Charlotte Historic District Staff Review HDC 2015-211	t Commission	Application for a Certificate of Appropriateness Date: October 14, 2015	
LOCAL HISTORIC DISTRICT:	Plaza Midwood		
PROPERTY ADDRESS:	1465 Haywood Court		
SUMMARY OF REQUEST:	New Construction		
APPLICANT:	Tim McCollum (Ed Heiser, Owner)		

The application for new construction on this property was denied in August, 12 2015. The basis for denial were Size, Scale and Massing. The applicant has submitted a new application for review. The Commission will determine if the project has been substantially redesigned and now meets the guidelines for new construction. The applicant has also added new drawings to reflect changes from the previous application.

Details of Proposed Request

Existing Conditions

The existing site is a large vacant parcel and the end of Haywood Court and the edge of the Plaza Midwood Historic District. The front of the lot is angled and the width is approximately 87'-6". The four adjacent structures on the street are one and, one and one half single family homes. Across the street is a large vacant tract and the rear yards of two single family homes. The grade drops from the front to back and from right to left.

Proposal

The proposal is a new two story single family house and detached garage. Features of the house include a full width front porch, wood and cedar shake siding, wood trim details, brick foundation and clad STDL windows.

Summary of revisions include the following:

- Elevation drawings that show the change in grade.
- Front setback has been reduced.
- Increase in rear yard area.
- Reduction in height from 24 feet to 23'.
- The width has been reduced from +/- 58 feet to +/- 56 feet.
- The front porch and overall footprint of the house has been reduced.
- The right side elevation includes an additional window toward the front and full double hung windows on the second story.
- Reduction of the garage to one story.

Policy & Design Guidelines for New Construction

New construction in Local Historic Districts has an obligation to blend in with the historic character and scale of the Local Historic District in which it is located. Designs for infill projects and other new construction within designated Local Historic Districts must be designed with the surroundings in mind. The Historic District Commission will not specify a particular architectural style or design for new construction projects. The scale, mass and size of a building are often far more important than the decorative details applied. However, well designed stylistic and decorative elements, as well as building materials and landscaping, can give new construction projects the attributes necessary to blend in with the district, while creating a distinctive character for the building. New construction projects in Local Historic Districts must be appropriate to their surroundings.

The Historic District Commission will review the building details for all new construction as part of their evaluation of new construction project proposals.

	w Construction Projects Will Be Evaluated Compatibility By The Following Criteria
1. Size	the relationship of the project to its site
2. Scale	the relationship of the building to those around it
3. Massing	the relationship of the building's various parts to each other
4. Fenestration	the placement, style and materials of windows and doors
5. Rhythm	the relationship of fenestration, recesses and projections
6. Setback	in relation to setback of immediate surroundings
7. Materials	proper historic materials or approved substitutes
8. Context	the overall relationship of the project to its surroundings
9. Landscaping	as a tool to soften and blend the project with the district

Staff Analysis

The Commission will determine if the proposal meets the guidelines for new construction.

McCollum Residence Historic District Commission Second Submittal

Summary page

The following is the updated plans for the house at 1465 Haywood Ct. The updated plans have reduced the size of the house vertically and horizontally from the last submission. The changes were made to reduce the width of the house at the street with the goal of maintaining the design characteristics that make this house a remarkable addition to the historic district Overall, we reduced the area under roof by ~908sf or approximately 17% from the last submittal.

WIDTH

We adjusted the overall width inside the home by 2' from 58 2" to 56' 2" and we reduced the width of the front porch by removing the wrap around porch elements to decrease the presence of the house on the street to give the house a smaller look from the street. We removed ~16' of front porch width off the house which reduces the street level presence of the house and makes the house appear skinnier. We also added shake to the mud room/pantry on the left side of the house to visually break up the front of the house to articulate that space on the side from the front of the house, further reducing the visual width of the house. The overall lot is ~87' 6" wide so relative to the lot, the house is using 64% of width of the lot. The three neighboring houses on the street use 43%, 89%, 54% as you head towards Thomas Ave. The average width of land used by the neighboring properties.

HEIGHT

We decreased the height of the house from the first floor to the ridge line from 24' 1" down to 23' by reducing the ceiling height on the first level down to 9'. The next door neighbors house is 22' 8.4" so in absolute size we are ~3.6" taller. We have integrated the topo into the plans to show that our house's ridge-line is lower than the houses next to it in spite of the slight disparity in height.

MASSING

We adjusted the right side (east facade) of the house by reconfiguring the bathroom and closets to provide larger windows. We also added a transom into the master closet and although the window in the side of the closet reduces our storage space, we beleive this can address the comments of our neighbor by creating a more detailed facade.

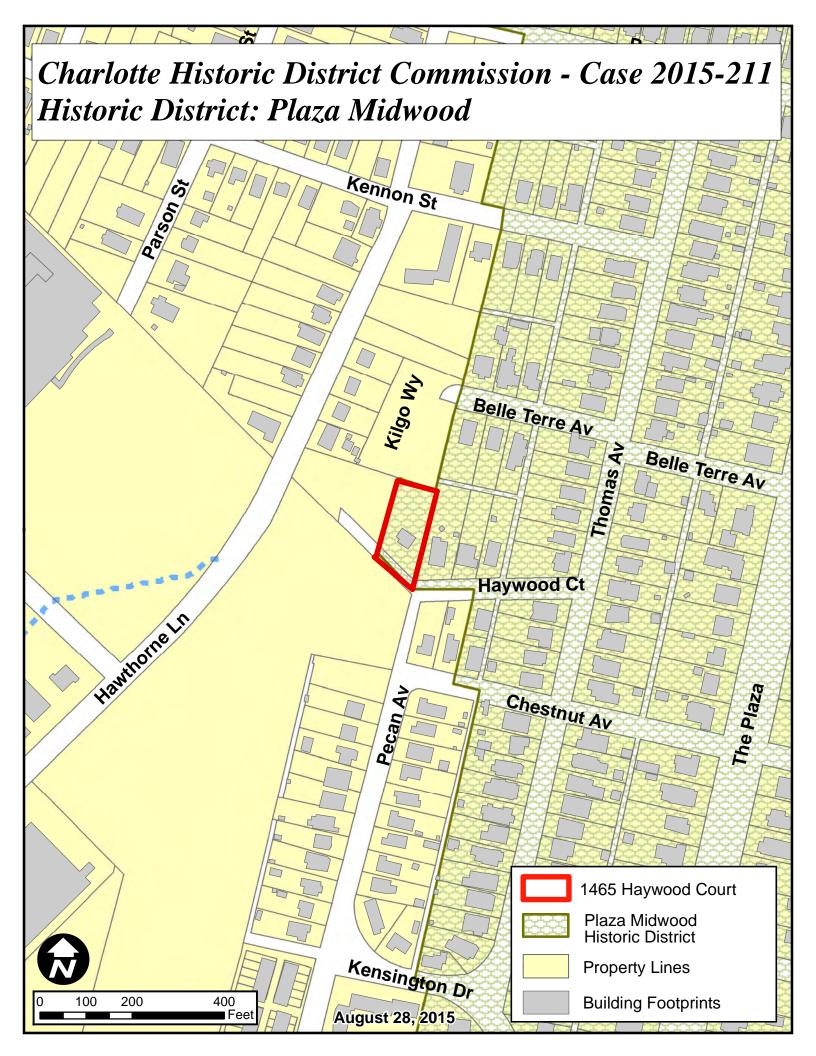
GARAGE

We eliminated the second level of the garage. If future space is needed, we will pursue a new application after the house is built.

LOT

In reducing the width of the front porch, we were able to move the house forward on the lot to better align with the existing houses on the street.





I hereby certify to only Revolve Residential: that this survey is based upon my best knowledge, information and belief; that this map was drawn under my supervision from an actual survey made under my supervision (deed description recorded in deed and map books as noted); that the boundaries not surveyed are indicated as dashed lines drawn from adjoining deed sources as shown hereon; that the ratio of precision or positional accuracy is 1:10,000; that this map meets the requirements of The Standards of Practice for Land Surveying in North Carolina (21 NCAC 56.1600). This map is not intended to meet G.S. 47-30 recording requirements. This 18th day of June, 2015. VICINITY MAP (not to scale) MIDWOOD HOLLOW, LLC (formerly know as PROJECT INNOVATIONS-BELLE TERRE VILLAGE, LLC) DB 21770-432 LOT 1 (MB 1580-459) Andrew G. Zoutewelle Professional Land Surveyor NC License No. L-3098 PART OF LOT 1 (MB 52-242) 5/ ZONIN (MB 15' ALLEYWAY 3-39) - NOT OPEN curve length & radius square feet (by coordinates) s.f. iron pipe/rebar found IPF/IRF road pavement ends (corner) 1.5' over line surveyor's noil H PK Nail iron rebor set IRS RCP reinforced concrete pipe map book deed book DB ____<u>ov</u>_____ right-of-woy RI R/W powerpole storm drain catch basin storm drain monhole sanitary sewer monhole fenceline -X--0guardrail JILL M. WALKER PART OF LOT 1 46 DB 8494-598 113-42 MB 52-242 R-22MF ZONING VACANT 15,292 S.F. TLC JOHN K. SCHERER 5 DB 11704-749 LOT 12 OF BLOCK 5 AFE 462 0CK MB 3-39 NBN R-5 ZONING MUL HOM B 2 B CH=N66*34'03"W-8.22' /L=8.47'-R=10.00' 6 10
 Tie N89'20'08"E-131.42'
 IPF(bent)/_____

 IRF
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 Tie from IRF to PK Nail bearing NC State Plane Coordinates of: N 542,559.23 E 1,459,316.94 CF=0.99984180019 S88'19'38"E-354.37' (ground distance) pavement edge HAYWOOD COURT 50' PUBLIC © R/W (MB 3-39) povement edge apparent R/W limit (MB 3-39) A.G. ZOUTEWELLE /General Notes:
1. Source of title of this property is recorded in Deed Book 25202, Page 740. This property is known as Part of Lot 1 of BELLE TERRE VILLAGE as shown on Map Book 52, Page 242 of the Mecklenburg County Registry.
Tax. I.D. number is 081–193–14.
Area as shown hereon was as calculated by the coordinate method.
2. This property is zoned R-5 as per Mecklenburg County GIS which has the following standard setbacks:
20' Front / 5' Side / 35' Rear / 40' Maximum Building Height This survey does not reflect a zoning analysis. Any development of this property is subject to the approval of the City of Charlotte.
3. This survey does not reflect a complete title examination which may reveal additional restrictions, easements and other matters of title.
4. This survey does not reflect complete utility locations. Contractors should contact the NC One-Call Locating Center at 1-800-632-4949 before any design, digging, or excavation is begun.
5. This property is not located within a FEMA Flood Fringe Area per FEMA Flood Panel No. 3710455400K with an effective date of February 19, 2014.
6. The orientation of this plat, as well as the NC grid coordinates cited hereon was based on control points set on June 30, 2014 with a Leica GS14 GNSS receiver while utilizing GPS, GLONASS, and the NC RTK VRS Network. Two seperate observations occured on different days while taking a minimum of 180 RTK readings at each session. Estimated accuracy at 95% certainty was 0.09'. General Notes: SURVEYORS NOPE 1418 East Fifth St. Charlotte, NC 28204 Phone: 704-372-9444 Fax: 704-372-9555 Firm Licensure Number C-1054 Copyright 2015 PHYSICAL SURVEY of 1465 HAYWOOD COURT CHARLOTTE, MECKLENBURG COUNTY, N.C. 0. P D S B for REVOLVE RESIDENTIAL June 18, 2015 Scale 1'' = 30'Y////// 11/1/12 certainty was 0.09'. Z: \2015DWGS\ZAC\HAYWOOD COURT 1465\DWG\HAYWOOD COURT 1465

