our home at 1900 Brush Creek Road Santa Rosa. Please email or feel free to call with any questions or further required actions. Thank you for your time and we look forward to hearing from you.

Sincerely, Amber Lichau (707) 889-6979

Santa Ros	a
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BUILDING PERMIT APPLICATION

BUILDING PERMIT NO .:

Related Files:

Department Use Only

PLEASE PRINT CLEARLY

	DRESS)		SUITE/UNIT NO.	DATE			
1900 BRUSH CRI	EEK RD SANTA R	OSA 95404	N/A	8/18/2020			
OWNER	•		CELL HOME BUSINE	SS CELL HOME BUSINESS			
DANIEL & AMBER L	LICHAU		(107)953-0699	(107) 889-6979			
OWNER ADDRESS	CITY	STATE	ZIP	E-MAIL ADDRESS			
	RD SANTA ROSA		95404	daniel_lichaue			
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DANIEL LILHAU		CONTRACTOR	(107)953-0699	1 (107)889-6979			
CONTACT ADDRESS	CITY	STATE	ZIP ZIP	E MAIL ADDRESS			
1900 BRUSH CREEK	OD SANTA ROSI	A CA	95404	daniel_lichas@			
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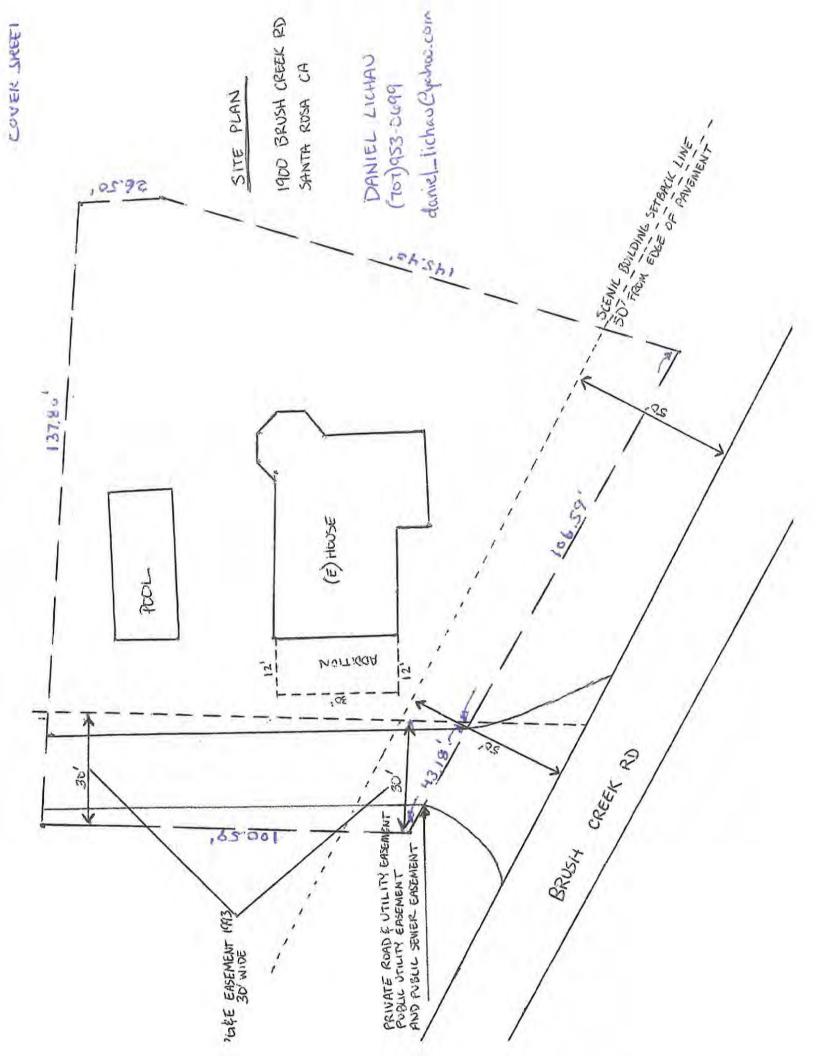
Electronic/Digital Signature Disclosure

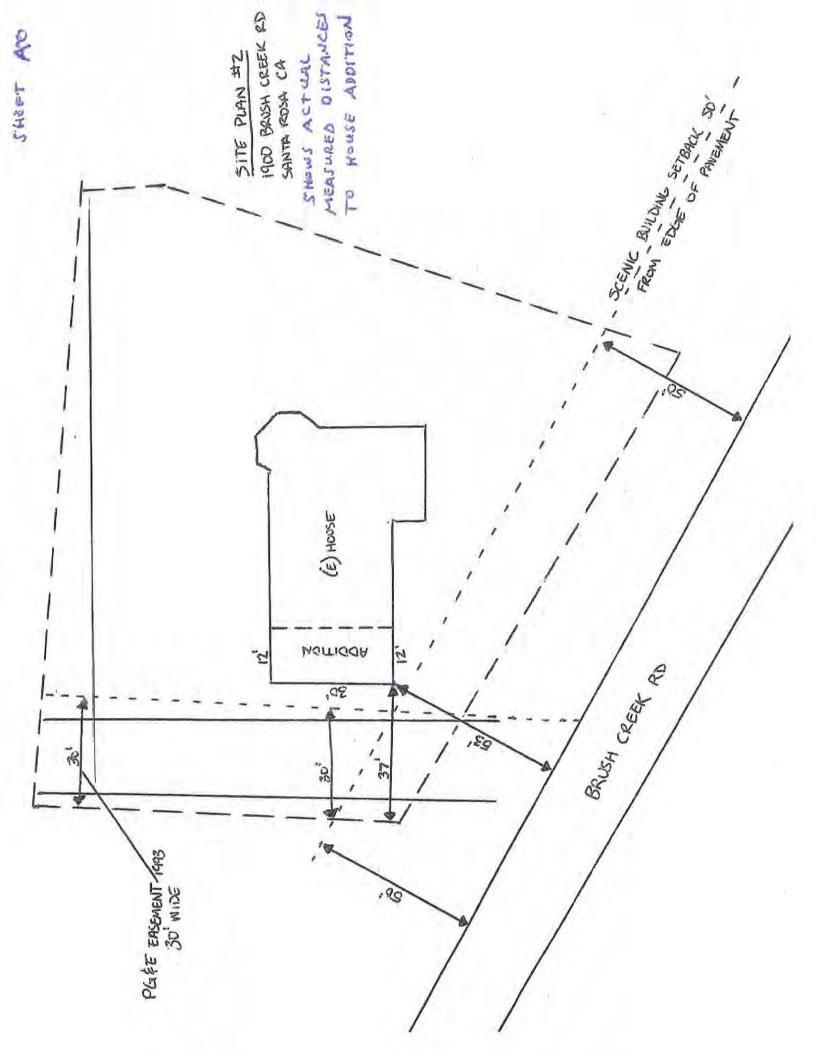
Project Address: 1902 Brush Creek Read Santa Rosa, CA 95404

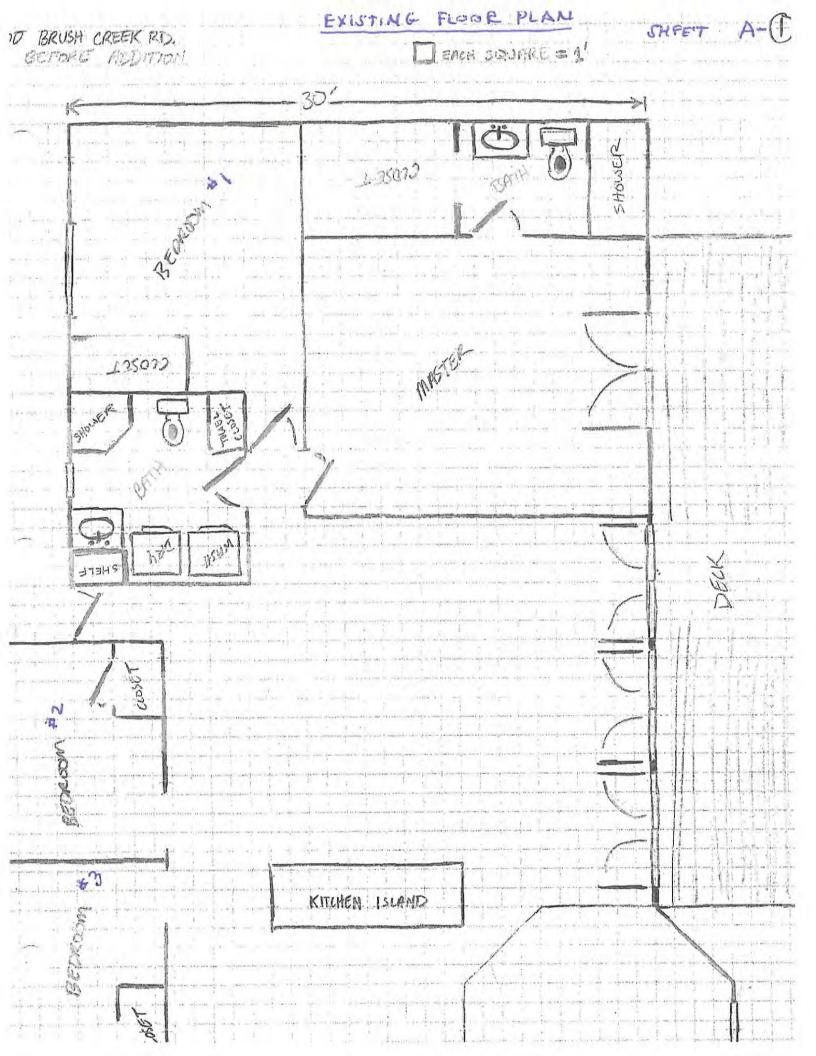
I understand and agree that (i) electronically signing and submitting any document(s) to the City of Santa Rosa legally binds me in the same manner as if I had signed in a nonelectronic or non-digital form, and (ii) the electronically stored copy of my signature, any written instruction or authorization and any other document provided to me by the City of Santa Rosa, is considered to be the true, accurate and legally enforceable record in any proceeding to the same extent as if such documents were originally generated and maintained in printed form. I agree not to contest the admissibility or enforceability of the City of Santa Rosa's electronically stored copy of any other documents.

By using the system to electronically sign and submit any document, I agree to the terms and conditions of this Electronic/Digital Signature Disclosure.

Signature:	Date: 8 24 2020
Title: NIA	Relationship to Project: NUNEr builder
Company/Organization: NA	

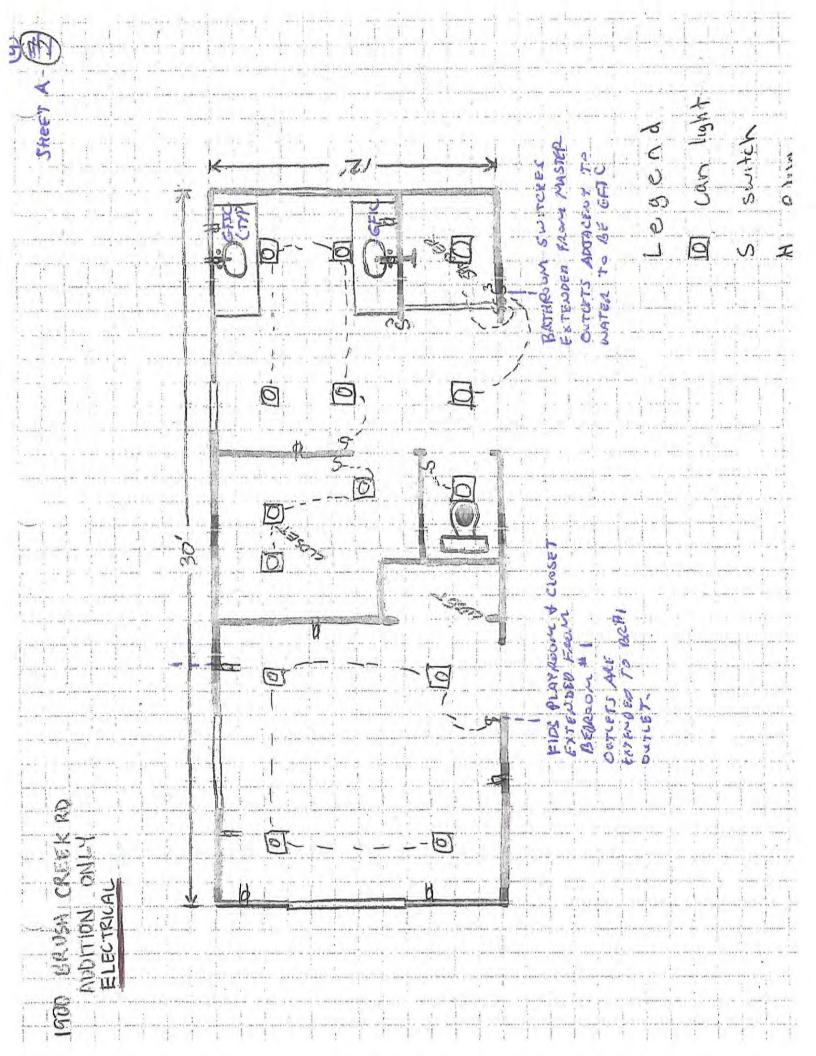


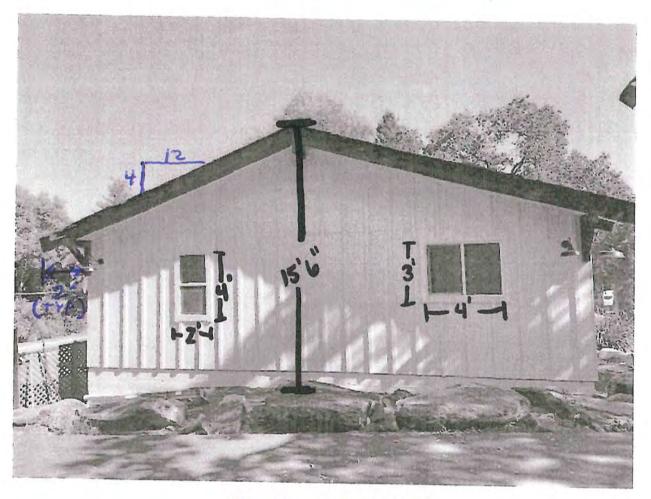




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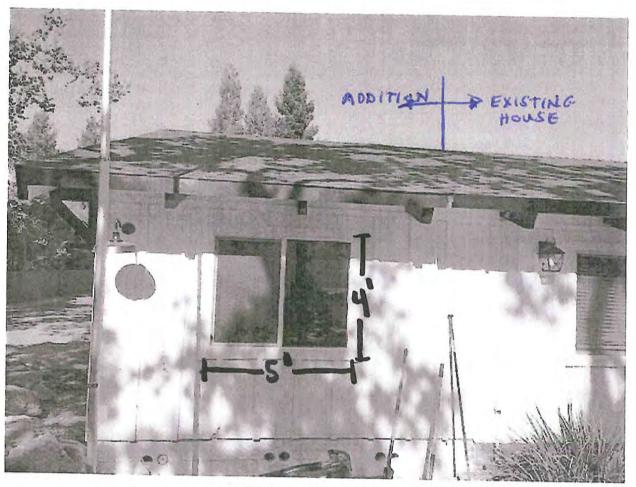
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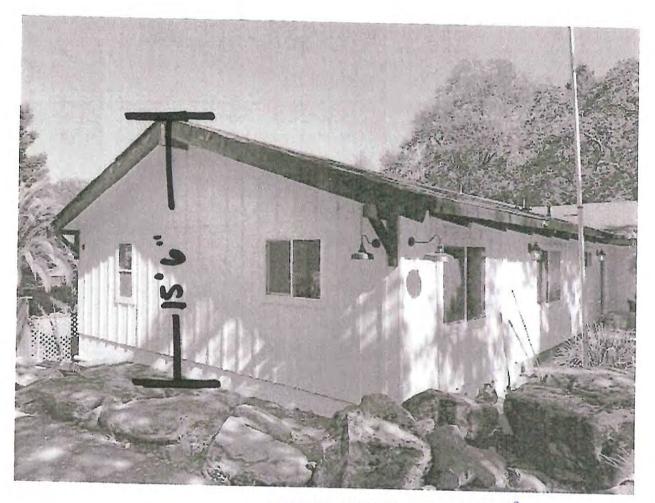
NORTH ELEVATION

