

AMARKET FEASIBILITY STUDY OF: WYNDHAM POINTE

A MARKET FEASIBILITY STUDY OF: WYNDHAM POINTE

Located at: 80 Brighton Hill Road Columbia, Richland County, SC 29223

Effective Date: November 7, 2023 Report Date: December 7, 2023

Prepared for:
Barrett Bock
Analyst, Development
Lincoln Avenue Capital LLC
401 Wilshire Boulevard, 11th Floor
Santa Monica, CA 90401

Prepared by: Novogradac 6700 Antioch Road, Suite 450 Merriam, KS 66204 913-677-4600





December 7, 2023

Barrett Bock Analyst, Development Lincoln Avenue Capital LLC 401 Wilshire Boulevard, 11th Floor Santa Monica, CA 90401

Re: Market Study for Wyndham Pointe located in Columbia, Richland County, South Carolina

Dear Barrett Bock:

At your request, Novogradac & Company LLP, doing business under the brand name Novogradac Consulting (Novogradac), has performed a study of the multifamily rental market in the Columbia, Richland County, South Carolina area relative to the above-referenced proposed affordable housing acquisition/rehabilitation project.

The purpose of this market study is to assess the viability of the acquisition/rehabilitation of Wyndham Pointe (Subject), an existing 180-unit LIHTC multifamily property located at 80 Brighton Hill Road, in Columbia, Richland County, South Carolina. Post renovation, all of the units will continue to be LIHTC-restricted to families earning 60 percent of the Area Median Income (AMI) or below.

We have not previously performed any work on the Subject property, but are concurrently preparing an appraisal. The following report provides support for the findings of the study and outlines the sources of information and the methodologies used to arrive at these conclusions. The scope of this report meets the 2023 requirements of the South Carolina State Housing Finance and Development Authority (SC Housing), including the following:

- Inspecting the site of the proposed Subject and the general location.
- Analyzing appropriateness of the proposed Subject's unit mix, rent levels, available amenities and site.
- Estimating market rent, absorption and stabilized occupancy levels for the market area.
- Investigating the health and conditions of the multifamily housing market.
- Calculating income bands, given the proposed Subject rents.
- Estimating the number of income-eligible households.
- Reviewing relevant public records and contacting appropriate public agencies.
- Analyzing the economic and social conditions in the market area in relation to the proposed project.
- Establishing the Subject Primary and Secondary Market Area(s) if applicable.
- Surveying competing projects, both Low-Income Housing Tax Credit (LIHTC) and market rate.

This report contains, to the fullest extent possible and practical, explanations of the data, reasoning, and analyses that were used to develop the opinions contained herein. The depth of discussion contained in the report is specific to the needs of the client and the requirements of SC Housing; both are identified intended users, and the intended use is for tax credit application submission. The report and the conclusions are subject to the Assumptions and Limiting Conditions attached.

The National Council of Housing Market Analysts (NCHMA) is a professional organization chartered to promote the development of high-quality market analysis for the affordable housing industry. Novogradac is a charter member of this organization. NCHMA has compiled model content standards for market studies. This report,

BARRETT BOCK LINCOLN AVENUE CAPITAL LLC DECEMBER 7, 2023 PAGE 2

which is a comprehensive market analysis full narrative report, conforms to those standards; any slight modifications or departures from those standards are considered incidental and result from client or agencyspecific needs.

The authors of this report certify that we are not part of the development team, owner of the Subject site, general contractor, nor are we affiliated with any member of the development team engaged in the development of the Subject property or the development's partners or intended partners. The recommendations and conclusions are based solely on the professional opinions and best efforts of the analysts. There exists no identity of interest between the analyst and the entity for which the report is prepared, the applicant or its principals (general partners, members, etc.).

The Stated Purpose of this assignment is for application. You agree not to use the Report other than for the Stated Purpose, and you agree to indemnify us for any claims, damages or losses that we may incur as the result of your use of the Report for other than the Stated Purpose. Without limiting the general applicability of this paragraph, under no circumstances may the Report be used in advertisements, solicitations and/or any form of securities offering.

Please do not hesitate to contact us if there are any questions regarding the report or if Novogradac can be of further assistance. It has been our pleasure to assist you with this project.

Respectfully submitted, Novogradac

Rachel B. Denton, MAI

Partner

Rachel.Denton@novoco.com

913.312.4612

TABLE OF CONTENTS

EXE	cutive Summary	
Α.	Project Description	9
В.	Site Description	13
C.	Market Area	25
	Primary Market Area	26
D.	Market Area Economy	30
	Commuting Patterns	38
Ε.	Community Demographic Data	39
F.	Project-Specific Demand Analysis	44
G.	Supply Analysis	53
	Survey of Comparable Projects	
	Comparable Property Analysis	
	Reasonability of Rents	
	Summary Evaluation of the Proposed Project	
Н.	Interviews	
	Interviews	
١.	Recommendations	112
J.	Signed Statement Requirements	114
	·	
Δda	dendum A	Qualifications of Consultants
	dendum B	•
	dendum C	
	dendum D	,



Property Summary of Subject

Subject Property Overview:

The Subject is an existing 180-unit multifamily development restricted to households earning 60 percent of the AMI or less. The Subject is located at 80 Brighton Hill Road, Columbia, Richland County, SC 29223 and offers 180 revenue-generating units, targeted toward the general population, which consist of one, two, and three-bedroom units in six three-story, garden-style buildings. Based on our physical inspection, the Subject exhibits average overall condition.

The property currently offers 24 one-bedroom units, 96 two-bedroom units, and 60 three-bedroom units targeted to family households. Post-renovation, all of the Subject's units will continue to be LIHTC restricted at the 60 percent AMI level. Further, all tenants are expected to remain income qualified post-renovation.

Targeted Tenancy:

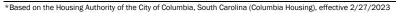
For SC Housing purposes, the tenancy is considered the general population. The targeted tenancy is not agerestricted and will consist primarily of households ranging from one to five-persons.

Proposed Rents, Unit Mix and Utility Allowance:

The following table details the Subject's proposed rents, utility allowances, unit mix, and unit sizes. Post-renovation, all 180 units will continue to be LIHTC restricted to families earning 60 percent of the AMI or below.

PROPOSED RENTS

			•	TO OOLD IT	_,,,,		
Unit Type	Unit Size (SF)	# Units	Asking Rent	Utility Allowance*	Gross Rent	2023 LIHTC Maximum Allowable Gross Rent	2024 HUD Fair Market Rent
				@60%			
1BR/1BA	1,036	24	\$890	\$55	\$945	\$945	\$1,110
2BR/2BA	1,232	96	\$1,075	\$59	\$1,134	\$1,134	\$1,246
3BR/2BA	1,444	60	\$1,244	\$65	\$1,309	\$1,309	\$1,595
Total		180					







Scope of Renovations:

The total renovation hard costs are estimated to be approximately \$45,000 per unit. According to the relocation plan provided by the developer, renovations will occur with minimal disruption to tenants; however, residents may be temporarily relocated during the day. In the event that a unit will need extensive work, tenants may be relocated to a nearby hotel paid for by the developer. No tenants will be permanently displaced. The scope of renovations includes, but is not limited to:

- Parking and drives: full mill, overlay, and striping
- Concrete repair and replace all steps, sidewalks, & curbs
- Ground work improvements
- Site lighting
- Replace mailboxes
- ADA compliant community spaces
- · Replace and add additional exterior lighting
- Paint exterior
- Attic insulation
- Repair masonry
- Replace vinyl siding
- Installation of new drywall
- Replace all exterior/interior doors
- Upgrade kitchens to include flooring, painting, cabinets, and countertops
- New appliance package refrigerator, garbage disposal, range, range hood, dishwasher
- Upgrade bathrooms to include flooring, painting, cabinets, toilets & sinks
- Upgrade to energy efficient lighting package
- Replace bathtub and shower surround
- Install new blinds
- Replace outlets and covers as needed
- New HVAC equipment
- ADA upgrades





Market Vacancy

The following table summarizes overall weighted vacancy trends at the surveyed properties.

OVERALL VACANCY

	012	INALE VACAITOI			
Property Name	Program	Tenancy	Total Units	Vacant Units	Vacancy %
Arcadia Park	LIHTC	Family	75	0	0.0%
Brookside Crossing	LIHTC	Family	162	2	1.2%
Deer Park Apartments	LIHTC	Family	64	0	0.0%
Jackson Creek Station	LIHTC	Family	56	0	0.0%
Regent Park Apartments	LIHTC	Family	72	0	0.0%
Gable Hill	Market	Family	180	2	1.1%
Greenbrier Apartments	Market	Family	526	17	3.2%
Paces Run	Market	Family	260	6	2.3%
Samara East	Market	Family	288	4	1.4%
Springtree Apartments	Market	Family	152	2	1.3%
The Preserve At Windsor Lake	Market	Family	264	4	1.5%
LIHTC Total			429	2	0.5%
Market Total			1,670	35	2.1%
Overall Total			2,099	37	1.8%

The comparable properties reported vacancy rates ranging from zero to 3.2 percent, with an overall weighted average of 1.8 percent. Managers at four of the five LIHTC properties reported being fully occupied. The average vacancy rate reported by the affordable comparables was 0.5 percent, well below the 2.1 percent weighted average reported by the market rate properties. All of the market rate properties reported vacancy rates of 3.2 percent or less. The average LIHTC vacancy rate of 0.5 percent is considered exceptionally low, and indicative of supply-constrained conditions.

According to the Subject's rent roll dated August 31, 2023 (most recent available), the Subject was fully occupied. The Subject has operated with vacancy and collection loss ranging from 5.3 to 11.3 percent between 2020 and 2023 year to date. Based on the performance of the LIHTC comparables, we expect the Subject will operate with a vacancy and collection loss of five percent or less.

Capture Rates

The following table illustrates the capture rates for the Subject.

CAPTURE RATE ANALYSIS CHART

Bedrooms/AMI Level	Total Demand	Supply	Net Demand	Units Proposed	Capture Rate
1BR - @60%	633	144	489	24	4.9%
2BR - @60%	672	182	490	96	19.6%
3BR - @60%	405	76	329	60	18.3%
Overall	1,710	402	1,308	180	13.8%

As the analysis illustrates, the Subject's capture rates range from 4.9 to 19.9 percent, with an overall capture rate of 13.8 percent. This indicates there is adequate continued demand for the Subject. Further, capture rates for all units, as well as the overall property, are below the 30 percent capture rate threshold as determined by SC Housing.







Projected Absorption Period

We were unable to obtain absorption information from any of the rent comparables, but have included information from six properties within a 20-mile radius of the Subject, which are shown in the following table.

ABSORPTION	Α	BS	60	R	b.	ΓΙ	0	Ν
------------	---	----	----	---	----	----	---	---

Property Name	Program	Tenancy	City	Year	Total Units	Absorption (units/month)	Distance to Subject
The Babcock	Market	Family	Columbia	2023	208	11	6.2 miles
Dove Place	LIHTC	Family	Columbia	2021	48	12	8.6 miles
O'neil Pointe	LIHTC	Family	Columbia	2020	42	14	1.6 miles
The Pointe At Elmwood	LIHTC	Family	Columbia	2020	58	15	5.6 miles
Killian Terrace	LIHTC	Family	Columbia	2020	288	29	4.5 miles
Sola Station	Market	Family	Columbia	2019	339	15	7.5 miles
Average Affordable					109	18	
Average Market					274	13	
Overall Average					164	16	

If the Subject were hypothetically 100 percent vacant, we would expect the property to experience a brief lease-up period due to the sustained demand for good quality affordable housing in the area. Assuming the Subject were completely vacant, we believe that the Subject would experience an absorption rate of approximately 20 units per month. This equates to an absorption period of approximately eight to nine months. This is considered largely hypothetical as the Subject is currently 100 percent occupied and maintains a waiting list. Further, current tenants are expected to remain income eligible to remain at the property post-renovation. As such, we believe the Subject will stabilize within one to two months of rehabilitation completion.

F

Market Conclusions

Overall, the local multifamily market is performing well with a 0.5 percent vacancy rate among all of the surveyed comparable projects. All of the LIHTC comparables maintain waiting lists, suggesting pent-up demand for affordable housing. One of the four LIHTC comparables are achieving maximum allowable rents. Given the rents being achieved by the comparables, and considering the Subject's condition post-renovations, we have concluded to achievable LIHTC rents at the 2023 maximum allowable level for the Subject's one, two, and three-bedroom units, respectively. These conclusions provide rent advantages between 31 to 36 percent relative to our market rent conclusions. Overall, we believe that the Subject will continue to be successful in the local market as proposed.



Recommendations

We believe there is ample demand for the Subject in the PMA and the market supports the renovation of the Subject development as proposed. The overall capture rate for the Subject's units is 13.8 percent, which is within the acceptable demand threshold and considered good. Individual capture rates by bedroom type range from 4.9 to 19.9 percent, which are all considered good to excellent. Between 2023 and market entry, the total number of households is expected to increase at a rate of 0.5 percent annually in the PMA. The Subject is located within 1.5 miles of most community services and facilities that tenants would utilize on a consistent basis.

One of the LIHTC comparables, Brookside Crossing, reported rents at the 2023 maximum allowable levels. Three of the four properties are fully occupied and maintain extensive waiting lists, indicating supply constrained conditions. Furthermore, based on the comparable data, we believe the Subject would achieve LIHTC rents at the 2023 maximum allowable levels. These conclusions provide rent advantages between 31 to 36 percent relative to our market rent conclusions. Overall, we believe that the Subject will continue to be successful in the local market as proposed.



Further, there are several apparent strengths of the Subject's site, development scheme, and market, which include:

- Rehabilitation of the Subject's units will positively impact the surrounding area by improving the Subject's condition and street appeal, and thus representing an improvement to the neighborhood.
- The Subject is an existing property that is 100 percent occupied and maintains a waiting list, and all tenants are expected to remain income qualified post-renovation.
- The Subject will be in good condition upon completion and will fill a need for good quality/newly renovated affordable housing in Columbia and the surrounding areas.

As such, we recommend the Subject as proposed, with no suggested modifications.

Long Term Impact on Existing LIHTC Properties in the PMA

There are just two vacant LIHTC units among the five LIHTC comparables surveyed, and four of the LIHTC comparables maintain waiting lists. Within the PMA, there are 20 existing LIHTC properties. Overall, the availability of LIHTC housing targeting low and moderate incomes is considered constrained given the demographic growth of the PMA, and high occupancy rates. The renovation of the Subject will improve the existing affordable housing stock in the PMA, and will preserve affordable units for low-income families.





Rent versus Buy Analysis

We performed a rent/buy analysis. Our inputs assume a three-bedroom, single-family home listing on Zillow in the Subject's neighborhood with a purchase price of \$196,000 and an interest rate of 7.00 percent for a 30-year fixed mortgage with a ten percent down payment. This was compared with the cost to rent the Subject's three-bedroom unit at 60 percent of AMI. The analysis indicates that with a monthly differential of \$367, it is more affordable to rent than purchase a home. The rent buy analysis is illustrated in the following table.

RE	ENT BUY ANALYSIS		
Property Type:	Three-	Bedroom Single-Family	Home
Sales Price		\$196,000	
Down Payment at 10.0%		\$19,600	
Mortgage Amount		\$176,400	
Current Interest Rate		7.00%	
Homeownership Costs	Monthly	% of Home Value	Annual
Mortgage Payment	\$1,174		\$14,083
Property Taxes	\$204	1.25%	\$2,450
Private Mortgage Insurance*	\$74	0.50%	\$882
Maintenance	\$327	2.00%	\$3,920
Utility Costs**	\$140		\$1,680
Tax Savings	(\$307)		(\$3,685)
	Cost Comparison		
	Monthly		Annual
Costs of Homeownership	\$1,611		\$19,330
Cost of Renting At Subject	\$1,244		\$14,928
Differential	\$367		\$4,402
	Cost of Occupancy		
	Homeownership		
Closing Costs		3.00%	\$5,880
Down Payment at 10.0%		10.00%	\$19,600
Total			\$25,480
	Subject Rental		
First Month's Rent	\$1,244		
Security Deposit	\$1,244		
Total * Based upon 0.50% of mortgage amount	\$2,488		

^{*} Based upon 0.50% of mortgage amount

As illustrated, the cash due at occupancy category totals over \$25,000 for the down payment and closing costs. The cash necessary for homeownership is still a barrier to many families. In general, first-time home buyers have difficulty saving for a down payment. Further, renting at the Subject is more affordable than purchasing even a modest single-family home in the Subject's neighborhood. Overall, we believe the Subject will face limited competition from homeownership.



^{**} Utility Costs Included in Rent at Subject

	Exhibit	S-2 SCSHFDA Primary Market Area Analysis Summary:		
Development Name:	Wyndham Pointe		Total # of Units:	180
Address:	80 Brighton Hill Road, Columbia, SC 29	2223	# of LIHTC/TEB Units:	180
PMA Boundary:		North Brickyard Road to the north, Polo Road, Interstate 20, and Interstat Fairfield Road, North Main Street, Interstate 20, and U.S. Highway 21 to t	•	d Harden
Development Type:	Family	Farthest Boundary Distance t	o Subject: 6	Miles

Rent	al Housing Stock (foun	d on page 38)	
Туре	# of Properties	Total Units	Vacant Units	Average Occupancy
All Rental Housing	49	7,491	178	97.62%
Market-Rate Housing	26	5,087	165	96.76%
Assisted/Subsidized Housing not to include LIHTC	3	500	3	99.40%
LIHTC (All that are stabilized)*	20	1,904	10	99.47%
Stabilized Comparables**	11	2,099	37	98.20%
Non Stabilized Comparables	0	0	0	-

^{*} Stabilized occupancy of at least 93% (Excludes projects still in initial lease up).

^{**} Comparables - comparable to the subject and those that compete at nearly the same rent levels and tenant profile, such as age, family and income.

	Subject Development						MR	Highest Unadjusted Comparable Rent			
Units	Bedrooms	Baths	Size (SF)	Proposed Tenant Rent	Per Unit	P	er SF	Advantage (%)	Per Unit	Per S	SF
24	1	1	1,036	\$890	\$1,100	\$	1.06	19.09%	\$1,350	S	1.30
96	2	2	1,232	\$1,075	\$1,246	\$	1.01	13.72%	\$1,565	\$	1.27
60	3	2	1,444	\$1,244.00	\$1,595	\$	1.10	22.01%	\$1,830	\$	1.27
Gross	Potential Ren	t Monthly*		\$ 199,200	\$ 241,716			17.59%			

^{*}Market Advantage is calculated using the following formula: Gross HUD FMR (minus) Net Proposed Tenant Rent (divided by) Gross HUD FMR. The calculation should be expressed as a percentage and rounded to two decimal points.

	D	emographic Dat	a (found on page	43)		
	2010 20		2023		2025		
Renter Households	14,072	45.90%	15,593		47.40%	15,556	46.80%
Income-Qualified Renter HHs (LIHTC)	-	-	3,185		20.40%	3,111	19.99%
Income-Qualified Renter HHs (MR)	-	-	-		-	-	-

	52					
Type of Demand	50%	60%	Market Rate	Editable	Editable	Overall
Renter Household Growth		28				28
Existing Households (Overburd + Substand)		1,682				1,682
Homeowner conversion (Seniors)		-				-
Other:		-				-
Less Comparable/Competitive Supply		402				402
Net Income-qualified Renters HHs	0	1,308	0	0	0	1,308

Capture Rates (found on page 52									
Targeted Populati	ion		50%	60%	Market l	Rate			Overall
Capture Rate				13.80%					13.80%
Absorption Rate (found on page 53)									
Absorption Period	2	months.							

Bedroom Type	# of Units	Proposed Tenant Paid Rent	Net Proposed Tenant Rent by Bedroom Type	Gross HUD FMR	Gross HUD FMR Total	Tax Credit Gross Rent Advantage
1BR	24	\$867	\$20,808	\$1,100	\$26,400	21.2%
2BR	96	\$1,047	\$100,512	\$1,246	\$119,616	16.0%
3BR	60	\$1,212	\$72,720	\$1,595	\$95,700	24.0%
Totals	180	•	\$194,040	•	\$241,716	19.7%

Source: SC Housing, Novogradac, December 2023



I. PROJECT DESCRIPTION

PROJECT DESCRIPTION

Development Location: The Subject is located at 1400 Trinity Drive, Columbia, Richland

County, SC 29209.

Construction Type: The Subject consists of six three-story, garden-style buildings, as

well as a single-story community building. The buildings are wood-frame with hardiplank siding exteriors with pitched asphalt roofs.

Year Built: The Subject was originally built in 2007. Based on our physical

inspection, the Subject exhibits good overall condition.

Occupancy Type: For SC Housing purposes, the tenancy is considered general

population. The targeted tenancy is not age-restricted and will consist primarily of households ranging from one to five-persons.

Target Income Group: The Subject will continue to target income-qualified family

households with one to five persons. As proposed, the annual household income levels for the Subject's units will range from

\$32,400 to \$54,420.

Special Population Target: None.

Number of Units by Unit Type: The Subject includes 24 one-bedroom units, 96 two-bedroom

units, and 60 three-bedroom units.

Number of Buildings and Stories: The Subject consists of six three-story, garden-style buildings.

.Unit Mix: The following table summarizes the Subject's unit sizes.

UNIT MIX AND SOUARE FOOTAGE

01111 MIN (71112 OQO) 1112 1 00 17 102								
Unit Type	Number of Units	Unit Size (SF)	Net Leasable Area (SF)					
1BR/1BA	24	1,036	24,864					
2BR/2BA	96	1,232	118,272					
3BR/2BA	60	1,444	86,640					
Total	180		229,776					



Proposed Rents and Utility Allowance:

The following table details the Subject's proposed rents, utility allowances, unit mix, and unit sizes. Post-renovation, all 180 units will continue to be LIHTC restricted to families earning 60 percent of the AMI or below.

PROPOSED RENTS

Unit Type	Unit Size (SF)	# Units	Asking Rent	Utility Allowance*	Gross Rent	2023 LIHTC Maximum Allowable Gross Rent	2024 HUD Fair Market Rent
				@60%			
1BR/1BA	1,036	24	\$890	\$55	\$945	\$945	\$1,110
2BR/2BA	1,232	96	\$1,075	\$59	\$1,134	\$1,134	\$1,246
3BR/2BA	1,444	60	\$1,244	\$65	\$1,309	\$1,309	\$1,595
Total		180					

^{*}Based on the Housing Authority of the City of Columbia, South Carolina (Columbia Housing), effective 2/27/2023

Utility Structure/Allowance:

The tenant is responsible for electric cooking, electric heating, electric water heating, central air conditioning, and general electric expenses. The landlord is responsible for cold water, sewer, and trash removal expenses, along with all common area utilities. The Subject's utility allowances are dictated by HUD. There are no proposed changes to the tenant-paid utility structure post-renovation. The utility structure varies among the comparable properties; we have adjusted the comparable' rents in accordance with the utility schedule obtained from the Housing Authority of the City of Columbia, South Carolina (Columbia Housing), effective February 27, 2023, which is the most recent available.

Community Amenities:

The Subject's community amenities include a computer lab, courtyard, community room, central laundry facility, on-site management, off-street parking, exercise facility, swimming pool, and playground. Post-renovation, the Subject's community amenities will remain the same. The comparables generally offer generally similar to slightly inferior area amenities relative to the Subject. These properties lack features including exercise facilities, and swimming pools, both of which the Subject offers. The differences in amenities have been accounted for in our determination of the Subject's achievable rents.

Unit Amenities:

The Subject's unit amenities include blinds, carpeting, a coat closet, exterior storage, washer/dryer hook-ups, and central heating and cooling. Kitchen appliances include a range/oven, dishwasher, garbage disposal, and refrigerator. Post-renovation, in-unit amenities will remain the same. All of the comparables offer similar to slightly superior in-unit amenities relative to the Subject. These properties generally offer features including in-unit washer/dryers and patios, both of which the Subject lacks. The differences in amenities have been accounted for in our determination of the Subject's achievable rents.

Current Rents & Unit Mix:

According to the rent roll dated August 31, 2023 (most recent available), the Subject is currently fully occupied. Further, the Subject has operated with vacancy and collection loss ranging from 5.3 to 11.3 percent between 2020 and 2023 year to date. The following table summarizes current tenant-paid rents at the Subject.

F



CURRENT TENANT PAID RENTS*

Unit Type	Unit Size (SF)	# Units	Asking Rent	Utility Allowance**	Gross Rent	2023 HERA Maximum Allowable Gross Rent***	2024 HUD Fair Market Rent
				@60 9	6		
1BR/1BA	1,036	24	\$890	\$77	\$967	\$967	\$996
2BR/2BA	1,232	96	\$1,075	\$86	\$1,161	\$1,161	\$1,125
3BR/2BA	1,444	60	\$1,244	\$96	\$1,340	\$1,340	\$1,442
Total		180					

^{*}Based on rent roll dated 8/31/2023

Scope of Renovations:

Total renovation hard costs are estimated to be approximately \$45,000 per unit. According to the relocation plan provided by the developer, renovations will occur with minimal disruption to tenants; however, residents may be temporarily relocated during the day. In the event that a unit will need extensive work, tenants may be relocated to a nearby hotel paid for by the developer. No tenants will be permanently displaced. The scope of renovations includes, but is not limited to:

- Parking and drives: full mill, overlay, and striping
- Concrete repair and replace all steps, sidewalks, & curbs
- Ground work improvements
- Site lighting
- Replace mailboxes
- ADA compliant community spaces
- Replace and add additional exterior lighting
- Paint exterior
- Attic insulation
- Repair masonry
- Replace vinyl siding
- Installation of new drywall
- Replace all exterior/interior doors
- Upgrade kitchens to include flooring, painting, cabinets, and countertops
- New appliance package refrigerator, garbage disposal, range, range hood, dishwasher
- Upgrade bathrooms to include flooring, painting, cabinets, toilets & sinks
- Upgrade to energy efficient lighting package
- Replace bathtub and shower surround
- Install new blinds
- Replace outlets and covers as needed
- New HVAC equipment
- ADA upgrades



^{**}Based on the Housing Authority of the City of Columbia, South Carolina (Columbia Housing), effective 2/27/2023

^{***}For Projects Placed in service prior to 1/1/2009

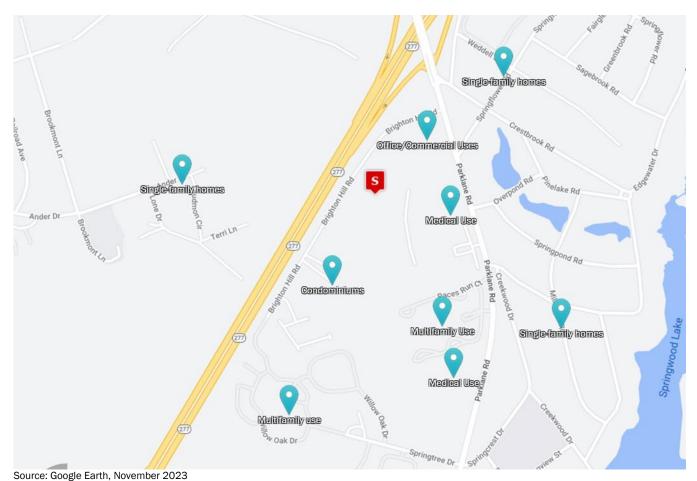


SITE DESCRIPTION

The location of a multifamily property can have a substantial negative or positive impact upon the performance, safety, and appeal of the project. The site description discusses the physical features of the site, as well as the layout, access issues, and traffic flow.

Date of Site Visit: November 7, 2023.

Surrounding Land Uses: The following map and pictures illustrate the surrounding land uses.



Physical Features of Site:

The Subject site is approximately 16.85 acres, or 733,986 square feet in size. The site is irregular but functional in shape and is generally level. The site is improved with six three-story, garden-style buildings, along with a single-story community building, which were originally built in 2007. According to the City of Columbia Zoning map, the Subject site is zoned GC (General Commercial), which allows for a broad range of uses including multifamily development.

Location/Surrounding Uses:

The Subject is located in a mixed-use area of northeastern Columbia. To the north of the Subject, across Brighton Hill Road, is a thick tree line, followed by State Route 277. Further north of the Subject is undeveloped heavily wooded land. To the east of the Subject, across a thick tree line, is the NHC Healthcare Parklane campus, which



consists of a nursing home and assisted living facility in good condition. Also to the east is an office building and parking lot in good condition. Immediately south of the Subject is heavily wooded undeveloped land, followed by Paces Run Apartments, a market rate multifamily development in average condition which has been utilized as a comparable in this analysis. Immediately west of the Subject is heavily wooded undeveloped land, followed by Brighton Hill Condos, a condominium development in average condition. Additionally, State Route 277, which provides highway access throughout the Columbia metropolitan area, is accessible via Parklane Road, approximately 0.3 miles to the northeast of the Subject. Retail and commercial occupancy appeared to be greater than 90 percent at the time of our inspection. There are no observed negative influences or nuisances in the area.



Photographs of Subject Site and Surrounding Uses



Subject's exterior



Subject's exterior



Subject's exterior



Subject's exterior and typical surface parking



Fitness center



Leasing office

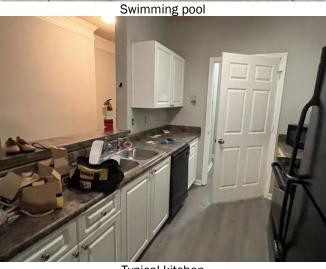














Typical kitchen

Typical bathroom





Typical living area

Typical kitchen





Typical bedroom

Typical bedroom





Typical bathroom

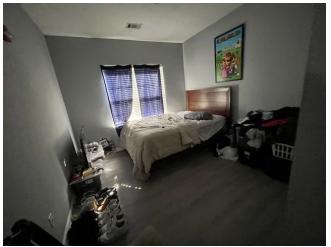
Typical bathroom





Typical living area

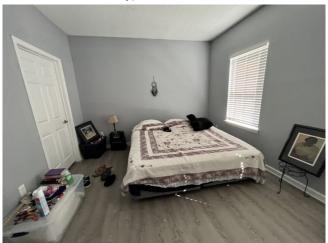
Typical kitchen





Typical bedroom

Typical bedroom





Typical bedroom

Typical bathroom





Typical bathroom

Typical bathroom







Typical commercial use in Subject neighborhood

Typical single-family home in Subject neighborhood



Typical single-family home in Subject neighborhood



Typical single-family home in Subject neighborhood



View southwest along Brighton Hill Road



View northeast along Brighton Hill Road

Visibility/Views: The Subject has average visibility from Brighton Hill Road. Views to the

north of the Subject consist of Brighton Hill Road followed by a dense tree line. Views to the east, south, and west of the Subject consists of heavily wooded land. Overall, visibility and views are considered

average/typical.

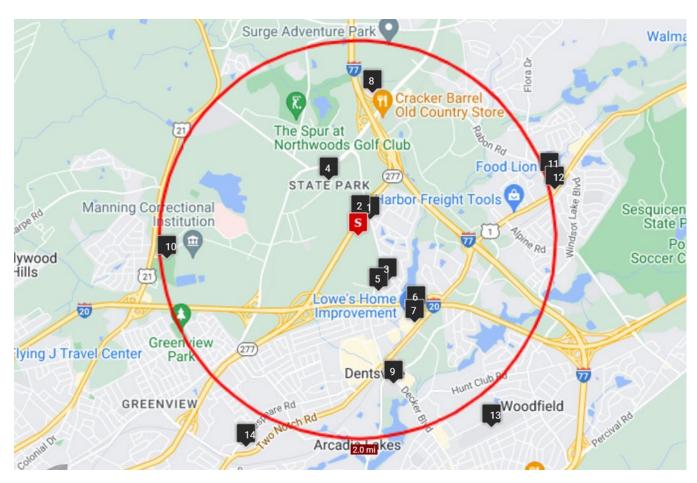
Detrimental Influence: At the time of the site inspection, there were no detrimental influences

observed that would adversely impact the marketability of the Subject.

Proximity to Local Services: The Subject is located in reasonable proximity to local services

including medical services and retail. The following table details the Subject's distance from key locational amenities. A Locational

Amenities Map and table is following.



LOCATIONAL AMENITIES

#	Service or Amenity	Distance to Subject	#	Service or Amenity	Distance to Subject
1	Bus Stop	0.2 miles	8	Providence Health-Northeast	1.4 miles
2	Circle K	0.2 miles	9	Dent Middle School	1.5 miles
3	Joseph Keels Elementary School	0.5 miles	10	Meadowlake Park	1.9 miles
4	Post Office	0.6 miles	11	Food Lion	2.0 miles
5	Richland Library Northeast	0.6 miles	12	Walgreens	2.0 miles
6	Fire Station	0.9 miles	13	Richland Northeast High School	2.3 miles
7	Bank of America	1.0 miles	14	Police Department	2.4 miles



Availability of Public Transportation:

Central Midlands Regional Transit Authority (The COMET) provides public transportation throughout Richland County and the Columbia region. The COMET operates 39 fixed-routes throughout the region. Fixed route fares are \$2.00, while discounted fares are \$1.00 for seniors ages 65 and older, persons with disabilities, veterans, Medicare card holders, and youth ages 16 to 18. All daily passes are available for \$4.00, while discounted daily fares are available for \$2.00. Children 15 years and under ride free. The nearest bus stop is located 0.2 miles northwest of the Subject, located at the intersection of Brighton Hill Road and Parklane Road, and is served by Route 75.

Road/Infrastructure Proposed Improvements:

We witnessed no current road improvements within the Subject's immediate neighborhood.

Crime Rates:

The following table illustrates crime statistics in the Subject's PMA compared to the MSA. Any number above 100 is above average compared to the national crime index, while any number below 100 indicates lower than average crime.

2023 CRIME INDICES

	PMA	MSA
Total Crime*	196	151
Personal Crime*	249	172
Murder	245	151
Rape	202	140
Robbery	214	131
Assault	271	196
Property Crime*	189	149
Burglary	194	148
Larceny	185	150
Motor Vehicle Theft	209	141

Source: Esri Demographics 2023, Novogradac, November 2023

Total crime indices in the Subject's location are above the national average and the surrounding MSA. The Subject's security features include controlled access and perimeter fencing. Furthermore, video surveillance will be added at the Subject post-renovation. Eight of the comparables reported offering some sort of security feature; as such, the Subject will be competitive in terms of security features.

Access and Traffic Flow:

The Subject is accessible via Brighton Hill Road, a lightly-trafficked street that provides access to Parklane Road. Parklane Road is a moderately trafficked four-lane road which generally traverses northwest and southeast and provides access to State Route 277, approximately 0.3 mile to the northeast of the Subject. State Route 277 provides highway access throughout the Columbia metropolitan area as well as to Interstate 77, approximately 0.8 miles to the north. Overall, access is considered average/typical, and traffic flow in the Subject's immediate area is considered light.



^{*}Unweighted aggregations

Positive/Negative Attributes:

The Subject has good access to area retail and community services in Columbia, most of which are within 1.3 miles of the Subject site. The Subject is considered to be in an adequate location for an affordable multifamily development.





PRIMARY MARKET AREA

For the purpose of this study, it is necessary to define the market area, or the area from which potential tenants for the project are likely to be drawn. In some areas, residents are very much "neighborhood oriented" and are generally very reluctant to move from the area where they have grown up. In other areas, residents are much more mobile and will relocate to a completely new area, especially if there is an attraction such as affordable housing at below market rents.

The Subject is located in the northeastern portion of Columbia, South Carolina. Columbia is located in a central portion of South Carolina and is part of the Columbia, SC Metropolitan Statistical Area, which is comprised of Richland, Lexington, Saluda, Kershaw, Fairfield, and Calhoun Counties. According to the US Census Bureau, Columbia had a population of 137,541 persons in 2021. The PMA for the Subject covers approximately 37.9 square miles and consists of a northeastern portion of the city of Columbia including the neighborhoods of Colonial Heights, Forest Acres, Rockbridge Village, Woodfield, Greenview, and Dentsville. The boundaries of the PMA are defined as Hard Scrabble Road, Sloan Road, and North Brickyard Road to the north, Polo Road, Interstate 20, and Interstate 77 to the east, Forest Drive and Harden Street to the south, and Harden Street, Fairfield Road, North Main Street, Interstate 20, and U.S. Highway 21 to the west. Given the natural boundaries, we anticipate that the vast majority of the Subject's tenants will come from within the boundaries of the PMA. We confirmed the PMA with property managers in the area, including the Subject's property manager. Approximate distances to the farthest boundaries of the PMA in each direction are as follows:

North: 3.6 miles East: 4.0 miles South: 6.0 miles West: 5.9 miles

The PMA includes all or part of the following census tracts:

CENSUS TRACTS IN PMA (28)						
450790114.21	450790108.04					
450790114.20	450790111.02					
450790114.11	450790113.07					
450790108.06	450790005.00					
450790108.05	450790110.00					
450790113.03	450790009.00					
450790114.12	450790010.00					
450790106.00	450790111.01					
450790107.03	450790010.00					
450790108.03	450790010.00					
450790113.05	450790011.00					
450790020.00	450790112.02					
450790001.00	450790113.06					
450790109.00	450790115.01					

The primary market area has been identified based upon conversations with management at market rate and LIHTC properties in the area as well as other market participants in addition to demographic characteristics of census tracts within the area. Although we believe that neighborhood characteristics and geographic/infrastructure barriers are typically the best indicators of PMA boundaries, we have also examined demographic characteristics of census tracts in and around the Columbia area in an effort to better identify the Subject's PMA. It is important to note however that we do not base our PMA determinations on census tract information alone as these boundaries are rarely known to the average person. The secondary market area (SMA) for the Subject is considered to be the Columbia, SC Metropolitan Statistical Area, which is comprised of Richland, Lexington, Saluda, Kershaw, Fairfield, and Calhoun Counties.



As per SC Housing guidelines, we have provided a table that illustrates the racial characteristics of the PMA, as well as data for the MSA and nation.

2020 POPULATION BY RACE

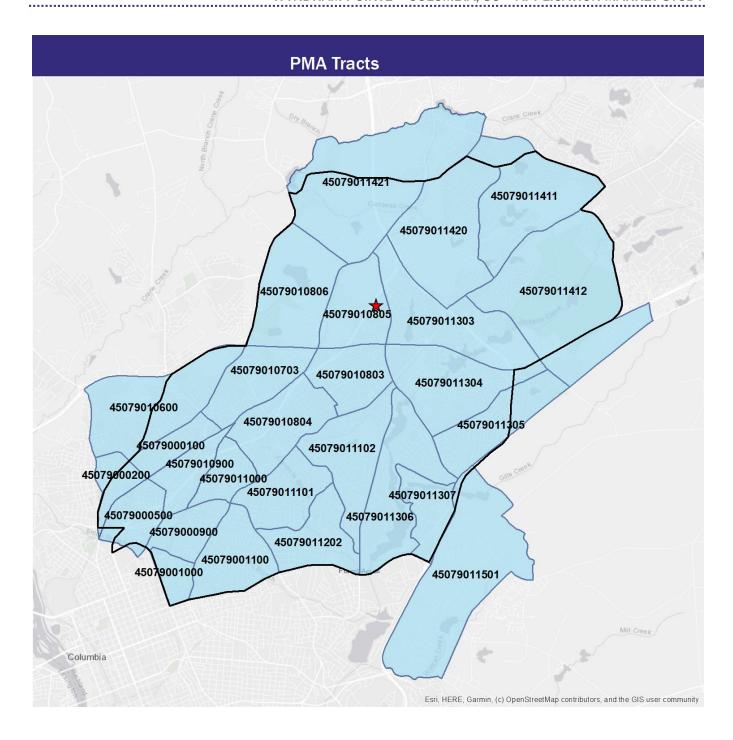
2020 I OI CLATION DI MACL							
	PIV	IA	SM	Α	USA	<u> </u>	
Total	75,716	-	767,598	-	308,730,056	-	
White	24,927	32.9%	463,516	60.4%	223,541,434	72.4%	
Black	45,629	60.3%	255,104	33.2%	38,927,189	12.6%	
American Indian	232	0.3%	2,746	0.4%	2,932,204	0.9%	
Asian	1,337	1.8%	12,704	1.7%	14,673,743	4.8%	
Pacific	68	0.1%	658	0.1%	540,007	0.2%	
Other	1,971	2.6%	17,873	2.3%	19,106,694	6.2%	
Two or More Races	1,552	2.0%	14,997	2.0%	9,008,785	2.9%	
Total Hispanic	4,140	-	39,153	-	50,474,965	-	
Hispanic: White	1,311	31.7%	15,589	39.8%	26,733,907	53.0%	
Hispanic: Black	480	11.6%	2,775	7.1%	1,243,402	2.5%	
Hispanic: American Indian	66	1.6%	487	1.2%	685,143	1.4%	
Hispanic: Asian	21	0.5%	161	0.4%	209,121	0.4%	
Hispanic: Pacific	2	0.0%	135	0.3%	58,436	0.1%	
Hispanic: Other	1,877	45.3%	16,878	43.1%	18,502,462	36.7%	
Hispanic: Two or More Races	383	9.3%	3,128	8.0%	3,042,490	6.0%	

Source: Esri Demographics 2023, Novogradac, November 2023

Per specific SC Housing guidelines, we have not accounted for leakage and have assumed 100 percent of demand will come from within the PMA boundaries.

The following maps outline the PMA and MSA, and identifies the census tracts included within the PMA boundaries.







Secondary Market Area Map



Source: Google Earth, November 2023

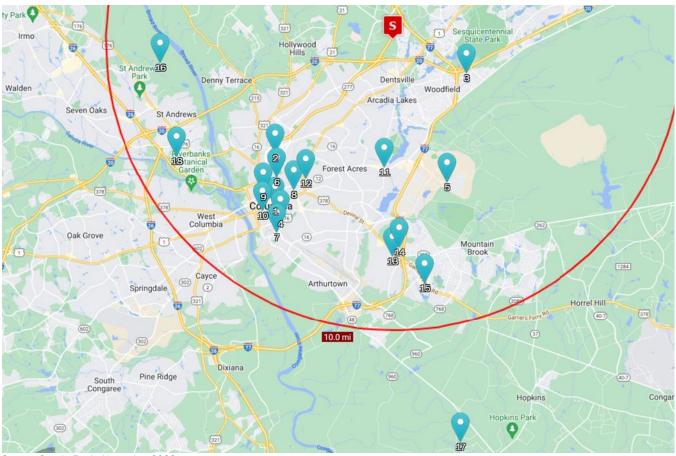




MARKET AREA ECONOMY

Map of Employment Centers

The following map illustrates the Subject's location compared to major employment centers in the surrounding areas.



Source: Google Earth, November 2023

MAJOR EMPLOYERS - COLUMBIA, SC

#	Employer	Industry	#	Employer	Industry
1	State of South Carolina	Government	10	AT&T South Carolina	Telecommunications
2	Prisma Health	Healthcare	11	First-Citizens Bank	Banking
3	BlueCross BlueShield of SC	Finance/Insurance	12	Providence Hospital	Healthcare
4	University of South Carolina	Education	13	Dorn VA Medical Ctr	Healthcare
5	U.S. Department of the Army	Military	14	Wells Fargo	Finance/Insurance
6	Richland School District 1	Public Administration	15	Verizon Wireless	Telecommunications
7	Richland School District 2	Public Administration	16	Air National Guard	Military
8	Richland County	Public Administration	17	Westinghouse Electric	Manufacturing
9	City of Columbia	Public Administration	18	Colonial Life	Insurance

Source: South Carolina Department of Employment & Workforce, retrieved November 2023



Employment by Industry

The following table illustrates employment by industry for the PMA as of 2023.

2023 - EMPLOYMENT BY INDUSTRY

	<u>PN</u>	<u>//A</u>	<u>US</u>	<u>USA</u>		
Industry	Number Employed	Percent Employed	Number Employed	Percent Employed		
Healthcare/Social Assistance	4,716	13.9%	22,115,876	13.6%		
Retail Trade	3,918	11.6%	16,983,329	10.4%		
Educational Services	3,570	10.6%	14,946,247	9.2%		
Accommodation/Food Services	3,221	9.5%	10,883,169	6.7%		
Admin/Support/Waste Mgmt Srvcs	2,604	7.7%	7,195,078	4.4%		
Finance/Insurance	2,265	6.7%	8,135,144	5.0%		
Manufacturing	2,231	6.6%	16,269,811	10.0%		
Prof/Scientific/Tech Services	2,008	5.9%	13,955,403	8.6%		
Public Administration	1,998	5.9%	7,857,180	4.8%		
Other Services	1,803	5.3%	7,645,568	4.7%		
Construction	1,463	4.3%	11,436,301	7.0%		
Transportation/Warehousing	963	2.8%	9,030,239	5.5%		
Information	875	2.6%	3,143,826	1.9%		
Wholesale Trade	705	2.1%	3,029,965	1.9%		
Real Estate/Rental/Leasing	599	1.8%	2,901,274	1.8%		
Arts/Entertainment/Recreation	448	1.3%	3,578,110	2.2%		
Utilities	252	0.7%	1,335,595	0.8%		
Agric/Forestry/Fishing/Hunting	165	0.5%	1,800,335	1.1%		
Mgmt of Companies/Enterprises	4	0.0%	216,588	0.1%		
Mining	0	0.0%	572,355	0.4%		
Total Employment	33,808	100.0%	163,031,393	100.0%		

Source: Esri Demographics 2023, Novogradac, November 2023

Employment in the PMA is concentrated in healthcare/social assistance, retail trade, and educational services, which collectively comprise 36.1 percent of local employment. The large share of PMA employment in retail trade is notable as this industry is historically volatile, and prone to contraction during economic recessions. However, the PMA also has a significant share of employment in the healthcare/social assistance industry, which typically exhibits greater stability during economic recessions. Relative to the nation, the PMA features comparatively greater employment in the admin/support/waste mgmt srvcs, accommodation/food services, and finance/insurance industries. Conversely, the PMA is underrepresented in the manufacturing, transportation/warehousing, and construction sectors.