(1A) <u>1465 Haywood Ct Survey</u> 1" = 30'-0"

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1511 HAYWOOD COURT





1815 THOMAS AVENUE



1507 HAYWOOD COURT

1508 HAYWOOD COURT

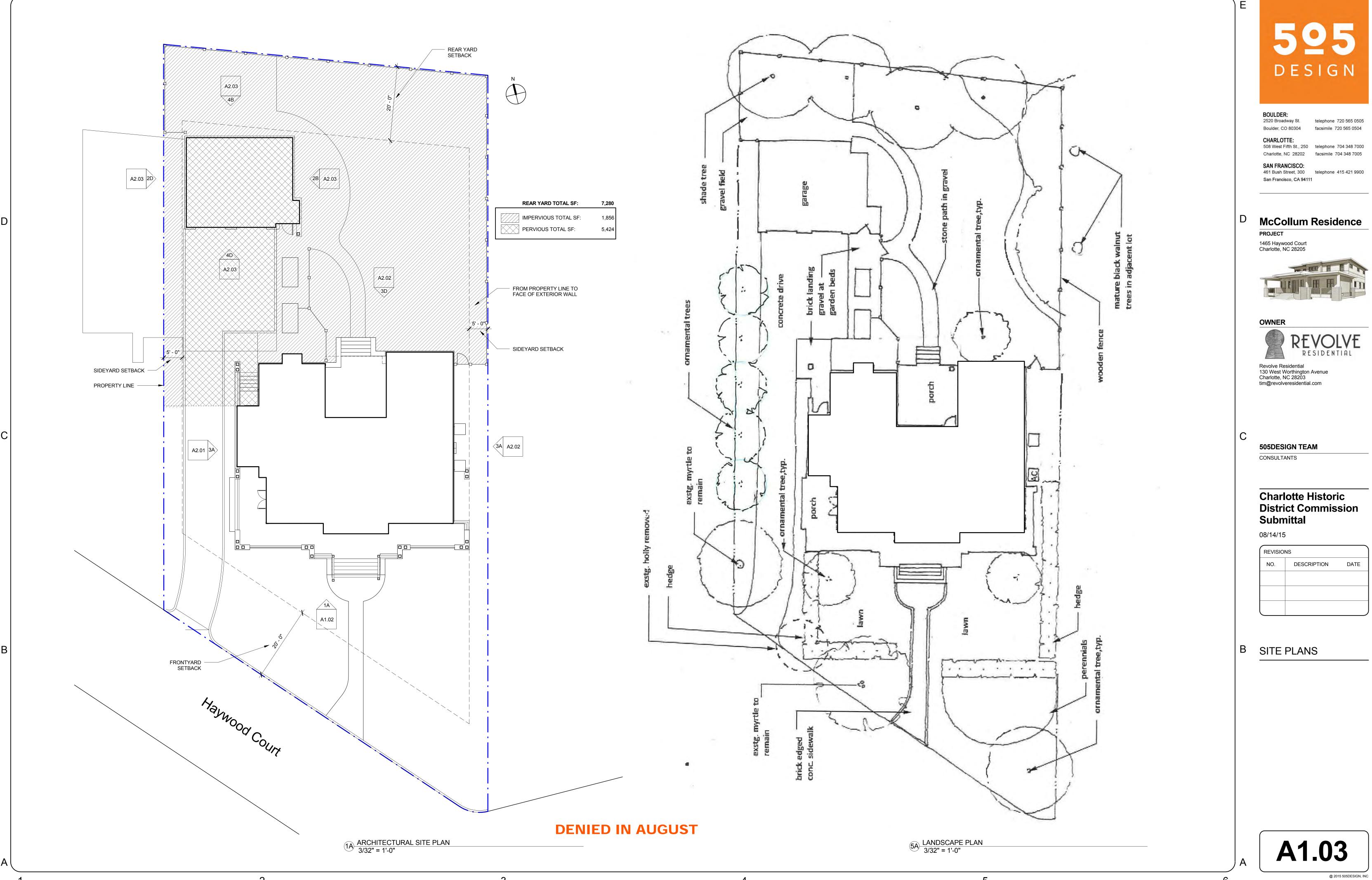


1823 THOMAS AVENUE

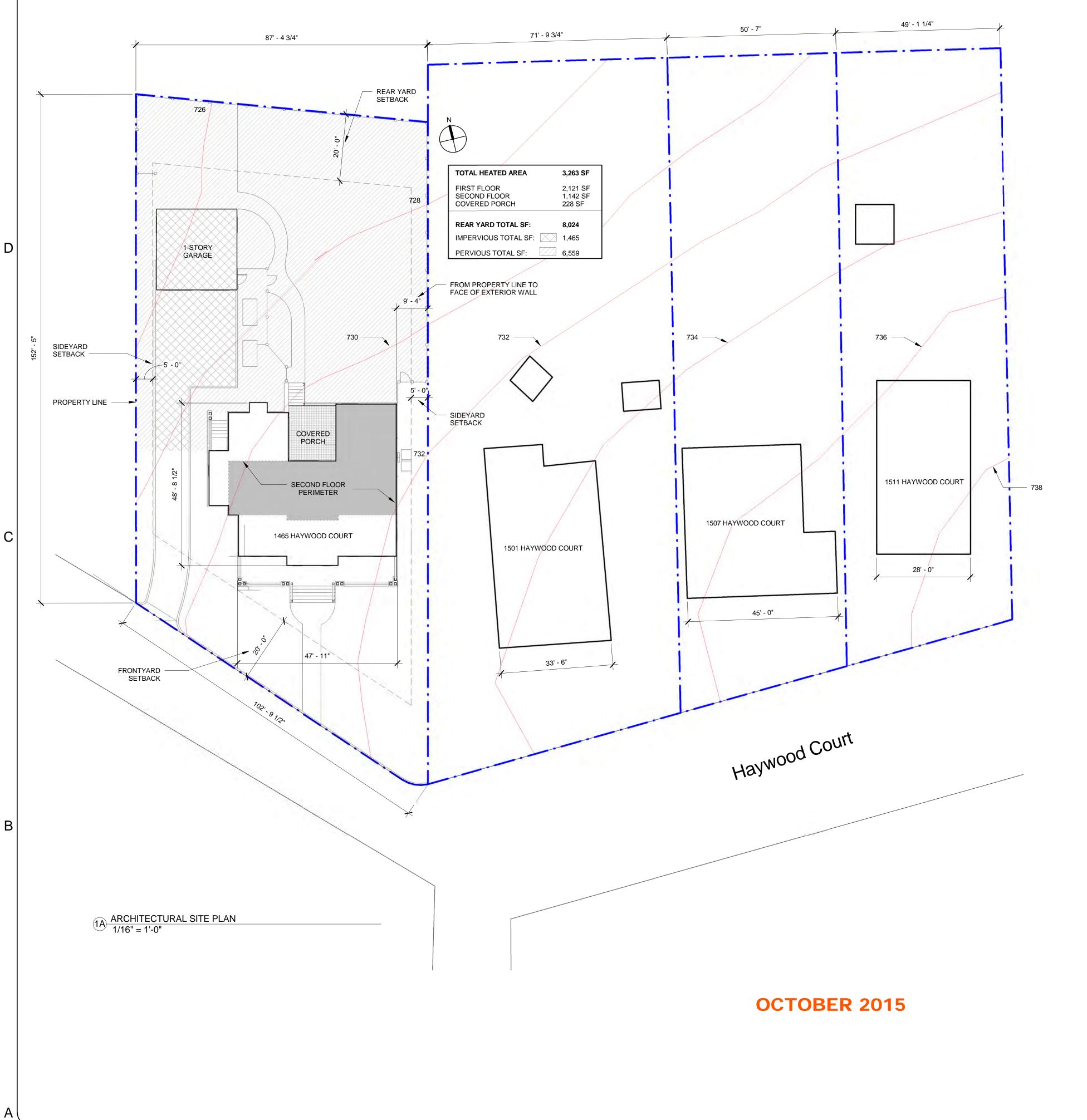
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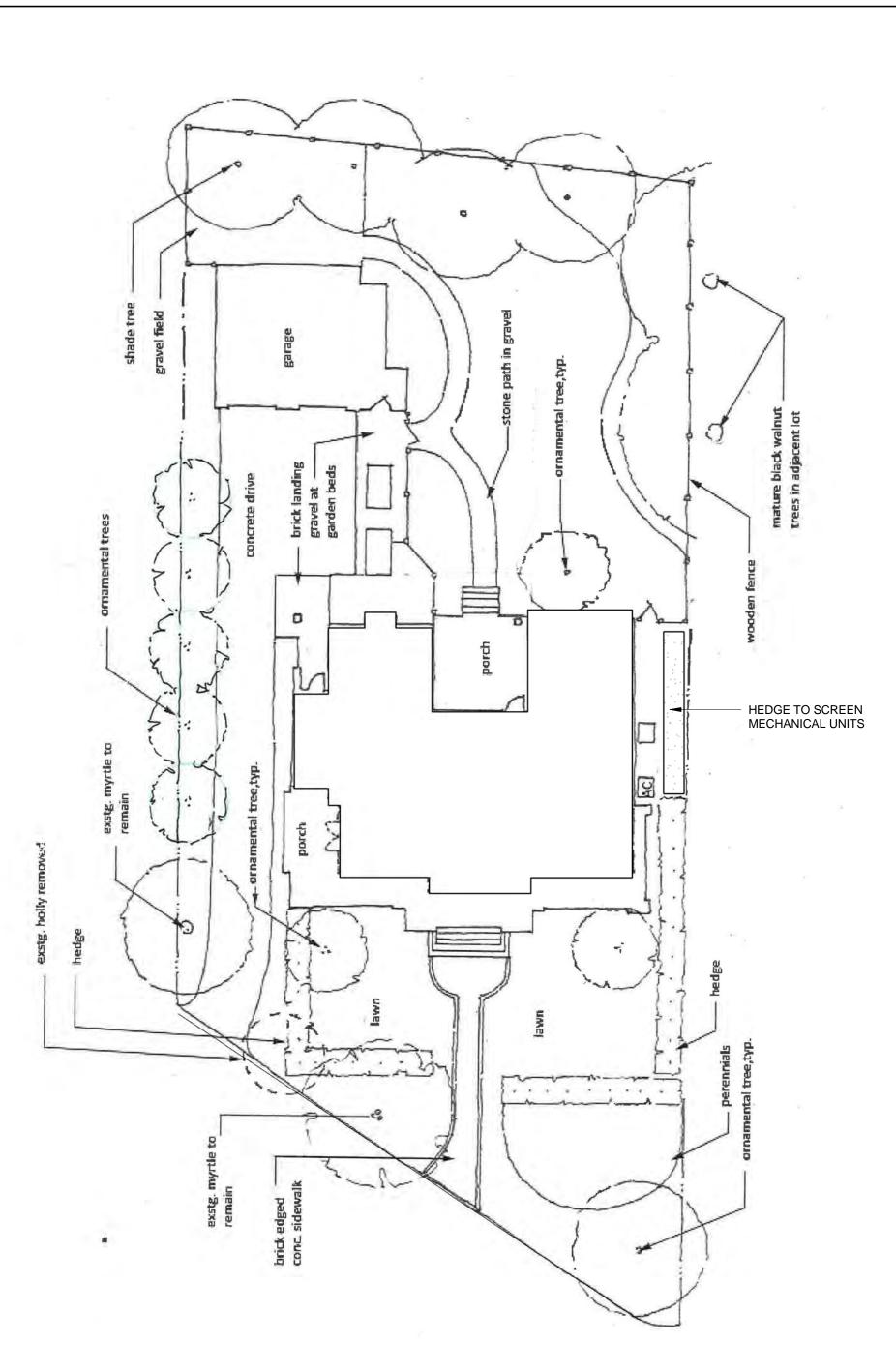
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В	SITE PLANS



