

HISTORIC AND DESIGN REVIEW COMMISSION

May 29, 2020

HDRC CASE NO: 2020-169
ADDRESS: 231 W AGARITA AVE
LEGAL DESCRIPTION: NCB 3261 BLK 7 LOT 8 & W 20 FT OF 9
ZONING: R-5
CITY COUNCIL DIST.: 1
DISTRICT: Monte Vista Historic District
APPLICANT: Gregory Papay/PAPAY GREGORY S & EVA
OWNER: Gregory Papay/PAPAY GREGORY S & EVA
TYPE OF WORK: Roof modification, solar panel installation
APPLICATION RECEIVED: April 17, 2020
60-DAY REVIEW: Not applicable due to City Council Emergency Orders
CASE MANAGER: Rachel Rettaliata

REQUEST:

The applicant is requesting a Certificate of Appropriateness for approval to:

1. Replace the existing asphalt shingle roof with a Tesla Solar Roof (solar shingles).
2. Demolish the dormer at the west side of the north (rear) side of the house to restore the simple hip profile to the roof.
3. Modify the gable shape of the dormer roof on the central dormer on the north side of the house to a shed dormer with standing seam roof and solar panels on top to match the dormers on the south side of the house.

APPLICABLE CITATIONS:

Historic Design Guidelines, Chapter 2, Exterior Maintenance and Alterations

1. Materials: Woodwork

A. MAINTENANCE (PRESERVATION)

- i. *Inspections*—Conduct semi-annual inspections of all exterior wood elements to verify condition and determine maintenance needs.
- ii. *Cleaning*—Clean exterior surfaces annually with mild household cleaners and water. Avoid using high pressure power washing and any abrasive cleaning or stripping methods that can damage the historic wood siding and detailing.
- iii. *Paint preparation*—Remove peeling, flaking, or failing paint surfaces from historic woodwork using the gentlest means possible to protect the integrity of the historic wood surface. Acceptable methods for paint removal include scraping and sanding, thermal removal, and when necessary, mild chemical strippers. Sand blasting and water blasting should never be used to remove paint from any surface. Sand only to the next sound level of paint, not all the way to the wood, and address any moisture and deterioration issues before repainting.
- iv. *Repainting*—Paint once the surface is clean and dry using a paint type that will adhere to the surface properly. See *General Paint Type Recommendations* in Preservation Brief #10 listed under Additional Resources for more information.
- v. *Repair*—Repair deteriorated areas or refasten loose elements with an exterior wood filler, epoxy, or glue.

B. ALTERATIONS (REHABILITATION, RESTORATION, AND RECONSTRUCTION)

- i. *Facade materials*—Avoid removing materials that are in good condition or that can be repaired in place. Consider exposing original wood siding if it is currently covered with vinyl or aluminum siding, stucco, or other materials that have not achieved historic significance.
- ii. *Materials*—Use in-kind materials when possible or materials similar in size, scale, and character when exterior woodwork is beyond repair. Ensure replacement siding is installed to match the original pattern, including exposures. Do not introduce modern materials that can accelerate and hide deterioration of historic materials. Hardiboard and other cementitious materials are not recommended.
- iii. *Replacement elements*—Replace wood elements in-kind as a replacement for existing wood siding, matching in profile, dimensions, material, and finish, when beyond repair.

3. Materials: Roofs

A. MAINTENANCE (PRESERVATION)

i. *Regular maintenance and cleaning*—Avoid the build-up of accumulated dirt and retained moisture. This can lead to the growth of moss and other vegetation, which can lead to roof damage. Check roof surface for breaks or holes and flashing for open seams and repair as needed.

B. ALTERATIONS (REHABILITATION, RESTORATION, AND RECONSTRUCTION)

i. *Roof replacement*—Consider roof replacement when more than 25-30 percent of the roof area is damaged or 25-30 percent of the roof tiles (slate, clay tile, or cement) or shingles are missing or damaged.

ii. *Roof form*—Preserve the original shape, line, pitch, and overhang of historic roofs when replacement is necessary.

iii. *Roof features*—Preserve and repair distinctive roof features such as cornices, parapets, dormers, open eaves with exposed rafters and decorative or plain rafter tails, flared eaves or decorative purlins, and brackets with shaped ends.

iv. *Materials: sloped roofs*—Replace roofing materials in-kind whenever possible when the roof must be replaced. Retain and re-use historic materials when large-scale replacement of roof materials other than asphalt shingles is required (e.g., slate or clay tiles). Salvaged materials should be re-used on roof forms that are most visible from the public right-of-way. Match new roofing materials to the original materials in terms of their scale, color, texture, profile, and style, or select materials consistent with the building style, when in-kind replacement is not possible.

v. *Materials: flat roofs*—Allow use of contemporary roofing materials on flat or gently sloping roofs not visible from the public right-of-way.

vi. *Materials: metal roofs*—Use metal roofs on structures that historically had a metal roof or where a metal roof is appropriate for the style or construction period. Refer to Checklist for Metal Roofs on page 10 for desired metal roof specifications when considering a new metal roof. New metal roofs that adhere to these guidelines can be approved administratively as long as documentation can be provided that shows that the home has historically had a metal roof.

vii. *Roof vents*—Maintain existing historic roof vents. When deteriorated beyond repair, replace roof vents in-kind or with one similar in design and material to those historically used when in-kind replacement is not possible.

Historic Design Guidelines, Chapter 3, Guidelines for Additions

6. Designing for Energy Efficiency

A. BUILDING DESIGN

i. *Energy efficiency*—Design additions and new construction to maximize energy efficiency.

ii. *Materials*—Utilize green building materials, such as recycled, locally-sourced, and low maintenance materials whenever possible.

iii. *Building elements*—Incorporate building features that allow for natural environmental control – such as operable windows for cross ventilation.

iv. *Roof slopes*—Orient roof slopes to maximize solar access for the installation of future solar collectors where compatible with typical roof slopes and orientations found in the surrounding historic district.

B. SITE DESIGN

i. *Building orientation*—Orient new buildings and additions with consideration for solar and wind exposure in all seasons to the extent possible within the context of the surrounding district.

ii. *Solar access*—Avoid or minimize the impact of new construction on solar access for adjoining properties.