The following table illustrates the changes in employment by industry from 2010 to 2023, in the Subject's PMA.



2010-2023 CHANGE IN EMPLOYMENT - PMA

	<u>20:</u>	<u>10</u>	<u>20:</u>	<u>23</u>	<u>201</u>	L0-2023
Industry	Number Employed	Percent Employed	Number Employed	Percent Employed	Growth	Annualized Percent
Healthcare/Social Assistance	5,124	15.2%	4,716	13.9%	-408	-0.6%
Retail Trade	3,534	10.5%	3,918	11.6%	384	0.8%
Educational Services	3,727	11.0%	3,570	10.6%	-157	-0.3%
Accommodation/Food Services	1,983	5.9%	3,221	9.5%	1,238	4.8%
Admin/Support/Waste Mgmt Srvcs	1,226	3.6%	2,604	7.7%	1,378	8.6%
Finance/Insurance	2,834	8.4%	2,265	6.7%	-569	-1.5%
Manufacturing	1,789	5.3%	2,231	6.6%	442	1.9%
Prof/Scientific/Tech Services	2,397	7.1%	2,008	5.9%	-389	-1.2%
Public Administration	3,636	10.8%	1,998	5.9%	-1,638	-3.5%
Other Services	1,296	3.8%	1,803	5.3%	507	3.0%
Construction	1,805	5.3%	1,463	4.3%	-342	-1.5%
Transportation/Warehousing	1,008	3.0%	963	2.8%	-45	-0.3%
Information	1,071	3.2%	875	2.6%	-196	-1.4%
Wholesale Trade	691	2.0%	705	2.1%	14	0.2%
Real Estate/Rental/Leasing	769	2.3%	599	1.8%	-170	-1.7%
Arts/Entertainment/Recreation	442	1.3%	448	1.3%	6	0.1%
Utilities	269	0.8%	252	0.7%	-17	-0.5%
Agric/Forestry/Fishing/Hunting	83	0.2%	165	0.5%	82	7.6%
Mgmt of Companies/Enterprises	93	0.3%	4	0.0%	-89	-7.4%
Mining	28	0.1%	0	0.0%	-28	-7.7%
Total Employment	33,805	100.0%	33,808	100.0%	3	0.0%

Source: Esri Demographics 2023, Novogradac, November 2023

Total employment in the PMA remained relatively stable between 2010 and 2023. The industries that nominally expanded most substantially during this period include admin/support/waste mgmt srvcs, accommodation/food services, and other services. Conversely during this same period, the public administration, finance/insurance, and healthcare/social assistance sectors experienced the least nominal growth and contracted.



Major Employers

The table below shows the largest employers in the city of Columbia.

MAJOR EMPLOYERS COLUMBIA, SC

Employer Name	Industry	# Of Employees					
State of South Carolina	Government	25,570					
Prisma Health	Healthcare	15,000					
BlueCross BlueShield of SC	Finance/Insurance	10,019					
University of South Carolina	Education	5,678					
United States Department of the Army	Military	5,286					
Richland School District 1	Public Administration	4,065					
Richland School District 2	Public Administration	3,654					
Richland County	Public Administration	2,393					
City of Columbia	Public Administration	2,300					
AT&T South Carolina	Telecommunications	2,100					
First-Citizens Bank & Trust Company	Banking	1,784					
Providence Hospital	Healthcare	1,625					
Dorn VA Medical Ctr	Healthcare	1,500					
Wells Fargo	Finance/Insurance	1,400					
Verizon Wireless	Telecommunications	1,234					
Air National Guard	Military	1,200					
Westinghouse Electric Co. LLC	Manufacturing	1,179					
Colonial Life & Accident Insurance Co. Inc.	Insurance	1,012					
0 8:11 10 15 1 10 1 10000							

Source: Richland County Economic Development, November 2023

The largest employer in Columbia is the State of South Carolina, employing 25,570 employees. The largest employers in Columbia are concentrated in the public administration, healthcare, educational services, military, and communication sectors. The concentration of employment in the healthcare/social assistance and public administration sectors is notable, as these sectors are historically known to exhibit greater stability during recessionary periods. Further, the large share of employment in public administration is due to Columbia being the state's capital and county seat of Richland County. We believe that the diverse industries represented by major employers provide stability to the local economy.

Expansions/Contractions

We made several attempts to reach the Richland County Economic Development Department regarding business expansions and relocations. However, we were unable to reach anyone for an interview. Based on our internet research, the following business expansions and relocations are planned for the county.

- According to the South Carolina Department of Commerce website, FN America, LLC, a global firearms manufacturer, announced plans to expand its Richland County operations as of May 2023.
 The company's \$18 million investment will create approximately 102 new jobs. The company plans to break ground in 2023 and has an estimated completion date in the first half of 2024.
- Per an article from Columbia Business Monthly, Scout Motors Inc. has plans to establish its first vehicle manufacturing plant in Blythewood. The company reported expectations to invest \$2 billion and has the potential to create 4,000 or more permanent jobs. At full capacity, the facility may be able to produce approximately 200,000 vehicles annually, with production expected to begin by the end of 2026.
- According to an article from May 2023 from businessfacilities.com, Xerxes, a manufacturing company, plans to expand its composite systems segment productions with an additional production facility in Richland County. The company is expected to bring approximately 80 jobs to the area. The facility is expected to be operational by the end of 2024 and will approach full production in 2026.



- According to an article from the South Carolina I-77 Alliance from September 2022, M.G.S. LLC, a
 military procurement company planned to expand in Columbia, South Carolina. The military
 procurement company is set to invest approximately \$3 million and will create 12 new jobs.
- According to an article from the South Carolina Department of Commerce in June 2021, Intertape Polymer Group (IPG), a packaging a protective solutions company, announced plans to expand operations in Richland County (in Blythewood). The company plans to invest over \$20 million and create approximately 135 new jobs over the next five years.
- According to an article from Richland County from April 2021, biotechnology company, Integrated Micro-Chromatography Systems Inc. (IMCS), located in Irmo, plans to invest \$4.1 million and create 31 new jobs over the next five years.
- A Trade & Industry Development article published in March 2021, indicated that Tyson Foods, Inc.
 will reestablish operations in Columbia, investing \$55 million over the next three to five years,
 creating 330 new positions. This is more than double the jobs previously maintained by Tyson in
 Columbia.

WARN Notices

The following table illustrates the contractions to the economy of Columbia provided by the South Carolina Department of Employment and Workforce for 2023 year-to-date (YTD). Employees affected represent job losses.

WARN LISTINGS RICHLAND COUNTY

Company	Industry	Employees Affected	Date
Wells Fargo	Banking	525	9/28/2023
Prisma Health	Healthcare/Social Assistance	266	7/13/2023
Radius Global Solutions LLC	Customer Service	1	3/7/2023
PeerStreet, Inc.	Finance	2	2/15/2023
Total		794	

Source: South Carolina Department of Employment and Workforce, November 2023

As the table depicts, there were 794 layoffs/closures in Richland County as of 2023 year-to-date. Additionally, there has been a significant up tick in layoffs in the second half of 2023. However, it is unknown if any of these layoffs will be temporary.



Employment and Unemployment Trends

The following table details employment and unemployment trends for the MSA from 2007 to August 2023.

EMPLOYMENT & UNEMPLOYMENT TRENDS (NOT SEASONALLY ADJUSTED)

		<u>M</u>	<u>SA</u>			<u>USA</u>	,	
Year	Total Employment	% Change	Unemployment Rate	Change	Total Employment	% Change	Unemployment Rate	Change
2007	352,815	-	5.3%	-	146,046,667	-	4.6%	-
2008	349,152	-1.0%	6.3%	0.9%	145,362,500	-0.5%	5.8%	1.2%
2009	337,179	-3.4%	9.2%	3.0%	139,877,500	-3.8%	9.3%	3.5%
2010	339,953	0.8%	9.5%	0.2%	139,063,917	-0.6%	9.6%	0.3%
2011	343,071	0.9%	9.0%	-0.5%	139,869,250	0.6%	9.0%	-0.7%
2012	350,699	2.2%	7.9%	-1.1%	142,469,083	1.9%	8.1%	-0.9%
2013	357,930	2.1%	6.5%	-1.4%	143,929,333	1.0%	7.4%	-0.7%
2014	367,597	2.7%	5.6%	-0.9%	146,305,333	1.7%	6.2%	-1.2%
2015	377,014	2.6%	5.4%	-0.2%	148,833,417	1.7%	5.3%	-0.9%
2016	384,046	1.9%	4.5%	-0.8%	151,435,833	1.7%	4.9%	-0.4%
2017	378,113	-1.5%	4.0%	-0.5%	153,337,417	1.3%	4.3%	-0.5%
2018	377,106	-0.3%	3.2%	-0.8%	155,761,000	1.6%	3.9%	-0.4%
2019	383,652	1.7%	2.6%	-0.6%	157,538,083	1.1%	3.7%	-0.2%
2020	374,904	-2.3%	5.1%	2.5%	147,794,750	-6.2%	8.1%	4.4%
2021	383,823	2.4%	3.7%	-1.5%	152,580,667	3.2%	5.4%	-2.7%
2022	388,695	1.3%	3.1%	-0.6%	158,291,083	3.7%	3.6%	-1.7%
2023 YTD Average*	395,509	1.8%	3.0%	-0.1%	160,773,875	1.6%	3.7%	0.0%
Aug-2022	386,401	-	3.4%	-	158,714,000	-	3.8%	-
Aug-2023	401,766	4.0%	2.3%	-1.1%	161,427,000	1.7%	3.9%	0.1%

Source: U.S. Bureau of Labor Statistics, November 2023

Between 2012 and 2019, job growth in the MSA was generally similar on average to the nation. Employment in the MSA declined by 2.3 percent in 2020 amid the pandemic, compared to 6.2 percent across the nation. The MSA subsequently recovered all pandemic-related job losses, and employment levels are currently at a post-recessionary record. As of August 2023, employment in the MSA increased at a rate of 4.0 percent year over year, compared to 1.7 percent growth across the nation.

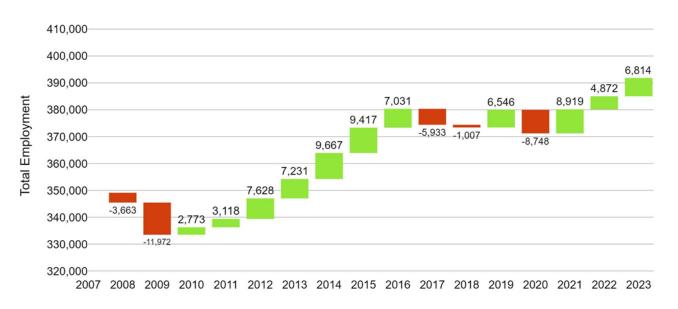
During the period preceding the onset of COVID-19 (2012 - 2019), the MSA generally experienced a lower unemployment rate relative to the nation. The MSA unemployment rate increased by 2.5 percentage points in 2020 amid the pandemic, reaching a high of 5.1 percent. For comparison, the national unemployment rate rose by 4.4 percentage points and reached a high of 8.1 percent over the same time period. According to the latest labor statistics, dated August 2023, the current MSA unemployment rate is 2.3 percent. This is well below the current national unemployment rate of 3.9 percent.

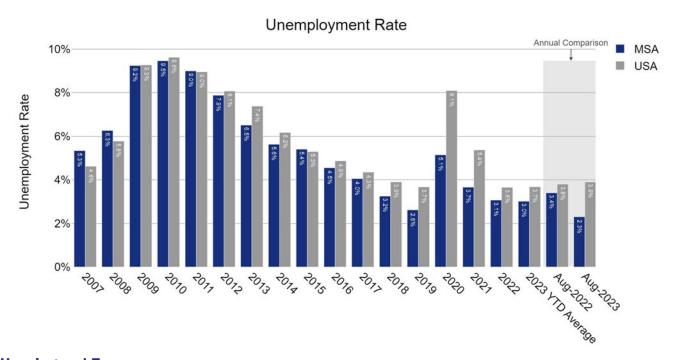
The following tables provide more illustration of the changes in employment and unemployment rate trends in the MSA.



^{*2023} YTD Average is through August

MSA Job Growth





Housing and Economy

There are 20 LIHTC and three Section 8 properties in the Subject's PMA, in addition to the Subject. Given the very low vacancy rates and presence of waiting lists among the LIHTC comparables, the availability of housing for low income renters is considered limited.

As noted prior, as of August 2023, the unemployment rate in the MSA is 2.3 percent, which is lower than the current national unemployment rate of 3.9 percent.



According to Zillow, the median home value of Columbia is \$203,295, up 23.4 percent from last year. However, single-family sales have begun to slow due to the recent rise in interest rates according to Realtor.com.

Commuting Patterns

The following table details travel time to work for residents within the PMA.

COMMUTING PATTERNS

ACS Commuting Time to Work	Number of Commuters	Percentage
Travel Time < 5 min	706	2.2%
Travel Time 5-9 min	4,158	12.7%
Travel Time 10-14 min	5,179	15.9%
Travel Time 15-19 min	7,044	21.6%
Travel Time 20-24 min	6,662	20.4%
Travel Time 25-29 min	1,863	5.7%
Travel Time 30-34 min	3,689	11.3%
Travel Time 35-39 min	377	1.2%
Travel Time 40-44 min	224	0.7%
Travel Time 45-59 min	655	2.0%
Travel Time 60-89 min	1,086	3.3%
Travel Time 90+ min	971	3.0%

Source: Esri Demographics 2023, Novogradac, November 2023

The highest percentage of commuters travel between 15 and 19 minutes. Further, approximately 72.8 percent of households within the PMA have commute times of less than 25 minutes, indicating that most households work in the local area with many likely commuting to downtown and other communities within greater Columbia area.

Conclusion

Employment in the PMA is concentrated in healthcare/social assistance, retail trade, and educational services, which collectively comprise 36.1 percent of local employment. The large share of PMA employment in retail trade is notable as this industry is historically volatile, and prone to contraction during economic recessions. However, the PMA also has a significant share of employment in the healthcare/social assistance industry, which typically exhibits greater stability during economic recessions. Relative to the nation, the PMA features comparatively greater employment in the admin/support/waste mgmt srvcs, accommodation/food services, and finance/insurance industries. As of August 2023, employment in the MSA is increasing at a rate of 4.0 percent, compared to 1.7 percent growth across the nation. According to the latest labor statistics, dated August 2023, the current MSA unemployment rate is 2.3 percent. This is well below the current national unemployment rate of 3.9 percent.



V. COMMUNITY DEMOGRAPHIC DATA

COMMUNITY DEMOGRAPHIC DATA

The following sections will provide an analysis of the demographic characteristics within the market area. Data such as population, households and growth patterns will be studied to determine if the Primary Market Area (PMA) and Columbia, SC Metropolitan Statistical Area, which serves as the Secondary Market Area (SMA), are areas of growth or contraction. The discussions will also describe typical household size and will provide a picture of the health of the community and the economy. The following demographic tables are specific to the populations of the PMA, MSA, and nation.

Population Trends

The following tables illustrate (a) Total Population/Growth Rate and (b) Population by Age Group.

POPULATION

Year		PMA		MSA	U	SA
	Number	Annual Change	Number	Annual Change	Number	Annual Change
2010	75,713	-	767,598	-	308,730,056	-
2023	77,400	0.2%	853,294	0.8%	337,460,311	0.7%
Projected Mkt E	ntry 77,821	0.3%	860,925	0.5%	339,441,843	0.3%
2028	78,499	0.3%	873,202	0.5%	342,629,524	0.3%

Source: Esri Demographics 2023, Novogradac, November 2023

POPULATION BY AGE GROUP

POPULATION BY AGE GROUP							
		PMA					
Age Cohort	2010	2023	Projected Mkt Entry	2028			
0-4	5,377	4,723	4,767	4,839			
5-9	4,691	4,478	4,461	4,434			
10-14	4,509	4,554	4,505	4,426			
15-19	5,629	5,304	5,307	5,312			
20-24	5,922	5,780	5,895	6,080			
25-29	5,624	5,229	5,326	5,483			
30-34	4,904	5,077	4,960	4,773			
35-39	4,307	4,977	4,855	4,659			
40-44	4,194	4,642	4,716	4,836			
45-49	4,783	3,930	4,185	4,595			
50-54	5,447	4,083	4,057	4,016			
55-59	5,025	4,507	4,335	4,058			
60-64	4,145	4,890	4,643	4,245			
65-69	3,013	4,534	4,512	4,477			
70-74	2,455	3,747	3,898	4,142			
75-79	2,261	2,750	2,970	3,325			
80-84	1,736	2,005	2,124	2,315			
85+	1,691	2,191	2,304	2,485			
Total	75,713	77,401	77,822	78,500			

Source: Esri Demographics 2023, Novogradac, November 2023

Between 2010 and 2023, annual population growth in the PMA trailed that of the MSA and the overall nation. Through 2028, the PMA is projected to experience annual population growth of 0.3 percent, which is similar to the overall nation, but slower than the MSA. Overall, the historical and projected population growth rates in the PMA and MSA are positive indications of future demand for all types of housing.

The population in the PMA in 2023 was concentrated in the age groups of 20 to 24, 15 to 19, 25 to 29, and 30 to 34, and combined these age groups represent 27.6 percent of the total population in the PMA. Through



market entry and 2028, the age groups of 20 to 24, 25 to 29, 15 to 19, and 30 to 34 will have the highest representation in the PMA.

HOUSEHOLD TRENDS

Total Number of Households, Average Household Size, and Group Quarters

HOUSEHOLDS

Year		PMA		MSA	Į	JSA
	Number	Annual Change	Number	Annual Change	Number	Annual Change
2010	30,642	-	294,848	-	116,709,667	-
2023	32,868	0.5%	342,770	1.2%	129,912,564	0.9%
Projected Mkt Entry	33,207	0.5%	347,106	0.7%	131,131,668	0.5%
2028	33,752	0.5%	354,081	0.7%	133,092,836	0.5%

Source: Esri Demographics 2023, Novogradac, November 2023

Household growth in the PMA occurred at an annual rate of 0.5 percent between 2010 and 2023, which was below that of the MSA and the overall nation. Annualized PMA growth is projected to be 0.5 percent through market entry and 2028, similar to the nation.

AVERAGE HOUSEHOLD SIZE

Year		PMA		MSA		USA
	Number	Annual Change	Number	Annual Change	Number	Annual Change
2010	2.35	-	2.47	-	2.57	-
2023	2.23	-0.4%	2.40	-0.2%	2.53	-0.1%
Projected Mkt Entry	2.22	-0.2%	2.39	-0.2%	2.53	-0.2%
2028	2.20	-0.2%	2.38	-0.2%	2.51	-0.2%

Source: Esri Demographics 2023, Novogradac, November 2023

As of 2023, the average household size in the PMA is 2.23 persons. The average household size is expected to decrease by 0.2 percent in the PMA from 2023 through 2028.

POPULATION IN GROUP QUARTERS

Year		PMA		MSA		USA
	Number	Annual Change	Number	Annual Change	Number	Annual Change
2010	3,719	-	40,347	-	8,273,022	-
2023	4,086	0.7%	30,701	-1.8%	8,230,258	0.0%
Projected Mkt Entry	-	-	-	-	-	-
2028	-	-	-	-	-	-

Source: Esri Demographics 2023, Novogradac, November 2023

The number of persons in group quarters increased in the PMA between 2010 and 2023, while the MSA declined, and the overall nation remained stable. Note that forecasted data for the population in group quarters is not available as growth in this population is more often a result of changes to local facilities than macro demographic trends.



Households by Tenure

The table below depicts household growth by tenure from 2010 through 2028.

TENURE PATTERNS PMA

		PM	1A	
	Owner-O	ccupied Units	Renter-Occ	upied Units
Year	Number	Percentage	Number	Percentage
2010	16,570	54.1%	14,072	45.9%
2023	17,275	52.6%	15,593	47.4%
Projected Mkt Entry	17,651	53.2%	15,556	46.8%
2028	18,255	54.1%	15,497	45.9%

Source: Esri Demographics 2023, Novogradac, November 2023

As of 2023, the percentage of renter-occupied units is estimated to be 47.4 percent. This is above the estimated 35.0 percent of renter-occupied units across the overall nation (not shown). The percentage and number of renter-occupied units in the PMA is expected to decrease through market entry and 2028.

Household Income Distribution

The following table depicts household income in the PMA from 2023 to 2028.

HOUSEHOLD INCOME DISTRIBUTION - PMA

Income Cohort	2023		Projecto	ed Mkt Entry	20	2028	
	Number	Percentage	Number	Percentage	Number	Percentage	
\$0-9,999	3,789	11.5%	3,699	11.1%	3,553	10.5%	
\$10,000-19,999	3,920	11.9%	3,838	11.6%	3,707	11.0%	
\$20,000-29,999	4,248	12.9%	4,158	12.5%	4,013	11.9%	
\$30,000-39,999	3,756	11.4%	3,731	11.2%	3,692	10.9%	
\$40,000-49,999	2,730	8.3%	2,812	8.5%	2,944	8.7%	
\$50,000-59,999	2,412	7.3%	2,378	7.2%	2,323	6.9%	
\$60,000-74,999	2,990	9.1%	3,008	9.1%	3,036	9.0%	
\$75,000-99,999	3,257	9.9%	3,344	10.1%	3,485	10.3%	
\$100,000-124,999	1,910	5.8%	2,028	6.1%	2,219	6.6%	
\$125,000-149,999	1,282	3.9%	1,358	4.1%	1,481	4.4%	
\$150,000-199,999	1,049	3.2%	1,167	3.5%	1,357	4.0%	
\$200,000+	1,525	4.6%	1,685	5.1%	1,942	5.8%	
Total	32,868	100.0%	33,207	100.0%	33,752	100.0%	

Source: HISTA Data / Ribbon Demographics 2023, Novogradac, November 2023

As of 2023, approximately 63.3 percent of households in the PMA earn less than \$60,000 annually.



Renter Household Income Distribution

The following tables depict renter household incomes in the PMA in 2023, the market entry date, and 2028.

RENTER HOUSEHOLD INCOME DISTRIBUTION - PMA

Income Cohort	2023		Projected	d Mkt Entry	20	2028	
	Number	Percentage	Number	Percentage	Number	Percentage	
\$0-9,999	2,742	17.6%	2,669	17.2%	2,552	16.5%	
\$10,000-19,999	2,370	15.2%	2,299	14.8%	2,186	14.1%	
\$20,000-29,999	2,621	16.8%	2,542	16.3%	2,416	15.6%	
\$30,000-39,999	1,852	11.9%	1,840	11.8%	1,821	11.8%	
\$40,000-49,999	1,268	8.1%	1,322	8.5%	1,408	9.1%	
\$50,000-59,999	1,153	7.4%	1,115	7.2%	1,054	6.8%	
\$60,000-74,999	1,136	7.3%	1,119	7.2%	1,092	7.0%	
\$75,000-99,999	1,125	7.2%	1,172	7.5%	1,248	8.1%	
\$100,000-124,999	472	3.0%	527	3.4%	615	4.0%	
\$125,000-149,999	286	1.8%	306	2.0%	339	2.2%	
\$150,000-199,999	304	1.9%	340	2.2%	397	2.6%	
\$200,000+	264	1.7%	304	2.0%	369	2.4%	
Total	15,593	100.0%	15,556	100.0%	15,497	100.0%	

Source: HISTA Data / Ribbon Demographics 2023, Novogradac, November 2023

As of 2023, approximately 77.0 percent of renter households in the PMA earn less than \$60,000 annually.

Renter Households by Number of Persons in the Household

The following table illustrates household size for renter households in the PMA.

RENTER HOUSEHOLDS BY NUMBER OF PERSONS - PMA

Household Size	2023		Project	Projected Mkt Entry		2028	
	Number	Percentage	Number	Percentage	Number	Percentage	
1 Person	6,140	39.4%	6,153	39.6%	6,174	39.8%	
2 Persons	4,227	27.1%	4,202	27.0%	4,163	26.9%	
3 Persons	2,545	16.3%	2,532	16.3%	2,512	16.2%	
4 Persons	1,544	9.9%	1,543	9.9%	1,542	10.0%	
5+ Persons	1,137	7.3%	1,125	7.2%	1,106	7.1%	
Total Households	1 5,593	100%	1 5,556	100%	15,497	100%	

Source: HISTA Data / Ribbon Demographics 2023, Novogradac, November 2023

The Subject offers one, two, and three-bedroom units and will generally cater to households consisting of one to five people. Thus, as indicated in the previous table and among those that are income-qualified, the Subject will support the majority of renter household sizes within the PMA.

Conclusion

The PMA experienced an annual population growth rate of 0.2 percent between 2010 and 2023, which was behind the surrounding MSA and the nation during the same time period. Population growth in the PMA is expected to increase at an annual rate of 0.3 percent through market entry and 2028, slower than the MSA, but similar to the overall nation. The average household size is expected to decrease slightly in the PMA from 2023 through market entry and 2028, similar to the MSA and nation during the same time period. Renter households with incomes less than \$60,000 represent 77.0 percent of the renter households in the PMA in 2023, and this share is expected to decrease slightly through market entry and 2028. Many of these households would income-qualify at the Subject.



VI. PROJECT-SPECIFIC DEMAND ANALYSIS

PROJECT SPECIFIC DEMAND ANALYSIS

The following demand analysis evaluates the potential amount of qualified households, which the Subject would have a fair chance at capturing. The structure of the analysis is based on the guidelines provided by SC Housing.

1. Income Restrictions

LIHTC rents are based upon a percentage of the Area Median Gross Income (AMI), adjusted for household size and utilities. HUD and South Carolina State Housing Finance and Development Authority (SC Housing) will estimate the relevant income levels, with annual updates. The income limits are calculated assuming that the maximum net rent a household will pay is 30 percent of its household income at the appropriate AMI level.

Household size is assumed to be 1.5 persons per bedroom for general population projects. For example, for one-bedroom units we assume the average income limits of a one and two-person household and for three-bedroom units we assume the average income limits for a four- and five-person household. This applies to family projects. For elderly projects, we have used a maximum income based on two-person households. Additionally, HUD assumes that one-person households are accommodated in one-bedroom units. For LIHTC income purposes, the actual size of the household is used.

To assess the likely number of tenants in the market area eligible to live in the Subject, we use Census information as provided by ESRI Business Information Solutions to estimate the number of potential tenants who would qualify to occupy the Subject as a LIHTC project.

The maximum income levels are based upon information obtained from the Rent and Income Limits Guidelines Table as accessed from Novogradac's website.

2. Affordability

As discussed above, the maximum income for LIHTC units is set by HUD/SC Housing while the minimum is based upon the minimum income needed to support affordability. This is based upon a standard of 35 percent. Lower and moderate-income families typically spend greater that 30 percent of their income on housing. These expenditure amounts can range higher than 50 percent depending upon market area. However, the 30 to 40 percent range is generally considered a reasonable range of affordability. SC Housing guidelines utilize 35 percent for families and 40 percent for senior households, which we will use to set the minimum income levels for the demand analysis.

3. Minimum and Maximum Income Levels

The following tables illustrate the minimum and maximum allowable income levels for the Subject's units.

2023 FAMILY INCOME LIMITS

Unit Type	Minimum Allowable Income	Maximum Allowable Income			
	@60%				
1BR	\$32,400	\$40,320			
2BR	\$38,880	\$45,360			
3BR	\$44,880	\$54,420			



4. Demand

The demand for the Subject will be derived from two sources: existing households and new households. These calculations are illustrated in the following tables.

4a. Demand from New Renter Households

The number of new households entering the market is the first level of demand calculated. South Carolina State Housing Finance and Development Authority (SC Housing) has requested that we utilize 2023 as the base year for the analysis, with demographic projections to June 2025 (Subject's market entry/anticipated completion date). This is considered the gross potential demand for the Subject property. This number is adjusted for income eligibility and renter tenure.

4b. Demand from Existing Households

Demand for existing households is estimated by summing three sources of potential tenants, plus a fourth allowance for other demand, if deemed applicable. (a) The first source is tenants who are rent overburdened. These are households who are paying over 35 percent of their income in housing costs for general occupancy housing or over 40 percent of their income in housing costs for elderly housing. This number is estimated using Census or American Community Survey (ACS) data. (b) The second source is households living in substandard housing. This number is estimated using 2021 Census data. (c) The third source is those seniors likely to move from their own homes into rental housing. Data from the American Housing Survey and interviews with area senior apartment property managers regarding the number or share of current renters who originated from homeownership must be used to refine the analysis. The Subject is urban and generally not likely to attract homeowners seeking to downsize into a family rental unit. (d) The fourth potential "Other" source of demand is demand which may exist that is not captured by the above methods, which may be allowed if the factors used can be fully justified.

4c. Additions to Supply

South Carolina State Housing Finance and Development Authority (SC Housing) guidelines indicate that units in all competing projects that were allocated, under construction, placed in service, or funded in 2022 as well as those units at properties that have not reached a stabilized occupancy of 93 percent should be removed from the demand analysis.

According to the South Carolina State Housing Finance and Development Authority (SC Housing) LIHTC allocation lists from 2020 to 2023, there have been three competitive properties, Midtown at Bull, Garden Lakes, and Addison Pointe, that were allocated tax credits in the PMA. As such, we have accounted for these development's 402 units in our demand analysis as these developments are expected to be complete by the end of 2025. A breakout of additions to supply by AMI level is shown in the following table.

ADD	ITION	IS TO	SUF	PPLY
-----	-------	-------	-----	------

/.==										
Unit Type	30% AMI	40% AMI	50% AMI	60% AMI	Unrestricted	Overall				
OBR						0				
1BR				144		144				
2BR				182		182				
3BR				76		76				
4BR						0				
5BR						0				
Total	-	-	-	402	-	402				

5. Method - Capture Rates

The above calculations and derived capture rates are illustrated in the following table.





60% AMI

NEW RENTER HOUSEHOLD DEMAND BY INCOME COHORT - @60%

Minimum Income Limit \$32,400			Maximum Income	Limit	\$54,420
Income Category	in Households	iseholds - Total Change PMA 2023 to Prj Mrkt y June 2025	Income Brackets	Percent within Cohort	Renter Households within Bracket
\$0-9,999	-73	197.9%	\$0	0.0%	0
\$10,000-19,999	-71	191.7%	\$0	0.0%	0
\$20,000-29,999	-79	213.5%	\$0	0.0%	0
\$30,000-39,999	-12	32.3%	\$7,598	76.0%	-9
\$40,000-49,999	54	-145.8%	\$9,999	100.0%	54
\$50,000-59,999	-38	103.1%	\$4,421	44.2%	-17
\$60,000-74,999	-17	45.8%	\$0	0.0%	0
\$75,000-99,999	47	-128.1%	\$0	0.0%	0
\$100,000-124,999	55	-149.0%	\$0	0.0%	0
\$125,000-149,999	20	-55.2%	\$0	0.0%	0
\$150,000-199,999	36	-96.9%	\$0	0.0%	0
\$200,000+	40	-109.4%	\$0	0.0%	0
Total	-37	100.0%		-75.7%	28

POTENTIAL EXISTING HOUSEHOLD DEMAND BY INCOME COHORT - @60%

Minimum Income Lir	num Income Limit \$32,400 Maximum Income Limit				\$54,420
Income Category	Total Renter Households PMA 2023		Income Brackets	Percent within	Households
income category	iotal Reliter no	JUSCHUIUS FINIA 2023	ilicome brackets	Cohort	within Bracket
\$0-9,999	2,742	17.6%	\$0	0.0%	0
\$10,000-19,999	2,370	15.2%	\$0	0.0%	0
\$20,000-29,999	2,621	16.8%	\$0	0.0%	0
\$30,000-39,999	1,852	11.9%	\$7,598	76.0%	1,407
\$40,000-49,999	1,268	8.1%	\$9,999	100.0%	1,268
\$50,000-59,999	1,153	7.4%	\$4,421	44.2%	510
\$60,000-74,999	1,136	7.3%	\$0	0.0%	0
\$75,000-99,999	1,125	7.2%	\$0	0.0%	0
\$100,000-124,999	472	3.0%	\$0	0.0%	0
\$125,000-149,999	286	1.8%	\$0	0.0%	0
\$150,000-199,999	304	1.9%	\$0	0.0%	0
\$200,000+	264	1.7%	\$0	0.0%	0
Total	15,593	100.0%		20.4%	3,185

ASSUMPTIONS - @60%

		7100011111111					
Tenancy	_	Family	% of Income towa	rds Housing	359		
Rural/Urban		Urban Maximum # of Occupants		Urban Maximum # of Occ		cupants	!
Persons in Household	0BR	1BR	2BR	3BR	4BR+		
1	0%	80%	20%	0%	0%		
2	0%	20%	80%	0%	0%		
3	0%	0%	60%	40%	0%		
4	0%	0%	0%	100%	0%		
5+	0%	0%	0%	100%	0%		



Demand from New	Renter Households 2023 to Jun	e 2025			
Income Target Popu					@60%
New Renter Househ					-37
Percent Income Qua					-75.7%
	Qualified Households				28
Demand from Exist	ing Households 2023				
Demand from Rent	Overburdened Households				
Income Target Popu					@60%
Total Existing Dema					15,593
Income Qualified					20.4%
Income Qualified Re	enter Households				3,185
=	urdened Prj Mrkt Entry June 202	5			51.6%
Rent Overburdened					1,643
Demand from Livin	g in Substandard Housing				
Income Qualified Re					3,185
-	ibstandard Housing				1.2%
	in Substandard Housing				39
Total Demand					
	Existing Households				1,682
Total New Demand	Lasting Households				28
	Plus Existing Households)				1,710
Dy Dodroom Domo	a al				
One Person	iiu			39.6%	676
Two Persons				27.0%	462
Three Persons				16.3%	278
Four Persons				9.9%	170
Five Persons				7.2%	124
Total				100.0%	1,710
					, -
	mand into Bedroom Type Units				
Of one-person hous				80%	541
Of two-person house			*****	20%	92
Of one-person hous	eholds in 2BR units			20%	135
Of two-person house				80%	369
Of three-person hou	seholds in 2BR units			60%	167
Of three-person hou	seholds in 3BR units			40%	111
	seholds in 3BR units			100%	170
Of five-person house	eholds in 3BR units			100%	124
Total Demand					1,710
Tota	I Demand (Subject Unit Types)		Additions to Supply		Net Demand
1 BR	633	-	144	=	489
2 BR	672	-	182	=	490
3 BR	405	-	76	=	329
Total	1,710		402		1,308

Net Demand

489

490

329

1,308

/



1 BR

2 BR

3 BR

Developer's Unit Mix

24

96

60

180

Capture Rate

4.9%

19.6%

18.3%

13.8%

=

=

60% AMI - Large Households

NEW RENTER HOUSEHOLD DEMAND BY INCOME COHORT - @60% - Large Family

Minimum Income Lim	nit	\$32,400	Maximum Income Limit		\$54,420
Income Category	New Renter Households - Total Change in Households PMA 2023 to Prj Mrkt Entry June 2025		Income Brackets	Percent within Cohort	Renter Households within Bracket
\$0-9,999	-73	197.9%	\$0	0.0%	0
\$10,000-19,999	-71	191.7%	\$0	0.0%	0
\$20,000-29,999	-79	213.5%	\$0	0.0%	0
\$30,000-39,999	-12	32.3%	\$7,598	76.0%	-9
\$40,000-49,999	54	-145.8%	\$9,999	100.0%	54
\$50,000-59,999	-38	103.1%	\$4,421	44.2%	-17
\$60,000-74,999	-17	45.8%	\$0	0.0%	0
\$75,000-99,999	47	-128.1%	\$0	0.0%	0
\$100,000-124,999	55	-149.0%	\$0	0.0%	0
\$125,000-149,999	20	-55.2%	\$0	0.0%	0
\$150,000-199,999	36	-96.9%	\$0	0.0%	0
\$200,000+	40	-109.4%	\$0	0.0%	0
Total	-37	100.0%		-75.7%	28

POTENTIAL EXISTING HOUSEHOLD DEMAND BY INCOME COHORT - @60% - Large Family

Minimum Income Lim		\$32,400	Maximum Income Limit	econ Large	\$54,420
Income Category		Households PMA 023	Income Brackets	Percent within Cohort	Households within Bracket
\$0-9,999	2,742	17.6%	\$0	0.0%	0
\$10,000-19,999	2,370	15.2%	\$ O	0.0%	0
\$20,000-29,999	2,621	16.8%	\$ 0	0.0%	0
\$30,000-39,999	1,852	11.9%	\$7,598	76.0%	1,407
\$40,000-49,999	1,268	8.1%	\$9,999	100.0%	1,268
\$50,000-59,999	1,153	7.4%	\$4,421	44.2%	510
\$60,000-74,999	1,136	7.3%	\$0	0.0%	0
\$75,000-99,999	1,125	7.2%	\$0	0.0%	0
\$100,000-124,999	472	3.0%	\$0	0.0%	0
\$125,000-149,999	286	1.8%	\$ 0	0.0%	0
\$150,000-199,999	304	1.9%	\$ O	0.0%	0
\$200,000+	264	1.7%	\$ O	0.0%	0
Total	15,593	100.0%		20.4%	3,185

ASSUMPTIONS - 60% - Large Family

Tenancy	_	Family	% of Income towards Housing		35%
Rural/Urban		Urban	Maximum # of Occupants		5
Persons in	0BR	1BR	2BR	3BR	4BR+
Household	OBIL		25.1	OBIL	151(
1	0%	0%	O %	0%	0%
2	0%	0%	O %	0%	0%
3	0%	0%	60%	40%	0%
4	0%	0%	20%	80%	0%
5+	0%	0%	0%	100%	0%



Income Target Population					@60%
New Renter Households PMA					-37
Percent Income Qualified					-75.7%
New Renter Income Qualified Household	ds				28
Demand from Existing Households 2023	3				
Demand from Rent Overburdened Hous	eholds				
ncome Target Population					@60%
Total Existing Demand					15,593
ncome Qualified					20.4%
ncome Qualified Renter Households					3,185
Percent Rent Overburdened Prj Mrkt Ent	ry June 2025				51.6%
Rent Overburdened Households					1,643
Demand from Living in Substandard Ho	using				
ncome Qualified Renter Households					3,185
Percent Living in Substandard Housing					1.2%
Households Living in Substandard Hous	ing				39
Total Demand					
Total Demand from Existing Households					1,682
Total New Demand					28
Total Demand (New Plus Existing House	holds)				1,710
By Bedroom Demand	,				,
One Person				39.6%	676
Two Persons				27.0%	462
Three Persons				16.3%	278
Four Persons				9.9%	170
Five Persons				7.2%	124
Total				100.0%	1,710
Го place Person Demand into Bedroom	Type Units				_,-
Of one-person households in 2BR units	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			0%	0
Of two-person households in 2BR units				0%	0
Of three-person households in 2BR units	`			60%	167
Of four-person households in 2BR units				20%	34
Of three-person households in 3BR units	`			40%	111
Of four-person households in 3BR units				80%	136
Of five-person households in 3BR units				100%	124
Total Demand					572
Total Demand (Subject Un	nit Types)		Additions to Supply		Net Demand
1 BR	-	-	-	=	-
2 BR	201	-	182	=	19
3 BR	371	_	76	=	295
Total	572		258		314
	Developer's Unit Mix		Net Demand		Capture Rate
1 BR	-	/	-	=	_
2 BR	96	/	19	=	507.6%
3 BR	60	/	295	=	20.4%
Total	156	/	200		20. 470



Conclusions

Several factors affect the indicated capture rates and are discussed following.

 This demand analysis does not measure the PMA's or Subject's ability to attract additional or latent demand into the market from elsewhere by offering an affordable option. We believe this to be moderate and therefore the demand analysis is somewhat conservative in its conclusions because this demand is not included.

The following table illustrates demand and net demand for the Subject's units.

DEMAND AND NET DEMAND

2 = ;		•	
	HH at @60% AMI (\$32,400 to \$54,420)	Large HH at @60% AMI (\$32,400 to \$54,420)	Overall Demand
Demand from New Households (age and income appropriate)	28	28	28
PLUS	+	+	+
Demand from Existing Renter Households - Rent Overburdened Households	1,643	1,643	1,643
PLUS	+	+	+
Demand from Existing Renter Households - Substandard Housing	39	39	39
=	=		-
Sub Total	1,710	1,710	1,710
Demand from Existing Households - Elderly Homeowner Turnover (Limited to 20% where applicable)	0	0	0
Equals Total Demand	1,710	1,710	1,710
Less	-	-	-
New Supply	402	402	402
Equals Net Demand	1,308	1,308	1,308

Note that the above *Demand and Net Demand* estimates include all income-eligible renter households. These estimates are then adjusted to reflect only the size-appropriate households by bedroom type in the following *Capture Rate Analysis*.

CAPTURE RATE ANALYSIS CHART

Bedrooms/AMI Level	Total Demand	Supply	Net Demand	Units Proposed	Capture Rate
1BR - @60%	633	144	489	24	4.9%
2BR - @60%	672	182	490	96	19.6%
3BR - @60%	405	76	329	60	18.3%
Overall	1,710	402	1,308	180	13.8%

As the analysis illustrates, the Subject's capture rates range from 4.9 to 19.9 percent, with an overall capture rate of 13.8 percent. This indicates there is adequate continued demand for the Subject. Further, capture rates for all units, as well as the overall property, are below the 30 percent capture rate threshold as determined by SC Housing.

Absorption Rate Projected Absorption Period

We were unable to obtain absorption information from any of the rent comparables, but have included information from six properties within a 20-mile radius of the Subject, which are shown in the following table.



ABSORPTION

Property Name	Program	Tenancy	City	Year	Total Units	Absorption (units/month)	Distance to Subject
The Babcock	Market	Family	Columbia	2023	208	11	6.2 miles
Dove Place	LIHTC	Family	Columbia	2021	48	12	8.6 miles
O'neil Pointe	LIHTC	Family	Columbia	2020	42	14	1.6 miles
The Pointe At Elmwood	LIHTC	Family	Columbia	2020	58	15	5.6 miles
Killian Terrace	LIHTC	Family	Columbia	2020	288	29	4.5 miles
Sola Station	Market	Family	Columbia	2019	339	15	7.5 miles
Average Affordable					109	18	
Average Market					274	13	
Overall Average					164	16	

If the Subject were hypothetically 100 percent vacant, we would expect the property to experience a brief lease-up period due to the sustained demand for good quality affordable housing in the area. Assuming the Subject were completely vacant, we believe that the Subject would experience an absorption rate of approximately 20 units per month. This equates to an absorption period of approximately eight to nine months. This is considered largely hypothetical as the Subject is currently 100 percent occupied and maintains a waiting list. Further, current tenants are expected to remain income eligible to remain at the property post-renovation. As such, we believe the Subject will stabilize within one to two months of rehabilitation completion.





SURVEY OF COMPARABLE PROJECTS

Comparable properties are examined on the basis of physical characteristics, i.e. building type, age/quality, level of common amenities, absorption, as well as similarity in rent. We attempted to compare the Subject to complexes from the competing market to provide a broader picture of the health and available supply in the market. We surveyed many properties that we chose not to use in the survey because they were not as comparable to the Subject as others that were selected.

Description of Property Types Surveyed/Determination of Number of Tax Credit Units

We interviewed numerous properties to determine which ones were considered "true" competition for the Subject. Several properties in the market area were interviewed and not included because of their dissimilarity or other factors. Fully subsidized properties were excluded due to differing rent structures from the Subject; however, it should be noted that subsidized properties in the market area were found to have stable occupancies. The following table illustrates the excluded properties.

=									
Property Name	Program	Tenancy	Reason for Exclusion						
Ames Manor Apartments	LIHTC	Family	Inferior condition						
Gable Oaks	LIHTC	Family	Closer comparables available						
Waters At Fairfield	LIHTC	Family	Closer comparables available						
Palmetto Garden Apartments	Market	Family	Inferior condition						
Arcadias Edge	Market	Family	Closer comparables available						
Chimneys At Brookfield	Market	Family	Closer comparables available						
Mauldin Village	Market	Family	Closer comparables available						
Landings At Forest Acres	Market	Family	Closer comparables available						

New Supply

We were unable to reach a contact with the City of Columbia Planning Department regarding planned, proposed, or under construction developments in the PMA. Therefore, we conducted online research and utilized a CoStar new construction report. According to CoStar, there are no proposed, planned, or under construction developments within the PMA.

LIHTC Competition / Recent and Proposed Construction

According to the South Carolina State Housing Finance and Development Authority (SC Housing) LIHTC allocation lists from 2020 to 2023, five properties have been allocated tax credits within the PMA within the last three years, which are detailed below. It should be noted that as of the date of this report, 2023 allocation lists have not yet been released.

