

HISTORIC AND DESIGN REVIEW COMMISSION

June 07, 2023

HDRC CASE NO: 2023-204
ADDRESS: 2310 W Kings Hwy
LEGAL DESCRIPTION: NCB 9076 BLK LOT 25
ZONING: R-6, H
CITY COUNCIL DIST.: 7
DISTRICT: Monticello Park Historic District
APPLICANT: Trenden Martinez | Jorden Global LLC
OWNER: Katherine Smith
TYPE OF WORK: New construction of an ADU
APPLICATION RECEIVED: May 19, 2023
60-DAY REVIEW: July 18, 2023
CASE MANAGER: Bryan Morales

REQUEST:

The applicant is requesting a Certificate of Appropriateness for approval to construct a one-story accessory, 399 sf dwelling unit in the backyard.

APPLICABLE CITATIONS:

Historic Design Guidelines, Chapter 3, Guidelines for Additions

1. Massing and Form of Residential Additions

A. GENERAL

- i. *Minimize visual impact*—Site residential additions at the side or rear of the building whenever possible to minimize views of the addition from the public right-of-way. An addition to the front of a building would be inappropriate.
- ii. *Historic context*—Design new residential additions to be in keeping with the existing, historic context of the block. For example, a large, two-story addition on a block comprised of single-story homes would not be appropriate.
- iii. *Similar roof form*—Utilize a similar roof pitch, form, overhang, and orientation as the historic structure for additions.
- iv. *Transitions between old and new*—Utilize a setback or recessed area and a small change in detailing at the seam of the historic structure and new addition to provide a clear visual distinction between old and new building forms.

B. SCALE, MASSING, AND FORM

- i. *Subordinate to principal facade*—Design residential additions, including porches and balconies, to be subordinate to the principal façade of the original structure in terms of their scale and mass.
- ii. *Roof top additions*—Limit rooftop additions to rear facades to preserve the historic scale and form of the building from the street level and minimize visibility from the public right-of-way. Full-floor second story additions that obscure the form of the original structure are not appropriate.
- iii. *Dormers*—Ensure dormers are compatible in size, scale, proportion, placement, and detail with the style of the house. Locate dormers only on non-primary facades (those not facing the public right-of-way) if not historically found within the district.
- iv. *Footprint*—The building footprint should respond to the size of the lot. An appropriate yard to building ratio should be maintained for consistency within historic districts. Residential additions should not be so large as to double the existing building footprint, regardless of lot size.
- v. *Height*—Generally, the height of new additions should be consistent with the height of the existing structure. The maximum height of new additions should be determined by examining the line-of-sight or visibility from the street. Addition height should never be so contrasting as to overwhelm or distract from the existing structure.

3. Materials and Textures

A. COMPLEMENTARY MATERIALS

- i. *Complementary materials*—Use materials that match in type, color, and texture and include an offset or reveal to distinguish the addition from the historic structure whenever possible. Any new materials introduced to the site as a result of an addition must be compatible with the architectural style and materials of the original structure.
- ii. *Metal roofs*—Construct new metal roofs in a similar fashion as historic metal roofs. Refer to the Guidelines for Alternations and Maintenance section for additional specifications regarding metal roofs.

iii. *Other roofing materials*—Match original roofs in terms of form and materials. For example, when adding on to a building with a clay tile roof, the addition should have a roof that is clay tile, synthetic clay tile, or a material that appears similar in color and dimension to the existing clay tile.

B. INAPPROPRIATE MATERIALS

i. *Imitation or synthetic materials*—Do not use imitation or synthetic materials, such as vinyl siding, brick or simulated stone veneer, plastic, or other materials not compatible with the architectural style and materials of the original structure.

C. REUSE OF HISTORIC MATERIALS

i. *Salvage*—Salvage and reuse historic materials, where possible, that will be covered or removed as a result of an addition.

4. Architectural Details

A. GENERAL

i. *Historic context*—Design additions to reflect their time while respecting the historic context. Consider character-defining features and details of the original structure in the design of additions. These architectural details include roof form, porches, porticos, cornices, lintels, arches, quoins, chimneys, projecting bays, and the shapes of window and door openings.

ii. *Architectural details*—Incorporate architectural details that are in keeping with the architectural style of the original structure. Details should be simple in design and compliment the character of the original structure. Architectural details that are more ornate or elaborate than those found on the original structure should not be used to avoid drawing undue attention to the addition.

iii. *Contemporary interpretations*—Consider integrating contemporary interpretations of traditional designs and details for additions. Use of contemporary window moldings and door surroundings, for example, can provide visual interest while helping to convey the fact that the addition is new.

5. Mechanical Equipment and Roof Appurtenances

A. LOCATION AND SITING

i. *Visibility*—Do not locate utility boxes, air conditioners, rooftop mechanical equipment, skylights, satellite dishes, cable lines, and other roof appurtenances on primary facades, front-facing roof slopes, in front yards, or in other locations that are clearly visible from the public right-of-way.

ii. *Service Areas*—Locate service areas towards the rear of the site to minimize visibility from the public right-of-way. Where service areas cannot be located at the rear of the property, compatible screens or buffers will be required.

B. SCREENING

i. *Building-mounted equipment*—Paint devices mounted on secondary facades and other exposed hardware, frames, and piping to match the color scheme of the primary structure or screen them with landscaping.

ii. *Freestanding equipment*—Screen service areas, air conditioning units, and other mechanical equipment from public view using a fence, hedge, or other enclosure.

iii. *Roof-mounted equipment*—Screen and set back devices mounted on the roof to avoid view from public right-of-way.

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.

Historic Design Guidelines, Chapter 4, New Construction

1. Building and Entrance Orientation

A. FAÇADE ORIENTATION

- i. *Setbacks*—Align front facades of new buildings with front facades of adjacent buildings where a consistent setback has been established along the street frontage. Use the median setback of buildings along the street frontage where a variety of setbacks exist. Refer to UDC Article 3, Division 2. Base Zoning Districts for applicable setback requirements.
- ii. *Orientation*—Orient the front façade of new buildings to be consistent with the predominant orientation of historic buildings along the street frontage.

B. ENTRANCES

- i. *Orientation*—Orient primary building entrances, porches, and landings to be consistent with those historically found along the street frontage. Typically, historic building entrances are oriented towards the primary street.

2. Building Massing and Form

A. SCALE AND MASS

- i. *Similar height and scale*—Design new construction so that its height and overall scale are consistent with nearby historic buildings. In residential districts, the height and scale of new construction should not exceed that of the majority of historic buildings by more than one-story. In commercial districts, building height shall conform to the established pattern. If there is no more than a 50% variation in the scale of buildings on the adjacent block faces, then the height of the new building shall not exceed the tallest building on the adjacent block face by more than 10%.
- ii. *Transitions*—Utilize step-downs in building height, wall-plane offsets, and other variations in building massing to provide a visual transition when the height of new construction exceeds that of adjacent historic buildings by more than one-half story.
- iii. *Foundation and floor heights*—Align foundation and floor-to-floor heights (including porches and balconies) within one foot of floor-to-floor heights on adjacent historic structures.

B. ROOF FORM

- i. *Similar roof forms*—Incorporate roof forms—pitch, overhangs, and orientation—that are consistent with those predominantly found on the block. Roof forms on residential building types are typically sloped, while roof forms on non-residential building types are more typically flat and screened by an ornamental parapet wall.

C. RELATIONSHIP OF SOLIDS TO VOIDS

- i. *Window and door openings*—Incorporate window and door openings with a similar proportion of wall to window space as typical with nearby historic facades. Windows, doors, porches, entryways, dormers, bays, and pediments shall be considered similar if they are no larger than 25% in size and vary no more than 10% in height to width ratio from adjacent historic facades.
- ii. *Façade configuration*—The primary façade of new commercial buildings should be in keeping with established patterns. Maintaining horizontal elements within adjacent cap, middle, and base precedents will establish a consistent street wall through the alignment of horizontal parts. Avoid blank walls, particularly on elevations visible from the street. No new façade should exceed 40 linear feet without being penetrated by windows, entryways, or other defined bays.

D. LOT COVERAGE

- i. *Building to lot ratio*—New construction should be consistent with adjacent historic buildings in terms of the building to lot ratio. Limit the building footprint for new construction to no more than 50 percent of the total lot area, unless adjacent historic buildings establish a precedent with a greater building to lot ratio.

3. Materials and Textures

A. NEW MATERIALS

- i. *Complementary materials*—Use materials that complement the type, color, and texture of materials traditionally found in the district. Materials should not be so dissimilar as to distract from the historic interpretation of the district. For example, corrugated metal siding would not be appropriate for a new structure in a district comprised of homes with wood siding.

- ii. *Alternative use of traditional materials*—Consider using traditional materials, such as wood siding, in a new way to provide visual interest in new construction while still ensuring compatibility.
- iii. *Roof materials*—Select roof materials that are similar in terms of form, color, and texture to traditionally used in the district.
- iv. *Metal roofs*—Construct new metal roofs in a similar fashion as historic metal roofs. Refer to the Guidelines for Alterations and Maintenance section for additional specifications regarding metal roofs.
- v. *Imitation or synthetic materials*—Do not use vinyl siding, plastic, or corrugated metal sheeting. Contemporary materials not traditionally used in the district, such as brick or simulated stone veneer and Hardie Board or other fiberboard siding, may be appropriate for new construction in some locations as long as new materials are visually similar to the traditional material in dimension, finish, and texture. EIFS is not recommended as a substitute for actual stucco.

B. REUSE OF HISTORIC MATERIALS

Salvaged materials—Incorporate salvaged historic materials where possible within the context of the overall design of the new structure.

4. Architectural Details

A. GENERAL

- i. *Historic context*—Design new buildings to reflect their time while respecting the historic context. While new construction should not attempt to mirror or replicate historic features, new structures should not be so dissimilar as to distract from or diminish the historic interpretation of the district.
- ii. *Architectural details*—Incorporate architectural details that are in keeping with the predominant architectural style along the block face or within the district when one exists. Details should be simple in design and should complement, but not visually compete with, the character of the adjacent historic structures or other historic structures within the district. Architectural details that are more ornate or elaborate than those found within the district are inappropriate.
- iii. *Contemporary interpretations*—Consider integrating contemporary interpretations of traditional designs and details for new construction. Use of contemporary window moldings and door surroundings, for example, can provide visual interest while helping to convey the fact that the structure is new. Modern materials should be implemented in a way that does not distract from the historic structure.

5. Garages and Outbuildings

A. DESIGN AND CHARACTER

- i. *Massing and form*—Design new garages and outbuildings to be visually subordinate to the principal historic structure in terms of their height, massing, and form.
- ii. *Building size*—New outbuildings should be no larger in plan than 40 percent of the principal historic structure footprint.
- iii. *Character*—Relate new garages and outbuildings to the period of construction of the principal building on the lot through the use of complementary materials and simplified architectural details.
- iv. *Windows and doors*—Design window and door openings to be similar to those found on historic garages or outbuildings in the district or on the principal historic structure in terms of their spacing and proportions.
- v. *Garage doors*—Incorporate garage doors with similar proportions and materials as those traditionally found in the district.

B. SETBACKS AND ORIENTATION

- i. *Orientation*—Match the predominant garage orientation found along the block. Do not introduce front-loaded garages or garages attached to the primary structure on blocks where rear or alley-loaded garages were historically used.
- ii. *Setbacks*—Follow historic setback pattern of similar structures along the streetscape or district for new garages and outbuildings. Historic garages and outbuildings are most typically located at the rear of the lot, behind the principal building. In some instances, historic setbacks are not consistent with UDC requirements and a variance may be required.

6. Mechanical Equipment and Roof Appurtenances

A. LOCATION AND SITING

- i. *Visibility*—Do not locate utility boxes, air conditioners, rooftop mechanical equipment, skylights, satellite dishes, and other roof appurtenances on primary facades, front-facing roof slopes, in front yards, or in other locations that are clearly visible from the public right-of-way.
- ii. *Service Areas*—Locate service areas towards the rear of the site to minimize visibility from the public right-of-way.

B. SCREENING

- i. *Building-mounted equipment*—Paint devices mounted on secondary facades and other exposed hardware, frames, and piping to match the color scheme of the primary structure or screen them with landscaping.

- ii. *Freestanding equipment*—Screen service areas, air conditioning units, and other mechanical equipment from public view using a fence, hedge, or other enclosure.
- iii. *Roof-mounted equipment*—Screen and set back devices mounted on the roof to avoid view from public right-of-way.

7. 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.

Standard Specifications for Windows in New Construction

- GENERAL: New windows on additions should relate to the windows of the primary historic structure in terms of materiality and overall appearance. Windows used in new construction should be similar in appearance to those commonly found within the district in terms of size, profile, and configuration. While no material is expressly prohibited by the Historic Design Guidelines, a high-quality wood or aluminum-clad wood window product often meets the Guidelines with the stipulations listed below. Whole window systems should match the size of historic windows on property unless otherwise approved.
- SIZE: Windows should feature traditional dimensions and proportions as found within the district.
- SASH: Meeting rails must be no taller than 1.25". Stiles must be no wider than 2.25". Top and bottom sashes must be equal in size unless otherwise approved.
- DEPTH: There should be a minimum of 2" in depth between the front face of the window trim and the front face of the top window sash. This must be accomplished by recessing the window sufficiently within the opening or with the installation of additional window trim to add thickness.
- TRIM: Window trim must feature traditional dimensions and architecturally appropriate casing and sloped sill detail. Window track components such as jamb liners must be painted to match the window trim or concealed by a wood window screen set within the opening.
- GLAZING: Windows should feature clear glass. Low-e or reflective coatings are not recommended for replacements. The glazing should not feature faux divided lights with an interior grille. If approved to match a historic window configuration, the window should feature real exterior muntins.
- COLOR: Wood windows should feature a painted finished. If a clad product is approved, white or metallic manufacturer's color is not allowed, and color selection must be presented to staff.

FINDINGS:

- a. The property at 2310 W Kings Hwy includes a one-story Classical Ranch style residence built c. 1954. The house is clad in yellow brick with a low-sloped, cross-gabled composition shingle roof and features painted shutters alongside the front windows. It has a small inset porch with a decorative classical column. One-over-one wood windows appear as single and paired or triple ganged. This property contributes to the Monticello Park historic district.

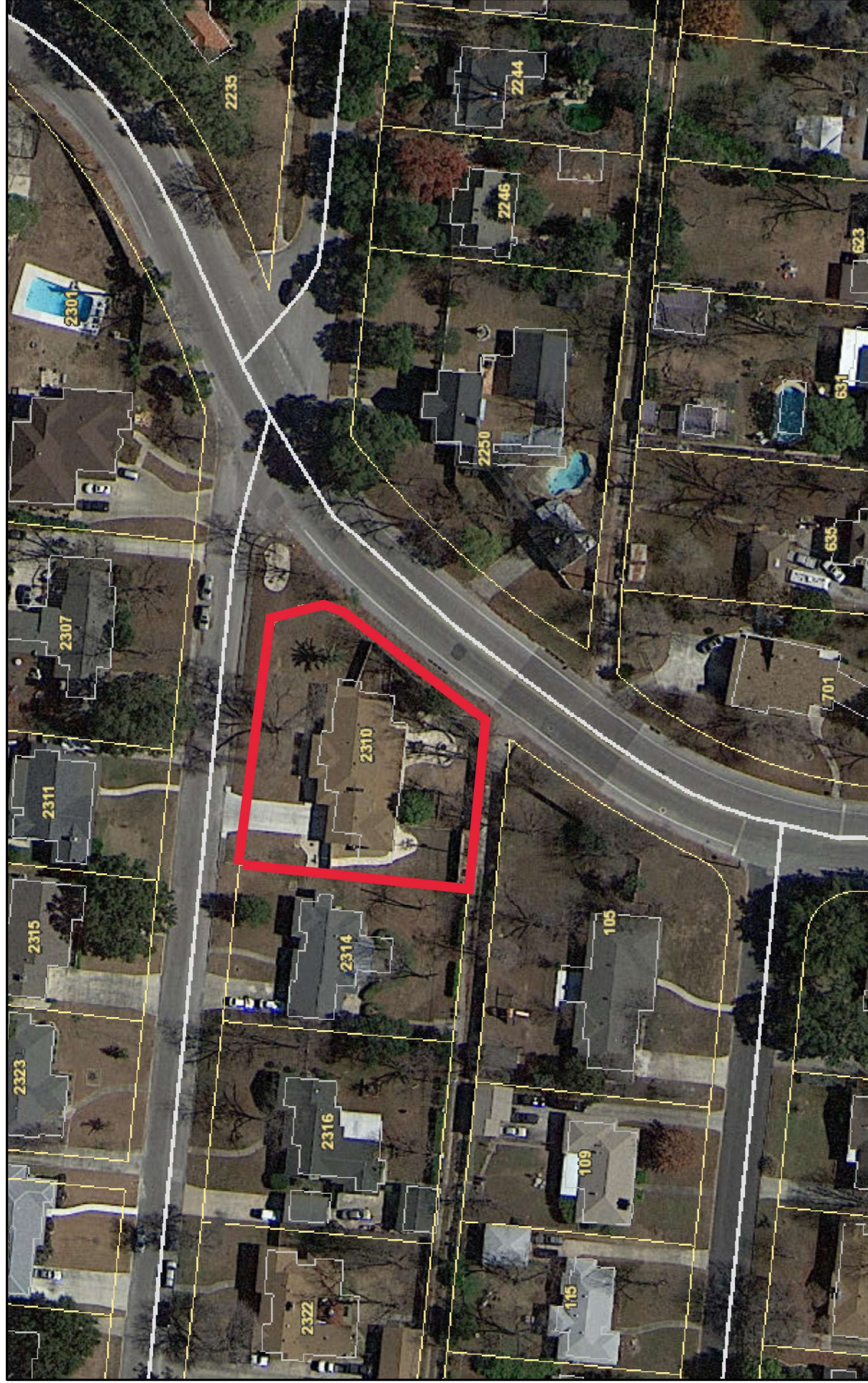
- b. **NEW CONSTRUCTION (ACCESORY STRUCTURE)** – The applicant is requesting to construct a one-story accessory dwelling unit (ADU) at the rear of the property. The Guidelines for New Construction 5.A. notes that new outbuildings should be visually subordinate to the primary historic structure in terms of their height, massing, and form, and should be no larger in plan than forty percent of the primary historic structure’s footprint. The existing primary structure on the lot features a footprint of 3,733 square feet and one story in height. The proposed one-story accessory structure features a total footprint of approximately 399 square feet, or approximately 11% of the primary structure’s footprint. Accessory structures on the block are predominately single story. Staff finds the proposed height and general massing conforms to Historic Design Guidelines.
- c. **ORIENTATION & SETBACKS** – The applicant has proposed both an orientation and setback for the new accessory structure that are consistent with the Guidelines for New Construction 5.B.
- d. **ARCHITECTURAL DETAILS (MATERIALS)** – The Guidelines for New Construction 5.A.iii. and iv. note that new accessory structures should relate to the period of construction of the primary historic structure on the lot by using complementary materials and simplified architectural details. Staff finds the proposed composition shingle roof and installation of fiber cement board siding generally conforms to guidelines. New Construction 2.B.i states that roof forms—pitch, overhangs, and orientation—consistent with those predominately found on the block should be incorporated. Staff finds the proposed gable roof and its pitch conforms to guidelines.
- e. **ARCHITECTURAL DETAILS (FENESTRATION PATTERN)** – The applicant is proposing to install one sliding clerestory window on the front elevation and four one-over-one single sash windows on the front, right, and left elevations. The Guidelines for New Construction 2.C.i. related to window and door openings stipulates to incorporate window and door openings with a similar proportion of wall to window space as typical with nearby historic facades. Staff finds the proposed fenestration pattern is generally consistent with the Guidelines; however, the clerestory window should be replaced with a more traditional one-over-one window.
- f. **WINDOWS (MATERIALS)** – The applicant proposes one vinyl sliding clerestory window on the front elevation and four vinyl one-over-one single sash windows on the front, right, and left elevations. Windows on the primary historic structure are predominately rectangular one-over-one operable wood windows that appear individually or in paired or triple ganged. Per Standard Specifications for Windows in Additions and New Construction, new windows on additions should relate to the windows of the primary historic structure in terms of materiality and overall appearance. Windows used in new construction should be similar in appearance to those commonly found within the district in terms of size, profile, and configuration. Staff finds the proposed window material does not conform to guidelines.