C. SOLAR COLLECTORS

i. *Location*—Locate solar collectors on side or rear roof pitch of the primary historic structure to the maximum extent feasible to minimize visibility from the public right-of-way while maximizing solar access. Alternatively, locate solar collectors on a garage or outbuilding or consider a ground-mount system where solar access to the primary structure is limited.

ii. *Mounting (sloped roof surfaces)*—Mount solar collectors flush with the surface of a sloped roof. Select collectors that are similar in color to the roof surface to reduce visibility.

iii. *Mounting (flat roof surfaces)*—Mount solar collectors flush with the surface of a flat roof to the maximum extent feasible. Where solar access limitations preclude a flush mount, locate panels towards the rear of the roof where visibility from the public right-of-way will be minimized.

FINDINGS:

- a. The primary structure at 231 W Agarita was constructed circa 1920 and first appears on the Sanborn map in 1951. The primary structure features a composition shingle hip roof with overhanging eaves, dormer windows on the front and rear of the structure, brick cladding, wood windows with decorative window surrounds, and a deeply inset front porch. The property is contributing to the Monte Vista Historical Association.
- b. **ROOF REPLACEMENT** – The applicant is requesting approval to install a Tesla Solar Roof, a striated glass roof tile that has integrated solar PV cells within the tiles. Each solar roof tile is 15 inches by 45 inches. The

solar roof tiles are longer than the existing composition roof shingles. Guideline 6.C.i for Additions stipulates that solar collectors should be located on side or rear roof pitch of the primary historic structure to the maximum extent feasible to minimize visibility from the public right-of-way while maximizing solar access. Additionally, Guideline 6.C.ii for Additions states that solar collectors should be mounted flush with the surface of a sloped roof. Select collectors that are similar in color to the roof surface to reduce visibility. The Tesla Solar Roof is a material that will replace the entire roof. As the Tesla Solar Roof consists of roof tiles, the solar collectors will be mounted flush. The solar collectors will be visible from the public right-of-way.

- c. ROOF REPLACEMENT: PITCH – The Tesla Solar Roof tiles will be installed as roofing material and will be flush with the roof pitch. Staff finds the proposal consistent with the Guidelines.
- d. ROOF REPLACEMENT: MATERIAL – The existing roof is an asphalt shingle roof and a replacement shingled product is appropriate for the house and the Tesla Solar Roof shingles are appropriate provided that the product is not overly distinct in terms of color and appearance. The product proposed has texture and is not mirrored in appearance. Staff finds the proposal appropriate.
- e. DORMER REMOVAL – The applicant has proposed to remove the gable dormer located on the west side of the rear of the roof in order to restore the simple hip roof profile of the roof. Guideline 3.B.ii for Exterior Maintenance and Alterations stipulates that the original shape, line, pitch, and overhang of historic roofs should be preserved when replacement is necessary. The existing dormers are likely non-original elements and removing the dormer would preserve the original roof form. Staff finds the proposal appropriate.
- f. ROOF MODIFICATION – The applicant has proposed to modify the gable form of the existing central dormer at the rear of the house to a shed-roof dormer with a standing seam roof with solar panels to match the existing shed-roof dormers at the front of the house. Guideline 3.B.ii for Exterior Maintenance and Alterations stipulates that the original shape, line, pitch, and overhang of historic roofs should be preserved when replacement is necessary. Staff finds the proposal consistent with the Guidelines.
- g. SOLAR PANEL INSTALLATION – The applicant has proposed to install traditional solar panels on the new shed roof dormer. The existing shed roof dormers currently feature traditional solar panels. Guideline 7.C.i for Additions stipulates that solar collectors should be located on the side or rear roof pitch of the primary historic structure to the maximum extent feasible to minimize visibility from the public right-of-way while maximizing solar access. Guideline 7.C.iii states that solar collectors should be mounted flush with the surface of a flat roof to the maximum extent feasible. Staff finds the proposal consistent with the Guidelines.
- h. GUTTER REPLACEMENT – The applicant has proposed to replace the internal gutter with a box-shaped external gutter that visually integrates with the fascia board. This scope of work is eligible for administrative approval and does not require review by the HDRC.

RECOMMENDATION:

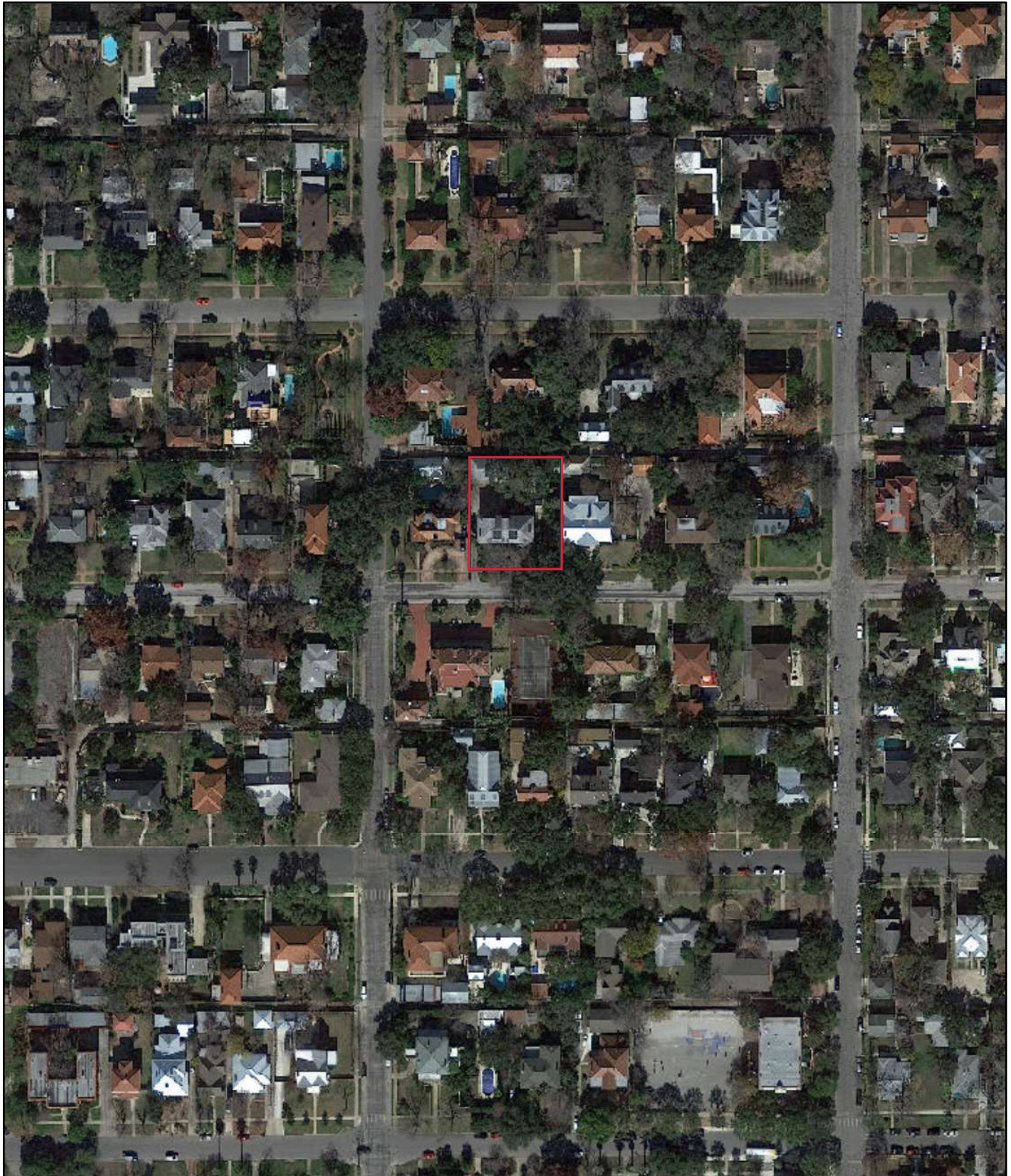
Item 1, staff recommends approval of the installation of the Tesla Solar Roof based on findings a through h with the following stipulation:

- i. That the applicant submits final material specifications including trim or edge detail to staff for review and approval prior to the issuance of a Certificate of Appropriateness.

Item 2, staff recommends approval of the rear dormer removal based on finding e.

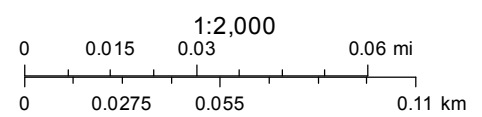
Item 3, staff recommends approval of the roof modification to the rear central dormer and solar panel installation based on findings f through g.