- Midtown at Bull was allocated LIHTCs in 2021 for the new construction of 90 one, two, and three-bedroom units restricted to families earning 20, 50, 60, and 70 percent of the AMI or less.
 Construction is expected to be completed in 2024, and will directly compete with the Subject.
- Garden Lakes was allocated LIHTCs in 2021 for the new construction of 288 one, two, and three-bedroom units restricted to families earning 60 percent of the AMI or less. Construction is expected to be completed in 2024, and will directly compete with the Subject.
- The Haven at Palmer Pointe was allocated LIHTCs in 2021 for the new construction of 150 one and two-bedroom units restricted to seniors earning 60 percent of the AMI or less. Construction is expected to be completed in 2024, and will not directly compete with the Subject as an age-restricted development.



 Addison Pointe was allocated LIHTCs in 2022 for the new construction of 80 one, two, and threebedroom units restricted to families earning 20, 50, 60, and 70 percent of the AMI or less. Construction is expected to be completed in 2025, and will directly compete with the Subject.

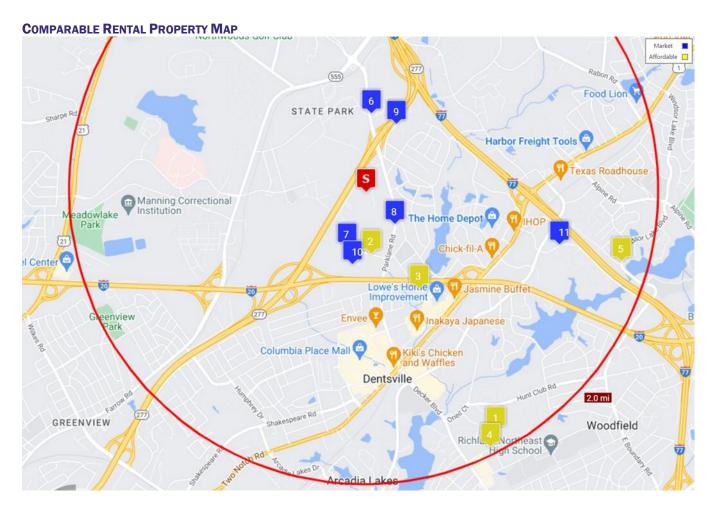
Comparable Properties

Property managers and realtors were interviewed for information on unit mix, size, absorption, unit features and project amenities, tenant profiles, and market trends in general. Our competitive survey includes 11 comparable properties containing 2,099 units. It should be noted that there is a lack of traditional, long-term affordable multifamily supply in the Subject's immediate market area.

The availability of LIHTC data is considered average. We included five affordable developments located between 0.5 and 2.0 miles from the Subject, all of which are located within the PMA. The market rate data is considered good. We included six market rate properties located between 0.3 and 1.4 miles from the Subject, all of which are located within the PMA. Overall, we believe the availability of data is adequate to support our conclusions. Other market rate properties were excluded based on unit types and inability to contact the properties.

A detailed matrix describing the individual competitive properties as well as the proposed Subject is provided on the following pages. A Comparable Properties Map, illustrating the location of the Subject in relation to comparable properties is also provided on the following page. The properties are further profiled in the write-ups following. The property descriptions include information on vacancy, turnover, absorption, age, competition, and the general health of the rental market, when available. Throughout the course of performing this analysis of the local rental market, many apartment managers, realtors, leasing agents, and owners were contacted in person, or through the telephone or email.





COMPARABLE PROPERTIES

#	Property Name	City	Rent Structure	Distance to Subject
1	Arcadia Park	Columbia	LIHTC/HOME	1.9 miles
2	Brookside Crossing	Columbia	LIHTC	0.5 mile
3	Deer Park Apartments	Columbia	LIHTC	0.8 mile
4	Jackson Creek Station	Columbia	LIHTC	2.0 miles
5	Regent Park Apartments	Columbia	LIHTC	1.9 miles
6	Gable Hill	Columbia	Market	0.5 mile
7	Greenbrier Apartments	Columbia	Market	0.4 mile
8	Paces Run	Columbia	Market	0.3 mile
9	Samara East	Columbia	Market	0.5 mile
10	Springtree Apartments	Columbia	Market	0.6 mile
11	The Preserve At Windsor Lake	Columbia	Market	1.4 miles

The following tables illustrate unit mix by bedroom type and income level, square footage by bedroom type, year built, common area and in-unit amenities, rent per square foot, monthly rents and utilities included, and vacancy information for the comparable properties and the Subject in a comparative framework.



SUMMARY MATRIX

				JUNINA	IV I IVIA	IIII						
#	Property Name	Distance	Type/Built/ Renovated	AMI	Unit Type	# % SF	Restriction	Rent (Adj)	Max Rent?	Waiting List	Vacant Units	Vacancy Rate
S	Wyndham Pointe		Garden	@60%	1BR/1BA	24 13.3% 1,036	@60%	\$867	Yes	No	0	0%
	80 Brighton Hill Road		3-stories		2BR/2BA	96 53.3% 1,232	@60%	\$1,047	Yes	No	0	0%
	Columbia, SC		2007		3BR/2BA	60 33.3% 1,444	@60%	\$1,212	Yes	No	0	0%
	Richland County		Family			180					0	0.0%
1	Arcadia Park	1.9 miles	Garden	@50%, @50% (HOME),	1BR/1BA	3 4.0% 850	@50%	\$602	No	Yes	0	0%
	2400 Kneece Rd		3-stories	@60%	1BR/1BA	3 4.0% 850	@50% (HOME)	\$602	No	Yes	0	0%
	Columbia, SC		2013		1BR/1BA	9 12.0% 850	@60%	\$753	No	Yes	0	0%
	Richland County		Family		2BR/2BA	6 8.0% 1,050	@50%	\$699	No	Yes	0	0%
					2BR/2BA	6 8.0% 1,050	@50% (HOME)	\$699	No	Yes	0	0%
					2BR/2BA 3BR/2BA	18 24.0% 1,050 6 8.0% 1,200	@60% @50%	\$881 \$777	No No	Yes Yes	0	0% 0%
					3BR/2BA	6 8.0% 1,200	@50% (HOME)	\$777	No	Yes	0	0%
					3BR/2BA	18 24.0% 1,200	@60%	\$986	No	Yes	0	0%
						75					0	0.0%
2	Brookside Crossing	0.5 mile	Garden	@60%	1BR/1BA	6 3.7% 695	@60%	\$886	Yes	No	0	0%
	220 Springtree Drive		3-stories		1BR/1BA	12 7.4% 775	@60%	\$886	Yes	No	0 2	0%
	Columbia, SC Richland County		2009 Family		2BR/2BA 3BR/2BA	108 66.7% 1,062 36 22.2% 1,276	@60% @60%	\$1,056 \$1,212	Yes Yes	No No	0	1.9% 0%
	raomana county		runny		OBITY ZBIT	162	600%	Ψ1,212	100	110	2	1.2%
3	Deer Park Apartments	0.8 mile	Garden	@50%	2BR/2BA	32 50.0% 1,100	@50%	\$913	Yes	Yes	0	0%
	7225 Firelane Rd		3-stories		3BR/2BA	32 50.0% 1,300	@50%	\$1,065	Yes	Yes	0	0%
	Columbia, SC		2007									
	Richland County		Family			64					0	0.0%
4	Jackson Creek Station	2.0 miles	Garden	@50% @60%	2BR/2BA	7 12.5% 1,075	@50%	\$828	No	Yes	0	0.0%
-	2301 Kneece Road	2.0 1111103	2-stories	200% 200%	2BR/2BA	21 37.5% 1,075	@60%	\$1,017	No	Yes	0	0%
	Columbia, SC		2016		3BR/2BA	7 12.5% 1,225	@50%	\$947	No	Yes	0	0%
	Richland County		Family		3BR/2BA	21 37.5% 1,225	@60%	\$1,065	No	Yes	0	0%
				05000 00000		56					0	0.0%
5	Regent Park Apartments	1.9 miles	Garden 3-stories	@50% @60%	1BR/1BA	4 5.6% 700	@50%	\$826	Yes	Yes	0	0%
	680 Windsor Lake Way Columbia, SC		2011		1BR/1BA 2BR/2BA	8 11.1% 700 6 8.3% 930	@60% @50%	\$826 \$983	No Yes	Yes Yes	0	0% 0%
	Richland County		Family		2BR/2BA	36 50.0% 930	@60%	\$983	No	Yes	0	0%
			,		3BR/2BA	8 11.1% 1,150	@50%	\$1,129	Yes	Yes	0	0%
					3BR/2BA	10 13.9% 1,150	@60%	\$1,129	No	Yes	0	0%
						72					0	0.0%
6	Gable Hill	0.5 mile	Garden	Market	1BR/1BA	24 13.3% 800	Market	\$1,074	N/A	No	0	0%
	310 Ross Road Columbia, SC		3-stories 1984		2BR/2BA 3BR/2BA	108 60.0% 1,000 48 26.7% 1,150	Market Market	\$1,271 \$1,437	N/A N/A	No No	2 0	1.9% 0%
	Richland County		Family		OBITY ZBIT	40 20.1% 1,100	Warnet	Ψ1,401	14//1	110	Ü	070
						180					2	1.1%
7	Greenbrier Apartments	0.4 mile	Garden	Market	1BR/1BA	N/A N/A 630	Market	\$1,080	N/A	No	0	N/A
	100 Willow Oak Drive		3-stories		1BR/1BA	84 16.0% 630	Market	\$835	N/A	No	3	3.6%
	Columbia, SC		1989 / 2005		1BR/1BA	110 20.9% 795	Market	\$935	N/A	No	3	2.7%
	Richland County		Family		1BR/1BA 1BR/1BA	N/A N/A 795 36 6.8% 882	Market Market	\$1,150 \$1,007	N/A N/A	No	0 3	N/A 8.3%
					1BR/1BA	N/A N/A 882	Market	\$1,067	N/A	No	0	N/A
					2BR/1BA	N/A N/A 928	Market	\$1,213	N/A	No	0	N/A
					2BR/1BA	40 7.6% 928	Market	\$1,096	N/A	No	3	7.5%
					2BR/2BA	124 23.6% 1,071	Market	\$1,213	N/A	No	0	0%
					2BR/2BA 2BR/2BA	N/A N/A 1,132 N/A N/A 1,132	Market Market	\$1,178 \$1,138	N/A N/A	No No	0 3	N/A N/A
					2BR/2BA	78 14.8% 1,154	Market	\$1,184	N/A	No	2	2.6%
					3BR/2BA	54 10.3% 1,321	Market	\$1,308	N/A	No	0	0%
						526					17	3.2%
8	Paces Run	0.3 mile	Garden	Market	1BR/1BA	N/A N/A 614	Market	\$1,050	N/A	No	3	N/A
	7501 Parklane Road		3-stories		1BR/1BA	N/A N/A 614	Market	\$1,200	N/A	No	0	N/A
	Columbia, SC Richland County		1987 Family		1BR/1BA 2BR/1BA	N/A N/A 779 N/A N/A 943	Market Market	\$1,159 \$1,259	N/A N/A	No No	3 0	N/A N/A
	moniana county		. anniy		2BR/2BA	128 49.2% 1,127	Market	\$1,259	N/A	No	0	0%
						260		, _,_,	,		6	2.3%
9	Samara East	0.5 mile	Garden	Market	OBR/1BA	12 4.2% 515	Market	\$949	N/A	No	1	8.3%
	8100 Bayfield Road		2-stories		1BR/1BA	92 31.9% 780	Market	\$1,009	N/A	No	1	1.1%
	Columbia, SC		1980		2BR/2BA	160 55.6% 918	Market	\$1,109	N/A	No	1	0.6%
	Richland County		Family		3BR/2BA	24 8.3% 1,031 288	Market	\$1,229	N/A	No	1 4	4.2% 1.4%
10	Springtree Apartments	0.6 mile	Garden	Market	1BR/1BA	80 52.6% 694	Market	\$927	N/A	No	2	2.5%
	250 Springtree Road	5.5 mile	2-stories		1BR/1BA	0 0.0% 694	Market	\$962	N/A	No	0	0%
	Columbia, SC		1982 / 2017		2BR/1BA	72 47.4% 984	Market	\$1,104	N/A	No	0	0%
	Richland County		Family		2BR/1BA	0 0.0% 984	Market	\$1,084	N/A	No	0	0%
						152					2	1.3%







WYNDHAM POINTE - COLUMBIA, SC - APPLICATION MARKET STUDY

#	Property Name	Distance	Type/Built/ Renovated	AMI	Unit Type	#	%	SF	Restriction	Rent (Adj)	Max Rent?	Waiting List	Vacant Units	Vacancy Rate
11	The Preserve At Windsor Lake	1.4 miles	Garden	Market	1BR/1BA	66	25.0%	775	Market	\$1,312	N/A	No	0	0%
	1460 Oakcrest Drive		3-stories		1BR/1BA	18	6.8%	918	Market	\$1,427	N/A	No	0	0%
	Columbia, SC		2007		2BR/2BA	114	43.2%	1,082	Market	\$1,549	N/A	No	1	0.9%
	Richland County		Family		2BR/2BA	18	6.8%	1,222	Market	\$1,669	N/A	No	1	5.6%
					3BR/2BA	36	13.6%	1,250	Market	\$1,795	N/A	No	2	5.6%
					3BR/2BA	12	4.5%	1,390	Market	\$1,970	N/A	No	0	0%
						264							4	1.5%



Units S Mark	SOUARE FOOTAGE F	ANKING	- All rents adjusted for utilities and co	oncession	s extracted from the market	
Mark		2.099	Weighted Occupancy	98.2%	s extracted from the market.	
		1,670	Market Rate	97.9%		
ı Tav	Credit	429	Tax Credit	99.5%		
	Bed x 1.0 Bath	725	2.0 Bed x 2.0 Bath	33.370	3.0 Bed x 2.0 Bath	
		\$1,427	The Preserve At Windsor Lake (Market)	\$1,669	The Preserve At Windsor Lake (Market)	\$1.970
		\$1,312	The Preserve At Windsor Lake (Market)	\$1,549	The Preserve At Windsor Lake (Market)	\$1,795
		\$1.300	Wyndham Pointe (AMR)	\$1,549	Wyndham Pointe (AMR)	\$1,700
		\$1,200	Paces Run (Market)	\$1,279	Gable Hill (Market)	\$1,437
		\$1,200	Gable Hill (Market)	\$1,279	Greenbrier Apartments (Market)	\$1,308
		\$1,159	Paces Run (Market)(1.0BA)	\$1,271	Wyndham Pointe (@60%) (ALR)	\$1,308 \$1,244
		\$1,130	Greenbrier Apartments (Market)(1.0BA)	\$1,239	Samara East (Market)	\$1,244
		\$1,080		\$1,213		\$1,229
			Greenbrier Apartments (Market)		Brookside Crossing (@60%)	\$1,212 \$1,212
		\$1,067	Greenbrier Apartments (Market)	\$1,184	Wyndham Pointe (@60%)	
		\$1,050	Greenbrier Apartments (Market)	\$1,178	Regent Park Apartments (@50%)	\$1,129
		\$1,009	Greenbrier Apartments (Market)	\$1,138	Regent Park Apartments (@60%)	\$1,129
		\$1,007	Samara East (Market)	\$1,109	Deer Park Apartments (@50%)	\$1,065
	rtments (Market)	\$962	Springtree Apartments (Market)(1.0BA)	\$1,104	Jackson Creek Station (@60%)	\$1,065
	rtments (Market)	\$935	Greenbrier Apartments (Market)(1.0BA)	\$1,096	Arcadia Park (@60%)	\$986
	rtments (Market)	\$927	Springtree Apartments (Market)(1.0BA)	\$1,084	Jackson Creek Station (@50%)	\$947
	nte (@60%) (ALR)	\$890	Wyndham Pointe (@60%) (ALR)	\$1,075	Arcadia Park (@50%)	\$777
	ossing (@60%)	\$886	Brookside Crossing (@60%)	\$1,056	Arcadia Park (@50%)	\$777
	ossing (@60%)	\$886	Wyndham Pointe (@60%)	\$1,047		
	ointe (@60%)	\$867	Jackson Creek Station (@60%)	\$1,017		
I i	rtments (Market)	\$835	Regent Park Apartments (@50%)	\$983		
	artments (@50%)	\$826	Regent Park Apartments (@60%)	\$983		
	artments (@60%)	\$826	Deer Park Apartments (@50%)	\$913		
	ark (@60%)	\$753	Arcadia Park (@60%)	\$881		
	ark (@50%)	\$602	Jackson Creek Station (@50%)	\$828		
Arcadia P	ark (@50%)	\$602	Arcadia Park (@50%)	\$699		
			Arcadia Park (@50%)	\$699		
SQUARE Wyndham F	Pointe (@60%)	1,036	Wyndham Pointe (@60%)	1,232	Wyndham Pointe (@60%)	1,444
	indsor Lake (Market)	918	The Preserve At Windsor Lake (Market)	1,222	The Preserve At Windsor Lake (Market)	1,390
	rtments (Market)	882	Greenbrier Apartments (Market)	1,222	Greenbrier Apartments (Market)	1,390
		882 882		1,154		1,321
	rtments (Market)		Greenbrier Apartments (Market)	, -	Deer Park Apartments (@50%)	
	ark (@50%)	850	Greenbrier Apartments (Market)	1,132	Brookside Crossing (@60%)	1,276
	ark (@50%)	850	Paces Run (Market)	1,127	The Preserve At Windsor Lake (Market)	1,250
	ark (@60%)	850	Deer Park Apartments (@50%)	1,100	Jackson Creek Station (@50%)	1,225
	II (Market)	800	The Preserve At Windsor Lake (Market)	1,082	Jackson Creek Station (@60%)	1,225
	rtments (Market)	795	Jackson Creek Station (@50%)	1,075	Arcadia Park (@50%)	1,200
	rtments (Market)	795	Jackson Creek Station (@60%)	1,075	Arcadia Park (@50%)	1,200
	ast (Market)	780	Greenbrier Apartments (Market)	1,071	Arcadia Park (@60%)	1,200
	ın (Market)	779	Brookside Crossing (@60%)	1,062	Regent Park Apartments (@50%)	1,150
Brookside Cr	ossing (@60%)	775	Arcadia Park (@50%)	1,050	Regent Park Apartments (@60%)	1,150
	, ,	775	Arcadia Park (@50%)	1,050	Gable Hill (Market)	1,150
The Preserve At Wi		700	Arcadia Park (@60%)	1,050	Samara East (Market)	1,031
The Preserve At Wi Regent Park Ap		700	Gable Hill (Market)	1,000		
The Preserve At Wi Regent Park Ap Regent Park Ap						
The Preserve At Wi Regent Park Ap Regent Park Ap Brookside Cr	ossing (@60%)	695	Springtree Apartments (Market)(1.0BA)	984		
The Preserve At Wi Regent Park Ap Regent Park Ap Brookside Cr Springtree Apa	ossing (@60%) rtments (Market)	695 694	Springtree Apartments (Market)(1.0BA)	984		
The Preserve At Wi Regent Park Ap Regent Park Ap Brookside Cr Springtree Apa Springtree Apa	ossing (@60%) rtments (Market) rtments (Market)	695 694 694	Springtree Apartments (Market)(1.0BA) Paces Run (Market)(1.0BA)	984 943		
The Preserve At Wi Regent Park Ap Regent Park Ap Brookside Cr Springtree Apa Springtree Apa Greenbrier Apa	ossing (@60%) rtments (Market) rtments (Market) rtments (Market)	695 694 694 630	Springtree Apartments (Market)(1.0BA) Paces Run (Market)(1.0BA) Regent Park Apartments (@50%)	984 943 930		
The Preserve At Wi Regent Park Ap Regent Park Ap Brookside Cr Springtree Apa Springtree Apa Greenbrier Apa	ossing (@60%) rtments (Market) rtments (Market)	695 694 694	Springtree Apartments (Market)(1.0BA) Paces Run (Market)(1.0BA)	984 943		
The Preserve At Wi Regent Park Ap Regent Park Ap Brookside Cr Springtree Apa Greenbrier Apa Greenbrier Apa	ossing (@60%) rtments (Market) rtments (Market) rtments (Market)	695 694 694 630	Springtree Apartments (Market)(1.0BA) Paces Run (Market)(1.0BA) Regent Park Apartments (@50%)	984 943 930		
The Preserve At Wi Regent Park Ap Regent Park Ap Brookside Cr Springtree Apa Springtree Apa Greenbrier Apa Greenbrier Apa Paces Ru	ossing (@60%) rtments (Market) rtments (Market) rtments (Market) rtments (Market)	695 694 694 630 630	Springtree Apartments (Market)(1.0BA) Paces Run (Market)(1.0BA) Regent Park Apartments (@50%) Regent Park Apartments (@60%)	984 943 930 930		



	1.0 Bed x 1.0 Bath		2.0 Bed x 2.0 Bath		3.0 Bed x 2.0 Bath	
RENT	Paces Run (Market)	\$1.95	The Preserve At Windsor Lake (Market)	\$1.43	The Preserve At Windsor Lake (Market)	\$1.44
PER	Greenbrier Apartments (Market)	\$1.71	The Preserve At Windsor Lake (Market)	\$1.37	The Preserve At Windsor Lake (Market)	\$1.42
SQUARE	Paces Run (Market)	\$1.71	Paces Run (Market)(1.0BA)	\$1.34	Gable Hill (Market)	\$1.25
FOOT	The Preserve At Windsor Lake (Market)	\$1.69	Greenbrier Apartments (Market)(1.0BA)	\$1.31	Samara East (Market)	\$1.19
	The Preserve At Windsor Lake (Market)	\$1.55	Gable Hill (Market)	\$1.27	Wyndham Pointe (AMR)	\$1.18
	Paces Run (Market)	\$1.49	Wyndham Pointe (AMR)	\$1.22	Greenbrier Apartments (Market)	\$0.99
	Greenbrier Apartments (Market)	\$1.45	Samara East (Market)	\$1.21	Regent Park Apartments (@50%)	\$0.98
	Springtree Apartments (Market)	\$1.39	Greenbrier Apartments (Market)(1.0BA)	\$1.18	Regent Park Apartments (@60%)	\$0.98
	Gable Hill (Market)	\$1.34	Paces Run (Market)	\$1.13	Brookside Crossing (@60%)	\$0.95
	Springtree Apartments (Market)	\$1.34	Greenbrier Apartments (Market)	\$1.13	Jackson Creek Station (@60%)	\$0.87
	Greenbrier Apartments (Market)	\$1.33	Springtree Apartments (Market)(1.0BA)	\$1.12	Wyndham Pointe (@60%) (ALR)	\$0.86
	Samara East (Market)	\$1.29	Springtree Apartments (Market)(1.0BA)	\$1.10	Wyndham Pointe (@60%)	\$0.84
	Brookside Crossing (@60%)	\$1.27	Regent Park Apartments (@50%)	\$1.06	Arcadia Park (@60%)	\$0.82
	Wyndham Pointe (AMR)	\$1.25	Regent Park Apartments (@60%)	\$1.06	Deer Park Apartments (@50%)	\$0.82
	Greenbrier Apartments (Market)	\$1.21	Greenbrier Apartments (Market)	\$1.04	Jackson Creek Station (@50%)	\$0.77
	Regent Park Apartments (@50%)	\$1.18	Greenbrier Apartments (Market)	\$1.03	Arcadia Park (@50%)	\$0.65
	Regent Park Apartments (@60%)	\$1.18	Greenbrier Apartments (Market)	\$1.01	Arcadia Park (@50%)	\$0.65
	Greenbrier Apartments (Market)	\$1.18	Brookside Crossing (@60%)	\$0.99		
	Brookside Crossing (@60%)	\$1.14	Jackson Creek Station (@60%)	\$0.95		
	Greenbrier Apartments (Market)	\$1.14	Wyndham Pointe (@60%) (ALR)	\$0.87		
	Arcadia Park (@60%)	\$0.89	Wyndham Pointe (@60%)	\$0.85		
	Wyndham Pointe (@60%) (ALR)	\$0.86	Arcadia Park (@60%)	\$0.84		
	Wyndham Pointe (@60%)	\$0.84	Deer Park Apartments (@50%)	\$0.83		
	Arcadia Park (@50%)	\$0.71	Jackson Creek Station (@50%)	\$0.77		
	Arcadia Park (@50%)	\$0.71	Arcadia Park (@50%)	\$0.67		
			Arcadia Park (@50%)	\$0.67		



						AMENTY MATE	ax.					
	Wyndham Pointe	Arcadia Park	Brookside	Deer Park Apartments	Jackson Creek	Regent Park	Gable Hill	Greenbrier	Paces Run	Samara East	Springtree Apartments	The Preserve At
Program Tenancy	LIHTC Family	LIHTC Family	LIHTC Family	LIHTC Family	LIHTC Family	LIHTC Family	Market Family	Market Family	Market Family	Market Family	Market Family	Market Family
Building	railily	railily	raillily	rainiy	rainily	rainiy	ramiy	rainiy	rainiiy	rainily	railily	railily
roperty Type	Garden	Garden	Garden	Garden	Garden	Garden	Garden	Garden	Garden	Garden	Garden	Garden
Stories	3	3	3	3	2	3	3	3	3	2	2	3
ear Built	2007	2013	2009	2007	2016	2011	1984	1989	1987	1980	1982	2007
ear Renovated								2005			2017	
ourtyard	yes	no	no	no	no	no	no	no	no	no	no	no
tility Structure leat	no	no	no	no	no	no	no	no	no	no	no	no
ooking	no	no	no	no	no	no	no	no	no	no	no	no
ther Bectric	no	no	no	no	no	no	no	no	no	no	no	no
ir Conditioning	no	no	no	no	no	no	no	no	no	no	no	no
/ater Heat	no	no	no	no	no	no	no	no	no	no	no	no
Vater	yes	yes	yes	no	no	yes	no	yes	yes	yes	no	no
ewer	yes	yes	yes	no	yes	yes	no	yes	yes	yes	no	no
nit												
alcony linds	no	no	yes	no	no	no ves	yes ves	yes	yes ves	yes	no	yes no
able/Satellite	yes no	yes no	ye≤ no	yes no	yes no	yes no	yes ves	yes no	no no	yes yes	yes no	no
arpeting	yes	yes	yes	yes	yes	yes	yes	Ves	yes	ves	no	yes
eiling Fan	yes	ves	yes	yes	yes	yes	yes	Ves	yes	no	yes	yes
entral/AC	yes	yes	yes .	yes .	yes	ÿes	yes	yes	yes	yes	yes	yes
oat Closet	yes	yes	yes .	yes	yes	no	no	yes	no	no	no	yes
xterior Storage	no	no	yes	no	no	no	no	yes	no	no	no	yes
replace	no	no	no	no	no	no	yes .	yes	no	no	no	no
lardwood Floors aulted Ceilings	no no	no no	yes no	no yes	no no	no no	no no	no no	no no	no no	yes no	no Ves
Vallein-Closet	yes	no	yes	yes	yes	yes	yes	Ves	yes	yes	no	yes yes
V/D Hookups	ves	ves	ves	ves	Ves	ves	Ves	no	ves	ves	no	ves
Citchen		1				1	, - , - , - , - , - , - , - , - , - , -		,	122		
ishwasher	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Disposal	yes	yes	yes	yes	yes	yes .	yes	yes	yes	yes	yes	yes
Microwave Oven	no	no	no	yes .	yes	yes	no	no	no	no	no	yes
Refrigerator	yes ves	yes ves	yes yes	yes ves	yes ves	yes ves	yes ∨es	yes ves	yes ves	yes ves	yes yes	yes ves
ommunity	yes	yes	ye	,=	ye) -	ye.	ye.	yes	yes	yes	yes
Business Center	VES	ves	Ves	VES	Ves	VES	Ves	Ves	no	no	no	ves
entral Laundry	yes	yes	yes .	yes	yes .	yes	yes	yes	yes	yes	yes	yes
lubhouse	yes	yes	yes	yes	no	yes	yes	yes	yes	yes	no	yes
n-Site Mgmt	yes	yes	yes	no	yes .	yes	yes	yes .	yes	yes	yes	yes
ecreation												
asketball Court xercise Facility	no ves	no ves	no yes	no no	no no	yes ves	no yes	no ves	no yes	no no	no ves	no ves
icnic Area	no no	no	no no	no	no	Ves	yes no	yes ves	no yes	yes	yes	yes
layground	yes	ves	ves	ves	Ves	V65	Ves	Ves	no	no	no	Ves
wimming Pool	yes	no	ves	no	no	no	Ves	Ves	Ves	ves.	ves	ves
ennis Court	no	no	no	no	no	no	yes	yes	no	yes	yes	no
olleyball Court	no	no	no	no	no	no	ÿes	no	no	no	no	no
ervices												
ar Wash ecunty	no	no	no	no	no	no	yes	yes .	yes	yes	no	yes
itercom (Buzzer	no	no	no	no	no	no	no	no	no	no	no	yes
mited Access	yes	no	no	no	no	no	no	no	no	no	no	yes yes
atrol	no	no	no	no	no	no	Ves	yes	no	no	yes	no
erimeter Fencin	yes	yes	no	no	no	no	no	no	no	no	no	no
fideo Surveillanc	no	yes	yes	no	yes	yes	no	yes .	no	no	no	no
arking												
arage	no	no	yes	no ves	no ves	no	no	no ves	no	no	no	yes
Surface	yes	yes .	yes	Y 600	γœ	yes	yes	γ ω	yes .	yes	\es	\es



PROPERTY PROFILE REPORT

Arcadia Park

Effective Rent Date 10/24/2023

Location 2400 Kneece Rd

Columbia, SC 29223 Richland County

Distance 1.9 miles
Units 75
Vacant Units 0
Vacancy Rate 0.0%

Type Garden (3 stories)
Year Built/Renovated 2013 / N/A

Marketing Began N/A
Leasing Began N/A
Last Unit Leased N/A

Major Competitors None identified
Tenant Characteristics None identified

Contact Name Jakita

Phone 803-462-3301



Market Information Utilities

@50%, @50% (HOME), @60% A/C not included -- central Program **Annual Turnover Rate** 5% Cooking not included -- electric not included -- electric Units/Month Absorbed N/A Water Heat **HCV** Tenants 10% Heat not included -- electric

Pre-leased to one week Other Electric not included Leasing Pace Annual Chg. in Rent None Water included Concession None Sewer included Waiting List Yes, 80 households Trash Collection included

Unit Mix (face rent)													
Beds	Baths	Туре	Units	Size (SF)	Rent	Concession (monthly)	Restriction	Waiting List	Vacant	Vacancy Rate	Max Rent?	Range	
1	1	Garden (3 stories)	3	850	\$602	\$0	@50%	Yes	0	0.0%	no	None	
1	1	Garden (3 stories)	3	850	\$602	\$0	@50% (HOME)	Yes	0	0.0%	no	None	
1	1	Garden (3 stories)	9	850	\$753	\$0	@60%	Yes	0	0.0%	no	None	
2	2	Garden (3 stories)	6	1,050	\$699	\$0	<i>@</i> 50%	Yes	0	0.0%	no	None	
2	2	Garden (3 stories)	6	1,050	\$699	\$0	@50% (HOME)	Yes	0	0.0%	no	None	
2	2	Garden (3 stories)	18	1,050	\$881	\$0	@60%	Yes	0	0.0%	no	None	
3	2	Garden (3 stories)	6	1,200	\$777	\$0	<i>@</i> 50%	Yes	0	0.0%	no	None	
3	2	Garden (3 stories)	6	1,200	\$777	\$0	@50% (HOME)	Yes	0	0.0%	no	None	
3	2	Garden (3 stories)	18	1,200	\$986	\$0	@60%	Yes	0	0.0%	no	None	

Unit iviix												
@50%	Face Rent	Conc.	Concd. Rent	Util. Adj.	Adj. Rent	@60%	Face Rent	Conc.	Concd. Rent	Util. Adj.	Adj. Rent	
1BR / 1BA	\$602	\$0	\$602	\$0	\$602	1BR / 1BA	\$753	\$0	\$753	\$0	\$753	
2BR / 2BA	\$699	\$0	\$699	\$0	\$699	2BR / 2BA	\$881	\$0	\$881	\$0	\$881	
3BR / 2BA	\$777	\$0	\$777	\$0	\$777	3BR / 2BA	\$986	\$0	\$986	\$0	\$986	
1BR / 1BA 2BR / 2BA	\$602 \$699	\$0 \$0	\$602 \$699	\$0 \$0	\$602 \$699	1BR / 1BA 2BR / 2BA	\$753 \$881	\$0 \$0	\$753 \$881	\$0 \$0	\$7 \$8	753 381



Arcadia Park, continued

Amenities

In-Unit Blinds Carpeting Central A/C Coat Closet Dishwasher Ceiling Fan Garbage Disposal Oven

Refrigerator Washer/Dryer hookup

Property Premium Business Center/Computer Lab Clubhouse/Meeting Room/Community None

Exercise Facility Off-Street Parking Playground

Central Laundry On-Site Management

Services Security Perimeter Fencing None Video Surveillance

> Other None

Comments

The contact stated that the property currently accepts Housing Choice Vouchers. The contact had no further comments.

Arcadia Park, continued

Trend Report

Vacancy Rates

 3Q22
 2Q23
 3Q23
 4Q23

 0.0%
 0.0%
 0.0%
 0.0%

Trend: @50%							Tre	Trend: @60%									
1BR / 1BA									1BR / 1BA								
Year	QT		Face Rent	Conc.	Concd. Rent	Adj. Rent		QT	Vac.	Face Rent	Conc.	Concd. Rent	Adj. Rent				
2022	3	0.0%	\$681 - \$756	\$0	\$681 - \$756	\$681 - \$756	2022	3	0.0%	\$907	\$0	\$907	\$907				
2023	2	0.0%	\$602	\$0	\$602	\$602	2023	2	0.0%	\$753	\$0	\$753	\$753				
2023	3	0.0%	\$602	\$0	\$602	\$602	2023	3	0.0%	\$753	\$0	\$753	\$753				
2023	4	0.0%	\$602	\$0	\$602	\$602	2023	4	0.0%	\$753	\$0	\$753	\$753				
2BR / 2BA							2BR /	2BR / 2BA									
Year	QT	Vac.	Face Rent	Conc.	Concd. Rent	Adj. Rent	Year	QT	Vac.	Face Rent	Conc.	Concd. Rent	Adj. Rent				
2022	3	0.0%	\$817 - \$907	\$0	\$817 - \$907	\$817 - \$907	2022	3	0.0%	\$1,089	\$0	\$1,089	\$1,089				
2023	2	0.0%	\$699	\$0	\$699	\$699	2023	2	0.0%	\$881	\$0	\$881	\$881				
2023	3	0.0%	\$699	\$0	\$699	\$699	2023	3	0.0%	\$881	\$0	\$881	\$881				
2023	4	0.0%	\$699	\$0	\$699	\$699	2023	4	0.0%	\$881	\$0	\$881	\$881				
3BR	/ 2B	Α					3BR	/ 2B	A								
Year	QT	Vac.	Face Rent	Conc.	Concd. Rent	Adj. Rent	Year	QT	Vac.	Face Rent	Conc.	Concd. Rent	Adj. Rent				
2022	3	0.0%	\$944 - \$1,048	\$0	\$944 - \$1,048	\$944 - \$1,048	2022	3	0.0%	\$1,257	\$0	\$1,257	\$1,257				
2023	2	0.0%	\$777	\$0	\$777	\$777	2023	2	0.0%	\$986	\$0	\$986	\$986				
2023	3	0.0%	\$777	\$0	\$777	\$777	2023	3	0.0%	\$986	\$0	\$986	\$986				
2023	4	0.0%	\$777	\$0	\$777	\$777	2023	4	0.0%	\$986	\$0	\$986	\$986				

Trend: Comments

The contact could not comment on the impact of the COVID-19 pandemic on the property's operations.

2023 The contact stated that the property accepts Housing Choice Vouchers. The contact had no further comments.

3Q23 N/A

4023 The contact stated that the property currently accepts Housing Choice Vouchers. The contact had no further comments.

Arcadia Park, continued

Photos









PROPERTY PROFILE REPORT

Brookside Crossing

Effective Rent Date 11/01/2023

Location 220 Springtree Drive

220 Springtree Drive Columbia, SC 29223 Richland County

Distance 0.5 miles
Units 162
Vacant Units 2
Vacancy Rate 1.2%

Type Garden (3 stories)
Year Built/Renovated 2009 / N/A

Marketing Began N/A
Leasing Began N/A
Last Unit Leased N/A

Major Competitors Spring Tree, Park Lane, Greenbriar

Tenant Characteristics Primarily couples and small families; approx.

20% seniors

Contact Name Tracy

Phone 803-741-7314



Market Information

A/C Program @60% not included -- central Annual Turnover Rate 20% Cooking not included -- electric Units/Month Absorbed N/A Water Heat not included -- electric **HCV** Tenants 10% Heat not included -- electric Leasing Pace Other Electric not included within one week

Annual Chg. in Rent Increased to 2023 max Water included Concession None Sewer included Waiting List None Trash Collection included

Unit Mi	Unit Mix (face rent)														
Beds	Baths	Туре	Units	Size (SF)	Rent	Concession (monthly)	Restriction	Waiting List	Vacant	Vacancy Rate	Max Rent?	Range			
1	1	Garden (3 stories)	6	695	\$886	\$0	@60%	No	0	0.0%	yes	None			
1	1	Garden (3 stories)	12	775	\$886	\$0	@60%	No	0	0.0%	yes	None			
2	2	Garden (3 stories)	108	1,062	\$1,056	\$0	@60%	No	2	1.9%	yes	None			
3	2	Garden (3 stories)	36	1,276	\$1,212	\$0	@60%	No	0	0.0%	yes	None			

Utilities

Unit Mix

@60%	Face Rent	Conc.	Concd. Rent	Util. Adj.	Adj. Rent
1BR / 1BA	\$886	\$0	\$886	\$0	\$886
2BR / 2BA	\$1,056	\$0	\$1,056	\$0	\$1,056
3BR / 2BA	\$1,212	\$0	\$1,212	\$0	\$1,212

Brookside Crossing, continued

Amenities

In-Unit
Balcony/Patio Blinds
Carpet/Hardwood Carpeting
Central A/C Coat Closet

Dishwasher Exterior Storage(\$65.00)
Ceiling Fan Garbage Disposal
Oven Refrigerator
Walk-In Closet Washer/Dryer hookup

Property
Business Center/Computer Lab Clubhouse/Meeting Room/Community

Exercise Facility
Garage(\$65.00)
Central Laundry
On-Site Management
Swimming Pool

Garage(\$65.00)
Playground
Playground

Security Video Surveillance Services None

Other None

Comments

The property offers exterior storage for an additional \$65 per month. Garage parking is available for an additional \$65 per month. The contact stated that the property does not currently maintain a waiting list, but the demand is high and units usually lease within two days.

Premium

None

Brookside Crossing, continued

Trend Report

Vacancy R	ates
-----------	------

2022	1023	2023	4Q23
0.0%	0.0%	0.0%	1.2%

Trend: @60%

110	Ticha, e 0070												
1BR	/ 1B	A											
Year	QT	Vac.	Face Rent	Conc.	Concd. Rent	Adj. Rent							
2022	2	0.0%	\$737	\$0	\$737	\$737							
2023	1	0.0%	\$795	\$0	\$795	\$795							
2023	2	0.0%	\$854	\$0	\$854	\$854							
2023	4	0.0%	\$886	\$0	\$886	\$886							
2BR	/ 2B	A											
Year	QT	Vac.	Face Rent	Conc.	Concd. Rent	Adj. Rent							
2022	2	0.0%	\$878	\$0	\$878	\$878							
2023	1	0.0%	\$945	\$0	\$945	\$945							
2023	2	0.0%	\$1,007	\$0	\$1,007	\$1,007							
2023	4	1.9%	\$1,056	\$0	\$1,056	\$1,056							
3BR	/ 2B	A											
Year	QT	Vac.	Face Rent	Conc.	Concd. Rent	Adj. Rent							
2022	2	0.0%	\$1,006	\$0	\$1,006	\$1,006							
2023	1	0.0%	\$1,006	\$0	\$1,006	\$1,006							
2023	2	0.0%	\$1,146	\$0	\$1,146	\$1,146							
2023	4	0.0%	\$1,212	\$0	\$1,212	\$1,212							

Trend: Comments

The property is under new management as of 2022. The contact reported that demand for affordable housing in the area remains strong. The rents at the property are currently set below 2022 maximum allowable rents; however, the contact reported that they anticipated rents increasing at some point in the next one to two months.

1Q23 N/A

The contact stated that the property accepts Housing Choice Vouchers. The property offers exterior storage for an additional \$65 per month. The also offers garage parking for an additional \$65 per month. The contact stated that the property does not currently maintain a waiting list, but the demand is high and units usually lease within two days.

The property offers exterior storage for an additional \$65 per month. Garage parking is available for an additional \$65 per month. The contact stated that the property does not currently maintain a waiting list, but the demand is high and units usually lease within two days.

Brookside Crossing, continued







Deer Park Apartments

Effective Rent Date 11/06/2023

Location 7225 Firelane Rd

Columbia, SC 29223 Richland County

Distance 0.8 miles
Units 64
Vacant Units 0
Vacancy Rate 0.0%

Type Garden (3 stories)
Year Built/Renovated 2007 / N/A

Marketing Began N/A
Leasing Began N/A
Last Unit Leased N/A

Major Competitors None identified

Tenant Characteristics Primarily from Columbia

Contact Name Jamaya Phone 803-699-4748



Market Information **Utilities** A/C @50% not included -- central Program **Annual Turnover Rate** 15% Cooking not included -- electric not included -- electric Units/Month Absorbed Water Heat 21 **HCV** Tenants 50% Heat not included -- electric Within three weeks Other Electric Leasing Pace not included Annual Chg. in Rent Increased to 2023 Max Water not included Concession None Sewer not included Waiting List Yes; Unknown length Trash Collection included

Unit Mi	Unit Mix (face rent)														
Beds	Baths	Туре	Units	Size (SF)	Rent	Concession (monthly)	Restriction	Waiting List	Vacant	Vacancy Rate	Max Rent?	Range			
2	2	Garden (3 stories)	32	1,100	\$822	\$0	@50%	Yes	0	0.0%	yes	None			
3	2	Garden (3 stories)	32	1,300	\$938	\$0	@50%	Yes	0	0.0%	yes	None			

Unit Mix @50% Face Rent Conc. Concd. Rent Util. Adj. Adj. Rent 2BR / 2BA \$822 \$913 \$0 \$822 \$91 3BR / 2BA \$938 \$0 \$938 \$127 \$1,065

Deer Park Apartments, continued

Amenities

In-Unit Blinds Carpeting Central A/C Coat Closet Ceiling Fan Dishwasher Garbage Disposal Microwave Refrigerator Vaulted Ceilings Walk-In Closet Security Services None

None

Washer/Dryer hookup

Other Property Premium Business Center/Computer Lab Clubhouse/Meeting Room/Community None None

Central Laundry Off-Street Parking

Playground

Comments

All units are restricted at 50 percent of AMI and are set at the 2023 maximum allowable levels.

Deer Park Apartments, continued

Trend Report

Vacancy Rates

3Q10	1Q16	1Q20	4023
0.0%	1.6%	0.0%	0.0%

Trend: @50%

2BR	/ 2B	A				
Year	QT	Vac.	Face Rent	Conc.	Concd. Rent	Adj. Rent
2010	3	0.0%	\$625	\$0	\$625	\$716
2016	1	N/A	\$583	\$0	\$583	\$674
2020	1	0.0%	\$661	\$0	\$661	\$752
2023	4	0.0%	\$822	\$0	\$822	\$913
3BR	/ 2B	A				
Year	\circ					
rear	QΙ	Vac.	Face Rent	Conc.	Concd. Rent	Adj. Rent
2010	3	Vac. 0.0%	Face Rent \$735	Conc. \$0	Concd. Rent \$735	Adj. Rent \$862
						•
2010	3	0.0%	\$735	\$0	\$735	\$862

Trend: Comments

- This LIHTC property has units set-aside at 50 and 60 percent of AMI. The manager indicated that the property operates with a restrictive covenant under which the property's 60 percent AMI rents must be set at the 50 percent AMI level. The property is performing well as it is fully leased. A waiting list is maintained although the manager would not reveal the number on it. Tenants mostly work in the retail and restaurant industries. There are no military personnel as they are generally over-income qualified. However, there are a number of civilian workers who work in food service at Fort Jackson. Average household income is generally in the high \$20,000s to low \$30,000s annually.
- The reported rents are lower than the previous interview in 2012. The contact was new to the property and did not know why rents have decreased and was unable to estimate rent changes over the past year. The contact also could not provide an estimate of annual turnover at the property.
- The property previously offered units at 60 percent of AMI. The contact could not state when the property eliminated the 60 percent units. However, all units are now restricted at 50 percent of AMI and are set at the maximum allowable levels.
- 4Q23 All units are restricted at 50 percent of AMI and are set at the 2023 maximum allowable levels.