SHEET A.G



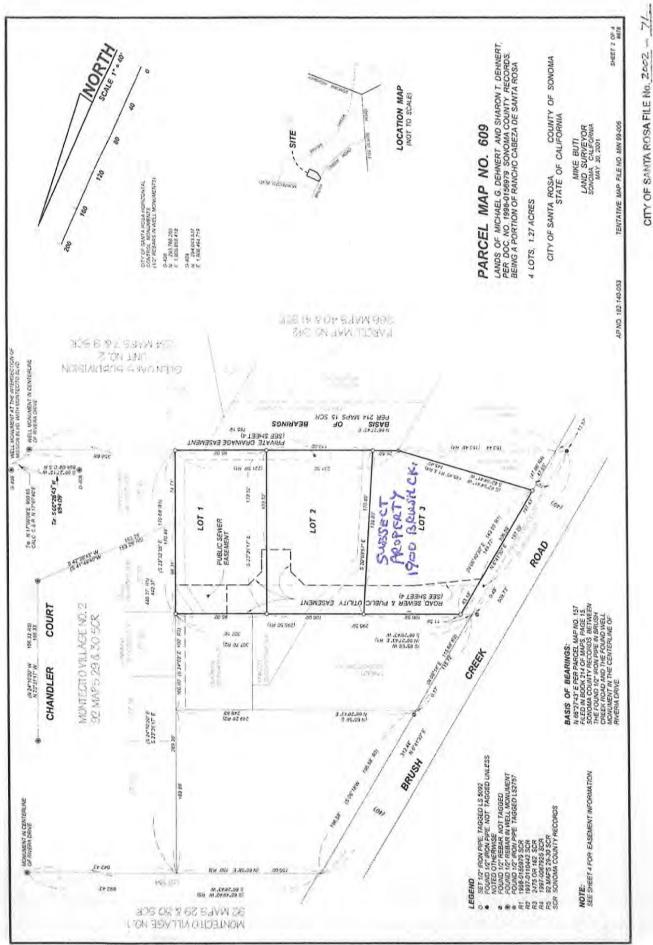
WEST ELEVATION

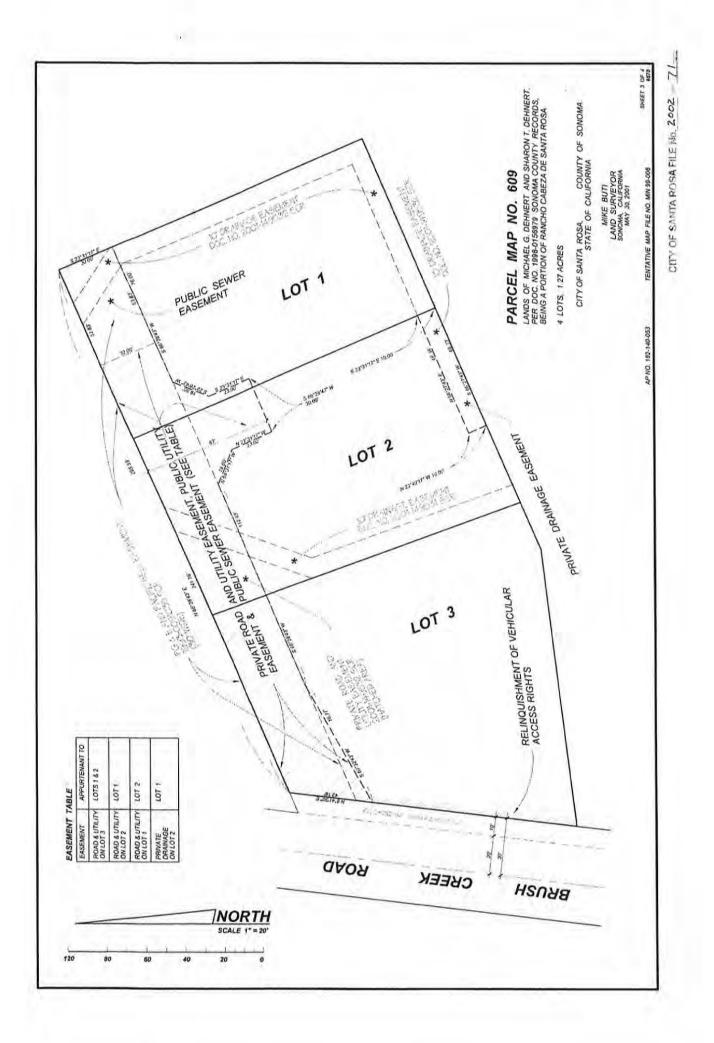
SHEET A-CD

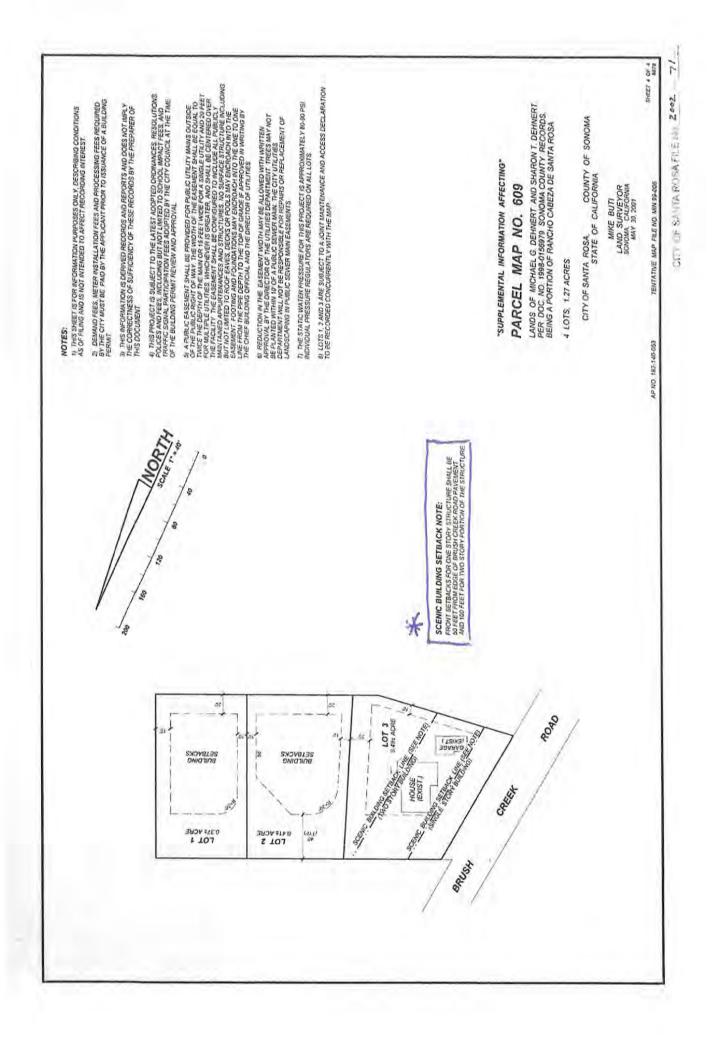


NORTHWEST ELEVATION

-	Dance 4/2/02 March March March March March	OWERS STATEMENT OWERS STATEMENT Were are in the production of the production	NOTARY PUBLIC CERTIFICATE Same al Customs 13 County of Sancers 13 County of Sancers 13 County Francis and Causar 10 Sales, prosenary algobated on The Jacob Add Landon and Sales, prosenary algobated The Jacob Add Defeater 20 Sales Add Add Add Add Add Add Add Add Add Ad	Signature E. Mrinter. agains set agains and can spatia and can	RECORD TITLE INTEREST NOTE Signatures of conversa of the bioloxing examples they been combind under the provinsions of execute field each scale Alloy Act, their indexest is such preventing cook.	NAMES RECORDED NATURE OF EASEMENT DEVENDE DOC. NO. 1998-0159379 SONOMA COUNTY RECORDS, PG & E AND PACIFIC RELL 1993-0091035 UNDERGROUND UTILITIES BEING A PORTION OF RANCHO CABEZA DE SANTA ROSA	MARY DEADMAN 2001-149527 DIAMAGE ROAD & UTUJIES 4 LOTS, T. Z. ACRES TIMOTHY FAWCETT 2002-019716 DRAIMAGE CITY OF SAVTA ROSA COUNTY OF SONOMA STATE OF CALIFORNIA	MIKE BUTI LAND SURVEYOR Sociolas, Clarepaid May 50, 201	AP NO. 192-140-003 TENTATIVE MAP FILE NO AW 99-006 SHEET 1 OF 4
CILT PROTOKENS CENTRIPICATE (Anthron AC Canner, CN Expineer, in and for the CMy of Santa Reas, State of California, I. Anthron examined in the Conference on a control of the California. Instation and paperoter during 21, 2000, and any apportant discretions lineation. The protected excidence of approval for the Terminal and the paperoter discretions lineation. The the major attractor of approval for the Terminal and the California for the Action and the paperoter of approval for the Terminal and the california the Action and the paperoter of approval for the Santa Reas Color Color and an easing- tion and accidence and control. The ready approver the autohomous short units reage and encounter of comprehensit. Or poper control the paperoter the autohomous short for major and encounter of comprehensit. Or poper control with a patientic public.	Dativer essement, and reinprustiment of verbular access rights as shown on ead max, within acconsisting, including all public faciliess as shown on City Engineer drawing number 2002-00 Control Access as shown on City Engineer drawing Dativer 5/3/0 2002 Multi Access of the City of of t	A contract of the contract of	COUNTY CLERKS CERTIFICATE Teachy that at bords, moreor or impossible bonds required under the particular of the standard provident of the Canary of Schemen annual, schemen dispersed by the solution of persons of the transmission of the supersed systemet of the solution	CITY AUDITORS CERTIFICATE (Paral L Bornont). Director of Administrate Services in and for the City of Satila Flores and of California. Go freeky cost (Paral Flores are no special seconsection for a paral state of Land fuel are surged second (Para Flores are no special seconsect to Land). The California is a number of property but which are not period seconsection for a mixing cost of the data and a special second systematics to form a data and can mixing cost and period.		State of California personnersis in contrain and	Free from 11+14- day of <u>JUAN</u> Free from 11+14- day of <u>JUAN</u> at <u>3.310</u> m in Book <u>and SC</u> of Mercy Paper request of Anthony A. Cabrera. Chy of Kapar 40-05.	County of Sciences, Scienc	DOCUMENT NO 02-90208

