HISTORIC AND DESIGN REVIEW COMMISSION
February 05, 2020

HDRC CASE NO:	**2020-029**
ADDRESS:	102 BUFORD
LEGAL DESCRIPTION:	NCB 1369 BLK 6 LOT N 83 FT OF 11
ZONING:	R-4, H
CITY COUNCIL DIST.:	2
DISTRICT:	Dignowity Hill Historic District
APPLICANT:	Bruce Lizalde
OWNER:	Bruce Lizalde
TYPE OF WORK:	Addition, maintenance, porch modifications
APPLICATION RECEIVED:	January 11, 2020
60-DAY REVIEW:	March 10, 2020
CASE MANAGER:	Huy Pham

REQUEST:
The applicant is requesting a Certificate of Appropriateness for approval to:
1. Replace the existing wrought iron porch columns with wood porch columns.
2. Replace the existing fiberglass door with a new fiberglass door.
3. Construct a 336 square foot rear addition.

APPLICABLE CITATIONS:
2. Guidelines for Exterior Maintenance and Alterations
7. Architectural Features: Porches, Balconies, and Porte-Cocheres
A. MAINTENANCE (PRESERVATION)
i. *Existing porches, balconies, and porte-cocheres*—Preserve porches, balconies, and porte-cocheres. Do not add new porches, balconies, or porte-cocheres where not historically present.
ii. *Balusters*—Preserve existing balusters. When replacement is necessary, replace in-kind when possible or with balusters that match the originals in terms of materials, spacing, profile, dimension, finish, and height of the railing.
iii. *Floors*—Preserve original wood or concrete porch floors. Do not cover original porch floors of wood or concrete with carpet, tile, or other materials unless they were used historically.

B. ALTERATIONS (REHABILITATION, RESTORATION, AND RECONSTRUCTION)
i. *Front porches*—Refrain from enclosing front porches. Approved screen panels should be simple in design as to not change the character of the structure or the historic fabric.
ii. *Side and rear porches*—Refrain from enclosing side and rear porches, particularly when connected to the main porch or balcony. Original architectural details should not be obscured by any screening or enclosure materials. Alterations to side and rear porches should result in a space that functions, and is visually interpreted as, a porch.
iii. *Replacement*—Replace in-kind porches, balconies, porte-cocheres, and related elements, such as ceilings, floors, and columns, when such features are deteriorated beyond repair. When in-kind replacement is not feasible, the design should be compatible in scale, massing, and detail while materials should match in color, texture, dimensions, and finish.
iv. *Adding elements*—Design replacement elements, such as stairs, to be simple so as to not distract from the historic character of the building. Do not add new elements and details that create a false historic appearance.

v. *Reconstruction*—Reconstruct porches, balconies, and porte-cocheres based on accurate evidence of the original, such as photographs. If no such evidence exists, the design should be based on the architectural style of the building and historic patterns.

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. *Rooftop 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.

Standard Specifications for Windows in Additions and 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 relate 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.

- SASH: Meeting rails must be no taller than 1.25”. Stiles must be no wider than 2.25”.
- 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.
- INSTALLATION: Wood windows should be supplied in a block frame and exclude nailing fins. Window opening sizes should not be altered to accommodate stock sizes prior to approval.
- FINAL APPROVAL: If the proposed window does not meet the aforementioned stipulations, then the applicant must submit updated window specifications to staff for review, prior to purchase and installation. For more assistance, the applicant may request the window supplier to coordinate with staff directly for verification

FINDINGS:

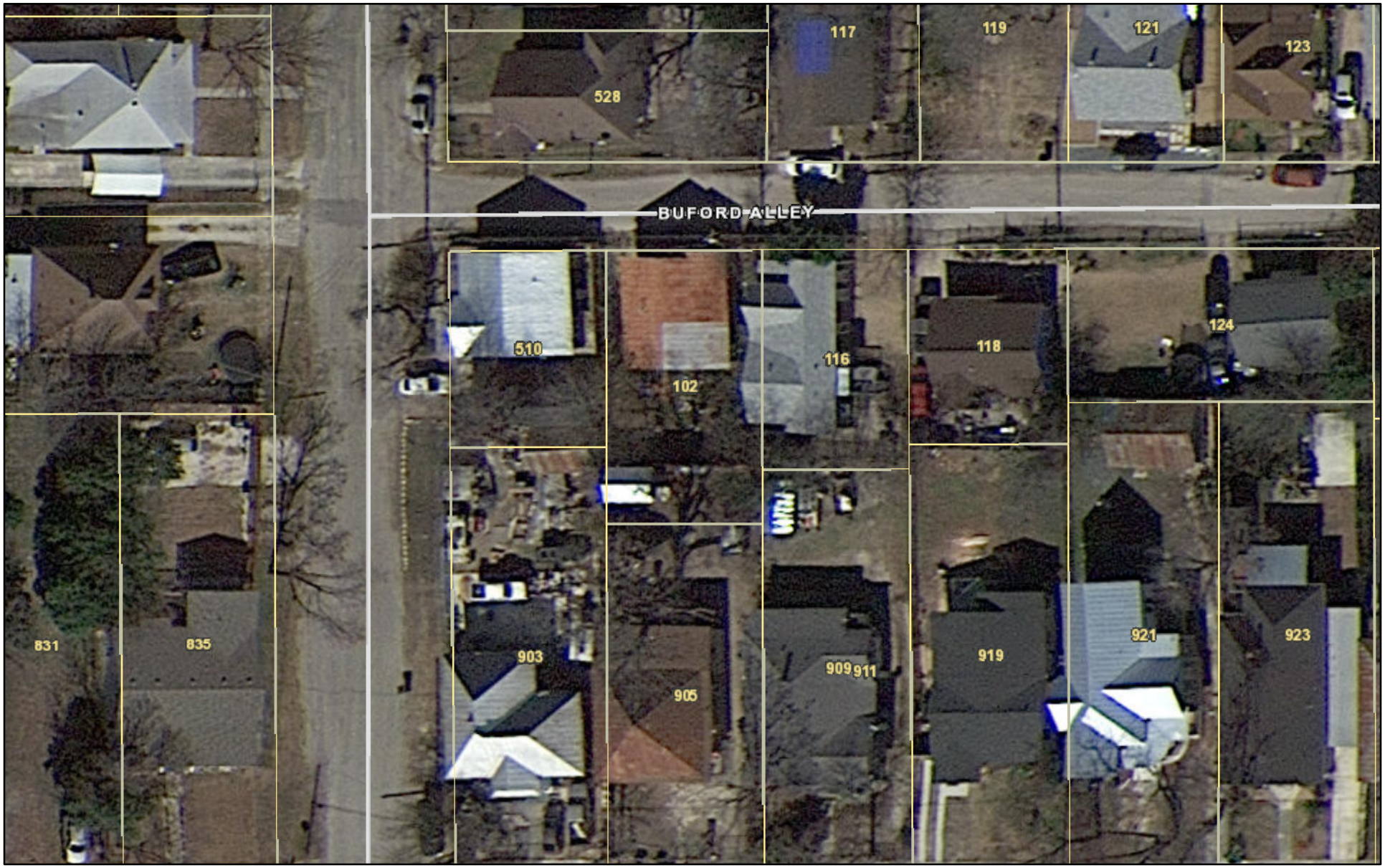
a. The primary historic structure 102 Buford was constructed circa 1910 in the Craftsman style and first appears on the 1912 Sanborn map. The one-story, single-family structure features a primary front facing gable with a subordinate gable porch roof. The structure features front eave brackets, exposed rafter tails, ganged sets of wood windows, and wood siding.
b. COMPLIANCE – On a site visit on January 29, 2020, staff found that the rear elevation was subjected to window and siding removal in preparation for the proposed addition, prior to approval. At this time, no known historic materials has been discarded.
c. COLUMN REPLACEMENT – The applicant has proposed to replace the wrought columns porch columns with square columns with capital and base trim. Per the Guidelines for Exterior Maintenance and Alterations 7.B.iii., applicants should replace in-kind porches, balconies, porte-cocheres, and related elements, such as ceilings, floors, and columns, when such features are deteriorated beyond repair. Staff finds that the wrought iron columns are not original to the structure and are eligible for replacement with wood columns that are typical to that of Craftsman style houses including the following details: The proposed wood columns should be no wider than 6' square, feature both capital and base trim and chamfered corners.
d. DOOR REPLACEMENT – The applicant has proposed to replace the existing, fiberglass door with a new painted fiberglass door in a matching configuration. Per the Guidelines for Exterior Maintenance and Alterations 6.B.i., when in-kind replacement is not feasible, ensure features match the size, material, and profile of the historic element. While a non-original door is eligible for replacement, staff finds that the new door should improve upon the non-conforming feature by featuring a Craftsman door configuration, regardless of material. A final door product should be submitted to staff prior to installation for review and approval.
e. ADDITION MASSING AND FORM – The applicant has proposed to construct a 336 square foot rear addition, featuring a subordinate gabled roof inset approximately 4 feet from the primary historic roof. Staff finds that the massing and form is generally consistent with Guidelines for Additions 1.A and B.
f. ADDITION MATERIALS AND DETAILS – The applicant has proposed to use board-and-batten Hardie siding, matching metal roof and textured plywood skirting, and new and existing Plygem aluminum windows. Per the Guidelines for Additions 3.A.i., applicants should 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. Staff finds that the Hardie plank siding should feature a horizon profile, 4-inch exposure, ¾ inch thickness and a smooth finish; no faux wood grain texture should be used. Staff also finds that the proposed Plygem windows do not adhere to the *Standard Specifications for Windows in Additions and New Construction;* faux divided lights and nailing fins should be avoided, regardless of material.

RECOMMENDATION:
Staff recommends approval of items 1 through 3 based on findings b through e with the following stipulations:

i. That the proposed wood columns be no wider than 6' square, feature both capital and base trim and chamfered corners.
ii. That the new improve upon the non-conforming feature by featuring a Craftsman door configuration, regardless of material. A door design must be submitted to staff prior to installation.
iii. The proposed new windows must adhere to *Standard Specifications for Windows in Additions and New Construction;* faux divided lights and nailing fins should be avoided, regardless of material. The proposed Plygem windows do not meet standard specifications. A compliant window product must be submitted to staff prior to installation.
iv. That the proposed composite siding feature an exposure of four (4) inches, a width of ¾", mitered corners, and a smooth finish.

CASE COMMENT:
COMPLIANCE – On a site visit on January 29, 2020, staff found that the rear elevation was subjected to window and siding removal in preparation for the proposed addition, prior to approval. At this time, no known historic material has been discarded.