Deer Park Apartments, continued







Jackson Creek Station

Effective Rent Date 11/06/2023

Location 2301 Kneece Road

Columbia, SC 29206 Richland County

Distance 2 miles
Units 56
Vacant Units 0
Vacancy Rate 0.0%

Type Garden (2 stories)
Year Built/Renovated 2016 / N/A

Marketing Began N/A
Leasing Began N/A
Last Unit Leased N/A

Major Competitors None Identified
Tenant Characteristics Mixed Tenancy

Contact Name Amy

Phone 803-764-2994



Market Information Utilities

A/C @50%, @60% not included -- central Program **Annual Turnover Rate** 25% Cooking not included -- electric not included -- electric Units/Month Absorbed Water Heat N/A **HCV** Tenants 35% Heat not included -- electric not included Other Electric Leasing Pace Within two weeks

Annual Chg. in Rent Increased up to 10% annually Water not included Concession None Sewer included Waiting List Yes; six households in length Trash Collection included

Unit Mi	Jnit Mix (face rent)														
Beds	Baths	Туре	Units	Size (SF)	Rent	Concession (monthly)	Restriction	Waiting List	Vacant	Vacancy Rate	Max Rent?	Range			
2	2	Garden (2 stories)	7	1,075	\$791	\$0	@50%	Yes	0	0.0%	no	None			
2	2	Garden (2 stories)	21	1,075	\$980	\$0	@60%	Yes	0	0.0%	no	None			
3	2	Garden (2 stories)	7	1,225	\$893	\$0	@50%	Yes	0	0.0%	no	None			
3	2	Garden (2 stories)	21	1,225	\$1,011	\$0	@60%	Yes	0	0.0%	no	None			

Unit Mix												
@50%	Face Rent	Conc.	Concd. Rent	Util. Adj.	Adj. Rent	@60%	Face Rent	Conc.	Concd. Rent	Util. Adj.	Adj. Rent	
2BR / 2BA	\$791	\$0	\$791	\$37	\$828	2BR / 2BA	\$980	\$0	\$980	\$37	\$1,017	
3BR / 2BA	\$893	\$0	\$893	\$54	\$947	3BR / 2BA	\$1,011	\$0	\$1,011	\$54	\$1,065	

Jackson Creek Station, continued

Amenities

In-Unit Blinds Carpeting Central A/C Coat Closet Ceiling Fan Dishwasher Garbage Disposal Microwave Oven Refrigerator Walk-In Closet

Washer/Dryer hookup

On-Site Management

Property Business Center/Computer Lab

Off-Street Parking Playground

Central Laundry

Security Video Surveillance Services None

Premium Other None None

Comments

The contact stated that the property accepts Housing Choice Vouchers. The property's rents are reportedly kept below max to maintain affordability.

Jackson Creek Station, continued

Trend Report

Vacancy Rates

 1Q19
 4Q20
 2Q23
 4Q23

 0.0%
 0.0%
 0.0%
 0.0%

Tre	nd	: @5(0%				Tre	end	: @6(0%			
2BR	/ 2B	Α					2BR	/ 2B	Α				
Year	QT	Vac.	Face Rent	Conc.	Concd. Rent	Adj. Rent	Year	QT	Vac.	Face Rent	Conc.	Concd. Rent	Adj. Rent
2019	1	0.0%	\$563	\$0	\$563	\$600	2019	1	0.0%	\$691	\$0	\$691	\$728
2020	4	0.0%	\$611	\$0	\$611	\$648	2020	4	0.0%	\$750	\$0	\$750	\$787
2023	2	0.0%	\$791	\$0	\$791	\$828	2023	2	0.0%	\$980	\$0	\$980	\$1,017
2023	4	0.0%	\$791	\$0	\$791	\$828	2023	4	0.0%	\$980	\$0	\$980	\$1,017
3BR	/ 2B	A					3BR	/ 2B	Α				
Year	QT	Vac.	Face Rent	Conc.	Concd. Rent	Adj. Rent	Year	QT	Vac.	Face Rent	Conc.	Concd. Rent	Adj. Rent
2019	1	0.0%	\$641	\$0	\$641	\$695	2019	1	0.0%	\$783	\$0	\$783	\$837
2020	4	0.0%	\$696	\$0	\$696	\$750	2020	4	0.0%	\$850	\$0	\$850	\$904
2023	2	0.0%	\$893	\$0	\$893	\$947	2023	2	0.0%	\$1,011	\$0	\$1,011	\$1,065
2023	4	0.0%	\$893	\$0	\$893	\$947	2023	4	0.0%	\$1,011	\$0	\$1,011	\$1,065

Trend: Comments

- The manager indicated that the rents are below the maximum allowable LIHTC rents but did not know why rents were kept low. The manager indicated that higher rents are achievable in the market and the property rarely has vacancies. The manager could provide absorption data as she was not employed at the property during leaseup.
- 4Q20 The contact had no comment regarding the effects of COVID-19 at the property.
- 2023 The contact stated that the property accepts Housing Choice Vouchers. The contact had no further comments.
- 4Q23 The contact stated that the property accepts Housing Choice Vouchers. The property's rents are reportedly kept below max to maintain affordability.

Jackson Creek Station, continued







Regent Park Apartments

Effective Rent Date 11/06/2023

Location 680 Windsor Lake Way Columbia, SC 29223

Richland County

Distance 1.9 miles
Units 72
Vacant Units 0
Vacancy Rate 0.0%

Type Garden (3 stories)
Year Built/Renovated 2011 / N/A

Marketing Began N/A
Leasing Began N/A
Last Unit Leased N/A

Waiting List

Major Competitors None identified

Tenant Characteristics Mixed tenancy from the Columbia area

Yes: 112 households

Contact Name Evelyn
Phone 803-708-4700



included

Utilities Market Information A/C @50%, @60% not included -- central Program **Annual Turnover Rate** 4% Cooking not included -- electric not included -- electric Units/Month Absorbed 36 Water Heat **HCV** Tenants 50% Heat not included -- electric Within two weeks Other Electric not included Leasing Pace Annual Chg. in Rent None Water included Concession None Sewer included

Trash Collection

Unit Mix	Unit Mix (face rent)														
Beds	Baths	Туре	Units	Size (SF)	Rent	Concession (monthly)	Restriction	Waiting List	Vacant	Vacancy Rate	Max Rent?	Range			
1	1	Garden (3 stories)	4	700	\$826	\$0	@50%	Yes	0	0.0%	yes	None			
1	1	Garden (3 stories)	8	700	\$826	\$0	@60%	Yes	0	0.0%	no	None			
2	2	Garden (3 stories)	6	930	\$983	\$0	@50%	Yes	0	0.0%	yes	None			
2	2	Garden (3 stories)	36	930	\$983	\$0	@60%	Yes	0	0.0%	no	None			
3	2	Garden (3 stories)	8	1,150	\$1,129	\$0	@50%	Yes	0	0.0%	yes	None			
3	2	Garden (3 stories)	10	1,150	\$1,129	\$0	@60%	Yes	0	0.0%	no	None			

Unit Mix												
@50%	Face Rent	Conc.	Concd. Rent	Util. Adj.	Adj. Rent	@60%	Face Rent	Conc.	Concd. Rent	Util. Adj.	Adj. Rent	
1BR / 1BA	\$826	\$0	\$826	\$0	\$826	1BR / 1BA	\$826	\$0	\$826	\$0	\$826	
2BR / 2BA	\$983	\$0	\$983	\$0	\$983	2BR / 2BA	\$983	\$0	\$983	\$0	\$983	
3BR / 2BA	\$1,129	\$0	\$1,129	\$0	\$1,129	3BR / 2BA	\$1,129	\$0	\$1,129	\$0	\$1,129	

Regent Park Apartments, continued

Amenities

In-Unit Blinds Carpeting Central A/C Dishwasher Garbage Disposal Ceiling Fan Microwave Refrigerator Walk-In Closet

Washer/Dryer hookup

Property Basketball Court Business Center/Computer Lab

Clubhouse/Meeting Room/Community Exercise Facility Central Laundry Off-Street Parking On-Site Management Picnic Area

Playground

Security Video Surveillance

None

Services None

Premium Other None

Comments

The contact stated that the property accepts Housing Choice Vouchers. There were no additional comments.

Regent Park Apartments, continued

Trend Report

Vacancy Rates

 3Q21
 2Q22
 2Q23
 4Q23

 0.0%
 0.0%
 0.0%
 0.0%

Trend: @	50%				Tre	nd	: @60	0%			
1BR / 1BA					1BR	′ 1B	A				
Year QT Va	c. Face Rent	Conc.	Concd. Rent	Adj. Rent	Year	QT	Vac.	Face Rent	Conc.	Concd. Rent	Adj. Rent
2021 3 0.0	9% \$595	\$0	\$595	\$595	2021	3	0.0%	\$730	\$0	\$730	\$730
2022 2 0.0	9% \$655	\$0	\$655	\$655	2022	2	0.0%	\$805	\$0	\$805	\$805
2023 2 0.0	9% \$826	\$0	\$826	\$826	2023	2	0.0%	\$826	\$0	\$826	\$826
2023 4 0.0	9% \$826	\$0	\$826	\$826	2023	4	0.0%	\$826	\$0	\$826	\$826
2BR / 2BA					2BR						
Year QT Va	c. Face Rent	Conc.	Concd. Rent	Adj. Rent	Year	QT	Vac.	Face Rent	Conc.	Concd. Rent	Adj. Rent
2021 3 0.0	9% \$705	\$0	\$705	\$705	2021	3	0.0%	\$870	\$0	\$870	\$870
2022 2 0.0	9% \$775	\$0	\$775	\$775	2022	2	0.0%	\$955	\$0	\$955	\$955
2023 2 0.0	9% \$983	\$0	\$983	\$983	2023	2	0.0%	\$983	\$0	\$983	\$983
2023 4 0.0	9% \$983	\$0	\$983	\$983	2023	4	0.0%	\$983	\$0	\$983	\$983
3BR / 2BA					3BR	′ 2B	A				
Year QT Va	c. Face Rent	Conc.	Concd. Rent	Adj. Rent	Year	QT	Vac.	Face Rent	Conc.	Concd. Rent	Adj. Rent
2021 3 0.0	9% \$805	\$0	\$805	\$805	2021	3	0.0%	\$999	\$0	\$999	\$999
2022 2 0.0	9% \$885	\$0	\$885	\$885	2022	2	0.0%	\$1,095	\$0	\$1,095	\$1,095
2023 2 0.0	0% \$1,129	\$0	\$1,129	\$1,129	2023	2	0.0%	\$1,129	\$0	\$1,129	\$1,129
2023 4 0.0	9% \$1,129	\$0	\$1,129	\$1,129	2023	4	0.0%	\$1,129	\$0	\$1,129	\$1,129

Trend: Comments

3Q21 N/A

2022 N/A

2023 The contact stated that the property accepts Housing Choice Vouchers. The contact had no further comments.

4023 The contact stated that the property accepts Housing Choice Vouchers. There were no additional comments.

Regent Park Apartments, continued





Gable Hill

Effective Rent Date 10/24/2023

Location 310 Ross Road

Columbia, SC 29223 Richland County

Distance 0.5 miles
Units 180
Vacant Units 2
Vacancy Rate 1.1%

Type Garden (3 stories)
Year Built/Renovated 1984 / N/A

Marketing Began N/A
Leasing Began N/A
Last Unit Leased N/A

Major Competitors Greenbrier, The Parklane, Fairways
Tenant Characteristics Early 20s,Families, 15-20% military

Contact Name Kim

Phone 803.736.5000



Utilities Market Information A/C Market not included -- central Program **Annual Turnover Rate** 25% Cooking not included -- electric not included -- electric Units/Month Absorbed Water Heat N/A **HCV** Tenants 0% Heat not included -- electric Leasing Pace Within 1-2 weeks Other Electric not included Annual Chg. in Rent Increased 4-7% Water not included Concession None Sewer not included Waiting List Trash Collection None included

Unit Mix (face rent)												
Beds	Baths	Туре	Units	Size (SF)	Rent	Concession (monthly)	Restriction	Waiting List	Vacant	Vacancy Rate	Max Rent?	Range
1	1	Garden (3 stories)	24	800	\$1,010	\$0	Market	No	0	0.0%	N/A	None
2	2	Garden (3 stories)	108	1,000	\$1,180	\$0	Market	No	2	1.9%	N/A	None
3	2	Garden (3 stories)	48	1,150	\$1,310	\$0	Market	No	0	0.0%	N/A	None

Unit Mix

Market	Face Rent	Conc.	Concd. Rent	Util. Adj.	Adj. Rent
1BR / 1BA	\$1,010	\$0	\$1,010	\$64	\$1,074
2BR / 2BA	\$1,180	\$0	\$1,180	\$91	\$1,271
3BR / 2BA	\$1,310	\$0	\$1,310	\$127	\$1,437

Gable Hill, continued

Amenities

In-Unit

Balcony/Patio Blinds
Cable/Satellite/Internet Carpeting
Central A/C Dishwasher
Ceiling Fan Fireplace
Garbage Disposal Oven
Refrigerator Walk-In Closet

Security Services
Patrol None

Washer/Dryer hookup

Property

Business Center/Computer Lab Car Wash
Clubhouse/Meeting Room/Community Exercise Facility
Central Laundry Off-Street Parking

On-Site Management Playground Swimming Pool Tennis Court Volleyball Court Premium Other None None

Comments

The property does not currently accept Housing Choice Vouchers.

Gable Hill, continued

Trend Report

Vacancy	Rates

4Q06	1Q08	2017	4Q23
10.0%	6.1%	2.8%	1.1%

Trend: Market

/ 1B	Α				
QT	Vac.	Face Rent	Conc.	Concd. Rent	Adj. Rent
4	N/A	\$661	\$0	\$661	\$725
1	N/A	\$573	\$0	\$573	\$637
2	N/A	\$731	\$0	\$731	\$795
4	0.0%	\$1,010	\$0	\$1,010	\$1,074
/ 2B	A				
QT	Vac.	Face Rent	Conc.	Concd. Rent	Adj. Rent
4	N/A	\$711	\$0	\$711	\$802
1	N/A	\$632	\$0	\$632	\$723
2	N/A	\$833	\$0	\$833	\$924
4	1.9%	\$1,180	\$0	\$1,180	\$1,271
/ 2B	A				
QT	Vac.	Face Rent	Conc.	Concd. Rent	Adj. Rent
4	N/A	\$871	\$0	\$871	\$998
1	N/A	\$741	\$0	\$741	\$868
2	N/A	\$1,023	\$0	\$1,023	\$1,150
4	0.0%	\$1,310	\$0	\$1,310	\$1,437
	OT 4 1 2 4 / 2B OT 4 1 2 4 / 2B OT 4 1 2 1 2 1 2 1 2 1 1 2 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 1 2 1	1 N/A 2 N/A 4 0.0% / 2BA OT Vac. 4 N/A 1 N/A 2 N/A 4 1.9% / 2BA OT Vac. 4 N/A 1 N/A 2 N/A 1 N/A 2 N/A	QT Vac. Face Rent 4 N/A \$661 1 N/A \$573 2 N/A \$731 4 0.0% \$1,010 / 2BA QT Vac. Face Rent 4 N/A \$711 1 N/A \$632 2 N/A \$833 4 1.9% \$1,180 / 2BA QT Vac. Face Rent 4 N/A \$711 1 N/A \$632 2 N/A \$833 4 1.9% \$1,180	OT Vac. Face Rent Conc. 4 N/A \$661 \$0 1 N/A \$573 \$0 2 N/A \$731 \$0 4 0.0% \$1,010 \$0 / 2BA OT Vac. Face Rent Conc. 4 N/A \$711 \$0 1 N/A \$632 \$0 2 N/A \$833 \$0 4 1.9% \$1,180 \$0 // 2BA OT Vac. Face Rent Conc. 4 N/A \$711 \$0 1 N/A \$632 \$0 2 N/A \$833 \$0 4 1.9% \$1,180 \$0 // 2BA OT Vac. Face Rent Conc. 4 N/A \$741 \$0 2 N/A \$741 \$0 2 N/A \$1,023 \$0	OT Vac. Face Rent Conc. Concd. Rent 4 N/A \$661 \$0 \$661 1 N/A \$573 \$0 \$573 2 N/A \$731 \$0 \$731 4 0.0% \$1,010 \$0 \$1,010 / 2BA OT Vac. Face Rent Conc. Concd. Rent 4 N/A \$711 \$0 \$711 1 N/A \$632 \$0 \$632 2 N/A \$833 \$0 \$833 4 1.9% \$1,180 \$0 \$1,180 / 2BA OT Vac. Face Rent Conc. Concd. Rent 4 N/A \$711 \$0 \$711 1 N/A \$632 \$0 \$632 2 N/A \$833 \$0 \$833 4 1.9% \$1,180 \$0 \$1,180

Trend: Comments

- 4Q06 Gable hill is a Market-rate property offering 180 one, two, and three-bedroom units. Rent has not changed over the past year. Contact said that concessions vary all the time. It depends on what unit, how long it has been vacant, and where it is located on the property.
- The rents reflected above are starting rents. Rents change daily based on the number of vacancies and depend on view, floor, and availability. The contact was unable to provide information on turnover rate. She believes that the market is slow.
- The contact noted that rents change daily based on the number of vacancies and depend on view, floor, and availability, though it was stated that generally there has been increases in the market over the past year. The contact was unable to provide information on which units were vacant, however she stated that there are five total vacancies at the property. The property does not accept Housing Choice Vouchers. There are no specials at the property.
- 4Q23 The property does not currently accept Housing Choice Vouchers.

Gable Hill, continued







Greenbrier Apartments

Effective Rent Date 10/24/2023

100 Willow Oak Drive Location

Columbia, SC 29223 **Richland County**

Distance 0.4 miles Units 526 Vacant Units 17 3.2% Vacancy Rate

Garden (3 stories) Type Year Built/Renovated 1989 / 2005

Marketing Began N/A Leasing Began N/A Last Unit Leased N/A

Major Competitors Providence Park, Paces Run, Fairways Mixed tenancy including military and civilian households, some student **Tenant Characteristics**

Contact Name Julicia

Phone 803-741-0041



Utilities Market Information A/C Program Market not included -- central 33% Annual Turnover Rate Cooking not included -- electric Units/Month Absorbed N/A Water Heat not included -- electric **HCV Tenants** 0% Heat not included -- electric Leasing Pace Within two weeks Other Electric not included Annual Chg. in Rent Fluctuates daily Water included included Concession None Sewer Waiting List None Trash Collection included

Greenbrier Apartments, continued

Uni	it Mix	(face r	ent)										
В	eds	Baths	Туре	Units	Size (SF)	Rent	Concession (monthly)	Restriction	Waiting List	Vacant	Vacancy Rate	Max Rent?	Range
	1	1	Garden (3 stories)	N/A	630	\$1,080	\$0	Market	No	0	N/A	N/A	HIGH
	1	1	Garden (3 stories)	N/A	795	\$1,150	\$0	Market	N/A	0	N/A	N/A	HIGH
	1	1	Garden (3 stories)	N/A	882	\$1,067	\$0	Market	No	0	N/A	N/A	HIGH
	1	1	Garden (3 stories)	84	630	\$835	\$0	Market	No	3	3.6%	N/A	LOW
	1	1	Garden (3 stories)	110	795	\$935	\$0	Market	No	3	2.7%	N/A	LOW
	1	1	Garden (3 stories)	36	882	\$1,007	\$0	Market	No	3	8.3%	N/A	LOW
	2	1	Garden (3 stories)	N/A	928	\$1,213	\$0	Market	No	0	N/A	N/A	HIGH
	2	1	Garden (3 stories)	40	928	\$1,096	\$0	Market	No	3	7.5%	N/A	LOW
	2	2	Garden (3 stories)	124	1,071	\$1,213	\$0	Market	No	0	0.0%	N/A	None
	2	2	Garden (3 stories)	78	1,154	\$1,184	\$0	Market	No	2	2.6%	N/A	None
	2	2	Garden (3 stories)	N/A	1,132	\$1,178	\$0	Market	No	0	N/A	N/A	HIGH
	2	2	Garden (3 stories)	N/A	1,132	\$1,138	\$0	Market	No	3	N/A	N/A	LOW
	3	2	Garden (3 stories)	54	1,321	\$1,308	\$0	Market	No	0	0.0%	N/A	None

Unit Mix

Market	Face Rent	Conc.	Concd. Rent U	Itil. Ad	dj. Adj. Rent
1BR / 1BA	\$835 - \$1,150	\$0	\$835 - \$1,150	\$0	\$835 - \$1,150
2BR / 1BA	\$1,096 - \$1,213	\$0	\$1,096 - \$1,213	\$0	\$1,096 - \$1,213
2BR / 2BA	\$1,138 - \$1,213	\$0	\$1,138 - \$1,213	\$0	\$1,138 - \$1,213
3BR / 2BA	\$1,308	\$0	\$1,308	\$0	\$1,308

Amenities

In-Unit
Balcony/Patio
Carpeting
Coat Closet
Exterior Storage
Fireplace
Oven
Walk-In Closet

Blinds Central A/C Dishwasher Ceiling Fan Garbage Disposal Refrigerator Security
Patrol
Video Surveillance

Services None

Property

Business Center/Computer Lab Clubhouse/Meeting Room/Community Garage(\$75.00) Off-Street Parking

Off-Street Parking Picnic Area Swimming Pool Car Wash Exercise Facility Central Laundry On-Site Management Playground Tennis Court Premium None Other None

Comments

The property does not accept Housing Choice Vouchers. The contact stated that garages are available for an additional \$75 per month.

Greenbrier Apartments, continued

Trend Report

Vacancy R	≀ates
-----------	-------

 2Q21
 3Q21
 1Q22
 4Q23

 6.1%
 6.1%
 6.1%
 3.2%

Trend: Market									
1BR	/ 1B	Α							
Year	QT	Vac.	Face Rent	Conc.	Concd. Rent	Adj. Rent			
2021	2	N/A	\$790 - \$900	\$0	\$790 - \$900	\$790 - \$900			
2021	3	N/A	\$745 - \$905	\$0	\$745 - \$905	\$745 - \$905			
2022	1	N/A	\$765 - \$919	\$0	\$765 - \$919	\$765 - \$919			
2023	4	N/A	\$835 - \$1,150	\$0	\$835 - \$1,150	\$835 - \$1,150			
2BR	/ 1B	A							
Year		Vac.	Face Rent	Conc.	Concd. Rent	Adj. Rent			
2021	2	N/A	\$920	\$0	\$920	\$920			
2021	3	N/A	\$920 - \$970	\$0	\$920 - \$970	\$920 - \$970			
2022	1	N/A	\$976 - \$1,026	\$0	\$976 - \$1,026	\$976 - \$1,026			
2023	4	N/A	\$1,096 - \$1,213	\$0	\$1,096 - \$1,213	\$1,096 - \$1,213			
2BR	/ 2B	A							
Year	QT	Vac.	Face Rent	Conc.	Concd. Rent	Adj. Rent			
2021	2	N/A	\$940 - \$980	\$0	\$940 - \$980	\$940 - \$980			
2021	3	N/A	\$885 - \$1,015	\$0	\$885 - \$1,015	\$885 - \$1,015			
2022	1	N/A	\$1,002 - \$1,042	\$0	\$1,002 - \$1,042	\$1,002 - \$1,042			
2023	4	N/A	\$1,138 - \$1,213	\$0	\$1,138 - \$1,213	\$1,138 - \$1,213			
3BR	/ 2B	A							
Year	QT	Vac.	Face Rent	Conc.	Concd. Rent	Adj. Rent			
2021	2	N/A	\$1,160	\$0	\$1,160	\$1,160			
2021	3	N/A	\$1,160 - \$1,170	\$0	\$1,160 - \$1,170	\$1,160 - \$1,170			
2022	1	1.9%	\$1,109	\$0	\$1,109	\$1,109			

\$0

\$1,308

Trend: Comments

\$1,308

2021 The contact reported stable rent collection and stable occupancy during COVID-19. A majority of tenants are not experiencing job losses.

\$1,308

3Q21 N/A

2023 4 0.0%

The property does not accept Housing Choice Vouchers. The contact reported that the property is no longer impacted by Covid-19. The contact noted that rent collection and occupancy are stable. The contact stated that garages are available for an additional \$75 per month.

The property does not accept Housing Choice Vouchers. The contact stated that garages are available for an additional \$75 per month.

Greenbrier Apartments, continued







Paces Run

Effective Rent Date 10/24/2023

Location 7501 Parklane Road

Columbia, SC 29223 Richland County

Distance 0.3 miles
Units 260
Vacant Units 6
Vacancy Rate 2.3%

Type Garden (3 stories)
Year Built/Renovated 1987 / N/A

Marketing Began N/A
Leasing Began N/A
Last Unit Leased N/A

Major Competitors Greenbrier Apartments, Fairways

Tenant Characteristics 25-30% military, some business contractors.

Contact Name Tanya
Phone 803.741.0300



Utilities Market Information A/C Market not included -- central Program **Annual Turnover Rate** 25% Cooking not included -- electric not included -- electric Units/Month Absorbed N/A Water Heat **HCV** Tenants 0% Heat not included -- electric Other Electric not included Leasing Pace Within 30 days Annual Chg. in Rent Changes daily, annual unknown Water included Concession None Sewer included Waiting List None Trash Collection included

Unit Mix (face rent)												
Beds	Baths	Туре	Units	Size (SF)	Rent	Concession (monthly)	Restriction	Waiting List	Vacant	Vacancy Rate	Max Rent?	Range
1	1	Garden (3 stories)	N/A	779	\$1,159	\$0	Market	No	3	N/A	N/A	None
1	1	Garden (3 stories)	N/A	614	\$1,200	\$0	Market	No	0	N/A	N/A	HIGH*
1	1	Garden (3 stories)	N/A	614	\$1,050	\$0	Market	No	3	N/A	N/A	LOW*
2	1	Garden (3 stories)	N/A	943	\$1,259	\$0	Market	No	0	N/A	N/A	None
2	2	Garden (3 stories)	128	1,127	\$1,279	\$0	Market	No	0	0.0%	N/A	None

Unit Mix

Market	Face Rent	Conc.	Concd. Rent	Util. Adj	. Adj. Rent
1BR / 1BA	\$1,050 - \$1,200	\$0	\$1,050 - \$1,200	\$0 :	\$1,050 - \$1,200
2BR / 1BA	\$1,259	\$0	\$1,259	\$0	\$1,259
2BR / 2BA	\$1.279	\$0	\$1.279	\$0	\$1.279

Paces Run, continued

Amenities

In-Unit Balcony/Patio Blinds Carpeting Central A/C Ceiling Fan Dishwasher Garbage Disposal Oven Walk-In Closet

Refrigerator Washer/Dryer hookup In-Unit Alarm

Security

Services None

Property None

Car Wash Clubhouse/Meeting Room/Community

Exercise Facility Central Laundry Off-Street Parking On-Site Management

Swimming Pool

Premium

Other

\$30 for unit with fireplace,

Comments

The contact was unable to provide the number of units by unit type. Units are equipped with in-unit alarms, which if activated cost an additional \$25 per month. The property does not currently accept Housing Choice Vouchers.

Paces Run, continued

Trend Report

Vacancy R	ates
-----------	------

 3Q10
 2Q17
 3Q21
 4Q23

 5.0%
 0.4%
 0.4%
 2.3%

Trenc	 IV.	ш	``\

110	114	· ivia	1101			
1BR	/ 1B	A				
Year	QT	Vac.	Face Rent	Conc.	Concd. Rent	Adj. Rent
2010	3	N/A	\$600 - \$710	\$50 - \$75	\$550 - \$635	\$550 - \$635
2017	2	N/A	\$768 - \$788	\$0	\$768 - \$788	\$768 - \$788
2021	3	N/A	\$770 - \$850	\$0	\$770 - \$850	\$770 - \$850
2023	4	N/A	\$1,050 - \$1,200	\$0	\$1,050 - \$1,200	\$1,050 - \$1,200
2BR	/ 1B	A				
Year	QT	Vac.	Face Rent	Conc.	Concd. Rent	Adj. Rent
2010	3	N/A	\$770	\$75	\$695	\$695
2017	2	N/A	\$857	\$0	\$857	\$857
2021	3	N/A	\$857	\$0	\$857	\$857
2023	4	N/A	\$1,259	\$0	\$1,259	\$1,259
2BR	/ 2B	Α				
Year	QT	Vac.	Face Rent	Conc.	Concd. Rent	Adj. Rent
2010	3	2.3%	\$810	\$100	\$710	\$710
2017	2	0.8%	\$914	\$0	\$914	\$914
2021	3	0.8%	\$930	\$0	\$930	\$930
2023	4	0.0%	\$1,279	\$0	\$1,279	\$1,279

Trend: Comments

3Q10 The property is now using a system that changes rents daily based on occupancy.

The contact noted that there is more demand for the one-bedroom units than there is for the two-bedroom units. Rents at the property change daily and are based on unit availability: the annual change in rent was unknown. The contact was unable to provide the number of units by unit type. Units are equipped with in-unit alarms, which if activated cost an additional \$25 per month. The property does not accept Housing Choice Vouchers.

3Q21 N/A

The contact was unable to provide the number of units by unit type. Units are equipped with in-unit alarms, which if activated cost an additional \$25 per month. The property does not currently accept Housing Choice Vouchers.

Paces Run, continued







Samara East

Effective Rent Date 10/24/2023

Location 8100 Bayfield Road

Columbia, SC 29223 Richland County

Distance 0.5 miles
Units 288
Vacant Units 4
Vacancy Rate 1.4%

Type Garden (2 stories)
Year Built/Renovated 1980 / N/A

Marketing Began N/A
Leasing Began N/A
Last Unit Leased N/A

Major Competitors Greenbrier Apartments

Tenant Characteristics 10% military, singles, some families.

Contact Name Beverly; Jamie Phone 803.736.2450



Utilities Market Information A/C Market not included -- central Program **Annual Turnover Rate** 42% Cooking not included -- electric not included -- electric Units/Month Absorbed N/A Water Heat **HCV** Tenants 7% Heat not included -- electric Within 1 month Other Electric not included Leasing Pace Annual Chg. in Rent Increased 3-5% Water included Concession None Sewer included Waiting List None Trash Collection included

Unit Mix	Unit Mix (face rent)											
Beds	Baths	Туре	Units	Size (SF)	Rent	Concession (monthly)	Restriction	Waiting List	Vacant	Vacancy Rate	Max Rent?	Range
0	1	Garden (2 stories)	12	515	\$949	\$0	Market	No	1	8.3%	N/A	None
1	1	Garden (2 stories)	92	780	\$1,009	\$0	Market	No	1	1.1%	N/A	None
2	2	Garden (2 stories)	160	918	\$1,109	\$0	Market	No	1	0.6%	N/A	None
3	2	Garden (2 stories)	24	1,031	\$1,229	\$0	Market	No	1	4.2%	N/A	None

Unit Mix

Market	Face Rent	Conc.	Concd. Rent	Util. Adj.	Adj. Rent
Studio / 1BA	\$949	\$0	\$949	\$0	\$949
1BR / 1BA	\$1,009	\$0	\$1,009	\$0	\$1,009
2BR / 2BA	\$1,109	\$0	\$1,109	\$0	\$1,109
3BR / 2BA	\$1,229	\$0	\$1,229	\$0	\$1,229

Samara East, continued

Amenities

In-Unit

Balcony/Patio Blinds
Cable/Satellite/Internet Carpeting
Central A/C Dishwasher
Garbage Disposal Oven
Refrigerator Walk-In Closet

Security None Services None

Washer/Dryer hookup

Property
Car Wash Clubhouse/Meeting Room/Community

Central Laundry Off-Street Parking
On-Site Management Picnic Area
Swimming Pool Tennis Court

Premium None Other None

Comments

The rent also includes pest control and basic cable. There were no additional comments.

Samara East, continued

Trend Report

Vacancy	Rates
vacancy	Maics

 1007
 1008
 3010
 4023

 6.9%
 8.7%
 3.8%
 1.4%

Tre	nd	: Ma	rket			
1BR	/ 1B	A				
Year	QT	Vac.	Face Rent	Conc.	Concd. Rent	Adj. Rent
2007	1	N/A	\$780	\$305	\$475	\$475
2008	1	N/A	\$633	\$65	\$568	\$568
2010	3	4.3%	\$649	\$0	\$649	\$649
2023	4	1.1%	\$1,009	\$0	\$1,009	\$1,009
2BR	/ 2B	A				
Year	QT	Vac.	Face Rent	Conc.	Concd. Rent	Adj. Rent
2007	1	N/A	\$695	\$347	\$348	\$348
2008	1	N/A	\$719	\$0	\$719	\$719
2010	3	3.1%	\$729	\$0	\$729	\$729
2023	4	0.6%	\$1,109	\$0	\$1,109	\$1,109
3BR	/ 2B	A				
Year	QT	Vac.	Face Rent	Conc.	Concd. Rent	Adj. Rent
2008	1	N/A	\$828	\$0	\$828	\$828
2010	3	4.2%	\$839	\$0	\$839	\$839
2023	4	4.2%	\$1,229	\$0	\$1,229	\$1,229
Studi	o / 1	IBA				
Year	QT	Vac.	Face Rent	Conc.	Concd. Rent	Adj. Rent

\$275

\$0

\$0

\$0

\$275

\$563

\$579

\$949

\$275

\$563

\$579

\$949

Trend: Comments

N/A

N/A

8.3%

8.3%

1

\$550

\$563

\$579

\$949

2007

2008

2010 3

2023

Parklane Apartments is a Market-rate property offering 288 studio, one, and two-bedroom units. Rent for studio units increased by 4%. There are three different rents for the one-bedroom, one-bath \$610, \$620, or \$630. Units for \$620 offer a fireplace, and units for \$630 offers fireplace, and washer/dryer hook-ups. Rent for these units have increased by 3%. Rents for two-bedroom, two-bath units have increased by 2%. Concession going on right now is half-off first 2 months rent with a one year lease. Contact said that the leasing pace depends on the situation but usually takes about 30-days.

The property manager reported that the one-bedroom units comprise of the most vacancies. Studio and three-bedrooms are the most popular units and usually remain occupied, or lease quickly. The property manager has been marketing to local businesses, posted ads in the local newspapers and websites. Parklane Apartments no longer accepts Housing Choice Vouchers; however have approximately 20 households that were grandfathered in. The property manager reported that high turnover was a result of military tenants being sent overseas and tenants moving out of state due to jobs transfers. She also believes the market is slow. Traffic has been reportedly slow. The property manager believes the holidays are also affecting traffic. She anticipates traffic to pick up in the next month.

3Q10 The rent also includes pest control and basic cable.

4023 The rent also includes pest control and basic cable. There were no additional comments.

Samara East, continued







Springtree Apartments

Effective Rent Date 10/24/2023

Location 250 Springtree Road

250 Springtree Road Columbia, SC 29223 Richland County

Distance 0.6 miles
Units 152
Vacant Units 2
Vacancy Rate 1.3%

Type Garden (2 stories)
Year Built/Renovated 1982 / 2017

Marketing Began N/A
Leasing Began N/A
Last Unit Leased N/A

Major Competitors Parklane, The Greenbrier
Tenant Characteristics 15% military, singles, roomates.

Contact Name Paula

Phone 803-741-0413



Utilities Market Information A/C Market not included -- central Program **Annual Turnover Rate** 15% Cooking not included -- electric not included -- electric Units/Month Absorbed N/A Water Heat **HCV** Tenants 0% Heat not included -- electric Other Electric Leasing Pace Up to three weeks not included Annual Chg. in Rent Fluctuates often Water not included Concession None Sewer not included Waiting List Trash Collection None not included

l	Unit Mix (face rent)												
	Beds	Baths	Туре	Units	Size (SF)	Rent	Concession (monthly)	Restriction	Waiting List	Vacant	Vacancy Rate	Max Rent?	Range
	1	1	Garden (2 stories)	0	694	\$885	\$0	Market	No	0	N/A	N/A	HIGH*
	1	1	Garden (2 stories)	80	694	\$850	\$0	Market	No	2	2.5%	N/A	LOW*
	2	1	Garden (2 stories)	0	984	\$980	\$0	Market	No	0	N/A	N/A	HIGH
	2	1	Garden (2 stories)	72	984	\$1,000	\$0	Market	No	0	0.0%	N/A	LOW

Unit Mix

Market	Face Rent	Conc.	Concd. Rent	Util. Adj.	Adj. Rent
1BR / 1BA	\$850 - \$885	\$0	\$850 - \$885	\$77	\$927 - \$962
2BR / 1BA	\$980 - \$1,000	\$0	\$980 - \$1,000	\$104 \$	\$1,084 - \$1,104

Springtree Apartments, continued

Amenities

In-Unit
Blinds Carpet/Hardwood
Central A/C Dishwasher
Ceiling Fan Garbage Disposal
Oven Refrigerator

Property

Exercise Facility
Off-Street Parking
Picnic Area

Central Laundry
On-Site Management
Swimming Pool

Security Patrol Services None

Premium Other None None

Comments

Tennis Court

The contact stated that rents fluctuate often due to pricing software.

Springtree Apartments, continued

Trend Report

Vacancy Rates

1020	2021	3Q21	4Q23
0.0%	0.0%	0.0%	1.3%

Trend: Market

1BR	/ 1B	A				
Year	QT	Vac.	Face Rent	Conc.	Concd. Rent	Adj. Rent
2020	1	0.0%	\$780	\$0	\$780	\$857
2021	2	0.0%	\$780	\$0	\$780	\$857
2021	3	0.0%	\$880	\$0	\$880	\$957
2023	4	2.5%	\$850 - \$885	\$0	\$850 - \$885	\$927 - \$962
2BR	/ 1B	A				
Year	QT	Vac.	Face Rent	Conc.	Concd. Rent	Adj. Rent
2020	1	N/A	\$825 - \$880	\$0	\$825 - \$880	\$929 - \$984
2021	2	N/A	\$825 - \$880	\$0	\$825 - \$880	\$929 - \$984
2021	3	N/A	\$1,000 - \$1,055	\$0	\$1,000 - \$1,055	\$1,104 - \$1,159
2023	4	0.0%	\$980 - \$1,000	\$0	\$980 - \$1,000	\$1,084 - \$1,104

Trend: Comments

1020	The contact stated the property renovated all units during 2016 and 2017, including new flooring, cabinets, paint, countertops, appliances, and
	fixtures. Higher end renovations include stainless steel appliances and command a premium of \$25 over the listed rents. Basic renovations include
	black appliances.

2021 The contact stated that rent collection and occupancy has not been negatively impacted by COVID-19.

The contact stated that rents can change day-to-day due to supply and demand. The given rents are the rates of the most recently leased units.

4Q23 The contact stated that rents fluctuate often due to pricing software.

Springtree Apartments, continued





The Preserve At Windsor Lake

11/01/2023 Effective Rent Date

1460 Oakcrest Drive Location

Columbia, SC 29223 **Richland County**

Distance 1.4 miles Units 264 4 Vacant Units Vacancy Rate 1.5%

Last Unit Leased

Garden (3 stories) Type Year Built/Renovated 2007 / N/A Marketing Began 7/01/2007 Leasing Began N/A

Villa at Spear Creek, Crowne Lake, Green Hill **Major Competitors**

N/A

Tenant Characteristics Local area tenants, small families,

professionals, military

Contact Name Phone 803-918-5934



Market Information

Utilities Market A/C not included -- central Program **Annual Turnover Rate** 23% Cooking not included -- electric Units/Month Absorbed 12 Water Heat not included -- electric **HCV** Tenants 0% Heat not included -- electric Leasing Pace Within two weeks Other Electric not included

Annual Chg. in Rent Changes daily Water not included Concession None Sewer not included Waiting List None Trash Collection not included

Unit Mi	x (face r	ent)										
Beds	Baths	Туре	Units	Size (SF)	Rent	Concession (monthly)	Restriction	Waiting List	Vacant	Vacancy Rate	Max Rent?	Range
1	1	Garden (3 stories)	66	775	\$1,235	\$0	Market	No	0	0.0%	N/A	None
1	1	Garden (3 stories)	18	918	\$1,350	\$0	Market	No	0	0.0%	N/A	None
2	2	Garden (3 stories)	114	1,082	\$1,445	\$0	Market	No	1	0.9%	N/A	None
2	2	Garden (3 stories)	18	1,222	\$1,565	\$0	Market	No	1	5.6%	N/A	None
3	2	Garden (3 stories)	36	1,250	\$1,655	\$0	Market	No	2	5.6%	N/A	None
3	2	Garden (3 stories)	12	1,390	\$1,830	\$0	Market	No	0	0.0%	N/A	None

Unit Mix

Market	Face Rent	Conc.	Concd. Rent l	Jtil. Adj. Adj. Rent
1BR / 1BA	\$1,235 - \$1,350	\$0	\$1,235 - \$1,350	\$77 \$1,312 - \$1,427
2BR / 2BA	\$1,445 - \$1,565	\$0	\$1,445 - \$1,565	\$104 \$1,549 - \$1,669
3BR / 2BA	\$1,655 - \$1,830	\$0	\$1,655 - \$1,830	\$140 \$1,795 - \$1,970

The Preserve At Windsor Lake, continued

Amenities

In-Unit
Balcony/Patio Carpeting
Central A/C Coat Closet
Dishwasher Exterior Storage
Ceiling Fan Garbage Disposal
Microwave Oven

Refrigerator Vaulted Ceilings
Walk-In Closet Washer/Dryer hookup

Property

Business Center/Computer Lab Car Wash
Clubhouse/Meeting Room/Community Exercise Facility
Garage(\$135.00) Central Laundry
Off-Street Parking On-Site Management

Playground

Security Intercom (Buzzer) Limited Access

n (Buzzer) None Access

Services

Premium Other None None

Comments

Picnic Area

Swimming Pool

The contact stated the property does not accept Housing Choice Vouchers. Garage parking is an additional \$135 per month. The contact had no further comments.

The Preserve At Windsor Lake, continued

Trend Report

Vacancy Rates

4021	1022	2023	4Q23
N/A	N/A	0.8%	1.5%

Tre	nd	: Ma	rket			
1BR	/ 1B	A				
Year	QT	Vac.	Face Rent	Conc.	Concd. Rent	Adj. Rent
2021	4	N/A	\$1,205 - \$1,275	\$0	\$1,205 - \$1,275	\$1,282 - \$1,352
2022	1	N/A	\$1,215 - \$1,275	\$0	\$1,215 - \$1,275	\$1,292 - \$1,352
2023	2	0.0%	\$1,235 - \$1,350	\$0	\$1,235 - \$1,350	\$1,312 - \$1,427
2023	4	0.0%	\$1,235 - \$1,350	\$0	\$1,235 - \$1,350	\$1,312 - \$1,427
2BR	/ 2B	A				
Year	QT	Vac.	Face Rent	Conc.	Concd. Rent	Adj. Rent
2021	4	N/A	\$1,505 - \$1,555	\$0	\$1,505 - \$1,555	\$1,609 - \$1,659
2022	1	N/A	\$1,505 - \$1,555	\$0	\$1,505 - \$1,555	\$1,609 - \$1,659
2023	2	0.8%	\$1,445 - \$1,565	\$0	\$1,445 - \$1,565	\$1,549 - \$1,669
2023	4	1.5%	\$1,445 - \$1,565	\$0	\$1,445 - \$1,565	\$1,549 - \$1,669
3BR	/ 2B	Α				
Year	QT	Vac.	Face Rent	Conc.	Concd. Rent	Adj. Rent
2021	4	N/A	\$1,695 - \$1,745	\$0	\$1,695 - \$1,745	\$1,835 - \$1,885
2022	1	N/A	\$1,715 - \$1,765	\$0	\$1,715 - \$1,765	\$1,855 - \$1,905
2023	2	2.1%	\$1,735 - \$1,830	\$0	\$1,735 - \$1,830	\$1,875 - \$1,970
2023	4	4.2%	\$1,655 - \$1,830	\$0	\$1,655 - \$1,830	\$1,795 - \$1,970

Trend: Comments

4021	The contact declined to provide the current occupancy rate at the property. This property does not accept Housing Choice Vouchers.
------	--

- The contact declined to provide the current occupancy and turnover rate at the property. This property does not accept Housing Choice Vouchers.
- The contact stated that the property does not accept Housing Choice Vouchers. Garage parking is an additional \$135 per month. The contact had no further comments.
- The contact stated the property does not accept Housing Choice Vouchers. Garage parking is an additional \$135 per month. The contact had no further comments.

COMPARABLE PROPERTY ANALYSIS

Following are relevant characteristics of comparable properties surveyed:

Location

The following table illustrates the Subject and comparable property household incomes, median gross rents, median home values, and WalkScores.