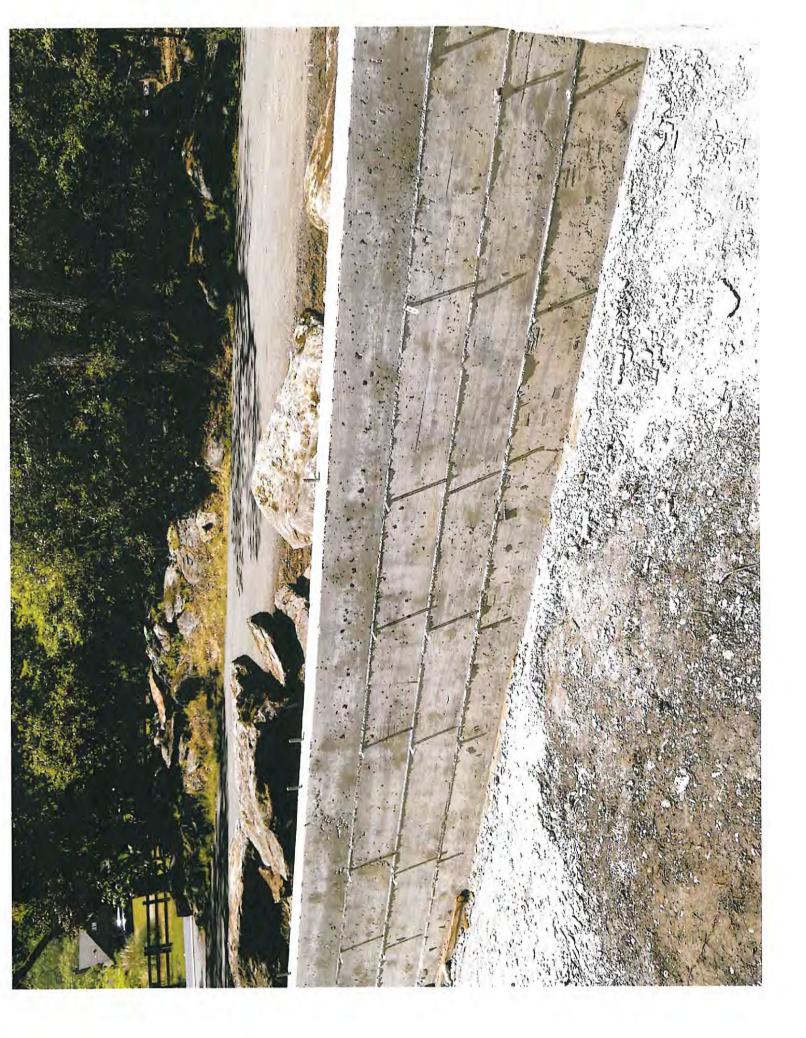






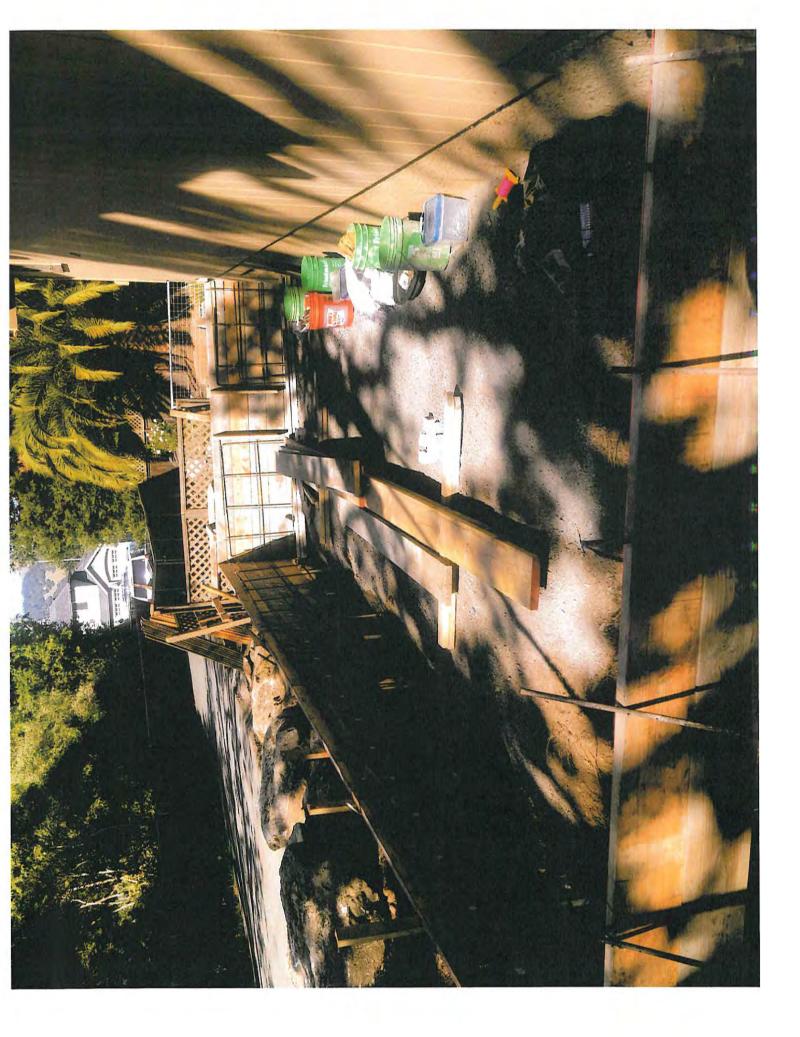




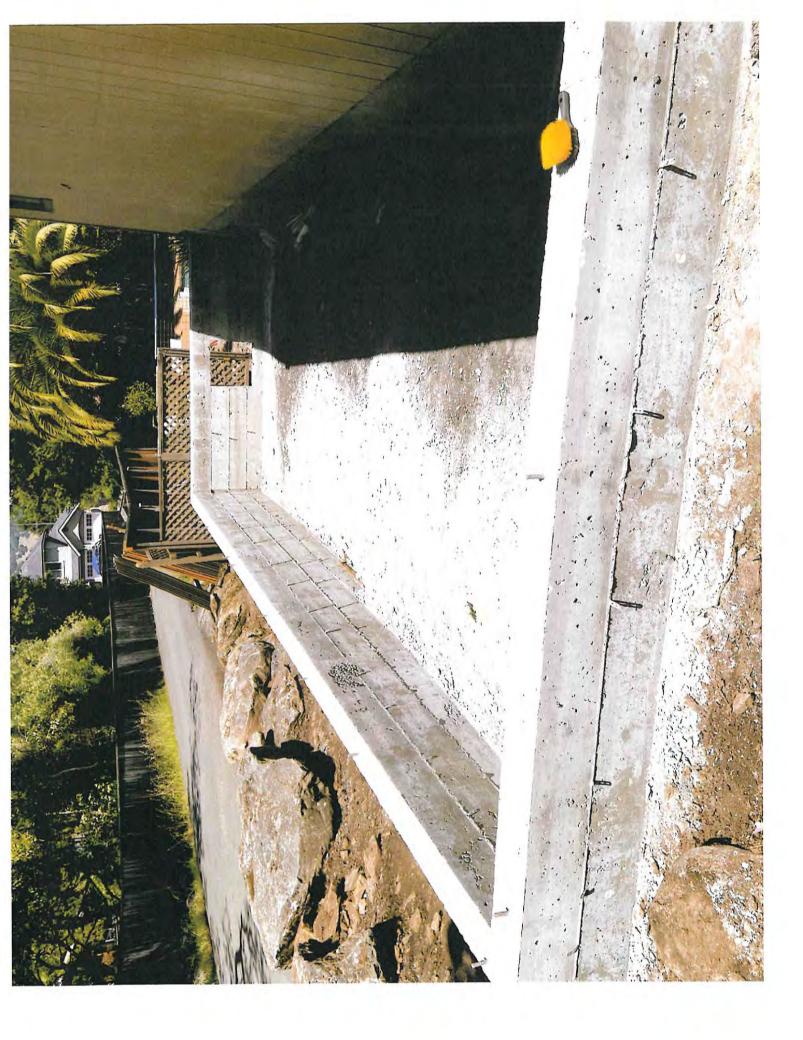




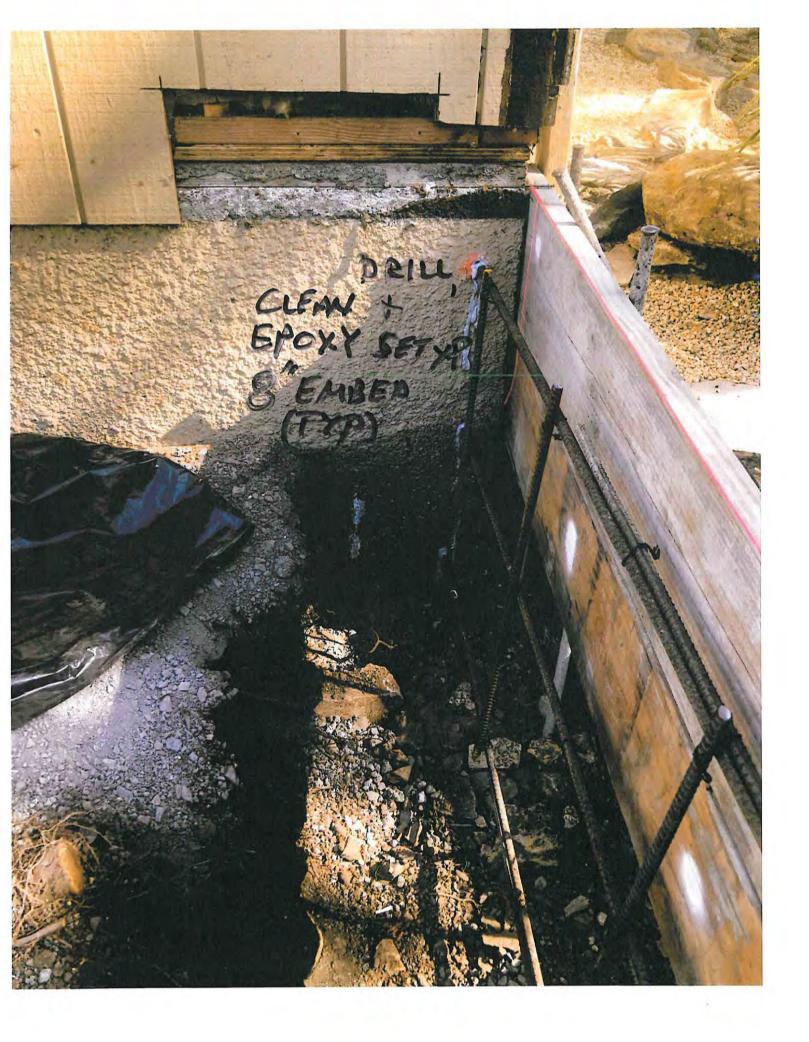


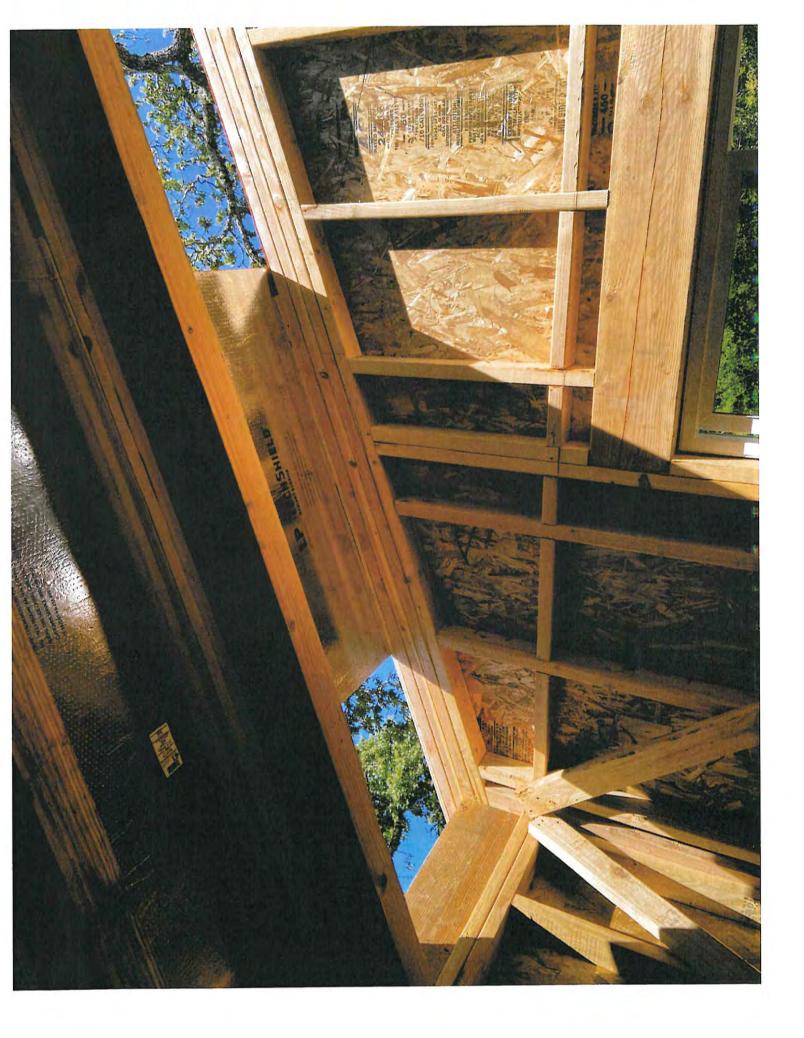


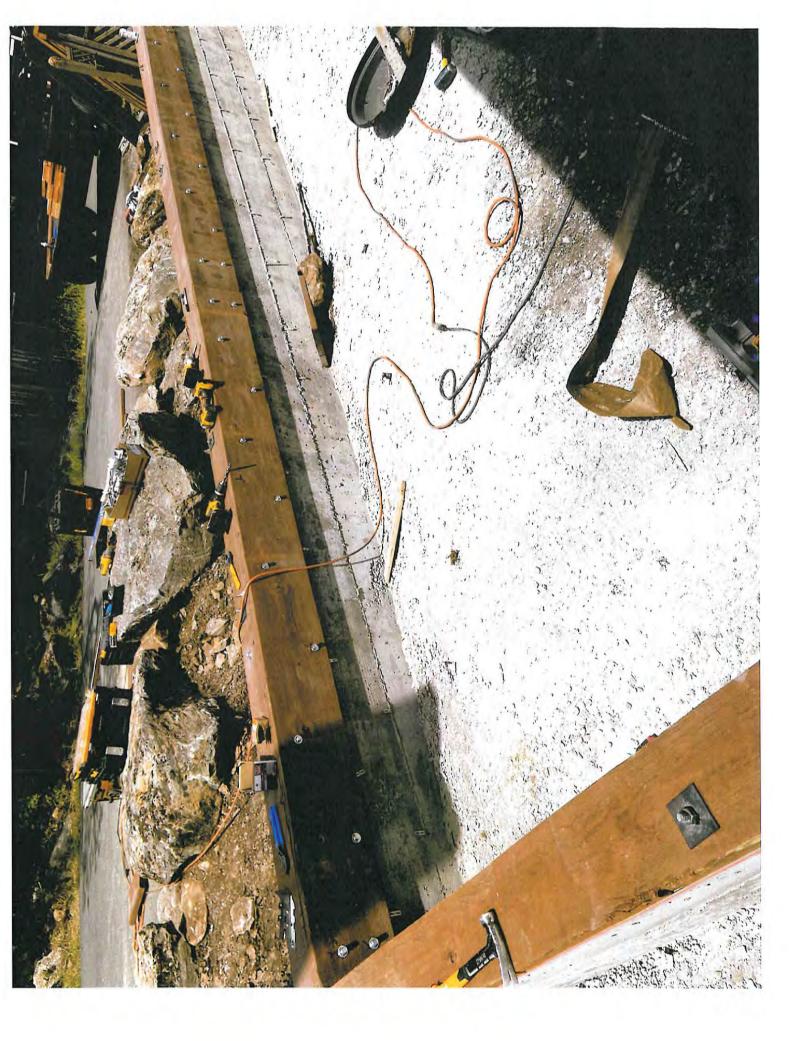




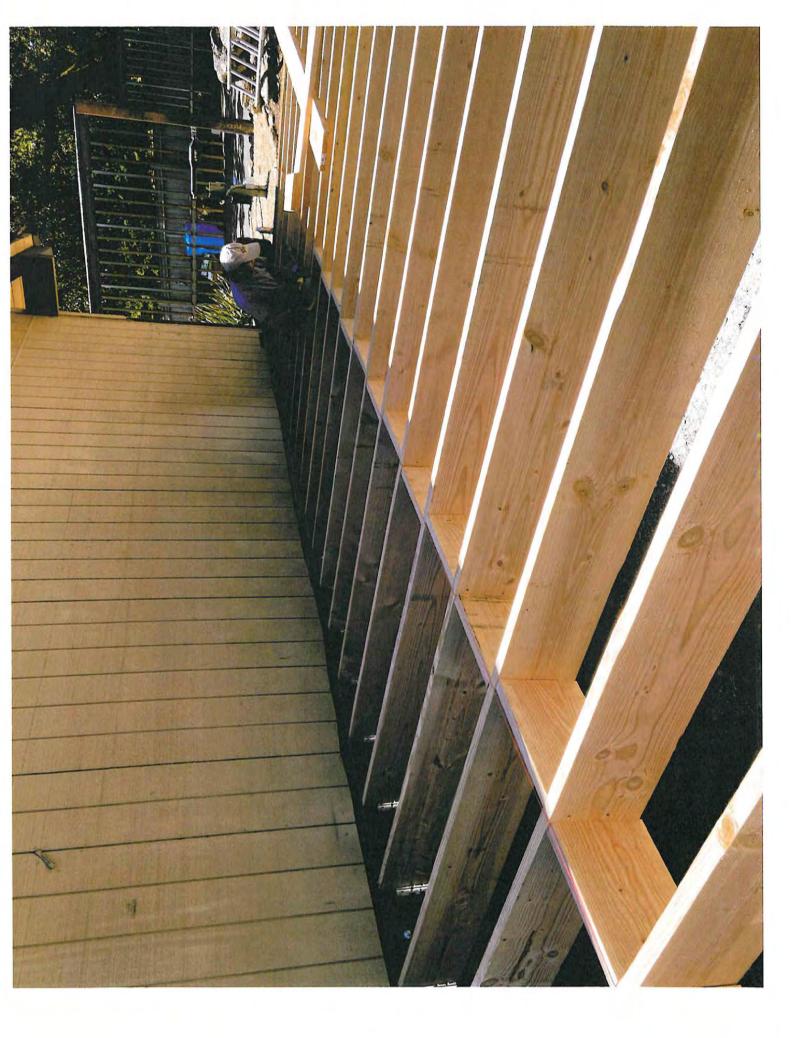




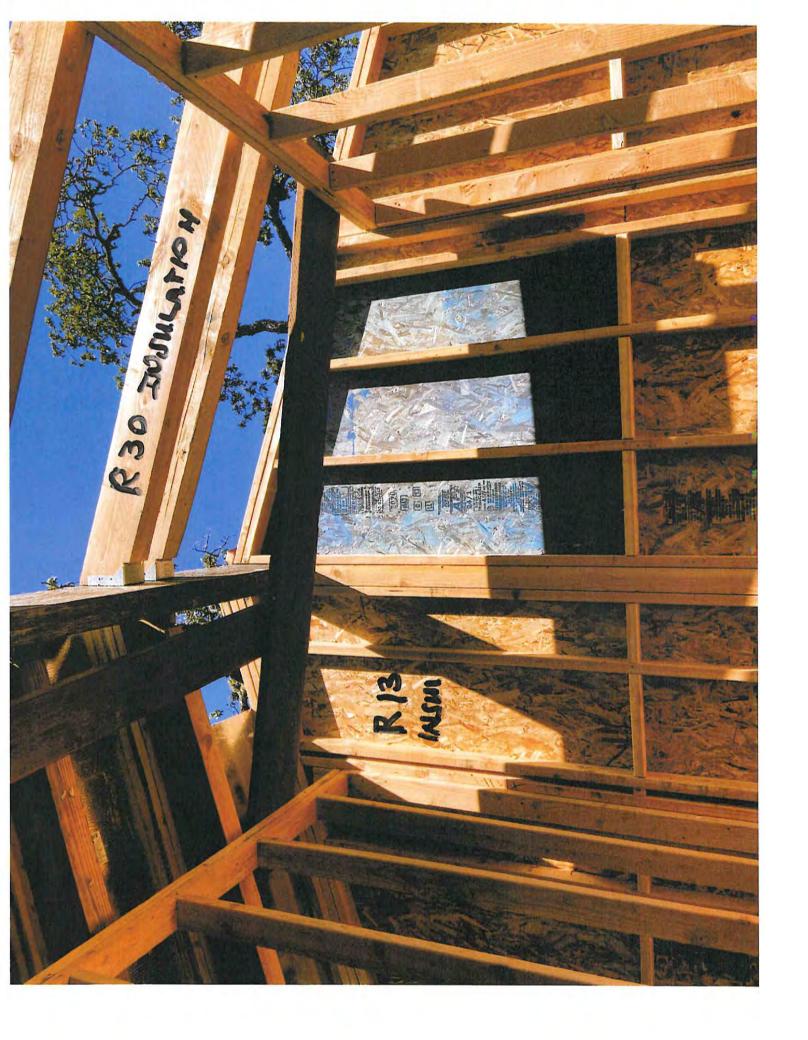


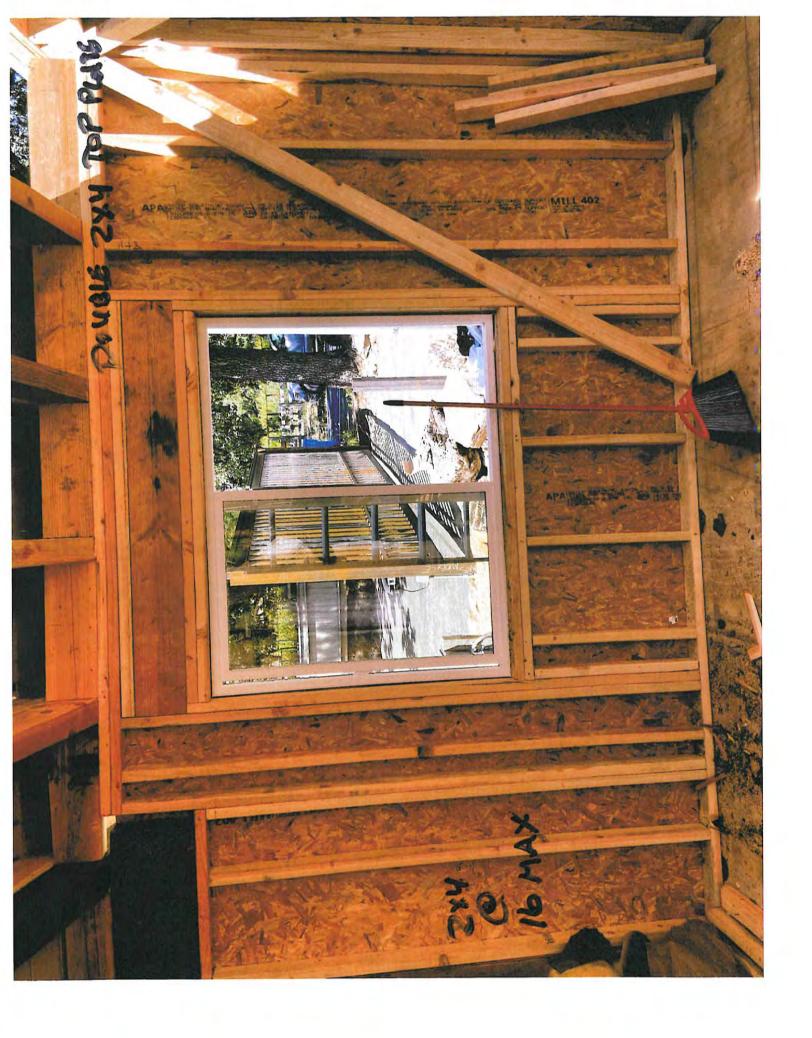


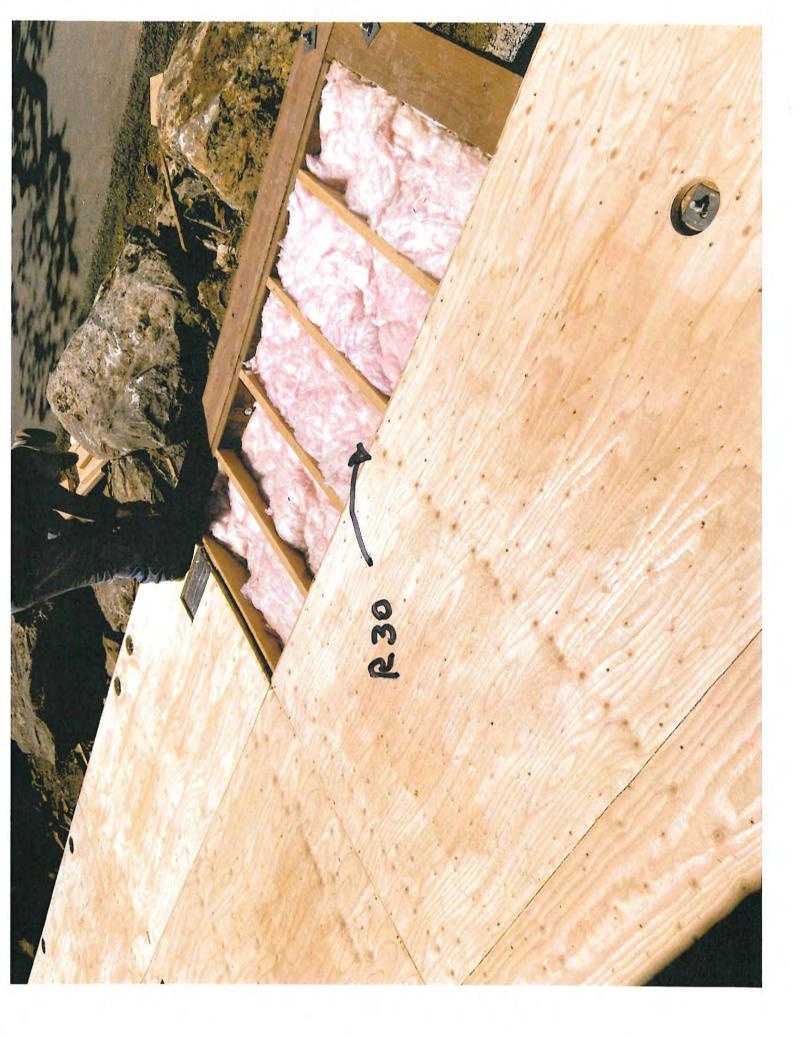


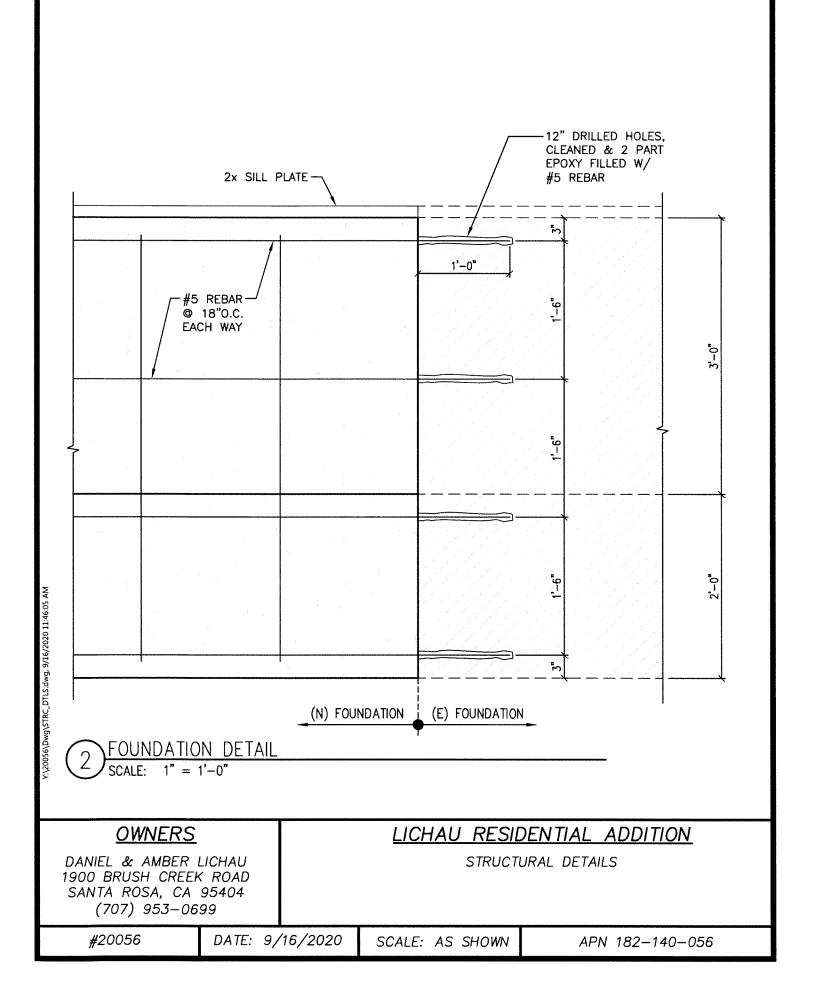


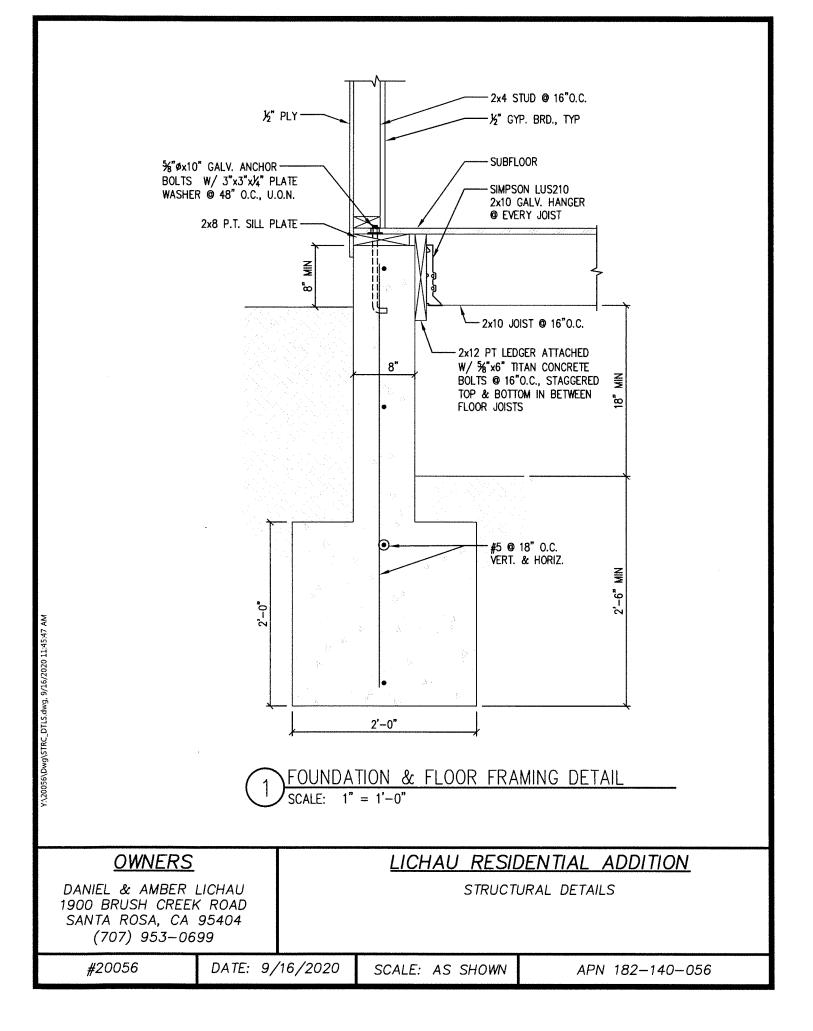


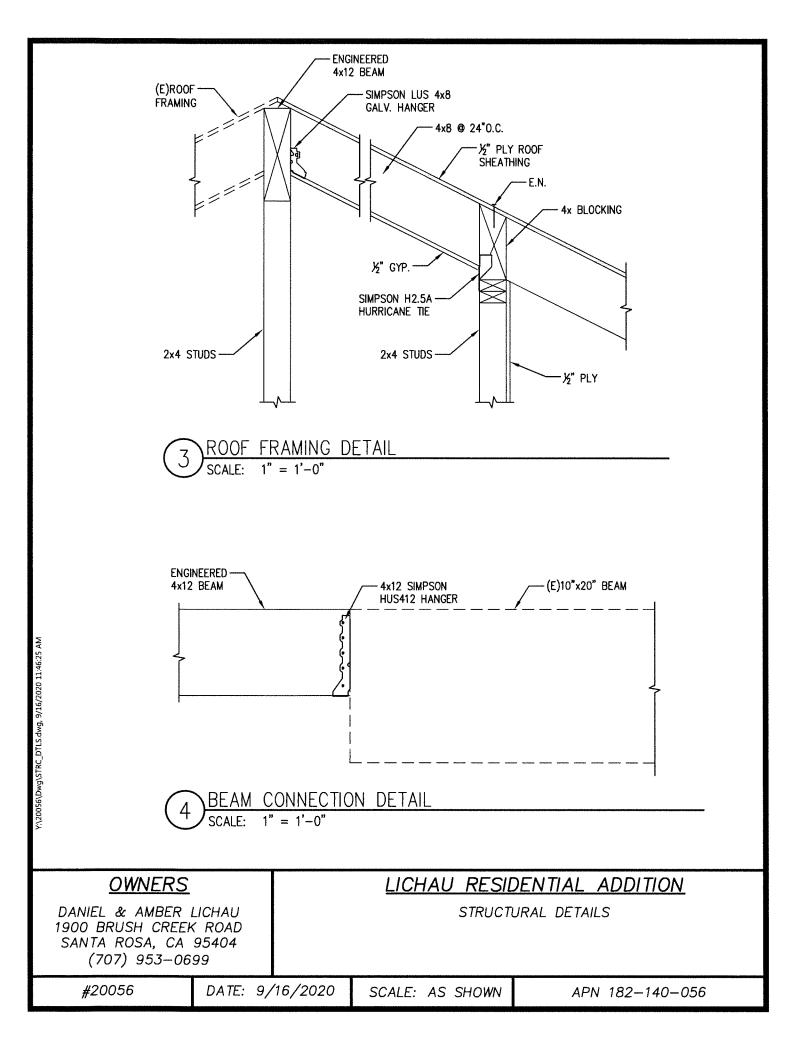












John Craig Construction, Inc 441 York Court Sonoma, CA 95476 (707) 287-6334 jccinc@mac.com Lic # 651162

Date: 9/2/20

Re: CALGreen Site Inspection Verification

Address: 1900 Brush Creek Road

Project Description: addition-320 sq ft

To whom it may concern:

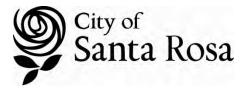
I have inspected the work and have received documentation sufficient to verify and certify that the project identified above was constructed in accordance with the project CALGreen Checklist and in accordance with the requirements set forth in the California Green Building Standards code as adopted and amended by the City of Santa Rosa Code.

Please contact me if there are any questions

Thank you,

John Craig John Craig

ICC # 8716810



2019 CALGreen CHECKLIST for RESIDENTIAL ADDITIONS and ALTERATIONS

Applies to building permit applications received on or after January 1, 2020, for additions or alterations that increase the conditioned space of existing low rise residential buildings including hotels, motels, lodging houses, dwellings, dormitories, condominiums, shelters, congregate residences, employee housing, factorybuilt housing and other types of dwellings containing sleeping accommodations with or without common toilet or cooking facilities including accessory buildings, facilities and uses thereto. Detached "U" occupancy buildings are not subject to the requirements of CALGreen. Existing site and landscaping improvements that are not otherwise disturbed are also not subject to the requirements of CALGreen. Repairs to existing structures are not subject to CALGreen at this time.

Project Address: 1900 Brush Creek

Project Name: Lichau addition

Project Description: Residential addition

Instructions:

- 1. The Owner or the Owner's agent shall employ a qualified CALGreen Inspector, listed by the City of Santa Rosa Building Division, to perform CALGreen Inspector services that apply and to verify and assure the Owner and the Building Division that all required work described herein is properly planned and implemented in the project.
- The CALGreen Inspector, in collaboration with the owner and the design professional, shall initially complete Column 2 of this checklist, sign and date the CALGreen Building Acknowledgements section at the end of this checklist and have the checklist printed on or attached to the approved plans for the project. The City's plans examiner will complete Column 3 of the checklist.
- 3. When determined necessary by City staff and indicated in **Column 2** of the checklist, the Owner or Contractor shall employ a CALGreen Inspector, certified by ICC, to perform CALGreen Inspector services.
- 4. In **Column 3**, Building Department staff will verify those measures checked in Column 3 of the checklist under the "City Staff" heading.
- 5. In **Column 4**, the CALGreen Inspector hired by the Owner will verify those measures checked in Column 2 of the checklist under the "CALGreen Inspector" heading.
- 6. Prior to final inspection by the Building Department, the CALGreen Inspector (if required) shall complete **Column 4** and sign and date **the Implementation Verification** section at the end of this checklist.