City of San Antonio One Stop



May 6, 2020

 User drawn lines

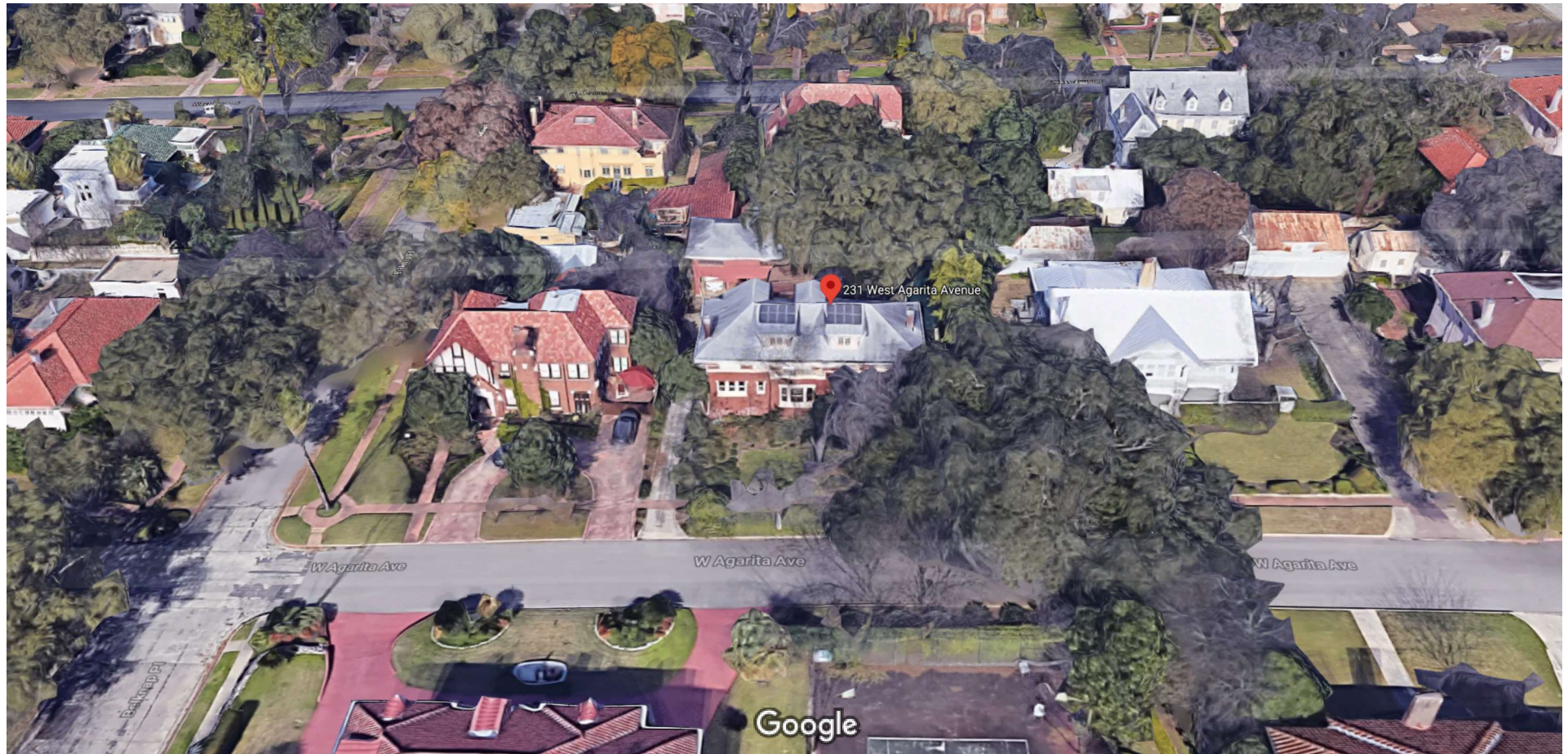


Google Maps 231 W Agarita Ave



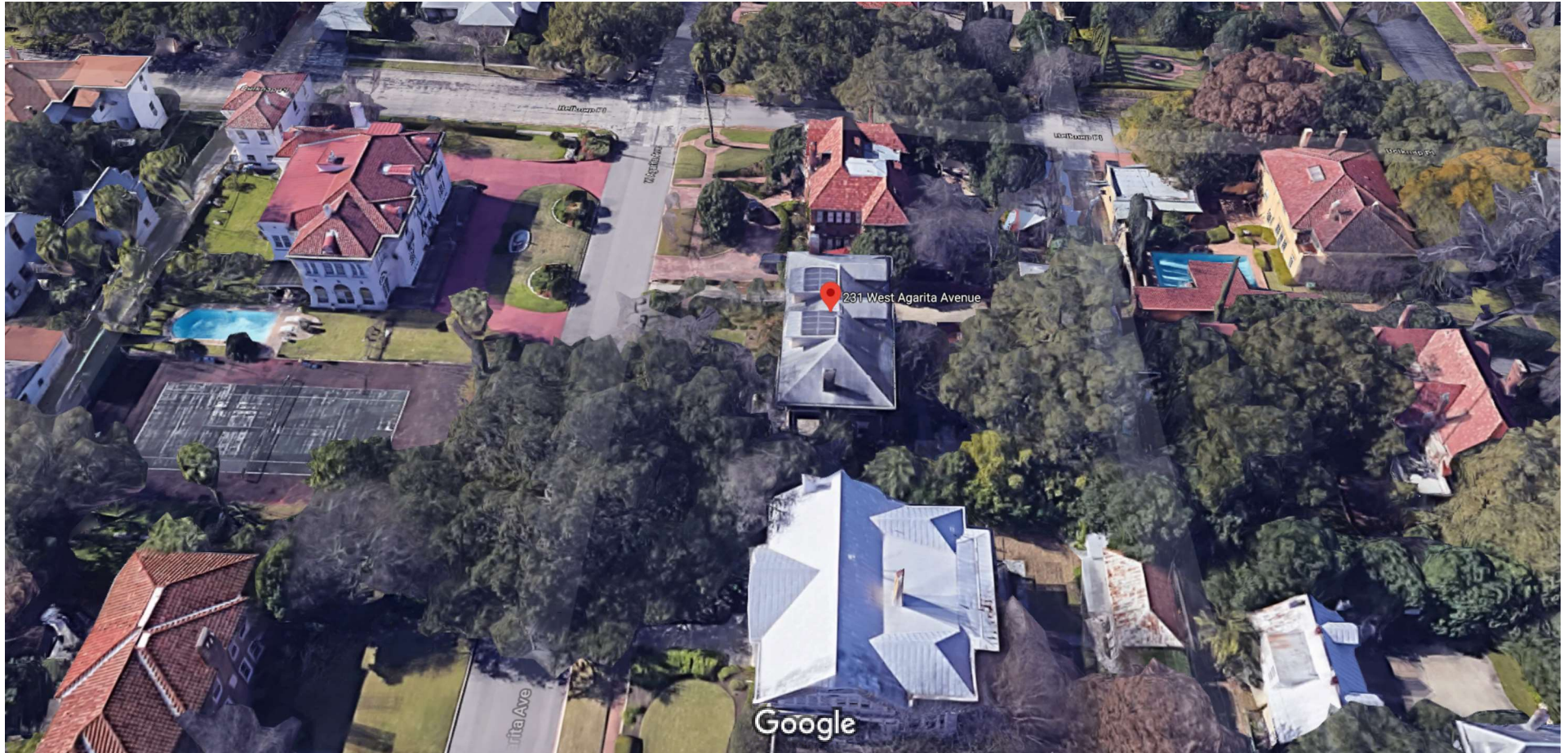
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Google Maps 231 W Agarita Ave