LOCATIONAL COMPARISON SUMMARY

#	Property Name	Program	Distance Subject	Household Income	Median Home Value	Median Rent	Crime Index	Walk Score	Vacant Housing	% Renter HH
S	Wyndham Pointe	LIHTC		\$38,444	\$203,295	\$1,015	225	10	6.6%	80.2%
1	Arcadia Park	LIHTC	1.9 miles	\$33,272	\$203,295	\$1,015	161	45	10.5%	64.5%
2	Brookside Crossing	LIHTC	0.5 mile	\$36,761	\$203,295	\$1,015	219	39	8.6%	76.3%
3	Deer Park Apartments	LIHTC	0.8 mile	\$45,945	\$203,295	\$1,015	219	31	10.8%	54.5%
4	Jackson Creek Station	LIHTC	2.0 miles	\$35,134	\$329,185	\$1,172	161	65	10.6%	61.6%
5	Regent Park Apartments	LIHTC	1.9 miles	\$47,642	\$203,295	\$1,015	181	9	10.0%	78.4%
6	Gable Hill	Market	0.5 mile	\$48,207	\$203,295	\$1,015	201	22	10.1%	76.6%
7	Greenbrier Apartments	Market	0.4 mile	\$36,246	\$203,295	\$1,015	219	31	8.5%	78.4%
8	Paces Run	Market	0.3 mile	\$45,152	\$203,295	\$1,015	219	31	8.2%	65.3%
9	Samara East	Market	0.5 mile	\$50,692	\$203,295	\$1,015	201	9	10.3%	73.0%
10	Springtree Apartments	Market	0.6 mile	\$36,267	\$203,295	\$1,015	219	29	8.6%	75.8%
11	The Preserve At Windsor Lake	Market	1.4 miles	\$47,648	\$203,295	\$1,015	174	23	9.6%	77.0%

The Subject is located in a mixed-use neighborhood in northeastern Columbia. All of the comparables are located within 2.0 miles of the Subject. All of the comparables are located in generally similar neighborhoods to the Subject, offering a similar median rent and median home values. Furthermore, the Subject is located in a "Car Dependent" area as defined by WalkScore. All of the comparables are located in areas with either similar to superior walkability to the Subject. Overall, the Subject is located in a generally similar location relative to the comparables, with Jackson Creek Station being located in a slightly superior location to the Subject.

Unit Size

The following table summarizes unit sizes in the market area, and provides a comparison of the Subject's unit size and the surveyed average unit sizes in the market.

UNIT SIZE COMPARISON

Bedroom Type	1BR	2BR	3BR
Subject	1,036	1,232	1,444
Average	759	1,040	1,219
Min	614	918	1,031
Max	918	1,222	1,390
Advantage/Disadvantage	36.5%	18.4%	18.4%

The Subject's one, two, and three-bedroom unit sizes are above the range of the surveyed comparable unit sizes. As such, the Subject's units appear to offer a significant size advantage over local supply. We have considered the Subject's unit sizes in our determination of achievable rents.



Vacancy

The following table summarizes overall weighted vacancy trends at the surveyed properties.

OVERALL VACANCY

Property Name	Program	Tenancy	Total Units	Vacant Units	Vacancy %
Arcadia Park	LIHTC	Family	75	0	0.0%
Brookside Crossing	LIHTC	Family	162	2	1.2%
Deer Park Apartments	LIHTC	Family	64	0	0.0%
Jackson Creek Station	LIHTC	Family	56	0	0.0%
Regent Park Apartments	LIHTC	Family	72	0	0.0%
Gable Hill	Market	Family	180	2	1.1%
Greenbrier Apartments	Market	Family	526	17	3.2%
Paces Run	Market	Family	260	6	2.3%
Samara East	Market	Family	288	4	1.4%
Springtree Apartments	Market	Family	152	2	1.3%
The Preserve At Windsor Lake	Market	Family	264	4	1.5%
LIHTC Total			429	2	0.5%
Market Total			1,670	35	2.1%
Overall Total			2,099	37	1.8%

The comparable properties reported vacancy rates ranging from zero to 3.2 percent, with an overall weighted average of 1.8 percent. Managers at four of the five LIHTC properties reported being fully occupied. The average vacancy rate reported by the affordable comparables was 0.5 percent, well below the 2.1 percent weighted average reported by the market rate properties. All of the market rate properties reported vacancy rates of 3.2 percent or less. The average LIHTC vacancy rate of 0.5 percent is considered exceptionally low, and indicative of supply-constrained conditions.

According to the Subject's rent roll dated August 31, 2023 (most recent available), the Subject was fully occupied. The Subject has operated with vacancy and collection loss ranging from 5.3 to 11.3 percent between 2020 and 2023 year to date. Based on the performance of the LIHTC comparables, we expect the Subject will operate with a vacancy and collection loss of five percent or less.

LIHTC Vacancy – All LIHTC Properties in PMA

There are 429 total LIHTC units in the PMA that we included in this comparable analysis. There are just two total vacant units among these five properties, and four of the five maintain waiting lists. This indicates strong demand for affordable rental housing in the PMA.

REASONABILITY OF RENTS

This report is written to SC Housing guidelines. Therefore, the conclusions contained herein may not be replicated by a more stringent analysis. We recommend that the sponsor understand the guidelines of all those underwriting the Subject development to ensure the proposed rents are acceptable to all.

Rents provided by property managers at some properties may include all utilities while others may require tenants to pay all utilities. To make a fair comparison of the Subject rent levels to comparable properties, rents at comparable properties are typically adjusted to be consistent with the Subject. Adjustments are made using the Housing Authority of the City of Columbia (Columbia Housing) utility allowance schedule, effective February 27, 2023, which is the most recent available. The rent analysis is based on net rents at the Subject as well as surveyed properties.

The following table summarizes the Subject's proposed 60 percent AMI net rents compared to the maximum allowable 60 percent AMI rents, and the net 60 percent AMI rents at the comparables.



LIHTC	RFNT	COMPA	RISON	@60%

Property Name	County	1BR	2BR	3BR	Max Rent?
Wyndham Pointe	Richland	\$867	\$1,047	\$1,212	Yes
2023 LIHTC Maximum Rent (Net)	Richland	\$867	\$1,047	\$1,212	
Arcadia Park	Richland	\$753	\$881	\$986	No
Brookside Crossing	Richland	\$886	\$1,056	\$1,212	Yes
Jackson Creek Station	Richland	-	\$1,017	\$1,065	No
Regent Park Apartments	Richland	\$826	\$983	\$1,129	No
Average	-	\$822	\$984	\$1,098	
Achievable LIHTC Rent		\$867	\$984	\$1,212	Yes

The Subject's proposed 60 percent AMI rents are set at the 2023 maximum allowable levels. As shown, one of the LIHTC comparables, Brookside Crossing, reported rents at the 2023 maximum allowable levels. Three of the four properties are fully occupied and maintain extensive waiting lists, indicating supply constrained conditions. Furthermore, based on the comparable data, we believe the Subject would achieve LIHTC rents at the 2023 maximum allowable levels. Upon completion of renovations, the Subject will be most similar to Brookside Crossing in terms of amenities and design.

Brookside Crossing is a 162-unit LIHTC development located 0.5 miles south of the Subject in a generally similar neighborhood. The property was built in 2009 and will exhibit a slightly inferior condition to the Subject post-renovation. This property offers generally similar unit and common area amenities as the Subject. Brookside Crossing is currently 98.8 percent occupied, indicating rents are well received. In overall terms, we believe the Subject will be a relatively similar product to Brookside Crossing. Based on the performance of this property, as well as the comparables, we believe the Subject's proposed rents at the 60 percent AMI level are achievable.

The Subject will offer a superior product relative to the LIHTC comparables achieving maximum allowable rents post renovation. Therefore, we have concluded to achievable LIHTC rents at the 2023 maximum allowable level for the Subject's one, two, and three-bedroom units.

Achievable Market Rents

Based on the quality of the surveyed comparable properties and the anticipated quality of the proposed Subject, we conclude that the Subject's rental rates are below the achievable market rates for the Subject's area. The following table shows both adjusted market rent comparisons and achievable market rents.

SUBJECT COMPARISON TO MARKET RENTS

Unit Type	Rent Level	Square Feet	Pro Forma Rent	Surveyed Min	Surveyed Max	Surveyed Average	Achievable Market Rent	Subject Rent Advantage
1BR/1BA	@60%	1,036	\$867	\$835	\$1,427	\$1,080	\$1,350	36%
2BR/2BA	@60%	1,232	\$1,047	\$1,084	\$1,669	\$1,241	\$1,550	32%
3BR/2BA	@60%	1,444	\$1,212	\$1,229	\$1,970	\$1,548	\$1,750	31%

The Subject's proposed LIHTC rents are below the achievable market rents, and below the comparable averages. The Subject's proposed LIHTC rents represent a rent advantage of 31 to 36 percent over the achievable market rents. We compared the Subject to **The Preserve At Windsor Lake**, as it is the most similar comparable to the Subject as proposed.

The Preserve At Windsor Lake is a 264-unit, garden-style development located 1.4 miles east of the Subject site, in a neighborhood considered generally similar to the Subject's location. The property was built in 2007, and currently exhibits a slightly inferior condition relative to the Subject as proposed. The Preserve At Windsor Lake offers generally similar common area amenities relative to the Subject. The property is currently 98.5 percent occupied, indicating rents have been well received. Overall, we have placed the Subject's achievable



rents below this property, but above the overall average rents reported by the comparables. The following table compares the Subject with The Preserve At Windsor Lake.

SUBJECT COMPARISON TO THE PRESERVE AT WINDSOR LAKE

Unit Type	Subject Achievable Market Rent	Square Feet	Subject RPSF	Comparable Rent	Square Feet	Comparable RPSF
1BR/1BA	\$1,350	1,036	\$1.30	\$1,427	918	\$1.55
2BR/2BA	\$1,550	1,232	\$1.26	\$1,669	1,222	\$1.37
3BR/2BA	\$1,750	1,444	\$1.21	\$1,970	1,390	\$1.42

In conclusion, we believe that the Subject's achievable market rents are \$1,350, \$1,550, and \$1,750, for its one, two, and three-bedroom units, respectively. The maximum allowable LIHTC rents provide an advantage between 31 to 36 percent relative to the achievable market rents conclusions.

Impact of Subject on Other Affordable Units in Market

Managers at four of the five LIHTC comparables reported being fully occupied with a waiting list. With a limited supply of affordable housing options in the PMA, and a stable and growing base of low-income tenants, we believe the Subject's rehabilitation will have no long-term impact on the existing area LIHTC developments. Since the Subject will continue to operate as a tax credit development, we do not expect any impact on the existing restricted housing in the market.

Rent versus Buy Analysis

We performed a rent/buy analysis. Our inputs assume a three-bedroom, single-family home listing on Zillow in the Subject's neighborhood with a purchase price of \$196,000 and an interest rate of 7.00 percent for a 30-year fixed mortgage with a ten percent down payment. This was compared with the cost to rent the Subject's three-bedroom unit at 60 percent of AMI. The analysis indicates that with a monthly differential of \$367, it is more affordable to rent than purchase a home. The rent buy analysis is illustrated in the following table.



RE	NT BUY ANALYSIS					
Property Type:	Property Type: Three-Bedroom Single-Family Home					
Sales Price		\$196,000				
Down Payment at 10.0%		\$19,600				
Mortgage Amount		\$176,400				
Current Interest Rate		7.00%				
Homeownership Costs	Monthly	% of Home Value	Annual			
Mortgage Payment	\$1,174		\$14,083			
Property Taxes	\$204	1.25%	\$2,450			
Private Mortgage Insurance*	\$74	0.50%	\$882			
Maintenance	\$327	2.00%	\$3,920			
Utility Costs**	\$140		\$1,680			
Tax Savings	(\$307)		(\$3,685)			
	Cost Comparison					
	Monthly		Annual			
Costs of Homeownership	\$1,611		\$19,330			
Cost of Renting At Subject	\$1,244		\$14,928			
Differential	\$367		\$4,402			
	ost of Occupancy					
	Homeownership	2.000/	ФГ 000			
Closing Costs		3.00%	\$5,880			
Down Payment at 10.0%		10.00%	\$19,600			
Total	Cubicat Dontal		\$25,480			
First Monthle Dont	Subject Rental					
First Month's Rent	\$1,244					
Security Deposit	\$1,244					
Total	\$2,488					

^{*} Based upon 0.50% of mortgage amount

As illustrated, the cash due at occupancy category totals over \$25,000 for the down payment and closing costs. The cash necessary for homeownership is still a barrier to many families. In general, first-time home buyers have difficulty saving for a down payment. Further, renting at the Subject is more affordable than purchasing even a modest single-family home in the Subject's neighborhood. Overall, we believe the Subject will face limited competition from homeownership.

Availability of Affordable Housing Options

There are just two vacant LIHTC units among the five LIHTC comparables surveyed, and four of the LIHTC comparables maintain waiting lists. Within the PMA, there are 20 existing LIHTC properties. Overall, the availability of LIHTC housing targeting low and moderate incomes is considered constrained given the demographic growth of the PMA, and high occupancy rates. The renovation of the Subject will improve the existing affordable housing stock in the PMA, and will preserve affordable units for low-income families.

Summary Evaluation of the Proposed Project

Overall, the local multifamily market is performing well with a 0.5 percent vacancy rate among all of the surveyed comparable projects. All of the LIHTC comparables maintain waiting lists, suggesting pent-up demand for affordable housing. One of the four LIHTC comparables are achieving maximum allowable rents. Given the rents being achieved by the comparables, and considering the Subject's condition post-renovations, we have concluded to achievable LIHTC rents at the 2023 maximum allowable level for the Subject's one, two, and three-bedroom units, respectively. These conclusions provide rent advantages between 31 to 36 percent relative to our market rent conclusions. Overall, we believe that the Subject will continue to be successful in the local market as proposed.



^{**} Utility Costs Included in Rent at Subject



INTERVIEWS

The following section details interviews with local market participants regarding the housing market.

Planning

New Supply

We were unable to reach a contact with the City of Columbia Planning Department regarding planned, proposed, or under construction developments in the PMA. Therefore, we conducted online research and utilized a CoStar new construction report. According to CoStar, there are no proposed, planned, or under construction developments within the PMA.

LIHTC Competition / Recent and Proposed Construction

According to the South Carolina State Housing Finance and Development Authority (SC Housing) LIHTC allocation lists from 2020 to 2023, five properties have been allocated tax credits within the PMA within the last three years, which are detailed below. It should be noted that as of the date of this report, 2023 allocation lists have not yet been released.

- Midtown at Bull was allocated LIHTCs in 2021 for the new construction of 90 one, two, and three-bedroom units restricted to families earning 20, 50, 60, and 70 percent of the AMI or less.
 Construction is expected to be completed in 2024, and will directly compete with the Subject.
- Garden Lakes was allocated LIHTCs in 2021 for the new construction of 288 one, two, and threebedroom units restricted to families earning 60 percent of the AMI or less. Construction is expected to be completed in 2024, and will directly compete with the Subject.
- The Haven at Palmer Pointe was allocated LIHTCs in 2021 for the new construction of 150 one and two-bedroom units restricted to seniors earning 60 percent of the AMI or less. Construction is expected to be completed in 2024, and will not directly compete with the Subject as an age-restricted development.
- Addison Pointe was allocated LIHTCs in 2022 for the new construction of 80 one, two, and three-bedroom units restricted to families earning 20, 50, 60, and 70 percent of the AMI or less.
 Construction is expected to be completed in 2025, and will directly compete with the Subject.

Section 8/Public Housing

We attempted to contact the Columbia Housing Authority for information to obtain information regarding voucher usage and waiting list data in the county; however, as of the date of this report our phone calls and emails have not been returned. The current payment standards are detailed in the table below and were provided by the Columbia Housing Authority.

PAYMENT STANDARDS

Bedroom Type	Gross Payment Standard	Subject Highest Proposed Gross LIHTC Rent
1BR	\$1,221	\$945
2BR	\$1,371	\$1,134
3BR	\$1,755	\$1,309

Source: Columbia Housing Authority, effective 10/1/2023

As indicated in the previous table, payment standards for all unit types are above the Subject's highest proposed LIHTC rents, indicating tenants in these units would not have to pay additional money out of pocket.

Property Managers

The results from our interviews with property managers are included in the comments section of the property profile reports.





Recommendations

We believe there is ample demand for the Subject in the PMA and the market supports the renovation of the Subject development as proposed. The overall capture rate for the Subject's units is 13.8 percent, which is within the acceptable demand threshold and considered good. Individual capture rates by bedroom type range from 4.9 to 19.9 percent, which are all considered good to excellent. Between 2023 and market entry, the total number of households is expected to increase at a rate of 0.5 percent annually in the PMA. The Subject is located within 1.5 miles of most community services and facilities that tenants would utilize on a consistent basis.

One of the LIHTC comparables, Brookside Crossing, reported rents at the 2023 maximum allowable levels. Three of the four properties are fully occupied and maintain extensive waiting lists, indicating supply constrained conditions. Furthermore, based on the comparable data, we believe the Subject would achieve LIHTC rents at the 2023 maximum allowable levels. These conclusions provide rent advantages between 31 to 36 percent relative to our market rent conclusions. Overall, we believe that the Subject will continue to be successful in the local market as proposed.

Further, there are several apparent strengths of the Subject's site, development scheme, and market, which include:

- Rehabilitation of the Subject's units will positively impact the surrounding area by improving the Subject's condition and street appeal, and thus representing an improvement to the neighborhood.
- The Subject is an existing property that is 100 percent occupied and maintains a waiting list, and all tenants are expected to remain income qualified post-renovation.
- The Subject will be in good condition upon completion and will fill a need for good quality/newly renovated affordable housing in Columbia and the surrounding areas.

As such, we recommend the Subject as proposed, with no suggested modifications.



X. SIGNED STATEMENT REQUIREMENTS

I affirm that an employee of Novogradac (Julianne Magana) has made a physical inspection of the market and surrounding area and the information obtained in the field has been used to determine the need and demand for new rental LIHTC units. I understand that any misrepresentation of this statement may result in denial of further participation in the South Carolina State Housing Finance and Development Authority's programs. I also affirm that I have no financial interest in the project or current business relationship with the ownership entity and my compensation is not contingent on this project being funded. This report was written according to the SCSHFDA's market study requirements. The information included is accurate and can be relied upon by SCSHFDA to present a true assessment of the low-income housing rental market.

Respectfully submitted, Novogradac

Date: December 7, 2023

Rachel B. Denton, MAI

Partner

Rachel.Denton@novoco.com

913.312.4612



ADDENDUM A

Qualifications of Consultants

STATEMENT OF PROFESSIONAL QUALIFICATIONS RACHEL BARNES DENTON, MAI

I. EDUCATION

Cornell University, Ithaca, NY School of Architecture, Art & Planning, Bachelor of Science in City & Regional Planning

II. LICENSING AND PROFESSIONAL AFFILIATION

Designated Member of the Appraisal Institute

Member of National Council of Housing Market Analysts (NCHMA)

Member of Commercial Real Estate Women (CREW) Network

2011 and 2012 Communications Committee Co-Chair for the Kansas City CREW Chapter

2013 Director of Communications and Board Member for Kansas City CREW

2014 Secretary and Board Member for Kansas City CREW

2015 and 2016 Treasurer and Board Member for Kansas City CREW

State of Arkansas Certified General Real Estate Appraiser No. CG3527

State of California Certified General Real Estate Appraiser No. AG044228

State of Colorado Certified General Real Estate Appraiser No. 100031319

State of Georgia Certified General Real Estate Appraiser No. 391113

State of Hawaii Certified General Real Estate Appraiser No. CGA1048

State of Illinois Certified General Real Estate Appraiser No. 553.002012

State of Kansas Certified General Real Estate Appraiser No. G-2501

State of Minnesota Certified General Real Estate Appraiser No. 40420897

State of Missouri Certified General Real Estate Appraiser No. 2007035992

State of Nebraska Certified General Real Estate Appraiser No. CG2017030R

State of New Mexico Certified General Real Estate Appraiser No. 03424-G

State of North Dakota Certified General Real Estate Appraiser No. CG-219110

State of Oklahoma Certified General Real Estate Appraiser No. 13085CGA

State of Oregon Certified General Real Estate Appraiser No. C000951

State of South Dakota Certified General Real Estate Appraiser No. 1488CG

State of Texas Certified General Real Estate Appraiser No. 1380396

III. PROFESSIONAL EXPERIENCE

Novogradac & Company LLP, Partner

Novogradac & Company LLP, Principal

Novogradac & Company LLP, Manager

Novogradac & Company LLP, Senior Real Estate Analyst

IV. PROFESSIONAL TRAINING

Educational requirements successfully completed for the Appraisal Institute:

Appraisal Principals, September 2004

Basic Income Capitalization, April 2005

Uniform Standards of Professional Appraisal Practice, various

Advanced Income Capitalization, August 2006

General Market Analysis and Highest & Best Use, July 2008

Advanced Sales Comparison and Cost Approaches, June 2009

Advanced Applications, June 2010

General Appraiser Report Writing and Case Studies, July 2014

Standards and Ethics (USPAP and Business Practices and Ethics)

MAI Designation General Comprehensive Examination, January 2015

MAI Demonstration of Knowledge Report, April 2016

Completed HUD MAP Training, Columbus, Ohio, May 2010

V. SPEAKING ENGAGEMENTS

Have presented and spoken at both national Novogradac conferences and other industry events, including the National Council of Housing Market Analysts (NCHMA) Annual Meetings and FHA Symposia, National Housing and Rehabilitation Association Conferences, Institute for Professional and Executive Development (IPED) conferences, and state housing conferences, such as Housing Colorado, Idaho Conference on Housing and Economic Development, and Missouri Workforce Housing Association.

VI. REAL ESTATE ASSIGNMENTS

A representative sample of Due Diligence, Consulting, or Valuation Engagements includes:

In general, have managed and conducted numerous market analyses and appraisals for various types of commercial real estate since 2003, with an emphasis on affordable multifamily housing.

Conducted and managed appraisals of proposed new construction, rehab and existing Low-Income Housing Tax Credit properties, Section 8 Mark-to-Market properties, HUD MAP Section 221(d)(4) and 223(f) properties, USDA Rural Development, and market rate multifamily developments on a national basis. Analysis includes property screenings, economic and demographic analysis, determination of the Highest and Best Use, consideration and application of the three traditional approaches to value, and reconciliation to a final value estimate. Both tangible real estate values and intangible values in terms of tax credit valuation, beneficial financing, and PILOT are considered. Additional appraisal assignments completed include commercial land valuation, industrial properties for estate purposes, office buildings for governmental agencies, and leasehold interest valuation. Typical clients include developers, lenders, investors, and state agencies.

Managed and conducted market studies for proposed Low-Income Housing Tax Credit, HUD MAP, market rate, HOME financed, USDA Rural Development, and HUD subsidized properties, on a national basis. Analysis includes property screenings, market analysis, comparable rent surveys, demand analysis based on the number of income qualified renters in each market, supply analysis and operating expense analysis. Property types include proposed multifamily, senior independent living, large family, acquisition/rehabilitation, historic rehabilitation, adaptive reuse, and single family developments. Typical clients include developers, state agencies, syndicators, investors, and lenders.

Completed and have overseen numerous Rent Comparability Studies in accordance with HUD's Section 8 Renewal Policy and Chapter 9 for various property owners and local housing authorities. The properties were typically undergoing recertification under HUD's Mark to Market Program.

Performed and managed market studies and appraisals of proposed new construction and existing properties insured and processed under the HUD Multifamily Accelerated Processing (MAP) program. These reports meet the requirements outlined in HUD Handbook 4465.1 and Chapter 7 of the HUD MAP Guide for 221(d)(4) and 223(f) programs.

Performed and have overseen numerous market study/appraisal assignments for USDA RD properties in several states in conjunction with acquisition/rehabilitation redevelopments. Documents are used by states, lenders, USDA, and the developer in the underwriting process. Market studies are compliant to State, lender, and USDA requirements. Appraisals are compliant to lender requirements and USDA HB-1-3560 Chapter 7 and Attachments.

Performed appraisals for estate valuation and/or donation purposes for various types of real estate, including commercial office, industrial, and multifamily assets. These engagements were conducted in accordance with the Internal Revenue Service's Real Property Valuation Guidelines, Section 4.48.6 of the Internal Revenue Manual.

Performed analyses of various real estate asset types subject to USDA 4279-B, Business and Industry Guaranteed Loans, Section 4279.150 guidelines.

Conducted various Highest and Best Use Analyses for proposed development sites nationwide. Completed an analysis of existing and proposed senior supply of all types of real estate, and conducted various demand and feasibility analyses in order to determine level of need and ultimate highest and best use of the site.

Prepared a three-year Asset Management tracking report for a 16-property portfolio in the southern United States. Data points monitored include economic vacancy, levels of concessions, income and operating expense levels, NOI and status of capital projects. Data used to determine these effects on the project's ability to meet its income-dependent obligations.

Performed various community-wide affordable housing market analyses and needs assessments for communities and counties throughout the Midwest and Western states. Analysis included demographic and demand forecasts, interviews with local stakeholders, surveys of existing and proposed affordable supply, and reconciliation of operations at existing supply versus projected future need for affordable housing. Additional analyses included identification of housing gaps, potential funding sources, and determination of appropriate recommendations. These studies are typically used by local, state, and federal agencies in order to assist with housing development and potential financing.

Managed a large portfolio of Asset Management reports for a national real estate investor. Properties were located throughout the nation, and were diverse in terms of financing, design, tenancy, and size. Information compiled included income and expenses, vacancy, and analysis of property's overall position in the market.

Performed appraisals of LIHTC assets for Year 15 purposes; valuations of both the underlying real estate asset and partnership interests have been completed. These reports were utilized to assist in potential disposition options for the property, including sale of the asset, buyout of one or more partners, or potential conversion to market rate.

STATEMENT OF PROFESSIONAL QUALIFICATIONS SARA N. NACHBAR

I. <u>EDUCATION</u>

Missouri State University – Springfield, MO Bachelor of Science – Finance

II. PROFESSIONAL EXPERIENCE

Manager, Novogradac & Company LLP Executive Assistant, Helzberg Entrepreneurial Mentoring Program Claims Associate, Farmers Insurance Group

III. REAL ESTATE ASSIGNMENTS

A representative sample of Due Diligence, Consulting, or Valuation Engagements includes:

- Prepared market studies for proposed Low-Income Housing Tax Credit, market rate, HOME financed, USDA Rural Development, and HUD subsidized properties on a national basis. Analysis includes property screenings, market analysis, comparable rent surveys, demand analysis based on the number of income qualified renters in each market, supply analysis, and operating expenses analysis. Property types include proposed multifamily, senior independent living, assisted living, large family, and acquisition with rehabilitation.
- Assisted in the preparation of Rent Comparability Studies for expiring Section 8 contracts and USDA contracts for subsidized properties located throughout the United States. Engagements included site visits to the subject property, interviewing and inspecting potentially comparable properties, and the analyses of collected data including adjustments to comparable data to determine appropriate adjusted market rents using HUD form 92273.
- Assisted in appraisals of proposed new construction, rehabilitation, and existing Low Income
 Housing Tax Credit properties. Analysis included property screenings, valuation analysis,
 capitalization rate analysis, expense comparability analysis, determination of market rents,
 and general market analysis.
- Prepared market studies and assisted in appraisals of proposed new construction and existing
 properties under the HUD Multifamily Accelerated Processing (MAP) program. These reports
 meet the requirements outlined in HUD Handbook 4465.1 and Chapter 7/Appendix 7 of the
 HUD MAP Guide for 221(d)(4) and 223(f) programs.
- Researched and analyzed local and national economy and economic indicators for specific projects throughout the United States. Research included employment industries analysis, employment historical trends and future outlook, and demographic analysis.
- Examined local and national housing market statistical trends and potential outlook in order to determine sufficient demand for specific projects throughout the United States.
- Conducted more than 40 site inspections for market studies and appraisals throughout the United States for various reports including proposed new construction and rehabilitation multifamily projects.

STATEMENT OF PROFESSIONAL QUALIFICATIONS

Brandon Mitchell

I. Education

University of Kansas

Bachelor of Science – Political Science

University of Missouri-Kansas City

Master of Science in Entrepreneurial Real Estate

II. <u>Professional Experience</u>

Analyst - Novogradac & Company LLP

III. Real Estate Assignments

A representative sample of Due Diligence, Consulting, or Valuation Engagements includes:

- Assisted in appraisals of proposed new construction, rehabilitation, and existing Low Income Housing Tax Credit properties. Analysis included property screenings, valuation analysis, capitalization rate analysis, expense comparability analysis, determination of market rents, and general market analysis.
- Prepared market studies for proposed Low-Income Housing Tax Credit, market rate, HOME financed, USDA Rural Development, and HUD subsidized properties on a national basis. Analysis includes property screenings, market analysis, comparable rent surveys, demand analysis based on the number of income qualified renters in each market, supply analysis, and operating expenses analysis. Property types include proposed multifamily, senior independent living, assisted living, large family, and acquisition with rehabilitation.
- Assisted in the preparation of Rent Comparability Studies for expiring Section 8 contracts and USDA contracts for subsidized properties located throughout the United States. Engagements included site visits to the subject property, interviewing and inspecting potentially comparable properties, and the analyses of collected data including adjustments to comparable data to determine appropriate adjusted market rents using HUD form 92273.
- Researched and analyzed local and national economy and economic indicators for specific projects throughout the United States. Research included employment industries analysis, employment historical trends and future outlook, and demographic analysis.
- Examined local and national housing market statistical trends and potential outlook in order to determine sufficient demand for specific projects throughout the United States.

ADDENDUM B
Utility Allowance Schedule

OMB Approval No. 2577-0169

U.S. Department of Housing and Urban Development

Office of Public and Indian Housing

The following allowances are used to determine the total cost of tenant-furnished utilities and appliances.

Locality/PHA	ing allowances are us	Green Discount	the total cos	Unit Type	ned dilliles and	аррнаноез.	Date (mm/dd/yyyy)
SC State Housing Finance &							
Development Agency Midlands Region		Energy Star		Larger Apartm	ent Bldgs. (5+ uni	ts)	02/27/2023
Midialius Negion				Monthly Do	llar Allowances		
Utility or Service	Fuel Type	0 BR	1 BR	2 BR	3 BR	4 BR	5 BR
Space Heating	Natural Gas	\$19	\$22	\$25	\$27	\$30	\$33
	Bottled Gas	\$43	\$50	\$56	\$62	\$68	\$74
	Electric Resistance	\$11	\$13	\$16	\$19	\$23	\$26
	Electric Heat Pump	\$9	\$11	\$13	\$15	\$16	\$18
	Fuel Oil	\$45	\$53	\$59	\$65	\$72	\$78
Cooking	Natural Gas	\$4	\$4	\$6	\$8	\$10	\$12
	Bottled Gas	\$8	\$10	\$14	\$19	\$23	\$28
	Electric	\$5	\$6	\$8	\$11	\$13	\$15
	Other						
Other Electric	Electric	\$18	\$21	\$29	\$37	\$46	\$54
Air Conditioning	Electric	\$12	\$14	\$20	\$26	\$32	\$38
Water Heating	Natural Gas	\$8	\$10	\$14	\$18	\$22	\$27
	Bottled Gas	\$18	\$22	\$31	\$41	\$51	\$60
	Electric	\$11	\$13	\$16	\$20	\$24	\$27
	Fuel Oil	\$19	\$23	\$33	\$43	\$53	\$63
Water		\$25	\$26	\$37	\$54	\$71	\$88
Sewer		\$36	\$38	\$54	\$73	\$87	\$101
Trash Collection		\$13	\$13	\$13	\$13	\$13	\$13
Other - Specify							
Range/Microwave		\$4	\$4	\$4	\$4	\$4	\$4
Refrigerator		\$5	\$5	\$5	\$5	\$5	\$5
Electric Base Charge		\$11	\$11	\$11	\$11	\$11	\$11
Natural Gas Base Charge		\$11	\$11	\$11	\$11	\$11	\$11
Actual Family Allowances-May be used	by the family to compute allo						
Actual Fulling Pale Wallood May 50 account	by the farmy to compate and	wantoo wiiio ocaroriing	ior a ariic.		Utility/Service/App	liance	Allowance
					Heating		
Head of Household Name					Cooking		
					Other Electric		
Unit Address					1		
Onit Address					Air Conditioning		
					Water Heating		
					Water		
					Sewer		_
Number of Bedrooms					Trash Collection		
					Range/Microwave		
					Refrigerator		
Previous editions are obsolete					Total	ar14) based on for	m HUD-52667 (7/2019

ADDENDUM C Floor/Site Plans

Wyndham Pointe

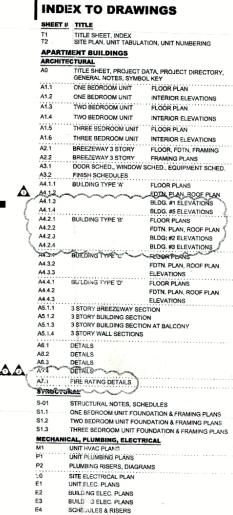
Apartment Homes 80 Brighton Hill Road Richland County, South Carolina

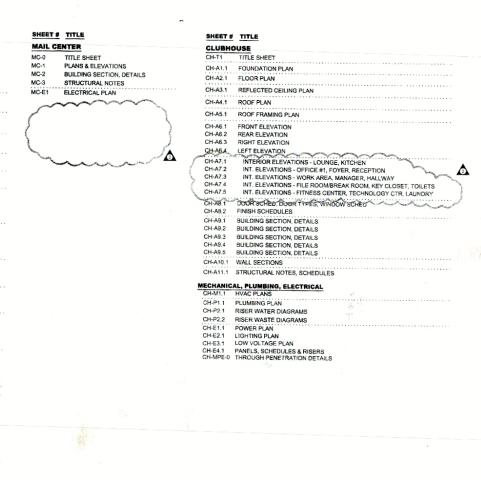
wner / Developer

VYNDHAM POINTE DEVELOPMENT, L.L.C. rchitect

IORTON M. GRUBER, AIA, ARCHITECT vil Engineer

BERLY & ASSOCIATES





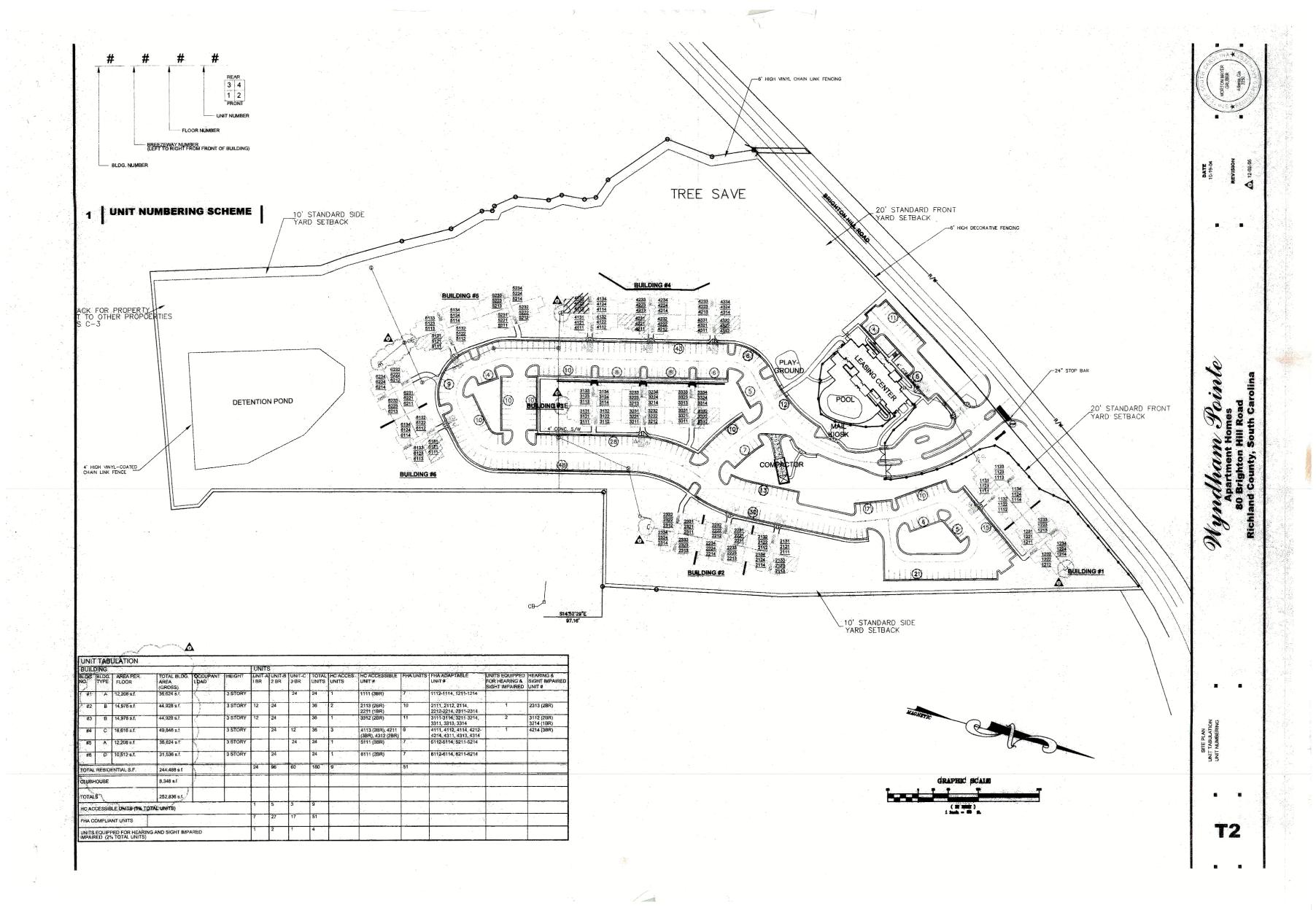


REVISION

11-17-04

Wyndham Pointe

T1



GENERAL NOTES

- THESE NOTES SHALL APPLY UNLESS OTHERWISE INDICATED BY DRAWINGS OR SPECIFICATIONS.
- CONTRACTOR SHALL OBTAIN AND PAY FOR ALL APPLICABLE PERMITS, INSPECTIONS AND APPROVALS. INCLUDING THOSE RELATED TO BUILDING AND SIGNAGE.
- ALL COMBUSTIBLE INTERIOR FINISHES SHALL BE EITHER CLASS A 18. OR C: MATERIALS WITH FLAME SPREAD RATING NOT TO EXCEE 200. IF REQUESTED, CONTRACTOR SHALL PROVIDE TO THE FIRE SERVICES AUTHORITY TEST DATA VERIFYING COMPLIANCE.
- IOR TO TURNING BUILDING OVER TO OWNER. REPAIR OR PLACE ALL MATERIALS, GLASS, OR ASSEMBLIES DAMAGED OR OKEN DURING CONSTRUCTION
- APARTMENT UNITS AT GROUND FLOORS SHALL MEET FHA
- MAINTAIN 1-HOUR FIRE RATED (VERTICAL AND HORIZONTAL) SEPARATIONS BETWEEN TENANTS.
- GC SHALL SUBMIT SPRINKLER SHOP DRAWINGS TO ARCHITECT AND BUILDING DEPARTMENT PRIOR TO INSTALLATION. DRAWINGS SHALL INDICATE COMPLIANCE WITH NFPA 13R DRAWINGS SHALL INCLUDE COMPLETE SEISMIC SUPPORT DETAILS. (FIRE SPRINKLER CONTRACTOR) SHALL OBTAIN A FIRE SPRINKLER SYSTERM PERMIT PRIOR TO INSTALLATION. ANY FIRE SPRINKLER PLAN INCLUDED IN THIS SET OF PLANS ARE FOR REFERENCE ONLY. NOT FOR PERMIT THIS SET OF PLANS ARE FOR REFERENCE ONE. INCLUDE SYSTEM SHALL BE MONITORED. DRAWINGS SHALL INCLUDE METHOD OF PROTECTION FOR ANY PIPING LOCATED WHERE
- SUBJECT TO FREEZING
 AT ALL RATED WALLS AND RATED CEILINGS, ALL PLUMBING ELECTRICAL & HVAC PENETRATIONS SHALL BE SEALED WITH APPROVED FIRESTOPPING MATERIAL.
- ALL FIRE RATED FLOOR/CEILING AND CEILING/ROOF ASSEMBLIES SHALL BE SUPPORTED BY FIRE RATED STRUCTURAL WALLS. COLUMNS, & BEAMS.

- FRAMER TO CAULK PLATES WHERE INDICATED WITH NON-HARDENING BUTYL OR APPROVED EQUAL MATERIAL TO ACHIEVE WATER SEAL.

FIRE ALARM SYSTEM REQUIREMENTS: FIRE ALARM SYSTEM REQUIREMENTS 1. FIRE ALARM SYSTEM INSTALLATION DEVICES, MATERIALS AND EQUIPMENT SHALL COMPLY WITH BUILDING CODE AND NFPA 72.

3 A 100% ACCEPTANCE TEST WILL BE CONDUCTED ON THE FIRE ALARM SYSTEM UPON COMPLETION OF INSTALLATION. FIRE ALARM CONTRACTOR SHALL PROVIDE ANY ADDITIONAL DEVICES THAT MAY BE REQUIRED TO MEET MINIMUM REQUIREMENTS EVEN IF SYSTEM IS INSTALLED PER OVED FIRE ALARM SYSTEM DRAWINGS.

4. SMOKE DETECTORS SHALL BE INSTALLED PER THE REQUIREMENTS OF GOVERNING CODES.

5. PROVIDE MANUAL PULL STATIONS AT THE ENTRANCE TO EACH STAIRWAY AT EACH FLOOR.

- 6. SUBMIT DRAWINGS TO ARCHITECT AND LOCAL GOVERNING AUTHORITIES.
- 7. PERMIT SHALL BE OBTAINED PRIOR TO INSTALLATION.
- INSULATE ALL EXTERIOR AND PARTY WALLS WITH R-13 BATT. INSULATION AND ATTICS WITH R-30 BLOWN OR BATT.
- SPRINKLER EQUIPMENT ROOMS AND FIRE PROTECTION EQUIPMENT SHALL BE IDENTIFIED AND LABELED PER THE REQUIREMENTS OF NFPA-13, STANDARD FIRE PREVENTION CODE. AND CONFORM WITH REQUIREMENTS OF GOVERNING AUTHORITIES.
- PVC. OR VINYL GUARDRAILS SHALL CONFORM WITH THE LOADING REQUIREMENTS OF SECTIONS 1607.7.1 OF THE INTERNATIONAL BUILDING
- ALTERNATE FIRE RATED ROOF CLG. ASSEMBLY. SHINGLES OVER ROOFING FELT ON %" OSB SHEATHING WITH PLY CLIPS ON ROOF TRUSSES AT 24" O.C. INSULATED WITH FURRING CHANNELS AT 12" O.C. PERPENDICULAR TO TRUSSES WITH ½" TYPE "C" GYP. BD. INSTALLED IN ACCORDANCE WITH UL DESIGN #P522
- EXTERIOR SHEATHING (EXCEPT BREEZEWAYS) SHALL BE ENERGY BRACE (RED) SHEATHING WITH JOINT'S LAPPED 3/4" TO PROVIDE WATER RESISTANT BARRIER. SEE SHEAR WALL SCHEDULE FOR STRUCTURAL

Wyndham Pointe 80 Brighton Hill Road

Richland County, South Carolina **APARTMENT BUILDINGS**

UNIT SQUARE FOOTAGE

UNIT	GROSS BUILDING AREA PER UNIT	GROSS UNIT AREA	UNIT HEATED AREA
1 BR	1116 sq.ft.	954 sq.ft.	898 sq.ft.
2 BR	1314 sq.ft.	1152 sq.ft	1086 sq.ft.
3 BR	1526 sq.ft.	1364 sq.ft.	1287 sq.ft.