RECOMMENDATION:

Staff recommends approval of the request, based on findings a through f, with the following stipulations:

- i. That the applicant install the windows to have the same head height as the front door.
- ii. That the applicant use a more traditional window configuration rather than the proposed clerestory window on the front elevation.
- iii. That the applicant use a wood or aluminum-clad wood windows rather than the proposed vinyl window material and submits updated specifications to staff for review and approval. The windows should feature an inset of two (2) inches within facades and should feature profiles that are found historically within the immediate vicinity. Meeting rails must be no taller than 1.25” and stiles no wider than 2.25”. White manufacturer’s color is not allowed, and color selection must be presented to staff. There should be a minimum of two inches in depth between the front face of the window trim and the front face of the top window sash. This must be accomplished by recessing the window sufficiently within the opening or with the installation of additional window trim to add thickness. Window trim must feature traditional dimensions and architecturally appropriate sill detail. Window track components must be painted to match the window trim or concealed by a wood window screen set within the opening.
- iv. That the applicant install fiber cement board siding with a reveal not exceeding six inches in width and feature a smooth texture.
- v. That the applicant adhere to setback requirements.

City of San Antonio One Stop



June 1, 2023

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0 0.0125 0.025 0.05 km

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ALAMO TITLE COMPANY

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G. 0231

KING'S HIGHWAY W—Contd

- 802Bunch T Howard
- 803Holingron Chas G
- 806Lovelace Lum M
- 807Homburg Fred A
- 807Reser Thos H
- 808Kitchen Emma A Mrs
- 810Schulze Clarence H
- 811 No return
- 813 Crawford Floyd P
- 814Vandiver Wm P
- 815Hicks Perry M
- 818Sanders Carl B
- 819Bryan Lola
- 822 Pollard Earl C
- 823Zimmer Enla M Mrs
- 824Warner Mollie Mrs
- 826Lock Allie S
- 827Crow John J
- 830McDonald Jos R
- 831Hlesser Louise Mrs
- 834Foote Gladys U Mrs
- 835Galvan Joe F
- 838Robinson Lottie H Mrs
- 902MI Lady's Beauty Salon
- 903Poynter Ray E
- 906Ryvals Chas E
- 907Singer Leo
- 910Hubbard F Ray
- 910 Monroe Bob
- 911Smith Faye M Mrs
- 914Wenzler John F
- 915Huichinson Bertha C Mrs
- 916Gaeljen Theo T
- 917Griffin Thos N
- 922Griffin Electric Co
- 923Gramer Lonnie R
- 923Cameron Ophelia B Mrs
- 924 Flowers Forest
- 925Autry Monte

San Antonio av intersects

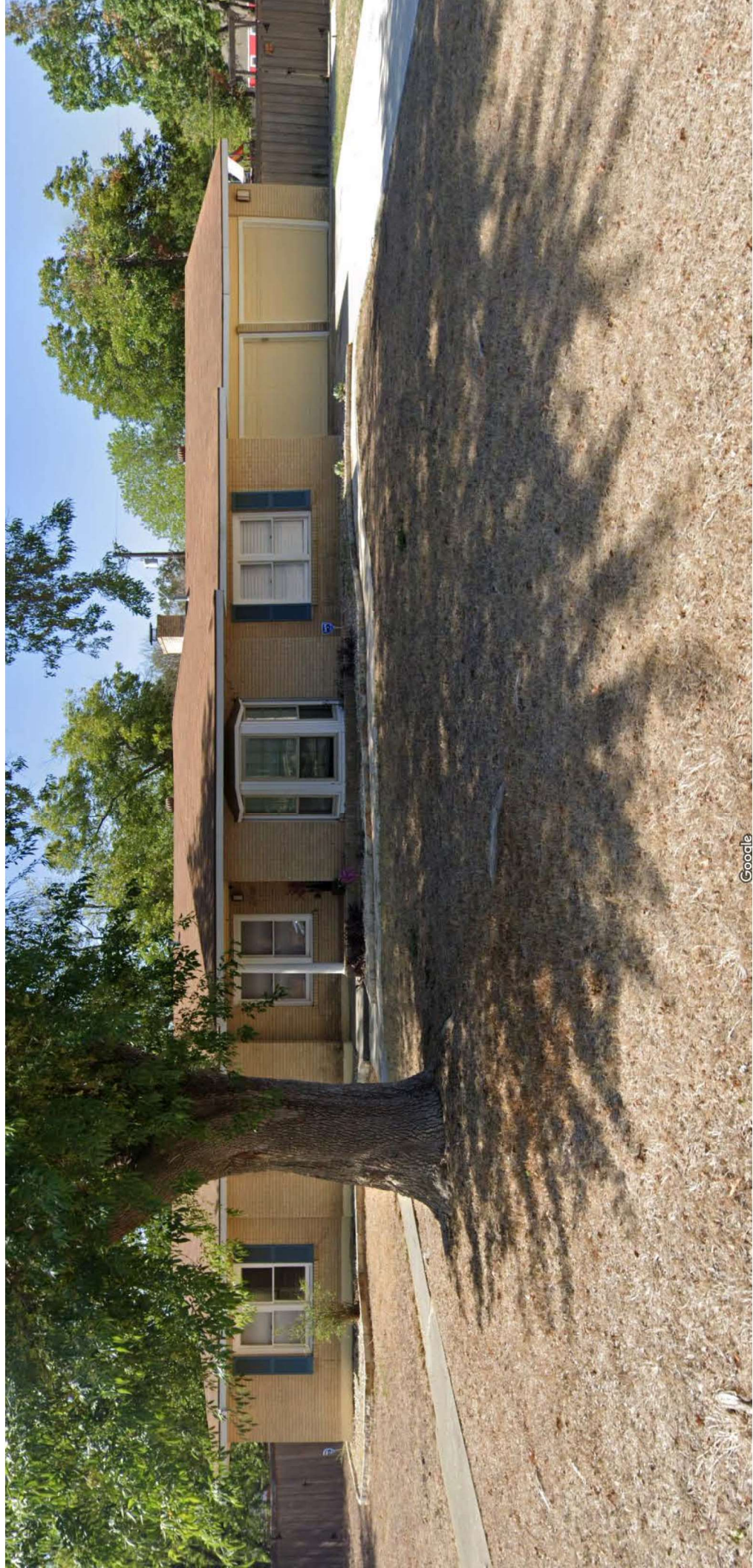
- 1409Terrell Gordon R
- 1410Cavanaugh Woodrow W
- 1413Barberio Fidel J
- 1414Farquhar Saml H
- 1418Balsing Claude L
- 1422DeLongue Chas H
- 1426Daugen Danl P
- 1430Jenkins Basil M
- 1431Mireles Fernando L
- 1434Cooper Wm L
- 1435Keyes Grace G Mrs
- 1438Rhin Jas L
- 1439Zoellner Harold D
- 1442 Vacant
- 1443Byrd Kenneth R
- 1445Lawn Wm A
- 1446Myles Mary A Mrs Rev
- 1502Longist Wm P
- 1503Henke Marguerite Mrs
- 1506Extence Geo W
- 1507Cotter Margt W Mrs
- 1510Herbst Albert F
- 1511Klaerner Hilmar H
- 1514Wetzel Ruth Mrs
- 1515Baer Cecil A
- 1518Sakian Nizak A
- 1519Sakian Jos
- 1522Cockrell Saml J
- 1523Dunlap Nettie P Mrs
- 1526 Vacant
- 1527Adams Lionel C
- 1530Post Manfred A
- 1531Livingston Jas R
- 1533LaFosse Leopold
- 1534Davenport Elz Mrs
- 1535Torres Fred C
- 1538Taylor Mattie Mrs
- 1539Mazzurana Eugene B Jr

Montrose blvd intersects


- 2000Nixon Park I Jr
- 2001Ansley Nellie Mrs
- 2006Edward Harry J Jr
- 2007Ehrler Conrad
- 2008 Vacant
- 2010Rodgers Ilyne S Mrs
- 2011Moyanah Kate Mrs
- 2012Alexander Nettie Mrs
- 2014Nelson Vyna J Mrs
- 2015Carpenter Ethel Mrs
- 2017Heron Madelyn J
- 2019Perry Pomp
- 2020Woodlief J C
- 2021Ashenfelter Earl C

KING'S HIGHWAY W—Contd

- 2307Abiasoli Jos J Jr
- 2310Jones Melvin D
- 2311Traylor Leonard C
- 2314Schaup Jack
- 2316Davis Field M
- 2322Max Harry L
- 2323Travis Milton R
- 2327Dyer Jas A
- 2330Brody Marvin B
- 2331Rosin Morris
- 2334Schumann John M
- 2335Hodge John T
- 2338Griffin Mauldin P
- 2339Lecocke Earnest J
- 2342Filler Harry
- 2343Whitten Shahl A
- 2346Shellhorn Edw
- 2347Sparks Chas E
- 2351Casseb Solomon J Jr
- 2402Scott Walter E
- 2403Kleibens Jas M
- 2406Preston Mabel Mrs
- 2407Kretzmeier Norman
- 2410Bradford Holly O
- 2411Gerhardt Jas M
- 2414Reynolds C Swanson
- 2418Jennings Walter P
- 2419Miller Gerd
- 2422Moeller Henry H
- 2423Levine Abr
- 2427Scott W Vernon
- 2429 Vacant
- 2430Mewhinney Preston B
- 2431Jacobson Albert
- 2434Hasse Eric J
- 2435DeMarco Michl J
- 2439Jud Alice M Mrs



in collaboration with:



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STELLAR
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office@interstellar.design

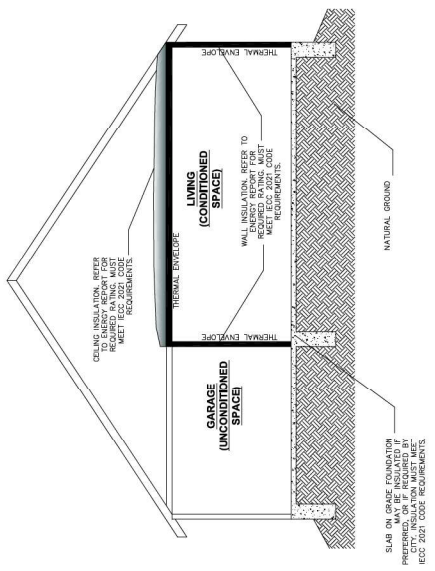
New Casita @
Builder: Jorden Global LLC
2310 W. Kings Hwy, San Antonio, TX

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CARRASCO
AIA ASSOCIATE

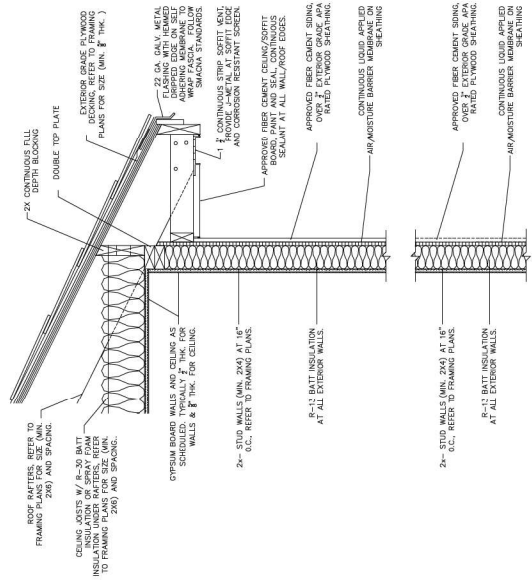


DATE DRAWN:	4.26.23
REVISIONS:	DATE:
1	NOTES (05.19.23)
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3	
4	
5	

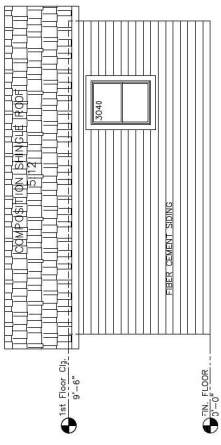
A-2	
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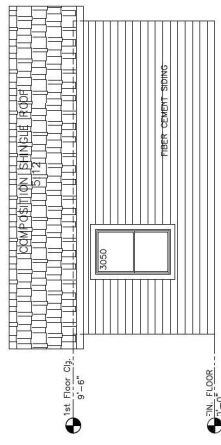
TYPICAL THERMAL ENVELOPE DIAGRAM
N.T.S.



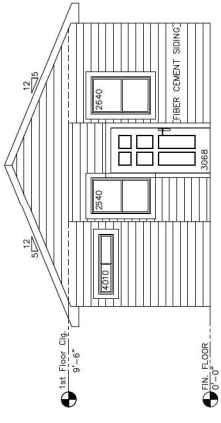
TYPICAL WALL SECTION DETAIL (SIDING)
N.T.S.



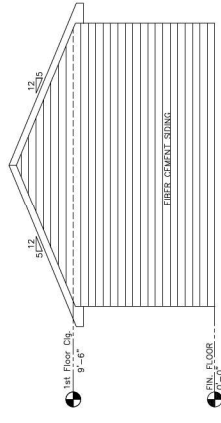
RIGHT ELEVATION
1/4" = 1'-0"



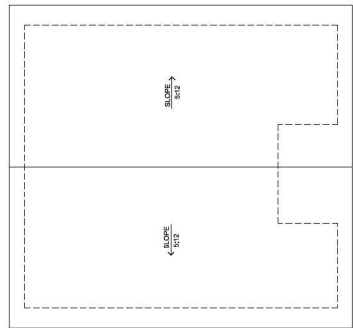
LEFT ELEVATION
1/4" = 1'-0"



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



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



ROOF PLAN
1/4" = 1'-0"

NOTE: ARTURO CARRASCO DESIGN HEREBY RESERVES THE RIGHT TO MAKE ANY CHANGES TO THESE PLANS & DESIGNS. THESE PLANS ARE ADDRESS-SPECIFIC, AND ANY CHANGES TO THE ADDRESS OR SITE CONDITIONS, IN ANY MANNER, ARE THEY TO BE ASSIGNED TO ANY THIRD PARTY. ANY CHANGES TO THESE PLANS MUST BE IN WRITING. ARTURO CARRASCO DESIGN DOES NOT EXPRESS WRITTEN PERMISSION TO REPRODUCE OR TRANSMIT THESE PLANS OR ANY PART THEREOF. THESE PLANS ARE MEANT TO SERVE AS A GENERAL SET OF PLANS AND SHOULD BE USED ONLY AS A GUIDELINE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL NECESSARY PERMITS AND HIRE LICENSED TRADE CONTRACTORS TO BUILD THE HOUSE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND HIRE LICENSED TRADE CONTRACTORS TO BUILD THE HOUSE. CONSTRUCTION OF THIS HOUSE TO BE IN COMPLIANCE WITH THE LOCAL AND ALL LOCAL CODES.