<u>NOTE</u>: The CALGreen Inspector shall not be the design professional or contractor for the project and shall not have a financial interest in the project for which services are being provided except for the cost of providing said services.

Effective 01/01/2020

			Effective 01/01/2020
<u>Column 1</u> Feature or Measure	<u>Column 2</u> Project Requirements	<u>Column 3</u> Verification To Be Provided By:	<u>Column 4</u> Compliance Verified
	Must be incorporated into the project unless the measure is not applicable (N/A).	Completed by City plan review staff during plan review.	Completed by CALGreen Inspector after measure has been completed.
4.1 PLANNING AND DESIGN			
Site Development		_	
4.106.2 A plan is developed and implemented to manage storm water drainage during construction.	⊠ or □ N/A		×
Description of proposed measure(s) or explanation of why it is not applied	cable (N/A)	·	
4.106.3 Construction plans shall indicate how site grading or a drainage system will manage all surface water flows to keep water from entering buildings.	⊠ or □ N/A		X
Description of proposed measure(s) or explanation of why it is not applied	cable (N/A)		
4.2 ENERGY EFFICIENCY			
Performance Approach	-		
4.201.1 Building meets or exceeds the requirements of the 2019 California Building Energy Efficiency Standards. (Tier 1 not applicable)	⊠ or □ N/A		×
Description of proposed measure(s) or explanation of why it is not applied	able (N/A)		
4.3 WATER EFFICIENCY AND CONSERVATION			
Indoor Water Use			
4.303.1 Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) installed in residential buildings shall comply with the prescriptive requirements of Sections 4.303.1.1 through 4.303.1.4.4.	or □ N/A		×
Description of proposed measure(s) or explanation of why it is not applied	cable (N/A)		

Effective 01/01/2020

			Effective 01/01/2020
<u>Column 1</u> Feature or Measure	Column 2 Project Requirements Must be incorporated into the project unless the measure is not applicable (N/A).	<u>Column 3</u> Verification To Be Provided By: Completed by City plan review staff during plan review.	Column 4 Compliance Verified Completed by CALGreen Inspector after measure has been completed.
4.303.2 Plumbing fixtures and fittings required in Section 4.303.1 shall be installed in accordance with the California Plumbing Code, and shall meet the applicable referenced standards.	⊠ or □ N/A		×
Description of proposed measure(s) or explanation of why it is not applied	cable (N/A)		
Outdoor Water Use			
4.304.1 Automatic irrigation systems installed at the time of final inspection shall be weather- or soil moisture-based.	⊠ or □ N/A		×
Description of proposed measure(s) or explanation of why it is not applied	cable (N/A)		
4.4 MATERIAL CONSERVATION AND RESOURCE EFFICIENCY			
Enhanced Durability and Reduced Maintenance			
4.406.1 Annular spaces around pipes, electric cables, conduits, or other openings in plates at exterior walls shall be protected against the passage of rodents by closing such openings with cement mortar, concrete masonry or similar method acceptable to the enforcing agency.	or □ N/A		×
Description of proposed measure(s) or explanation of why it is not applied	cable (N/A)	L	
Construction Waste Reduction, Disposal and Recycling	g		
4.408.1 Recycle and/or salvage for reuse a minimum of 65% of the nonhazardous construction and demolition waste. (Per 4.408.2, 4.408.3 or 4.408.4)	⊠ or □ N/A		×
Description of proposed measure(s) or explanation of why it is not applied	cable (N/A)		
Building Maintenance and Operation			
4.410.1 An operation and maintenance manual shall be provided to the building occupant or owner.	⊠ or □ N/A		×
Description of proposed measure(s) or explanation of why it is not applied	cable (N/A)	-	