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5A LANDSCAPE PLAN 1/16" = 1'-0"



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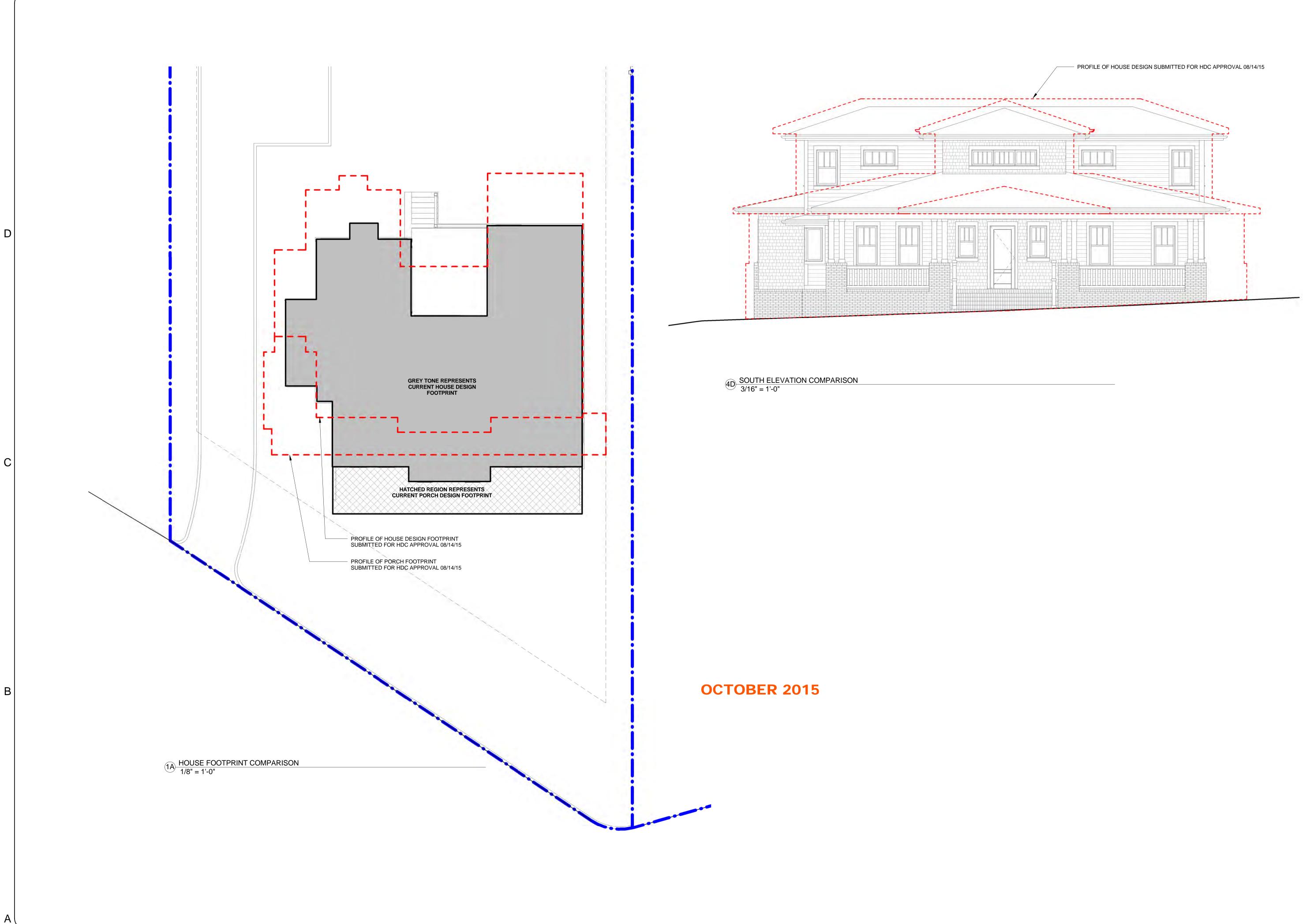
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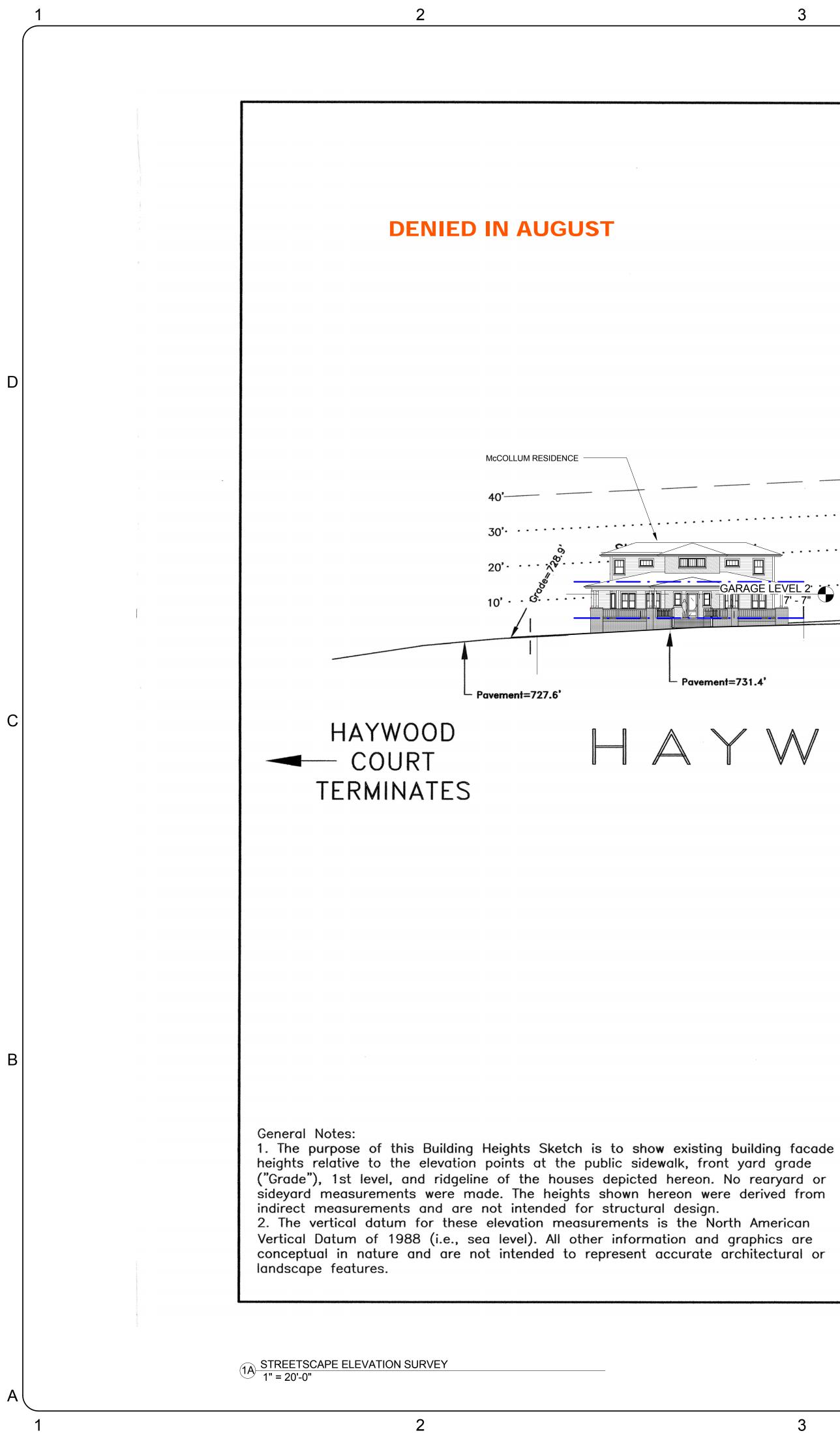
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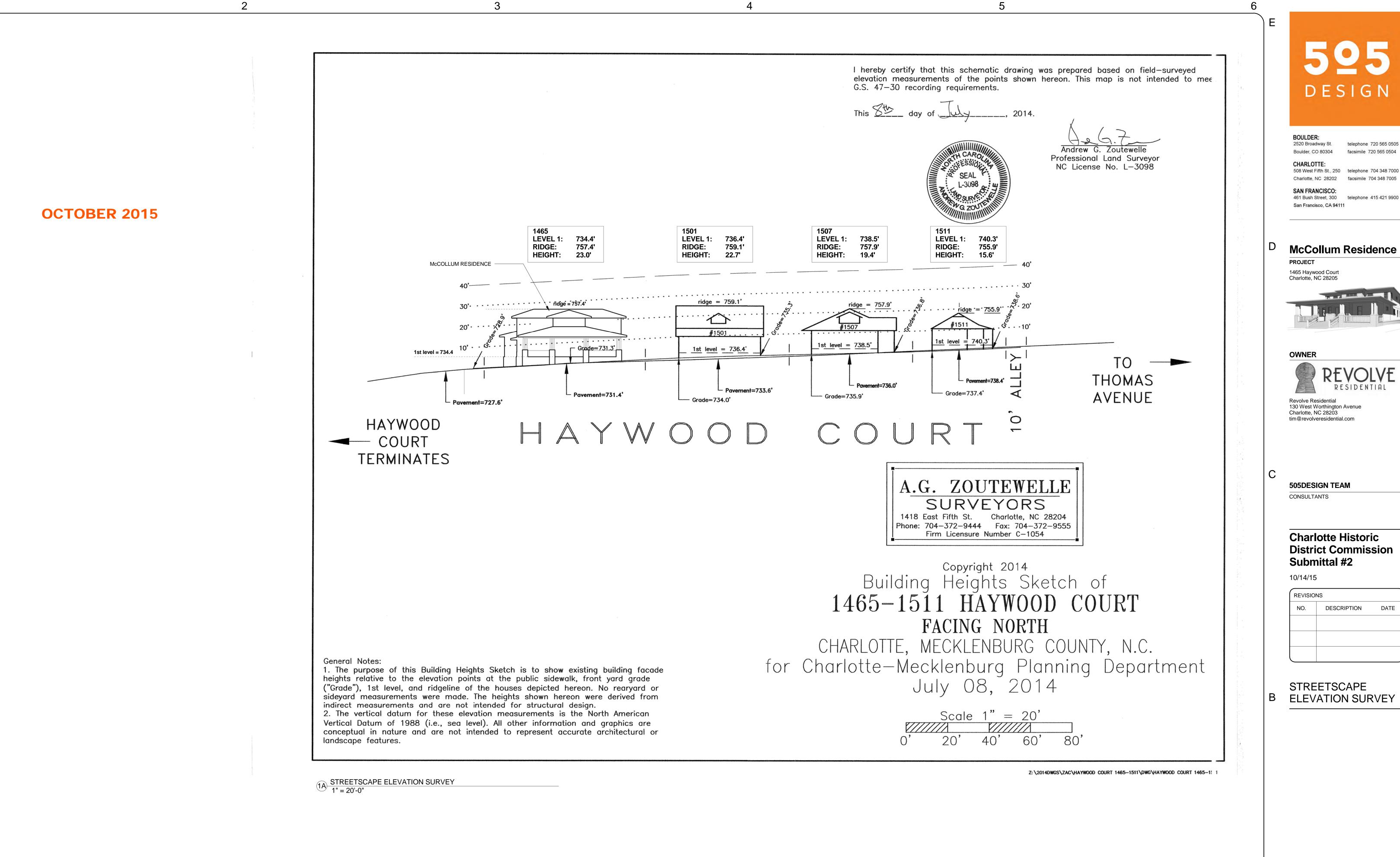
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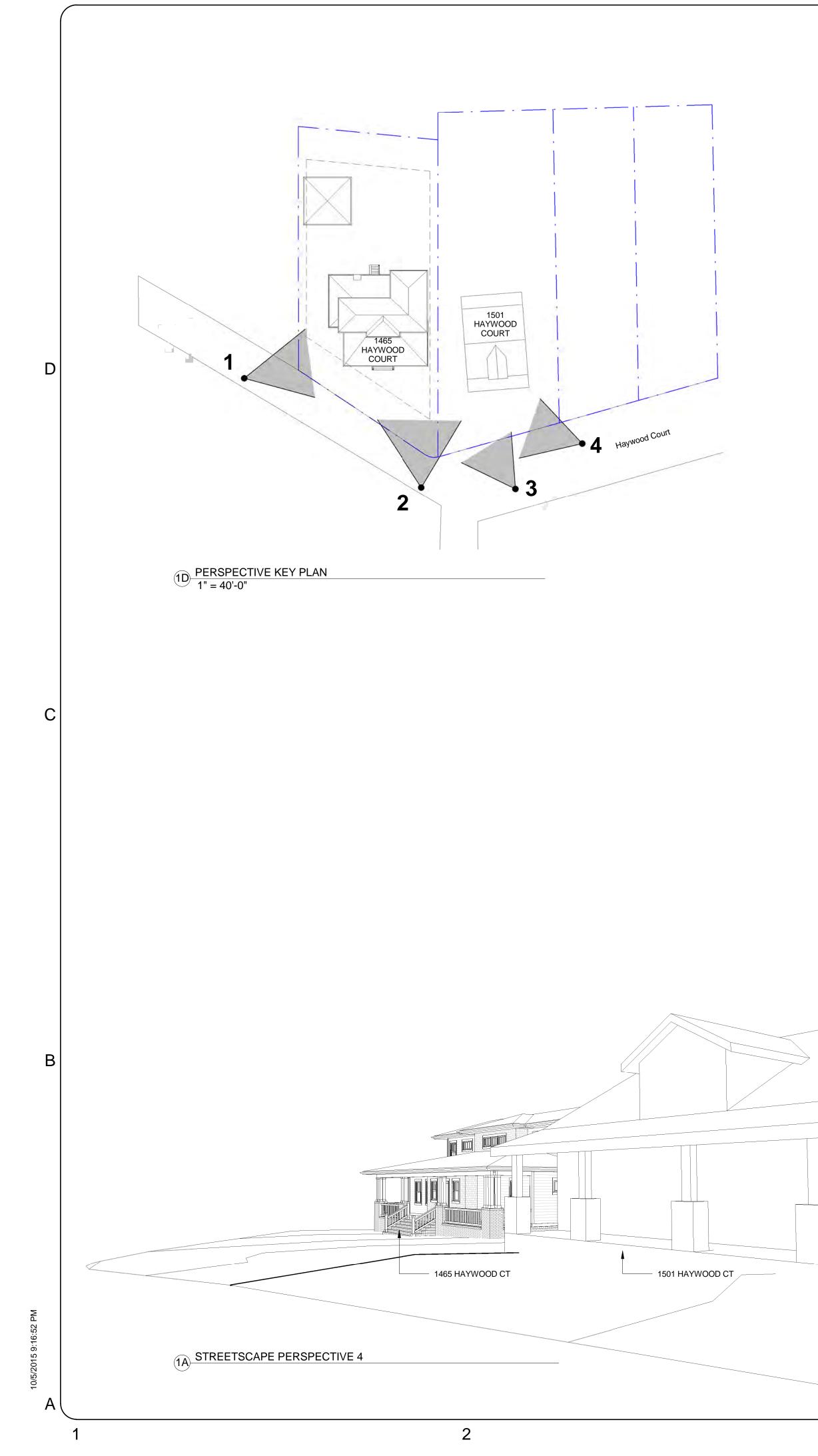