102 Buford



January 29, 2020

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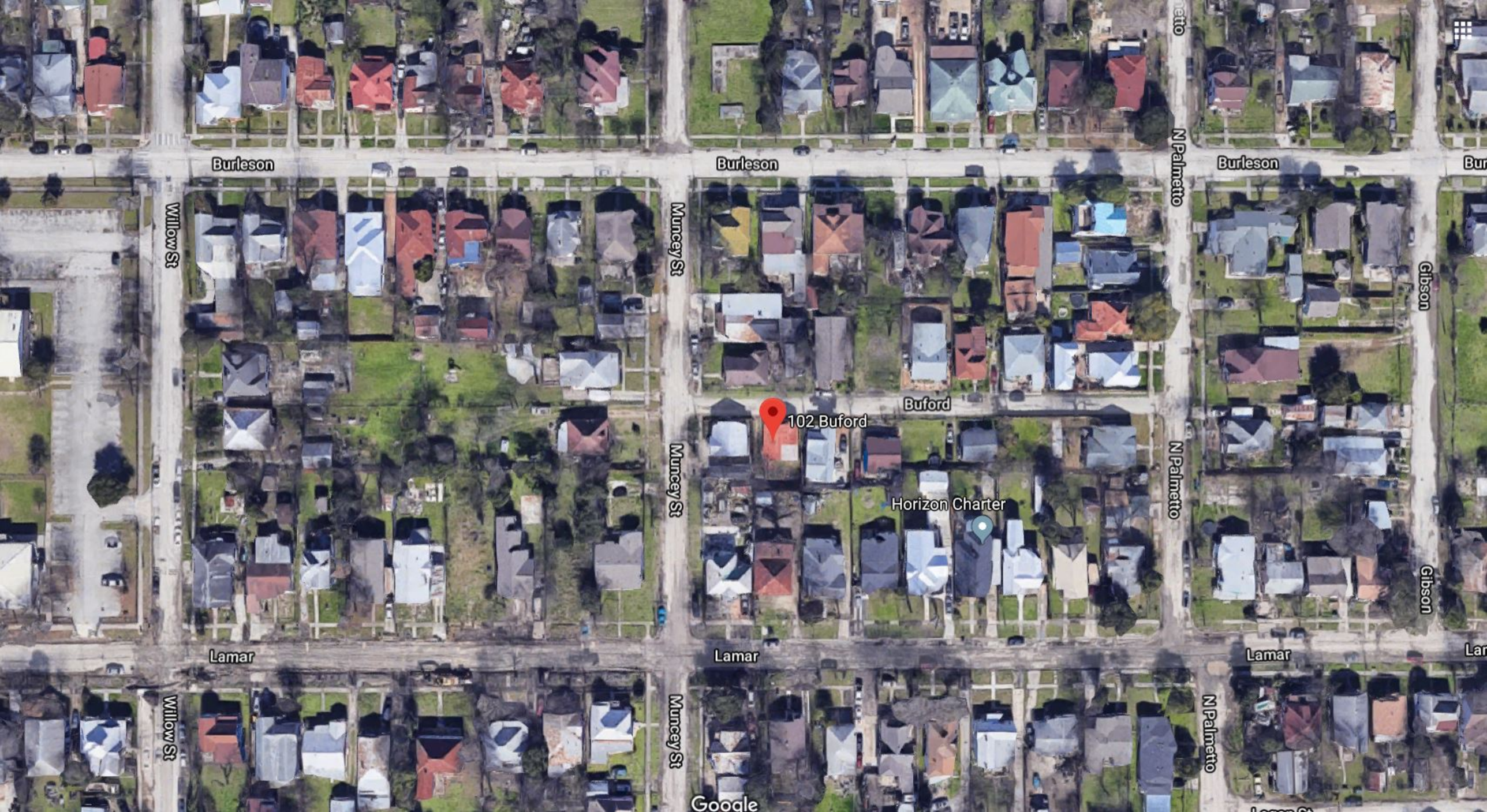
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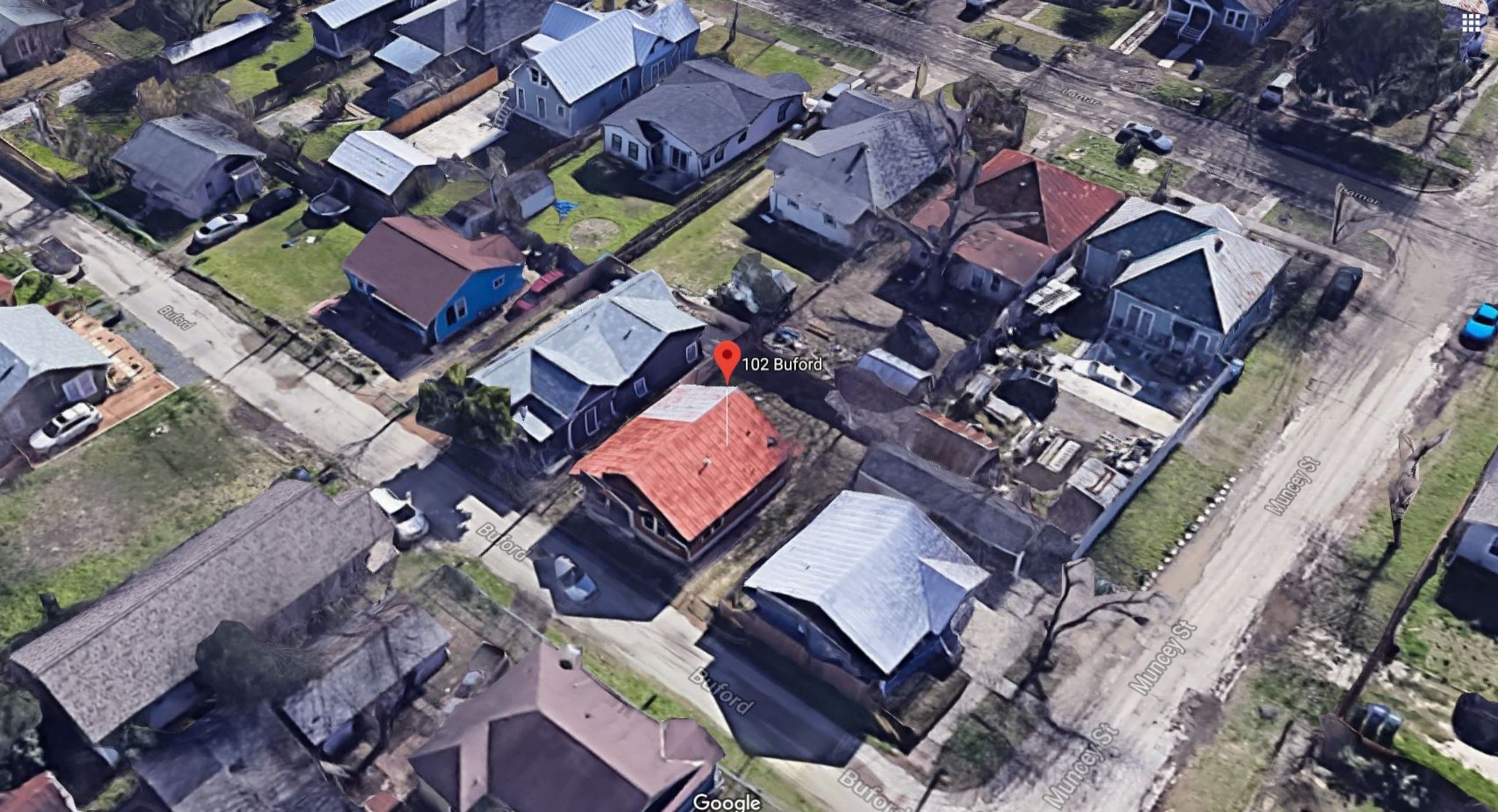
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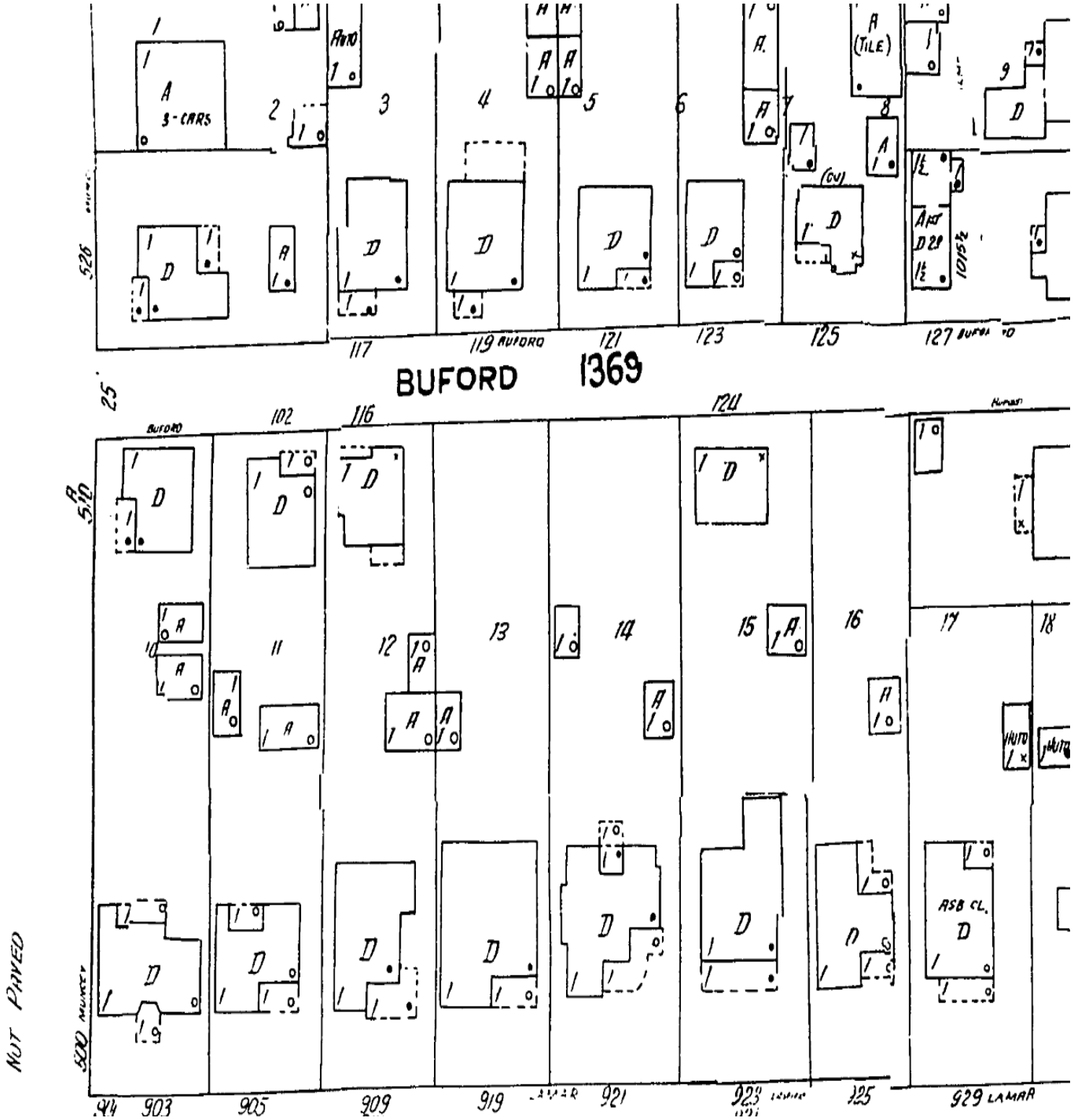
Digital Sanborn Maps, 1867–1970

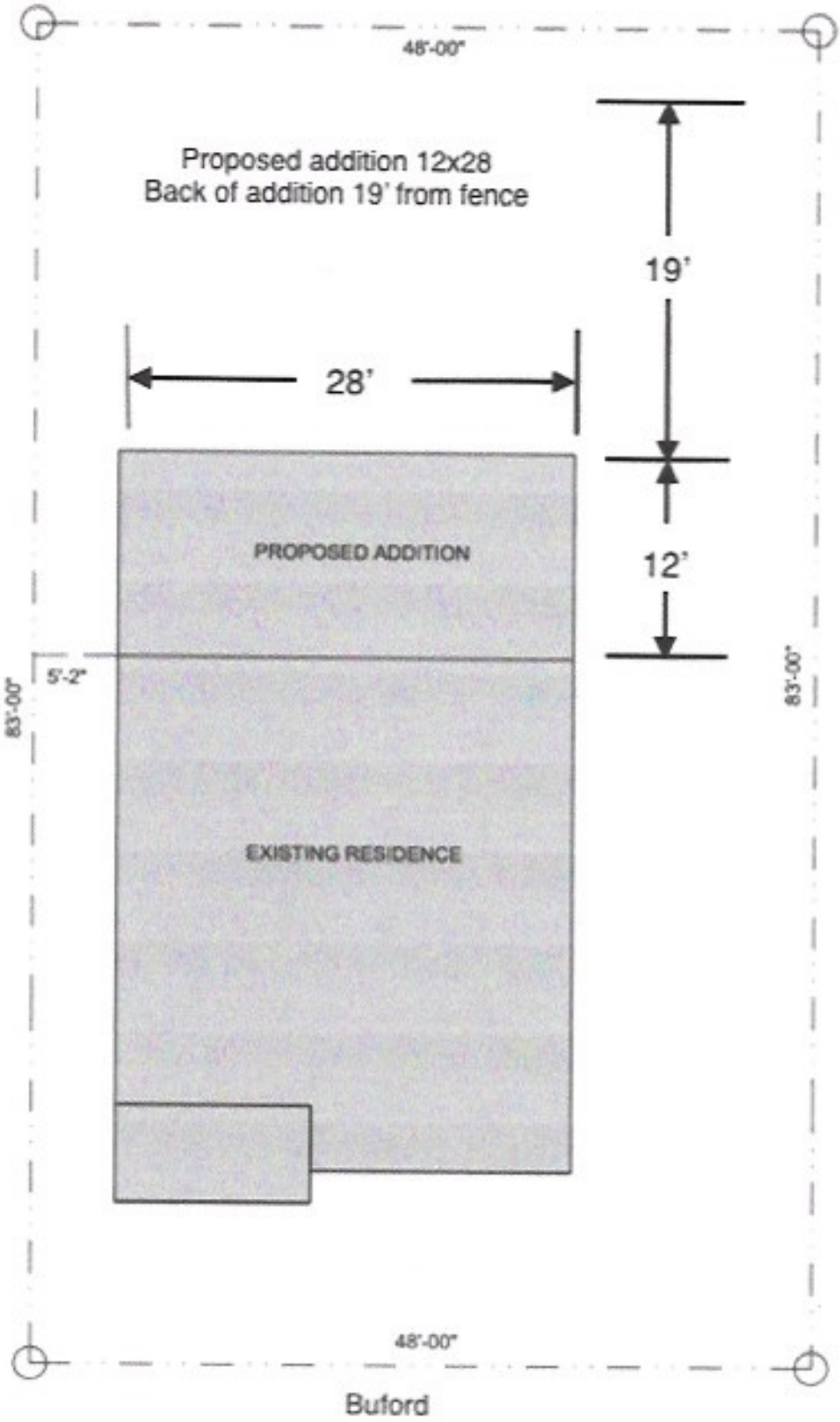
San Antonio 1911-Mar. 1951 vol. 2, 1912-Jan. 1951, Sheet 162