	1		Effective 01/01/2020
<u>Column 1</u> Feature or Measure	Column 2 Project Requirements Must be incorporated into the project unless the measure is not applicable (N/A).	<u>Column 3</u> Verification To Be Provided By: Completed by City plan review staff during plan review.	Compliance Verified Completed by CALGreen Inspector after measure has been completed.
4.5 ENVIRONMENTAL QUALITY			
Fireplaces			
4.503.1 Any installed gas fireplace shall be a direct-vent sealed-combustion type. Any installed woodstove or pellet stove shall comply with U.S. EPA New Source Performance Standards (NSPS) emission limits.	⊠ or □ N/A		×
Description of proposed measure(s) or explanation of why it is not appli	icable (N/A)		
Pollutant Control			
4.504.1 Duct openings and other related air distribution component openings shall be covered during construction.	or □ N/A		×
Description of proposed measure(s) or explanation of why it is not appli	icable (N/A)		
4.504.2.1 Adhesives, sealants and caulks shall be compliant with VOC and other toxic compound limits.	or □ N/A		×
Description of proposed measure(s) or explanation of why it is not appli	cable (N/A)		
4.504.2.2 Paints, stains and other coatings shall be compliant with VOC limits.	or □ N/A		×
Description of proposed measure(s) or explanation of why it is not appli	icable (N/A)		
4.504.2.3 Aerosol paints and other coatings shall be compliant with product weighted MIR Limits for ROC and other toxic compounds.	or □ N/A		×
Description of proposed measure(s) or explanation of why it is not appli	icable (N/A)		
4.504.2.4 Documentation shall be provided to verify that compliant VOC limit finish materials have been used.	or □ N/A		×
Description of proposed measure(s) or explanation of why it is not appli	icable (N/A)		
	-		

Effective 01/01/2020 Column 1 Column 2 Column 3 Column 4 Feature or Measure Project Verification To Compliance Requirements Be Provided By: Verified Must be incorporated into the project unless Completed by City plan Completed by CALGreen the measure is not review staff during plan Inspector after measure applicable (N/A). review. has been completed. 4.504.3 Carpet and carpet systems shall be compliant \boxtimes X with VOC limits. or N/A Description of proposed measure(s) or explanation of why it is not applicable (N/A)4.504.4 80 percent of floor area receiving resilient X \boxtimes flooring shall comply with specified VOC criteria. or □ N/A Description of proposed measure(s) or explanation of why it is not applicable (N/A) X 4.504.5 Particleboard, medium density fiberboard (MDF), X and hardwood plywood used in interior finish systems or shall comply with low formaldehyde emission standards. N/A Description of proposed measure(s) or explanation of why it is not applicable (N/A) Interior Moisture Control X 4.505.2 Vapor retarder and capillary break is installed at \boxtimes slab on grade foundations. or N/A Description of proposed measure(s) or explanation of why it is not applicable (N/A) X 4.505.3 Moisture content of building materials used in \boxtimes wall and floor framing is checked before enclosure. or N/A Description of proposed measure(s) or explanation of why it is not applicable (N/A)Indoor Air Quality and Exhaust X 4.506.1 Humidity controlled exhaust fans which terminate \boxtimes outside the building are provided in every bathroom or N/A unless otherwise a component of a whole house ventilation system. Description of proposed measure(s) or explanation of why it is not applicable (N/A)

Effective 01/01/2020

			Ellective 01/01/2020
<u>Column 1</u> Feature or Measure	Column 2 Project Requirements Must be incorporated	<u>Column 3</u> Verification To Be Provided By:	<u>Column 4</u> Compliance Verified
	into the project unless the measure is not applicable (N/A).	Completed by City plan review staff during plan review.	Completed by CALGreen Inspector after measure has been completed.
Environmental Comfort			
4.507.2. Duct systems are sized and designed and equipment is selected using the following methods:	or		X
 Establish heat loss and heat gain values according to ANSI/ACCA Manual J-2016 or equivalent. 	□ N/A		
 Size duct systems according to ANSI/ACCA 1 Manual D-2016 or equivalent. 			
 Select heating and cooling equipment according to ANSI/ACCA 3 Manual S-2014 or equivalent. 			
Description of proposed measure(s) or explanation of why it is not applic	able (N/A)	-	
Innovative Concepts and Local Environmental Condition	ons		
Items necessary to address innovative concepts or local environmental conditions.			
Item 1:			
INSTALLER AND CALGreen INSPECTOR QUALIFICATIONS			
Qualifications			
702.1 HVAC system installers are trained and certified in the proper installation of HVAC systems.	⊠ or □ N/A		×
Description of proposed measure(s) or explanation of why it is not applic	able (N/A)		
702.2 The CALGreen Inspector for this project is qualified and able to demonstrate competence in the discipline they inspect and verify.	⊠ or □ N/A		
Description of proposed measure(s) or explanation of why it is not applic	able (N/A)		
Verifications			
703.1 Verification of compliance with this code many include construction documents, plans, specifications, builder or installer certification, inspection reports, or other methods acceptable to the enforcing agency which show substantial conformance.			×
Description of proposed measure(s) or explanation of why it is not applic	able (N/A)		

Green Building Acknowledgments

Project Address: 1900 Brush Creek

Project Description: Residential addition

Section 1 - Design Verification

Complete all lines of Section 1- "Design Verification" and submit the completed checklist (Columns 1 and 2) with the plans and building permit application to the Building Department.

The owner, design professional <u>and</u> the CALGreen inspector have reviewed the plans and certify that the items checked above are hereby incorporated into the project plans and will be implemented into the project in accordance with the requirements set forth in the 2019 California Green Building Standards Code.

fe.	
Owner's Signature	Date
Owner Name (Please Print)	
Sfé.	
Design Professional's Signature	Date
Design Professional's Name (Please Print)	
John Craig	
Signature of CALGreen Building Inspector	Date
John Craig	707 297-6334
CALGreen Inspector's Name (Please Print)	Phone
jccinc@mac.com	
CALGreen Inspector's E-mail Address	
Section 2 - Implementation Verification Complete, sign and submit the completed checklist, including Column 4, together w "Implementation Verification" to the Building Department prior to Building Department	

I have inspected the work have received sufficient documentation to verify and certify that the project identified above was constructed in accordance with this Green Building Checklist and in accordance with the requirements set forth in the 2019 California Green Building Standards Code.

ohn ('rai

CALGreen Inspector Signature

John Craig

CALGreen Inspector's Name (Please Print)

jccinc@mac.com

CALGreen Inspector's E-mail Address (if different than above)

9/2/2020

Date

707 287-6334

Phone (if different than above)

2300 Bethards Dr., Suite L, Santa Rosa, CA 95405 -Tel (707) 523-7490

OBERTSON

E-mail mike@robertsonengineering.net

August 12,2020 DANIEL LICHAU 1900 BRUSH CREEK RO SANTA ROSA, CA. 95404 RES OBSERVATION OF FOUNDATION FROM PHOTOS AND PERSOWALLY AT 1900 BRUSH CREEK ROAD SANTA ROSA Dear Damel, This letter confirms my personal site Observation of the foundation and footing for your house addition. The fosting was infalled a minimum of 24" into the ground, which from the p. fostos you provided appear to be in Solid ground. The forting width is a Minimum of 36" and appears that below the forms that were set ended with more than 48 in width. It is my profession opinion that the footing size is sufficient to adequately support the Miel / bla structure.

Page 1/1 PJC & Associates, Inc. Date 8-11-20 MOWTESS Proposed Addition Legalization 1900 Brush Creek ed Project Name 300.4 Project Address Santa Rosa, CA on site to do pachameter testing for the addition O location was exemusted located on the southwest (235°) perimeter on the opposite to expose the faction & the @ location original foundation to addition at the downhill side -toundation of the location, This is the fullest portion 81 7 #4-#5 2 NorthWest T 018°0C 18" SW (4) >0 w) 4 '0C #4-#5 for hist 1 K honz Verticals 14" @ 18 00 grade 24 D (3) #4-#5 horizontals Verticels @, 18" O.C. Twid Services Manager Signature Field Technician/Sp Thompson Printed Name Printed Name Main Dimos. 600 Murbit Ave- Suitz 210, Ratinert Park, CA 44928 707-584-4804 phone 707-584-4811 fax Bonnina Branchi PD Box 469, Schemes, CA 95476 707-684-4804 phone 707-935-3587 fax

BUILDING ENERGY ANALYSIS REPORT

PROJECT:

LICHAU ADITION ONLY 1900 BRUSH CREEK ROAD SANTA ROSA, CA 95404

Project Designer:

DANIEL LICHAU 1900 BRUSH CREEK ROAD SANTA ROSA, CA 95404 (707) 953-0699

Report Prepared by:

MINERVA TOPETE Title 24 Data Corporation 633 MONTEREY TRAIL (P.O. BOX 2199) FRAZIER PARK, CA 93225 (800) 237-8824

Job Number:

134590

Date:

8/14/2020

The EnergyPro computer program has been used to perform the calculations summarized in this compliance report. This program has approval and is authorized by the California Energy Commission for use with both the Residential and Nonresidential 2019 Building Energy Efficiency Standards.

TABLE OF CONTENTS

Cover Page	1
Table of Contents	2
Form CF1R-PRF-01-E Certificate of Compliance	3
Form MF-1R Mandatory Measures Summary	11
HVAC System Heating and Cooling Loads Summary	15
Room Heating Peak Loads	16
Room Cooling Peak Loads	17

CERTIFICATE OF COMPLIANCE

Project Name: LICHAU ADITION ONLY

Calculation Description: Title 24 Analysis

(Page 1 of 8)

Input File Name: 134590 -MMT-LICHAU.ribd19x

GENER	AL INFORMATION				
01	Project Name	CHAU ADITION ONLY			
02	Run Title	Title 24 Analysis			
03	Project Location	1900 BRUSH CREEK ROAD			
04	City	SANTA ROSA	05	Standards Version	2019
06	Zip code	95404	07	Software Version	EnergyPro 8.1
08	Climate Zone	2	09	Front Orientation (deg/ Cardinal)	270
10	Building Type	Single family	11	Number of Dwelling Units	1
12	Project Scope	AdditionOnly	13	Number of Bedrooms	5
14	Addition Cond. Floor Area (ft ²)	360	15	Number of Stories	1
16	Existing Cond. Floor Area (ft ²)	1836	17	Fenestration Average U-factor	0.3
18	Total Cond. Floor Area (ft ²)	2196	19	Glazing Percentage (%)	13.33%
20	ADU Bedroom Count	0	21	ADU Conditioned Floor Area	0
22	Is Natural Gas Available?	Yes			

Addition Alone Project Analysis Parameters					
01	02	03	04	05	06
Existing Area (excl. new addition) (ft2)	Addition Area (excl. existing) (ft2)	Total Area (ft2)	Existing Bedrooms	Addition Bedrooms	Total Bedrooms
1836	360	2196	4	1	5

COMPLIANCE RESULTS		
01 Building Complies with Computer Performance		
02	02 Building does not require field testing or HERS verification	
03	This building incorporates one or more Special Features shown below	

Registration Number:

Registration Date/Time:

HERS Provider:

CA Building Energy Efficiency Standards - 2019 Residential Compliance

Report Version: 2019.1.108 Schema Version: rev 20200101

Project Name: LICHAU ADITION ONLY

Calculation Description: Title 24 Analysis

Calculation Date/Time: 2020-08-14T17:29:47-07:00

Input File Name: 134590 -MMT-LICHAU.ribd19x

	ENERGY USE SUMMARY							
Energy Use (kTDV/ft ² -yr)	Standard Design	Proposed Design	Compliance Margin	Percent Improvement				
Space Heating	3.17	10.33	-7.16	-225.9				
Space Cooling	34.36	26.3	8.06	23.5				
IAQ Ventilation	0	0	0					
Water Heating	56.2	56.2	0	0				
Self Utilization Credit	n/a	0	0	n/a				
Compliance Energy Total	93.73	92.83	0.9	1				

REQUIRED SPECIAL FEATURES

The following are features that must be installed as condition for meeting the modeled energy performance for this computer analysis.

- Insulation below roof deck
- New ductwork added is less than 40 ft. in length

HERS FEATURE SUMMARY

The following is a summary of the features that must be field-verified by a certified HERS Rater as a condition for meeting the modeled energy performance for this computer analysis. Additional detail is provided in the building tables below. Registered CF2Rs and CF3Rs are required to be completed in the HERS Registry

Building-level Verifications:

- -- None --
- Cooling System Verifications:
- -- None --

Heating System Verifications:

- -- None --
- HVAC Distribution System Verifications:
- -- None --
- Domestic Hot Water System Verifications:

• -- None --

ZONE INFORMATION						
01	02	03	04	05	06	07
Zone Name	Zone Type	HVAC System Name	Zone Floor Area (ft ²)	Avg. Ceiling Height	Water Heating System 1	Water Heating System 2
ADU	Conditioned	Res HVAC1	360	8	DHW Sys 1	N/A

Registration Number:

Registration Date/Time:

HERS Provider:

CA Building Energy Efficiency Standards - 2019 Residential Compliance

Project Name: LICHAU ADITION ONLY

Calculation Description: Title 24 Analysis

Calculation Date/Time: 2020-08-14T17:29:47-07:00

CF1R-PRF-01E

(Page 3 of 8)

Input File Name: 134590 -MMT-LICHAU.ribd19x

OPAQUE SURFACES																
01	02		03		04	05		06		07		08		09		10
Name	Zone		Cons	truction	Azimuth	Orientation	Gr	oss Area (ft ²)		dow and Area (ft2)		Tilt (deg	g) Wal	l Exceptio	ons	Status
Add North Wall	ADU		R-1	5 Wall	0	Left		390		20		90	E	xtension		New
Add East Wall	ADU		R-1	5 Wall	90	Back		96		8		90	E	xtension		New
Add West Wall	ADU		R-1	5 Wall	270	Front		96		20		90	E	xtension		New
Add Roof	ADU		R-30 High Performance At		n/a	n/a		360		n/a		n/a				New
Add Raised Floor	ADU		R-19 Floo	r Crawlspace	n/a	n/a		360		n/a		n/a				New
ATTIC																
01		02		()3	04		05			06		07		08	
Name	C	onstruct	ion	Ту	/pe	Roof Rise (x	oof Rise (x in 12) Roof Reflectan		tance	Roof Emittance		ce	Radiant Barrier		Cool Roof	
Attic ADU	At	tic RoofA	ADU	Vent	ilated	4		0.1		0.85			No		No	
FENESTRATION / GLA	ZING															
01		02		03		04	05	5 06	07	08	09	10	11	12	13	14
Name	Name Type		Surface		Orientation	Azim	width (ft)	Heigh (ft)	t Mult.	Area (ft ²)	U-factor	U-factor Source	SHGC	SHGC Sourc e	Exterior Shading	
Add N Windov	ws	Windo	w	Add North	Wall	Left	0			1	20	0.3	NFRC	0.21	NFRC	Bug Screen
Add E Windov	vs	Windo	w	Add East V	Vall	Back	90	D I		1	8	0.3	NFRC	0.21	NFRC	Bug Screer
Add W Windo	ws	Windo	w	Add West \	Wall	Front	27	0		1	20	0.3	NFRC	0.21	NFRC	Bug Screen

Registration Number:

Registration Date/Time:

HERS Provider:

Project Name: LICHAU ADITION ONLY

Calculation Description: Title 24 Analysis

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OPAQUE SURFACE CONSTR	RUCTIONS						
01	02	03	04	05	06	07	08
Construction Name	Surface Type	Construction Type	Framing	Total Cavity R-value	Interior / Exterior Continuous R-value	U-factor	Assembly Layers
R-15 Wall	Exterior Walls	Wood Framed Wall	2x4 @ 16 in. O. C.	R-15	None / None	0.089	Inside Finish: Gypsum Board Cavity / Frame: R-15 / 2x4 Exterior Finish: Wood Siding/sheathing/decking
R-13 Wall	Interior Walls	Wood Framed Wall	2x4 @ 16 in. O. C.	R-13	None / None	0.092	Inside Finish: Gypsum Board Cavity / Frame: R-13 / 2x4 Other Side Finish: Gypsum Board
Attic RoofADU	Attic Roofs	Wood Framed Ceiling	2x4 @ 24 in. O. C.	R-13	None / None	0.078	Roofing: Light Roof (Asphalt Shingle) Roof Deck: Wood Siding/sheathing/decking Cavity / Frame: R-13.0 / 2x4 Around Roof Joists: R-0.0 insul.
R-19 Floor Crawlspace	Floors Over Crawlspace	Wood Framed Floor	2x6 @ 16 in. O. C.	R-19	None / None	0.049	Floor Surface: Carpeted Floor Deck: Wood Siding/sheathing/decking Cavity / Frame: R-19 / 2x6
R-30 High Performance At	Ceilings (below attic)	Wood Framed Ceiling	2x10 @ 16 in. O. C.	R-30	None / None	0.034	Over Ceiling Joists: R-6.0 insul. Cavity / Frame: R-24.1 / 2x10 Inside Finish: Gypsum Board