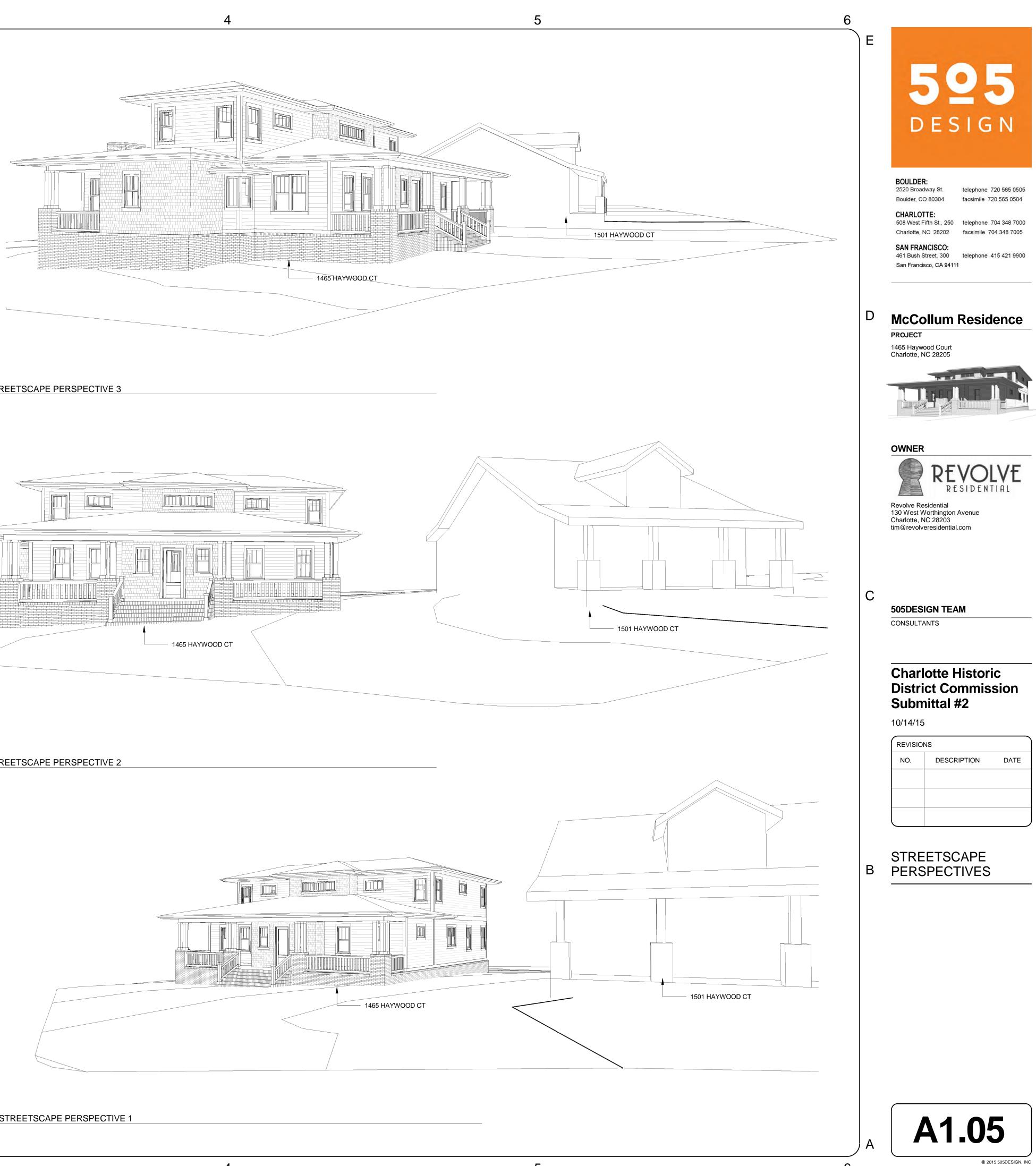
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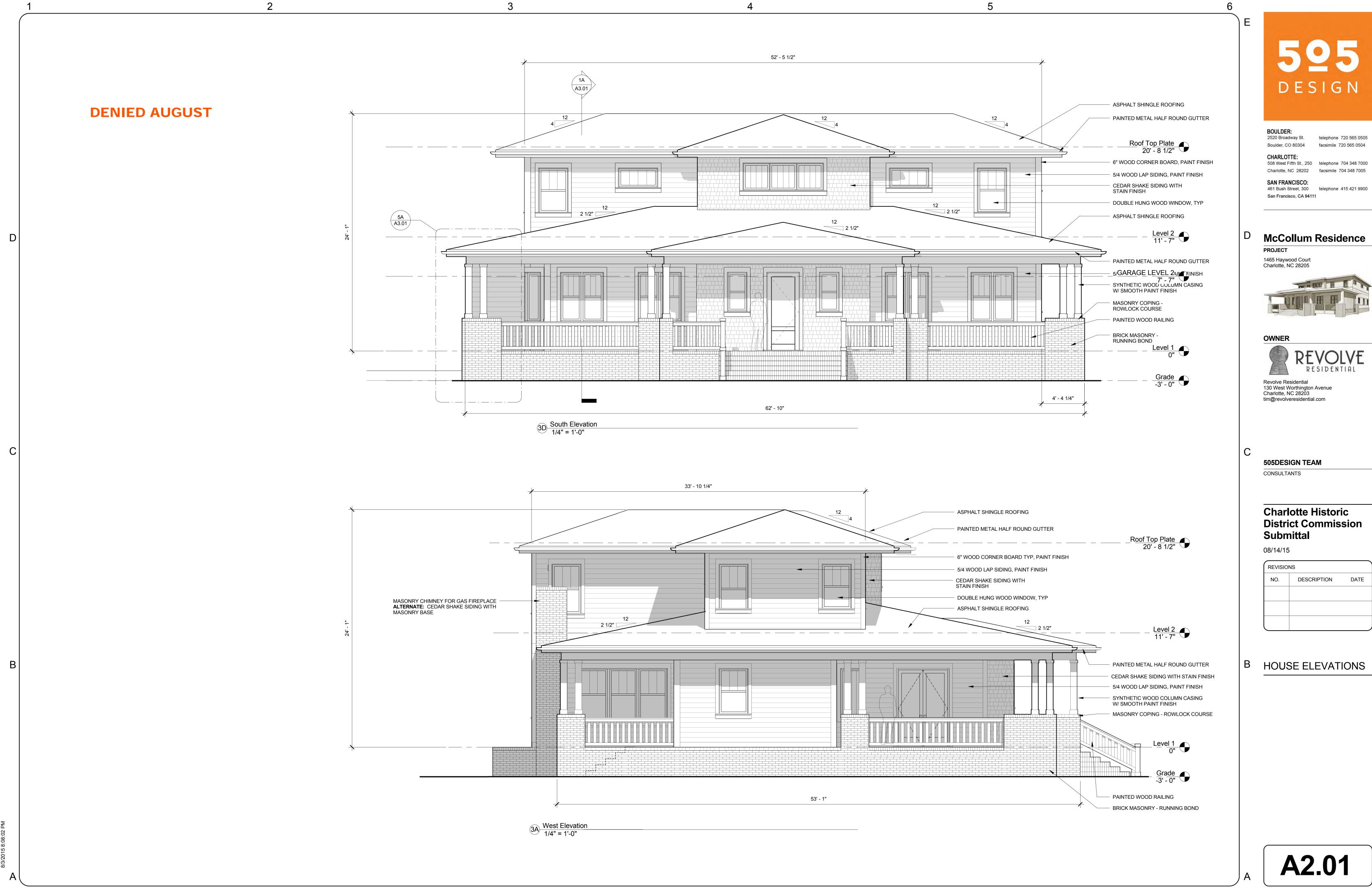
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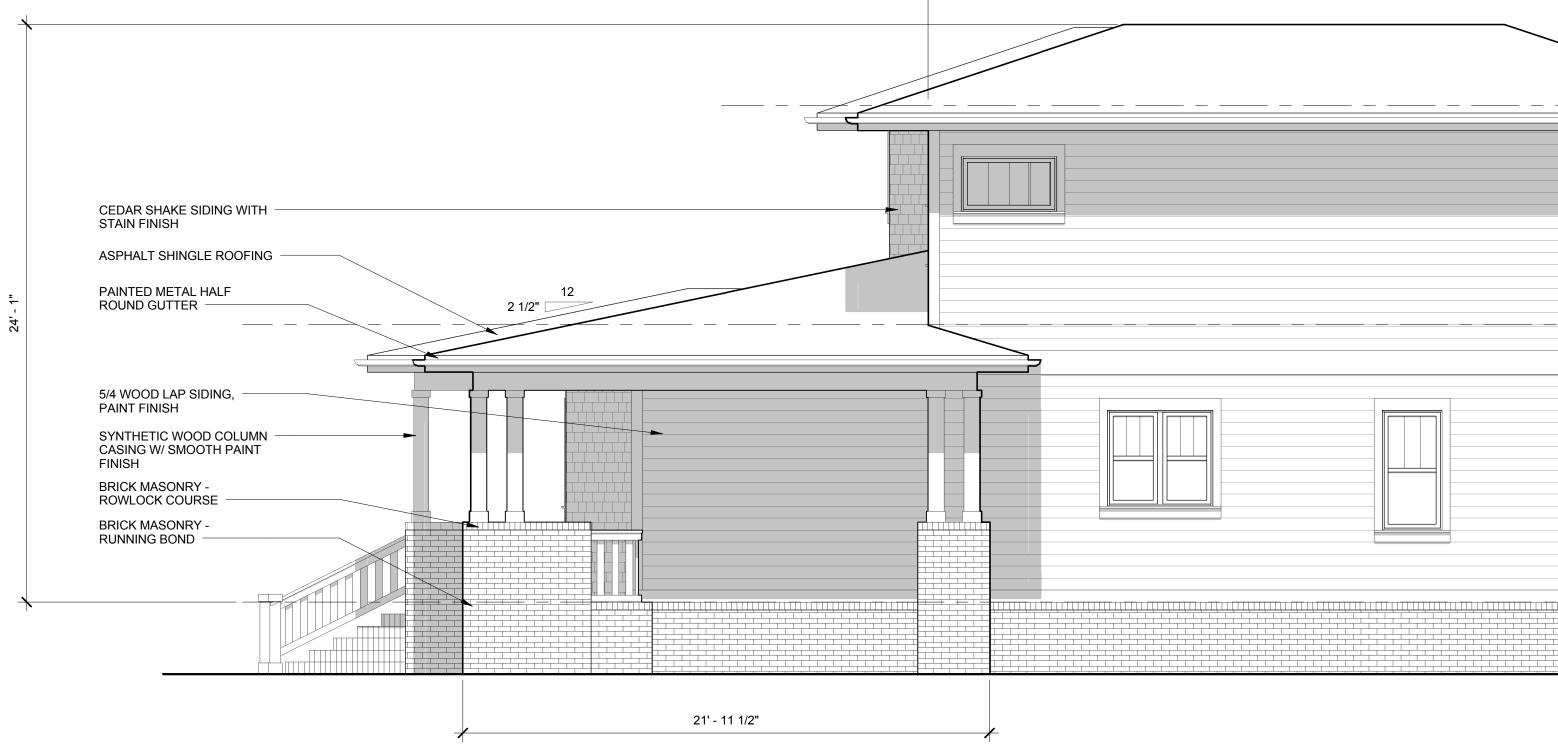