GROSS BUILDING AREA / PER UNIT:
AREA TAKEN TO OUTSIDE OF FACE OF STUD INCLUDING AREAS WITHOUT SURROUNDING WALLS THAT ARE WITHIN THE HORIZONTAL PROJECTION OF ROOF OR FLOOR ABOVE INCLUDES AREA OF BREEZEWAY ATTRIBUTED TO

UNIT HEATED AREA.
AREA TAKEN TO INTERIOR FACE OF

ABBREVIATIONS

AL.	ALUMINUM	N.I.C.	NOT IN CONTRACT
A.F.F.	ABOVE FINISHED FLOOR	NOM.	NOMINAL
ALT.F.	ABOVE PINISHED PLOOR	NTS	NOT TO SCALE
		1415	NOT TO SCHEE
BD.	BOARD		
BLDG	BUILDING	OA.	OVERALL
BLKG	BLOCKING	OD.	OUTSIDE DIAMETER
BRG	BEARING	OPNG	OPENING
5114		OPP.	OPPOSITE
CAB.	CABINET	0.0	ON CENTER
		0.0	ONCENTER
CLG	CEILING		
CMU.	CONCRETE MASONRY UNIT	P.L.	PLASTIC LAMINATE
COL	COLUMN	PLAM	PLASTIC LAMINATE
CON	CONTRACTOR	99	PAR
CONC.	CONCRETE	Pf	PAINT
		P.T	PRESSURE TREATED
CONST.	CONSTRUCTION		
CONT.	CONTINUOUS OR CONTINUE	PWD.	PLYWOOD.
CPT.	CARPET(ED)		
CTR.	COUNTER	QT	QUARRY TILE
CT.	CERAMIC TILE		
	CONTROL JOINT	RA.	RETURN AIR
C.1.		RE.	REFERENCE / REFER TO
C.O.	CASED OPENING		
		RD.	ROOF DRAIN
DIA.	CHAMETER	REFR	REFRIGERATOR
DIM.	DIMENSION	REINE	REINFORCE (D) (ING)
DIM.	DIMENSION	REINF	REINFORCE (D) (IIVG)
DISP.	DISPENSER	REQMTS	REQUIREMENTS
DIV.	DIVISION	REQ	REQUIRED
DR	SOOR	RES	RESILIENT
05.	DOWNSPOUT	80.	ROUGH OPENING
		AU.	NO SOLIT OF CHINA
DTL	DETAIL		
DWG	DRAWING	SCH.	SCHEDULE
DWR	DRAWER	SC.	SOLIO CORE
Other	2.01101	SEC.	SECTION
		S.F.	SQUARE FEET
EA.	EACH		
ELEC.	ELECTRICAL	SHTG	SHEATHING
EL.	FI EVATION	SH.	SHELF
EMER.	EMERGENCY	524	SIMILAR
	EQUIPMENT	SPEC	SPECIFICATION
EQUIP.			
EQ.	EQUAL.	SPK.	SPEAKER
EXH.	EXHAUST	90.	SQUARE
EXIST.	EXISTING	SST	STAINLESS STEEL
	EXPANSION	STL	STEEL
EXP.			STORAGE
EXT.	EXTERIOR	STOR	
E.J.	EXPANSION JOINT	SUPP	SUPPLIER
		SUSP	SUSPENDED
FA.	FIRE ALARM		
			A STATE OF THE STA
FD.	FLOOR DRAIN	TEL	TELEPHONE
FE.	FIRE EXTINGUISHER	TEN.	TENANT LOWNER LERANCHE
FIM.	FINISH(E0)	Typ	TYPICAL
FLR	FLOOR(INGI)		
FOC		T.C.C.	TENANTS CABINET CONTRA
FOC:	FACE OF CONCRETE	1.36.36	TERRITIS CADINET CONTRA
FQF.	FACE OF FINISH	T.E.C.	TENANT'S ELECTRICAL CON
FOM.	FACE OF MASONRY	T.G.C	TENANTS GENERAL CONTRA
FQS.	FACE OF STUD		
FRP.	FIBERGLASS REINFORCED PANEL	UON	UNLESS OTHERWISE NOTED
		0.0.4	DUTTER OUT THE MAN SE HOUTED
FYG.	FCOTING	1167	White councilias to
FT.	FOOT OR FEET	VCT	VINYL COMPOSITION TILE
FURR.	FURRED (ING)	VERT	VERTICAL
F.R.	FIRE RESISTANT	VT	VINYL TILE
		V.LF	VERIFY IN FIELD
		4.1.7	TENER I DATE LEGIS
GALV.	GALVANIZED		
GA.	GAUGE	WC	WATER CLOSET
GD.	GRADE OR GRADING	WD.	WOOD
GL	GLASS	WWF	WELDED WIRE FABRIC
	GYPSUM	W/	WITH
GYP	UTF3UM		
G.C.	GENERAL CONTRACTOR	WO	WITHOUT
GWB.	GYPSUM WALL BOARD		
HIC.	HOLLOW CORE		
HC.			
HC.	HANDICAPPED		
HM.	HOLLOW METAL		
HORIZ.	HORIZONTAL		
	was a succession		
1D.	INSIDE CIAMETER		
INST.	INSTALLER		
INSUL.	INSULATION		
INT.	INTERIOR		
	and the second s		
_			
JT.	JOINT		

DRAWING SYMBOL KEY DOOR NUMBER (SEE DOOR SCHEDULE) WINDOW TAG (SEE WINDOW SCHEDULE) INTERNATIONAL FUEL GAS CODE. 2003 EDITION INTERNATIONAL MECHANICAL CODE, 2003 EDITION TOILET ACCESSORY TAG (SEE TOILET ACCESSORY SCHEDULE) EQUIPMENT TAG (SEE EQUIPMENT SCHEDULE) REVISION TAG (SEE PROJECT TRACKING)

SPRINKLERED:

REVISION CLOUD (DENOTES AREA OR ITEM ON DRAWING AFFECTED BY REVISION) COLUMN GRID DESIGNATION JCC/ANSLA117 1: ACCESSIBLE AND USEABLE BUILDINGS

-BUILDING ENERGY EFFICIENCY STANDARDS ACT

13R WITH SPRINKLER COVERAGE AT BALCONIES

ALLOWABLE BLDG AREA: (SEE UNIT TABULATION SHEET AO FOR ACTUAL AREAS)

 $A_{A} = A_{T} + \left(\frac{A_{T} + A_{T}}{100}\right) = + \left(\begin{array}{c} A_{T} \\ \hline 100 \end{array}\right) \text{ (EQUATION 5-1)}$

A = 12,000 PER TABLE 503
F/P = 1 SINCE ALL BLDGS.

I_F = 100 (1 · 0.25) 20/30

I_F = 49.5 SLOGS. HAVE MIN 20 FRONTAGE OR OPEN SPACE

 $A_A = 12000 + \left(\frac{12000 \cdot 75}{100}\right) + \left(\frac{12000 \cdot 0}{100}\right)$

HAVE MIN 20 AROUND ENTIRE PERIMETER

AREA ALLOWED WITH INCREASE FOR FRONTAGE = 21,000 S.F.

AREA ALLOWED PER TABLE 503 IBC = 12,000 S.F.

200 GROSS SQ. FT./OCCUPANT

I_ = 100 (F/P - 0.25) W/30

A = 17.940

MAX. # STORIES: THREE

THE AMERICANS WITH DISABILITIES ACT

(ITEM DENOTED) ELEVATION MARK

DETAIL REFERENCE TAG

(#)

BUILDING SECTION REFERENCE TAGS

PROJECT DATA

INTERNATIONAL PLUMBING CODE, 2003 EDITION

NATIONAL ELECTRICAL CODE, 2002 EDITION, (NFPA 70) A INTERNATIONAL FIRE PREVENTION CODE, 2003 EDITION INTERNATIONAL ENERGY CONSERVATION CODE, 2003 EDITION

01-11-06 A CHANGES PER OWNERS REQUEST, MISC. REVISIONS TO BRICK & ELEVATIONS

PROJECT TRACKING

DESCRIPTION 100% DRAWINGS

11-17-04 A REVISIONS PER BLDG. DEPT. AND OWNER, REVISE PLUMBING FIXTURE SCHED., CHANGE COLUMN DETAILING, ADD TOILET ACCESSORIES, MISC. REVISIONS A4.4.2, A4.4.3, A5.1.

SHEETS AFFECTED

ALL SHEETS EXCEPT A7.1 & E5

12-02-05 DELETE BALCONIES, GARDEN TUBS, TILE TUB SURROUND.
CHANGE SIDING TO VINYL, REVISE ROOF TO GABLE ROOF, ADD CLOSET AT ENTRY OF 2BR & 3BR UNIT AND RELOCATE HVAC & WH. DELETE TRAY CLG AT 3RD FLOOR

INDEX TO DRAWINGS

	TECTURAL	
A0	TITLE SHEET, PROJECT DE GENERAL NOTES, SYMBO	DATA, PROJECT DIRECTORY. DL KEY
A1.1	ONE BEDROOM UNIT	FLOOR PLAN
A1.2	ONE BEDROOM UNIT	INTERIOR ELEVATIONS
A1.3	TWO BEDROOM UNIT	FLOOR PLAN
A1.4	TWO BEDROOM UNIT	INTERIOR ELEVATIONS
A1.5	THREE BEDROOM UNIT	FLOOR PLAN
A1.6	THREE BEDROOM UNIT	INTERIOR ELEVATIONS
A2.1	BREEZEWAY 3 STORY	FLOOR, FDTN, FRAMING
A2.2	BREEZEWAY 3 STORY	FRAMING PLANS
A3.1	DOOR SCHED., WINDOW	SCHED., EQUIPMENT SCHED.
A3.2	FINISH SCHEDULES	
A4.1.1	BUILDING TYPE 'A'	FLOOR PLANS
A4.1.2		FDTN. PLAN, ROOF PLAN
A4.1.3		BLDG. FI ELEVATIONS
A4.1.4		BLDG. #5 ELEVATIONS
A4.2.1	BUILDING TYPE 'B'	FLOOR PLANS
A4.2.2		FDTN. PLAN, ROOF PLAN 🕺
A4.2.3		BLDG. #2 ELEVATIONS
A4.2.4		BLDG. #3 ELEVATIONS
A4.3.1	BUILDING TYPE C	FLOOR PLANS

FOTH PLAN ROOF PLAN

FLOOR PLANS

ELEVATIONS

PROJECT DIRECTORY

2000 Riveredge Parkway Bus: (770) 850-8280 Bus. Fax: (770) 850-8230

245 Peachtree Center Ave. Suite 2445 Bus: (404) 584-1681 Bus. Fax: (404) 584-1695 ARCHITECT'S PROJECT MANAGER Thomas J. Metzger, AIA S801 Fawn Run Drive Flower Mound, TX 75028 Bus: (972) 807-4002 Fax: (972) 874-7319

BUILDING DEPARTMENT RICHLAND COUNTY BUILDING INSPECTIONS DEPT 2020 HAMPTON STREET Bus: (803) 576-2140

DETAILS DETAILS A5.1 FIRE RATING DETAILS STRUCTURAL

STRUCTURAL NOTES, SCHEDULES ONE BEDROOM UNIT FOUNDATION & FRAMING PLANS TWO BEDROOM UNIT FOUNDATION & FRAMING PLANS
THREE BEDROOM UNIT FOUNDATION & FRAMING PLAN

MECHANICAL, PLUMBING, ELECTRICAL UNIT PLUMBING PLANS

METER CENTER DETAILS

BUILDING TYPE 'D'

DETAILS

3 STORY BUILDING SECTION 3 STORY BUILDING SECTION AT BALCONY

SITE ELECTRICAL PLAN BUILDING ELEC, PLANS BUILDING ELEC. PLANS SCHEDULES & RISERS

SUBMITTAL REQUIREMENTS

- Top chord live load (including snow load)
- Bottom chord live load

- 15. Metal connector plate type, size thickness or gage, and the dimensioned location of each metal connector plate except where symmetrically located relative to the job.
- Lumber size species and grade for each member

17. Connection requirements ou
- Truss big died
- Truss big to ply
- Field species

18. Calculated deflection ratio and/or maximum deflection for live and tr
19. maximum axial compression forces in the truss members to enable
designer to design the size, connections and anchorage of the permar
lateral bracing. Forces shall be shown on the truss construction docum
supplemental documents

20. Populated narmanent truss member bracing locations

Suprintal shall include the following information:

1. Drawings shall be signed and sealed by an engineer like project is located.

2. Drawings shall influed and sealed by an engineer like project is located.

3. Floor Plans locating all devices and equipment.

4. Alarm control and trouble signaling devices.

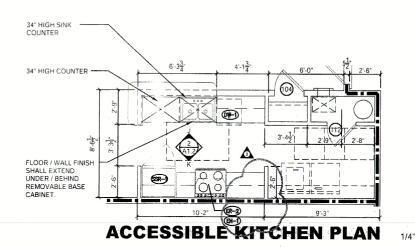
5. Announciation.

- . Battery Calculations 3. Conductor Types and Sizes
- 9. Voltage drop calculations
 10. Manufacturers, model numbers and listing information for equipment devices a

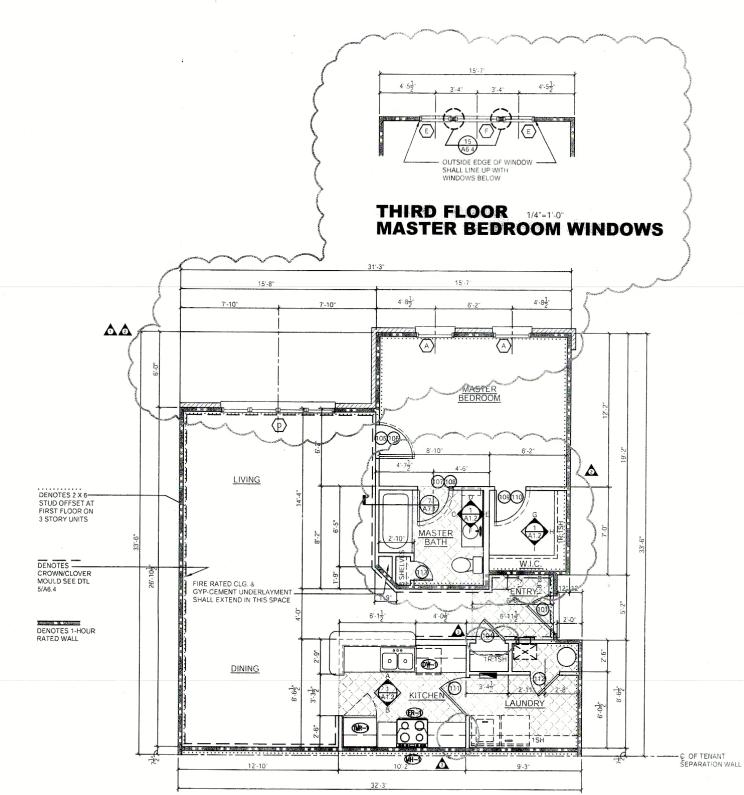
- located.

 3. Drawings shall indicate required codes for compliance.
- Torawings shall indicate required codes for compliance.
 Floor Plans locating all sprinkler heads and piping layout
 Drawing shall include complete seismic support details
- All details needed to install system
 Identification method for all rooms and equipment.

A0

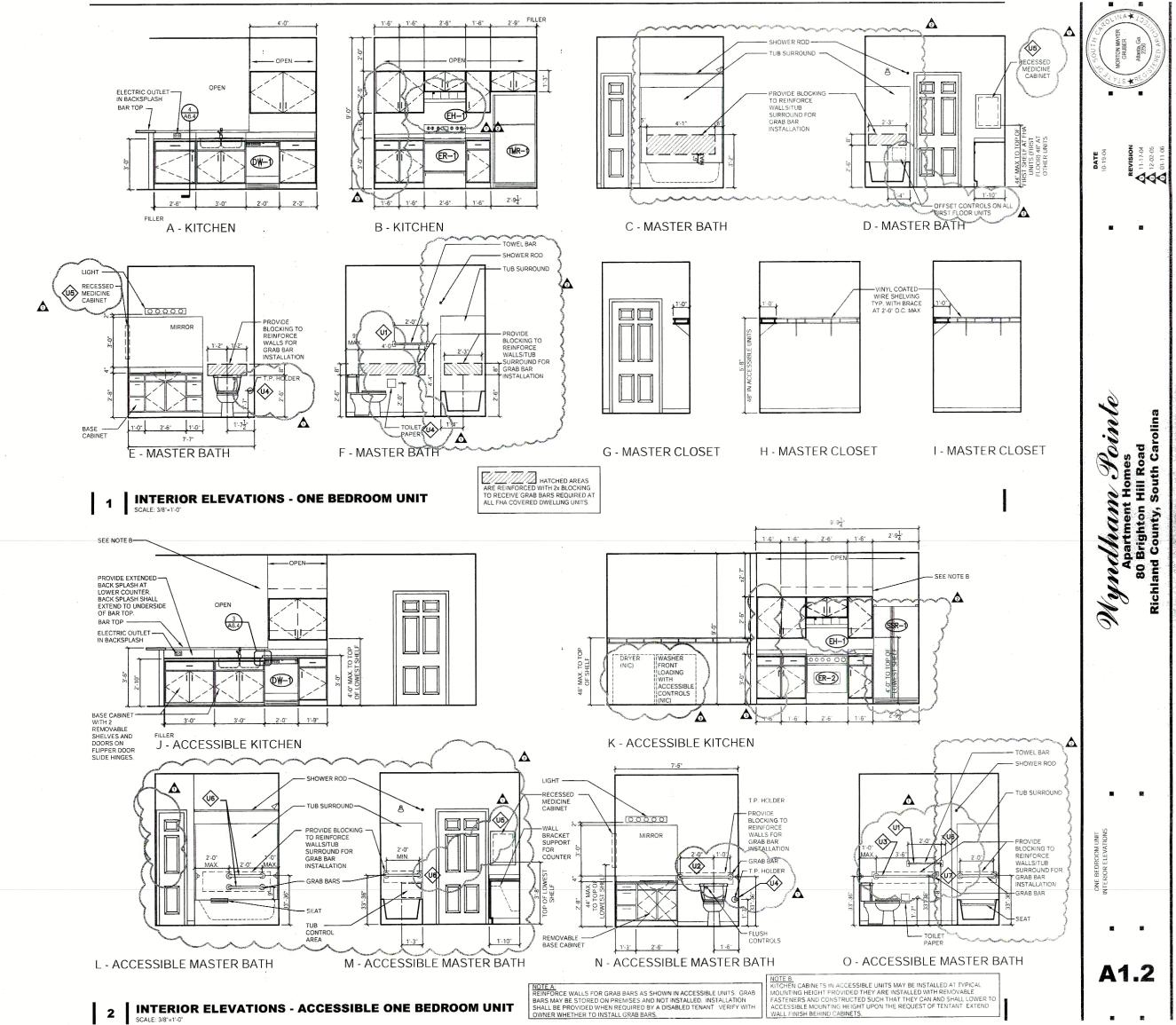




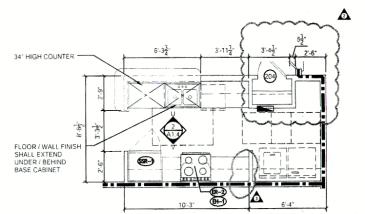


A1.1

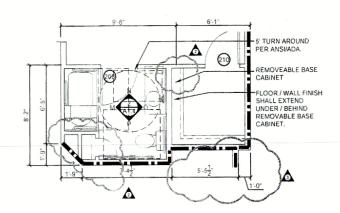
ONE BEDROOM UNIT PLAN 1/4"=1'-0"



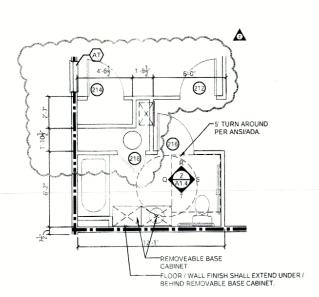
MORTON M. GRUBER, AIA, ARCHITECT 28 PEACHIREE CENTRA NO SUITE 2445 ATLANTA, CA. 33333 TEL. 404584-1680 FAX 404584-1683



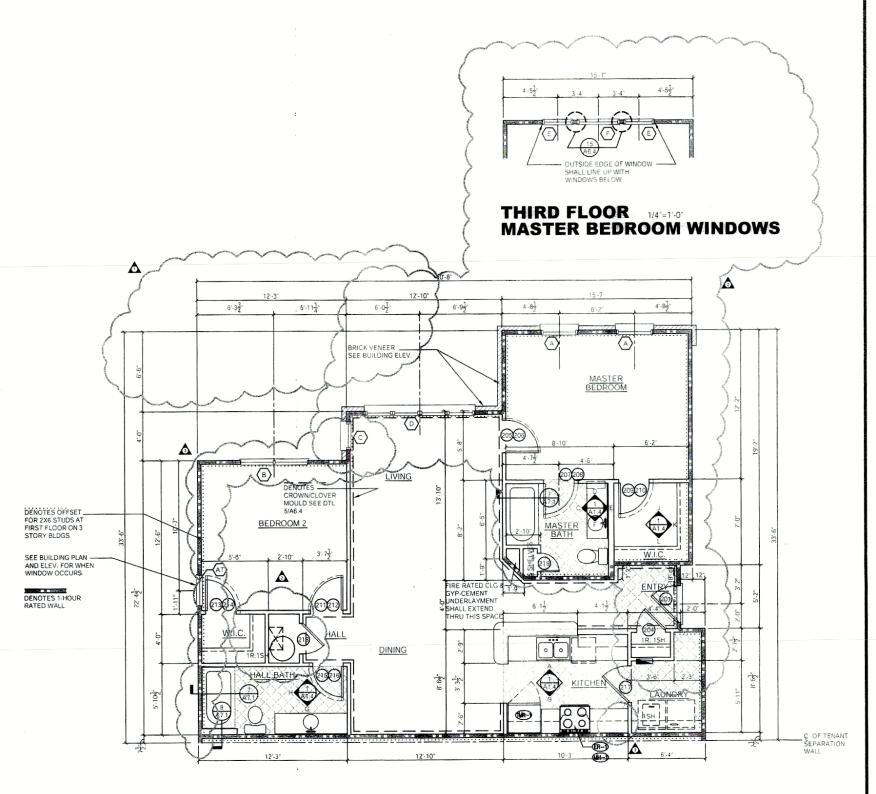
ACCESSIBLE KITCHEN PLAN



ACCESSIBLE MASTER BATH PLAN 1/4"=1"-0"



ACCESSIBLE
HALL BATH PLAN 1/4"=1'-0"

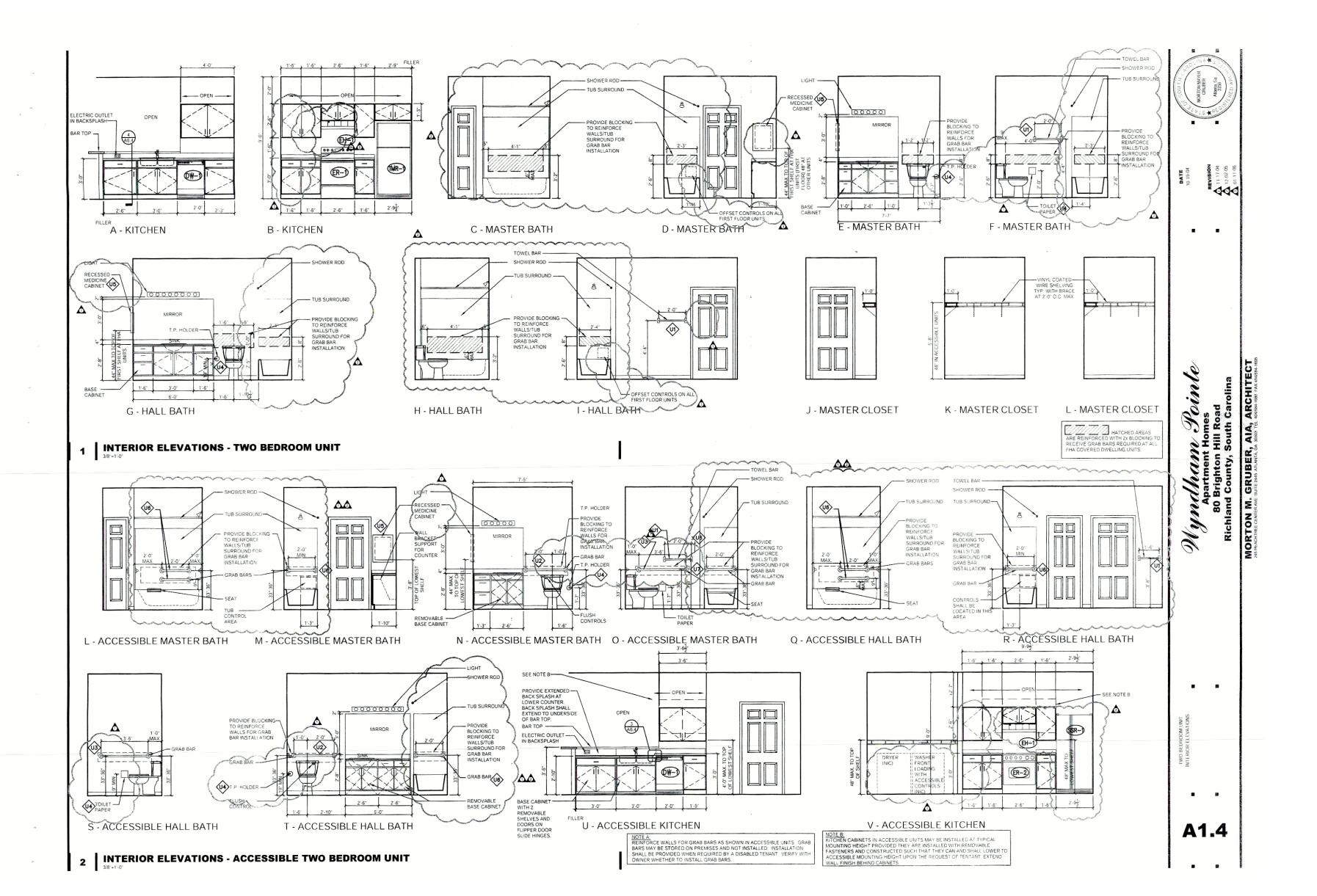


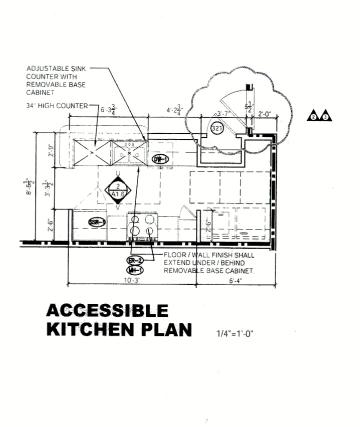
TWO BEDROOM LOWER UNIT PLAN 1/4"=1-0"

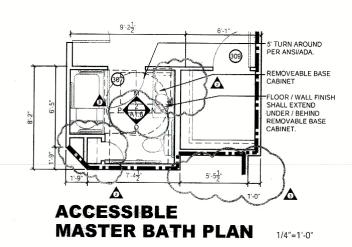
Wyndham Pointe
Apartment Homes
80 Brighton Hill Road
Birkland County South Carolina

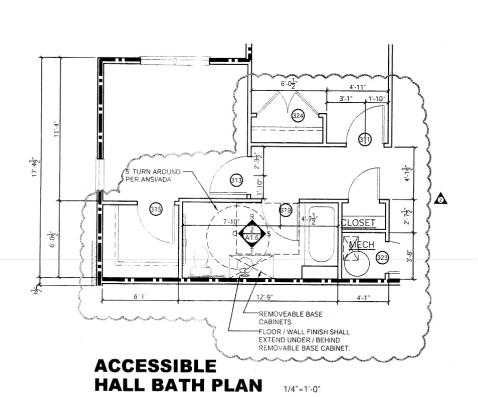
A1.3

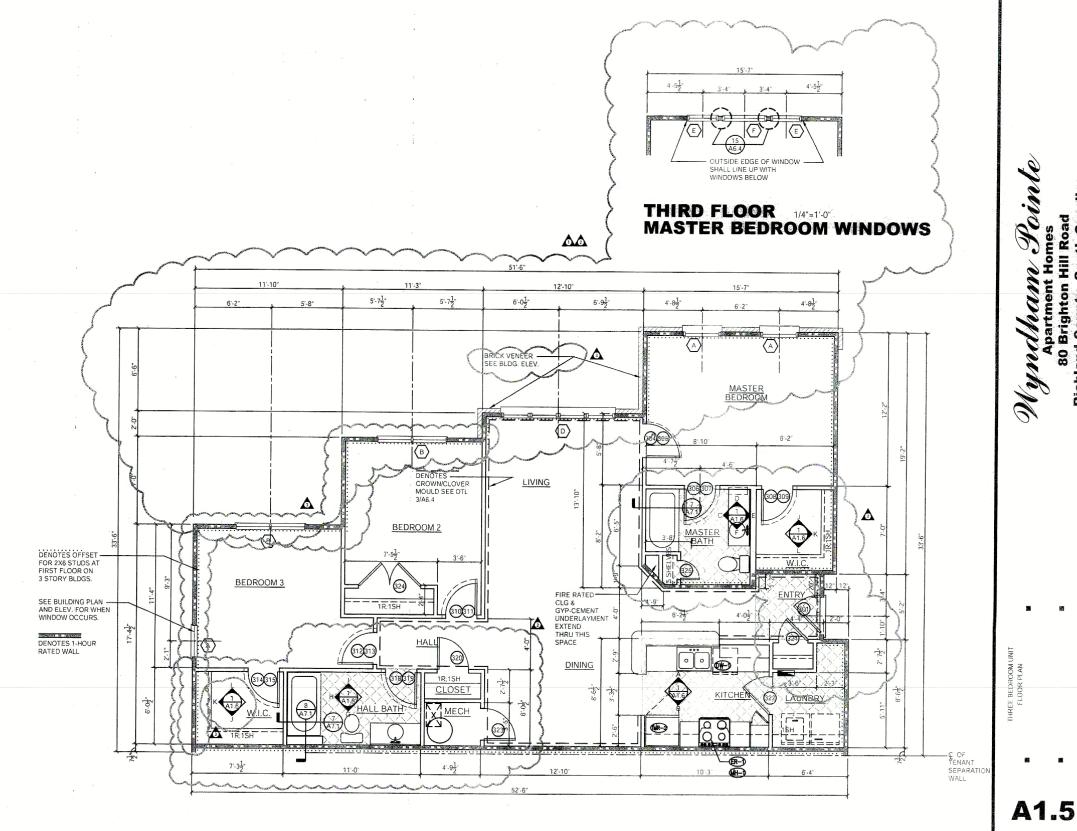
DATE 10.19.04





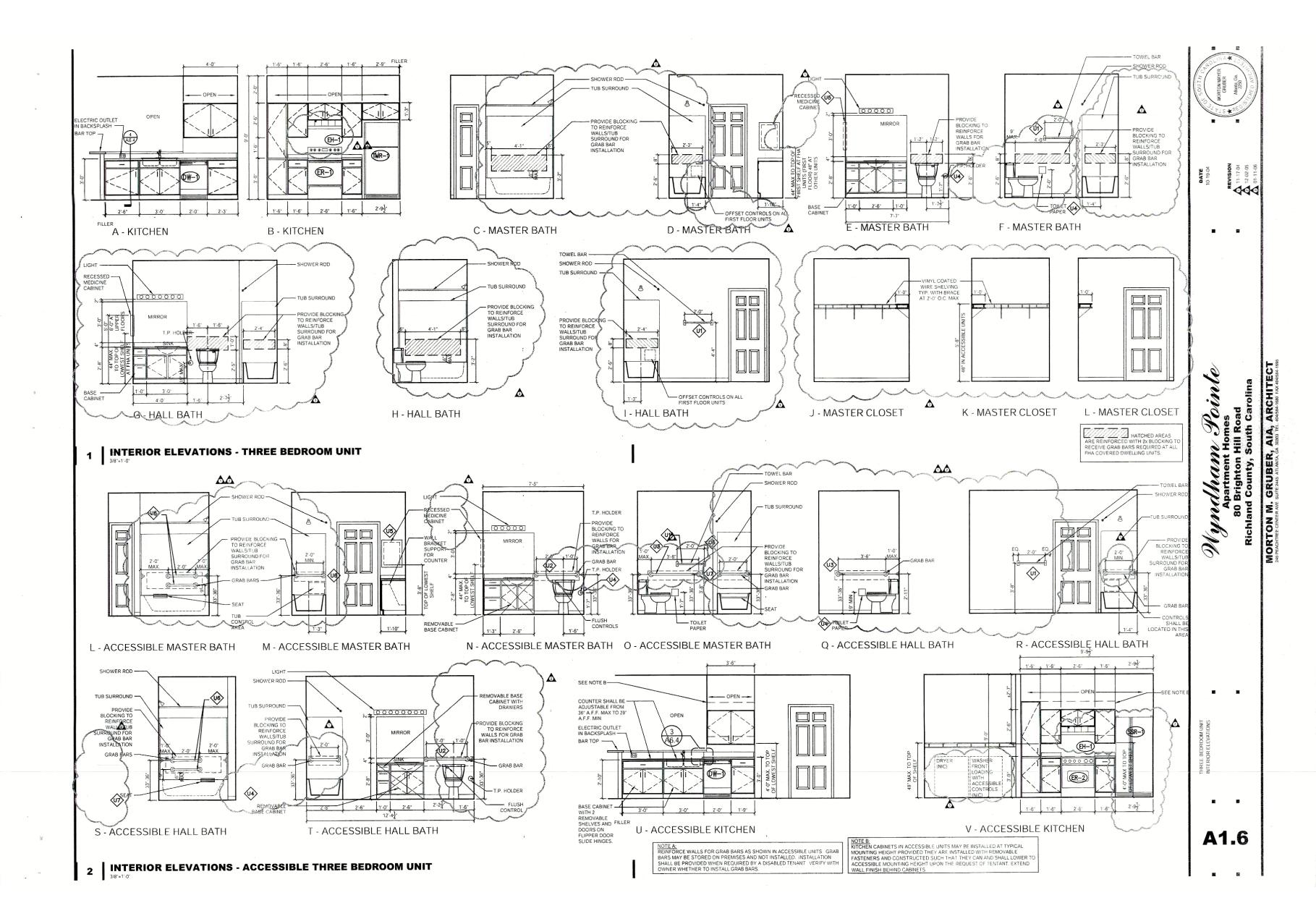


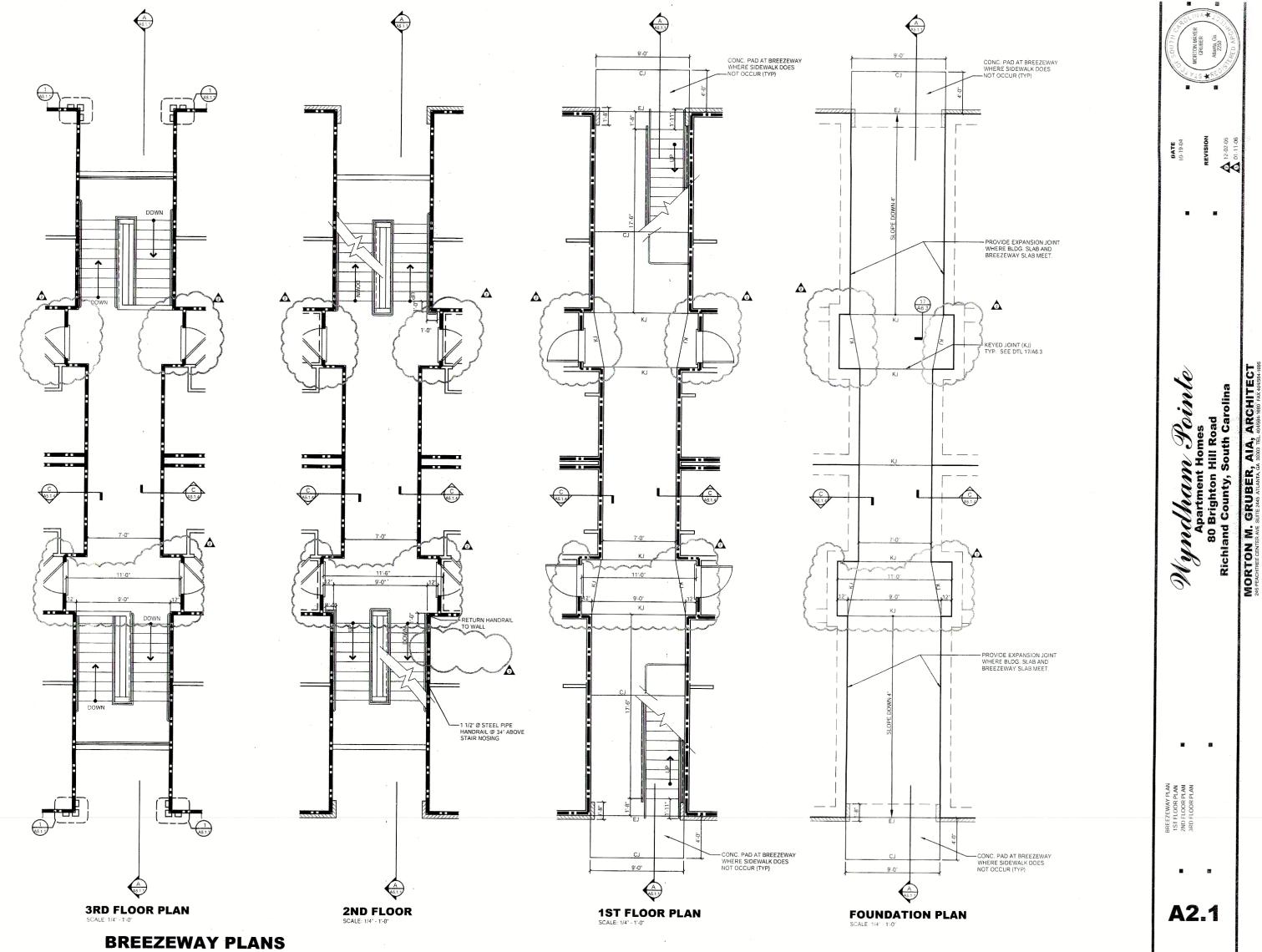




THREE BEDROOM LOWER UNIT PLAN

1/4"=1'-0"





MORTON MAYE

GRUBER

Alanta Gar

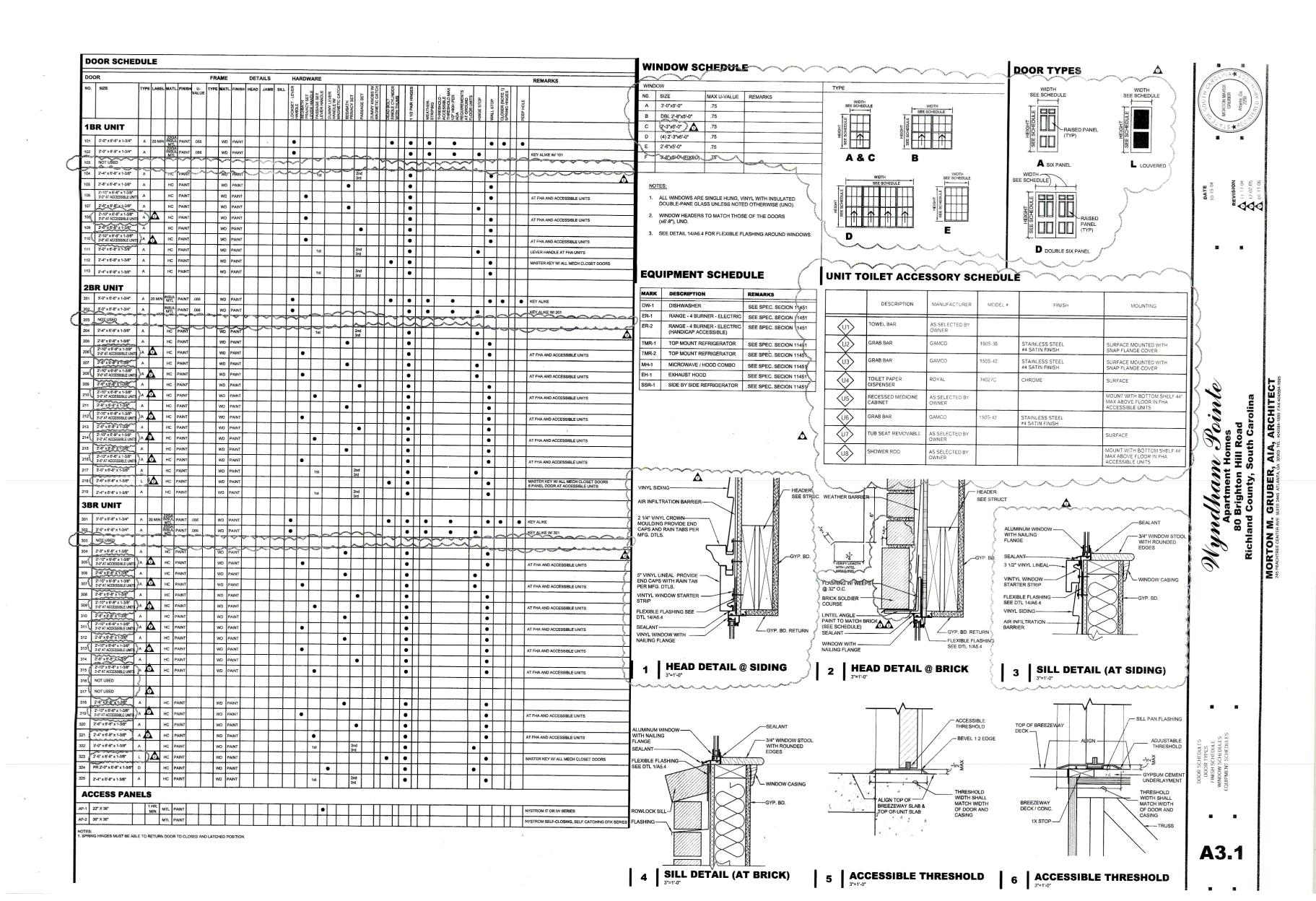
10-19-04 **REVISION**17-02-05

. .