BUILDING ENVELOPE - HERS VERIFICATION			
01	02	03	04
Quality Insulation Installation (QII)	Quality Installation of Spray Foam Insulation	Building Envelope Air Leakage	CFM50
Not Required	Not Required	Not Required	n/a

Registration Number:

Registration Date/Time:

HERS Provider:

CA Building Energy Efficiency Standards - 2019 Residential Compliance

WATER HEATING SYSTEMS

Project Name: LICHAU ADITION ONLY

Calculation Description: Title 24 Analysis

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							1										
01		02			03			04			05		06			07	
Nam	ne	System Type		Dist	ribution Type	e '	Water Hea	ater Name (#)) 5	Solar He	ating System Compac		bact Distribution HERS \		HERS V	erification	
DHW S	Sys 1	Domestic Hot W (DHW)	ater	Standa	ard Distributi System	on	DHW H	leater 1 (1)			n/a		None		n/a		
WATER HEATI	ERS																
01	02	03	04	05	06	07	08	09)	10	11		12		13	14	
Name	Heating Element Type	Tank Type	# Units	Tank Vol. (gal)	Energy Factor or Efficiency	Input Rating or Pilot	Tanl Insulat R-valu (Int/E	ion Loss ue Recov	or Rat /ery Elor	st Hr. ting or w Rate	NEEA Heat Pump Brand or Model		Tank Location or Ambient Condition		Status	Verified Existing Condition	
DHW Heater 1	Gas	Small Instantaneous	1	0.1	0.64-EF	<= 200 kBtu/hr	0	76	5	n/a	/a n/a		n/a		Existing	n/a	
WATER HEATI	NG - HERS V	ERIFICATION															
01		02		()3	04	ļ		05		06		07			08	
Nam	e	Pipe Insulation		Paralle	l Piping	Compact Di	stribution		Distribution ype	Reci	rculation Con	trol			Drain Wate Recovery		
DHW Sys 2	1 - 1/1	Not Required		Not Re	equired	ired Not Req		l None		1	Not Required		Not Required		Not Required		
SPACE CONDI	TIONING SYS	STEMS															
	01		02		03	0	4	05	06		07	08	09		10	11	
N	ame	Syste	em Typ	e	Heating L Name		~	Fan Name	Distribution Name		Required Thermostat Type	Status	Verified Existing Condition	Equi	ating pment ount	Cooling Equipmen Count	
Res	Res HVAC1 Heating and cooling system other Heating Cooling Component Cooling Component HVAC Fan 1 Air Distribution 1 1 1 1 1 1		n/a	Existing	NA		1	1									

Registration Number:

Registration Date/Time:

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HVAC - HEAT		YPES														
	01 02						03					04				
	Na	me			System Type					N	umber of Uni	its		Неа	ting Efficiency	
	Heating Co	mponent	t 1		Ce	ntral gas f	urnace				1				AFUE-75	
HVAC - COO		TYPES														
01	L		02		03		04	4		05		06		07		08
Nan	ne	Sys	stem Type	Nur	nber of U	nits	Efficien	cy EER	Effi	ciency SEE	R Zor	ally Controlle	d	Mulit-speed Compressor		
Cooling Con	nponent 1	Ductles	s mini-split A	C	1		8	1		8		Not Zonal		Single Speed	Cooling Component 1-hers-cool	
HVAC - DIST		YSTEMS														
01	02		03	04	05	06	07	08	09	10	11	12	13	14	15	16
				Duct Ins.	R-value	Duct L	ocation	Surfac	e Area							
Name	Тур	e	Design Type	Supply	Return	Supply	Return	Supply	Return	Bypass Duct	Duct Leakage	HERS Verification	Status	Verified Existing Condition	Existing Distribution system	New Ducts 40 ft
Air Distributi on System 1	Uncondi [.] atti		Non- Verified	R-6	R-6	Attic	Attic	n/a	n/a	No Bypass Duct	Existing (not specified)	Air Distributi on System 1-hers- dist	Existing + New	n/a	n/a	n/a

HVAC FAN SYSTEMS - HERS VERIFICATION							
01	02	03					
Name	Verified Fan Watt Draw	Required Fan Efficacy (Watts/CFM)					
HVAC Fan 1-hers-fan	Not Required	0					

PROJECT NOTES

Registration Number:

Registration Date/Time:

HERS Provider:

CA Building Energy Efficiency Standards - 2019 Residential Compliance

Project Name: LICHAU ADITION ONLY

Calculation Description: Title 24 Analysis

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Report Version: 2019.1.108 Schema Version: rev 20200101 **HERS Provider:**

Report Generated: 2020-08-14 17:29:59

CA Building Energy Efficiency Standards - 2019 Residential Compliance

Project Name: LICHAU ADITION ONLY

Calculation Description: Title 24 Analysis

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DOCUN	IENTATION AUTHOR'S DECLARATION STATEMENT	
1. I certi	fy that this Certificate of Compliance documentation is accurate and complete.	
Documer	ntation Author Name:	Documentation Author Signature:
	MINERVA TOPETE	y muy
Company	<i>r.</i>	Signature Date: 8/14/2020
	Title 24 Data Corporation	8/14/2020
Address:		CEA/ HERS Certification Identification (If applicable):
	633 MONTEREY TRAIL (P.O. BOX 2199)	
City/State	e/Zip:	Phone:
	FRAZIER PARK, CA 93225	(800) 237-8824
RESPON	SIBLE PERSON'S DECLARATION STATEMENT	
I certify t	he following under penalty of perjury, under the laws of the State of California:	
1.	I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the	e building design identified on this Certificate of Compliance.
2.	I certify that the energy features and performance specifications identified on this Certificate of C	Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
3.	The building design features or system design features identified on this Certificate of Compliance calculations, plans and specifications submitted to the enforcement agency for approval with this	e are consistent with the information provided on other applicable compliance documents, worksheets, building permit application.
Responsi	ble Designer Name:	Responsible Designer Signature:
Company		Date Signed:
	DANIEL LICHAU	
Address:		License:
	1900 BRUSH CREEK ROAD	
City/State		Phone:
	SANTA ROSA, CA 95404	(707) 953-0699

Registration Number:

HERS Provider:



2019 Low-Rise Residential Mandatory Measures Summary

<u>NOTE:</u> Low-rise residential buildings subject to the Energy Standards must comply with all applicable mandatory measures, regardless of the compliance approach used. Review the respective section for more information. *Exceptions may apply. (01/2020)

Building Envelop	e Measures:
§ 110.6(a)1:	Air Leakage. Manufactured fenestration, exterior doors, and exterior pet doors must limit air leakage to 0.3 CFM per square foot or less when tested per NFRC-400, ASTM E283 or AAMA/WDMA/CSA 101/I.S.2/A440-2011.*
§ 110.6(a)5:	Labeling. Fenestration products and exterior doors must have a label meeting the requirements of § 10-111(a).
§ 110.6(b):	Field fabricated exterior doors and fenestration products must use U-factors and solar heat gain coefficient (SHGC) values from Tables 110.6-A, 110.6-B, or JA4.5 for exterior doors. They must be caulked and/or weather-stripped.
§ 110.7:	Air Leakage. All joints, penetrations, and other openings in the building envelope that are potential sources of air leakage must be caulked, gasketed, or weather stripped.
§ 110.8(a):	Insulation Certification by Manufacturers. Insulation must be certified by the Department of Consumer Affairs, Bureau of Household Goods and Services (BHGS).
§ 110.8(g):	Insulation Requirements for Heated Slab Floors. Heated slab floors must be insulated per the requirements of § 110.8(g).
§ 110.8(i):	Roofing Products Solar Reflectance and Thermal Emittance. The thermal emittance and aged solar reflectance values of the roofing material must meet the requirements of § 110.8(i) and be labeled per §10-113 when the installation of a cool roof is specified on the CF1R.
§ 110.8(j):	Radiant Barrier. When required, radiant barriers must have an emittance of 0.05 or less and be certified to the Department of Consumer Affairs
§ 150.0(a):	Ceiling and Rafter Roof Insulation. Minimum R-22 insulation in wood-frame ceiling; or the weighted average U-factor must not exceed 0.043. Minimum R-19 or weighted average U-factor of 0.054 or less in a rafter roof alteration. Attic access doors must have permanently attached insulation using adhesive or mechanical fasteners. The attic access must be gasketed to prevent air leakage. Insulation must be installed in direct contact with a continuous roof or ceiling which is sealed to limit infiltration and exfiltration as specified in § 110.7, including but not limited to placing insulation either above or below the roof deck or on top of a drywall ceiling."
§ 150.0(b):	Loose-fill Insulation. Loose fill insulation must meet the manufacturer's required density for the labeled R-value.
§ 150.0(c):	Wall Insulation. Minimum R-13 insulation in 2x4 inch wood framing wall or have a U-factor of 0.102 or less, or R-20 in 2x6 inch wood framing or have a U-factor of 0.071 or less. Opaque non-framed assemblies must have an overall assembly U-factor not exceeding 0.102. Masonry walls must meet Tables 150.1-A or B.*
§ 150.0(d):	Raised-floor Insulation. Minimum R-19 insulation in raised wood framed floor or 0.037 maximum U-factor.*
§ 150.0(f):	Slab Edge Insulation. Slab edge insulation must meet all of the following: have a water absorption rate, for the insulation material alone withou facings, no greater than 0.3 percent; have a water vapor permeance no greater than 2.0 perm per inch; be protected from physical damage and UV light deterioration; and, when installed as part of a heated slab floor, meet the requirements of § 110.8(g).
§ 150.0(g)1:	Vapor Retarder. In climate zones 1 through 16, the earth floor of unvented crawl space must be covered with a Class I or Class II vapor retarder. This requirement also applies to controlled ventilation crawl space for buildings complying with the exception to § 150.0(d).
§ 150.0(g)2:	Vapor Retarder. In climate zones 14 and 16, a Class I or Class II vapor retarder must be installed on the conditioned space side of all insulation in all exterior walls, vented attics, and unvented attics with air-permeable insulation.
§ 150.0(q):	Fenestration Products. Fenestration, including skylights, separating conditioned space from unconditioned space or outdoors must have a maximum U-factor of 0.58; or the weighted average U-factor of all fenestration must not exceed 0.58.*
Fireplaces, Deco	rative Gas Appliances, and Gas Log Measures:
§ 110.5(e)	Pilot Light. Continuously burning pilot lights are not allowed for indoor and outdoor fireplaces.
§ 150.0(e)1:	Closable Doors. Masonry or factory-built fireplaces must have a closable metal or glass door covering the entire opening of the firebox.
§ 150.0(e)2:	Combustion Intake. Masonry or factory-built fireplaces must have a combustion outside air intake, which is at least six square inches in area and is equipped with a readily accessible, operable, and tight-fitting damper or combustion-air control device.
§ 150.0(e)3:	Flue Damper. Masonry or factory-built fireplaces must have a flue damper with a readily accessible control.*
Space Conditioni	ng, Water Heating, and Plumbing System Measures:
§ 110.0-§ 110.3:	Certification. Heating, ventilation and air conditioning (HVAC) equipment, water heaters, showerheads, faucets, and all other regulated appliances must be certified by the manufacturer to the California Energy Commission.*
§ 110.2(a):	HVAC Efficiency. Equipment must meet the applicable efficiency requirements in Table 110.2-A through Table 110.2-K.*
§ 110.2(b):	Controls for Heat Pumps with Supplementary Electric Resistance Heaters. Heat pumps with supplementary electric resistance heaters must have controls that prevent supplementary heater operation when the heating load can be met by the heat pump alone; and in which the cut-on temperature for compression heating is higher than the cut-on temperature for supplementary heating, and the cut-off temperature for compression heating is higher than the cut-off temperature for supplementary heating."
§ 110.2(c):	Thermostats. All heating or cooling systems not controlled by a central energy management control system (EMCS) must have a setback thermostat.*
§ 110.3(c)4:	Water Heating Recirculation Loops Serving Multiple Dwelling Units. Water heating recirculation loops serving multiple dwelling units must meet the air release valve, backflow prevention, pump priming, pump isolation valve, and recirculation loop connection requirements of § 110.3(c)4.
§ 110.3(c)6:	Isolation Valves. Instantaneous water heaters with an input rating greater than 6.8 kBtu per hour (2 kW) must have isolation valves with hose bibbs or other fittings on both cold and hot water lines to allow for flushing the water heater when the valves are closed.
§ 110.5:	Pilot Lights. Continuously burning pilot lights are prohibited for natural gas: fan-type central furnaces; household cooking appliances (except appliances without an electrical supply voltage connection with pilot lights that consume less than 150 Btu per hour); and pool and spa heaters.
§ 150.0(h)1:	Building Cooling and Heating Loads. Heating and/or cooling loads are calculated in accordance with the ASHRAE Handbook, Equipment Volume, Applications Volume, and Fundamentals Volume; the SMACNA Residential Comfort System Installation Standards Manual; or the ACCA Manual J using design conditions specified in § 150.0(h)2.



ENERGY COMMISSION	
§ 150.0(h)3A:	Clearances. Air conditioner and heat pump outdoor condensing units must have a clearance of at least five feet from the outlet of any dryer
§ 150.0(h)3B:	Liquid Line Drier. Air conditioners and heat pump systems must be equipped with liquid line filter driers if required, as specified by the manufacturer's instructions.
§ 150.0(j)1:	Storage Tank Insulation. Unfired hot water tanks, such as storage tanks and backup storage tanks for solar water-heating systems, must have a minimum of R-12 external insulation or R-16 internal insulation where the internal insulation R-value is indicated on the exterior of the tank.
§ 150.0(j)2A:	Water Piping, Solar Water-heating System Piping, and Space Conditioning System Line Insulation. All domestic hot water piping must be insulated as specified in Section 609.11 of the California Plumbing Code. In addition, the following piping conditions must have a minimum insulation wall thickness of one inch or a minimum insulation R-value of 7.7: the first five feet of cold water pipes from the storage tank; all hot water piping with a nominal diameter equal to or greater than 3/4 inch and less than one inch; all hot water piping with a nominal diameter less than 3/4 inch that is: associated with a domestic hot water recirculation system, from the heating source to storage tank or between tanks, buried below grade, and from the heating source to kitchen fixtures.*
§ 150.0(j)3:	Insulation Protection. Piping insulation must be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind as required by Section 120.3(b). Insulation exposed to weather must be water retardant and protected from UV light (no adhesive tapes). Insulation covering chilled water piping and refrigerant suction piping located outside the conditioned space must include, or be protected by, a Class I or Class II vapor retarder. Pipe insulation buried below grade must be installed in a waterproof and non-crushable casing or sleeve.
§ 150.0(n)1:	Gas or Propane Water Heating Systems. Systems using gas or propane water heaters to serve individual dwelling units must include all of the following: A dedicated 125 volt, 20 amp electrical receptacle connected to the electric panel with a 120/240 volt 3 conductor, 10 AWG copper branch circuit, within three feet of the water heater without obstruction. Both ends of the unused conductor must be labeled with the word "spare" and be electrically isolated. Have a reserved single pole circuit breaker space in the electrical panel adjacent to the circuit breaker for the branch circuit and labeled with the words "Future 240V Use"; a Category III or IV vent, or a Type B vent with straight pipe between the outside termination and the space where the water heater is installed; a condensate drain that is no more than two inches higher than the base of the water heater, and allows natural draining without pump assistance; and a gas supply line with a capacity of at least 200,000 Btu per hour.
§ 150.0(n)2:	Recirculating Loops. Recirculating loops serving multiple dwelling units must meet the requirements of § 110.3(c)5.
§ 150.0(n)3:	Solar Water-heating Systems. Solar water-heating systems and collectors must be certified and rated by the Solar Rating and Certification Corporation (SRCC), the International Association of Plumbing and Mechanical Officials, Research and Testing (IAPMO R&T), or by a listing agency that is approved by the Executive Director.
Ducts and Fans	Measures:
§ 110.8(d)3:	Ducts. Insulation installed on an existing space-conditioning duct must comply with § 604.0 of the California Mechanical Code (CMC). If a contractor installs the insulation, the contractor must certify to the customer, in writing, that the insulation meets this requirement.
§ 150.0(m)1:	CMC Compliance. All air-distribution system ducts and plenums must meet the requirements of the CMC §§ 601.0, 602.0, 603.0, 604.0, 605.0 and ANSI/SMACNA-006-2006 HVAC Duct Construction Standards Metal and Flexible 3rd Edition. Portions of supply-air and return-air ducts and plenums must be insulated to a minimum installed level of R-6.0 or a minimum installed level of R-4.2 when ducts are entirely in conditioned space as confirmed through field verification and diagnostic testing (RA3.1.4.3.8). Portions of the duct system completely exposed and surrounded by directly conditioned space are not required to be insulated. Connections of metal ducts and inner core of flexible ducts must be mechanically fastened. Openings must be sealed with mastic, tape, or other duct-closure system that meets the applicable requirements of UL 181, UL 181A, or UL 181B or aerosol sealant that meets the requirements of UL 723. If mastic or tape is used to seal openings greater than ¼ inch, the combination of mastic and either mesh or tape must be used. Building cavities, support platforms for air handlers, and plenums designed or constructed with materials other than sealed sheet metal, duct board or flexible duct must not be used to convey conditioned air. Building cavities and support platforms may contain ducts. Ducts installed in cavities and support platforms must not be compressed to cause reductions in the cross-sectional area. ⁺
§ 150.0(m)2:	Factory-Fabricated Duct Systems. Factory-fabricated duct systems must comply with applicable requirements for duct construction, connections, and closures; joints and seams of duct systems and their components must not be sealed with cloth back rubber adhesive duct tapes unless such tape is used in combination with mastic and draw bands.
§ 150.0(m)3:	Field-Fabricated Duct Systems. Field-fabricated duct systems must comply with applicable requirements for: pressure-sensitive tapes, mastics, sealants, and other requirements specified for duct construction.
§ 150.0(m)7:	Backdraft Damper. Fan systems that exchange air between the conditioned space and outdoors must have backdraft or automatic dampers.
§ 150.0(m)8:	Gravity Ventilation Dampers. Gravity ventilating systems serving conditioned space must have either automatic or readily accessible, manually operated dampers in all openings to the outside, except combustion inlet and outlet air openings and elevator shaft vents.
§ 150.0(m)9:	Protection of Insulation. Insulation must be protected from damage, sunlight, moisture, equipment maintenance, and wind. Insulation exposed to weather must be suitable for outdoor service. For example, protected by aluminum, sheet metal, painted canvas, or plastic cover. Cellular foam insulation must be protected as above or painted with a coating that is water retardant and provides shielding from solar radiation.
§ 150.0(m)10:	Porous Inner Core Flex Duct. Porous inner core flex ducts must have a non-porous layer between the inner core and outer vapor barrier.
§ 150.0(m)11:	Duct System Sealing and Leakage Test. When space conditioning systems use forced air duct systems to supply conditioned air to an occupiable space, the ducts must be sealed and duct leakage tested, as confirmed through field verification and diagnostic testing, in accordance with § 150.0(m)11 and Reference Residential Appendix RA3.
§ 150.0(m)12:	Air Filtration. Space conditioning systems with ducts exceeding 10 feet and the supply side of ventilation systems must have MERV 13 or equivalent filters. Filters for space conditioning systems must have a two inch depth or can be one inch if sized per Equation 150.0-A. Pressure drops and labeling must meet the requirements in §150.0(m)12. Filters must be accessible for regular service.*
§ 150.0(m)13:	Space Conditioning System Airflow Rate and Fan Efficacy. Space conditioning systems that use ducts to supply cooling must have a hole for the placement of a static pressure probe, or a permanently installed static pressure probe in the supply plenum. Airflow must be \geq 350 CFM per ton of nominal cooling capacity, and an air-handling unit fan efficacy \leq 0.45 watts per CFM for gas furnace air handlers and \leq 0.58 watts per CFM for all others. Small duct high velocity systems must provide an airflow \geq 250 CFM per ton of nominal cooling capacity, and an air-handling unit fan efficacy \leq 0.62 watts per CFM. Field verification testing is required in accordance with Reference Residential Appendix RA3.3.*