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Wayne Lowe, P.E.
WAYNE LOWE, P.E.
09/02/2023
DATE

CUSTOM CASITA
JORDEN GLOBAL, LLC
FOUNDATION DESIGNS

PROJECT: 37
ADDRESS: 2301 W. KINGS HWY.
LOT: BLOCK: N.E.B.L.
SUBDIVISION:
CITY: SAN ANTONIO, TX
COUNTY: BEXAR

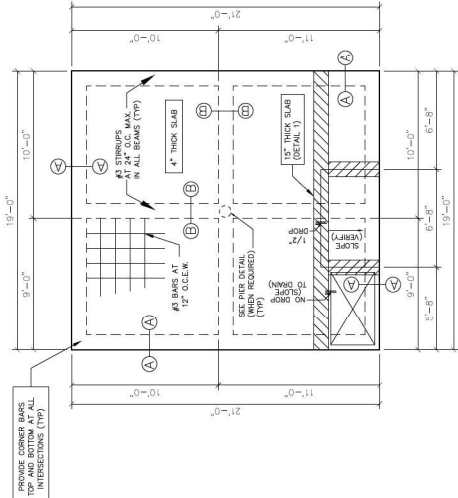
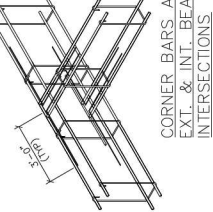
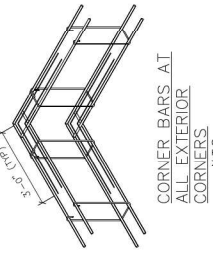
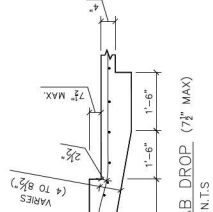
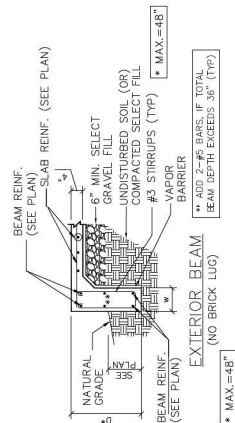
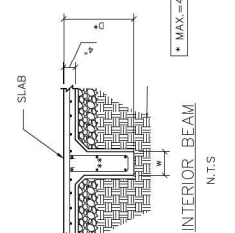
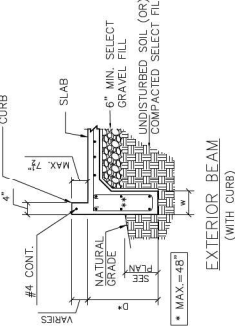
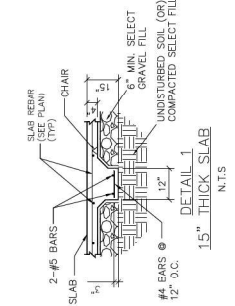
JOBA# = USE23-148
DRAWN BY: AC
CHECKED BY: ME
DATE: 25-06-23

REVISION 1:
BY: DATE:

REVISION 2:
BY: DATE:

S1.0

SEE S1.1 FOR TYPICAL SLAB FOUNDATION DETAILS



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

NOTES:
1. Contractor shall not use these plans to layout forms. Contractor shall verify all dimensions and locations of all reinforcement bars and report any discrepancies to the Engineer/Architect in writing, prior to the start of construction.

Foundation Movement: This foundation has been designed with the assumption that movement can be expected. The design is based on the applicable building codes and specifications.

NOTES:
These drawings are intended to show only structural foundation plans and details. Refer to the architectural, mechanical, plumbing, electrical and other drawings for the location and size of doors, openings, stairs, elevators, pools, etc.

NOTE:
THIS FOUNDATION HAS BEEN DESIGNED BASED ON THE ASSUMPTION THAT THE BUILDING SHALL BE PREPARED AS RECOMMENDED IN THE GEO-TECHNICAL REPORT, FOR THIS PROJECT.

NOTE:
ALL EXTERIOR GRADE BEAMS MUST BE FOUNDED AT LEAST 30" BELOW NATURAL, UNDISTURBED SOILS, UNLESS NOTED OTHERWISE.

BEAM SCHEDULE			
BEAM NUMBER	DEPTH (MIN.)	BEAM STEEL TOP	BEAM STEEL BOTTOM
A-A	36"	2-#6	2-#7
B-B	30"	2-#6	2-#7

TOTAL SLAB AREA= 399 SQ. FT.



FRAMING DESIGNS

JOB #. = USE 3-148
 DRAWN BY. AC
 CHECKED BY. WL
 DATE. 35-08-23

REVISION 2: _____
BY: _____
DATE: _____

S2.0

1. DEAD LOADS:	
FLOORS	10 PSF
ROOF	10 PSF, SHINGLE
CEILING	5 PSF, 10 PSF GARAGE
2. LIVE LOADS:	
FLOORS	40 PSF
ROOF	20 PSF
CEILING	10 PSF, 20 PSF GARAGE

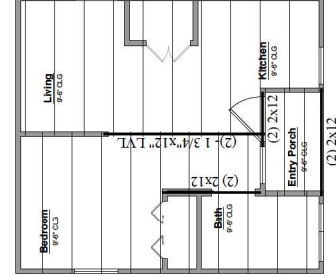
ROOF RAFTER

WOOD BEAM

PURLIN

ALL RAFTERS ARE 2X6 S.P. #2 @ 24" O.C., U.N.O.

ALL CEILING JOISTS ARE S.P. #2, 2X6 @ 24" O.C., U.N.



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

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

Pin	Depth	Stability	Maximum force on the pin
(1)–(2) pins	11° & 16°	2. revs 160 kN/meter sticks 12° 0.6°	620 psi
	14° & 16°	3. revs 160 kN/meter sticks 12° 0.6°	620 psi
	14° & 16°	3. revs 160 kN/meter sticks 12° 0.6°	620 psi
(3)–(4) pins	14° & 16°	3. revs 160 kN/meter sticks 12° 0.6°	525 psi
	14° & 16°	3. revs 160 kN/meter sticks 12° 0.6°	525 psi
(5)–(6) pins & (7)–(8) pins	20° & 24°	3. revs 160 kN/meter sticks 12° 0.6°	565 psi
	20° & 24°	3. revs 160 kN/meter sticks 12° 0.6°	565 psi
(9)–(10) pins & (11)–(12) pins	20° & 24°	3. revs 160 kN/meter sticks 12° 0.6°	525 psi
	20° & 24°	3. revs 160 kN/meter sticks 12° 0.6°	525 psi

For toploaded beams and beams with side loads with less than those shown	Flange	Depth	Noting	Maximum Uplift Load from One Side
$C2^{\circ}$ - P pins	$1\frac{1}{2}'' \times 8$ in.	2' revs. 16d nails/water table 12" o.c.	400 plf	
	$1\frac{1}{2}'' \times 10''$	3' revs. 16d nails/water table 12" o.c.	600 plf	
	$1\frac{1}{2}'' \times 12$ in.	2' revs. 16d nails/water table 12" o.c.	450 plf	
	$1\frac{1}{2}'' \times 14$ in.	3' revs. 16d nails/water table 12" o.c.	525 plf	
$C2^{\circ}$ - P pins	$1\frac{1}{2}'' \times 10''$	3' revs. 16d nails/water table 12" o.c.	375 plf	
	$1\frac{1}{2}'' \times 12$ in.	2' revs. 16d nails/water table 12" o.c.	450 plf	
	$1\frac{1}{2}'' \times 14$ in.	3' revs. 4 in. bolts (or 50222500 screws)	560 plf	
	$1\frac{1}{2}'' \times 16$ in.	2' revs. 4 in. bolts (or 50222500 screws)	630 plf	
$C4^{\circ}$ - P pins & $C4^{\circ}$ - P pins	$2'' \times 8$ in.	2' revs. 8 in. bolts (or 50222500 screws)	300 plf	
	$2'' \times 10''$	2' revs. 8 in. bolts (or 50222500 screws) or 4" C.C. staggered every 8"	500 plf	

HEADER NOTES:

1. ALL HEADERS SHALL BE S.P. #2 (OR) EQUAL.
2. NO POINT LOADS ARE ALLOWED ABOVE HEADER
3. THIS SCHEDULE IS ADDRESS SPECIFIC USE ONLY
4. MAX. LOADS CONSIDERED
 ROOF: 20 PSF LIVE LOAD & 10 PSF DEAD LOAD
 CEILING: 10 PSF LIVE LOAD & 5 PSF DEAD LOAD
5. TRIBUTARY WIDTH SHALL NOT EXCEED 20 FEET

1. ALL HIP, VALLEY, AND RIDGE MEMBERS SHALL BE 2X8 S.Y.P., NO. 2, UNLESS NOTED OTHERWISE AND SUPPORTED @ $\pm 8'-0"$ O.C., U.N.O.
2. VERIFY ROOF PITCH ON SITE.
3. PURLINS SHALL MATCH THE SIZE OF THE BATTENS SUPPORTED AND SHALL BE SUPPORTED @ $4'-0"$ O.C. MAX.
4. SEE "HEADER SCHEDULE" FOR HEADER SIZES AT OPENINGS.



1 row of SDW screws @ 8" O.C.
A(2) - For (2)x studs, use SDW2230
A(3) - For (3)x studs, use SDW2240
A(4) - For (4)x studs, use SDW2260
A(5) - For (5)x studs, use SDW2263
A(6) - For (6)x studs, use SDW2263

DETAIL A
BUILT-UP COLUMN



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Penny Wayne Lowe, P.E.
PENNY WAYNE LOWE, P.E.
09/01/2023
DATE

JORDEN GLOBAL, LLC

CUSTOM CASITA

WALL BRACING DESIGNS

ADDRESS: 2301 W. KINGS HWY.
LOT: _____ BLOCK: _____ N.C.B.: _____
SUBDIVISION: _____
CITY: SAN ANTONIO, TX
COUNTY: BEXAR

JOE# = UJ223-148
DESIGN BY: AC
CHECKED BY: ME
DATE: 01-05-23

REVISION 1:
BY: _____
DATE: _____

REVISION 2:
BY: _____
DATE: _____

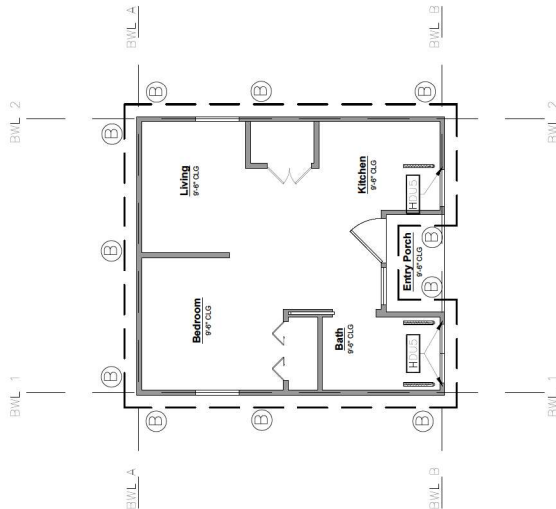
S2.1

NOTES:

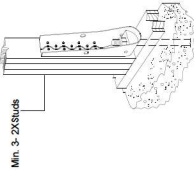
1. TIA LET-IN BRACING: ATTACH CONTINUOUS DIAGONAL TIA (6" STD) LET-IN TO TOP & BOTTOM PLATES AND INTERMEDIATE STUDS. ATTACH W/2" NAILS AT EACH PLATE AND STUDS. END OF LET-IN AT TOP PLATE SHOULD BE CLOSE TO THE BUILDING CORNER UNLESS WHOLEY OTHERWISE. INSTALL BRACE AND STUDS WITH SPACING LESS THAN 90 DEGREE ANGLE TO THE HORIZONTAL. ARROW INDICATES TENSION SIDE OF TIA.
2. SIMPSON POWER BRACING MAY BE USED IN PLACE OF THE TIA LET-IN WHEN THE FOLLOWING CONDITIONS ARE MET:
 - IF PLATE-SIMPSON POWER: MIN. 6" OF WALL LENGTH REQUIRED.
 - IF PLATE-SIMPSON POWER: MIN. 6" OF WALL LENGTH REQUIRED.
 - IF PLATE-SIMPSON POWER: MIN. 10' WALL REQUIRED.ATTACH SIMPSON POWER AS SPECIFIED BY THE MANUFACTURER.
3. FOR BRACING - ATTACH TIA TO STUDS W/ 2" NAILS @ 4" O.C. AT ALL SHEADING PANEL EDGES (MINIMUM BRACING AS REQUIRED) AND 12" O.C. ALONG INTERMEDIATE STUDS. NO NAILS SHOULD BE PLACED NO LESS THAN 3/4" FROM THE PANEL EDGE.
4. ATTACH SIMPSON POWER STRAPS AT THE EXTERIOR WALLS BETWEEN STUDS TO THE STUDS AT A SPACING OF 4' O.C. REFER TO THE FOLLOWING OPTIONS DIAGRAM ON THIS SHEET.
5. SIMPSON W/2" NAIL STRAP: MAY BE USED IN LIEU OF TIA LET-IN BRACING. INSTALL WITH (2) 2" NAILS IN TOP AND BOTTOM OF PLATES. ATTACH WITH 2" NAILS AT INTERMEDIATE STUDS. INSTALL STRAP NO LESS THAN A 45 DEGREE ANGLE AND NO GREATER THAN 90 DEGREE ANGLE TO THE HORIZONTAL. INSTALL IN Y PLANE.

LEGEND

- (A) TIA METHOD (LET-IN-BRACE)
ARROW SHOWS DIRECTION OF BRACE (SEE DETAIL SHEET)
- (B) CONTINUOUSLY SHEATHED METHOD, REFER Q.S.B SHEATHING, S2.3)
- (C) HOUS - S252.5 SIMPSON HOLD DOWN. INSTALL AS PER MANUFACTURER'S RECOMMENDATIONS
- (D) TIA METHOD - "X" (LET-IN-BRACE)



1st FLOOR WALL BRACING PLAN
SCALE: 1/4"=1'-0"



HOUS
(HOUS HOUS HOUS11
and HOUS14 similar)



1. GYPSUM BOARD REQUIRED ON INSIDE OF WALL PER IRC 2015

 Inside View of View☐ Inside View of VGA

CONTINUOUSLY SHEATHED METHOD

DOUBLE STEEL WALL OPTION

Outside View of V&A

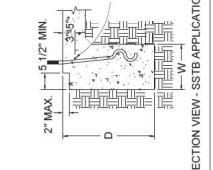
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CONTINUOUSLY SHEATHED METHOD

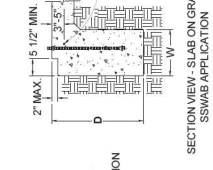
CWB/RCWB/WB BRACING 1 AND 2 STORY APPLICATIONS

LET-IN BRACE 1 AND 2 STORY APPLICATIONS

SIMPSON SSW15X7 GARAGE FRONT 1 STORY APPLICATION

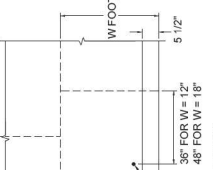
SSWI2X10 FOR SINGLE STORY
SSWI5X10 FOR 1ST OF 2 STORY

SIMPSON SSW12X7 GARAGE FRONT



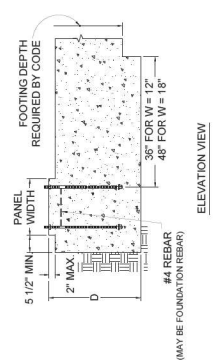
SIMPSON SINGLE SW16X7X4 1 STORY APPLICATION

W



CONTINUOUSLY SHEATHED CORNER FRAMING DETAIL

ATTACHED CORNER FRAME



ANCHORAGE FOR SSW & SW GARAGE WALL

ELEVATION VIEW



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Wayne Lowe, P.E.
WAYNE LOWE, P.E.
09/02/2023
DATE

CUSTOM CASITA
JORDEN GLOBAL, LLC
FOUNDATION DESIGNS

PROJECT: 37
ADDRESS: 2301 W. KINGS HWY.
LOT: BLOCK: N.E.B.L.
SUBDIVISION:
CITY: SAN ANTONIO, TX
COUNTY: BEXAR

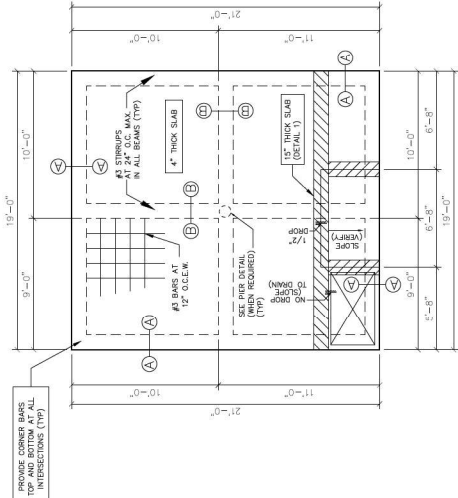
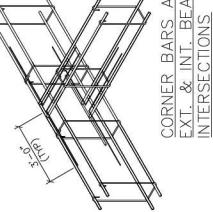
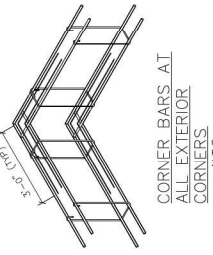
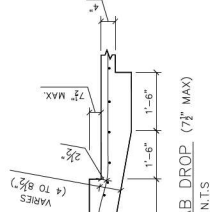
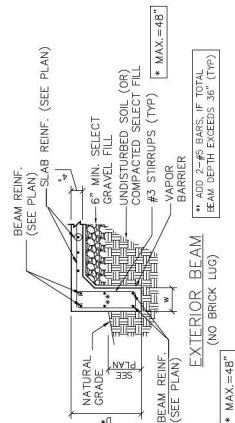
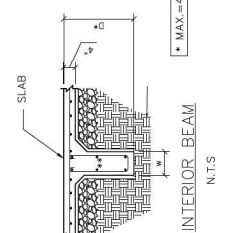
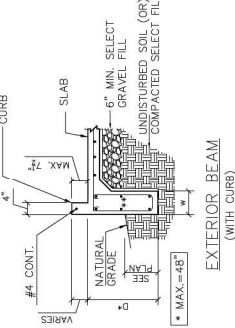
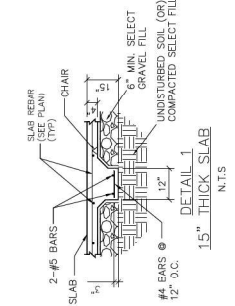
JOBA# = USE23-148
DRAWN BY: AC
CHECKED BY: ME
DATE: 25-06-23

REVISION 1:
BY: DATE:

REVISION 2:
BY: DATE:

S1.0

SEE S1.1 FOR TYPICAL SLAB FOUNDATION DETAILS



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

NOTES:
1. Contractor shall not use these plans to layout forms. Contractor shall verify all dimensions and locations of all reinforcement bars and report any discrepancies to the Engineer/Architect in writing, prior to the start of construction.

Foundation Movement: This foundation has been designed with the assumption that movement can be expected. The design is based on the applicable building codes and specifications.

NOTES:
These drawings are intended to show only structural foundation plans and details. Refer to the architectural, mechanical, plumbing, electrical and other drawings for the location and size of doors, openings, stairs, elevators, pools, etc.