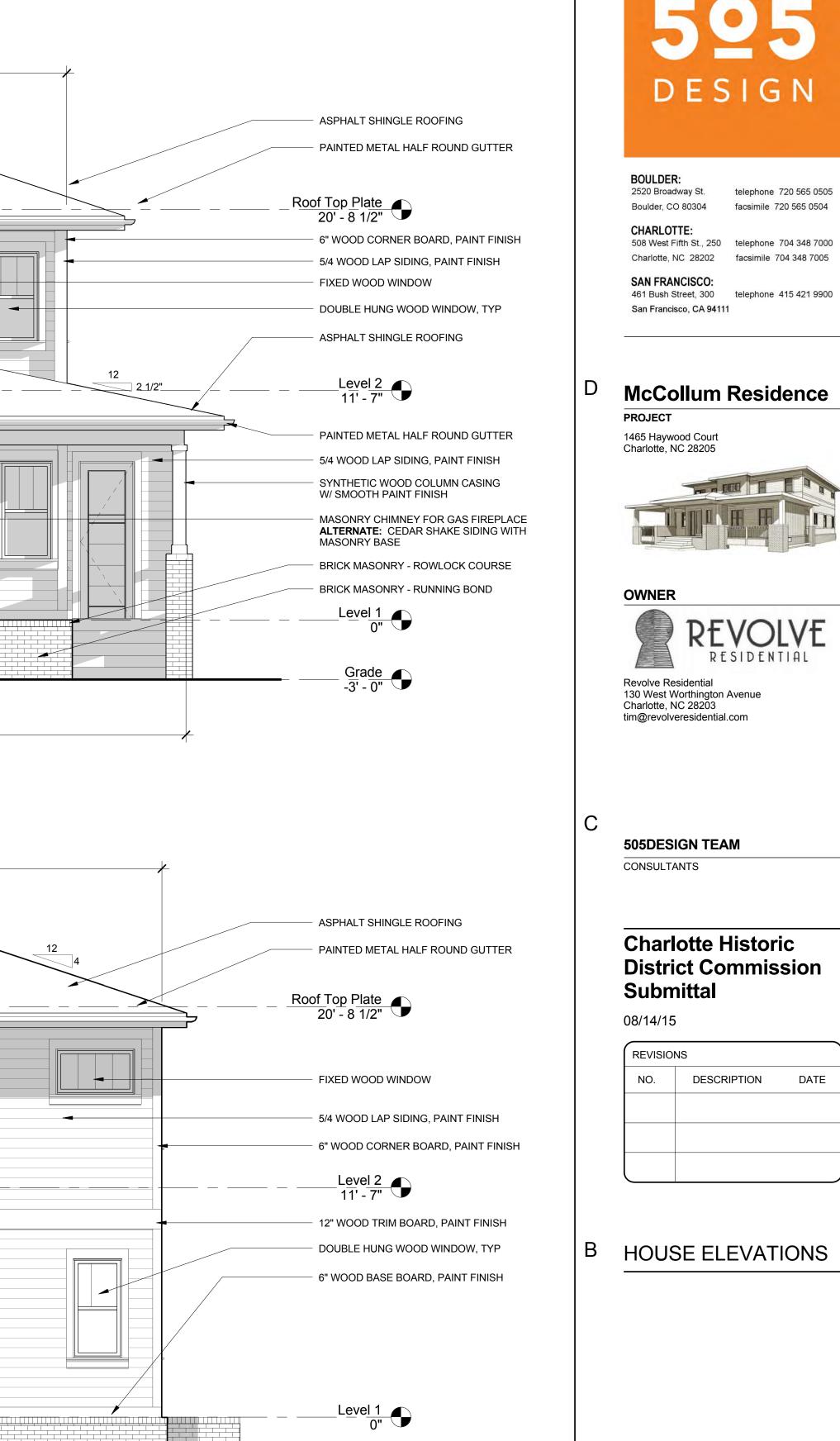




(3A) East Elevation 1/4" = 1'-0"

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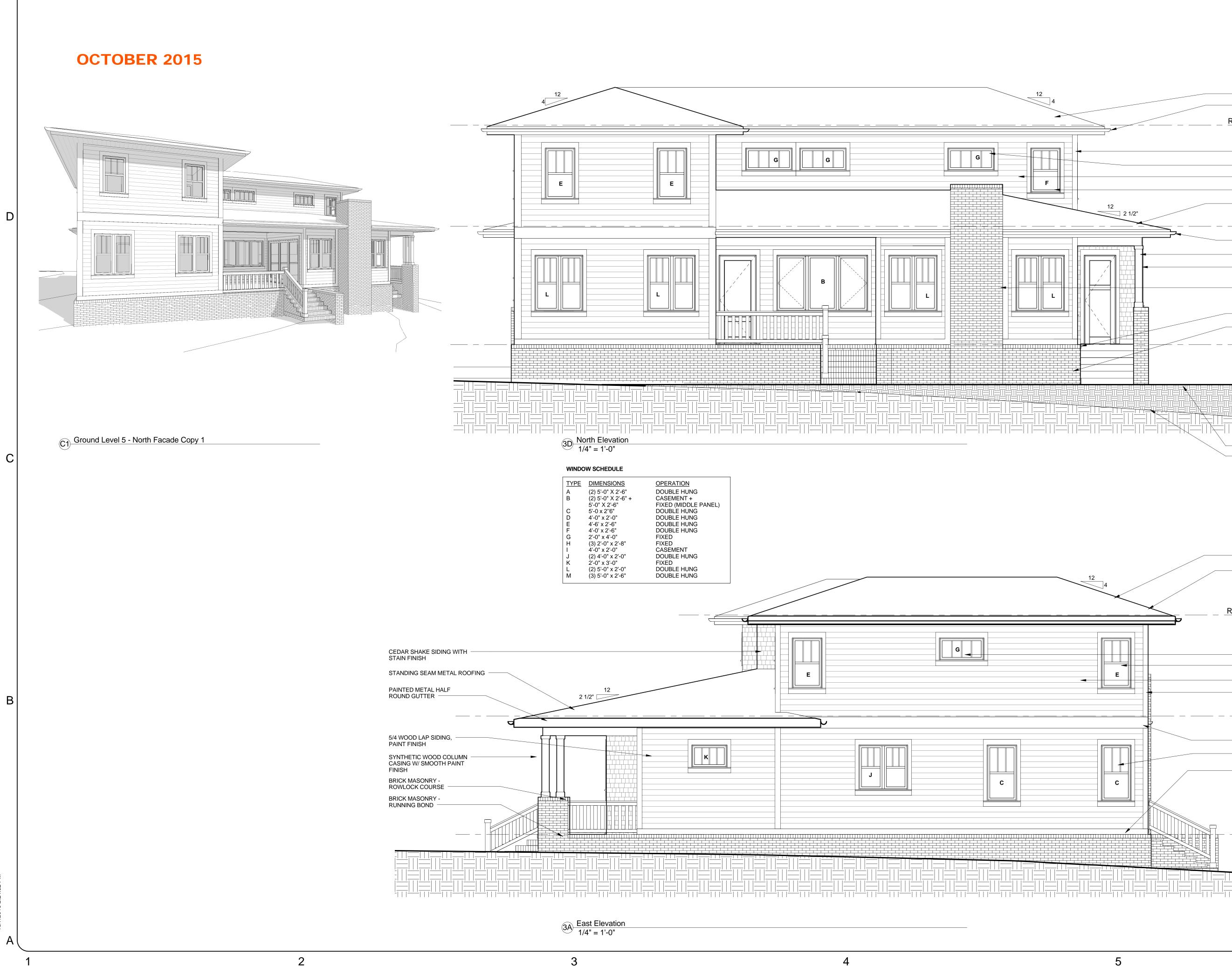
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ASPHALT SHINGLE ROOFING