Requirements for	or Ventilation and Indoor Air Quality:
§ 150.0(o)1:	Requirements for Ventilation and Indoor Air Quality. All dwelling units must meet the requirements of ASHRAE Standard 62.2, Ventilation and Acceptable Indoor Air Quality in Residential Buildings subject to the amendments specified in § 150.0(o)1.
§ 150.0(o)1C:	Single Family Detached Dwelling Units. Single family detached dwelling units, and attached dwelling units not sharing ceilings or floors with other dwelling units, occupiable spaces, public garages, or commercial spaces must have mechanical ventilation airflow provided at rates determined by ASHRAE 62.2 Sections 4.1.1 and 4.1.2 and as specified in § 150.0(o)1C.
§ 150.0(o)1E:	Multifamily Attached Dwelling Units. Multifamily attached dwelling units must have mechanical ventilation airflow provided at rates in accordance with Equation 150.0-B and must be either a balanced system or continuous supply or continuous exhaust system. If a balanced system is not used, all units in the building must use the same system type and the dwelling-unit envelope leakage must be \leq 0.3 CFM at 50 Pa (0.2 inch water) per square foot of dwelling unit envelope surface area and verified in accordance with Reference Residential Appendix RA3.8.
§ 150.0(o)1F:	Multifamily Building Central Ventilation Systems. Central ventilation systems that serve multiple dwelling units must be balanced to provide ventilation airflow for each dwelling unit served at a rate equal to or greater than the rate specified by Equation 150.0-B. All unit airflows must be within 20 percent of the unit with the lowest airflow rate as it relates to the individual unit's minimum required airflow rate needed for compliance.
§ 150.0(o)1G:	Kitchen Range Hoods. Kitchen range hoods must be rated for sound in accordance with Section 7.2 of ASHRAE 62.2.
§ 150.0(o)2:	Field Verification and Diagnostic Testing. Dwelling unit ventilation airflow must be verified in accordance with Reference Residential Appendix RA3.7. A kitchen range hood must be verified in accordance with Reference Residential Appendix RA3.7.4.3 to confirm it is rated by HVI to comply with the airflow rates and sound requirements as specified in Section 5 and 7.2 of ASHRAE 62.2.
Pool and Spa Sy	ystems and Equipment Measures:
§ 110.4(a):	Certification by Manufacturers. Any pool or spa heating system or equipment must be certified to have all of the following: a thermal efficiency that complies with the Appliance Efficiency Regulations; an on-off switch mounted outside of the heater that allows shutting off the heater without adjusting the thermostat setting; a permanent weatherproof plate or card with operating instructions; and must not use electric resistance heating."
§ 110.4(b)1:	Piping. Any pool or spa heating system or equipment must be installed with at least 36 inches of pipe between the filter and the heater, or dedicated suction and return lines, or built-in or built-up connections to allow for future solar heating.
§ 110.4(b)2:	Covers. Outdoor pools or spas that have a heat pump or gas heater must have a cover.
§ 110.4(b)3:	Directional Inlets and Time Switches for Pools. Pools must have directional inlets that adequately mix the pool water, and a time switch that will allow all pumps to be set or programmed to run only during off-peak electric demand periods.
§ 110.5:	Pilot Light. Natural gas pool and spa heaters must not have a continuously burning pilot light.
§ 150.0(p):	Pool Systems and Equipment Installation. Residential pool systems or equipment must meet the specified requirements for pump sizing, flow rate, piping, filters, and valves.*
Lighting Measur	res:
§ 110.9:	Lighting Controls and Components. All lighting control devices and systems, ballasts, and luminaires must meet the applicable requirements of § 110.9.*
§ 150.0(k)1A:	Luminaire Efficacy. All installed luminaires must meet the requirements in Table 150.0-A.
§ 150.0(k)1B:	Blank Electrical Boxes. The number of electrical boxes that are more than five feet above the finished floor and do not contain a luminaire or other device must be no greater than the number of bedrooms. These electrical boxes must be served by a dimmer, vacancy sensor control, or fan speed control.
§ 150.0(k)1C:	Recessed Downlight Luminaires in Ceilings. Luminaires recessed into ceilings must meet all of the requirements for: insulation contact (IC) labeling; air leakage; sealing; maintenance; and socket and light source as described in § 150.0(k)1C.
§ 150.0(k)1D:	Electronic Ballasts for Fluorescent Lamps. Ballasts for fluorescent lamps rated 13 watts or greater must be electronic and must have an output frequency no less than 20 kHz.
§ 150.0(k)1E:	Night Lights, Step Lights, and Path Lights. Night lights, step lights and path lights are not required to comply with Table 150.0-A or be controlled by vacancy sensors provided they are rated to consume no more than 5 watts of power and emit no more than 150 lumens.
§ 150.0(k)1F:	Lighting Integral to Exhaust Fans. Lighting integral to exhaust fans (except when installed by the manufacturer in kitchen exhaust hoods) must meet the applicable requirements of § 150.0(k).*
§ 150.0(k)1G:	Screw based luminaires. Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8.*
§ 150.0(k)1H:	Light Sources in Enclosed or Recessed Luminaires. Lamps and other separable light sources that are not compliant with the JA8 elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires.
§ 150.0(k)1I:	Light Sources in Drawers, Cabinets, and Linen Closets. Light sources internal to drawers, cabinetry or linen closets are not required to comply with Table 150.0-A or be controlled by vacancy sensors provided that they are rated to consume no more than 5 watts of power, emit no more than 150 lumens, and are equipped with controls that automatically turn the lighting off when the drawer, cabinet or linen closet is closed.
§ 150.0(k)2A:	Interior Switches and Controls. All forward phase cut dimmers used with LED light sources must comply with NEMA SSL 7A.
§ 150.0(k)2A: § 150.0(k)2B:	
	Interior Switches and Controls. All forward phase cut dimmers used with LED light sources must comply with NEMA SSL 7A.
§ 150.0(k)2B:	Interior Switches and Controls. All forward phase cut dimmers used with LED light sources must comply with NEMA SSL 7A. Interior Switches and Controls. Exhaust fans must be controlled separately from lighting systems. [*] Interior Switches and Controls. Lighting must have readily accessible wall-mounted controls that allow the lighting to be manually
§ 150.0(k)2B: § 150.0(k)2C:	Interior Switches and Controls. All forward phase cut dimmers used with LED light sources must comply with NEMA SSL 7A. Interior Switches and Controls. Exhaust fans must be controlled separately from lighting systems.* Interior Switches and Controls. Lighting must have readily accessible wall-mounted controls that allow the lighting to be manually turned ON and OFF.*



2019 Low-Rise Residential Mandatory Measures Summary

ENERGY COMMILLION	
§ 150.0(k)2G:	Interior Switches and Controls. An energy management control system (EMCS) may be used to comply with control requirements if it: provides functionality of the specified control according to § 110.9; meets the Installation Certificate requirements of § 130.4; meets the EMCS requirements of § 130.0(e); and meets all other requirements in § 150.0(k)2.
§ 150.0(k)2H:	Interior Switches and Controls. A multiscene programmable controller may be used to comply with dimmer requirements in § 150.0(k) if it provides the functionality of a dimmer according to § 110.9, and complies with all other applicable requirements in § 150.0(k)2.
§ 150.0(k)2I:	Interior Switches and Controls. In bathrooms, garages, laundry rooms, and utility rooms, at least one luminaire in each of these spaces must be controlled by an occupant sensor or a vacancy sensor providing automatic-off functionality. If an occupant sensor is installed, it must be initially configured to manual-on operation using the manual control required under Section 150.0(k)2C.
§ 150.0(k)2J:	Interior Switches and Controls. Luminaires that are or contain light sources that meet Reference Joint Appendix JA8 requirements for dimming, and that are not controlled by occupancy or vacancy sensors, must have dimming controls.*
§ 150.0(k)2K:	Interior Switches and Controls. Under cabinet lighting must be controlled separately from ceiling-installed lighting systems.
§ 150.0(k)3A:	Residential Outdoor Lighting. For single-family residential buildings, outdoor lighting permanently mounted to a residential building, or to other buildings on the same lot, must meet the requirement in item § 150.0(k)3Ai (ON and OFF switch) and the requirements in either § 150.0(k)3Aii (photocell and either a motion sensor or automatic time switch control) or § 150.0(k)3Aii (astronomical time clock), or an EMCS.
§ 150.0(k)3B:	Residential Outdoor Lighting. For low-rise residential buildings with four or more dwelling units, outdoor lighting for private patios, entrances, balconies, and porches; and residential parking lots and carports with less than eight vehicles per site must comply with either § 150.0(k)3A or with the applicable requirements in Sections 110.9, 130.0, 130.2, 130.4, 140.7 and 141.0.
§ 150.0(k)3C:	Residential Outdoor Lighting. For low-rise residential buildings with four or more dwelling units, any outdoor lighting for residential parking lots or carports with a total of eight or more vehicles per site and any outdoor lighting not regulated by § 150.0(k)3B or § 150.0(k)3D must comply with the applicable requirements in Sections 110.9, 130.0, 130.2, 130.4, 140.7 and 141.0.
§ 150.0(k)4:	Internally illuminated address signs. Internally illuminated address signs must comply with § 140.8; or must consume no more than 5 watts of power as determined according to § 130.0(c).
§ 150.0(k)5:	Residential Garages for Eight or More Vehicles. Lighting for residential parking garages for eight or more vehicles must comply with the applicable requirements for nonresidential garages in Sections 110.9, 130.0, 130.1, 130.4, 140.6, and 141.0.
§ 150.0(k)6A:	Interior Common Areas of Low-rise Multifamily Residential Buildings. In a low-rise multifamily residential building where the total interior common area in a single building equals 20 percent or less of the floor area, permanently installed lighting for the interior common areas in that building must be comply with Table 150.0-A and be controlled by an occupant sensor.
§ 150.0(k)6B:	Interior Common Areas of Low-rise Multifamily Residential Buildings. In a low-rise multifamily residential building where the total interior common area in a single building equals more than 20 percent of the floor area, permanently installed lighting for the interior common areas in that building must: i. Comply with the applicable requirements in Sections 110.9, 130.0, 130.1, 140.6 and 141.0; and ii. Lighting installed in corridors and stairwells must be controlled by occupant sensors that reduce the lighting power in each space by at least 50 percent. The occupant sensors must be capable of turning the light fully on and off from all designed paths of ingress and egress.
Solar Ready Buil	dings:
§ 110.10(a)1:	Single Family Residences. Single family residences located in subdivisions with 10 or more single family residences and where the application for a tentative subdivision map for the residences has been deemed complete and approved by the enforcement agency, which do not have a photovoltaic system installed, must comply with the requirements of § 110.10(b) through § 110.10(e).
§ 110.10(a)2:	Low-rise Multifamily Buildings. Low-rise multi-family buildings that do not have a photovoltaic system installed must comply with the requirements of § 110.10(b) through § 110.10(d).
§ 110.10(b)1:	Minimum Solar Zone Area. The solar zone must have a minimum total area as described below. The solar zone must comply with access, pathway, smoke ventilation, and spacing requirements as specified in Title 24, Part 9 or other parts of Title 24 or in any requirements adopted by a local jurisdiction. The solar zone total area must be comprised of areas that have no dimension less than 5 feet and are no less than 80 square feet each for buildings with roof areas less than or equal to 10,000 square feet or no less than 160 square feet each for buildings with roof areas less than or equal to 10,000 square feet or no less than 160 square feet each for buildings with roof areas greater than 10,000 square feet. For single family residences, the solar zone must be located on the roof or overhang of the building and have a total area no less than 250 square feet. For low-rise multi-family buildings the solar zone must be located on the roof or overhang of the building project, and have a total area no less than 15 percent of the total roof area of the building any skylight area. The solar zone requirement is applicable to the entire building, including mixed occupancy."
§ 110.10(b)2:	Azimuth. All sections of the solar zone located on steep-sloped roofs must be oriented between 90 degrees and 300 degrees of true north.
§ 110.10(b)3A:	Shading. The solar zone must not contain any obstructions, including but not limited to: vents, chimneys, architectural features, and roof mounted equipment.*
§ 110.10(b)3B:	Shading. Any obstruction located on the roof or any other part of the building that projects above a solar zone must be located at least twice the distance, measured in the horizontal plane, of the height difference between the highest point of the obstruction and the horizontal projection of the nearest point of the solar zone, measured in the vertical plane.
§ 110.10(b)4:	Structural Design Loads on Construction Documents. For areas of the roof designated as a solar zone, the structural design loads for roof dead load and roof live load must be clearly indicated on the construction documents.
§ 110.10(c):	Interconnection Pathways. The construction documents must indicate: a location reserved for inverters and metering equipment and a pathway reserved for routing of conduit from the solar zone to the point of interconnection with the electrical service; and for single family residences and central water-heating systems, a pathway reserved for routing plumbing from the solar zone to the water-heating system.
§ 110.10(d):	Documentation. A copy of the construction documents or a comparable document indicating the information from § 110.10(b) through § 110.10(c) must be provided to the occupant.
§ 110.10(e)1:	Main Electrical Service Panel. The main electrical service panel must have a minimum busbar rating of 200 amps.
§ 110.10(e)2:	Main Electrical Service Panel. The main electrical service panel must have a reserved space to allow for the installation of a double pole circuit breaker for a future solar electric installation. The reserved space must be permanently marked as "For Future Solar Electric".