NOTE:
THIS FOUNDATION HAS BEEN DESIGNED BASED ON THE ASSUMPTION THAT THE BUILDING SHALL BE PREPARED AS RECOMMENDED IN THE GEO-TECHNICAL REPORT, FOR THIS PROJECT.

NOTE:
ALL EXTERIOR GRADE BEAMS MUST BE FOUNDED AT LEAST 30" BELOW NATURAL, UNDISTURBED SOILS, UNLESS NOTED OTHERWISE.

BEAM SCHEDULE			
BEAM NUMBER	DEPTH (MIN.)	BEAM STEEL TOP	BEAM STEEL BOTTOM
A-A	36"	2-#6	2-#7
B-B	30"	2-#6	2-#7

TOTAL SLAB AREA= 399 SQ. FT.



FRAMING DESIGNS

ADDRESS: 2301 W KINGS HWY
 DT: BLOCK: N.C.B.:
 SUBMISSION:
 CITY: SAN ANTONIO, TX
 COUNTY: BEAR

DD# : USE23-148
 DRAWN BY: AC
 CHECKED BY: WL
 DATE: 35-08-23

EWISION 1:	2021 JRC
Y:	WL
ATE:	05-22-23

EMISION 2: _____
Y: _____
ATE: _____

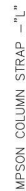
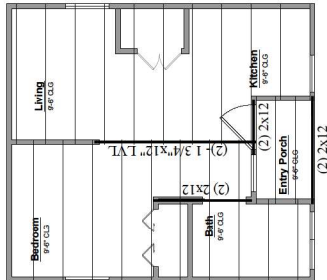
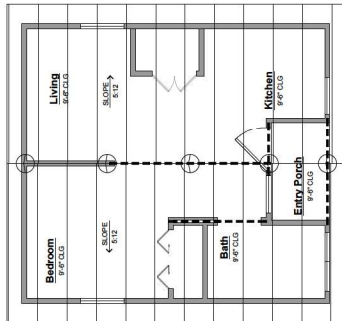
52.0

1. DEAD LOADS:	10 PSF
FLOORS	10 PSF, SHINGLE
ROOF	5 PSF, 10 PSF GARAGE
CEILING	
2. LIVE LOADS:	40 PSF
FLOORS	20 PSF
ROOF	10 PSF, 20 PSF GARAGE
CEILING	


ROOF RAFTER	_____
WOOD BEAM	=====
PURLIN	-----

ALL PATIENTS ARE GIVEN 24" X 36" X 110

11 CEILING JOISTS ARE SP #2 2Y6 @ 24" O.C. 11 IN O

 $\text{C}_6\text{H}_5\text{I} \rightarrow \text{C}_6\text{H}_5 + \text{I}^\bullet$
$$E_0 = 1/4^m - 1^m \dots 0^m$$


row of SDW screws @ 8" O.C.

ROOF BRACING SCHEDULE			
	HEIGHT	REQUIREMENTS	SECTION
 TYPICAL ROOF BRACING	1-6 FT.	2x4/2x4 "I" BRACING	2x4/2x4 2x6
	7-10 FT.	2x6/2x4 "I" BRACING	2x6 2x4
	11-14 FT.	2x6/2x6 "I" BRACING	2x6 2x6

DETAIL A
BUILT-UP COLUMNS

DOOR / WINDOW HEADER SCHEDULE	BEAM SIZE	MAX. CLEAR WIDTH OF OPENING	
		SUPPORTING ROOF ONLY	SUPPORTING ROOF AND ONE FLOOR
(2) 2x6		3'-0"	2'-6"
(2) 2x8		4'-0"	3'-6"
(2) 2x10		5'-6"	4'-6"
(2) 2x12		7'-0"	6'-0"

HEADER NOTES:

1. ALL HEADERS SHALL BE S.P. #2 (OK) EQUAL.
2. NO POINT LOADS ARE ALLOWED ABOVE HEADER
3. THIS SCHEDULE IS ADDRESS SPECIFIC USE ONLY
4. MAX. LOADS CONSIDERED

ROOF: 20 PSF LIVE LOAD & 10 PSF DEAD LOAD
 COLLING: 10 PSF LIVE LOAD & 5 PSF DEAD LOAD

NOTES:

- ALL HIP, VALLEY, AND RIDGE MEMBERS SHALL BE 2X8 S.Y.P. NO. 2, UNLESS NOTED OTHERWISE AND SUPPORTED @ 4'-0" O.C., U.N.O.
- VEREY ROOF PITCH ON SITE
- PURINS SHALL MATCH THE SIZE OF THE RAFTERS SUPPORTED AND SHALL BE SUPPORTED @ 4'-0" O.C. MAX.
- SEE "HEADER SCHEDULE" FOR HEADER SIZES AT

HANCER SCHEDULE		
MEMBER	HANCER	UNIT
25 DIMENSIONAL LINER		
(1) 2	101-2	500-104
(2) 240	H0320-2	2-110
(2) 2402	H0325-2-2	2-622
(3) 2402	H0210-3	2-086
(3) 2402	H0215-3	2-286
1SL, LV, & PHL (0.1 PLY)		
(3) 17	H010	2-125
(3) 17 1/2	H011	2-260
(3) 17 1/2	H016	2-875
(3) 17 1/2	H05044	1-8660
(3) 17 1/2	H05044	1-8660
1SL, LV, & PHL (0.1 PLY)		
(3) 15	H010	2-280
(3) 15 1/2	H011	5-835
(3) 15 1/2	H0505-50/70	5-835
(3) 15 1/2	H0505-50/70	5-835
(3) 15 1/2	H0505-50/70	5-860

MULTIPLE MEMBER CONNECTORS

Plan	Shape	Notch	Notch depth from the side
(T)-H ⁺ beam	18" x 18"	2 rows 16d/8d/4d nails 12" o.c.	400 psi
	14" x 18"	3 rows 16d/8d/4d nails 12" o.c.	600 psi
	11" x 18"	2 rows 16d/8d/4d nails 12" o.c.	470 psi
(T)-H ⁺ plate	14"	3 rows 16d/8d/4d nails 12" o.c.	520 psi
	10" x 10"	2 rows 16d/8d/4d nails 12" o.c.	370 psi
	20" x 24"	3 rows F ⁺ nails (2, 50d/25d/20d street)	560 psi
(C)-H ⁺ plate	18" x 18"	2 rows F ⁺ nails (2, 50d/25d/20d street)	500 psi
	14" x 18"	2 rows F ⁺ nails (2, 50d/25d/20d street)	320 psi
	20" x 24"	3 rows F ⁺ nails (2, 50d/25d/20d street)	500 psi



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FAX: (210) 837-3179
WWW.UNIVERSALSTRUCTURAL.COM



Wayne Wayne Lowe, P.E.
09/21/2023
DATE

CUSTOM CASITA
JORDEN GLOBAL, LLC
WALL BRACING DESIGNS

ADDRESS: 2301 W. KINGS HWY.
LOT: _____ BLOCK: _____ N.C.B.: _____
SUBDIVISION: _____
CITY: SAN ANTONIO, TX
COUNTY: BEXAR

JOB#: _____ USED: 1-18
DRAWN BY: _____ AC
CHECKED BY: _____ ME
DATE: _____ 09-22-23

REVISION 1: 2022 IRC
BY: _____ ME
DATE: 09-22-23

REVISION 2: _____
BY: _____
DATE: _____

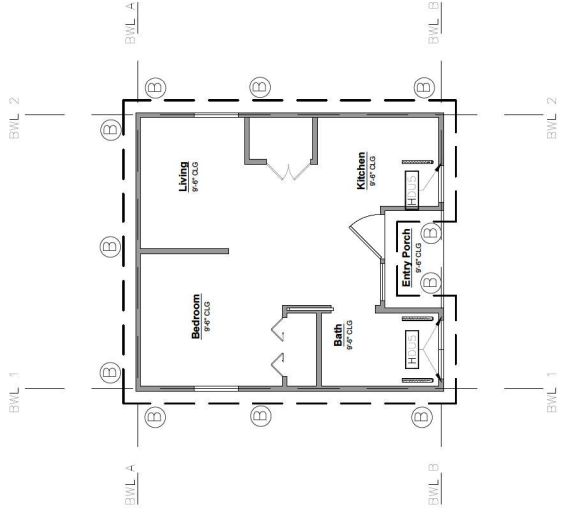
S2.1

NOTES:

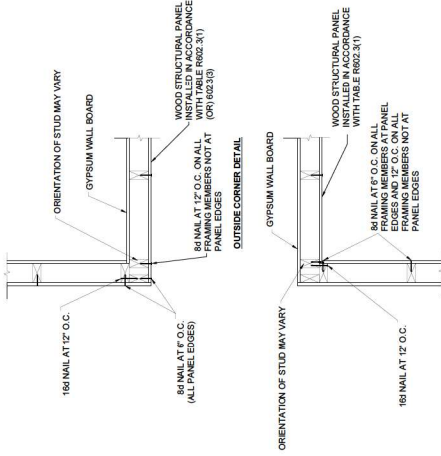
- A. LET-IN BRACING
1. TWO LET-IN BRACES ATTACHED CONTINUOUS DIAGONAL W/ (6" STD) LET-IN TO TOP & BOTTOM PLATES AND INTERMEDIATE STUDS. ATTACH W/ 2" X 4" NAILS AT EACH PLATE AND STUDS. END OF LET-IN AT TOP PLATE SHOULD BE CLOSE TO THE BRACING CORNER UNLESS WHOLED OTHERWISE. INSTALL BRACE WITH 1/2" CLEARANCE FROM STUDS. BRACE SHOULD BE PLACED NO GREATER THAN 10 FEET APART TO THE HORIZONTAL. ARROW INDICATES DIRECTION OF TENSION.
 2. SIMPSON POWER BRACING MAY BE USED IN PLACE OF THE TWO LET-IN WHEN THE FOLLOWING CONDITIONS ARE MET:
 - 1. 6" PLATE-SIMPSON POWER BRACE MIN. 6" MIN. LENGTH REQUIRED.
 - 2. 6" PLATE-SIMPSON POWER BRACE MIN. 6" MIN. LENGTH REQUIRED.
 - 3. 10" PLATE-SIMPSON POWER BRACE MIN. 10" MIN. LENGTH REQUIRED.ATTACH SIMPSON POWER BRACE AS SPECIFIED BY THE MANUFACTURER.
 3. FOR BRACING - ATTACH 1/2" X 4" STD TO STUDS W/ 8" NAILS @ 6" O.C. AT ALL SHEETING PANEL EDGES (NAILING BLOCKING AS REQUIRED) AND 1/2" X 4" ALONG INTERMEDIATE STUDS. 8" NAILS SHOULD BE PLACED NO LESS THAN 3/4" FROM THE PANEL EDGE.
 4. ATTACH SIMPSON POWER BRACES AT THE EXTERIOR WALLS BETWEEN STUDS TO THE STUDS AT A SPACING OF 4' O.C. REFER TO THE BRACING SYSTEMS DRAWING ON THIS SHEET.
 5. SIMPSON W/ W/ 1/2" X 4" STD - MAY BE USED IN LIEU OF TWO LET-IN BRACING. INSTALL WITH (2) TWO NAILS IN TOP AND BOTTOM OF PLATES. ATTACH WITH 8" NAILS AT INTERMEDIATE STUDS. INSTALL STUMP NO LESS THAN 4' O.C. BRACE PANEL AND NO GREATER THAN 10 FEET APART TO THE HORIZONTAL. INSTALL IN Y PLANE.

LEGEND

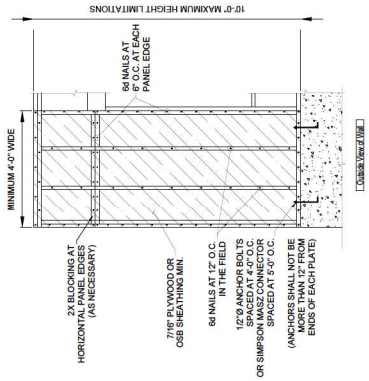
- LET-IN METHOD (LET-IN-BRACE)
ARROW SHOWS DIRECTION OF
BRACE (SEE DETAIL SHEET)
- CONTINUOUSLY SHEATHED
METHOD (REFER TO S.B.
SHEATHING, S2.1)
- HOLDS - S252.5 SIMPSON HOLD
DOWN. INSTALL AS PER
MANUFACTURER'S RECOMMENDATIONS
- LET-IN METHOD - "X"
(LET-IN-BRACE)



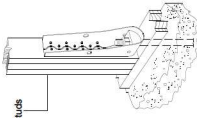
1st FLOOR WALL BRACING PLAN
SCALE: 1/4"=1'-0"



CONTINUOUSLY SHEATHED CORNER FRAMING DETAIL



CONTINUOUSLY SHEATHED METHOD 1 AND 2 STORY APPLICATIONS



Min. 2x4 Studs

HOLDS
(HOLDS HOLDS HOLDS
and HOLDS HOLDS)

**T-47 RESIDENTIAL REAL PROPERTY AFFIDAVIT
(MAY BE MODIFIED AS APPROPRIATE FOR COMMERCIAL TRANSACTIONS)**

Date: June 23, 2022 GF No. _____
Name of Affiant(s): David Hoa Nguyen
Address of Affiant: _____
Description of Property: Lot 25, NCB 9076, Woodlawn Park
Bexar County, Texas

"Title Company" as used herein is the Title Insurance Company whose policy of title insurance is issued in reliance upon the statements contained herein.

Before me, the undersigned notary for the State of Indiana, personally appeared Affiant(s) who after by me being sworn, stated:

1. We are the owners of the Property. (Or state other basis for knowledge by Affiant(s) of the Property, such as lease, management, neighbor, etc. For example, "Affiant is the manager of the Property for the record title owners.")
2. We are familiar with the property and the improvements located on the Property.
3. We are closing a transaction requiring title insurance and the proposed insured owner or lender has requested area and boundary coverage in the title insurance policy(ies) to be issued in this transaction. We understand that the Title Company may make exceptions to the coverage of the title insurance as Title Company may deem appropriate. We understand that the owner of the property, if the current transaction is a sale, may request a similar amendment to the area and boundary coverage in the Owner's Policy of Title Insurance upon payment of the promulgated premium.
4. To the best of our actual knowledge and belief, since 1/08/2016 there have been no:
 - a. construction projects such as new structures, additional buildings, rooms, garages, swimming pools or other permanent improvements or fixtures;
 - b. changes in the location of boundary fences or boundary walls;
 - c. construction projects on immediately adjoining property(ies) which encroach on the Property;
 - d. conveyances, replattings, easement grants and/or easement dedications (such as a utility line) by any party affecting the Property.

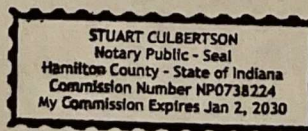
EXCEPT for the following (If None, Insert "None" Below:) None

5. We understand that Title Company is relying on the truthfulness of the statements made in this affidavit to provide the area and boundary coverage and upon the evidence of the existing real property survey of the Property. This Affidavit is not made for the benefit of any other parties and this Affidavit does not constitute a warranty or guarantee of the location of improvements.

6. We understand that we have no liability to Title Company that will issue the policy(ies) should the information in this Affidavit be incorrect other than information that we personally know to be incorrect and which we do not disclose to the Title Company.

SWORN AND SUBSCRIBED this 23 day of June, 2022.

[Signature]
Notary Public





Accessory Dwelling Construction Agreement
2310 W King Hwy
San Antonio, TX 78201

This Accessory Dwelling Construction Contract (the "Contract" or "Agreement") is made as of April 7th, 2023 (the "Effective Date") by Katherine Smith of 2310 W King Hwy, San Antonio TX 78201, and Jorden Global LLC of 2935 Thousand Oaks Drive, #6244, SAN ANTONIO, Texas 78247.

Jorden Global LLC desires to provide Construction services to Katherine Smith. Katherine Smith desires to obtain such services from Jorden Global LLC.

THEREFORE, in consideration of the mutual promises set forth below, the parties agree as follows:

1. **DESCRIPTION OF SERVICES.** Beginning on April 7th, 2023, Jorden Global LLC will provide to Katherine Smith the services described in the attached Exhibit A (collectively, the "Services").
2. **SCOPE OF WORK.** Jorden Global LLC will provide all services, materials, and labor as described in a material schedule for the Construction of an Accessory Dwelling described in the attached Exhibit A at the property of Katherine Smith located at:
2310 W King Hwy, San Antonio TX 78201 - hereinafter referred to as ("Worksite").

This includes building and construction materials, necessary labor and site security, and all required tools and machinery needed for completion of construction as described in the construction breakdown, mutually agreed upon and signed by both parties.

Jorden Global LLC is only responsible for furnishing any building improvements related to construction of the structure, but not related to landscaping, grading, walkways, painting, sewer or water systems, steps, driveways, patios, and aprons, etc., **unless they are specifically agreed to in writing.** For this specific project some of the listed improvements might have been agreed to in writing. See Exhibit A for reference.

3. **PLANS, SPECIFICATIONS AND CONSTRUCTION DOCUMENTS.** Jorden Global LLC will make available to Katherine Smith all plans, specifications, drawings, blueprints, and similar construction documents necessary for Jorden Global LLC to provide the Services described herein. Any such materials shall remain the property of Katherine Smith. Jorden Global LLC will promptly return all excess materials to Katherine Smith upon completion of the Construction Services.



4. COMPLIANCE WITH LAWS. Jorden Global LLC shall provide all Construction Services in a workmanlike manner, and in compliance with all applicable federal, state, and local laws and regulations, including, but not limited to all provisions of the Fair Labor Standards Act, the Americans with Disabilities Act, and the Federal Family and Medical Leave Act.

5. WORK SITE. Katherine Smith warrants that they own the property herein described and are authorized to enter this contract. Prior to the start of construction, Katherine Smith shall provide an easily accessible building site, which meets all zoning requirements for the structure, and in which the boundaries of Katherine Smith property will be clearly identified by stakes at all corners of the property. Katherine Smith shall maintain these stakes in proper position throughout construction.

6. MATERIALS AND/OR LABOR PROVIDED. Jorden Global LLC shall provide to Katherine Smith a List of each party furnishing materials and/or labor to Jorden Global LLC as part of the Construction Services.

Jorden Global LLC may substitute materials only with the express written approval of Katherine Smith, provided that the substituted materials are no lesser quality than those previously agreed upon by Katherine Smith, and Jorden Global LLC.