Roof Top Plate 19' - 7 1/2"

FIXED WOOD WINDOW

Level 2 10' - 7"

MASONRY BASE

| |----| | | |----| | | |----| | | |---

ASPHALT SHINGLE ROOFING

Roof Top Plate 19' - 7 1/2"

FIXED WOOD WINDOW

Level 2 10' - 7"

_Level 1 0"

DOUBLE HUNG WOOD WINDOW

5/4 WOOD LAP SIDING, PAINT FINISH

6" WOOD CORNER BOARD, PAINT FINISH

12" WOOD TRIM BOARD, PAINT FINISH

DOUBLE HUNG WOOD WINDOW, TYP

6" WOOD BASE BOARD, PAINT FINISH

PAINTED METAL HALF ROUND GUTTER

— LINE OF NEW GRADE — LINE OF EXISTING GRADE

PROPERTY LINE

PAINTED METAL HALF ROUND GUTTER

6" WOOD CORNER BOARD, PAINT FINISH

5/4 WOOD LAP SIDING, PAINT FINISH

DOUBLE HUNG WOOD WINDOW, TYP

PAINTED METAL HALF ROUND GUTTER

5/4 WOOD LAP SIDING, PAINT FINISH

SYNTHETIC WOOD COLUMN CASING W/ SMOOTH PAINT FINISH

- MASONRY CHIMNEY FOR GAS FIREPLACE ALTERNATE: CEDAR SHAKE SIDING WITH

BRICK MASONRY - ROWLOCK COURSE

BRICK MASONRY - RUNNING BOND

STANDING SEAM METAL ROOFING

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DESIGN

508 West Fifth St., 250 telephone 704 348 7000 Charlotte, NC 28202 facsimile 704 348 7005

461 Bush Street, 300 telephone 415 421 9900

McCollum Residence

REVOLVE

RESIDENTIAL

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facsimile 720 565 0504

BOULDER: 2520 Broadway St.

CHARLOTTE:

PROJECT

OWNER

C

Revolve Residential 130 West Worthington Avenue Charlotte, NC 28203

tim@revolveresidential.com

505DESIGN TEAM

Submittal #2

10/14/15

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District Commission

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CONSULTANTS

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Boulder, CO 80304

SAN FRANCISCO:

San Francisco, CA 94111

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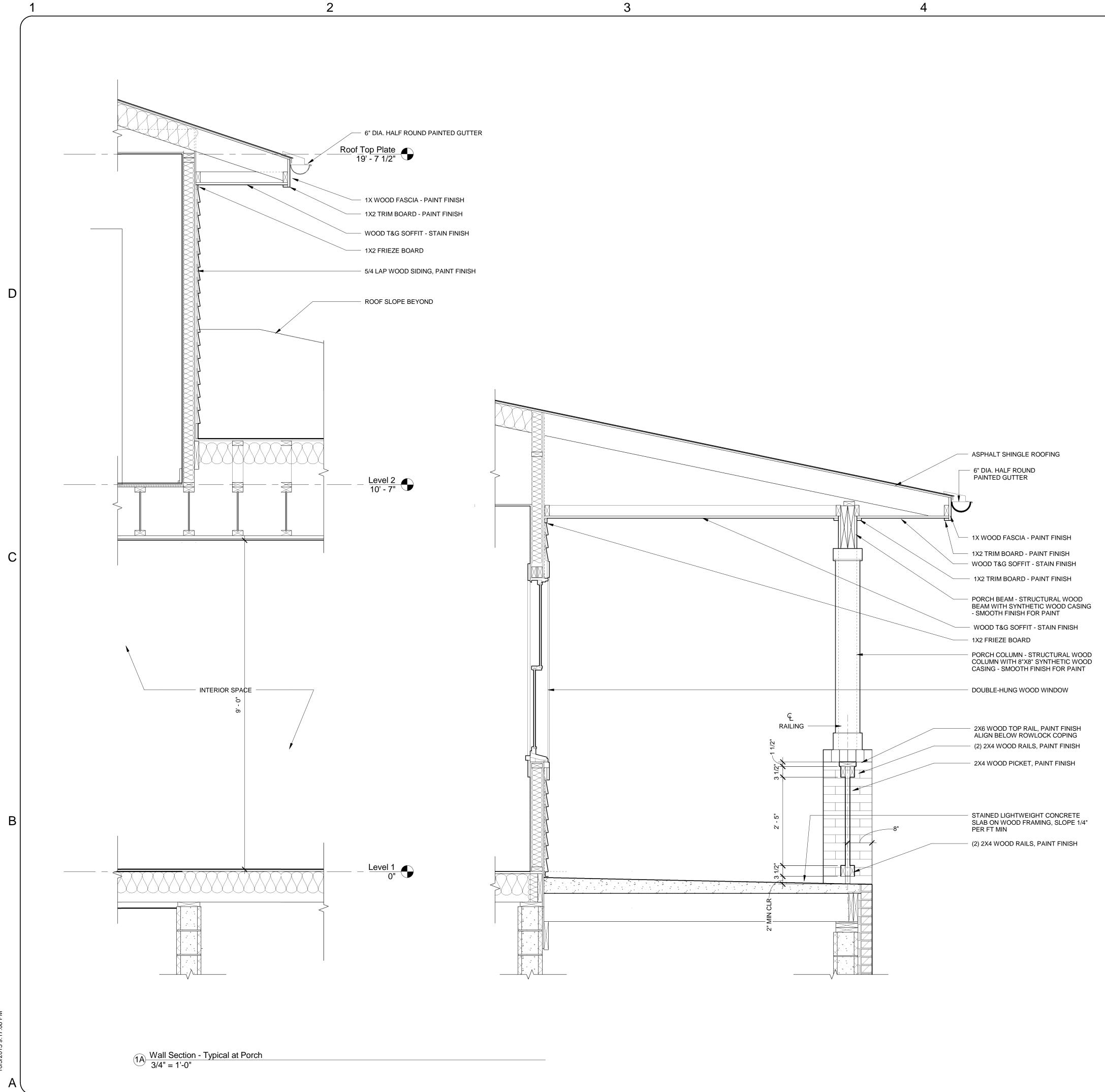
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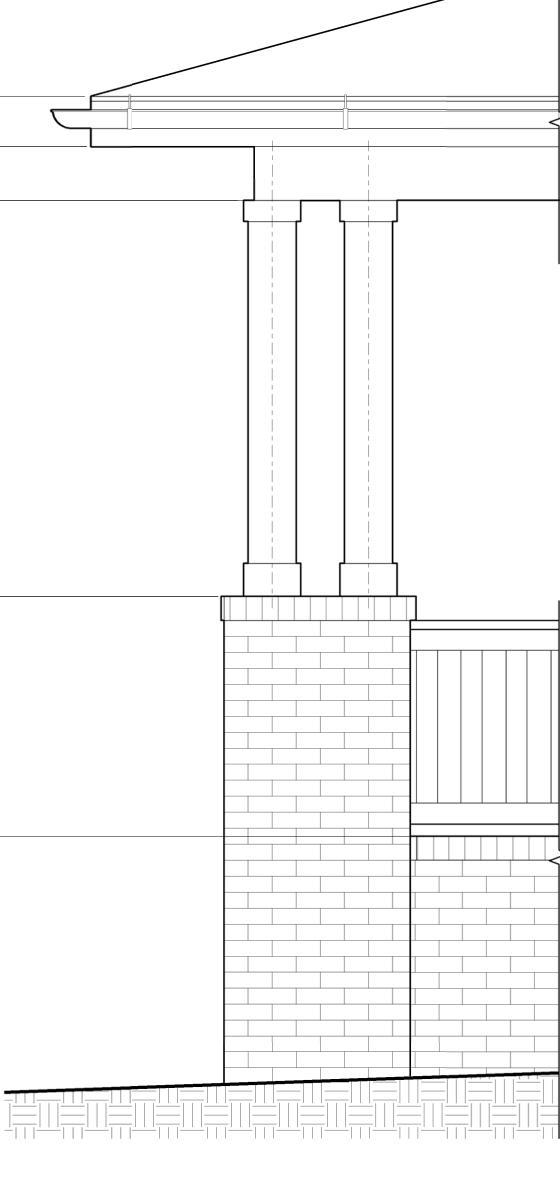
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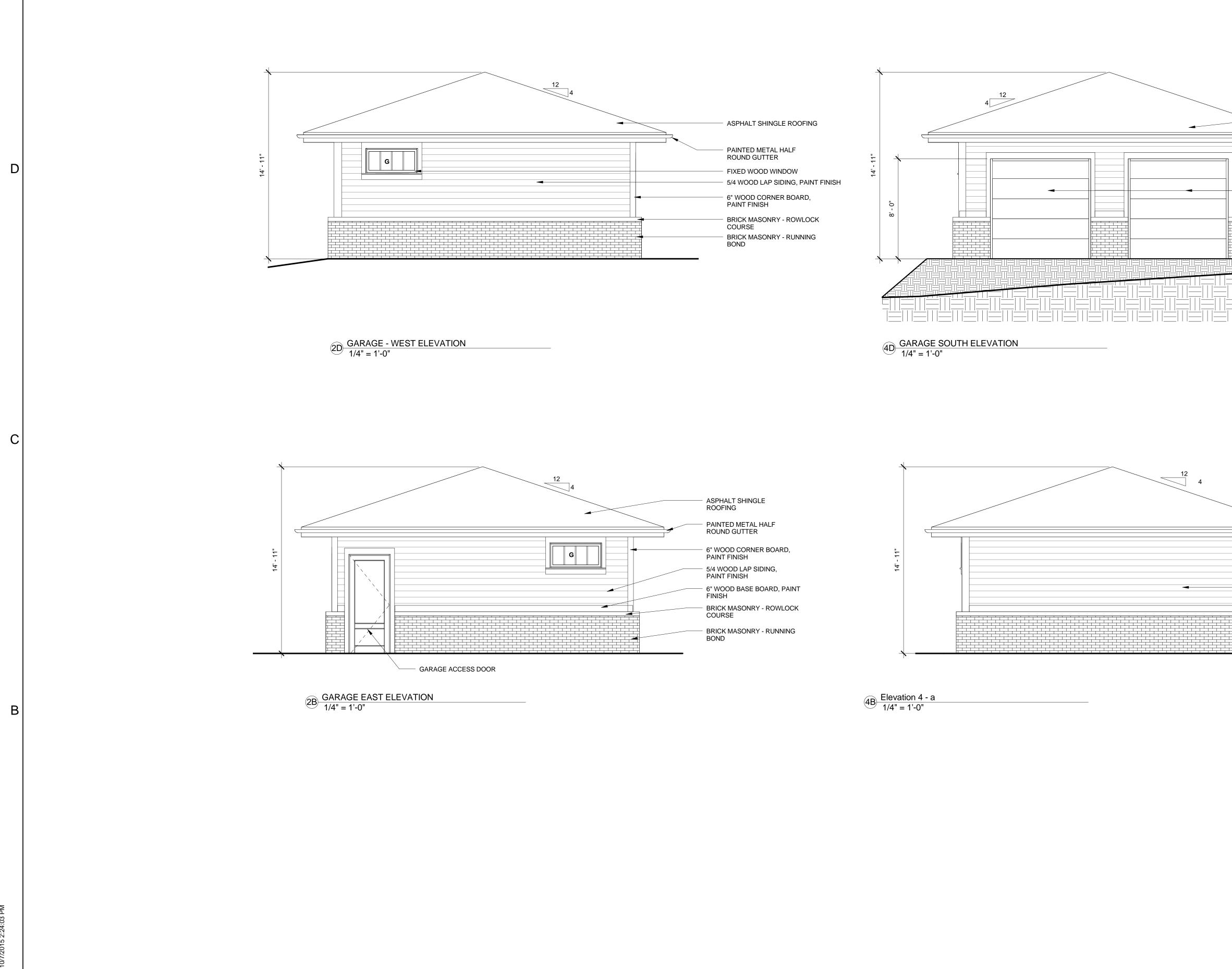
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	Charlotte Historic District Commission Submittal #2
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В	BUILDING SECTIONS DETAILS