System Name	HVAC SYSTEM HEATING AND COOLING LOADS SUMMARY Project Name LICHAU ADITION ONLY System Name							
Res HVAC						-	360	
ENGINEERING CHECKS		SYSTEM LOAD						
Number of Systems	1		COIL	COOLING P	EAK	COIL H	IG. PEAK	
Heating System			CFM	Sensible	Latent	CFM	Sensible	
Output per System	60,000	Total Room Loads	161	3,976	113	136	5,1	
Total Output (Btuh)	60,000	Return Vented Lighting		0		-		
Output (Btuh/sqft)	166.7	Return Air Ducts		0				
Cooling System		Return Fan		0	·		·	
Output per System	60,000	Ventilation	0	0	0	0	4 i i	
Total Output (Btuh)	60,000	Supply Fan		0				
Total Output (Tons)	5.0	Supply Air Ducts		0		214		
Total Output (Btuh/sqft)	166.7		- 1 G					
Total Output (sqft/Ton)	72.0	TOTAL SYSTEM LOAD		3,976	113		5,1	
Air System								
CFM per System	1,500	HVAC EQUIPMENT SELECTION						
Airflow (cfm)	1,500	Existing FAU/AC Before 1978		48,679	6,468	1	60,0	
Airflow (cfm/sqft)	4.17				-			
Airflow (cfm/Ton)	300.0							
Outside Air (%)	0.0%	Total Adjusted System Output		48,679	6,468	100	60,0	
Outside Air (cfm/sqft)	0.00	(Adjusted for Peak Design conditions)						
Outside Air 0 cfm Supply Fan 1,500 cfm 70 °F		Coil ———————————————————————————————————	→		RC	MOO	05 °F 70 °F	

ROOM HEATING PEAK LOADS											
Project Name						Da					
LICHAU ADITION ONLY	8/14/2020										
ROOM INFORMATION	ADU		SIGN CONDITIO	NS							
Room Name		e of Peak			Jan 1 AM						
Floor Area	360.00 ft ²	Out	door Dry Bulb Te	24 °F							
Indoor Dry Bulb Temperature	70 °F										
					∆T [°] F						
Conduction	Area	٦.,	U-Value				Btu/hr				
R-19 Floor Crawlspace R-15 Wall	360.0		0.0469	X	46	=	776				
	534.0		0.0953	X	46	=	2,342				
New Windows/Doors	48.0	~	0.3000	Х	46	=	662				
R-30 High Performance Attic	360.0		0.0419	Х	46	=	694				
		X		Х		=					
	-	X		Х		=					
		X		Х		=					
	-	X		Х		=					
	-	Х		Х		=					
		X		Х		=					
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		Х		Х		=					
		х		Х		=					
		х		Х		=					
Items shown with an asterisk (*) denote conduc	ction through an interior surf	ace to	another room		Page To	otal	4,474				
Infiltration: 1.00 X Air Sen Schedule Fraction	1.073 X 360 X sible Area		8.00 X 0. ling Height AC	266 H	/ 60] X	-	6 = 631				
TOTAL HOURLY HEAT LOSS FOR F	ROOM						5,105				

RESIDENTIAL ROOM COOLING LOAD SUMMARY														
Project Name											[Date	14 4	/0.000
LICHAU ADITION ONLY ROOM INFORMATION			DEG			TI	ONE					8/	/14,	/2020
		ADU												96 °F
Room Name Floor Area		360.00 ft ²			or Dry Bull or Wet Bul		-							69 ⁰F
Indoor Dry Bulb Temperature 78 °F					or Daily Ra		•	eratu	lie					35 °F
			Oute	100	Dully No	ing	0.							
Opaque Surfaces	Orientation	Area			U-Fa	cto	r			CLI	۲D ¹			Btu/hr
R-19 Floor Crawlspace		3	60.0	Χ		0.	0469	Х			9.6	=		162
R-15 Wali	(N)	3	70.0	Χ		0.	0953	Х			9.0	=		317
R-15 Wall	(E)		88.0 X 0.0953 X 19.		19.0	=		159						
R-15 Wall	(W)		76.0	Χ			0953	Х			19.0	=		138
R-30 High Performance Attic	(N)	3	60.0	Х		0.	0419	Х	43.0		=		648	
				Х				Х				=		
				Х				Х				=		
				Х				Х				=		
				Х				Х				=		4 405
Items shown with an asterisk (*) den	ote conduction through an	interior surfa	ice to a	anot	ther room.				Р	age	e Total			1,425
1. Cooling Load Temperature Diff	erence (CLTD)		Shade						Unsh	ad	od			
Fenestration	Orientation	Area	Shaue	a	GLF			Area		lau	GLF			Btu/hr
Add N Windows	(N)		0.0 X		10.5	+				x		10.5	<u> </u>	211
Add E Windows	(E)		0.0 X	-	10.5	+			8.0	x			_	191
Add W Windows	(W)		0.0 X	-	10.5	+					00.0	_	477	
			x	-		+					_			
			x	-		+				x			=	
			x			+				x			=	
							=							
			x			+				X			=	
			x			+				X			=	
										I	Page To	tal		878
Internal Cain														D411/ba
Internal Gain Occupants 1	.1 Occupants	s x					245	Dtub	n/occ			=		Btu/hr 265
Occupanto	⁶⁰ Floor Area						1.00	w/sc		•		=		1,229
								W/3C	111			-	<u> </u>	
Infiltration: 1.073 X	0.71 🗙	13.20 🗙			18 =									180
Air Sensible		ELA	·	Δ									<u> </u>	
TOTAL HOURLY SENSIBLE HEAT GAIN FOR ROOM 3,976														
Latent Gain														Btu/hr
Occupants 1	.1 Occupants	s X					155	Btuh	l/occ.			=		167
	 		r										_	
Infiltration: 4,812 X	0.71 X	13.20 X			.00121 =									-54
Air Latent	CFM	ELA		ΔV	/V									
TOTAL HOURLY LATENT H	EAT GAIN FOR RO	ОМ												113

Hi sir.

I got your email and I'll start addressing the issue tomorrow.

I'd like to petition the director as described in the attachment you sent. Do you know the best way to contact and petition this? I was told the office was closed due to COVID. I'd appreciate any help you could give me. And again, I'm sorry to be taking up your time.

Dan Lichau

On Sep 17, 2020, at 6:34 PM, daniel lichau <daniel_lichau@yahoo.com> wrote:

----- Forwarded Message -----From: Maystrovich, Mark <mmaystrovich@srcity.org> To: daniel lichau <daniel_lichau@yahoo.com> Sent: Thursday, September 17, 2020, 04:08:47 PM PDT Subject: 1900 Brush Creek

Good Evening Daniel

Attached is a letter of violation regarding the removal of a large redwood tree. Please read the letter and all code sections carefully. I will be returning your permit application and plans for the addition you have sent via email.

Mark

Mark Maystrovich |Senior Code Enforcement Officer Planning and Economic Development |100 Santa Rosa Avenue | Santa Rosa, CA 95404 Tel. (707) 543-3268 | Fax (707) 543-4315 | mmaystrovich@srcity.org

Hello and thank you for your email. Please note: The City of Santa Rosa has closed most of its public counters until further notice to help curb a resurgence of coronavirus infections occurring in Sonoma County and statewide. Access to most City services remains available online, by phone, and in some instances in-person by appointment. For a current list of those services, visit srcity.org/ServiceFinder.

For detailed information about the City of Santa Rosa's ongoing response the coronavirus public health emergency, please visit the City's website at srcity.org/PreventTheSpread

-----Original Message-----From: Administrator <<u>Administrator@srcity.org</u>> Sent: Thursday, September 17, 2020 3:24 PM To: Maystrovich, Mark <<u>MMaystrovich@srcity.org</u>> Subject: Scanned image from MX-C402SC

Reply to: administrator@srcity.org <administrator@srcity.org> Device Name: COPIER.CD-CODEENF Device Model: MX-4071 Location: Not Set

File Format: PDF MMR(G4) Resolution: 200dpi x 200dpi

Attached file is scanned image in PDF format. Use Acrobat(R)Reader(R) or Adobe(R)Reader(R) of Adobe Systems Incorporated to view the document. Adobe(R)Reader(R) can be downloaded from the following URL: Adobe, the Adobe logo, Acrobat, the Adobe PDF logo, and Reader are registered trademarks or trademarks of Adobe Systems Incorporated in the United States and other countries.

http://www.adobe.com/ <administrator@srcity.org_20200917_142428.pdf>

From:	Oswald, Jesse
To:	daniel lichau@yahoo.com
Cc:	Tony; Maystrovich, Mark
Subject:	1900 Brush Creek Submittal Requirements
Date:	Monday, December 7, 2020 10:51:00 AM
Attachments:	administrator@srcity.org 20201207 103820.pdf
	administrator@srcity.org 20201207 103742.pdf
	administrator@srcity.org 20201207 103721.pdf
	administrator@srcity.org 20201207 103706.pdf

Good morning,

To facilitate application for the legalization of the addition, please see the analysis below:

- 1. Through Planning staff's research and analysis shows the unpermitted addition can be permitted. The building setback lines placed on the Final Map Supplemental sheet(s) are not enforceable.
- 2. The applicant will be required to submit plans and specifications adhering to the attached "As-Built" process: <u>https://www.srcity.org/DocumentCenter/View/2199/-Handout-for-As-Built-Projects-PDF</u>. The applicant will be required to pay additional fees due to the work without a permit. The fee shall be equal to the permit fee as described on the bottom of page 28 of the fee schedule: <u>https://srcity.org/DocumentCenter/View/16129/Planning--Economic-Development-Department-Fee-Schedule?bidle</u>. They will also be required to pay the Stop Work Order Removal Fee identified on page 43 (near the middle of the page) "Removal of Stop Work Order".
- 3. Planning staff have determined that had the applicant applied: The tree that was removed without authorization would have been approved for removal in-accordance with the Tree Ordinance. In accordance with Subsection 17-24.050(C)(1), for each six inches or fraction thereof of the diameter of a tree which was approved for removal, two trees of the same genus and species as the removed tree (or another species, if approved by the Director), each of a minimum 15-gallon container size, shall be planted on the project site, provided however, that an increased number of smaller size trees of the same genus and species may be planted if approved by the Director, or a fewer number of such trees of a larger size if approved by the Director. Mr. Robertson's letter reports that the total diameter of the removed tree is 74 inches (48+26). Under this criteria, the mitigation requirement is planting of 26 Coast Redwood trees, each a minimum of 15-gallon container size (74 / 6 = 12.33 6-inch increments, which rounds up to 13 sections). In accordance with Subsection 17-24.050(C)(3), If the development site is inadequate in size to accommodate the replacement trees, the trees shall be planted on public property with the approval of the Director of the City's Recreation and Parks Department. Upon the request of the developer and the approval of the Director, the City may accept an in-lieu payment of \$100.00 per 15-gallon replacement tree on condition that all such payments shall be used for tree-related educational projects and/or planting programs of the City. The total payment in-lieu fee would be \$2,600.
- 4. The additional complaint for bright lights shining on adjacent properties will be required to be

addressed with the building permit submittal.

Steps:

- Prepared a compete submittal utilizing any and all necessary documents sent to you here – following the "as-built" process: <u>https://www.srcity.org/DocumentCenter/View/2199/-Handout-for-As-Built-Projects-PDF</u> and the addition/alteration guidance: <u>https://www.srcity.org/DocumentCenter/View/18246/Construction-Documents-Submittal-Requirements-for-Remodel-and-or-Additions-to-Residential-Projects</u> (since electronic submittals are required – disregard the # of plan sets required).
- 2. Complete and submit a building permit application: <u>https://www.srcity.org/DocumentCenter/View/2614/Building-Permit-Application-PDF</u>
- 3. Address the additional lights installed that potentially shine on any neighboring properties
- 4. Include this email in the submittal
- 5. Submit to" <u>permitsubmittal@srcity.org</u> If submittals exceed 15mB provide a drop box or file transfer mechanism.

Regards,

Jesse Oswald | Chief Building Official

Planning & Economic Development |100 Santa Rosa Avenue, Room 3 | Santa Rosa, CA 95404 Tel. (707) 543-3249 | Fax (707) 543-3219 | <u>joswald@srcity.org</u>



Good morning,

Hope you had a great weekend. Thank you for your response! Yes, that did help. We appreciate your help.

Sincerely, Amber and Daniel

On Monday, February 8, 2021, 07:14:18 AM PST, Trippel, Andrew <a trippel@srcity.org> wrote:

Good morning,

1. Planning has made the decision to move forward with review of the appeal.

2. I don't understand your question about if I "will respond to an email request for documentation provided by the appellant/information in the project file. Are we able to get this before the 2/11, assuming you've received documentation from the appellant other than the initial appeal and amended appeal applications that we already have?" Any information provided to the City, including email conversations between City staff and the public, is public record and if disclosable would be provided in response to a Public Records Request. You can submit a Public Records request at any time using the <u>City's Public Records Request</u> portal. The City has staff who respond to requests for public records. In the request, you can make the scope of the request as narrow as you like. To-date, the City has not received any information in addition to the Appeal Application and amended Appeal Application received in December 2020.

Does this help?

Andrew

Andrew Trippel | Acting Supervising Planner – Current Planning

Planning & Economic Development |100 Santa Rosa Ave Rm 3 | Santa Rosa, CA 95404

Tel. (707) 543-3223 | Fax (707) 543-3269 | atrippel@srcity.org



From: daniel lichau <daniel_lichau@yahoo.com>
Sent: Friday, February 5, 2021 11:00 AM
To: Trippel, Andrew <atrippel@srcity.org>
Cc: Tony <tony@cabreraassoc.com>; Rose, William <WRose@srcity.org>
Subject: Re: [EXTERNAL] Re: Planning Commission 1900 Brush Creek appeal hearing on February 25, 2021

Good morning Andrew,

Thank you for your email. Are you able to give us clarification on whether the appeal will move forward on the scheduled date because you've received confirmation from the appellant that she will be present and will have her documentation in, or if planning has made the decision to move forward with the appeal whether the appellant is available or not?

Secondly, it's my understanding that you will respond to an email request for documentation provided by the appellant/information in the project file. Are we able to get this before the 2/11, assuming you've received documentation from the appellant other than the initial appeal and amended appeal applications that we already have?

Thanks so much for your time.

Sincerely,

Amber and Daniel

On Thursday, February 4, 2021, 07:00:26 PM MST, Trippel, Andrew <<u>atrippel@srcity.org</u>> wrote:

Good afternoon,

Planning Commission will review an Appeal of Director determinations made during Planning Review of Building Permit B20-6871, which is an application to legalize an addition to an existing residence at 1900 Brush Creek Road, during its regularly scheduled public meeting on Thursday, February 25, 2021, at or after 4:00 PM. This public meeting will be a virtual Zoom public meeting. Both the property owner and the appellant will have the opportunity to speak during review of the Appeal.

Information about the scheduled Planning Commission public meeting, including accessing the meeting via Zoom, will be available at https://srcity.org/1339/Planning-Commission. The staff report and associated information will be published for public review at least 7 days prior to the meeting. I will email the agenda when it is published.

Best Regards,

Andrew

Andrew Trippel | Acting Supervising Planner – Current Planning

Planning & Economic Development |100 Santa Rosa Ave Rm 3 | Santa Rosa, CA 95404

Tel. (707) 543-3223 | Fax (707) 543-3269 | atrippel@srcity.org



From: Trippel, Andrew <a trippel@srcity.org>
Sent: Wednesday, January 20, 2021 6:59 AM
To: daniel lichau <daniel_lichau@yahoo.com>
Cc: Tony <tony@cabreraassoc.com>; Rose, William <<u>WRose@srcity.org</u>>
Subject: Re: [EXTERNAL] Re: Planning Commission 1900 Brush Creek appeal hearing on February 25, 2021

Thanks for your quick response, Danny. I will be in touch as soon as I hear back from the Appellant.

Best,

Andrew

From: daniel lichau <<u>daniel_lichau@yahoo.com</u>>

Sent: Tuesday, January 19, 2021 8:57 PM

To: Trippel, Andrew <<u>atrippel@srcity.org</u>>

Cc: Tony <<u>tony@cabreraassoc.com</u>>; Rose, William <<u>WRose@srcity.org</u>>

Subject: [EXTERNAL] Re: Planning Commission 1900 Brush Creek appeal hearing on February 25, 2021

Hi Andrew,

We hope this email finds you well. Thanks so much for your time. We will be able to be present for the meeting.

Sincerely,

Amber and Daniel Lichau

On Tuesday, January 19, 2021, 06:49:47 PM PST, Trippel, Andrew <<u>atrippel@srcity.org</u>> wrote:

Good evening,

Planning staff will be prepared to present an Appeal of Director determinations made during Planning Review of Building Permit B20-6871, which is an application to legalize an addition to an existing residence at 1900 Brush Creek Road, for review by the Planning Commission during its regularly scheduled public meeting on Thursday, February 25, 2021, at or after 4:00 PM. This public meeting will be a virtual Zoom public meeting. Both the applicant and the appellant will have the opportunity to speak during review of the Appeal.

Please advise if you will be available to participate in the meeting scheduled on February 25, 2021.

Thank you,

Andrew

Andrew Trippel | Acting Supervising Planner – Current Planning

Planning & Economic Development |100 Santa Rosa Ave Rm 3 | Santa Rosa, CA 95404

Tel. (707) 543-3223 | Fax (707) 543-3269 | atrippel@srcity.org