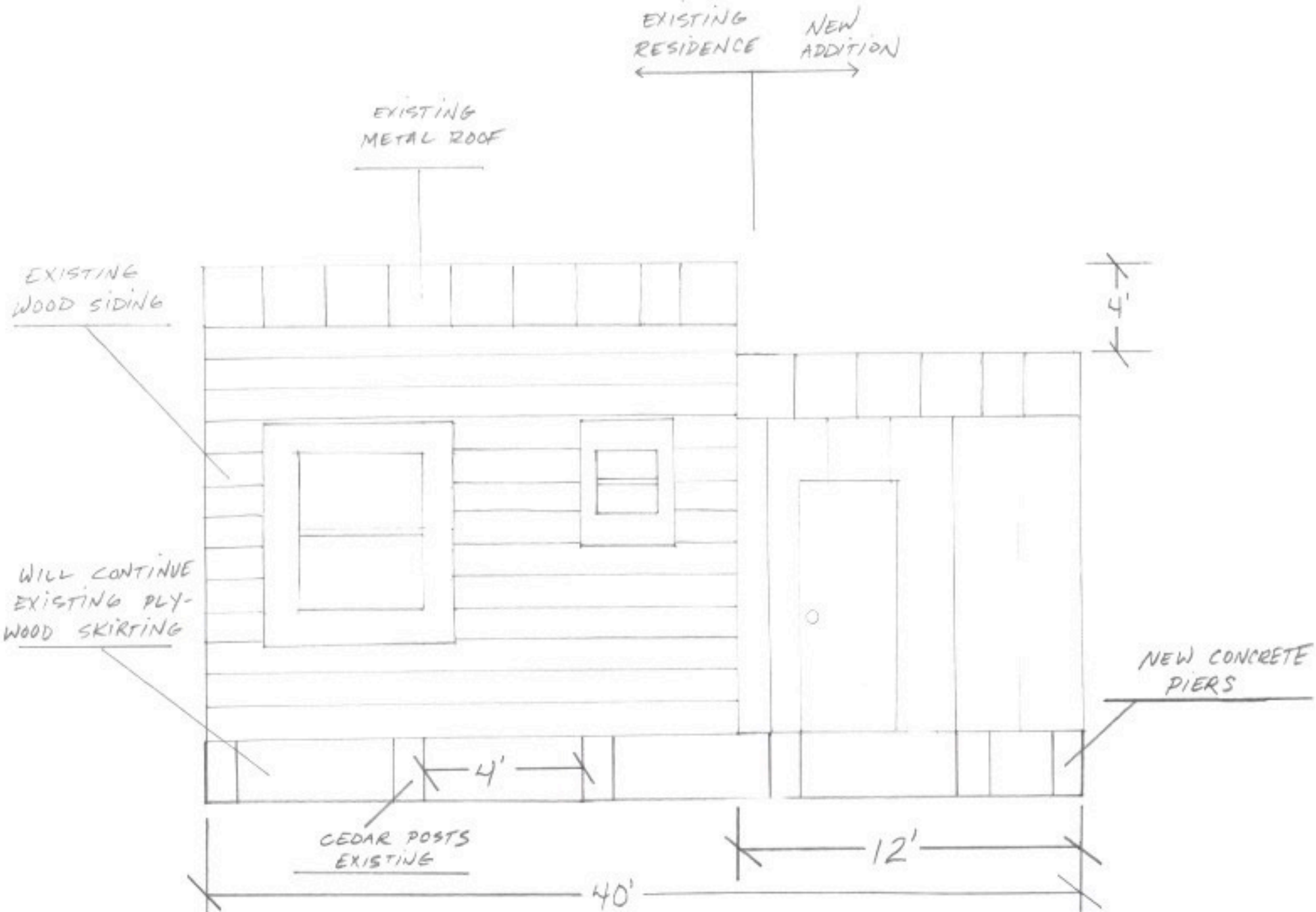
102 Buford S.A., TX 78202

Scope of Work Addition Elevations

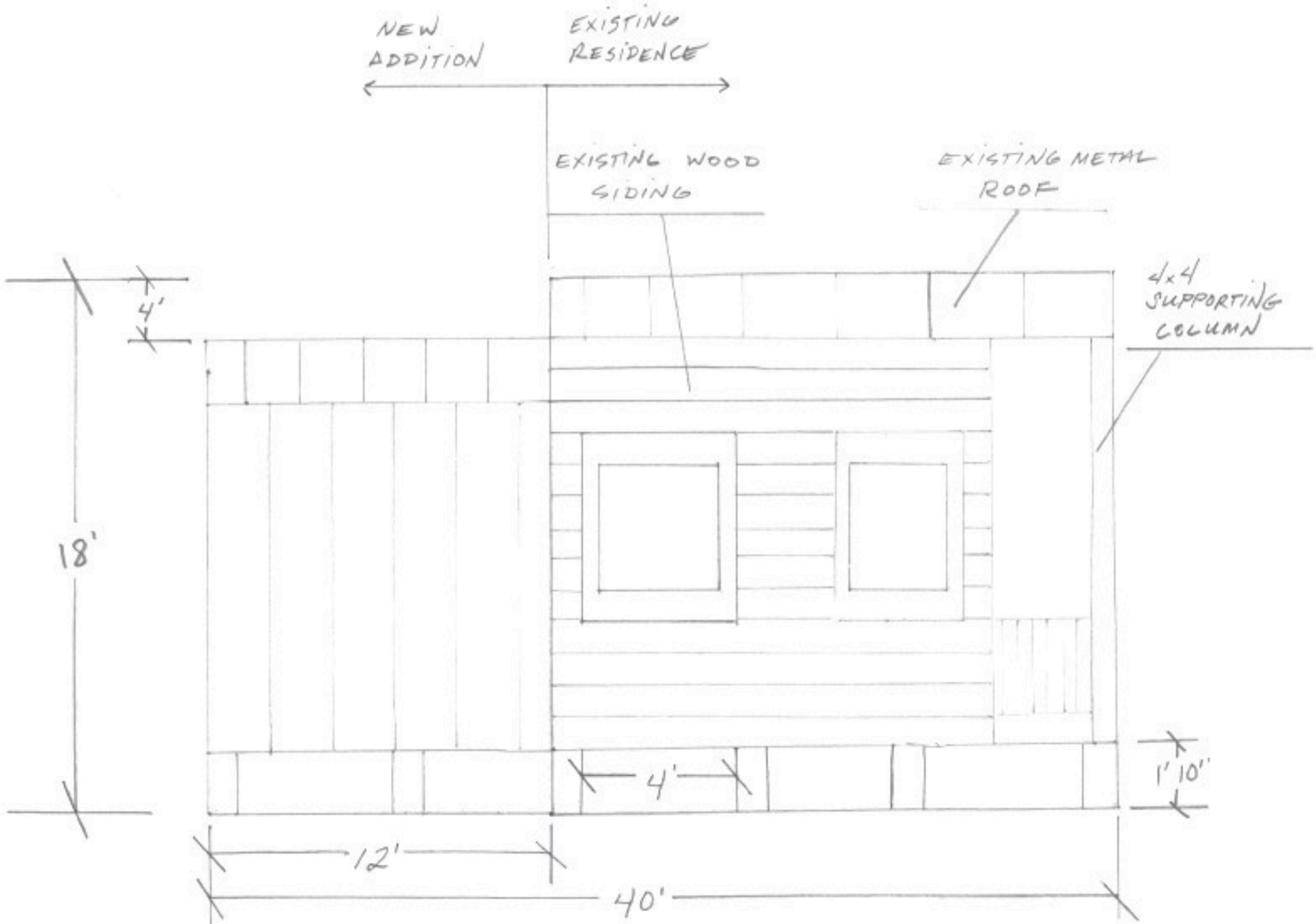
- Front Porch
    - Remove damaged wrought iron railing and post and replace with (3) 4x4 wood post with wrap base and railing measuring 2’ 7”
- Back Addition
    - Extend back of home 12x28
    - Remove current 3 windows and reuse them on the new addition
    - Rear side elevation to include addition new 32 x 80 six panel steel door to replace current back 32x80 steel door
    - Construct rear addition using hardie fiber cement vertical siding
- Site Plan
    - Attached showing addition 12x28 with 19’ setback from fence


48'-00"
Proposed addition 12x28
Back of addition 19' from fence
19'
28'
PROPOSED ADDITION
12'
5'-2"
83'-00"
83'-00"
EXISTING RESIDENCE
48'-00"
Buford