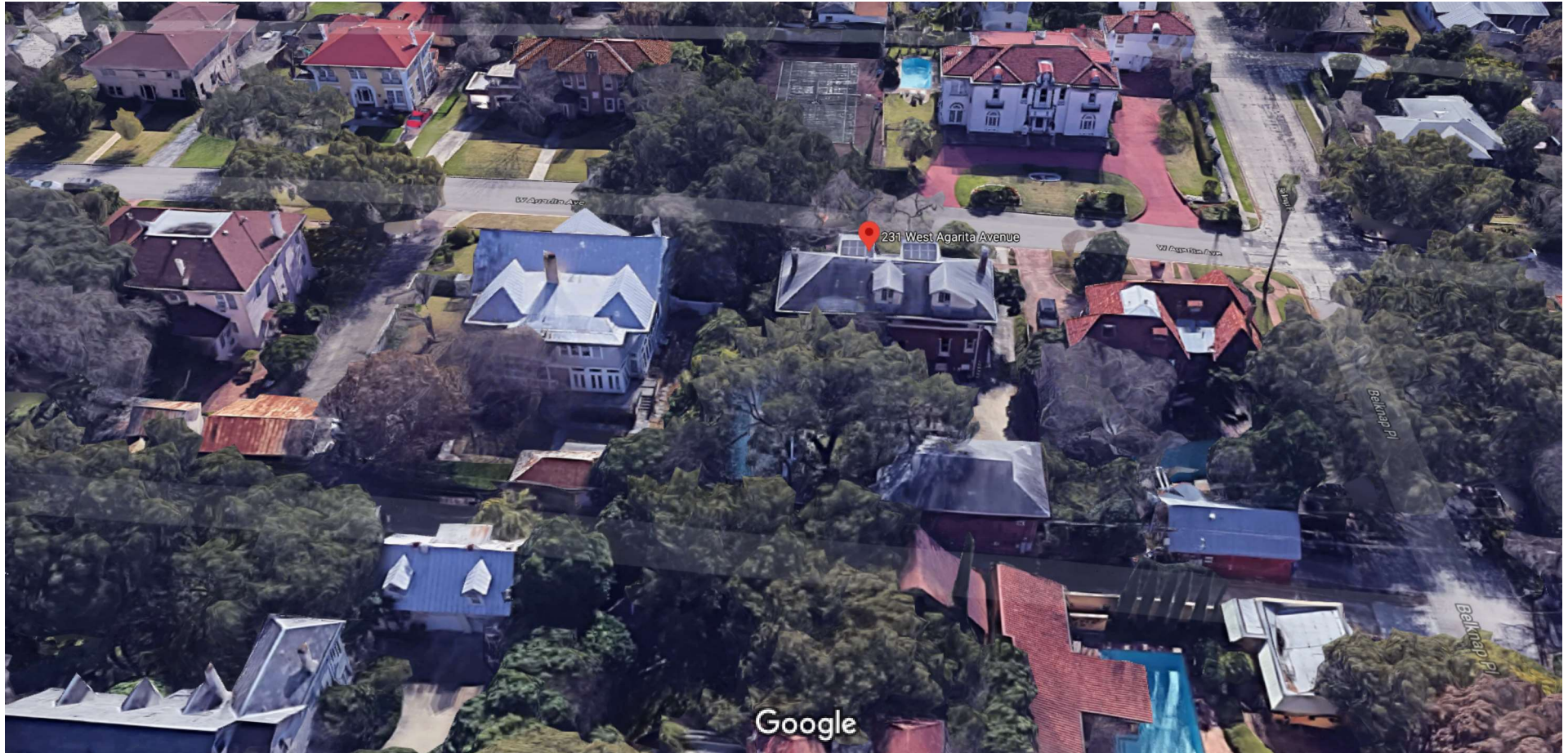
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Google Maps 231 W Agarita Ave



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73

71

(QUEENSBOROUGH CT)

W. SUMMIT AV.

DISCUSSION

72

HOWARD-

W. AGARITA

77

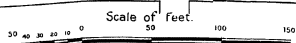
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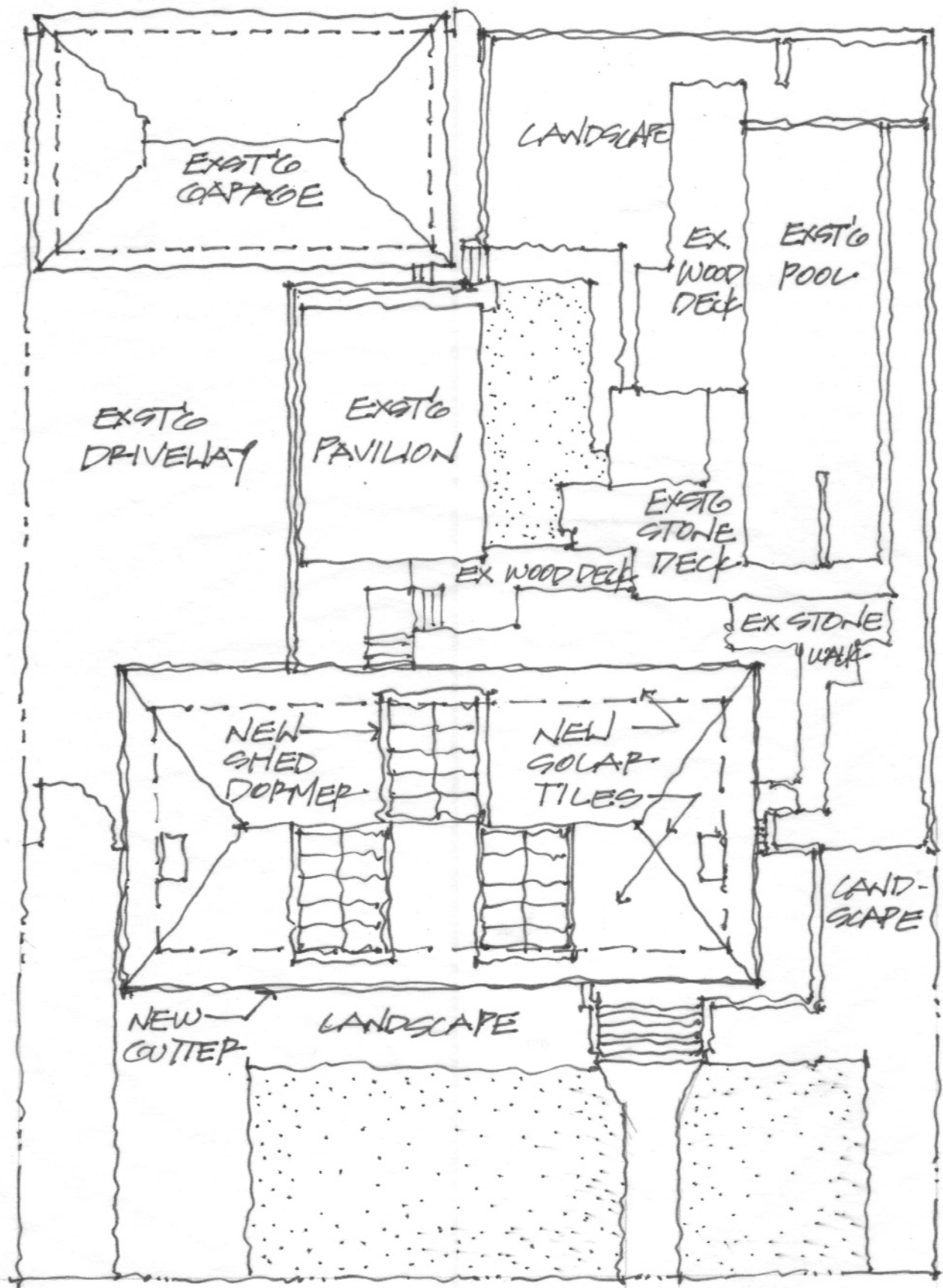
W. MULBERRY