Wordham Pointe Apartment Homes 80 Brighton Hill Road MORTON M. GRUBER, AIA, ARCHITECT 245 PEACHTREE CENTER AVE SUITE 2445 ATLANTA, CA 30303 TEL. AUASSA-1689 FAX-404384-1685

BREEZEWAY PLANS 2ND FLOOR FRAMING PLAN 3RD FLOOR FRAMING PLAN

A2.2



Roc	om T	Floor	100	Wall (ALL WA	LLS ARE SMOOTH FINISH)		Ceiling		Remarks
VO.	Name	Carpet	Tile	Paint	Trim Paint	Trim	Surface	Paint	
		MFG: Mohawk Style: Moving up Color: #518 Classic neutral	MFG: Congoleum Style: Pretude Color: #02102 Fixed Greige	MFG: Sherwin Williams Color: SW6156 Ramie	MFG. Sherwin Williams MFG. Sherwin Williams Style: Super Paint Interior - Satin Color: SW6154 Nacre	BESE: WM 623 (cgee base) 916-by-3-1/4-inch 990 Casing: WM 356 11/16-by-2-1/4-inch 97 Door Casing: WM 356 11/16-by-3-1/4-inch 97 Door Casing: Wm bwth 97 Door Casing: Wap with 98 Door Casing: Wap with 98 Door Casing: Wap with 99 Door Casing: WM 126-by-3/4-inch 90 Door Casing: WM 126-by-3/4-inch 90 Door Casing: WM 126-by-3/4-inch 90 Door Casing: WM 126-by-3/4-inch 91 Door Casing: WM 126-by-3/4-inch 91 Door Casing: WM 126-by-3/4-inch 92 Door Casing: WM 126-by-3/4-inch 92 Door Casing: WM 126-by-3/4-inch 93 Door Casing: WM 126-by-3/4-inch 94 Door Casing: WM 126-by-3/4-inch 95 Door Casing: WM 126-by-3/4-inch 96 Door Casing: WM 126-by-3/4-inch 97 Door Casing: WM 126-by-3/4-inch 98 Door Casing: WM 126-by-3/4-inch 98 Door Casing: WM 126-by-3/4-inch 98 Door Casing: WM 126-by-3/4-inch 99 Door Casing: WM 126-by-3/4-inch 99 Door Casing: WM 126-by-3/4-inch 99 Door Casing: WM 126-by-3/4-inch 90 Door Casing: WM 126-by-3/4-in	Surface: Gypsum Board - smooth linish	MFG: Shewm Willeams	
	ENTRY	•	•	•	•			•	CEE DI AM EOD I OCATION OF MAN I COMPANIA
	LIVING ROOM	•		•	•	0000			SEE PLAN FOR LOCATION OF VINYL / CARPET TRANSITION
	DINING ROOM	•		•	•	0 0 0			
	KITCHEN		•	•	•		•		
			•				and the second s		
	MASTER BEDROOM / CLOSET	•							
\perp	MASTER BATH		•	•	•	• • •			
1	BEDROOM #2 / CLOSET	•		•	•	0 0 0			
	BEDROOM #3 / CLOSET		9		•			•	~
	Constitution of the Consti								No. of the second second
1	HALL CLOSET	•			•				
1	HALLWAY BATH		•	•	•	• • •			4
1									
95 Q12									
		40							
1	:								
1									
)

		-				
ROOM NAME	CABINETS		COUNTERTOP		R	EMARKS
	MANUFACTURER	FINISH	MATERIAL	MANUFACTURER	FINISH	
KITCHEN	REPUBLIC	OAK ALAMO	PLASTIC LAMINATE	Nevamar (1st CHOICE) OR Formica (2nd CHOICE)	Style Earthstone texture Color EA2001T Color #7734-58 Jamocha grapite matte finish	V V
MASTER BATH	REPUBLIC	OAK ALAMO	PLASTIC LAMINATE	Formica	Color #7708-58 Flax Gauze matte finish	
HALL BATH	REPUBLIC	OAK ALAMO	PLASTIC LAMINATE	Formica	Color #7708-58 Flax Gauze - matte finish	

MATERIAL	MANUFACTURER	FINISH
BRICK	GENERAL SHALE / BORAL	CAMBRIDGE / MT. VERNON - QUEEN SIZE
ROOFING	ELK	PRESTIGE RAISED 30 YEAR ARCHITECTURAL COLOR: WEATHERWOOD
TRIM AND SOFFIT PAINT	SHERWIN WILLIAMS	EXTERIOR - GLOSS WHITE
SIDING PAINT	SHERWIN WILLIAMS	COLORS AS SELECTED BY OWNER

Myndham Pointe
Apartment Homes
80 Brighton Hill Road
Richland County, South Carolina
MORTON M. GRUBER, AIA, ARCHITECT
245 PARCHITECT 245 PAIGNIA GA 32000 TEL 404584-1880 FAX 404584-1880

A3.2

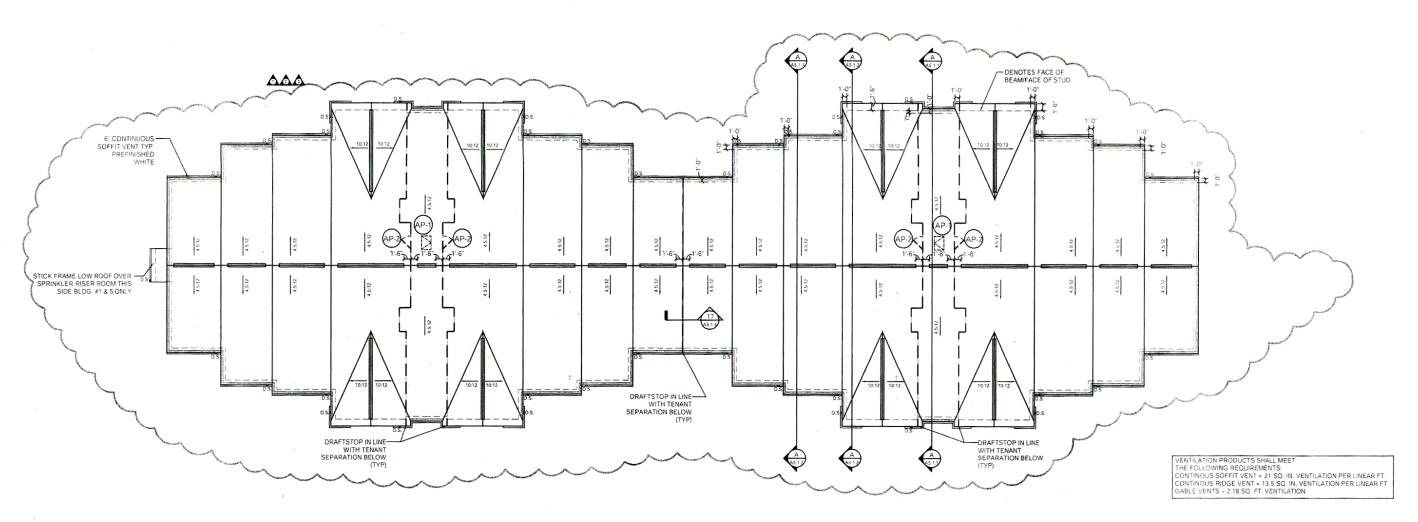
BUILDING TYPE 'A' - GROUND FLOOR PLAN

(UPPER FLOORS SIMILAR) 3/32"=1'-0"

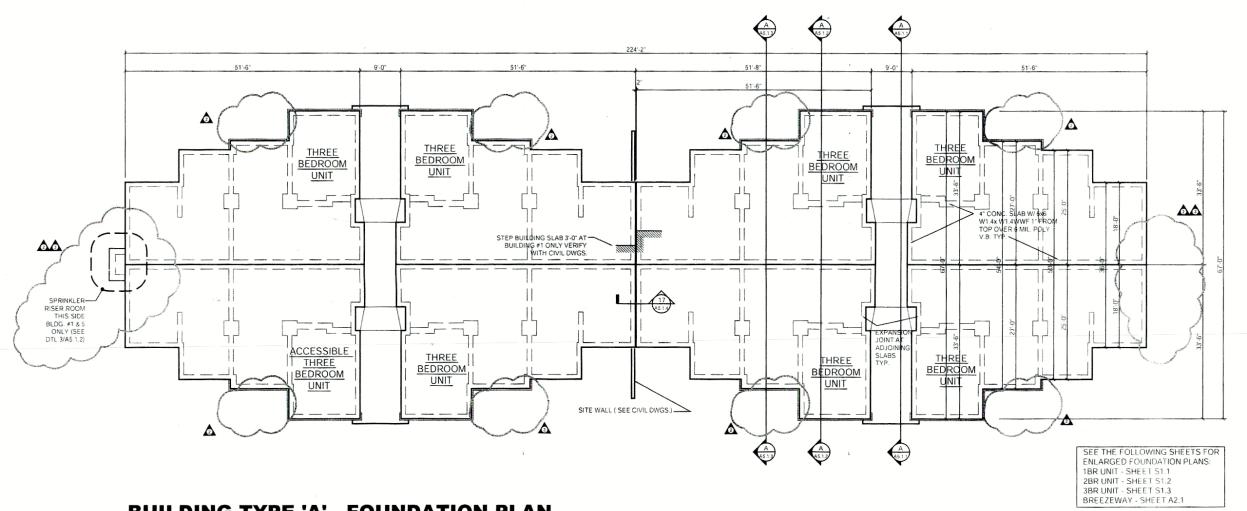
DATE 10-19-04

MORTON M. GRUBER, AIA, ARCHITECT 245 PEACHTREE CENTER AVE SUITE 2445 ATLANTA, GA 30303 TEL 404/5864-16800 FAX 404/5864-1680

A4.1.1





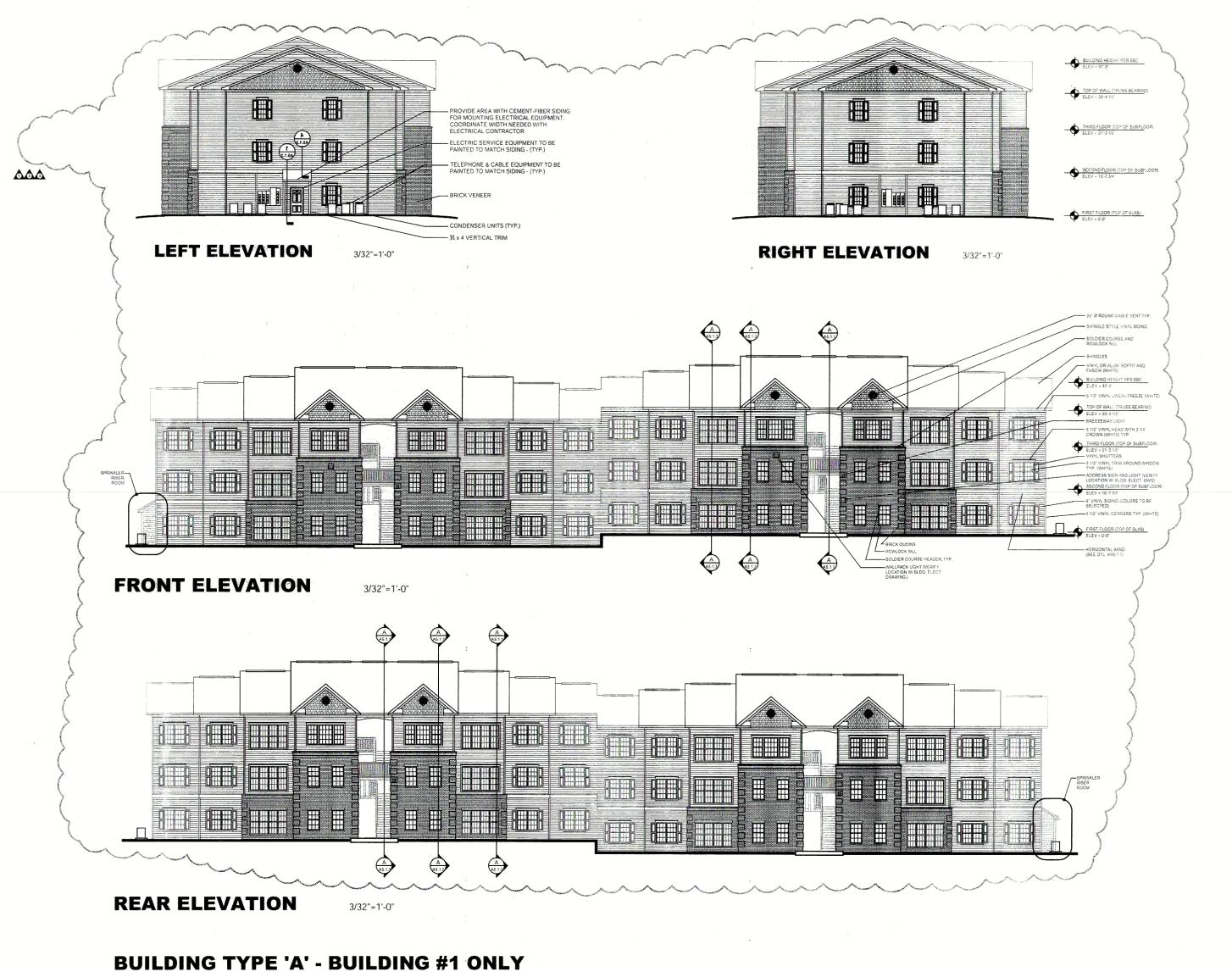


Myndham Pointe
Apartment Homes
80 Brighton Hill Road
Richland County, South Carolina
MORTON M. GRUBER, AIA, ARCHITECT
285 FEACHTREE GENTER AND SUITE 2445 ATLANTA, CAN 2000 7 EL. 404594-1689 FTAX 404594-1689

A4.1.2

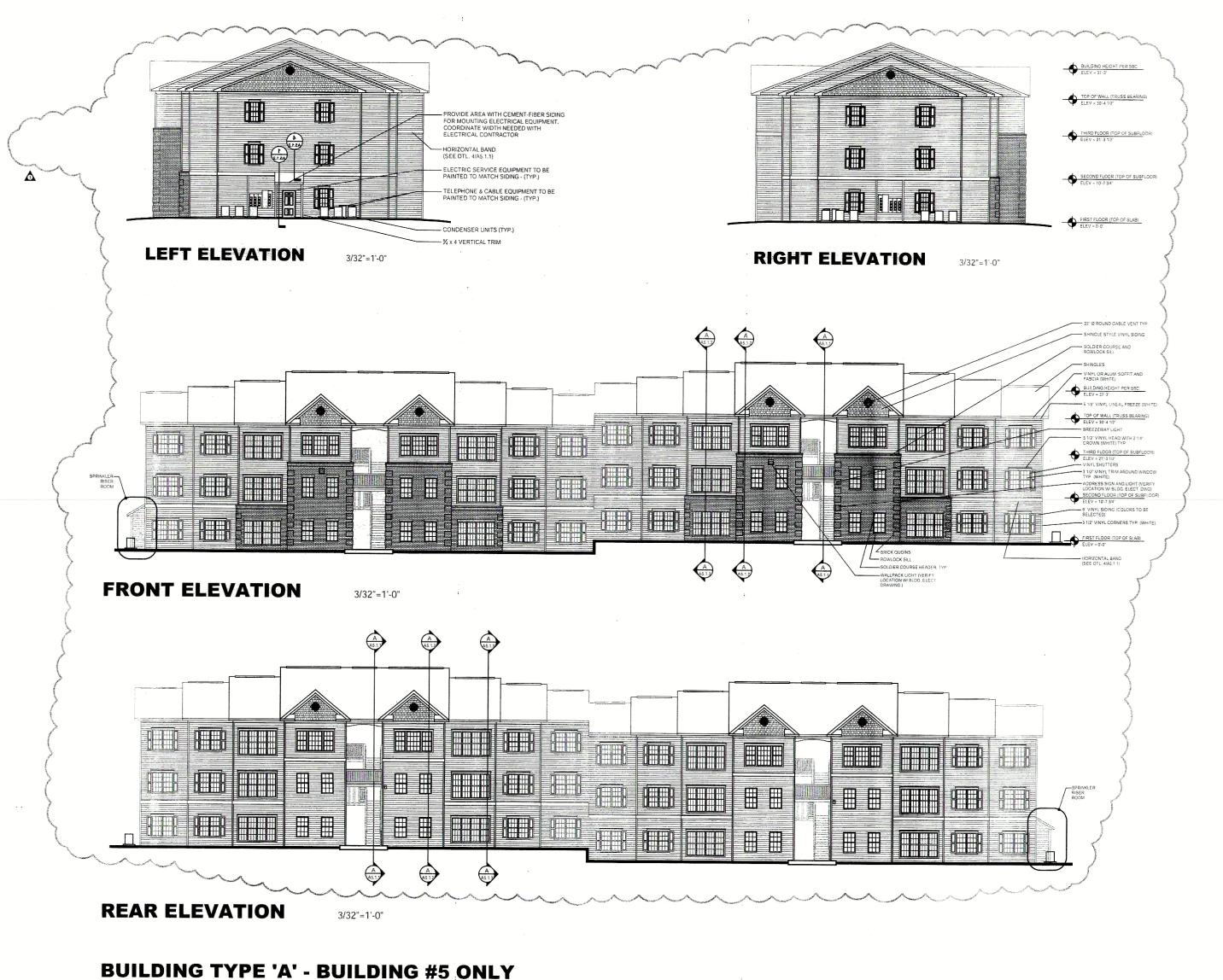
DATE 10-19-04

BUILDING TYPE 'A' - FOUNDATION PLAN

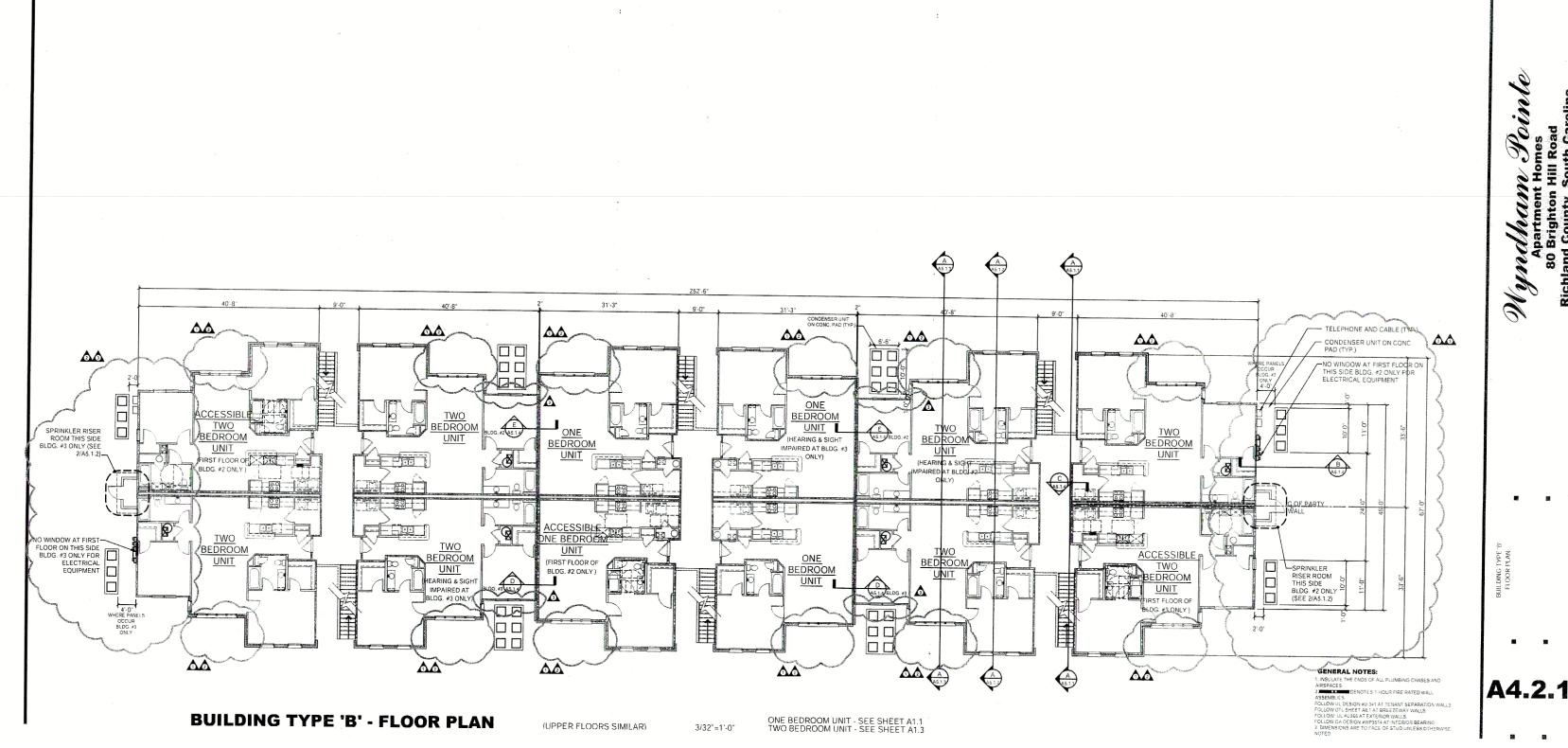


Wyndham Pointe
Apartment Homes
80 Brighton Hill Road
Richland County, South Carolina MORTON M. GRUBER, AIA, ARCHITECT 245 PEACHTREE CENTER AND STULL ADMISSAL 1880 FAX ADMINE, SA 30303 TEL 404584-1880 FXX ADMINE, SA

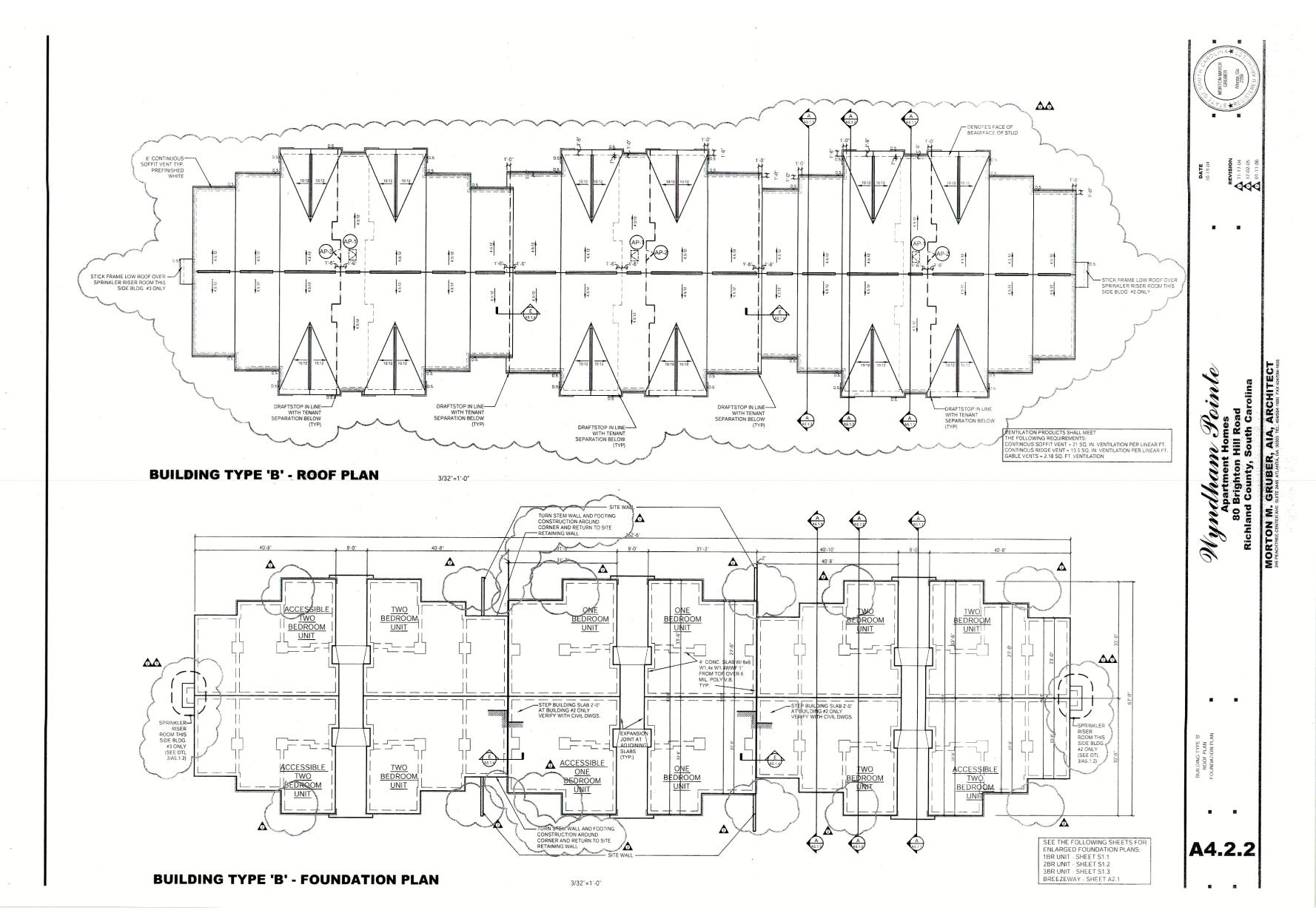
A4.1.3



MORTON M. GRUBER, AIA, ARCHITECT 228 PEACHTRE CANGES AND SUITE 245 ATLANTA, 2023 TEL ADMENTED DE ENVANCED ON TEL ADMENTED DE ENVANCED Of yndham Pointe
Apartment Homes
80 Brighton Hill Road
Richland County, South Carolina **A4.1.4**



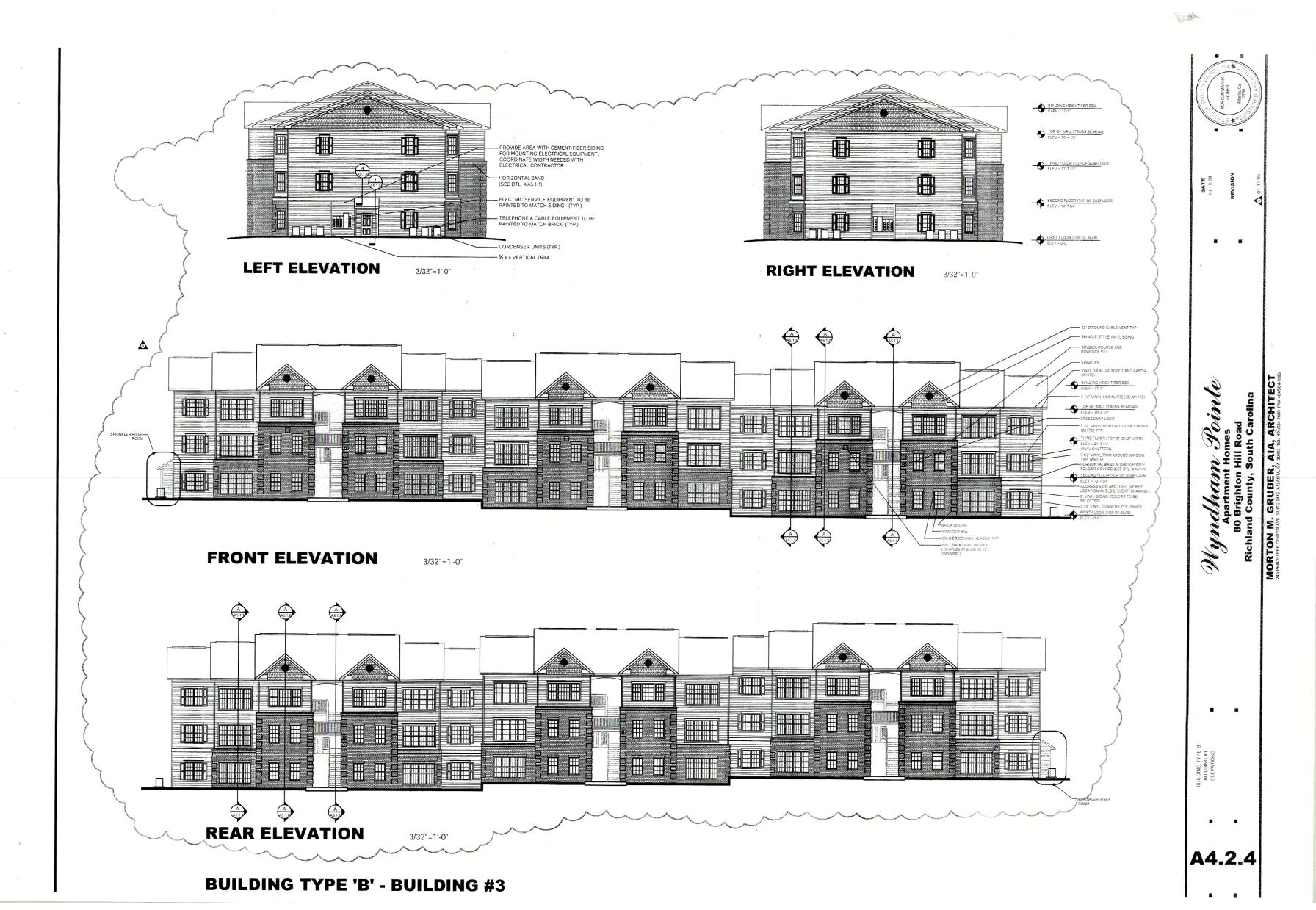
MORTON M. GRUBER, AIA, ARCHITECT 245 PEACHTREE CENTER AND SUITE 2445 ATTANTA CA 30003 TEL 404594-1690 FAX 404894-1695

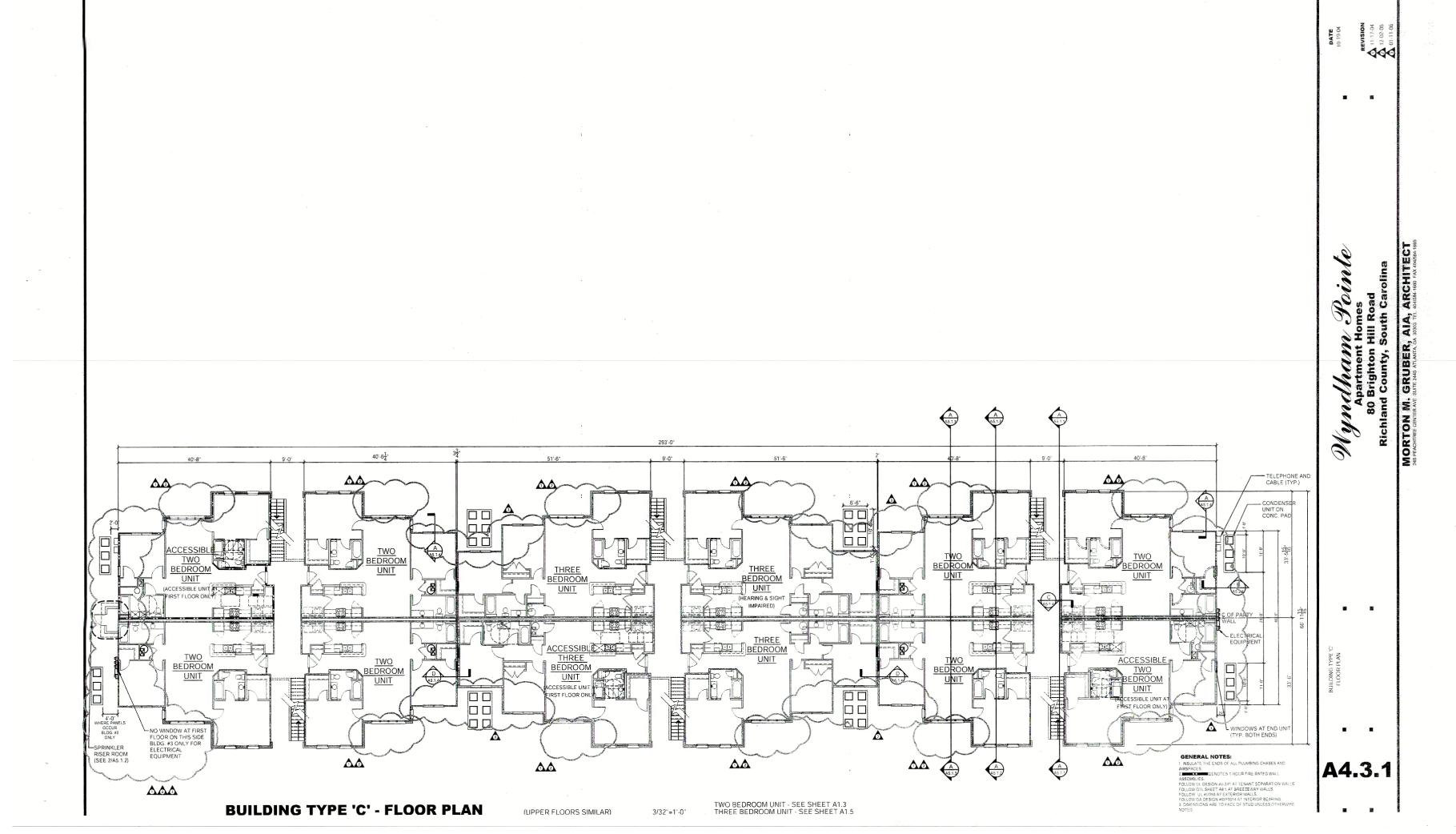


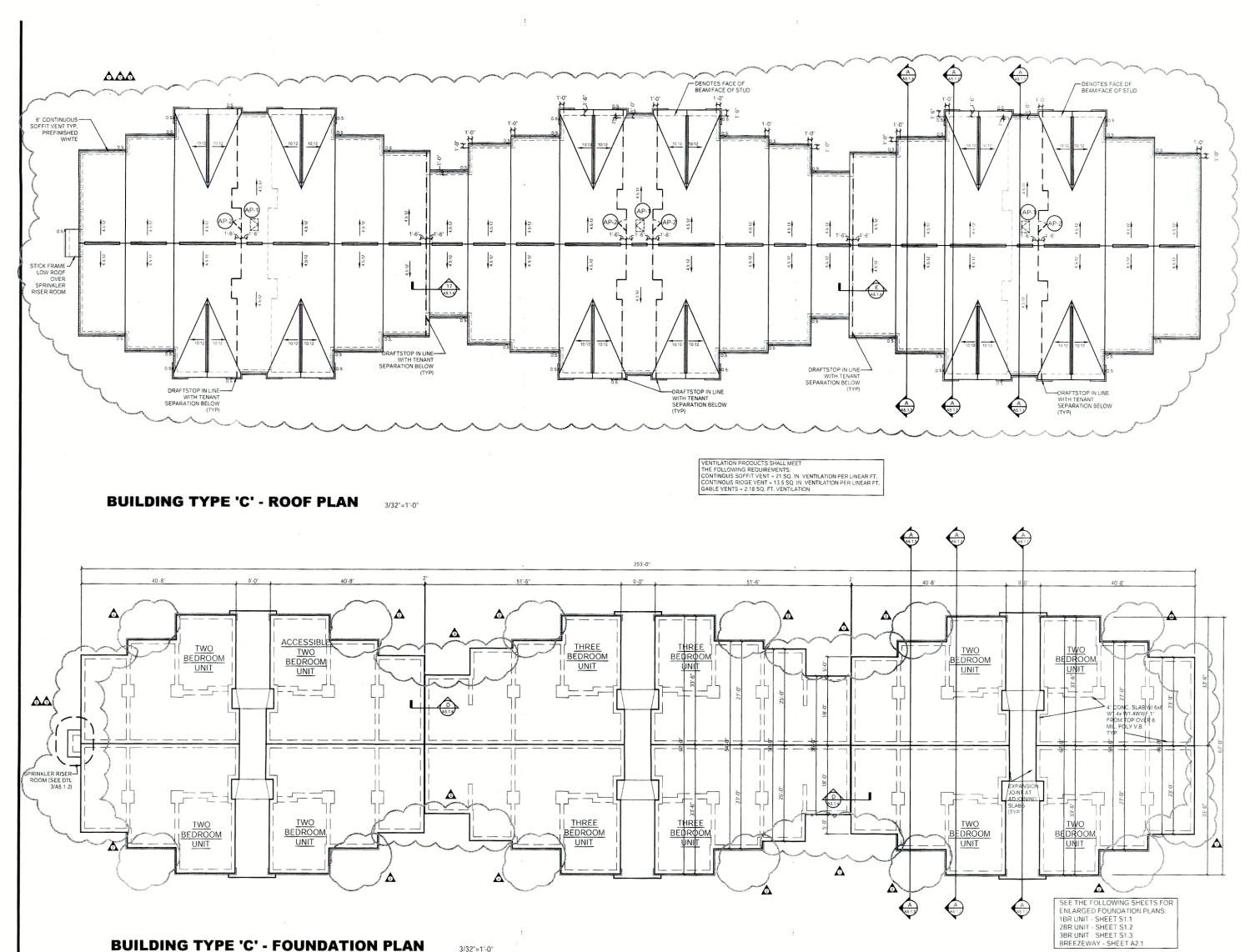


BUILDING TYPE 'B' - BUILDING #2

MORTON M. GRUBER, AIA, ARCHITECT 282 PEACHTREE CENTERANE SUITE 2845 ATLANTA, 64 30303 TEL 404894-1889 FXX 404894-18





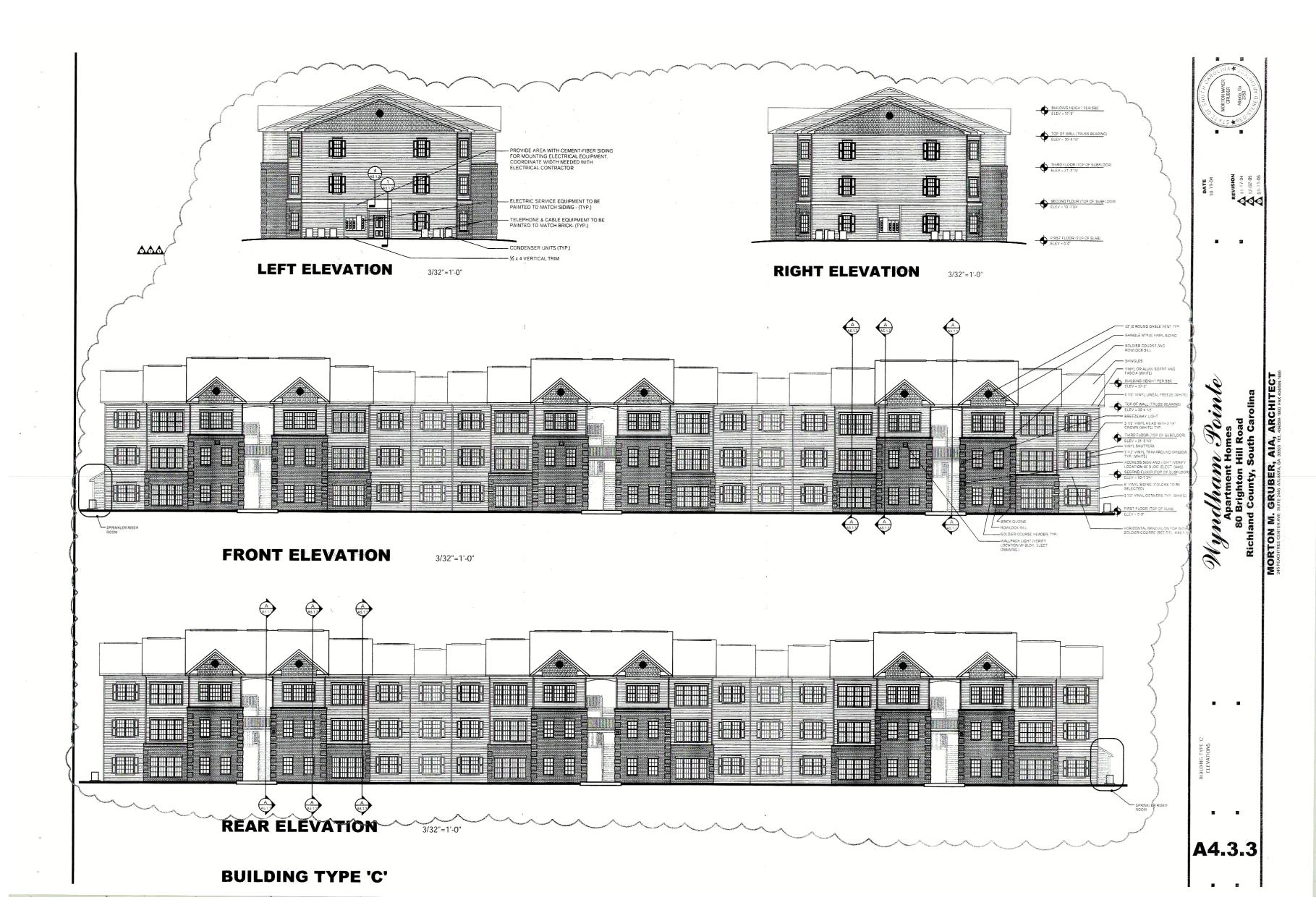


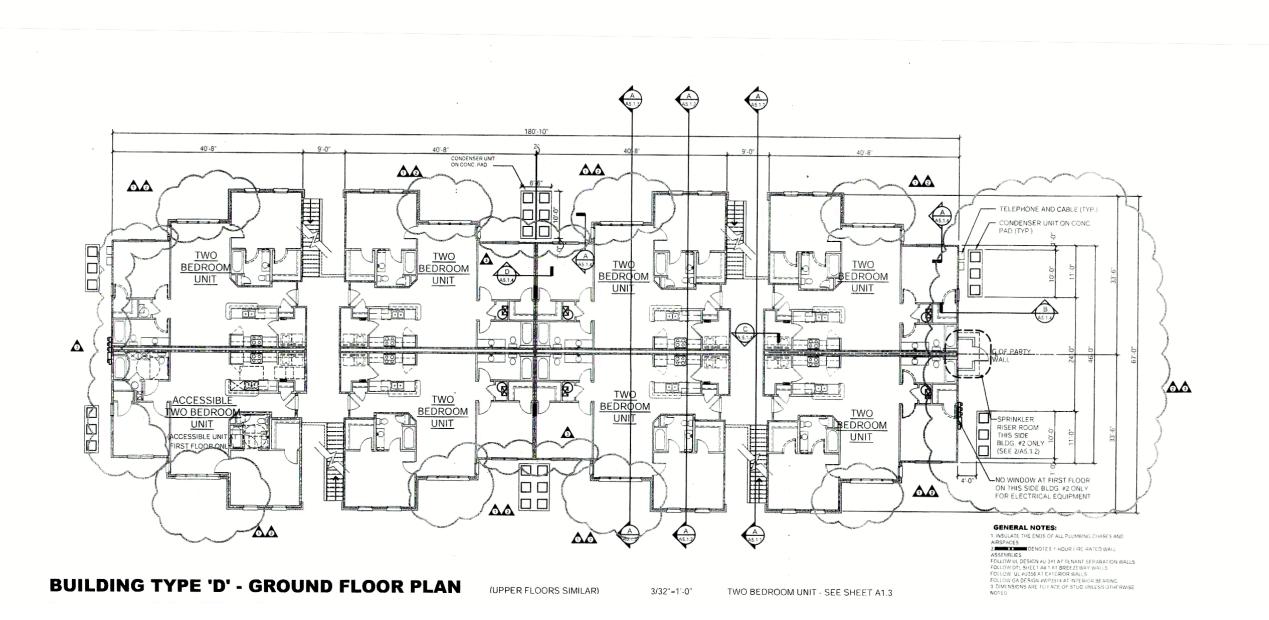
DATE 10.19-04

Myndham Sointe
Apartment Homes
80 Brighton Hill Road
Richland County, South Carolina

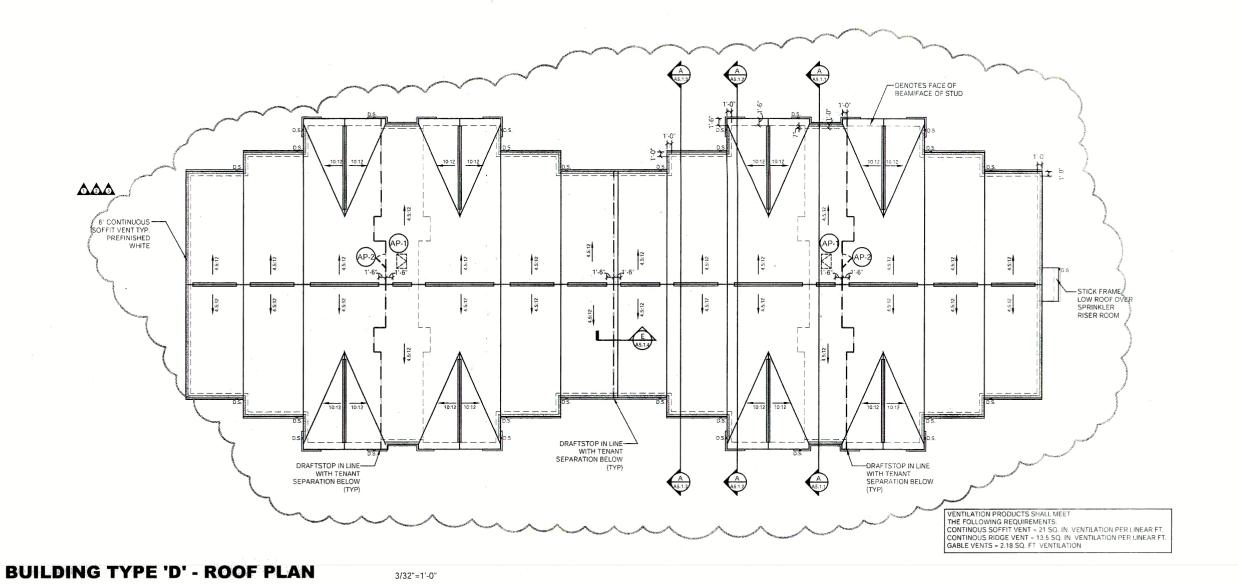
MORTON M. GRUBER, AIA, ARCHITECT 245 PFACHTREE CENTER AND SUITE 2445 ATLANTA, DA 30003 TEL 404506-1909 FAX 404/1994-1993

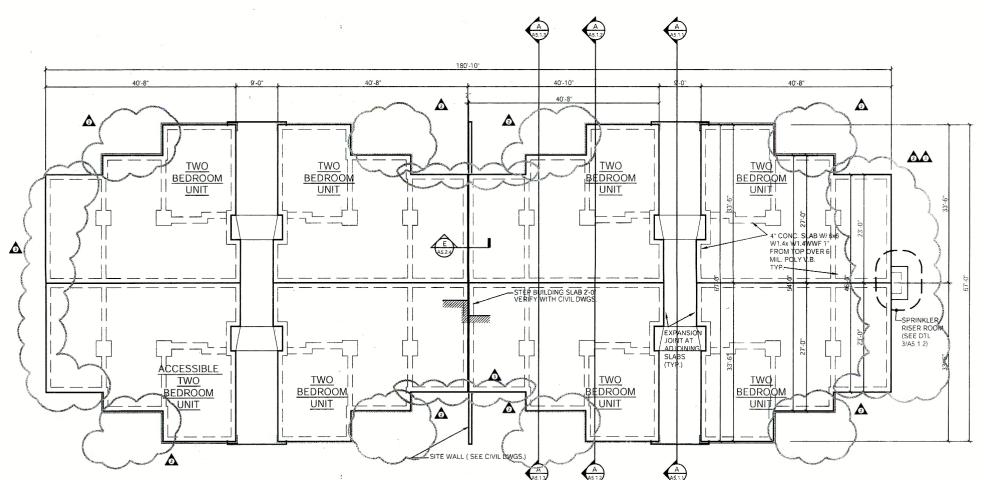
A4.3.2





A4.4.1





3/32"=1'-0"

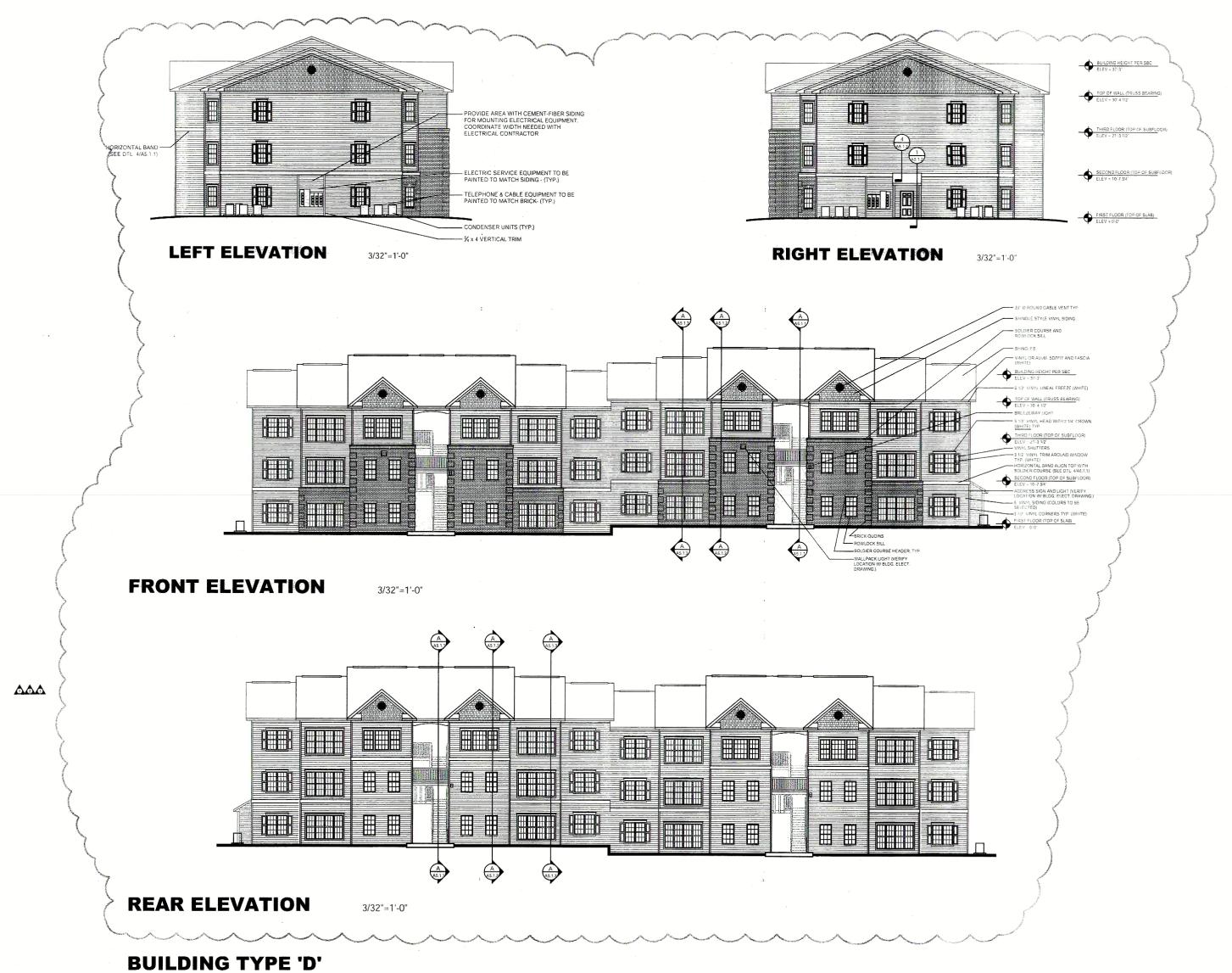
BUILDING TYPE 'D' - FOUNDATION PLAN

SEE THE FOLLOWING SHEETS FOR ENLARGED FOUNDATION PLANS: 1BR UNIT - SHEET S1.1 2BR UNIT - SHEET S1.2 3BR UNIT - SHEET S1.3 BREEZEWAY - SHEET A2.1 Wyndham Pointe
Apartment Homes
80 Brighton Hill Road
Richland County, South Carolina