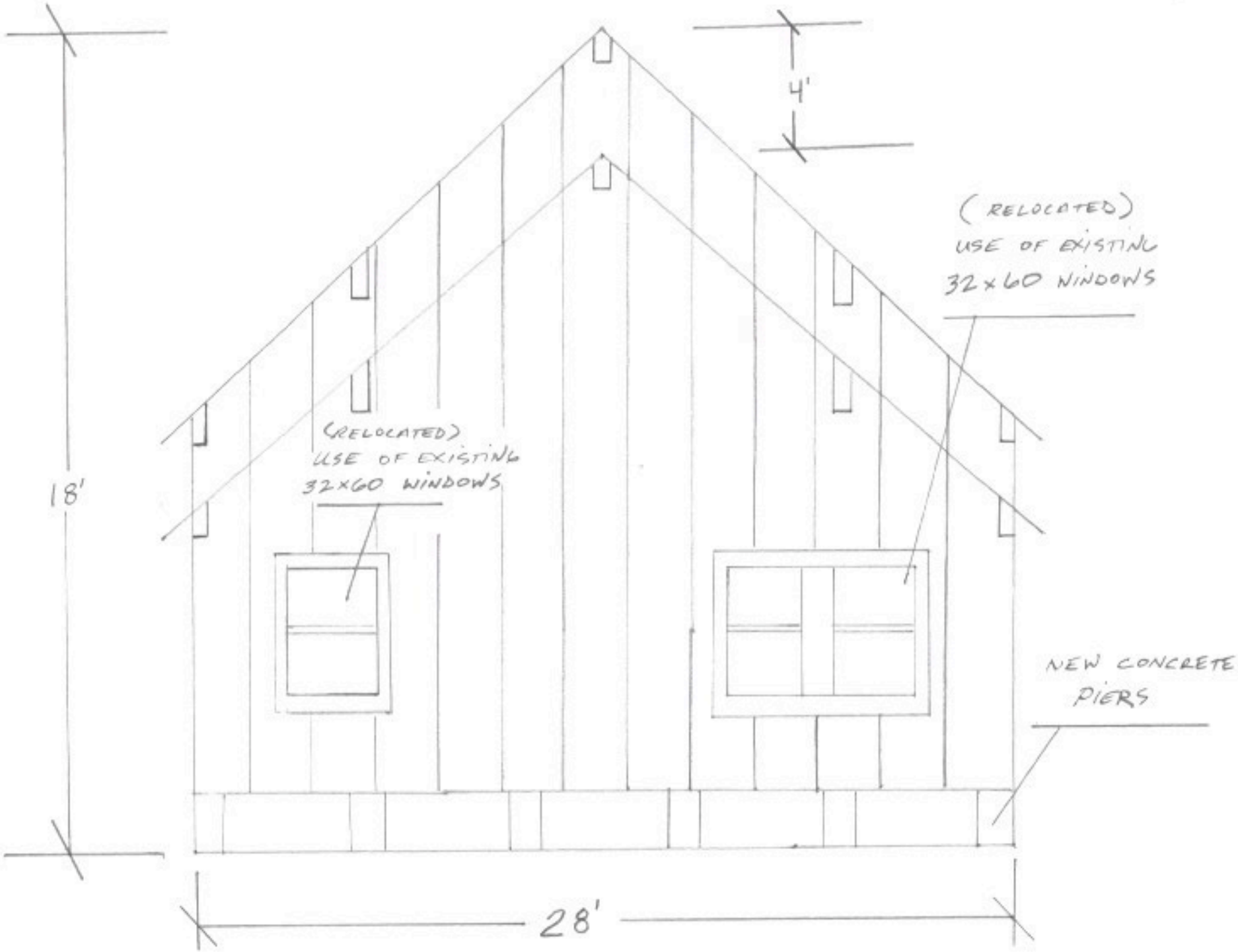
EAST ELEVATION

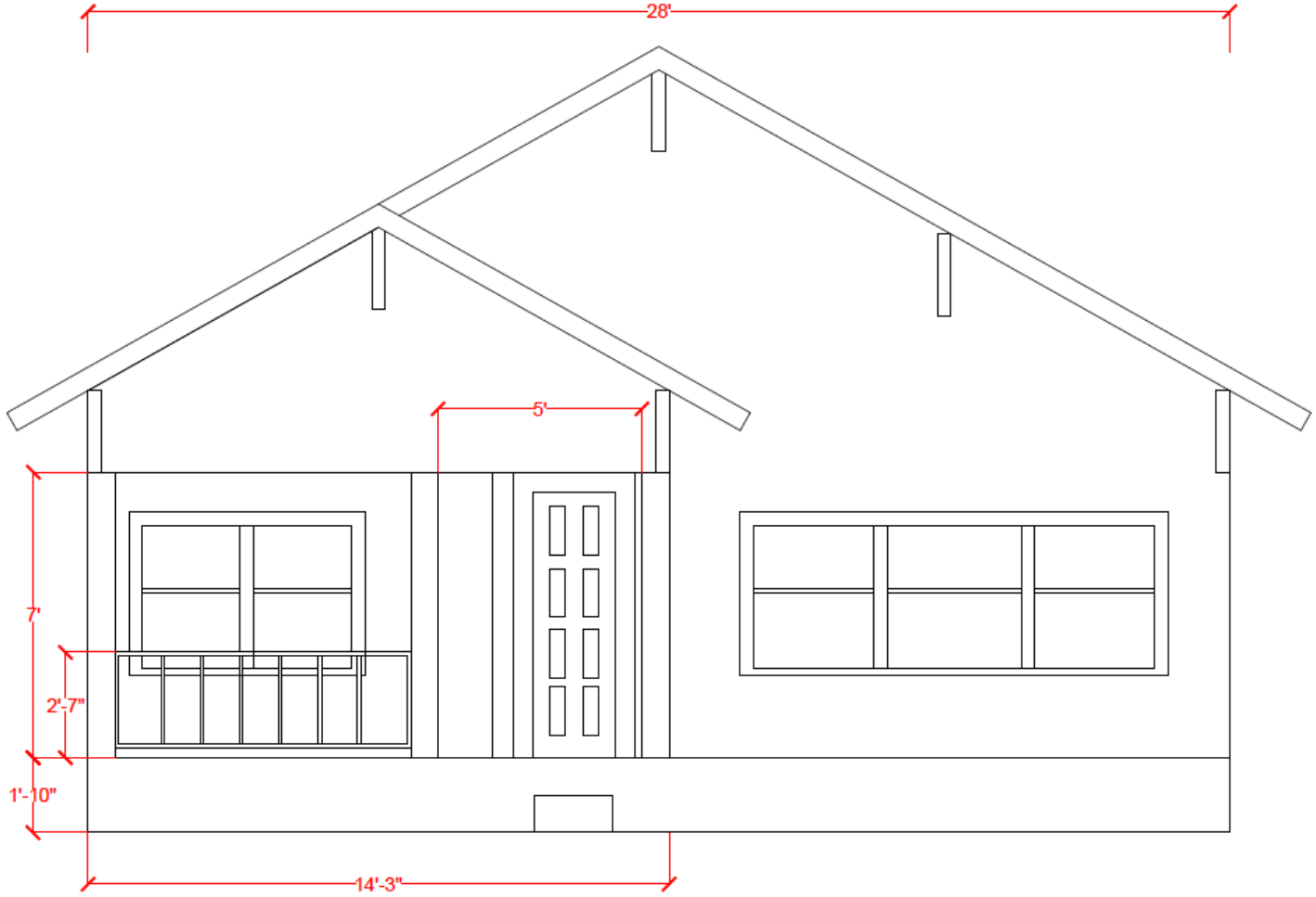


WEST ELEVATION

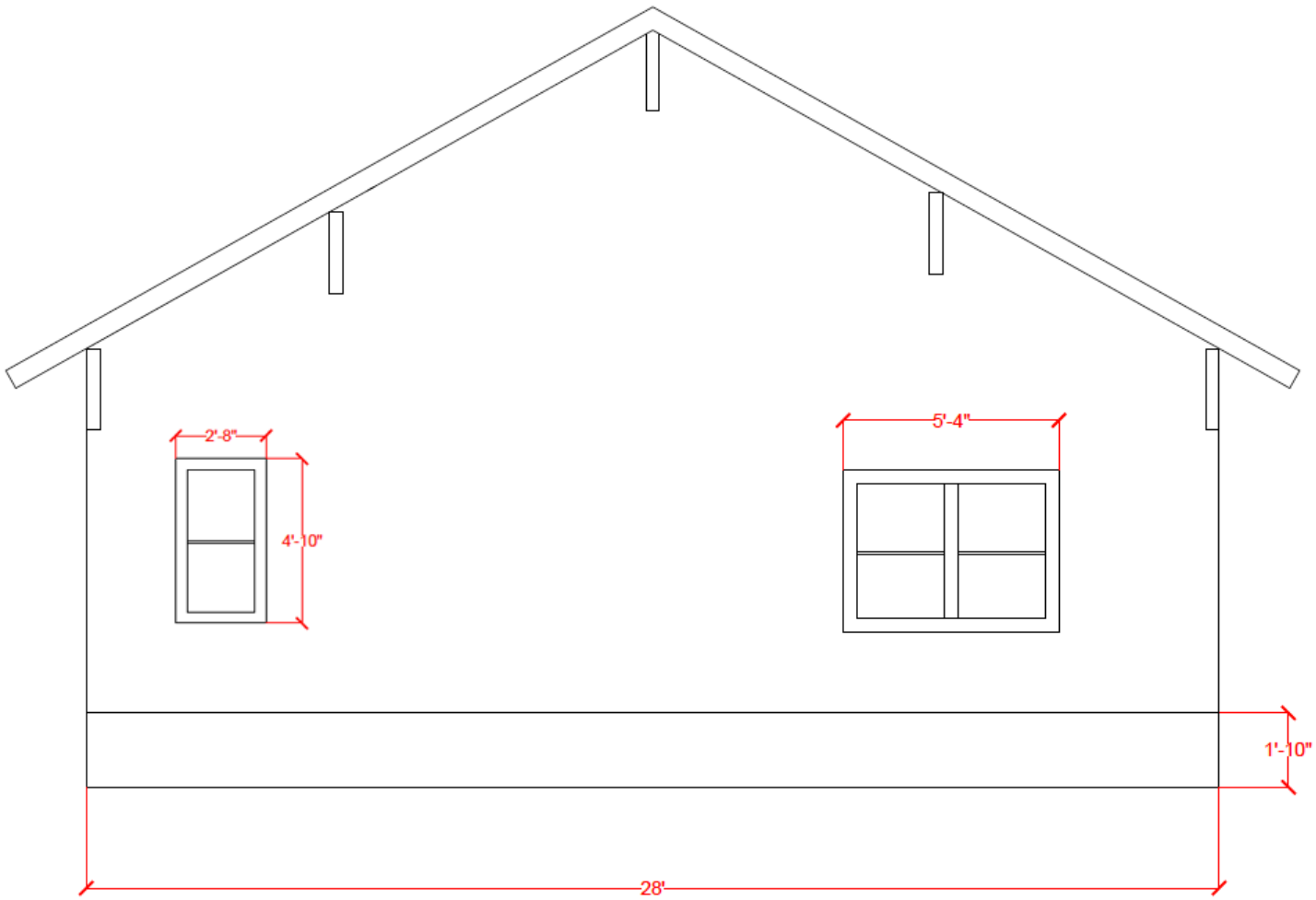


REAR ELEVATION

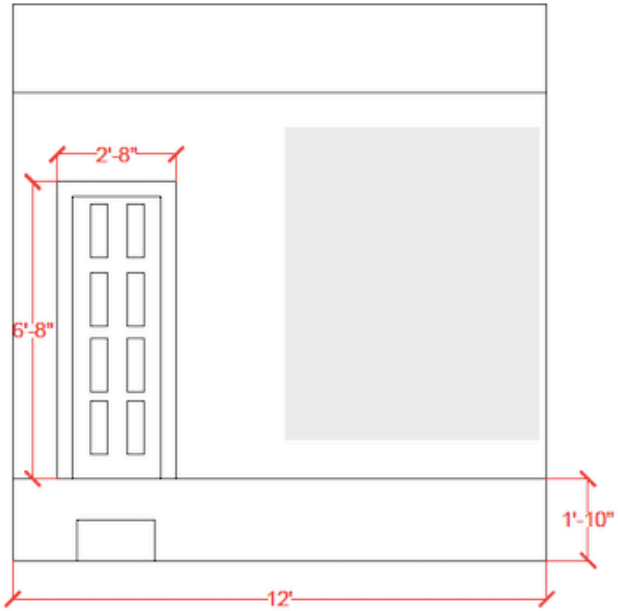




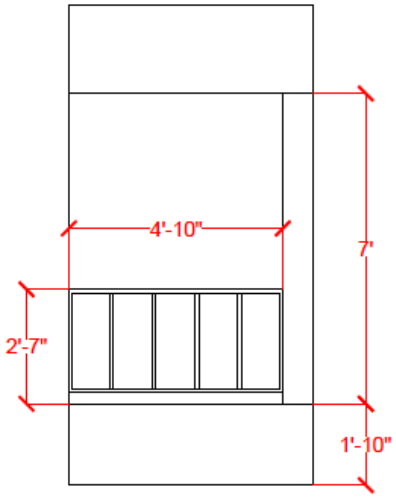
FRONT PORCH ELEVATION



BACK ADDITION ELEVATION

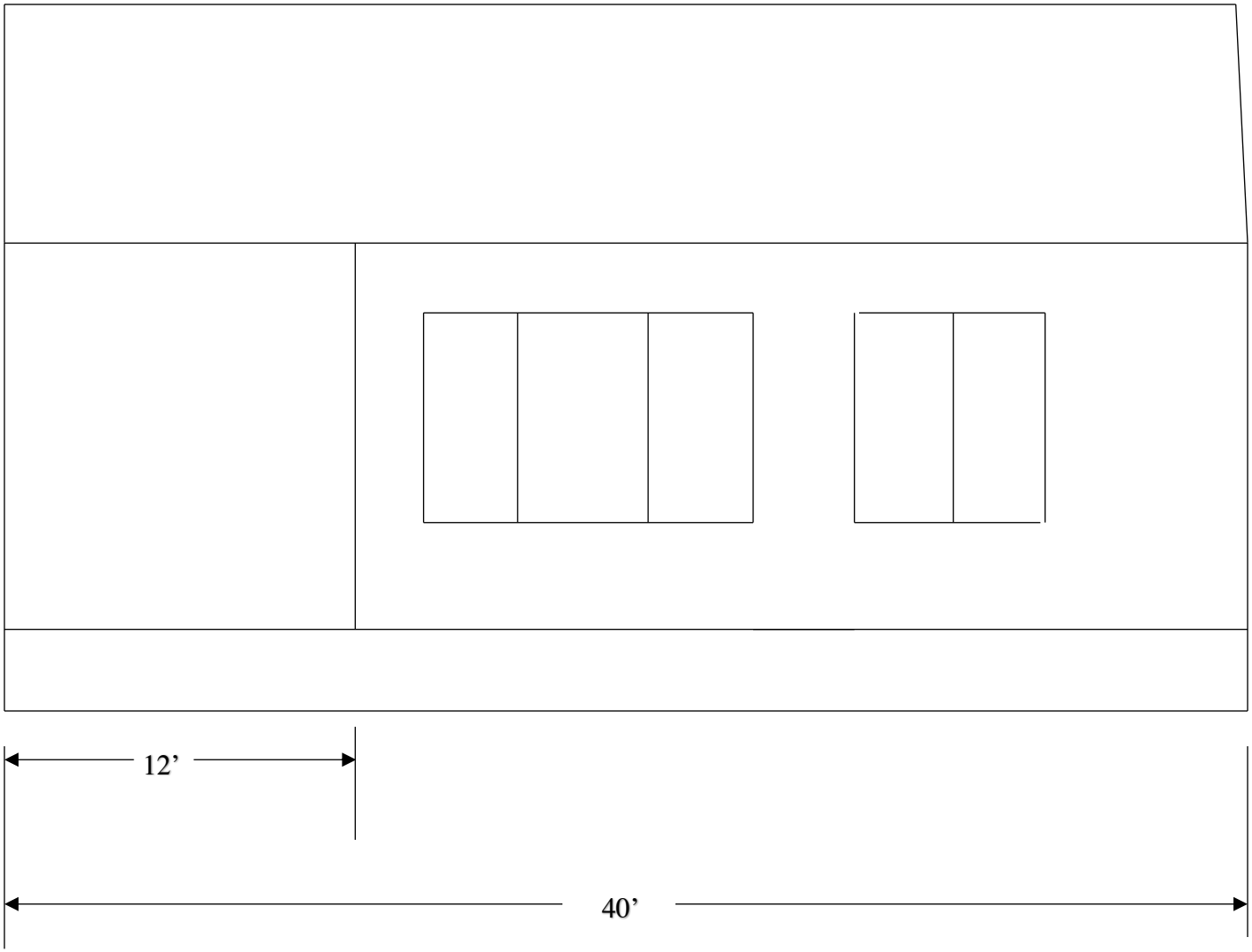


SIDE ADDITION ELEVATION

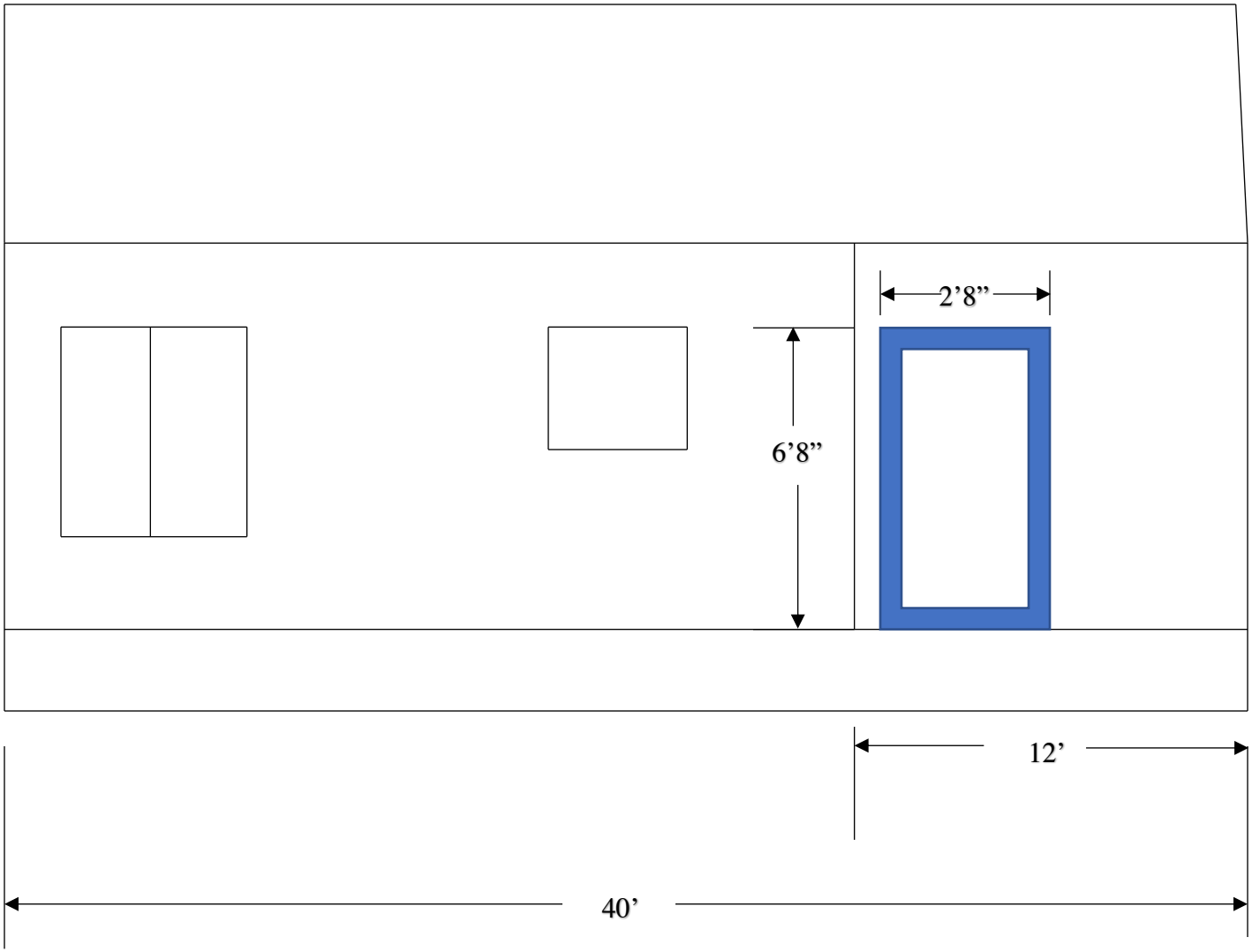


PORCH ELEVATION SIDE

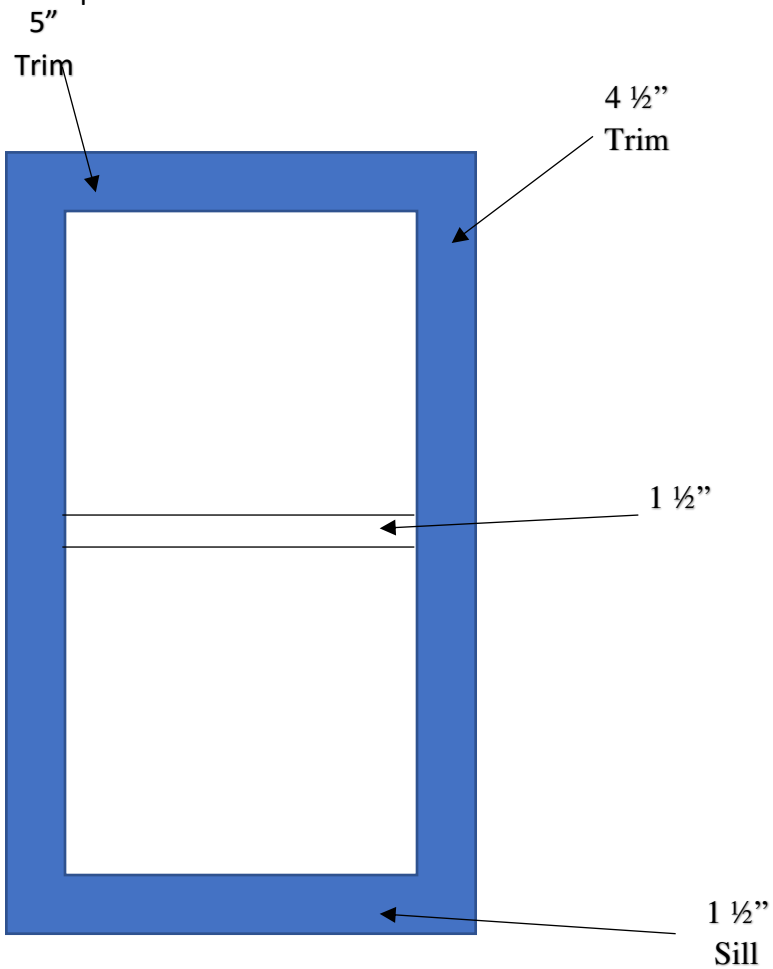
Left Side Elevation w/ 12’ addition