5A PORCH COLUMN ELEVATION 3/4" = 1'-0"

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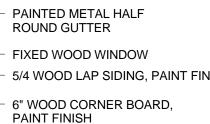


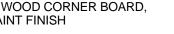


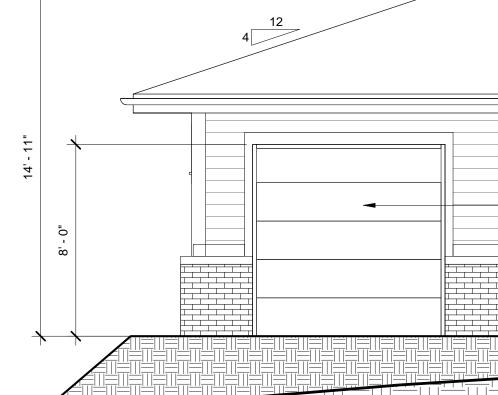


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PAINTED METAL HALF ROUND GUTTER	×
FIXED WOOD WINDOW	

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•	BRICK MASON COURSE
	BRICK MASON



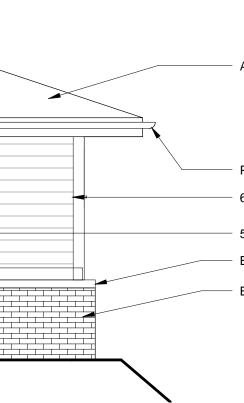




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LE NS OPERATION 2'-6" DOUBLE HUNG 2'-6" + CASEMENT + FIXED (MIDDLE PANEL) DOUBLE HUNG DOUBLE HUNG DOUBLE HUNG DOUBLE HUNG P'-8" FIXED CASEMENT 2'-0" DOUBLE HUNG FIXED 2'-0" DOUBLE HUNG 2'-0" DOUBLE HUNG 2'-0" DOUBLE HUNG 2'-0" DOUBLE HUNG 2'-0" DOUBLE HUNG	В	GARAGE



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WINDOW SCHEDULE

TYPE A B C D E F G H I J K L	$\frac{\text{DIMENSIONS}}{(2) 5'-0" \times 2'-6"}$ $(2) 5'-0" \times 2'-6"$ $(2) 5'-0" \times 2'-6"$ $5'-0 \times 2''6"$ $4'-0" \times 2'-0"$ $4'-6' \times 2'-6"$ $2'-0" \times 2'-6"$ $2'-0" \times 2'-6"$ $4'-0" \times 2'-0"$ $(2) 2'-0" \times 2'-0"$ $(2) 4'-0" \times 2'-0"$ $(2) 5'-0" \times 2'-0"$	OPERATION DOUBLE HUNG CASEMENT + FIXED (MIDDLE PANEL) DOUBLE HUNG DOUBLE HUNG DOUBLE HUNG FIXED FIXED CASEMENT DOUBLE HUNG FIXED DOUBLE HUNG

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Garage Door Example





McCollum Residence Charlotte Historic District Commission Exhibits - 10/14/15 Railing and Fence Example

P 2

IN HEAD-TO-HEAD COMPETITION, IT'S NO CONTEST.

MIRATEC VS PRIMED WOOD TRIM

- MiraTEC has none of wood's frustrating
- MiraTEC doesn't require significant maintenance and replacement, because it resists moisture, rot and termites. Primed wood may be treated, but many do not offer rot and termite protection.
- MiraTEC is a more advanced, engineered
- MiraTEC offers consistent density.
- MiraTEC work warp, split or check over time.
 MiraTEC work warp, split or check over time.
 MiraTEC is one solid piece. Primed wood is normally finger jointed to make longer lengths and edge glued to make the width with a limited warranty on the glue joints.



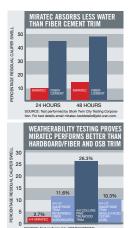
MIRATEC VS FIBER CEMENT TRIM

MiraTEC has a more authentic wood grain texture.

- MiraTEC is reversible. MiraTEC is highly resistant to moisture. Independent tests show fiber cement absorbs five times more water (ASTM 24-Hour Soak Test). See chart at right.
- MiraTEC is 100% silica free. Cutting fiber cement releases silica, a known carcinogen
- MiraTEC is not brittle or difficult to stack.
- MiraTEC is as easy to handle, cut and nail as wood, requires no special tools.
- MiraTEC is available in widths up to 16" and lengths of 16', takes less time and labor to install.
- MiraTEC is backed by a 50-year limited warranty. Most fiber cement has a 15-year limited warranty. MiraTEC costs up to 30% less.

MIRATEC VS PVC TRIM

- MiraTEC has a more authentic wood grain texture.
- MiraTEC accepts all shades of paint beautifully.
 MiraTEC is not prone to thermal expansion.
- MiraTEC is made from sustainable materials and renewable resources.
- MiraTEC costs up to 50% less.





NO OTHER TRIM

MIRATEC VS HARDBOARD/FIBER AND OSB TRIM

MiraTEC has greater moisture resistance which means better long term performance.

Detter long term performance. MiraTEC performs up to 9 times better in Weatherability Testing, which evaluates a product's ability to withstand exposure to the elements over time. See chart at right.

MiraTEC is not laminated.

- PERFORMS LIKE MIRATEC.
- >> Reversible with clear cedar wood grain texture on one side and smooth on the other.

- >> Won't check, split or crack.
 >> Cuts consistently due to uniform product density.

>> Primed with an ultra-low VOC primer containing a mildewcide.

ANYONE CAN TALK PERFORMANCE. Miratec proves it. Moisture resistant: As measured by ASTM D1037 for Water Absorption and Thickness Swelling. ◩ Thickness Swelling. Rot resistant: Tested per AWPA E16 Field Test for Evaluation of Wood Preservatives to be Used Out of Ground Contact: Horizontal Lap-Joint Method. rmite resistant: Tested per AWPA E7 andard Method of Evaluating Wood eservatives by Field Tests with Stake Building code compliant (ESR-3043): MiraTEC is the first and only wood composite trim to earn an evaluation rep (ESR-3043) from ICC-ES.

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IN HEAD-TO-HEAD COMPETITION, IT'S NO CONTÉST.

MIRATEC VS PRIMED WOOD TRIM

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- MiraTEC won't warp, split or check over time.
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MIRATEC VS HARDBOARD/FIBER AND OSB TRIM

- MiraTEC is not laminated.
- MiraTEC has greater moisture resistance which means better long term performance.
- MiraTEC performs up to 9 times better in Weatherability Testing, which evaluates a product's ability to withstand exposure to the elements over time. See chart at right.

MiraTEC is reversible. MiraTEC is highly resistant to moisture. Independent tests show fiber cement absorbs five times more water (ASTM 24-Hour Soak Test). See chart at right. MiraTEC is 100% silica free. Cutting fiber cement releases silica, a known carcinogen. MiraTEC is not brittle or difficult to stack.

- MiraTEC is as easy to handle, cut and nail as wood, requires no special tools.
- MiraTEC is available in widths up to 16" and lengths of 16', takes less time and labor to install.

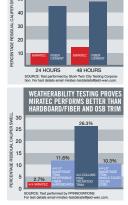
MIRATEC VS FIBER CEMENT TRIM

MiraTEC has a more authentic wood grain texture.

- MiraTEC is backed by a 50-year limited warranty. Most fiber cement has a 15-year limited warranty. 50 MiraTEC costs up to 30% less.

MIRATEC VS PVC TRIM

- MiraTEC has a more authentic wood grain texture.
- MiraTEC accepts all shades of paint beautifully.
- MiraTEC is not prone to thermal expansion.
- MiraTEC is made from sustainable materials and renewable resources.
- MiraTEC costs up to 50% less.



MIRATEC ABSORBS LESS WATER Than Fiber cement trim



ANYONE CAN TALK PERFORMANCE. Miratec proves it.

- Moisture resistant: As measured by ASTM D1037 for Water Absorption and

Building code compliant (ESR-3043): MiraTEC is the first and only wood composite trim to earn an evaluation report (ESR-3043) from ICC-ES.



Miratec Product Information

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- >> Easy to handle, machine, cut and nail. >> Won't check, split or crack.

ASIM D103/ for Water Absorption and Thickness Swelling. Rot resistant: Tested per AWPA E16 Field Test for Evaluation of Wood Preservatives to be Used Out of Ground Contact: Horizontal Lap-Joint Method.

Termite resistant: Tested per AWPA E7 Standard Method of Evaluating Wood Preservatives by Field Tests with Stake



MiraTEC Trim Outperforms Hardboard Trim

MiraTEC trim earned ESR-3043 and performs to a standard that hardboard products can't - MiraTEC is not hardboard trim.

Treated Wood Composite Trim		Hardboard Trim		
Brands	MiraTEC®	LP SmartSide Trim Reversible Fiber (Hardboard), Collins Pine TruWood Trim		
Manufacturing Process	TEC [™] patented and proprietary manufacturing process was created specifically to make trim. TEC manufacturing process creates an engineered wood product with uniform density. MiraTEC is one solid piece – will not delaminate. Made in a sealed press with steam injected for added durability.	Hardboard manufacturing process was created to manufacture exterior siding. Hardboard manufacturing process may create a product with variable density. Hardboard trim may be manufactured by laminating thinner panels together to create trim thicknesses – may delaminate over time. Made in an open press between heated platens.		
Durability	Easy to handle, machine, cut and nail. Won't check, split or crack. Treated with zinc borate for superior termite resistance. Made with phenolic resins for excellent moisture resistance. More authentic wood grain texture.	Easy to handle, machine, cut and nail. May delaminate. LP SmartSide Trim Reversible Fiber (Hardboard) and Collins Pine TruWood Trim are laminated in all thicknesses. Less authentic wood grain texture.		
Building Code Approved/Listed	MiraTEC trim earned an evaluation report (ESR-3043) from ICC-ES. MiraTEC meets the strict requirements of ICC-ES Acceptance Criteria (AC424). Hardboard trim cannot meet those requirements. This new evidence supports the claim that MiraTEC is a worry-free product with incredible durability and a strong 50-year warranty.	Hardboard trim does not have a building code listing. Hardboard trim cannot perform to the standards in ESR-3043.		
Green	MiraTEC trim has no added urea formaldehyde. This is certified by Scientific Certification Systems under certificate number SCS-MC-01802. Made from sustainable materials. No old growth wood is used in the manufacture of MiraTEC trim. Complies with CARB. MiraTEC trim is factory-primed on four sides with a low VOC primer containing a mildewcide. Contributes to industry green building programs such as LEED.	Varies by brand.		
Warranty	Backed by an industry-best 50-year warranty. Protects against hail damage, rot, termite damage and edge swell.	Warranty coverage varies from 10 to 50 years by brand. LP SmartSide Trim Reversible Fiber (Hardboard) warranty excludes hail damage, termite damage and swelling and/or edge checking.		