ELKNAP

PL

Scale of feet





SITE PLAN
221 WEST ACAPITA

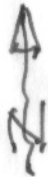
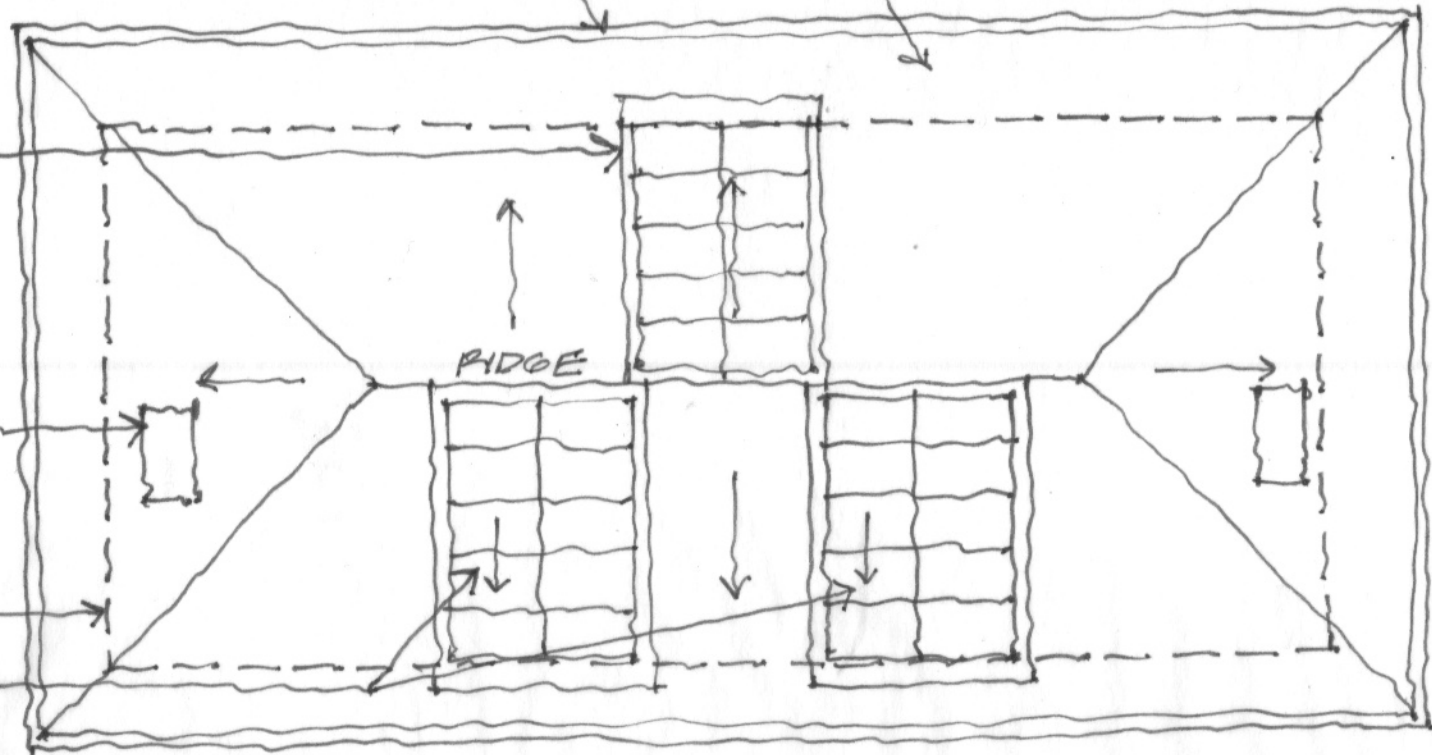
4.15.20