7. PAYMENT. Payment shall be made to Jorden Global LLC, SAN ANTONIO, Texas 78247.

Total project value: [REDACTED]
Structure Size: 375.00 Square Feet

DS
KS

Note – additional square footage will be billed at [REDACTED] USD per additional foot if the final structure size exceeds 375 SQ/FT

Katherine Smith agrees to pay Jorden Global LLC as follows:

1. Soft Cost Payment – due upon contract signing - [REDACTED] USD – pre-construction services to include: Architectural planning and review for a finalized construction plans for permitting and construction. Engineer planning and review for structural and foundation construction plans in accordance with the final Architectural layout.
2. Phase 1 Payment 1 – due upon soft cost services being completed - [REDACTED] USD – Mobilization, site services, portable toilet delivery. Home staking and placement, tree removal if necessary, permitting, site work and grading needed to clear area for foundation. Pier and beam foundation forms, rebar, pre pour inspection, concrete service supplies ordered, plumbing trenching and underground rough in inspection for new structure. Electrical underground services if needed per plans, to include inspection. Services to prepare for foundation final and pour. Inspections, plumbing rough in, electrical underground and foundation pre-pour.



3. Phase 2 Payment 2 – due upon phase 1 services being completed - [REDACTED] – concrete pour and foundation final inspection. Cure time for piers in accordance with engineer recommendations. Finalize lumber package and begin frame services as described in the scope of work. Up to cornice. Install roof decking to dry structure in. Order windows as described in the scope of work for fabrication.
4. Phase 3 Payment 3 – due upon phase 2 services being completed - [REDACTED] USD – Framing cornice, sheathing install, and finalization for framing inspection. Tradesman rough in service for electrical and mechanical. Plumbing top out service. Insulation service in accordance with scope of work. Install exterior siding in accordance with material schedule in Architectural elevations, exterior soffit, fascia installation. Inspections for insulation, plumbing top out, mechanical rough in, electrical rough in.
5. Phase 4 Payment 4 – due upon phase 3 services being completed - [REDACTED] USD – Roofing service completion. Install drywall on ceilings, and walls to prepare for texture. Interior texture on walls and ceilings to prepare for paint. Begin interior finish out – to include bathroom shower fiber cement walls and shower pans, benches, and niches in accordance with the design recommendation approved by Born Again Properties, LLC. Floor preparations as needed for installation, paint all interior ceilings once texture is dried. Finalize kitchen cabinet and countertop selection. To include bathroom vanities and or prefabricated products. Electrical top out. Mechanical top out.
6. Payment 5 – due upon phase 4 services being completed - [REDACTED] – interior painting of all walls. Set all interior and exterior doors as required in the breakdown of service and door schedule. Prime and paint all doors as needed. Begin laying flooring throughout all dry areas of the home. Install bathroom floor and shower tile once material is approved by the client in all wet areas and bathrooms described in the Architectural layout. Install and paint interior trim when flooring is complete. Set and install all cabinets, wet bars, shelving, islands, and vanities as described in the Architectural layout. Install countertops as needed. Electrical trim out. Plumbing trim out. HVAC trim out. Test all systems. Final building and trade inspections.
7. Retainer Payment 6 – due upon final inspection and completion - [REDACTED] – touch ups and project completion – Notice of Completion verification.

In addition to any other right or remedy provided by law, if Katherine Smith fails to pay for the Services when due, Jorden Global LLC has the option to treat such failure to pay as a material breach of this Contract and may cancel this Agreement and/or seek legal remedies.

8. OTHER PAYMENT PROVISIONS.

Change Orders – any changes to the original binding scope work will be presented for approval and subject to immediate payment. Failure to approve necessary change orders can result in project delays.

Make checks payable to: Jorden Global LLC



We accept Wire Transfers; our banking information is available upon request.

Credit Cards accepted – A 3.7% processing fee is applied to all credit card transactions*

- 9. TERM.** Jorden Global LLC shall commence the work to be performed within 15 days of April 7th, 2023, and shall complete the work on or before August 7th, 2023, time being of the essence of this contract.

Upon completion of the project, Katherine Smith agrees to sign a Notice of Completion within ten (10) days after the completion of the contract. If the project passes its final inspection and Katherine Smith does not provide the Notice of Completion, Jorden Global LLC may sign the Notice of Completion on behalf of Katherine Smith.

- 10. PERMITS.** Jorden Global LLC and all specialty subcontractors shall obtain all necessary building permits. Jorden Global LLC and all specialty subcontractors shall apply for and obtain any other necessary permits and licenses required by the local municipal/county government to do the work; the cost thereof shall be included as part of the Payment to Jorden Global LLC under this Contract.

- 11. INSURANCE.** Before work begins under this Contract, Jorden Global LLC shall furnish certificates of insurance to Katherine Smith substantiating that Jorden Global LLC has placed in force valid insurance covering its full liability under the New Construction laws of the State of Texas and shall furnish and maintain general liability insurance, and builder's risk insurance for injury to or death of a person or persons, and for personal injury or death suffered in any construction related accident and property damage incurred in rendering the Services.

- 12. CONFIDENTIALITY.** Jorden Global LLC, and its employees, agents, or representatives will not at any time or in any manner, either directly or indirectly, use for the personal benefit of Jorden Global LLC, or divulge, disclose, or communicate in any manner, any information that is proprietary to Katherine Smith. Jorden Global LLC and its employees, agents, and representatives will protect such information and treat it as strictly confidential. This provision will continue to be effective after the termination of this Contract.

Upon termination of this Contract, Jorden Global LLC will return to Katherine Smith all records, notes, documentation, and other items that were used, created, or controlled by Jorden Global LLC during the term of this Contract.

- 13. INDEMNIFICATION.** With the exception that this Section shall not be construed to require indemnification by Jorden Global LLC to a greater extent than permitted under the public policy of the State of Texas, Jorden Global LLC may agree to indemnify Katherine Smith against, hold it harmless from and defend Katherine Smith from all claims, loss, liability, and expense, including actual attorneys' fees, arising out of or in connection with Jorden Global



LLC's Construction Services performed under this Contract. Jorden Global LLC shall not provide indemnity against claims or losses deemed to be caused by the negligence, willful misconduct, or breach of contract of Katherine Smith or Katherine Smith's agents.

- 14. WARRANTY.** Jorden Global LLC shall provide its services and meet its obligations under this Contract in a timely and workmanlike manner, using knowledge and recommendations for performing the services which meet generally acceptable standards in Jorden Global LLC's community and region, and will provide a standard of care equal to, or superior to, care used by service providers like Jorden Global LLC on similar projects. Jorden Global LLC shall construct the structure in conformance with the plans, specifications, and any breakdown and binder receipt signed by Jorden Global LLC, Katherine Smith.
- 15. FREE ACCESS TO WORKSITE.** Katherine Smith will allow free access to work areas for workers and vehicles and will allow areas for the storage of materials and debris. Driveways will be kept clear for the movement of vehicles during work hours. Jorden Global LLC will make reasonable efforts to protect driveways, lawns, shrubs, and other vegetation. Jorden Global LLC also agrees to keep the Worksite clean and orderly and to remove all debris as needed during the hours of work to maintain work conditions which do not cause health or safety hazards.
- 16. UTILITIES.** Katherine Smith shall provide and maintain water and electrical service, connect permanent electrical service, gas service or oil service, whichever is applicable, and tanks and lines to the building constructed under this Agreement after an acceptable cover inspection has been completed, and prior to the installation of any inside wall cover. Katherine Smith shall, at Katherine Smith's expense, connect sewage disposal and water lines to said building prior to the start of construction, and always maintain sewage disposal and water lines during construction as applicable. Katherine Smith shall permit Jorden Global LLC to use, at no cost, any electrical power and water use necessary to carry out and complete the work.
- 17. INSPECTION.** Katherine Smith shall have the right to inspect all work performed under this Contract. All defects and uncompleted items shall be reported immediately. All work that needs to be inspected or tested and certified by an engineer as a condition of any government departments or other state agency, or inspected and certified by the local health officer, shall be done at each necessary stage of construction and before further construction can continue. All inspection and certification will be done at Jorden Global LLC's expense.
- 18. DEFAULT.** The occurrence of any of the following shall constitute a material default under this Contract:



a. The failure of Katherine Smith to make a required payment when due as described in the draw schedule or failure to authorize necessary unforeseen change orders that might arise.

b. The insolvency of either party or if either party shall, either voluntarily or involuntarily, become a debtor of or seek protection under Title 11 of the United States Bankruptcy Code.

c. A lawsuit is brought on any claim, seizure, lien, or levy for labor performed or materials used on or furnished to the project by either party, or there is a general assignment for the benefit of creditors, application, or sale for or by any creditor or government agency brought against either party.

d. The failure of Katherine Smith to make the building site available or the failure of Jorden Global LLC to deliver the Services in the time and manner provided for in this Agreement.

19. REMEDIES. In addition to all other rights a party may have available according to law of the State of Texas, if a party defaults by failing to substantially perform any provision, term or condition of this Contract (including without limitation the failure to make a monetary payment when due), the other party may terminate the Contract by providing written notice to the defaulting party. This notice shall describe with sufficient detail the nature of the default. The party receiving said notice shall have 21 days from the effective date of said notice to cure the default(s) or begin substantial completion if completion cannot be made in 21 days. Unless waived by a party providing notice, the failure to cure or begin curing, the default(s) within such time shall result in the automatic termination of this Contract.

20. FORCE MAJEURE. If performance of this Contract or any obligation thereunder is prevented, restricted, or interfered with by causes beyond either party's reasonable control ("Force Majeure"), and if the party unable to carry out its obligations gives the other party prompt written notice of such event, then the obligations of the party invoking this provision shall be suspended to the extent necessary by such event. The term Force Majeure shall include, but not be limited to, acts of God, plague, epidemic, pandemic, outbreaks of infectious disease or any other public health crisis, including quarantine or other employee restrictions, fire, explosion, vandalism, storm, casualty, illness, injury, general unavailability of materials or other similar occurrence, orders or acts of military or civil authority, or by national emergencies, insurrections, riots, or wars, or strikes, lock-outs, work stoppages, or other labor disputes, or supplier failures. The excused party shall use reasonable efforts under the circumstances to avoid or remove such causes of non-performance and shall proceed to perform with reasonable dispatch whenever such causes are removed or ceased. An act or



omission shall be deemed within the reasonable control of a party if committed, omitted, or caused by such party, or its employees, officers, agents, or affiliates.

21. DISPUTE RESOLUTION. The parties will attempt to resolve any dispute arising out of or relating to this Agreement through friendly negotiations amongst the parties. If the matter is not resolved by negotiation, the parties will resolve the dispute using the below Alternative Dispute Resolution (ADR) procedure.

Any controversies or disputes arising out of or relating to this Agreement will be submitted to mediation in accordance with any statutory rules of mediation. If mediation does not successfully resolve the dispute or is unavailable, then the parties may proceed to seek an alternative form of resolution in accordance with any other rights and remedies afforded to them by law, including filing suit.

22. ENTIRE AGREEMENT. This Contract contains the entire Agreement of the parties, and there are no other promises or conditions in any other contract or agreement whether oral or written concerning the subject matter of this Agreement. Any amendments must be in writing and signed by each party. This Agreement supersedes any prior written or oral agreements between the parties.

23. SEVERABILITY. If any provision of this Agreement will be held to be invalid or unenforceable for any reason, the remaining provisions will continue to be valid and enforceable. If a court finds that any provision of this Agreement is invalid or unenforceable, but that by limiting such provision it would become valid and enforceable, then such provision will be deemed to be written, construed, and enforced as so limited.

24. AMENDMENT. This Agreement may be modified or amended in writing if the writing is signed by each party.

25. GOVERNING LAW. This Agreement shall be construed in accordance with and governed by the laws of the State of Texas, without regard to any choice of law provisions of Texas or any other jurisdiction.

26. NOTICE. Any notice or communication required or permitted under this Agreement shall be sufficiently given if delivered in person or by certified mail, return receipt requested, to the address set forth in the opening paragraph or to such other address as one party may have furnished to the other in writing.

27. WAIVER OF CONTRACTUAL RIGHT. The failure of either party to enforce any provision of this Contract shall not be construed as a waiver or limitation of that party's right to subsequently enforce and compel strict compliance with every provision of this Contract.



28. SIGNATORIES. This Agreement shall be signed by Katherine Smith, Client and on behalf of Jorden Global LLC by Trenden Martinez, Member (Contractor's License: H-931853) and shall be effective as of the date first written above.

By:  5EBBA56DA71C481... Date: 4/7/2023
Katherine Smith - Client

By:  D9A39BE1DFD1453... Date: 4/7/2023
Trenden Martinez – Member
Jorden Global, LLC

Geotechnical Solutions

2922 NW Loop 410, Ste. 105

San Antonio, Texas 78230 • 210. 209. 4472 : geotechsltns@gmail.com

Firm No.: F-19672

Mr. Trenden Martinez
Jorden Global, LLC
Trenden@jordenglobal.com

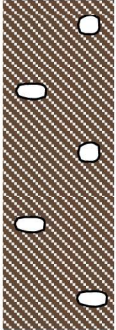
April 14, 2023
No.: 23-138 (Page 1 of 5)

RE: Geotechnical Study (Proposed Casita/ADU)
2310 W. Kings Hwy
San Antonio, Texas 78201

Sir:

Pursuant to your request, a representative of Geotechnical Solutions traveled to the above-referenced property on Apr. 12, 2023, to obtain soil samples (**by means of 2 borings,**) for the purposes of determining the Atterberg Limits (PI), soil classification/s, allowable bearing capacities, potential soil vertical movement estimates and foundation design parameters for a proposed small building, which will have a slab surface area of at least 400 square feet. The laboratory test results and our findings are summarized below. **Representative Site Photos are attached.**

Typical Stratigraphy & Atterberg Limits (PI)

Depth / Interval	Soil Classification	Symbol	LL, %	PL, %	PI
1/2"	Brown, silty Clay (CH), moist, very stiff to hard, some gravel		65	23	42
1.6'					
3.3'					
	-Refusal due to dense gravelly seam/cobbles		57	19	38

Overall Effective PI: **36 - 38** ; PVR/PVM: **-3" to +3"** (at soil surface)

Allowable Q_a : **1700 psf** at minimum depth of 10" below existing elevation

Allowable Q_a : **2100 psf** at minimum depth of 18" below existing elevation

Allowable Q_a : **2600 psf** at minimum depth of 40" below existing elevation

Proposed ADU/Casita:
2310 W. Kings Hwy, 78201 (S.A.)

Reinforced Beam-and-Slab-on-Grade Foundation

A post-tensioned slab-on-grade foundation may be considered for the proposed building/s. Geotechnical and pertinent PTI design parameters, based on general design analysis methods in Chapters 3 and 4 PTI - 2004 Edition, along with the 2008 Supplement, were evaluated and are summarized in the following table. **BRAB-WRI** parameters are also provided.

(OPTION 1 – Select Fill Method)
CRITERIA BASED ON PVR/PVM OF APPROX.: -3/4" to +1"

(Design PI: 25)

Thornthwaite Moisture Index	-15 to -14
Allowable Bearing Capacity	3000 psf
BRAB-WRI: Cw and Climatic Rating Factor:	0.88 ; 0.12
Edge Moisture Variation Distance (Em)	5.9' (c)
	2.8' (e)
Differential Vertical Soil Movement (Ym)	0.90" (c)
	1.25" (e)
Site Slope Correction Coefficient, Cs	Slope to Grade
Minimum Perimeter Grade Beam Penetration into Compacted Granular Fill Soil:	12 in.
Minimum (") Native Soil to Remove and Replace with Granular Select Fill:	2 ft.

The above design parameters assume that the granular select fill has a PI range of (7 – 22); and that subgrade clay-soil will be scarified to a minimum depth of 8 inches and moistened within optimal soil-moisture range, prior to densely compacting; and that the moist-condition granular select fill will be introduced in loose lifts (not thicker than 9") prior to compacting. Compaction Method ASTM D698 is recommended to verify in-place density of subgrade clay-soil and compacted select fill.

OPTION 2: As Is (Beam-and-Slab-on Grade)

CRITERIA BASED ON PVR/PVM OF APPROX.: -1.75" to +1.75"

(Design PI: 37)

Thornthwaite Moisture Index	-15 to -14
Allowable Bearing Capacity	2200 psf
Edge Moisture Variation Distance (Em)	8.6' (center)
	4.5' (edge)
Differential Vertical Soil Movement (Ym)	1.30" (center)
	1.75" (edge)
BRAB-WRI: Cw and Climatic Rating Factor:	0.77 ; 0.23
Minimum Perimeter Grade Beam Penetration into Clay-Soil, After Grubbing Activities	24"

The above design parameters assume that vertical moisture barrier (perimeter beam) is designed to extend to the recommended embedment depth and **that subgrade soil / fill soil and excavated grade beam trenches are free of roots and loose soil and should be in a moist and dense / well-compacted condition, prior to concrete placement/discharge.** Voids created by the removal of trees or previously existing flatwork/structures, should be **backfilled** with moistened, low PI, sandy/gravelly soil and densely compacted. Final design parameters are commonly at the discretion of the project structural engineer.

The PTI method of predicting soil movement is mostly applicable when site moisture conditions are controlled by climatic conditions. Of course, foundation performance can be significantly influenced by adding perimeter pavement/s, yard drainage and yard maintenance, flower beds adjacent to foundation, rain gutters, utility line leaks, trees before and after construction, post construction subsurface or surface alterations near the foundation perimeter; and exceptional dry/wet prolonged conditions. The above criterion also assumes that proper irrigation methods and drainage **will be maintained** after construction. ***If proper drainage / irrigation is not maintained, potential vertical movements greater than that anticipated may occur.***

The use of **sacked fill** between the beams should be at the discretion of the structural engineer. In this case, the structural engineer should provide anticipated foundation performance information if sacked fill is incorporated in the overall foundation specifications/details.

LIMITATIONS OF GEOTECHNICAL STUDY

**Proposed ADU/Casita
2310 W. Kings Hwy
San Antonio, Texas 78201**

The analysis and recommendations contained in this report were based on the data from two (2) test borings, the laboratory test results, the observations associated with the properties and our experience in the area. This report may not reflect precise variations of the soil conditions across the site. If different subsurface conditions are encountered at the time of construction/excavations, we should be contacted to evaluate the conditions encountered.