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Miratec Product Information

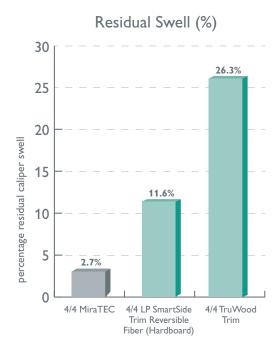






MiraTEC Trim Performs 9x Better than Hardboard Trim in Long Term Weatherability Testing

- MiraTEC performed 4.29 times better than LP SmartSide Trim (Reversible Fiber, which is a hardboard product).
- MiraTEC performed 9.4 times better than Collins Pine TruWood Trim.





Test Objective	The Weatherability Test, a known standard in wood and composite product testing, evaluates a product's ability to withstand climate change. It is performed in accordance with ANSI A 135.6 (2006). It is meant to show a product's response to real-world weather conditions that assess durability in hot summers, cold winters and rainfall.
Test Protocol	All trim samples used in the test were subject to six (6) cycles of exposure to: soak, steam, freeze, dry, steam again and dry again. All samples tested were nominal 4/4 thickness. The MiraTEC 4/4 product measures a full ¾." The LP SmartSide 400 Series Trim (reversible fiber, which is a hardboard product) is a scant product, meaning it measures 5/8" instead of the standard.
Test Measurement	Results are calculated by the residual, or remaining, thickness swell of the trim. A trimboard exhibits thickness swelling when exposure to exterior conditions breaks down the resin bonds within the trim, leading to water absorption. The thickness of the sample is calculated at the beginning and at the end of the test.
Test Agency	Test performed by FPInnovations (formerly Forintek). Email miratec-testdetails@jeld-wen.com.



Miratec Product Information

Product	Wood Composite	Fiber Cement	at PVC 058 Ha	OSB	Hardboard/Fiber	Glass-Fiber- Reinforced Plastic	Mood
Brand Names	MIRATEC'	HardieTrim Boards, WeatherBoards Fiber Cement Trim, Plycem Fiber Cement Exterior Trim	AZEK Trim, VERSATEX Trimboard and others	LP SmartSide Trim Single-faced Cedar Strand (OSB)	LP SmartSide Trim Reversible Fiber (Hardboard), Collins Pine TruWood Trim	Boral TruExterior Trim	Various
Building Code Approved/Listed	ESR-3043	t.	ESR-1074, ESR-3160. ESR-3023 and ESR-2922	1	ł	ſ	t
Price	\$\$	\$\$\$	\$\$\$\$	\$\$	\$\$	\$\$\$	Varies by species
Material	Treated Exterior Composite	Fiber Cement	Cellular PVC	Oriented Strand Board (OSB)	Hardboard/Fiber	Glass-Fiber-Reinforced Plastic Fly Ash Composite	Redwood, Cedar, Spruce, Fir or Pine
Construction	Single Piece, Uniform Density. Treated Wood Fiber. Not laminated. Phenolic Resins.	Single Piece Portland Cement, Sand, Cellulose Fiber. Some with voids in backside for reduced weight.	Single Piece Foamed PVC.	Single Piece Laminated Wood Strands. Phenolic Resins.	Two Pieces Laminated Wood Fiber. Phenolic Resins.	Single Piece Polymer Chemistry. Coal- Combustion Products (Ash).	Variable Density
Rot and Termite Protection	Zinc Borate	None	None	LP SmartGuard	Varies by manufacturer	None	None
Warranty	50 years	15-25 Years ¹	25 Years – Lifetime ¹	50 years ³	10 - 50 years ¹	20 years	None
Surface (Smooth/Textured)	Reversible [*]	Smooth and Textured (Double SKUs)	Varies by Manufacturer	Textured	Reversible ⁴	Reversible ⁴	Varies by species
Coating	Factory Primed 4 Sides	Factory Primed 3 Sides	None Required	Factory Primed 3 Sides	Factory Primed 4 Sides	Factory Primed 4 Sides	Primed and Unprimed
Length	16'	10' - 12'	8' - 20'	16' - 20'	12' - 16'	16'	Varies
Thickness	5/8" Actual, 4/4 (3/4" Actual) and 5/4 (1" Actual)	Varies	Varies	Varies	LP offers 440 Series (5/8" Actual) and 540 Series (comparable to 5/4)	4/4 (3/4" Actual) and 5/4 (1" Actual)	Varies
True or Scant Thickness	True	True	True	Scant	Scant	True	1
Green	MiraTEC trim is made Cutting fiber cement re	MiraTEC trim is made from wood chips, a sustainable material, is certified to have no added urea formaldehyde, and offers a low VOC primer containing a mildewcide. Cutting fiber cement releases silica dust, which is a known carcinogen. PVC trim is made from plastic and is not environmentally friendly. Glass-fiber-reinforced plastic	material, is certified to h own carcinogen, PVC trin	ave no added urea for n is made from plastic	maldehyde, and offers a li c and is not environmenta	ow VOC primer containin Illy friendly. Glass-fiber-rei	ig a mildewcide. Inforced plastic

' WeatherBoards Fiber Cement Trim warranty is prorated.

² Lifetime Warranty for first owner only.

Miratec Product Information

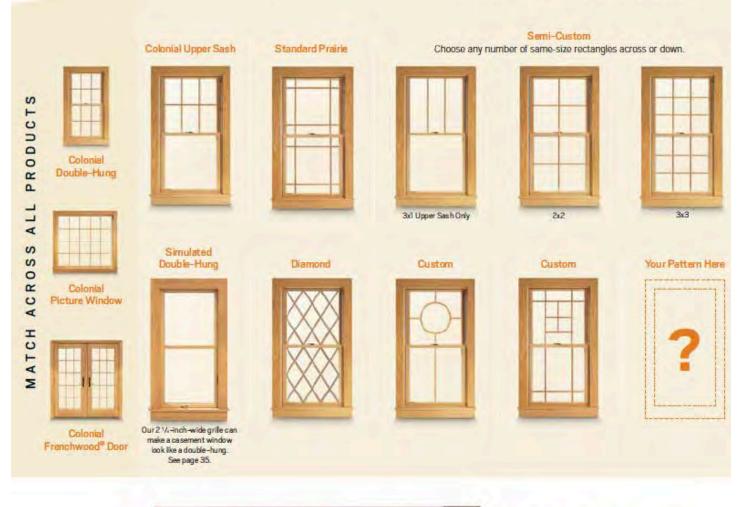
³ Hail, termite damage and swelling and/or edge checking are excluded from LP warranties. Hail, damage due to mold, mildew or fungus, termites and swelling and/or edge checking are excluded from TruWood Trim warranty.

⁴ Reversible; smooth surface one side and textured on the other.

³ All widths nominal.

P 6

GRILLE OPTIONS





DESIGN YOUR OWN PATTERN

Andersen gives you complete flexibility to design your own custom grille style. You sketch it, our craftsmen will create it.

SHOWN: Andersen* 400 Series casements with custom circle pattern grilles in transoms.

Andersen 400 Series Window Product Information: Alternate product = Pella 450 Series



ENERGY EFFICIENCY



We take saving energy seriously.

Saving energy is important to us. That goes for the energy efficiency of the windows and doors we make and also for our manufacturing processes that produce them.

Energy-saving glass for any climate.

Andersen has the glass you need to get the performance you want, including a variety of Low-E glass options to help you control heating and cooling costs in any climate, plus SmartSun* glass that meets ENERGY STAR* qualifications in all climate zones.



Built for years to come.

Our products are built strong to last long.* We use the right materials in the right places, including solid wood, fiberglass and our own Fibrex* composite material. These give our windows and doors superior strength, stability and long-term* beauty.

Take comfort in superior weather resistance.

Andersen[®] patio doors feature unique locking systems that pull the door panel snugly tight. The result is an enhanced weather seal, plus improved security.

Our weather-resistant construction seals out drafts, winds and water so well, you can relax in comfort whatever the weather. We carefully select weatherstripping to match each style of window and door to make sure you enjoy superior comfort and reliability.

Never needs painting.

The Perma-Shield* exteriors on Andersen* windows and doors won't peel, blister, flake or corrode,* so they are virtually maintenance free. They come in the four colors most popular with homeowners: White, Sandtone, Terratone* and Forest Green.



We offer options for the harshest weather environments.

Windows and doors with Stormwatch* protection meet building code requirements in many Gulf and Atlantic coast states.** Products with Stormwatch* protection are energy efficient, resist the effects of salt water and stand up to hurricane-force winds and wind-borne debris¹ For details visit: andersenwindows.com/coastal.

Andersen 400 Series Window Product Information: Alternate product = Pella 450 Series

The easy way to compare energy efficiency.

If you'd like a quick, accurate way to compare the energy efficiency of windows and doors, just look for the National Fenestration Rating Council (NFRC) label. For details see page 18.

DURABILITY

Tough, time-tested Perma-Shield® exteriors

The exclusive Andersen" Perma-Shield" system gives our windows and doors a tough protective shell that safeguards the wood inside. It repels water, resists dents and stays beautiful for years."

RELIABILITY



LIMITED WARRANTY

Quality so solid, the warranty is transferable."

Most other window and door warranties end when a home is sold, but our coverage — 20 years on glass, 10 years on non-glass parts — transfers from each owner to the next. And, because it is not prorated, the coverage offers full benefits, year after year, owner after owner. So it can add real value when you decide to sell your home.

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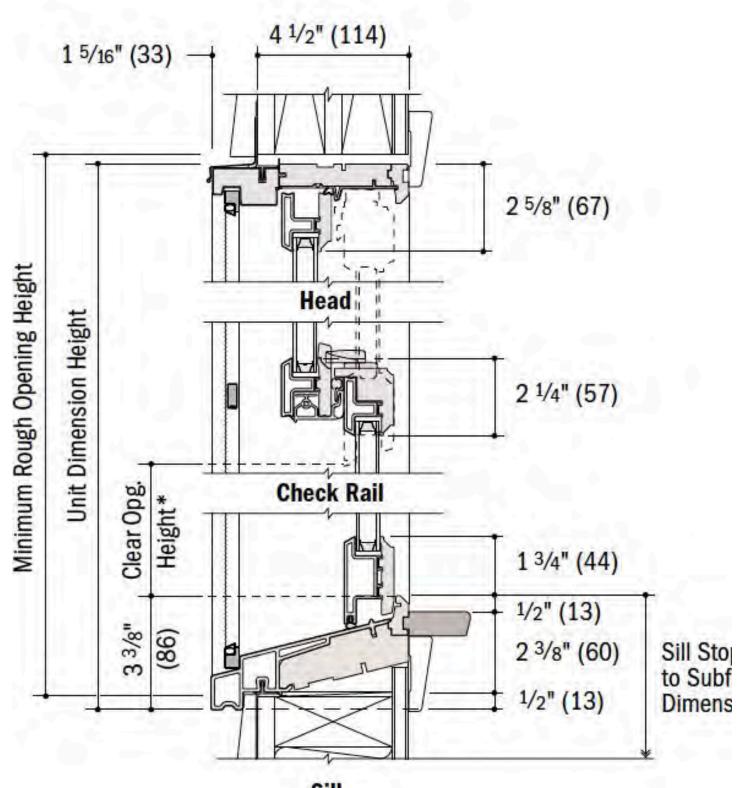
Reversible smooth or textured surface gives MiraTEC maximum versatility



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Andersen 400 Series Window Product Information: Alternate product = Pella 450 Series





Sill Vertical Section

Andersen 400 Series Window Product Information: Alternate product = Pella 450 Series



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