NEW SOLAR TILE ROOF
NEW BOX-SHAPED
GUTTER, PTD. TO MATCH
EXST'G. TRIM

NEW SHED
DORMER W/
SOLAR
PANELS

EXISTING
CHIMNEY
EDGE OF
WALL BELOW

EXST'G SHED
DORMER W/
SOLAR PANELS



ROOF PLAN
231 WEST AGARITA

4.15.20



SOUTH ELEVATION (STREET)
231 WEST ACAPITA

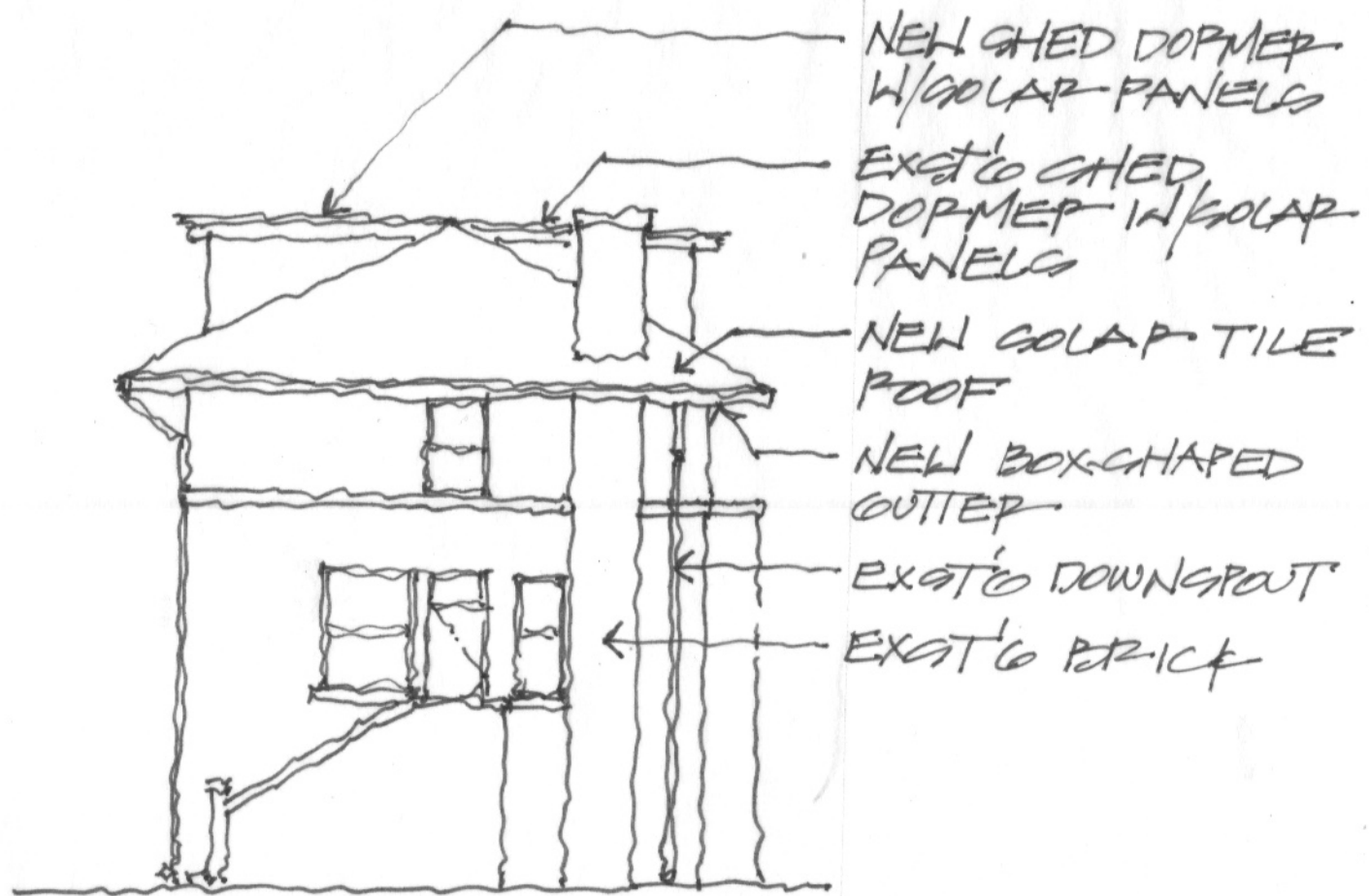
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EAST ELEVATION

2221 WEST AGAPITA

4.15.20



WEST ELEVATION
221 WEST AGARITA



NORTH ELEVATION

231 WEST AGAPITA

4.15.20



NORTH ELEVATION - DEMO
271 WEST AGARITA

4.15.20















Solar Roof Product Information

Solar Roof Benefit



Stunning aesthetics

Adopting solar has historically required a degree of aesthetic compromise, but a Solar Roof provides clean energy from the most beautiful roof ever

Unmatched durability

Solar Roof is made of extremely strong tempered glass and comes with a 25 year warranty covering your roofing and energy production

Exceptional performance

With high quality underlayment and integrated air gaps and vents, which allows hot air to vent, your home will remain cool and comfortable

Clean energy generation

Hidden solar cells within the tiles produce electricity and reduce your electric bill which helps pay for your roof over time

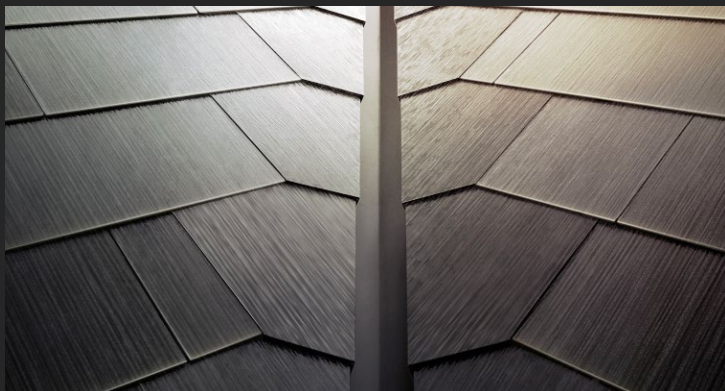
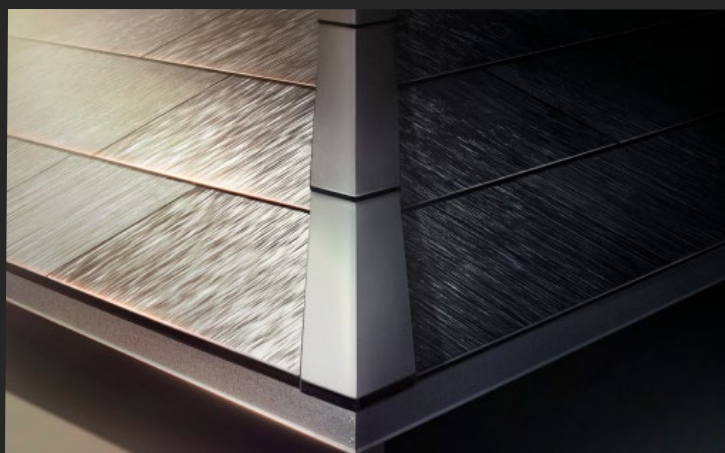
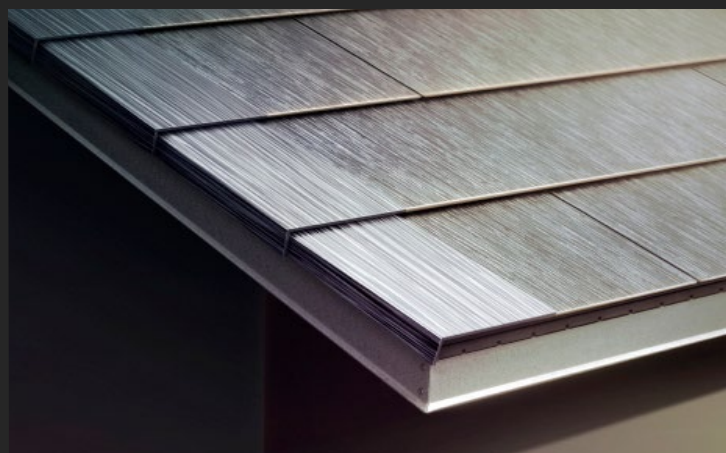
Energy independence with Powerwall

Combine a Solar Roof with Powerwall to use solar energy at night, rely less on utility power and back up your home during a grid outage



Customized For Your Home

Custom designed flashings and ridgecaps fit around your home's unique design and roof pitch while accentuating the Solar Roof tiles and ensuring maximum weather-proofing. The end result is a roof that looks better and lasts longer.