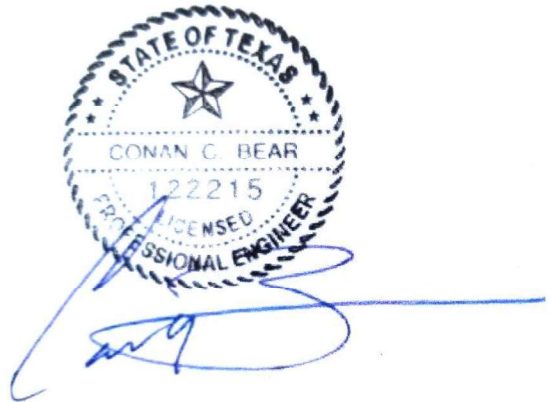
This report was prepared for this project exclusively for the use of *Jorden Global, LLC, and their design team and the builder/ foundation contractor.*

Thank you for the opportunity to be of service
Geotechnical Solutions (F-19672)

Alan J. Vasquez

Alan J. Vasquez
Geotechnical Consultant

Conan C. Bear, P.E.
Engineering Consultant



4/14/23

**Representative Site Photos
(2310 W. Kings Hwy)**



Contract - Detailed


Pella Window and Door Showroom of San Antonio
6510 Blanco Road
San Antonio, TX 78216
Phone: (210) 735-2030 Fax: (210) 735-3837

Sales Rep Name: Owens, Marcus
Sales Rep Phone: [REDACTED]
Sales Rep Fax:
Sales Rep E-Mail: mowens@pellasouthtexas.com

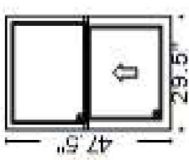


Customer Information	Project/Delivery Address	Order Information
Jorden Global 2935 Thousand Oaks Dr SAN ANTONIO, TX 78247-3563 Primary Phone: [REDACTED] Mobile Phone: Fax Number: E-Mail: Contact Name: Great Plains #: 1006869226 Customer Number: [REDACTED] Customer Account: [REDACTED]	2310 W Kings Highway 2935 Thousand Oaks Dr Lot # San Antonio, TX 78247-3563 County: Owner Name: Owner Phone:	Quote Name: 2310 W Kings Highway Order Number: 370 Quote Number: 16792864 Order Type: Installed Sales Wall Depth: Payment Terms: Deposit/C.O.D. Tax Code: SATGROUPTX Cust Delivery Date: None Quoted Date: 5/2/2023 Contracted Date: Booked Date: Customer PO #:

Customer Notes: PELLA 250 SERIES VINYL
WHITE FRAMES
PELLA INSTALL LABOR INCLUDED

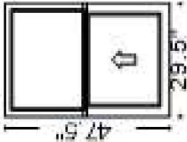
Line #		Location:	Attributes			Item Price	Qty	Ext'd Price
10		BATH	Pella 250 Series, Sliding Window, Vent Right / Fixed, 47.5 X 11.5, White				1	
		Viewed From Exterior	1: Non-Standard Size Vent Right / Fixed Double Slider Frame Size: 47 1/2 X 11 1/2 General Information: Standard, Vinyl, Nail Fin, No Foam Insulated, 3 1/4", 1 1/8", 2 1/8" Exterior Color / Finish: White Interior Color / Finish: White Glass: Insulated Dual Obscure Low-E Obscure SunDefense™ Low-E Insulating Glass Argon Non High Altitude Hardware Options: Cam-Action Lock, 1 Lock, White, No Limited Opening Hardware Screen: Half Screen, InView™ Performance Information: U-Factor 0.27, SHGC 0.22, VLT 0.51, CPD PEL-N-210-00186-00006, Performance Class R, PG 35, Calculated Positive DP Rating 35, Calculated Negative DP Rating 35, TDI WIN-1951, Year Rated 08 11, Clear Opening Width 18.792, Clear Opening Height 7.25, Clear Opening Area 0.946125, Egress Does not meet typical United States egress, but may comply with local code requirements Grille: No Grille, Wrapping Information: Factory Applied, Pella Recommended Clearance, Perimeter Length = 118". Venting Width: Equal Obscure Glass Style: Pattern62(Standard)					

Rough Opening: 48" X 12"

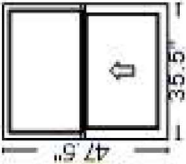
Line #		Location:	Attributes			Item Price	Qty	Ext'd Price
15		FRONT ENTRY TEMPGLAS	Pella 250 Series, Single Hung, 29.5 X 47.5, White				1	
		Viewed From Exterior	1: 3048 Single Hung, Equal Frame Size: 29 1/2 X 47 1/2 General Information: No Dry Wall Pass Through, Standard, Vinyl, Nail Fin, No Foam Insulated, 3 1/4", 1 1/8", 2 1/8" Exterior Color / Finish: White Interior Color / Finish: White Glass: Insulated Dual Tempered Low-E SunDefense™ Low-E Insulating Glass Argon Non High Altitude Hardware Options: Cam-Action Lock, White, No Limited Opening Hardware Screen: Half Screen, InView™ Performance Information: U-Factor 0.28, SHGC 0.22, VLT 0.51, CPD PEL-N-208-00186-00003, Performance Class R, PG 35, Calculated Positive DP Rating 35, Calculated Negative DP Rating 35, TDI WIN-1957, Year Rated 08 11, Clear Opening Width 25.25, Clear Opening Height 18.214, Clear Opening Area 3.193774, Egress Does not meet typical United States egress, but may comply with local code requirements Grille: No Grille, Wrapping Information: Factory Applied, Pella Recommended Clearance, Perimeter Length = 154".					

Rough Opening: 30" X 48"

Customer Notes: WITHIN 18" OF HINGED DOOR

Line #		Location:	Attributes				Item Price	Qty	Ext'd Price
20		KITCHEN	Pella 250 Series, Single Hung, 29.5 X 47.5, White					1	
			1: 3048 Single Hung, Equal						
		PK # 2133	Frame Size: 29 1/2 X 47 1/2						
			General Information: No Dry Wall Pass Through, Standard, Vinyl, Nail Fin, No Foam Insulated, 3 1/4", 1 1/8", 2 1/8"						
			Exterior Color / Finish: White						
			Interior Color / Finish: White						
			Glass: Insulated Dual Low-E SunDefense™ Low-E Insulating Glass Argon Non High Altitude						
			Hardware Options: Cam-Action Lock, White, No Limited Opening Hardware						
			Screen: Half Screen, InView™						
			Performance Information: U-Factor 0.28, SHGC 0.22, VLT 0.51, CPD PEL-N-208-00186-00001, Performance Class R, PG 35, Calculated Positive DP Rating 35, Calculated Negative DP Rating 35, TDI WIN-1957, Year Rated 08 11, Clear Opening Width 25.25, Clear Opening Height 18.214, Clear Opening Area 3.193774, Egress Does not meet typical United States egress, but may comply with local code requirements						
			Grille: No Grille,						
			Wrapping Information: Factory Applied, Pella Recommended Clearance, Perimeter Length = 154".						
		Viewed From Exterior							

Rough Opening: 30" X 48"

Line #		Location:	Attributes				Item Price	Qty	Ext'd Price
25		LIVING	Pella 250 Series, Single Hung, 35.5 X 47.5, White					1	
			1: 3648 Single Hung, Equal						
		PK # 2133	Frame Size: 35 1/2 X 47 1/2						
			General Information: No Dry Wall Pass Through, Standard, Vinyl, Nail Fin, No Foam Insulated, 3 1/4", 1 1/8", 2 1/8"						
			Exterior Color / Finish: White						
			Interior Color / Finish: White						
			Glass: Insulated Dual Low-E SunDefense™ Low-E Insulating Glass Argon Non High Altitude						
			Hardware Options: Cam-Action Lock, White, No Limited Opening Hardware						
			Screen: Half Screen, InView™						
			Performance Information: U-Factor 0.28, SHGC 0.22, VLT 0.51, CPD PEL-N-208-00186-00001, Performance Class R, PG 35, Calculated Positive DP Rating 35, Calculated Negative DP Rating 35, TDI WIN-1957, Year Rated 08 11, Clear Opening Width 31.25, Clear Opening Height 18.214, Clear Opening Area 3.952691, Egress Does not meet typical United States egress, but may comply with local code requirements						
			Grille: No Grille,						
			Wrapping Information: Factory Applied, Pella Recommended Clearance, Perimeter Length = 166".						
		Viewed From Exterior							

Rough Opening: 36" X 48"

Line #	Location:	Attributes	Item Price	Qty	Ext'd Price
35	PELLA INSTALL	*NCWINDOW1 - Windows Up to 95X71 Installs		5	

Qty	1
-----	---

Thank You For Purchasing Pella® Products

PELLA WARRANTY:

Pella products are covered by Pella's limited warranties in effect at the time of sale. All applicable product warranties are incorporated into and become a part of this contract. Please see the warranties for complete details, taking special note of the two important notice sections regarding installation of Pella products and proper management of moisture within the wall system. Neither Pella Corporation nor the Seller will be bound by any other warranty unless specifically set out in this contract. However, Pella Corporation will not be liable for branch warranties which create obligations in addition to or obligations which are inconsistent with Pella written warranties.

Clear opening (egress) information does not take into consideration the addition of a Rolscreen [or any other accessory] to the product. You should consult your local building code to ensure your Pella products meet local egress requirements.

Per the manufacturer's limited warranty, unfinished mahogany exterior windows and doors must be finished upon receipt prior to installing and refinished annually, thereafter. Variations in wood grain, color, texture or natural characteristics are not covered under the limited warranty.

INSYNCTIVE PRODUCTS: In addition, Pella Insynctive Products are covered by the Pella Insynctive Products Software License Agreement and Pella Insynctive Products Privacy Policy in effect at the time of sale, which can be found at [Insynctive.pella.com](https://www.pella.com/insynctive-privacy-policy). By installing or using Your Insynctive Products you are acknowledging the Insynctive Software Agreement and Privacy Policy are part of the terms of sale.

Notice of Collection of Personal Information: We may collect your personal information when you interact with us. Under the California Consumer Privacy Act (CCPA), California residents have specific rights to request this information, request to delete this information, and opt out of the sharing or sale of this information to third parties. To learn more about our collection practices and your rights under the CCPA please visit our link <https://www.pella.com/california-rights-policy/> at [pella.com](https://www.pella.com).

ARBITRATION AND CLASS ACTION WAIVER ("ARBITRATION AGREEMENT")

YOU and Pella and its subsidiaries and the Pella Branded Distributor AGREE TO ARBITRATE DISPUTES ARISING OUT OF OR RELATING TO YOUR PELLA PRODUCTS (INCLUDES PELLA GOODS AND PELLA SERVICES) AND WAIVE THE RIGHT TO HAVE A COURT OR JURY DECIDE DISPUTES. YOU WAIVE ALL RIGHTS TO PROCEED AS A MEMBER OR REPRESENTATIVE OF A CLASS ACTION, INCLUDING CLASS ARBITRATION, REGARDING DISPUTES ARISING OUT OF OR RELATING TO YOUR PELLA PRODUCTS. You may opt out of this Arbitration Agreement by providing notice to Pella no later than ninety (90) calendar days from the date You purchased or otherwise took ownership of Your Pella Goods. To opt out, You must send notice by e-mail to pellawebsupport@pella.com, with the subject line: "Arbitration Opt Out" or by calling (877) 473-5527. Opting out of the Arbitration Agreement will not affect the coverage provided by any applicable limited warranty pertaining to Your Pella Products. For complete information, including the full terms and conditions of this Arbitration Agreement, which are incorporated herein by reference, please visit www.pella.com/arbitration or e-mail to pellawebsupport@pella.com, with the subject line: "Arbitration Details" or call (877) 473-5527. D'ARBITRAGE ET RENONCIATION AU RECOURS COLLECTIF ("convention d'arbitrage") EN FRANÇAIS SEE PELLA.COM/ARBITRATION. DE ARBITRAJE Y RENUNCIA COLECTIVA ("acuerdo de arbitraje") EN ESPAÑOL VER PELLA.COM/ARBITRATION.

Seller shall not be held liable for failure or delay in the performance of its obligations under this Agreement, if such performance is hindered or delayed by the occurrence of an act or event beyond the Seller's reasonable control (force majeure event), including but not limited to earthquakes, unusually severe weather and other Acts of God, fire, strikes and labor unrest, epidemics, riots, war, civil unrest, and government interventions. Seller shall give timely notice of a force majeure event and take such reasonable action to mitigate the impacts of such an event.

Product Performance Information:

U-Factor, Solar Heat Gain Coefficient (SHGC), and Visible Light Transmittance (VLT) are certified by the National Fenestration Rating Council (NFRC).

Manufacturer stipulates that these ratings conform to applicable NFRC procedures for determining whole product performance. NFRC ratings are determined for a fixed set of environmental conditions and a specific product size. NFRC does not recommend any products and does not warrant the suitability of any product for any specific use.

Design Pressure (DP), Performance Class, and Performance Grade (PG) are certified by a third party organization, in many cases the Window and Door Manufacturers Association (WDMA). The certification requires the performance of at least one product of the product line to be tested in accordance with the applicable performance standards and verified by an independent party. The certification indicates that the product(s) of the product line passed the applicable tests. The certification does not apply to mulled and/or product combinations unless noted. Actual product results will vary and change over the products life.

For more performance information along with information on Florida Product Approval System (FPAS) Number and Texas Dept. of Insurance (TDI) number go to www.pella.com/performance.

Terms & Conditions

All Orders

This quote is valid for 30 days and subject to repricing after that.

I am aware that the products sold by Pella South Texas are made to order and my order is made specifically for my home / project, including aesthetics and sizing. I understand that there will be no changes allowed on this order after products are ordered. I have reviewed each line on the contract with the sales representative and clearly understand the hinging, venting, count of openings, grilles, sizing, and color are correct, with all products being viewed from the exterior.

To activate order, please sign and return this copy. All orders are subject to acceptance by Pella South Texas.

Pella South Texas makes no guarantees as to manufacturing lead times and is not responsible for any delays from the manufacturers. Any lead time or delivery date discussions during the sales process are estimates based on the best information available at the time and should only be used as such. No discounts will be given for any delays in manufacturing.

Installed Orders

For replacement projects, Pella South Texas makes no guarantees that existing window and door treatments and accessories (such as blinds, shutters, shades, storm doors, storm windows, etc.) will fit with your new Pella windows and doors.

For replacement projects, Pella South Texas makes no guarantees that existing interior (e.g. drywall, paint, wallpaper, etc.) or exterior materials (e.g. siding, stucco, EIFS, brick, etc.) will be undamaged during the installation process. While great care will be taken with our customers' homes, there are times where existing materials will not allow a window or door to be removed and reinstalled without additional work being required by the homeowner subsequent to installation.

Payment Terms:

Unless financing through Pella South Texas offered financing programs, payment of 50% is required prior to ordering any products (unless payment terms have been previously given)

The balance is due upon substantial completion. Substantial completion is achieved when all available product has been installed and is operational. Items such as missing or broken parts and service adjustments are covered by warranty and do not affect the status of your project from being substantially complete.

Partial installations will be due for that part of the project upon substantial completion of that partial install.

The final payment must be Paid in Full on the last day of Substantial Completion. In the event that any part of your order was ordered incorrectly, has damage, or is incomplete, you may temporarily withhold the following from your final payment:

For items not able to be installed or needing a full unit reorder, the price due for that item, including installation cost, will not be due.

For items substantially complete but needing parts under warranty, you may withhold:

\$700 for damaged or broken sash/glass

\$300 for missing or damaged screen, hardware or similar product

Full payment is expected at the time missing or damaged units are installed or replaced.

Late payments beyond the Payment Terms defined above will be charged 1.5% of the outstanding balance per month. If Pella South Texas is required to employ an attorney to collect the amounts owed to it by Customer, Pella South Texas will be entitled to collect all attorney's fees, costs, and expenses it incurs.

Non-Installed Orders

Remaining account balance must be Paid in Full at delivery, unless credit terms have been extended by Pella South Texas.

Purchaser agrees to take receipt of all materials within 30 days of either original requested need by date or actual date of the entire order's arrival at Pella South Texas' warehouse, whichever is later. After 30 days, the remaining account balance is Due in Full. After 90 days, storage fees of 1.5% of the contracted price will be assessed per month. All storage fees are required to be Paid in Full prior to product delivery. Screens and hardware are exceptions and may be stored up to 24 months without penalty. If screens and hardware are not requested within 24 months after final product delivery, they are subject to disposal and would need to be reordered when needed.

Call a minimum of five days in advance to schedule delivery. Customer is expected to supply help to unload unless a 2-man delivery is on the contract.

Any product damage must be reported to Pella South Texas within 48 hours of product receipt.

Late payments beyond the Payment Terms defined above will be charged 1.5% of the outstanding balance per month. If Pella South

Texas is required to employ an attorney to collect the amounts owed to it by Customer, Pella South Texas will be entitled to collect all attorney's fees, costs, and expenses it incurs.

Service Orders

All non-warranty Service quotes must be paid for in full, including tax, prior to ordering. Service parts may not be returned or refunded.