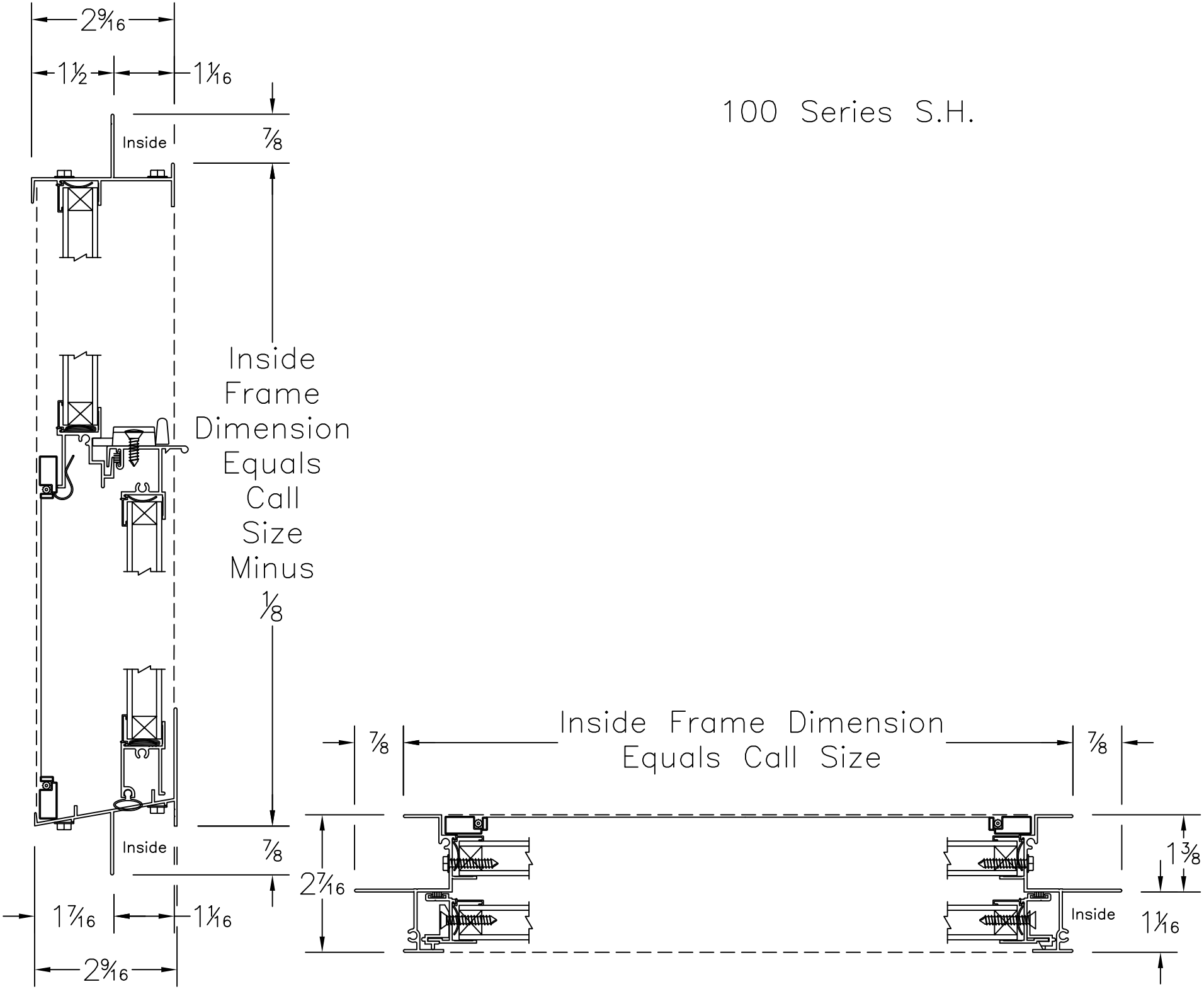
Right Side Elevation w/ 12’ addition



The windows on the addition are current windows on the rear of the home and will be relocated only. No new windows will be installed on project. The current dimensions will reflect what is currently on the home. The trim, sill and depth will be the same as what is currently in place. The diagram shows the dimensions of what is currently in place and what will be in place at the addition. The attached picture is what the rear window relocation will look like when complete.