Beautifully Functional



Heat vents are painted or replaced to ensure weatherization and ventilation is maintained



Waste vents and other roof obstructions can be accommodated into your design



Skylight flashings are replaced or modified to match your new Solar Roof aesthetic

Installation Overview

Your Solar Roof proposal includes all hardware and turnkey installation of Solar Roof. The installation can be broken down into the following steps:



Removal of Current Roof and Structural Upgrades

We will remove your existing roof down to the decking and make any required structural repairs

Waterproofing and Flashing

A waterproofing membrane and flashings are installed

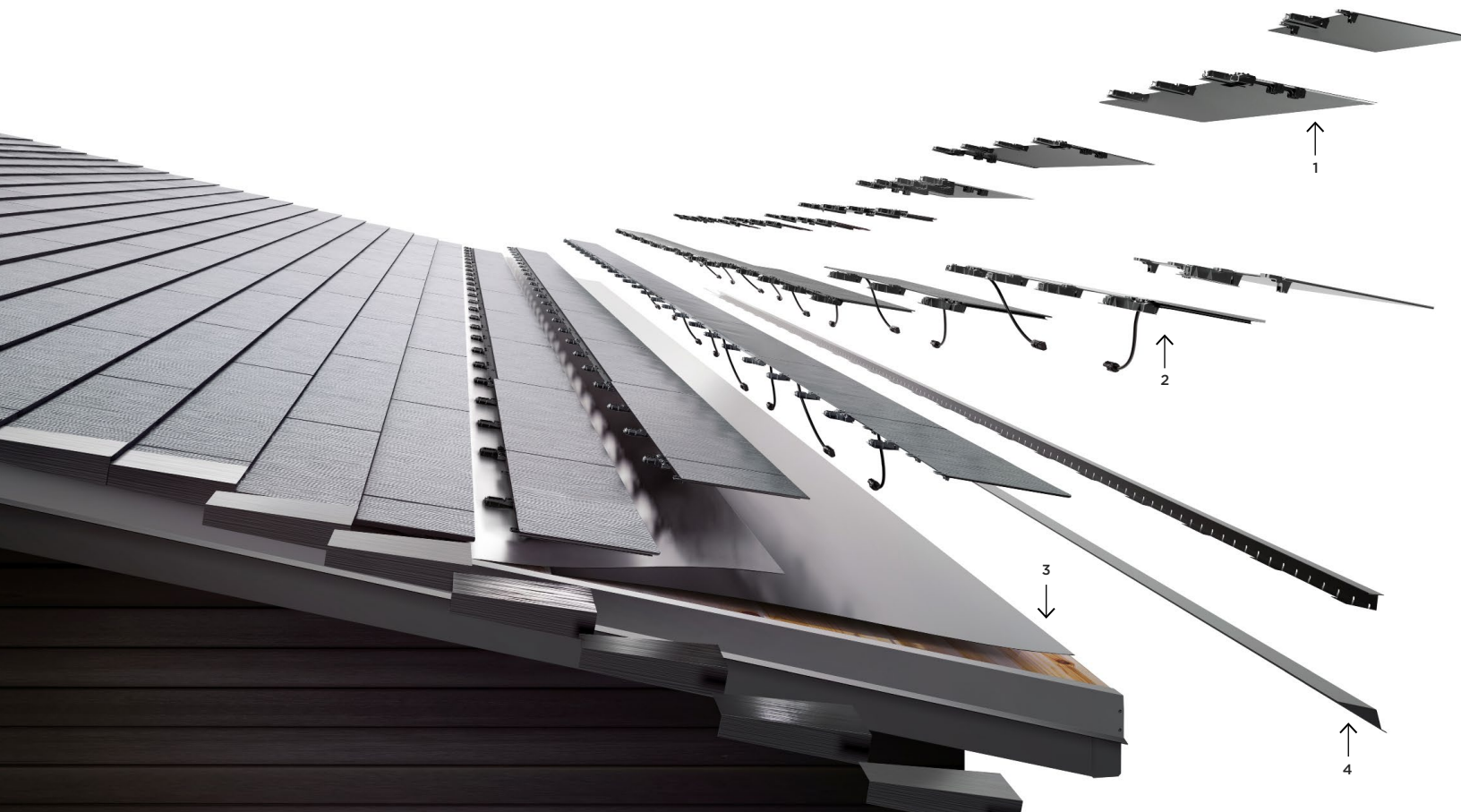
Solar Roof and Powerwall Installation

Tiles with and without solar cells will be installed to your specified system size. Solar Roof and any Powerwalls will be connected to your home electrical system

System Commissioning and Utility Approvals

Tesla commissions your Solar Roof and arrange all

- 1 Textured Solar Roof tiles
- 2 Solar Roof PV tiles with wiring
- 3 Weatherproofing underlayment
- 4 Flashing



Next Steps



Deposit

Place a \$100 refundable deposit to get started. This will be applied to the purchase price of your Solar Roof

Phone call

A Tesla product specialist will contact you once Solar Roof is available in your region and discuss your home energy needs

Review your Solar Roof order and design options

Your agreement includes your final hardware and installation pricing for your Solar Roof and Powerwall system, if applicable

Home energy assessment

If not already completed, we will schedule a site visit confirm your design and identify any additional home improvements required.

Schedule your installation

After you approve your order, we'll submit for permits and utility approval to install your Solar Roof. Once we receive these, we'll reach out and schedule your installation

Installation

Installation time is dependent on the size and complexity of your roof, but most installations take approximately one week to complete. After installation, you can start using Solar Roof when the utility provides Permission to Operate (PTO). PTO requirements vary by region and utility.

Download the app

Once the system is installed, you can download the Tesla mobile app to monitor your Powerwall and home energy use in real-time, anywhere

Ongoing support

Your Solar Roof has a 25-year solar module, tile and weatherization warranty. We are here to support you with any questions during that time. You can reach us at **(877) 798-3752**