☐ **Project Checklist has been reviewed**

Customer Name	(Please print)
Customer Signature	
Date	
Credit Card Approval Signature	

Pella Sales Rep Name	(Please print)
Pella Sales Rep Signature	
Date	

Order Totals	
Taxable Subtotal	
Sales Tax @ 8.25%	
Non-taxable Subtotal	
Total	
Deposit Received	
Amount Due	



Santiago Residence > 2301 W King Addition Construction Project - 03/30/2023 21:41

March 30, 2023

Submitted to:

Kiva Santiago
2301 W King Hwy, ADU
San Antonio, TX 782101
Home: [REDACTED]
Personal: [REDACTED]

Submitted by:

Jorden Global, LLC
2935 Thousand Oaks#6244
San Antonio, TX 78247
Business: (830)-481-7241
Mobile: [REDACTED]
Business: Trenden@sabinaholdings.com
Personal: [REDACTED]
Trenden@jordenglobal.com

License Number: H-931853



Project Information:

2301 W King, Addition Construction Project - 03/30/2023 21:41

The following estimate outlines new construction services requested for the 2301 W King, ADU, San Antonio TX 78201 property due TO REQUEST. This is a preliminary estimate based upon our initial site visit. At any time, this estimate may be altered to conform to the buildings OR homeowners' specifications for the scope of work or nature and or condition of building OR proposed buildings. Please note: This estimate is based on a site visit take off - All measurements (lineal and square footage) are based on either field measurements or plan set take offs by others. Additionally, this estimate was constructed prior to the completion of demolition. grading, or any other site work. As such, our estimate does not include or otherwise address any hidden damage to real property (any damage to real property of which JORDEN GLOBAL, LLC may be unaware of). Repair costs relating to such damage which are not included in our estimate may include but is not limited to: costs related to hidden rot; decay; electrical; plumbing; HVAC; code updates; abatement services, architectural or structural details and/or permits or fees. If we discover any additional damage and/or increased costs associated to the property in question, supplemental estimates and/or change orders will be constructed and disseminated in a timely manner AND approved for payment from land/home/property owner prior to any changes being adjusted. This is a cost estimate which is based on market conditions established by Clear Estimates as outlined in the individual line items, all costs are calculated using cost plus adherence. This estimate is only valid for 30 days due to fluctuating market prices. All credits to the property owner will be exclusive of the overhead and profit. Contractors' overhead and profit is not affected by credits Should you have any questions associated to this estimate, please phone me at the number listed. WE WILL COVER AN 18 MONTH WARRANTY FOR ALL CRAFT AND WORKMANSHIP

Project cost calculated by square foot:

Total square footage: 375

Best Regards,

Trenden Martinez
Jordan Global, LLC - Member
Direct: (830)-481-7241
Trenden@jordenglobal.com

General Project Contents



Part Code Category	Description	Total
	Professional Services - Design - City of San Antonio - Building Permit, price to include related inspections fee(s)	
	<ul style="list-style-type: none"> Architectural service – develop a plan for construction, to include interior layouts and exterior elevations. Up to 3 revisions. Plan needed for construction and permitting. Engineer service – develop code compliant structural and foundation plans for construction in accordance to the final Architectural plan. To be submitted for permit approval and construction. Geotechnical analysis – perform a soil sample test to determine soil density. Includes report needed to determine foundation depth. Document used for permitting approval. • Building permit approval • Pre pour inspection. Frame inspection Building final inspection 	
1 PROJECT PREPARATION		
1 PROJECT PREPARATION	Portable Toilet - Contractor Item, on-site for duration of project - price includes unit and routine cleaning until removed - duration 10-12 weeks. Overages in allotted time may result in additional billable fee(s)	
1 PROJECT PREPARATION	Deliver dumpster, pickup and dump every 21 days, 30 cubic yards, 4.5 tons - based on duration of project and anticipated debris, calculated by dumpster, 4 containers anticipated	
1 PROJECT PREPARATION	Insurance - Builders risk blanket insurance for the duration of construction. Based on finalized Construction and Architectural Plan. Flat rate from carrier. Recommended to cover material and unforeseen events.	
2 CONCRETE DEMOLITION	Demolition Item – Remove flagstone in the back of the home protruding into the area where the addition will be built. To include haul away and debris removal.	



7 CONCRETE	Concrete Item - Pour concrete slab in accordance with the foundation plans and city code. Includes forming, site work, rebar, pre-inspections, final pour, and final inspection. Labor and materials. General service. 400 SQ/FT addition.	<ul style="list-style-type: none"> ADU capable to some degree. Follow compliance recommendations set forth in the final Architectural, Structural and Foundation plan(s)
10 WALL FRAMING	Framing Item - complete framing service for the entire addition in accordance with the city approved structural plans, includes frame service, frame inspections, lumber package, exterior siding, and roof decking. Labor and materials. Takeoff calculated off structural and architectural plans.	
11 ROOF	Specialized material is subject to review and additional cost. Budgeted items are builder grade.	
	Roof Item - Complete roof installation in accordance with the architectural plans, to include labor and materials. 5 roofing squares.	
	<ul style="list-style-type: none"> 3-Tab shingle, waterproofing, drip edge and ice shield included. 	
15 VINYL WINDOWS	Window Budget - Fabrication and install of windows as described in the architectural plan. Pella 250 series. White vinyl. Line item includes labor and materials.	
	Plumbing Service - complete plumbing in accordance with architectural and foundation plans, completed by master tradesman, tie rough in, trim out, final - Fixed Price. Labor only item. Client to provide:	<ul style="list-style-type: none"> Shower valve assembly and shower head Bathroom vanity faucet Kitchen faucet Kitchen disposal
21 GENERAL PLUMBING	All underground work prior to concrete included. Tie in trenching allotted up to 10" linear fee.	M-42078
24 HVAC	HVAC - Install new mini split system in accordance with architectural plans in the addition. Labor and materials.	57720 E



25 ELECTRICAL

Electrical Service - install electrical items in accordance with architectural plans, labor only. Includes rough in, trim out and final - all in accordance with city code and inspections, completed by master tradesman. Labor only item. Client to provide:

- Ceiling fan(s)
- Vanity light • Pendant light if requested.

We provide all raw building material. To include dimmers, outlets, switch covers and can lights.

TECL 35010

27 INSULATION

Install insulation, R-13 unfaced, in walls, 3-1/2" thick x 15" wide, 16"oc - throughout all walls in the addition, after rough in, labor and materials.

27 INSULATION

Install insulation, R-30 unfaced, laid flat, 9-1/2" thick x 16" wide, 16"oc - in the ceiling of the addition, 400 SQ/FT to include labor and materials.



28 WALL COVERINGS	Installation of shower pan and liner in accordance with the foundation plan dimensions. Complete fiber cement service on walls to seal, apply red guard for water proofing. Labor to install ceramic bathroom shower tile on shower walls and floor thin-set, grout & seal. Labor and material, ceramic shower wall tile included. Tile product budget \$1.55 USD/SQ/FT - 55 SQ/FT
28 WALL COVERINGS	Drywall Item - Install drywall in the entire addition after rough in, 1/4 on walls and 1/2 on ceilings, based on 400 SQ/FT - tape and float, texture to prepare for paint. Labor and materials. Includes Drywall product, screws, and joint compound.
30 INTERIOR DOORS	Install 3X pre-hung 2-8 x 6-8, 6 panel, hollow core interior doors. In accordance with door schedule in plans. Labor and materials, includes hinges and doorknobs.
31 INTERIOR TRIM, STAIRS AND ACCESSORIES	Install pine baseboard, up to 4" , plain builder grade in addition, labor, and materials. 400 Sq/Ft
32 CABINETS AND COUNTERTOPS	Cabinet Service – Fabricate kitchenette RTA style cabinets according to the Architectural layout. Includes soft close doors and hinges. Color options presented prior to order finalization. Labor and materials. Made to client choosing. Budget item – Builder grade prefabricated cabinets.
33 FLOOR COVERING	Labor to install flooring, laminate or engineered flooring, float/interlock throughout the addition in all common areas – to exclude the bathroom floor. Bathroom floor to have ceramic tile.
33 FLOOR COVERING	Flooring materials included. Client to confirm all flooring product they choose. Labor and material item. Flooring product budget \$1.55 USD/SQ/FT
33 FLOOR COVERING	Labor to install flooring in master bathroom, up to 12" ceramic tile floor, in adhesive, grout & seal. No flooring materials included.
35 INTERIOR AND EXTERIOR PAINTING	Interior Painting - Complete interior painting, walls, ceilings, doors, and trim - total area 400 SQ/FT - to include labor and materials.



- Exterior painting of the addition. Board and baton siding. Service to include prep work, caulking of joints and gaps, final coats of paint on exterior walls, soffit, and fascia. Labor and materials.

[REDACTED]

[REDACTED]

DS
b7c



Compliance Certificate

Project Casita @ 2310 W. Kings Hwy

Energy Code: **2021 IECC**
Location: **San Antonio, Texas**
Construction Type: **Single-family**
Project Type: **New Construction**
Orientation: **Bldg. faces 0 deg. from North**
Conditioned Floor Area: **372 ft2**
Glazing Area: **6%**
Climate Zone: **2 (1644 HDD)**
Permit Date:
Permit Number:

Construction Site:
2310 W. Kings Hwy
San Antonio, TX 78201

Owner/Agent:
Trenden Martinez
Jorden Global, LLC

Designer/Contractor:
Arturo Carrasco
Arturo Carrasco Designs

Compliance: Passes using UA trade-off

Compliance: **7.1% Better Than Code** Maximum UA: **102** Your UA: **90** Maximum SHGC: **0.25** Your SHGC: **0.22**

The % Better or Worse Than Code Index reflects how close to compliance the house is based on code trade-off rules.
It DOES NOT provide an estimate of energy use or cost relative to a minimum-code home.

Slab-on-grade tradeoffs are no longer considered in the UA or performance compliance path in REScheck. Each slab-on-grade assembly in the specified climate zone must meet the minimum energy code insulation R-value and depth requirements.

Envelope Assemblies

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Prop. U-Factor	Req. U-Factor	Prop. UA	Req. UA
Ceiling: Flat Ceiling or Scissor Truss	372	0.0	30.0	0.031	0.026	12	10
Wall 1 (Front): Wood Frame, 16" o.c. Orientation: Front	180	13.0	0.0	0.082	0.084	12	12
Door: Solid Door (under 50% glazing) Orientation: Front	20			0.170	0.400	3	8
Window: Vinyl Frame SHGC: 0.22 Orientation: Front	4			0.270	0.400	1	2
Window 2: Vinyl Frame SHGC: 0.22 Orientation: Front	15			0.280	0.400	4	6
Wall 2 (Left): Wood Frame, 16" o.c. Orientation: Left side	238	13.0	0.0	0.082	0.084	18	19
Window 3: Vinyl Frame SHGC: 0.22 Orientation: Left side	15			0.280	0.400	4	6
Wall 3 (Right): Wood Frame, 16" o.c. Orientation: Right side	238	13.0	0.0	0.082	0.084	18	19
Window 4: Vinyl Frame SHGC: 0.22 Orientation: Right side	12			0.280	0.400	3	5






Inspection Checklist



Energy Code: 2021 IECC

Requirements: 0.0% were addressed directly in the REScheck software












Text in the "Comments/Assumptions" column is provided by the user in the REScheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section # & Req.ID	Pre-Inspection/Plan Review	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
103.1, 103.2 [PR1] ¹ 	Construction drawings and documentation demonstrate energy code compliance for the building envelope. Thermal envelope and energy compliance path represented on construction documents.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
103.1, 103.2, 403.8 [PR3] ¹ 	Construction drawings and documentation demonstrate energy code compliance for lighting and mechanical systems. Systems serving multiple dwelling units must demonstrate compliance with the IECC Commercial Provisions.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
302.1, 403.7 [PR2] ² 	Heating and cooling equipment is sized per ACCA Manual S based on loads calculated per ACCA Manual J or other methods approved by the code official.	Heating: Btu/hr _____ Cooling: Btu/hr _____	Heating: Btu/hr _____ Cooling: Btu/hr _____	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	



Additional Comments/Assumptions:

Section # & Req.ID	Foundation Inspection	Complies?	Comments/Assumptions
303.2.1 [FO11] ² 	A protective covering is installed to protect exposed exterior insulation and extends a minimum of 6 in. below grade.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
403.9 [FO12] ² 	Snow and ice-melting system controls installed to shut off system when pavement temperature > 50F and no precipitation.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	



Additional Comments/Assumptions:

Section # & Req.ID	Framing / Rough-In Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
402.1, 402.3.4 [FR1] ¹ 	Door U-factor.	U-____	U-____	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	See the Envelope Assemblies table for values.
402.1, 402.3.1, 402.3.3, 402.5 [FR2] ¹ 	Glazing U-factor (area-weighted average).	U-____	U-____	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	See the Envelope Assemblies table for values.
402.1, 402.3.2, 402.3.3, 402.5 [FR3] ¹ 	Glazing SHGC value (area-weighted average).	SHGC:____	SHGC:____	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	See the Envelope Assemblies table for values.
303.1.3 [FR4] ¹ 	U-factors of fenestration products are determined in accordance with the NFRC test procedure or taken from the default table.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
402.4.1.1 [FR23] ¹ 	Air barrier and thermal barrier installed per manufacturer's instructions.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
402.4.3 [FR20] ¹ 	Fenestration that is not site built is listed and labeled as meeting AAMA /WDMA/CSA 101/I.S.2/A440 or has infiltration rates per NFRC 400 that do not exceed code limits.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
402.4.5 [FR16] ²	IC-rated recessed lighting fixtures sealed at housing/interior finish and labeled to indicate ≤2.0 cfm leakage at 75 Pa.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
403.3.1 [FR12] ¹ 	Supply and return ducts in attics insulated ≥ R-8 where duct is ≥ 3 inches in diameter and ≥ R-6 where < 3 inches.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
403.3.4 [FR13] ¹ 	Ducts, air handlers and filter boxes are sealed with joints/seams compliant with International Mechanical Code or International Residential Code, as applicable.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
403.3.7 [FR15] ³ 	Building cavities are not used as ducts or plenums.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
403.4 [FR17] ² 	HVAC piping conveying fluids above 105 °F or chilled fluids below 55 °F are insulated to ≥ R-3.	R-____	R-____	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
403.4.1 [FR24] ¹ 	Protection of insulation on HVAC piping.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Section # & Req.ID	Framing / Rough-In Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
402.4.6 [FR29] ³ 	Electrical and communication boxes installed in the thermal boundary of the envelope sealed to limit air leakage between conditioned and unconditioned spaces.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
403.5.2 [FR18] ² 	Hot water pipes are insulated to $\geq R-3$.	R- _____	R- _____	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
403.6 [FR19] ²	Automatic or gravity dampers are installed on all outdoor air intakes and exhausts for mechanical ventilation systems.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
403.6.1 [FR30] ²	Ventilation systems in climate zones 7 & 8 shall utilize heat or energy recovery			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	


Additional Comments/Assumptions:

Section # & Req.ID	Insulation Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
303.1 [IN13] ² 	All installed insulation is labeled or the installed R-values provided.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
402.1, 402.2.5, 402.2.6 [IN3] ¹ 	Wall insulation R-value. If this is a mass wall with at least ½ of the wall insulation on the wall exterior, the exterior insulation requirement applies (FR10).	R-_____ <input type="checkbox"/> Wood <input type="checkbox"/> Mass <input type="checkbox"/> Steel	R-_____ <input type="checkbox"/> Wood <input type="checkbox"/> Mass <input type="checkbox"/> Steel	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	See the Envelope Assemblies table for values.
303.2 [IN4] ¹	Wall insulation is installed per manufacturer's instructions.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	




Additional Comments/Assumptions:

Section # & Req.ID	Final Inspection Provisions	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
402.1, 402.2.1, 402.2.2, 402.2.6 [FI1] ¹	Ceiling insulation R-value.	R-____ <input type="checkbox"/> Wood <input type="checkbox"/> Steel	R-____ <input type="checkbox"/> Wood <input type="checkbox"/> Steel	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	See the Envelope Assemblies table for values.
303.1.1.1, 303.2 [FI2] ¹	Ceiling insulation installed per manufacturer's instructions. Blown insulation marked every 300 ft ² .			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
402.2.3 [FI22] ²	Vented attics with air permeable insulation include baffle adjacent to soffit and eave vents that extends over insulation.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
402.2.4 [FI3] ¹	Attic access hatch and door insulation ≥ R-value of the adjacent assembly.	R-____	R-____	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
402.4.1.3 [FI17] ¹	Blower door test @ 50 Pa. ≤ 5.0 ach in Climate Zones 1-2, and ≤ 3.0 ach in Climate Zones 3-8.	ACH 50 = ____	ACH 50 = ____	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
403.3.5 [FI27] ¹	Ducts are pressure tested in accordance with ANEI/RESNET/ICC 380 or ASTM E1554 to determine air leakage with either: Rough-in test: Total leakage measured with a pressure differential of 0.1 inch w.g. across the system including the manufacturer's air handler enclosure if installed at time of test. Postconstruction test: Total leakage measured with a pressure differential of 0.1 inch w.g. across the entire system including the manufacturer's air handler enclosure.	____ cfm/100 ft ²	____ cfm/100 ft ²	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
403.3.6 [FI4] ¹	Duct tightness test result of ≤ 4 cfm/100 ft ² across the system or ≤ 3 cfm/100 ft ² without air handler @ 25 Pa. Duct tightness ≤ 8 cfm/100 ft ² for ducts within thermal envelope. For rough-in tests, verification may need to occur during Framing Inspection.	____ cfm/100 ft ²	____ cfm/100 ft ²	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
403.3.4.1 [FI24] ¹	Air handler leakage designated by manufacturer at ≤ 2% of design air flow.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
403.1.1 [FI9] ²	Programmable thermostats installed for control of primary heating and cooling systems and initially set by manufacturer to code specifications.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
403.5.1 [FI11] ²	Circulating service hot water systems have automatic or accessible manual controls.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Section # & Req.ID	Final Inspection Provisions	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
403.2 [FI26] ²	Hot water boilers supplying heat through one- or two-pipe heating systems have automatic outdoor setback control to lower boiler water temperature based on outdoor temperature, indoor temperature or water temperature sensing.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
403.5.1.1 [FI28] ²	Heated water circulation systems have a circulation pump. The system return pipe is a dedicated return pipe or a cold water supply pipe. Gravity and thermos-syphon circulation systems are not present. Controls for circulating hot water system pumps start the pump with signal for hot water demand within the occupancy. Controls automatically turn off the pump when water is in circulation loop is at set-point temperature and no demand for hot water exists.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
403.5.1.2 [FI29] ²	Electric heat trace systems comply with IEEE 515.1 or UL 515. Controls automatically adjust the energy input to the heat tracing to maintain the desired water temperature in the piping.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
403.5.3 [FI31] ²	Drain water heat recovery units tested in accordance with CSA B55.1. Potable water-side pressure loss of drain water heat recovery units < 3 psi for individual units connected to one or two showers. Potable water-side pressure loss of drain water heat recovery units < 2 psi for individual units connected to three or more showers.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
403.6.2 [FI25] ²	All mechanical ventilation system fans not part of tested and listed HVAC equipment meet efficacy and air flow limits per Table R403.6.2.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
403.6.3 [FI33] ²	Mechanical ventilation systems tested and verified to meet the minimum flow rates required by Section R403.6.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
403.5.1.1.1 [FI32] ²	Demand recirculation water systems have automatic controls to start pump when hot water is requested.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
404.1 [FI6] ¹	100% of permanent fixtures have high efficacy lamps.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
404.1.2 [FI23] ³ 	Fuel gas lighting systems have no continuous pilot light.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Section # & Req.ID	Final Inspection Provisions	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
404.1.1 [FI35] ³ 	Exterior lighting for multifamily buildings shall comply with Section C405.4.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
404.2 [FI36] ³ 	Permanent interior lighting shall be controlled with either a dimmer, occupancy sensor or other control built into the fixture.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
404.3 [FI37] ³ 	Exterior lighting ≥ 30 watts shall have the following controls: manual on/off switch with automatic shut-off, automatic shut-off in daylight hours, and controls that override automatic shutoff that returns to automatic control within 24 hours.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
401.3 [FI7] ²	Compliance certificate posted with building specifications and compliance path and results.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
303.3 [FI18] ³	Manufacturer manuals for mechanical and water heating systems have been provided.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
408.2.1 [FI38] ³	Enhanced Envelope Performance Option: Proposed building UA = 0.95 UA of 2021 IECC Standard Reference Design.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	

Additional Comments/Assumptions:



2021 IECC Energy Efficiency Certificate

Insulation Rating	R-Value
-------------------	---------

Above-Grade Wall	13.00
Below-Grade Wall	0.00
Floor	0.00
Ceiling / Roof	30.00
Ductwork (unconditioned spaces):	_____

Glass & Door Rating	U-Factor	SHGC
---------------------	----------	------

Window	0.28	0.22
Door	0.17	

Heating & Cooling Equipment	Efficiency
-----------------------------	------------

Heating System: _____	_____
Cooling System: _____	_____
Water Heater: _____	_____

Name: _____ Date: _____

Comments

Load Short Form

Entire House

QUALITY AIR DESIGNS INC.