100 Series S.H.



Current sticker on all the windows throughout the home.

GENERAL

1. International Residential Code Structural Engineering Design Provisions, 2018 Edition or the International Building Code Structural Engineering Design Provisions, 2018 Edition.
2. The design gravity loads are as follows:

   Superimposed Dead Loads (included, but not limited to):

Mechanical and Ceiling:	10psf
Roof Assemblies:	10psf
Wood Floor Assemblies:	10psf
Finishes:	As required

   Live Loads minimum (in accordance with 2018 IRC):

Roof:	20psf
Roof Net Uplift:	10psf
Floor:	40psf
Uninhabitable Attics:	
Without Storage:	10psf

3. The structure has been designed to withstand the wind pressures specified in ASCE 7-10, using a 3 second gust basic wind speed of 115 miles per hour at a standard height of 33 feet above the ground in exposure B.
4. The general contractor is responsible for fitting new work with existing construction. Information on existing buildings shown in the drawings was based upon the information supplied to structures. This information is not as-built data and the actual as-built construction may differ from that represented in the drawings. Contractors shall verify all information. *Variations from dimensions indicated on the construction documents shall be brought to the attention of the engineer*.
5. These Drawings do not, nor are intended to, locate property lines, building setbacks, nor height limitations. It is the contractor's responsibility to locate and verify the building and construct it to, and within, applicable code restrictions. Further, it is the contractor's responsibility to address site drainage appropriate to the site and in consideration to adjoining properties and the new construction.
6. Methods, procedures, and sequences of construction are the responsibility of the contractor and must satisfy the minimum requirements of the 2018 International Residential Building Code or 2018 International Building Code . The contractor shall take all necessary precautions to maintain and ensure the integrity of the structure at all stages of construction.
7. The general contractor and sub-contractors shall determine the scope of the structural work from the contract documents taken as a whole. The structural drawings shall not be considered separately for purposes of bidding the structural work. Due considerations shall be given to other structural work or work related to the structure, including necessary coordination described or implied by the architectural and mechanical drawings. Structural drawings and material and member specifications take precedence over other drawings if modifications are needed they will be brought to the engineers attention.
8. Scales noted on the drawings are for general reference only. No dimensional information shall be obtained by direct scaling of the drawing
9. The general contractor is responsible for coordination of all resulting revisions to the structural system or other trades as a result of acceptance of contractor proposed alternatives or substitutions.
10. Structural members have been located and designed to accommodate the mechanical equipment openings specified by the mechanical consultant if information is given. Any submissions resulting in revisions to the structure shall be the responsibility of the contractor to coordinate with the structure and its engineer.
11. Principle openings in the structure are indicated on the contract documents, refer to the architectural, mechanical, electrical, and plumbing drawings for sleeves, curbs, inserts, etc. not herein indicated. Openings in slabs with a maximum width or diameter of 12 inches or less shall not require additional framing or reinforcement, unless noted otherwise. The location of sleeves or openings in structural members shall be submitted to engineer for review.

FOUNDATION BUILDING PAD

1. Due to the absence of a site specific subsurface analysis and report from a Geotechnical Engineer, the foundation design is based on assumptions and/or site observations of the existing site conditions. These assumptions may not be verifiable without the expending of additional fees. Foundation conditions noted during construction that differ from those shown in the structural drawings shall be noted to the Structural Engineer before further construction is to proceed.
2. Within the foundation outline, remove all flat clay and/or unstable, completely weathered limestone, strata, all organics (I.E., roots, trees, grass, and other humus), any building foundations or rubble, and any other deleterious materials to a minimum depth of 12".
3. A vapor barrier with a performance equivalent to a 10 mil stego wrap vapor barrier shall be places beneath the slab on grade and shall be continuous all grade beams.
4. In areas where limestone is exposed at the cut surface, remove a depth of limes to provide for at least 6" of compact select fill. In areas where soil or completely weathered limestone is exposed, scarify at least six inches of the cut soil subgrade and recompact to at least 95% of the maximum dry density determined using Texas State Department of Highways and Public Transportation (SDHPT) Test Method TEX-113-E conducted with a labrotory compacted effort of 6.63 FT lbs/cu. In. Hold water contents within ± 2%.
5. Bring the building pads to grade with select material conforming to the following:

a. Retained on 2-1/2" screen	0%
b. Retained on 7/8" screen	5%-50%
c. Retained on 3/8" screen	25%-65%
d. Retained on ¼" screen	35%-75%
e. Retained on #40 mesh sieve	60%-90%

   Material passing the #40 sieve shall meet the following plasticity requirements:

PASSING No. 40 Sieve	MAXIMUM Plasticity Index	MINIMUM Plasticity Index
25%-40%	15	3
10%-25%	20	4

Sandy loam is not acceptable fill material

6. Contractor shall certify the compaction of the select material to at least 95% of the maximum dry density as determined using SDHPT Test Method TEX-113-E conducted with a laboratory compactive effort of 6.63 ft/cu. In. Hold water contents to within +2% of the optimum, and maintain compacted lift thickness to 6" or less.
7. The Foundation design assumptions do allow for a limited amount of potential vertical rise will not affect structural stability. The allowance in design does not cover architectural, mechanical, electrical, or plumbing features.

CONCRETE

1. Concrete in the following areas shall have the following compressive strength (f'c) at 28 days:

Grade beams	3000 PSI
Slab on grade	3000 PSI

2. All concrete mix designs shall be reviewed and approved by the testing agency prior to sending to the engineer of record for approval.
3. Use the cementitious materials, of the same type, brand and source throughout the Project:

   a. Portland Cement: ASTM C 150, Type I/II

4. Use the following normal-weight aggregates: ASTM C 33, coarse aggregate or better, graded. Provide aggregates from a single source conforming to the following:

   a. Maximum Coarse-Aggregate Size: typically ¾" nominal diameter

   b. Fine aggregate: Free of materials with deleterious reactivity to alkali in cement

5. Water shall conform to ASTM C 94/C 94M and be potable.
6. Admixtures if used shall be subject to the approval of the structural engineer.
7. Mixing, transporting, and placing of concrete shall conform to ACI 301 and ASTM C 94
8. Conformance to ACI 305.1 "Specification for Hot Weather Concreting" is required when air temperature is above 90 degrees F.
9. Conformance to ACI 306 "Cold Weather Concreting" is required when a period for more than three (3) consecutive days, the average daily air temperature is below 40 degrees F and the air temperature is not greater than 50 degrees F for more than one-half of any 24 hour period.
10. The fire protection rating for this project is based upon the use of normal weight aggregate concrete made with carbonate aggregates. Carbonate aggregates consist mainly of calcium or magnesium carbonate, E.G., limestone or dolomite, and contain 40 percent or less quartz, chert, and flint.
11. ***GENERAL CONTRACTOR SHALL NOTIFY THE ENGINEER 48 HOURS PRIOR TO PLACEMENT OF CONCRETE IN THE FOUNDATION.***
12. Detailing of concrete reinforcement bars and accessories shall conform to the recommendations of ACI 315 "Details and Detailing of Concrete Reinforcement" and ACI SP-66 "Detailing Manual". Placing of reinforcing bars shall conform to the recommendations of ACI 315R "Manual of Engineering" and placing drawings for reinforced concrete structures" and CRSI "Manual of Standard Practice".
13. No conduit or piping larger than 1" I.D. shall be run in structural concrete members unless shown on structural drawings.
14. All pipe sleeves in concrete members shall be schedule 40 pipe unless shown otherwise on the structural drawings. Location of the sleeves shall be as approved by the Structural Engineer. Provide 3 additional stirrups each side of each sleeve in beams and space as directed by the Engineer.
15. Reinforced steel shall be deformed new billet steel bars in accordance with A.S.T.M. Specification A615 Grade 60.
16. All stirrups shall be Grade 60 with standard 90 degree hooks
17. Provide 2-#5 x 4'-0" "L" shaped bars top and bottom at all corners and "T" intersections of beams.
18. All hooks and bends in reinforcing bars shall conform to ACI Standards unless shown otherwise.
19. Reinforcement designated as "continuous" may be spliced using Type splices. Reinforcement bar splice lengths in beams which are located at the centerline of support bar bottom bars and at mid-span for bars may be 36 bar diameters, unless otherwise noted. Provide standard ACI hooks for top and bottom bars at discontinuous ends of all grade beams.
20. Reinforcement bars shall not be tack welded, welded, heated, or cut unless indicated on the contract documents or reviewed by the structural engineer.
21. Minimum concrete cover protection for reinforcement bars shall be as follows: (see ACI 318 Section 7.7 for conditions not noted)

Concrete exposed to weather	
#5 bars and smaller	2 inches
All other bars	2 inches
Concrete cast against earth	3 inches
Grade Beams:	
Top	2 inches
Board formed sides	2 inches
Earth formed sides	3 inches
Bottom	3 inches
Slab on grade:	
Single layer or top layer	2 inches
Bottom layer cast against soil	3 inches
Bottom layer not cast against soil	2 inches

TIMBER

1. Unless otherwise noted, all structural framing lumber shall be clearly marked No. 2 Southern Pine by the SPIB.
2. All wood studs shall be full height without intermediate plate lines unless detailed otherwise.
3. Solid 2x blocking shall be provided at end and point of all wood joists and shall be placed between supports in rows not exceeding 8'-0" apart. All walls shall have 2x solid blocking at 4'-0" o.c. (this is the fire blocking as well) maximum vertically for plate heights exceeding 8'-0". End nail with 2-16d nails or side toe nail with 1-16d nails.
4. Decking: All plywood decking shall be APA Rated Sheathing, Exposure 1. ¾" T&G for floors with 48/24 Span rating, 5/8" with clips for roofs with 40/20 Span Rating, use 10d common nails at 6" o.c. at all supported edges, 10d at 12" o.c. at all intermediate supports (1 5/8" min. penetration). All joints in plywood decking shall be staggered.
5. All exterior walls shall be solid clad with 15/32" plywood APA Rated Sheathing, Exposure 1, from the top plate to the bottom plate. Attach to frame using 10d nails spaced at 6" o.c. along edges at 12" at intermediate studs (1-5/8" min penetration).
6. All framing members framing into the side of a header shall be attached using metal joist hangers.
7. Place a single treated plate at the bottom and a double plate at the top of all stud walls.
8. If nailing is not noted or shown otherwise on plans or details, nailing schedule shall be as follows:

   Connection — Nailing

   1. Joist to sill or Girder- toenail.....(3) - 8d
   2. Bridging to joist - toenail each end.....(2) - 8d
   3. Sole plate to joist or blocking - typ. Face nail.....16d at 16" o.c.
      Or brace wall panel.....(3) - 16d
   4. Top plate to stud - endnail/endnail.....(2) - 16d
   5. Stud to sole plate - toenail.....(4) - 8d
      Or end nail..(2) - 16d
   6. Double studs - face nail.....16d at 24" o.c.
   7. Double top plates - typical face nail.....16d at 16" o.c. or lap splice (8) 16d
   8. Blocking between joists - toenail .....(3) - 8d
   9. Rafters to top plat w/ overhang < 2'-0" - toenail.....(3) - 8d
   10. Rafters to top plate w/ overhang ≥ 2'-0" .....Provide Simpson H3 Hurricane ties
   11. Rim joist to top plate - toenail .....8d at 16" o.c.
   12. Top plates (laps and intersections) - face nail.....(2) - 16d
   13. Continuous header (two pieces).....16d at 16" o.c. staggered along each edge
   14. Ceiling joists to plate - toenail.....(3) - 8d
   15. Continuous header to stud - toenail.....(4) - 8d
   16. Ceiling Joists (laps over partitions) - face nail.....(3) - 16d
   17. Ceiling Joists to parallel rafters - face nail.....(3) - 16d
   18. Rafter to plate - toenail.....(3) - 8d
   19. 1" diagonal brace to each stud and plate - face nail...(2) - 8d
   20. Built-up corner studs.....16d at 24" o.c.
   21. Built - up girder and beams - face nail at top and bottom
       Staggered on opposite sides....20d at 32" o.c.
       Face nail at ends and at each splice.....(2) - 20d
   22. 2" planks - at each bearing 16d
   23. Collar tie to rafter - face nail.....(3) - 10d
   24. Jack rafter to hip - toenail.....(3) - 10d
       Face nail.....(2) - 16d
   25. Roof rafter to 2x ridge beam - toenail.....(2) - 16d
       Face nail.....(2) - 16d
   26. Joist to band joist - face nail.....(3) - 16d
   27. Ledger strip - face nail.....(3) - 16d
   28. Plywood
       Floor, wall and roof sheathing (to framing):
       3/8" and less.....8d
       ½",5/8" and ¾".....10d
       1-1/8" and 1-1/4" 10d
   29. Floor Plywood: Nails spaced at 6" o.c. at edges and at 12" o.c.
       At intermediate supports
   30. Roof plywood : nails spaced at 6" o.c. at edges and at 12" o.c. at
       Intermediate supports ,"H" clips at 24" o.c.
   31. Panel siding (to framing):
       ½" or less.....6d
       5/8" 8d
       *Corrosion - resistant siding or casing nails
   32. Built-up columns (unless detailed otherwise):

COLUMN TYPE	FASTENERS
2- 2x4	1 row of 10d nails each side @ 8" o.c. staggered
3- 2x4	1 row of 30d nails each side @ 8" o.c. staggered
4- 2x4	1 row of 3/8" dia. Through bolts @ 8" o.c. staggered
2- 2x6	2 rows of 10d nails each side @ 8" o.c.
3- 2x6	2 rows of 30d nails each side @ 8" o.c.
4- 2x6	2 rows of 3/8" dia through bolts @ 8" o.c.

9. Wood nailer attachment to steel members 3/8" thick or less: attach 2x nailer with 0.177" diameter x 1-7/8" long HILTI X-AL-H powder actuated fasteners spaced at 8" o.c. staggered or with an approved alternative.
10. Exterior sole plates and interior shear wall plates shall be attached to concrete foundations with ½" Ø anchor bolts spaced at a maximum of 6'-0" o.c. There shall be a minimum of 2 bolts per plate section with one bolt located not more than 12" or less than 7 bolt diameter from each end of the plate section.
11. Common wire nails or spikes, or galvanized box nails shall be used for all framing unless noted otherwise.
12. Fasteners, including bolts, lag screws, and drift pins with diameters 3/8" or greater shall conform to SAE J 429 Grade 1. Bolts shall be installed per AMSI/ASME Standard B18.2.1.
13. Include an allowance for 200 board feet of lumber to be used as directed in the field for special conditions not covered by note or drawing (labor for erecting same to be included). Upon completion of the project, owner shall be rebated for any unused portion of allowance materials.

LAMINATED VENEER LUMBER (LVL)

1. All laminated veneer lumber (LVL) shall be the species so. Pine, Grade 1.9E and shall provide the following allowable design values:
   - 2600 psi in bending
   - 285 psi in horizontal shear
   - 1,900,000 psi in modulus of elasticity
2. Multiple plies shall be attachment together with a **minimum** of:
   - 3 rows of . 1/4 in. x 1-1/2 in. RSS Star Drive Low Profile Washer Head Structural Screws
   - 3 rows of 10d common nails @12" o.c. for beam depths 14" or greater, 2" from top and bottom. Glued with liquid nail For multiple plies of 4, 2 rows of ½" Ø A307 bolts w/ washers @ 16" o.c., 2" from top and bottom.
3. Load must be applied evenly across entire beam width, u.n.o. If unable, follow manufacturer specifications for side-load beams or contact engineer.
4. LVL beams shall only be penetrated in the middle third span. Do not notch LVL beams without approval from Engineer. The maximum allowable round hole size is 2" for beams 7¼" in depth or more. Rectangular holes are not allowed. Holes shall be located in the middle third of the depth & spaced minimum of 2x diameter of the largest hole.

COORDINATION

1. Only certain of the required sleeve openings in structural framing component members, and only certain of the required framed openings in and/or through structural assembly are indicated on the structural series drawings. However, all sleeves, inserts and opening, including frames and/or sleeves, therefore, shall be provided for passage, provision and/or incorporation of the work of the contract, including but not limited to Mechanical, Electrical, and Plumbing work. The providing for sleeves or framed openings shall include the verification of sizes, alignment, dimension, position, locations, elevation, and grades as required to serve the intended purpose. Openings not indicated on the structural series drawings, but required as above, shall have been approved by the engineer.
2. Refer to Architectural, Mechanical, Electrical, and Plumbing series drawings for floor elevations, slopes, drains, and location of depressed and elevated floor areas.
3. Structural series drawings shall be compared with drawings of other series; differences shall be referred to the Architect for instruction.
4. Compatibility of accommodation and provision for build equipment supported on or from structural components shall be verified as to the size, dimension, clearances, accessibility, weights and reaction with the equipment for which the accommodation has been designed prior to submission of shop drawings and submittal data for each equipment and for structural components; differences shall be referred to the Architect for review, approval, and notation.
5. The structural system of this building is designed to perform as a completed unit. Prior to completion of the structure, structural components may be unstable and it is the responsibility of the contractor, or the client in the absence of a general contractor, to provide temporary shoring and/or bracing as required for the stability of the incomplete structure and for the safety of all on-site personnel.

The remodeling and/or rehabilitation of an existing building requires that curtain assumptions be made regarding existing conditions, and because some of these assumptions may not be verifiable without expending additional sums of money or destroying an otherwise adequate or serviceable portion of the structure. The client agrees to the fullest extent permitted by law, to indemnify and hold the Design Professional harmless from any claim, liability, or cost (including reasonable attorneys' fees and cost of defense) for injury or economic loss arising or allegedly arising out of the professional services provided under this agreement, exempting only those damages, liabilities for costs the attributable to the negligence or willful misconduct of the Design Professional.

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STATE OF TEXAS
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12/10/2019
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GENERAL NOTES

JEFF ADAMSON

DRAWN BY: MM
DATE: 12/10/19
SCALE: 1/4"-1'-0" SHEET:
S0.0

GENERAL NOTES FOR PIER FOUNDATIONS

FOLLOW ALL SPECIFICATIONS ON DRAWING FIRST

GENERAL PIER CONSTRUCTION:

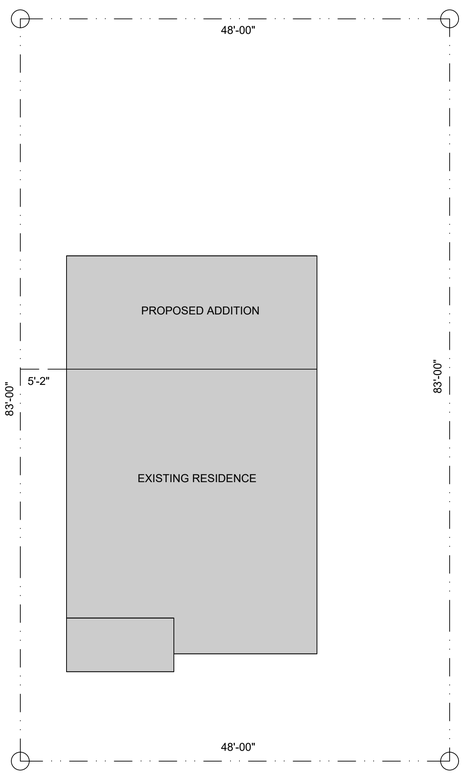
1. ALL WORK AND MATERIALS SHALL COMPLY WITH THESE PLANS AND SPECIFICATIONS,THE 2018 INTERNATIONAL RESIDENTIAL CODE (IRC).
2. CONTRACTOR IS SOLELY RESPONSIBLE FOR SAFETY AND INCLUDING ANY UNDERGROUND AND OVERHEAD UTILITY.
3. CONTRACTOR SHALL OBTAIN ANY REQUIRED PERMITS.
4. ALL WASTE SHALL BE DISPOSED OF BY CONTRACTOR AT LOCAL GOVERNMENT APPROVED SITE. GROUND SLOPE ADJACENT TO FOUNDATION AND SITE DRAINAGE SHALL COMPLY WITH CODE
5. CURE FRESH CONCRETE FOR 14 DAYS (E.G. COVER WITH 6-MIL PLASTIC OR OTHER ACCEPTABLE METHOD).
6. ALL CONCRETE SHALL BE 3000-PSI MINIMUM

SELECT FILL:

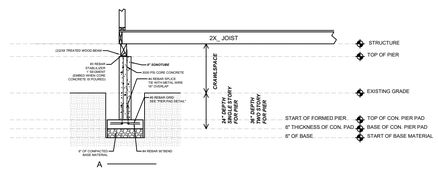
1. FILL SHALL BE PLACED THEN COMPACTED TO A MINIMUM OF 95%
2. FILL SHALL BE NO LESS THAN 6" OF THICKNESS
3. SOAKED FILL THEN LEAVE OVERNIGHT TO SET
4. RETURN TO ENSURE THAT FILL HAS SET THEN COMPACT FILL A SECOND TIME

CONCRETE PIERS AND FOOTING:

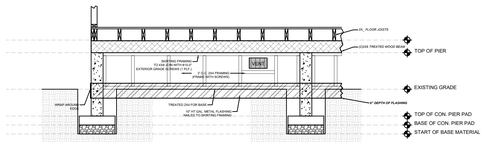
1. CONCRETE PIERS SHALL HAVE A MINIMUM DIAMETER OF 8"
2. PIERS SHALL HAVE 4 #4 REBAR RUNNING VERTICALLY
3. REINFORCE FOOTINGS WITH #5 REBAR PLACED IN SHOWN ORIENTATION
4. FOOTING (BASE PAD) THICKNESS SHALL HAVE A MINIMUM OF 6"THICKNESS



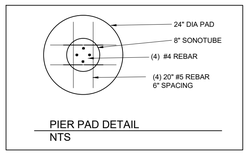
SITE PLAN
SCALE: 1/4"=1'0"



A1 FOUNDATION ELEVATION

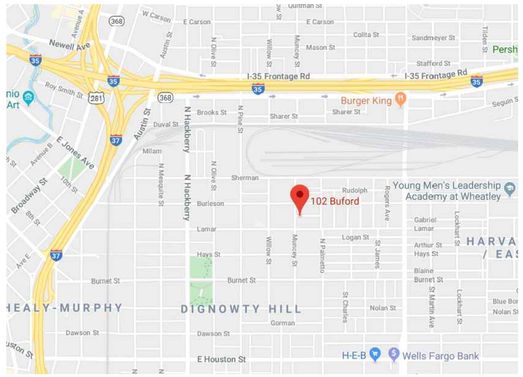


A2 FOUNDATION ELEVATION

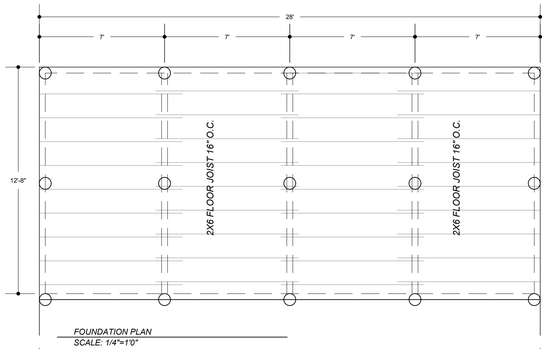


PIER PAD DETAIL
NTS

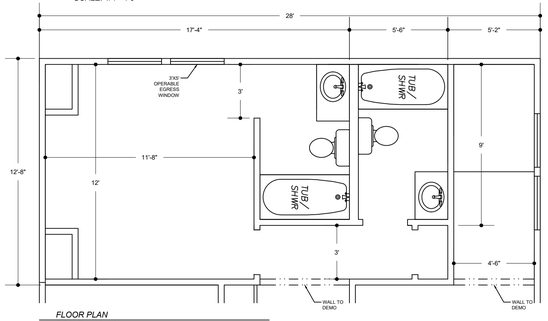
TYPICAL NEW PIER CONSTRUCTION



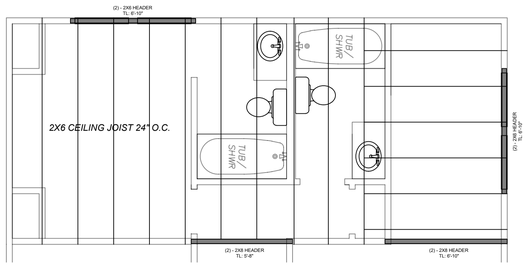
VICINITY MAP



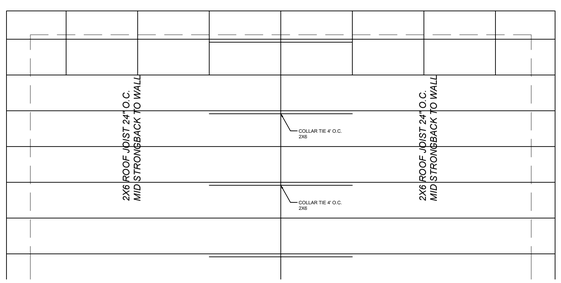
FOUNDATION PLAN
SCALE: 1/4"=1'0"