Job:
Date: May 23, 2023
By:

2624 RIGSBY AVE, SANANTONIO, TX 78222

Project Information

For:
2301 W KING HWY, SAN ANTONIO, TX 78201

Design Information

	Htg	Clg	Infiltration	
Outside db (°F)	33	103	Method	Simplified
Inside db (°F)	70	75	Construction quality	Average
Design TD (°F)	37	28	Fireplaces	0
Daily range	-	M		
Inside humidity (%)	50	50		
Moisture difference (gr/lb)	33	27		

HEATING EQUIPMENT

Make Carrier
Trade PERFORMANCE 15 SEER2 HP
Model 25SPA518A00300
AHRI ref 209690770

Efficiency 7.5 HSPF2
Heating input
Heating output 17100 Btuh @ 47°F
Temperature rise 27 °F
Actual air flow 570 cfm
Air flow factor 0.079 cfm/Btuh
Static pressure 0 in H2O
Space thermostat
Capacity balance point = 13 °F

Backup: Carrier 5KW HEATER
Input = 2 kW, Output = 7165 Btuh, 100 AFUE

COOLING EQUIPMENT

Make Carrier
Trade PERFORMANCE 15 SEER2 HP
Cond 25SPA518A00300
Coil FMC4Z1800AL1
AHRI ref 209690770

Efficiency 12.0 EER2, 15.2 SEER2
Sensible cooling 11970 Btuh
Latent cooling 5130 Btuh
Total cooling 17100 Btuh
Actual air flow 570 cfm
Air flow factor 0.061 cfm/Btuh
Static pressure 0 in H2O
Load sensible heat ratio 0.89

ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
BEDROOM	100	2263	3284	180	200
CLOS	12	119	58	9	4
BATH	54	1141	575	91	35
KITCH	63	1497	2012	119	122
UTILITY	20	285	128	23	8
LIVING	63	1790	2898	142	176
DINING	63	77	407	6	25

Calculations approved by ACCA to meet all requirements of Manual J 7th Ed.



Entire House	d	375	7173	9363	570	570
Other equip loads			0	0		
Equip. @ 1.08 RSM				10074		
Latent cooling				1152		
TOTALS		375	7173	11227	570	570

Calculations approved by ACCA to meet all requirements of Manual J 7th Ed.



Loads for Multiple Orientations

Entire House

QUALITY AIR DESIGNS INC.

Job:
Date: May 23, 2023
By:

2624 RIGSBY AVE, SAN ANTONIO, TX 78222

Project Information

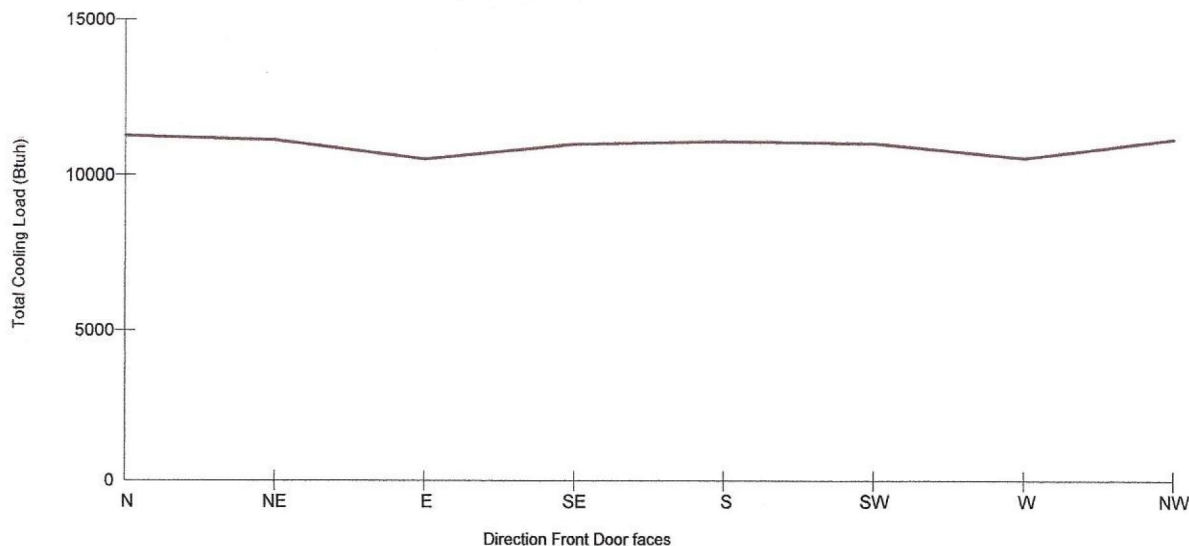
For:
2301 W KING HWY, SAN ANTONIO, TX 78201

Design Conditions

Location:		Indoor:		Heating	Cooling
San Antonio Intl, TX, US		Indoor temperature (°F)		70	75
Elevation: 789 ft		Design TD (°F)		37	28
Latitude: 30°N		Relative humidity (%)		50	50
		Moisture difference (gr/lb)		32.6	27.2
Outdoor:		Heating	Cooling	Infiltration:	
Dry bulb (°F)	33	103	20 (M)		
Daily range (°F)	-	76			
Wet bulb (°F)	-	7.5			
Wind speed (mph)	15.0				

Front Door	North	Northeast	East	Southeast	South	Southwest	West	Northwest
Sensible Load (Btuh)	10074	9949	9348	9819	9907	9852	9390	9981
Latent Load (Btuh)	1152	1152	1152	1152	1152	1152	1152	1152
Total Load (Btuh)	11227	11101	10500	10972	11059	11004	10542	11133
Heating AVF (cfm)	570	570	570	570	570	570	570	570
Cooling AVF (cfm)	570	570	570	570	570	570	570	570

Building Orientation Cooling Load



Current Orientation: Front Door faces North
Highest Cooling Load: Front Door faces North

Calculations approved by ACCA to meet all requirements of Manual J 7th Ed.

Building Analysis Entire House QUALITY AIR DESIGNS INC.

Job:
Date: May 23, 2023
By:

2624 RIGSBY AVE, SAN ANTONIO, TX 78222

Project Information

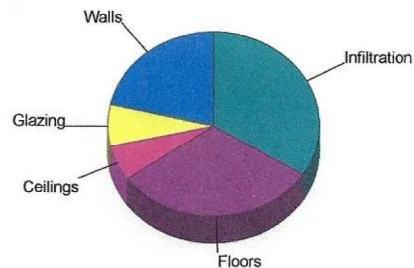
For: 2301 W KING HWY, SAN ANTONIO, TX 78201

Design Conditions

Location:		Indoor:		Heating	Cooling
San Antonio Intl, TX, US		Indoor temperature (°F)		70	75
Elevation: 789 ft		Design TD (°F)		37	28
Latitude: 30°N		Relative humidity (%)		50	50
		Moisture difference (gr/lb)		32.6	27.2
Outdoor:		Heating	Cooling		
Dry bulb (°F)	33		103		
Daily range (°F)	-		20 (M)		
Wet bulb (°F)	-		76		
Wind speed (mph)	15.0		7.5		
		Infiltration:			
		Method		Simplified	
		Construction quality		Average	
		Fireplaces		0	

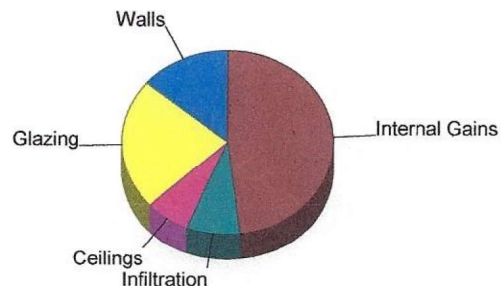
Heating

Component	Btuh/ft²	Btuh	% of load
Walls	2.8	1535	21.4
Glazing	13.4	521	7.3
Doors	0	0	0
Ceilings	1.2	458	6.4
Floors	5.9	2218	30.9
Infiltration	62.6	2442	34.0
Ducts		0	0
Piping		0	0
Humidification		0	0
Ventilation		0	0
Adjustments		0	0
Total		7173	100.0



Cooling

Component	Btuh/ft²	Btuh	% of load
Walls	2.3	1294	13.8
Glazing	55.7	2171	23.2
Doors	0	0	0
Ceilings	1.7	639	6.8
Floors	0	0	0
Infiltration	19.5	759	8.1
Ducts		0	0
Ventilation		0	0
Internal gains		4500	48.1
Blower		0	0
Adjustments		0	0
Total		9363	100.0



Latent Cooling Load = 1152 Btuh
Overall U-value = 0.095 Btuh/ft²-°F, Window / Floor Area = 10.4 %

Data entries checked.

Component Constructions

Entire House

QUALITY AIR DESIGNS INC.

Job:
Date: May 23, 2023
By:

2624 RIGSBY AVE, SAN ANTONIO, TX 78222

Project Information

For: 2301 W KING HWY, SAN ANTONIO, TX 78201

Design Conditions

Location:		Indoor:		Heating	Cooling
San Antonio Intl, TX, US		Indoor temperature (°F)		70	75
Elevation:	789 ft	Design TD (°F)		37	28
Latitude:	30°N	Relative humidity (%)		50	50
Outdoor:		Moisture difference (gr/lb)		32.6	27.2
Heating		Cooling			
Dry bulb (°F)	33	103			
Daily range (°F)	-	20 (M)			
Wet bulb (°F)	-	76			
Wind speed (mph)	15.0	7.5			
		Infiltration:			
		Method		Simplified	
		Construction quality		Average	
		Fireplaces		0	

Construction descriptions

	Or	Area ft ²	U-value Btu/h/ft ² ·°F	Insul R ft ² ·°F/Btu/h	Htg HTM Btu/h/ft ²	Loss Btu/h	Clg HTM Btu/h/ft ²	Gain Btu/h
Walls								
12E2: Fm wall, vnl ext, r-13 cav ins, 1/2" gypsum board int fnsh, 2"x4" wood fm, 16" o.c. stud		553	0.075	13.0	2.78	1535	2.34	1294
Partitions								
(none)								
Windows								
3D0: 2 glazing, clr outr, air gas, vnl fm mat, clr innr, 1/4" gap, 1/4" thk; 6.67 ft head ht	e	12	0.361	0	13.4	160	65.5	786
	s	12	0.361	0	13.4	160	33.5	402
	w	15	0.361	0	13.4	200	65.5	983
	all	39	0.361	0	13.4	521	55.7	2171
Doors								
(none)								
Ceilings								
16G0: Attic ceiling, asphalt shingles roof mat, r-30 cell ins, 1/2" gypsum board int fnsh		375	0.033	30.0	1.22	458	1.70	639
Floors								
22A0: Bg floor, heavy dry or light damp soil, on grade depth		74	0.810	0	30.0	2218	0	0



Manual S Compliance Report

Entire House

QUALITY AIR DESIGNS INC.

Job:
Date: May 23, 2023
By:

2624 RIGSBY AVE, SAN ANTONIO, TX 78222

Project Information

For: 2301 W KING HWY, SAN ANTONIO, TX 78201

Cooling Equipment

Design Conditions

Outdoor design DB:	103°F	Sensible gain:	9363	Btuh	Entering coil DB:	75.0°F
Outdoor design WB:	75.9°F	Latent gain:	1152	Btuh	Entering coil WB:	62.5°F
Indoor design DB:	75.0°F	Total gain:	10515	Btuh		
Indoor RH:	50%	Estimated airflow:	501	cfm		

Manufacturer's Performance Data at Actual Design Conditions

Equipment type:	Split ASHP				
Manufacturer:	Carrier	Model:	25SPA518A00300+FMC4Z1800AL1		
Actual airflow:	570	cfm			
Sensible capacity:	11970	Btuh	128%	of load	
Latent capacity:	5130	Btuh	445%	of load	
Total capacity:	17100	Btuh	163%	of load SHR: 70%	

Heating Equipment

Design Conditions

Outdoor design DB:	33.0°F	Heat loss:	7173	Btuh	Entering coil DB:	70.0°F
Indoor design DB:	70.0°F					

Manufacturer's Performance Data at Actual Design Conditions

Equipment type:	Split ASHP				
Manufacturer:	Carrier	Model:	25SPA518A00300+FMC4Z1800AL1		
Actual airflow:	570	cfm			
Output capacity:	17100	Btuh	238%	of load	
Supplemental heat required:	0	Btuh			
			Capacity balance:	13	°F
			Economic balance:	-99	°F

Backup equipment type:	Elec strip				
Manufacturer:	Carrier	Model:	5KW HEATER		
Actual airflow:	570	cfm			
Output capacity:	2.1	kW	100%	of load Temp. rise: 11 °F	

Meets all requirements of ACCA Manual S.





Residential Plans Examiner Review Form for HVAC System Design (Loads, Equipment, Ducts)

Form
RPER 1
15 Mar 09

Header Information

Contractor: **QUALITY AIR DESIGNS INC.**
JEREMY MARTINEZ

Mechanical license:

Building plan #:

Home address (Street or Lot#, Block, Subdivision): **2301 W KING HWY, Entire House**

REQUIRED ATTACHMENTS

Manual J1 Form (and supporting worksheets):
or MJ1AE Form* (and supporting worksheets):
OEM performance data (heating, cooling, blower):
Manual D Friction Rate Worksheet:
Duct distribution sketch:

ATTACHED

Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
Yes	<input type="checkbox"/>	No	<input type="checkbox"/>

HVAC LOAD CALCULATION (IRC M1401.3)

Design Conditions

Winter Design Conditions

Outdoor temperature: **33 °F**
Indoor temperature: **70 °F**
Total heat loss: **7173 Btuh**

Summer Design Conditions

Outdoor temperature: **103 °F**
Indoor temperature: **75 °F**
Grains difference: **27 gr/lb @ 50% RH**
Sensible heat gain: **8702 Btuh**
Latent heat gain: **1071 Btuh**
Total heat gain: **9772 Btuh**

Building Construction Information

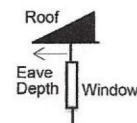
Building

Orientation: **Front Door faces North**
North, East, West, South, Northeast, Northwest, Southeast, Southwest

Number of bedrooms: **1**
Conditioned floor area: **375 ft²**
Number of occupants: **3**

Windows

Eave overhang depth: **0 ft**
Internal shade: **none**
Blinds, drapes, etc.
Number of skylights: **0**



HVAC EQUIPMENT SELECTION (IRC M1401.3)

Heating Equipment Data

Equipment type: **Split ASHP**
Furnace, Heat pump, Boiler, etc.
Model: **Carrier**
25SPA518A00300+FMC4Z1800AL1
Heating output capacity: **0 Btuh**
Heat pumps - capacity at winter design outdoor conditions
Aux. heating output capacity: **7165 Btuh**

Cooling Equipment Data

Equipment type: **Split ASHP**
Air Conditioner, Heat pump, etc.
Model: **Carrier**
25SPA518A00300+FMC4Z1800AL1
Total cooling capacity: **0 Btuh**
Sensible cooling capacity: **0 Btuh**
Latent cooling capacity: **0 Btuh**

Blower Data

Heating cfm: **570**
Cooling cfm: **570**
Static pressure: **0 in H2O**
Fan's rated external static pressure for design airflow

HVAC DUCT DISTRIBUTION SYSTEM DESIGN (IRC M1601.1)

Design airflow: 570 cfm	Longest supply duct: 0 ft	Duct Materials Used
Equipment design ESP: 0 in H2O	Longest return duct: 0 ft	Trunk duct:
Total device pressure losses: 0 in H2O	Total effective length (TEL): 0 ft	Branch duct: Sheet metal
Available static pressure (ASP): 0 in H2O	Friction rate: 0 in/100ft <small>Friction Rate = ASP ÷ (TEL x 100)</small>	

I declare the load calculation, equipment, equipment selection and duct design were rigorously performed based on the building plan listed above. I understand the claims made on these forms will be subject to review and verification.

Contractor's printed name: _____

Contractor's signature: _____

Date: _____

Reserved for County, Town Municipality or Authority having jurisdiction use.

*Home qualifies for MJ1AE Form based on Abridged Edition Checklist