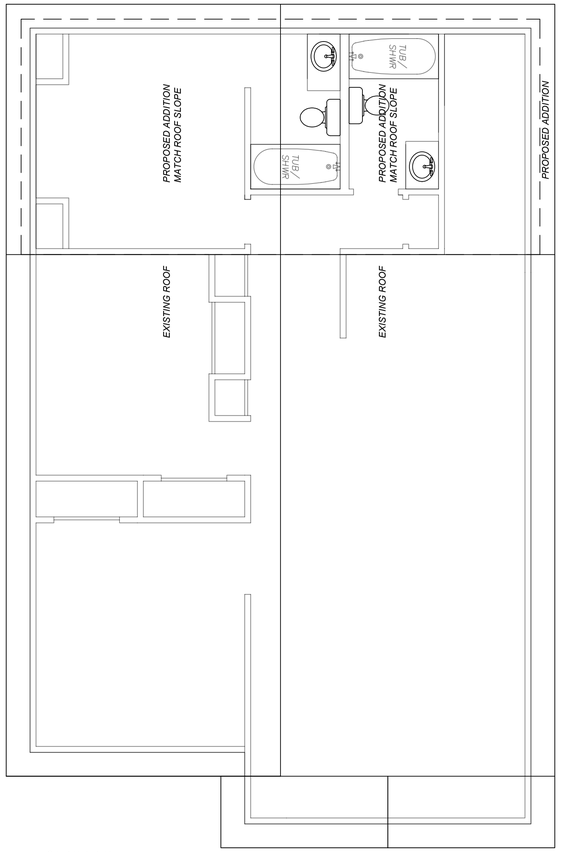
FLOOR PLAN
SCALE: 1/4"=1'0"



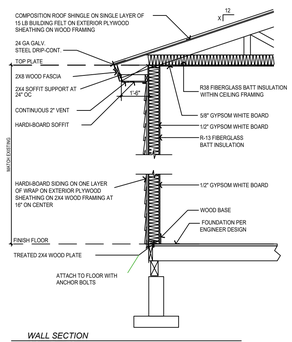
CEILING JOIST
SCALE: 1/4"=1'0"



ROOF PLAN
SCALE: 1/4"=1'0"



OVERVIEW PLAN
SCALE: 1/4"=1'0"



WALL SECTION
SCALE: NTS

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GENERAL NOTES

JEFF ADAMSON

DRAWN BY: MM

DATE: 12/10/19

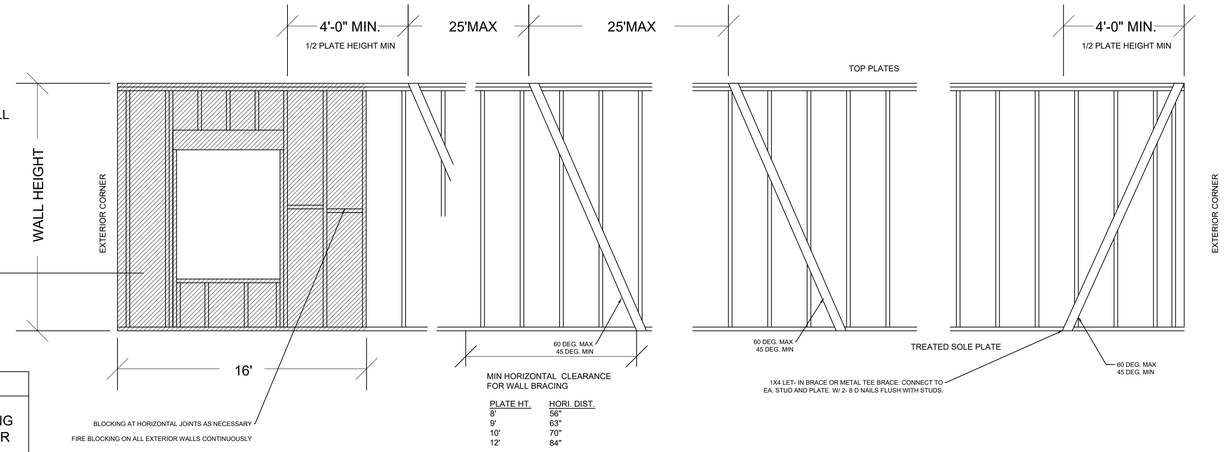
SCALE: 1/4"-1'-0"

SHEET: S1.0

CONTRACTOR SHALL CONFORM WITH ALL THE REQUIREMENTS OF THE CURRENT INTERNATIONAL RESIDENTIAL CODE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING IF ANY OTHER CODES, REQUIREMENTS OR ORDINANCES APPLY AND CONFORM TO THEM. IF A DISCREPANCY EXISTS BETWEEN THE PLANS AND ANY CODES OR REQUIREMENTS, THE ENGINEER SHALL BE NOTIFIED TO RESOLVE THE DISCREPANCY PRIOR TO FURTHER COMMENCEMENT OF WORK.

STRUCTURAL PANEL WIND BRACING WHERE DIAGONALS CANNOT BE USED:
$\frac{1}{2}$" OR $\frac{5}{8}$" STRUCTURAL PLYWOOD SHEATHING. 2" GALV. ROOFING NAILS OR 8D COMMON NAILS (2-1/2"X0.131) SPACED AT 4"O.C. ALONG EDGES AND 12" O.C. IN FIELD STUD SPACING AT 16"O.C. MAX HORIZONTAL OR VERTICAL PLACEMENT PERMITTED. BLOCKING REQUIRED AT HORIZONTAL JOINTS

SHEATHING IS CONTINUOUS (WRAP THE STRUCTURE)



MIN HORIZONTAL CLEARANCE FOR WALL BRACING

PLATE HT.	HORI. DIST.
8'	56"
9'	63"
10'	70"
12'	84"

TYPICAL WALL BRACING DETAIL

SCALE: NTS

LOAD BEARING HEADER SPAN TABLE			
HEADER SIZE	# OF JACK STUDS	ROOF AND CEILING	ROOF CEILING AND 1 FLOOR
2-2X6	1	5'-0"	3'-0"
2-2X8	2	6'-0"	4'-0"
2-2X10	2	8'-0"	5'-0"
2-2X12	2	9'-0"	6'-0"
3-2X6	1	6'-0"	4'-0"
3-2X8	2	7'-9"	5'-0"
3-2X10	2	9'-0"	6'-0"
3-2X12	2	10'-6"	7'-0"

CEILING JOISTS - MAX SPAN FOR #2 SP
LL=10 PSF. DL=5 PSF. DEFL= L/240
WITHOUT ATTIC STORAGE

CEILING JOIST SPACING			
JOIST SIZE	24"	16"	12"
2X6	14'-5"	16'-6"	18'-2"
2X8	18'-6"	21'-9"	24'-0"
2X10	23'-11"	25'-0"	27'-0"

CEILING JOISTS - MAX SPAN FOR #2 SP
LL=10 PSF. DL=5 PSF. DEFL= L/240
LIMITED ATTIC STORAGE

CEILING JOIST SPACING			
JOIST SIZE	24"	16"	12"
2X6	10'-4"	12'-8'	14'-5"
2X8	13'-1"	16'-0"	18'-6"
2X10	16'-0"	19'-7"	22'-7"

WIND BRACING AND FRAMING DETAIL

SCALE: NTS

RAFTERS- (CEILING NOT ATTACHED)
LL=20 PSF. DL= 10 PSF. DEFL= L/180
MAX. SPAN #2 SP - LIGHT ROOF COVERING

RAFTER SPACING			
RAFTER SIZE	24'"	16"	12"
2-2X6	12'-3"	15'-1"	17'-0"
2-2X8	15'-10"	19'-5"	22'-5"
2-2X10	18'-11"	23'-2"	26'-0"

RAFTERS- (CEILING NOT ATTACHED)
LL=20 PSF. DL= 20 PSF. DEFL= L/180
MAX. SPAN #2 SP -HEAVY ROOF COVERING

RAFTER SPACING			
RAFTER SIZE	24'"	16"	12"
2-2X6	10'-8"	13'-0"	15'-1"
2-2X8	13'-9"	16'-10"	19'-5"
2-2X10	16'-5"	20'-1"	23'-2"

RAFTERS- (CEILING ATTACHED)
LL=20 PSF. DL= 10 PSF. DEFL= L/240
MAX. SPAN #2 SP - LIGHT ROOF COVERING

RAFTER SPACING			
RAFTER SIZE	24'"	16"	12"
2-2X6	12'-3"	15'-1"	17'-0"
2-2X8	15'-10"	19'-5"	22'-5"
2-2X10	18'-11"	23'-2"	26'-0"

RAFTERS- (CEILING ATTACHED)
LL=20 PSF. DL= 20 PSF. DEFL= L/240
MAX. SPAN #2 SP -HEAVY ROOF COVERING

RAFTER SPACING			
RAFTER SIZE	24'"	16"	12"
2-2X6	10'-8"	13'-0"	15'-1"
2-2X8	13'-9"	16'-10"	19'-5"
2-2X10	16'-5"	20'-1"	23'-2"

LINTEL SPANS (FT)					
MASONRY HEIGHT FT	6'	8'	10'	12'	16"
0"-3'	3.5"X3.5"X$\frac{1}{4}$"	3.5"X3.5"X$\frac{1}{4}$"	5"X3.5"X$\frac{5}{16}$"	5"X3.5"X$\frac{5}{16}$"	7"X4"X$\frac{3}{8}$"
3'-MORE	3.5"X3.5"X$\frac{1}{4}$"	4"X4"X$\frac{1}{4}$"	5"X3.5"X$\frac{5}{16}$"	6"X4"X$\frac{3}{8}$"	8"X4"X$\frac{1}{2}$"

STUD WALL COLUMNS
FOR SUPPORT OF BEAMS

#OF STUDS		
BEAM SIZE	2X4 STUDS	2X6 STUDS
2-2X10	2	2
2-2X12	3	2
3-2X12	3	3
2-9-1/2" LVL	4	4
3-9-1/2" LVL	5	4
2-11-7/8" LVL	5	4
3-11-7/8" LVL	6	4
2-14"LVL	6	4
3-14"LVL	8	5
2-16"LVL	8	5
3-16"LVL	10	6
2-18"LVL	10	6
3-18"LVL	14	6
4-18"LVL	14	8

EXTERIOR WALL STUDS MAXIMUM ALLOWABLE LENGTH (FT)
STUDS SPACED @ 16" O.C.

SUPPORTING		
STUD SIZE	ROOF ONLY	1 FLOOR ROOF
2X4	12'-0"	10'-0"
2X6	20'-0"	18'-0"

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Revision/Issue		Date

WIND AND WALL BRACING

JEFF ADAMSON

DRAWN BY: MM
DATE: 12/10/19
SCALE: 1/4"-1'-0"
SHEET: S1.1


John
Bin There Dump That
Residential Friendly Dumpsters
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