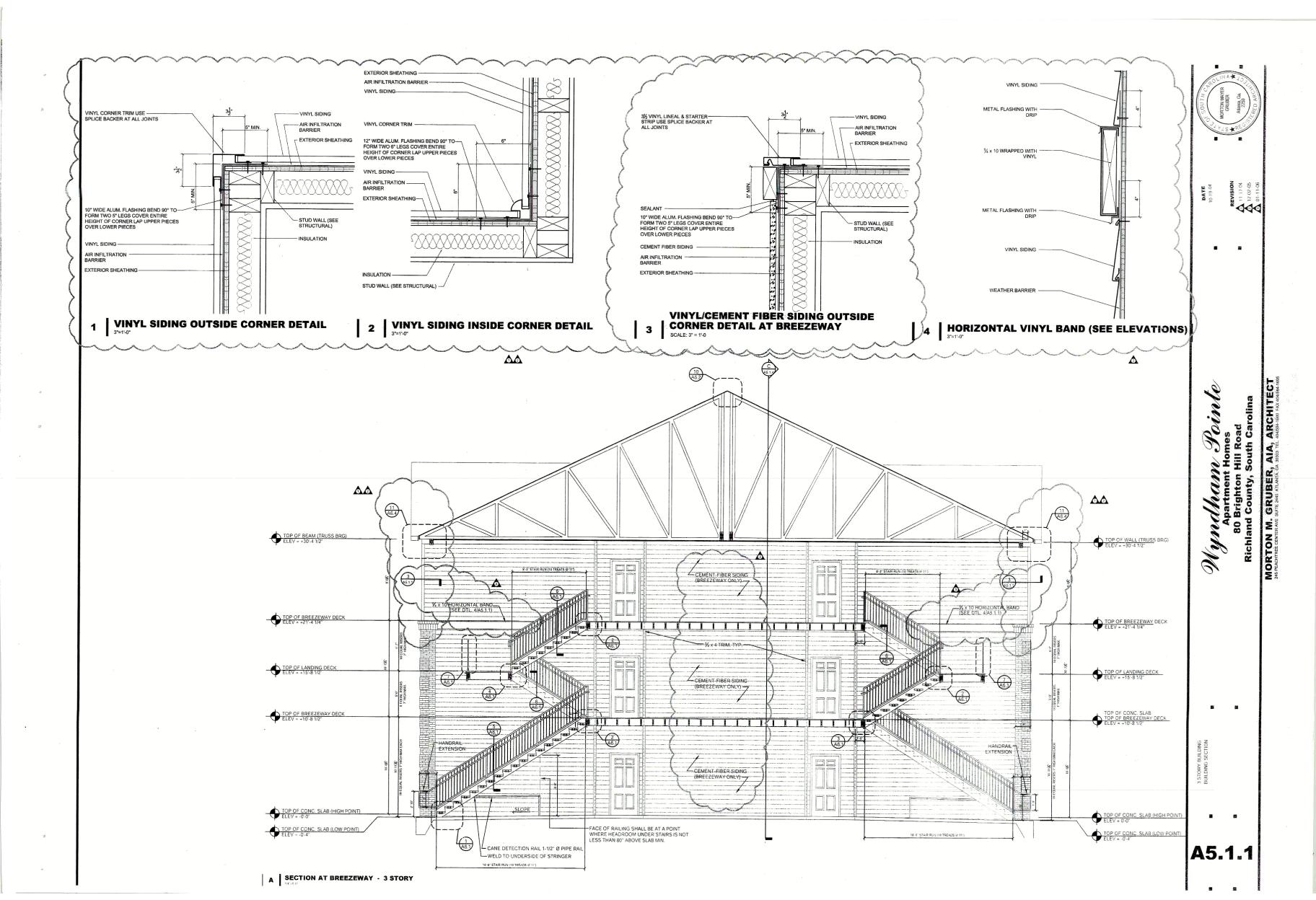
MORTON M. GRUBER, AIA, ARCHITECT 245 PAGGIFFEE CENTER AND SULTE 245 ATLANTA, GA 30033 TEL. 4045964-1699 FAX 404594-1699

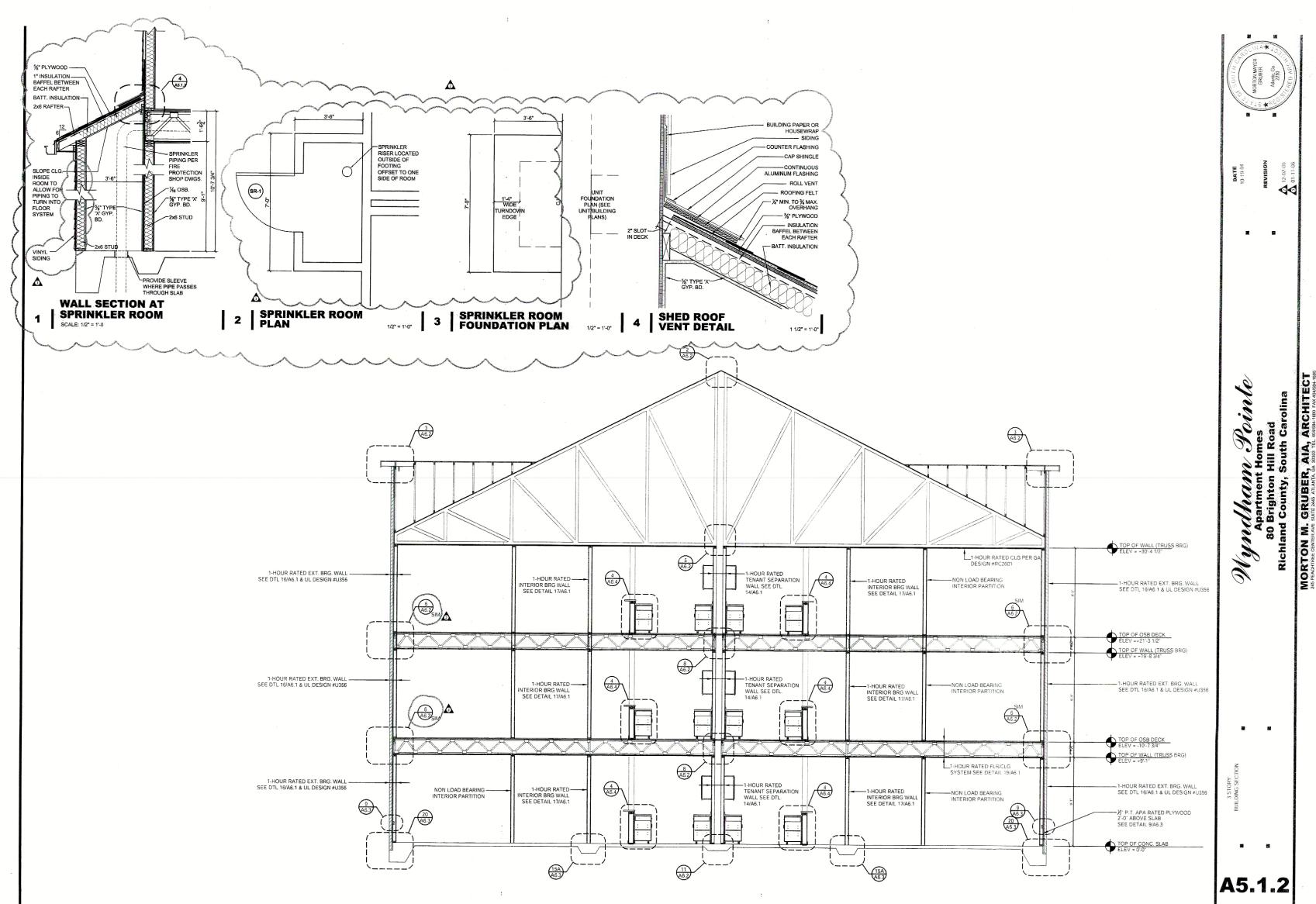
BUILDING TYPE 'D'
ROOF PLAN
FOUNDATION PLAN

A4.4.2

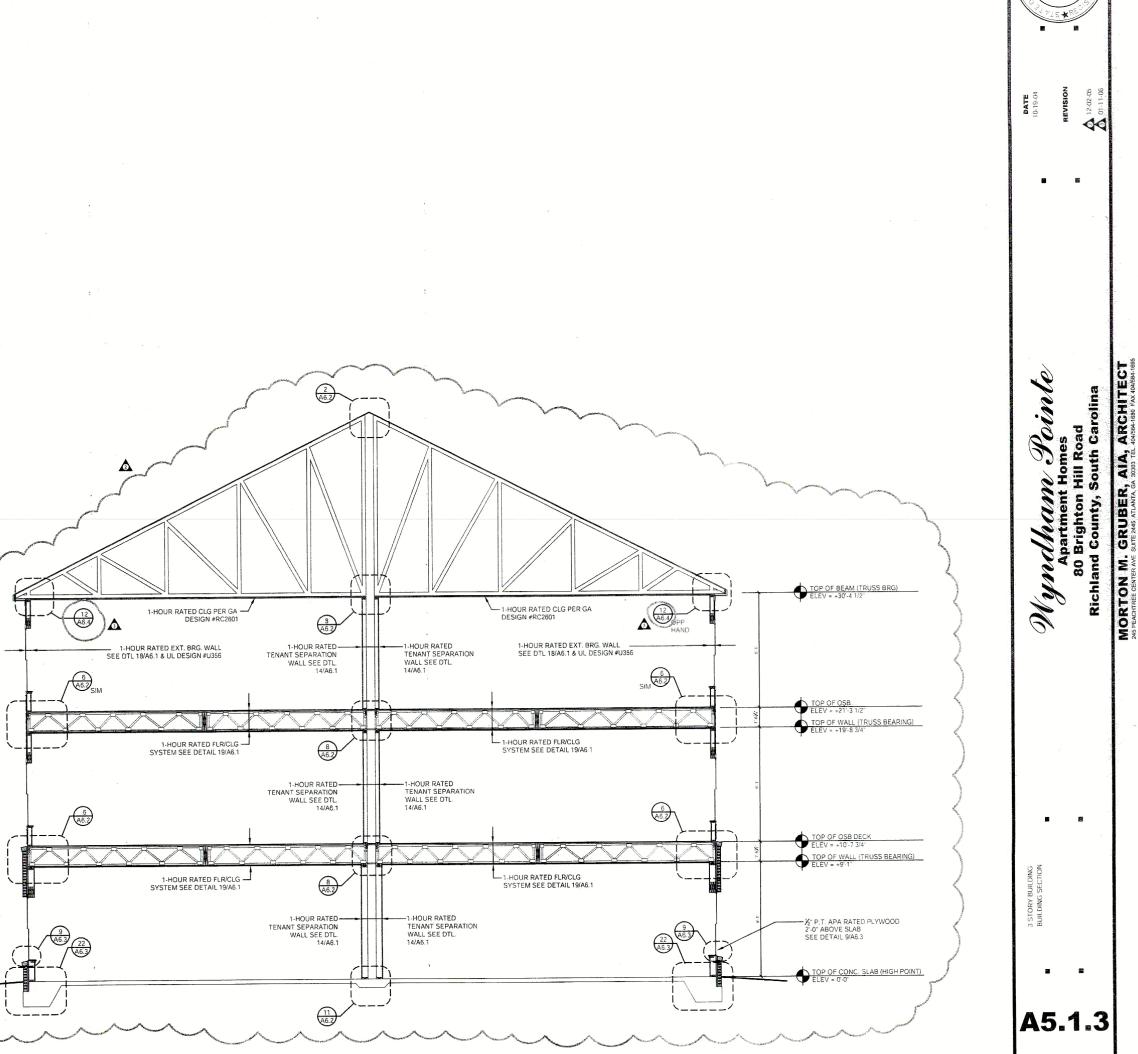








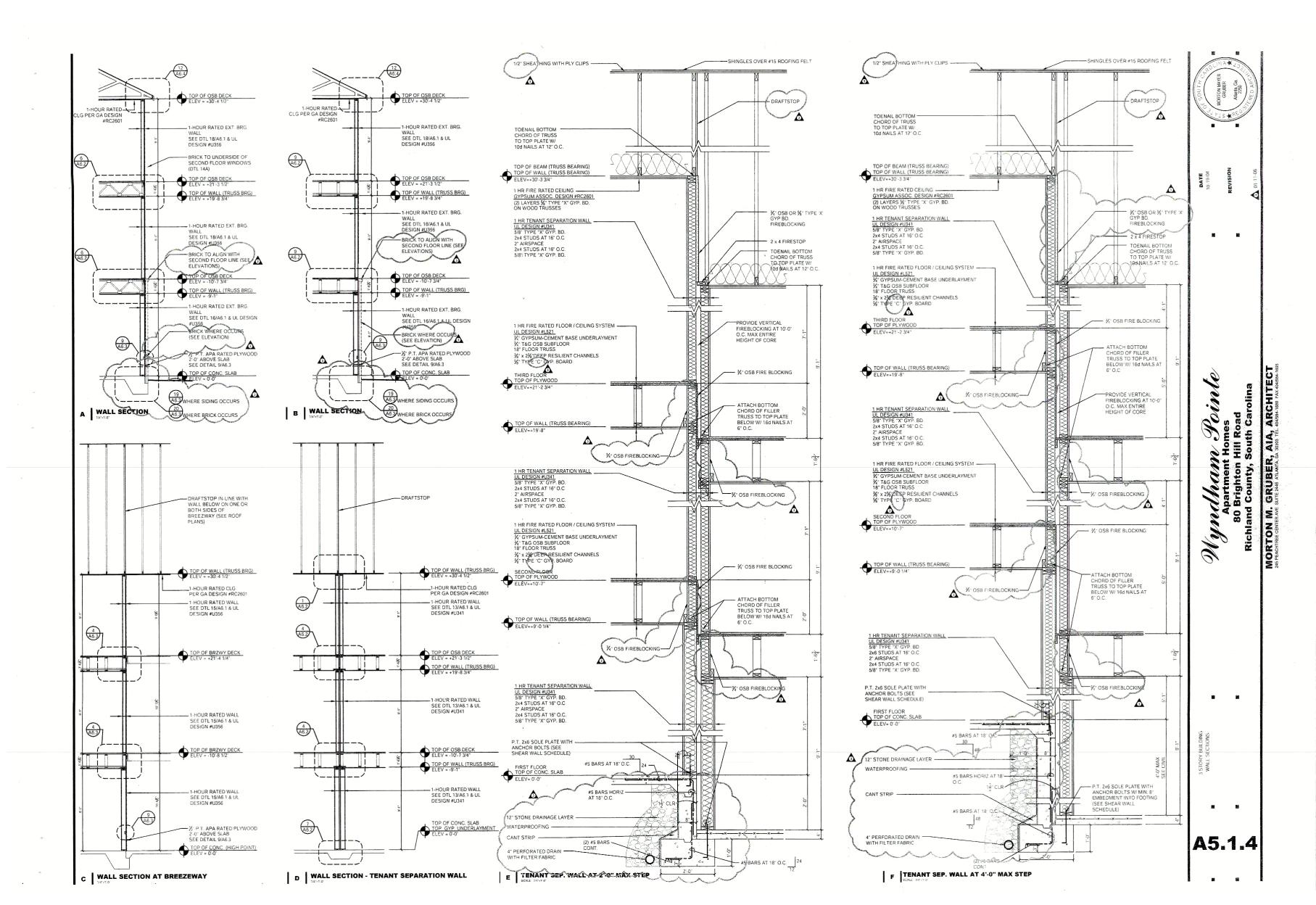
A BLDG SECTION - 3 STORY

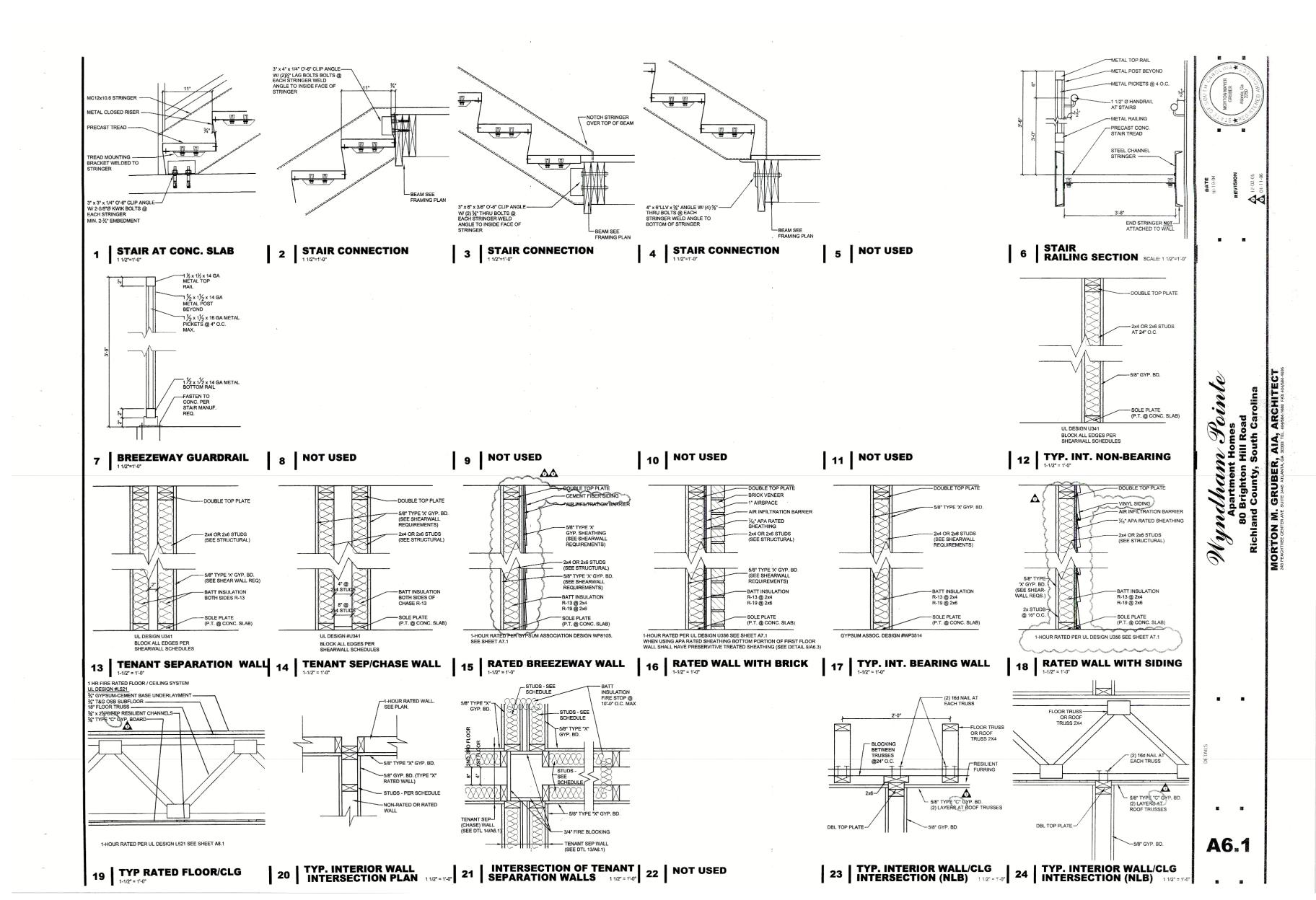


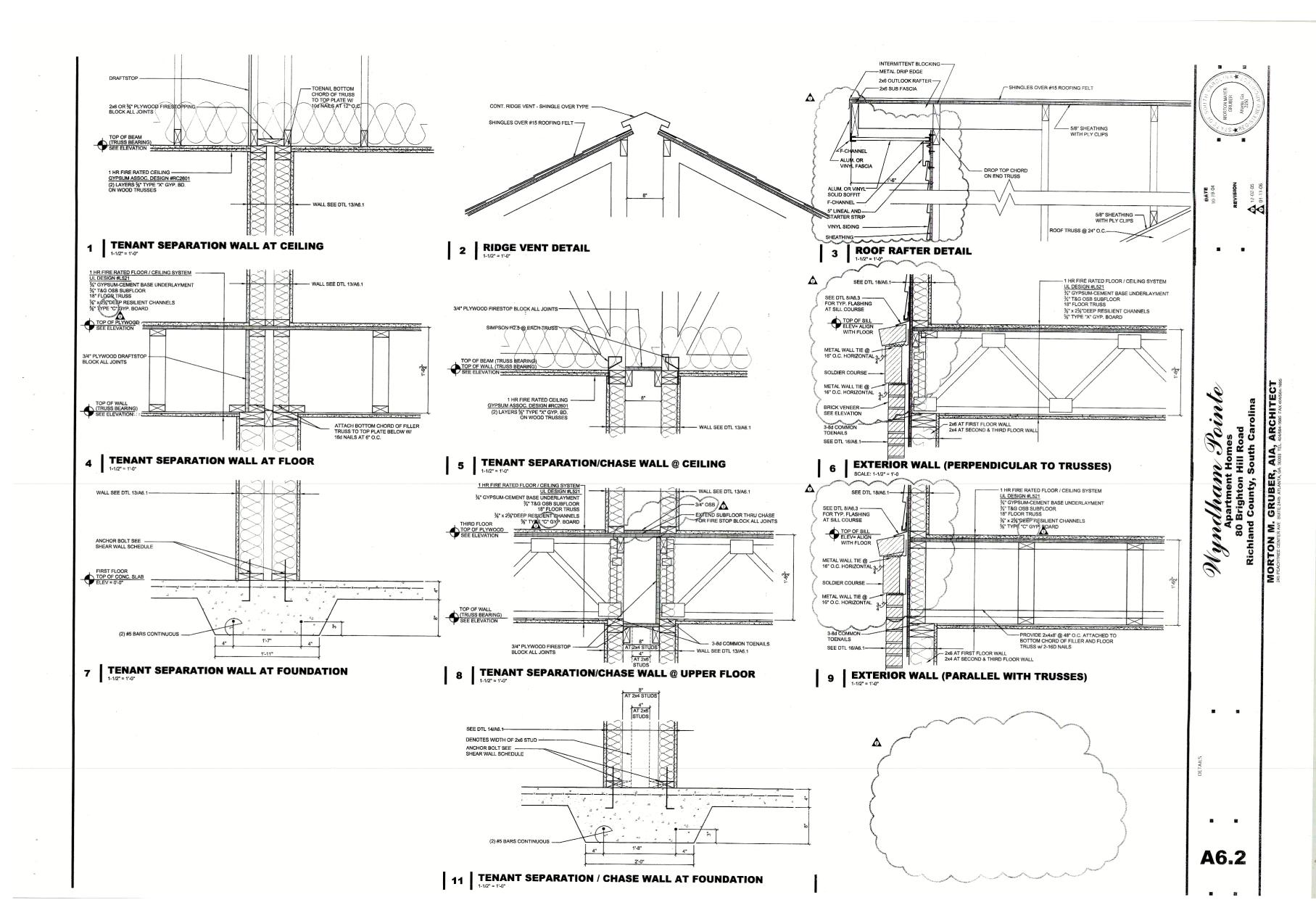
MORTON MAYER

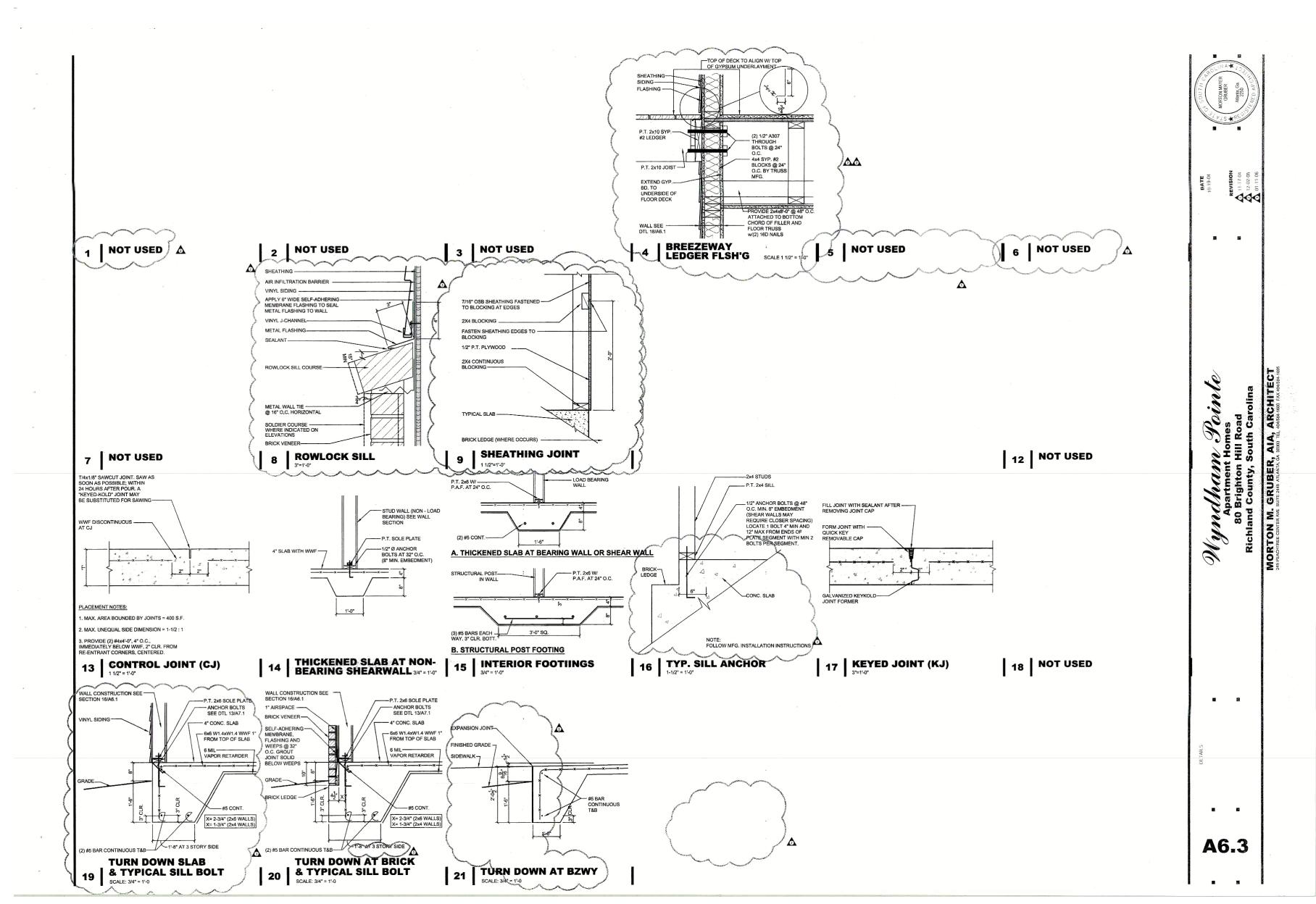
ANIMARER

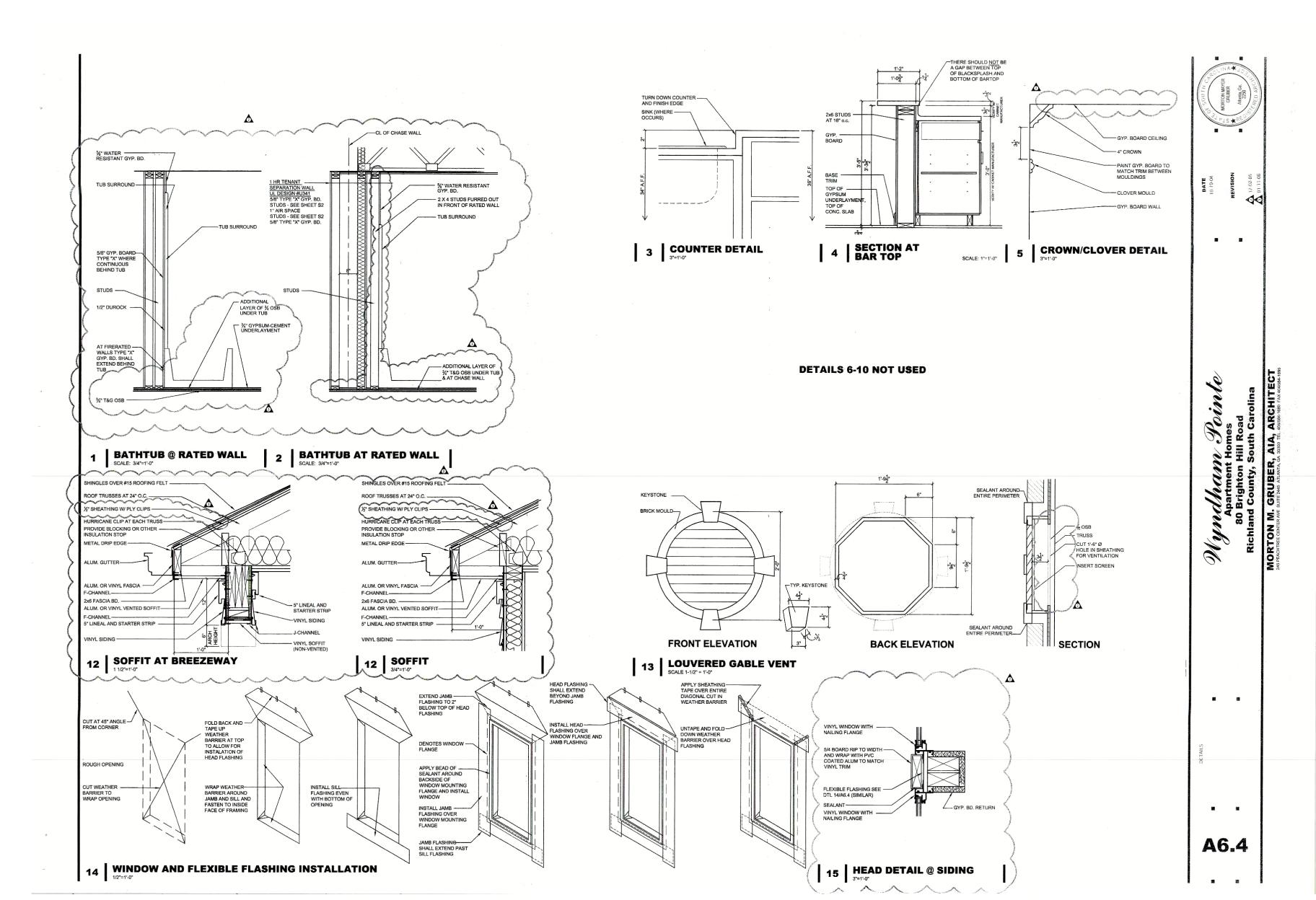
AN

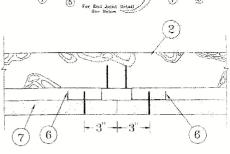












1. Flooring System The finish flooring may consist of any one of the following

System No. 1

Finish Flooring Nom 1 by 4 in. T&G, laid perpendicular to trusses; or 15/32 in thick wood structural panels, usin grade "Undertayment" or "Single-Floot". Long dimensions of panel (strength axis) or face grain of plywood to be perpendicular to trusses with joints staggered. Yapor Barrier (Optional) - Commercial asphalt saturated felt, 0.030 in thick Subflooring 33/32. In thick wood structural panels. Itastilled perpendicular to trusses with only joints staggered 4.1 Plywood or nonveneer APA rated panels secured to trusses with construction adhesive and No. 6d inneed shank nails. Nails spaced 12 in. OC along each truss. Staples having equal or

Finish Flooring — Floor Topping Mixture* 6.8 gal of water to 80 lbs of floor opping mixture to 1.9 cu ft of sand. Compressive strength to be 1100 psi min.

HACKER INDUSTRIES INC - - Firm-Fill, Firm-Fill 2010, Firm-Fill High

System No. 3

Finish Floor — Mineral and Fiber board*, sizes ranging from 3 ft by 4 ft to 8 ft by 12 ft, by min 1/2 in. thick. All joints to be staggered a min of 12 in. OC with adjacent

Finish Flooring — Floor Topping Mixture* — 10 to 13 gal of water to 170 lbs of floor topping mixture to 595 lbs of sand, Compressive strength 900 psi min, thickness to be 3/4 in. min.

ORTECRETE CORP -- Type IL.

Subflooring — 23/32 in. thick wood structural panels, min grade "underlayment" or "single floor". Face grain of phywood or strength axis of panels installed perpendicular to trusses with end joints staggered 4ft. Panels secured to trusses with construction adhesive and No. 6d ringed shank nails. Nails spaced 12 in. OC along each truss. Staples have equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.

System No. 5

inish Flooring — Floor Topping Mixture* — 8 gal max of water to 80 lbs of loor topping mixture to 220 lbs max of sand. Compressive strength to be 1500 psi ain. Thickness to be 3/4 in. min.

UNITED STATES GYPSUM CO -- Levelrock 2500, Levelrock RH

GYPSUM ASSOC FILE NO 3514

GYPSUM WALLBOARD, WOODSTUDS

One layer $^5/a^4$ type X gypsum wallboard or veneer base applied parallel with or at right angles to each side of 2 x 4 wood studs spaced 16 $^{\circ}$ o.c. with 1 $^{1/4}$ $^{\circ}$ Type W drywall screws 12 $^{\circ}$ o.c. Stagger joints each side. (LOAD-BEARING)

GA FILE NO. WP 3514

 $\label{eq:Subflooring-23/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Long dimension of panels (strength axis) or face grain of plywood to be perpendicular to joists with joints staggered.$

System No. 6

Finish Flooring - Floor Topping Mixture* - 8 gal may of water to 100 lbs of

floor topping mixture to 275 lbs max of sand. Compressive strength to be 2100 psi min. Thickness to be 1/2 in. min.

UNITED STATES GYPSUM CO - Levelrock 3500

Subflooring — 23/32 in, thick wood structural panels, min grade "C-D" or "Sheathing". Long dimension of panels (strength axis) or face grain of plywood to be perpendicular to joists with joints staggered.

System No. 7

Finish Flooring — Floor Topping Mixture* — 8 gal max of water to 100 lbs of floor topping mixture to 275 lbs max of sand. Compressive strength to be 3000 psi min. Thickness to be 1/2 in. min.

Subflooring — 23/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Long dimension of panels (strength axis) or face grain of plywood to be perpendicular to joists with joints staggered.

Finish Flooring — Floor Topping Mixture* — 3.5 gal max of water to 100 lbs of floor topping mixture to 100 lbs max of washed stillea sand. Compressive strength to be 3000 psi min. Thickness to be 3/4 in. min.

UNITED STATES GYPSUM CO - Levelrock SLC

Vapor Barrier — (Optional) — Commercial asphalt saturated felt, 0.030 in. thick.

Subflooring — 23/32 in, thick wood structural panels, min grade "C-D" or "Sheathing". Long dimension of panels (strength axis) or face grain of plywood to be perpendicular to joists with joints staggered.

2. Trusses Parallel chord trusses, spaced a max of 24 in. OC, fabricated from nom 2 by 4 humber, with lumber oriented vertically or borizontally. Min truss depth is 18 in Truss members secured together with min 0.0356 in. thick gall vest plates. Plates have 5/16 in. long teeth projecting perpendicular to the plane of the plate. The teeth are in pairs facing each other (made by the same punch), forming a split tooth type plate. Each tooth has a chisel point on its outside edge. These points are diagonally opposite each other for each pair. The top half of each tooth has a twist for stiffness. The points are repeated on approx. 7/8 in. centers with four rows of teeth per inch of plate width.

3. Barts and Blankets* (Optional) — Glass fiber insulation, max 3-1/2 in thick, secured to the plywood subflooring with staples spaced 12 in. OC or to the trusses with 0.090 in dian galv steel wire spaced 12 in. OC or to the trusses with 0.090 in dian galv steel wire spaced 12 in. OC. Any glass fiber insulation bearing the UL Classification Marking as to Surface Burning Characteristics and/or Fire Resistance, having a min density of 0.5 pcf. As an option, the insulation may be fitted in the concealed space, draped over the resilient channels and gypsum wallboard colling membrane when the resilient channels and gypsum wallboard saturations its membrane when the resilient channels and gypsum wallboard saturations its membrane when the resilient channels and gypsum wallboard saturations its secured to the decking.

3A. Loose Fill Material* As an alternate to Item 3 when insulation is draped over resilient channels and gypsum wallboard ceiling membrane.— Any loose fill material bearing the U.I. Classification Marking for Surface Burning Characteristics, lavving a min density of 0.5 pcf and insulated as a max hishesses of 3-1/2 in. When used the resilient channel and gypsum wallboard attachment is modified as specified in Items 6 and 7. The finished ruling when loose fill material is used has not been determined.

5. Ceiling Damper* Maximum nominal area, 324 sq in. Maximum square size, 18 in 18 factoring law area in the exceed 524 sq in. with a maximum width of 18 in. Maximum damper helpit is 14 in. Installed in acceptance with the manufacturers installation instructions provided with the damper. Maximum damper openings not acceed 324 sq in, per 100 sq it of ceiling area.

C&S AIR PRODUCTS - Model RD-521

POTTORFF CO INC -- Model CED-521

6. Furring Channels Resilient channels, 5/8 in. deep by 2-5/8 in, wide at the base and 1-3/8 in. wide at the face, formed from 0/20 in. thick gabs steel, spaced 16 in. OC, installed perpendicular to trusses. When insulation, Item 3 or 3/A, is draped on the resilient channel/gypsum wallboard celling membrane, the spacing shall be 12 in. OC. Channels occurd to each truss with 1-1/4 in. long Type S sted screws. Channels overlapped 4 in. at splices. Channels oriented opposite at wallboard butt joints (spaced 6 in. OC) as shown in the above illustration.

7. Cypsum Board* Nom 5/8 in. thick. 48 in. wide, installed with long dimension perpendicular to resilient channels with 1 in. long Type S screws spaced 12 in. OC used to the set with 1 in. The set of the set o

UNITED STATES GYPSUM CO - - Types C, IP-X2, IPC-AR.

YESO PANAMERICANO S A DE C V — Types C, IP-X2, IPC-AR.

8. Finishing System (Not shown) — Vinyl, dry or premixed joint compound, applied in two coats to joints and screw-heads; paper tape, 2 in. wide, embedded in first layer of compound over all joints. As an alternate, nom 3/2 in. thick veneer plaster may be applied to the entire surface of gypsum wallboard.

Approx. Weight: 7 psf Fire Test: SWRI 01-4511-619,8-19-92

Sound Test: See WP 3520

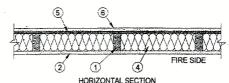
*Bearing the UL Classification Mark

UL SYSTEM NO. U356

Design No. U341 Bearing Wall Rating-1 Hr.

Design No. U356 May 03, 2001

(Exposed to Fire on Interior Face Only Bearing Wall Rating — 1 Hr Finish Rating — 23 Min



Wood Studs Nom 2 by 4 in. spaced 16 in. OC with two 2 by 4 in. top and one 2 by 4 in. bottom plates. Studs laterally-braced by wood structural panel sheathing (Item 5) and effectively fire stopped at top and bottom of wall.

Gypsum Board* Any Classified 5/8 in. thick, 4 ft wide, applied vertically and nailed to stude and bearing plates 7 in. OC with 6d cement-coated nails, 1-7/8 in. long with 1/4 in. diam head.

See Gypsum Board (CKNX) Category for names of Classified Com-3. Joints and Nailheads (Not Shown) — Wallboard joints covered with tape and joint compound. Nail heads covered with joint compound.

4. Batts and Blankets* Mineral fiber or glass fiber insulation, 3-1/2 in. thick, pressure fit to fill wall cavities between stude and plates. Mineral fiber insulation to be unfined and to have a min density of 3 pcf. Glass fiber insulation to be faced with alumium foil or kraft paper and to have a min density of 0.9 pcf (min R-13 thermal).

See Batts and Blankets (BKNV) Category in the Building Materials Directory and Batts and Blankets (BZJZ) Category in the Fire Resistance Directory for names of Classifier Communics

4A. Fiber, Sprayed* As an alternate to Batts and Blankers (Item 4) — Spray applied cellulose insulation material. The fiber is applied with water to completely fill the enclosed eavily in accordance with the application instructions supplied with the product. Nominal dry density of 3.0 In/ft3.

U S GREENFIBER L L C - Cocoon stabilized cellulose insulation.

5. Wood Structural Panel Sheathing Min 7/16 in. thick, 4 ft wide wood structural panels, min grade "C-D" or "Sheathing". Installed with long dimension of sheet (strength axis) or face grain of playwood parallel with or perpendicular to studs. Vertical joints centered on studs. Horizontal joints backed with nom 2 by 4 in. wo blooking. Attached to studs on activation studies with the care the content of the panels and 12 in. OC along interior studs.

Exterior Facings Installed in accordance with the manufacturer's installation instructions. One of the following exterior facings is to be applied over the sheathin

A. Vinyl Siding — Molded Plastic* Contoured rigid vinyl siding having a flame spread value of 20 or less.

See Molded Plastic (BTAT) category in the Building Materials

B. Particle Board Siding Hardboard exterior sidings including patterned panel or lap siding.

C. Wood Structural Panel or Lap Siding APA Rated Siding. Exterior, plywood, OSB or composite panels with veneer faces and structural wood core, pr PS 1 or APA Standard PRP-108, including iextured, rough sawn, medium density overlay, brushed, groved and lip siding.

D. Cementitious Stucco Portland cement or synthetic stucco systems with self-furring metal lath or adhesive base coat. Thickness from 3/8 to 3/4 in., depending on system.

E. Brick Veneer Any type on nom 4 in. wide brick veneer. When brick veneer is used, the rating is applicable with exposure on either face. Brick veneer fastened with corrugated metal wall ties attached over sheathing to wood studs with 8 of mail per tie: ties spaced not more than each sixth course of brick and max 32 in. OC bentionally. One in. air space provided between brick veneer and occasionally.

F. Exterior Insulation and Finish System (EIFS) Nom 1 in. Foamed Plastice* insulation bearing the UL Classification Mark attached over sheathing and finished with conting system, or Portiand cement or synthetic stucco systems, in accordance with anamafactures* instructions. See Foamed Plastic (BRYX and CCVW) categories for names of Classified companies.

G. Siding Aluminum or steel siding attached over sheathing t

GYPSUM ASSOC FILE #RC 2601

GYPSUM BOARD, WOOD JOISTS, ROOF COVERING

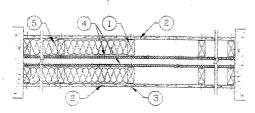
Base layer % type X gypsum wallboard applied at right angles to 2 x 10 wood joists 24" o.c. with 1% Type W or S drywall screws 24" o.c. Face layer % type X gypsum wallboard or gypsum veneer base applied at right angles to joists with 1% Type S drywall screws 12" o.c. at joints and intermediate joists and 11% Type G drywall screws 12" o.c. placed 2" back on either side of end joints. Joints offset 24" from base

layer joints. Wood joists supporting 1/2" plywood with exterior glue applied at angles to joists with 8d nails. Appropriate roof covering. Ceiling provides one hour fire resistance protection for wood framing, including trusses.

GA FILE NO. RC 2601

UL DESIGN NO. U341

Finish Rating-Min 20 min.



HORIZONTAL SECTION

1. Wood Studs—Nom 2 by 4 firs, apsect 24 in. 0,C. max. Cross braced at mid-height and affectively firestopped at top and bottom of wall.

2. Wallboard, Gypsum*—9/8 in. thick 4 ft wide. Wallboard or lath applied norizontally or vestically and neifled to stude and bearing plates 7 in. 0,C. with 6d cement coated nails, 1-7/8 in. long, 0,0915 in. shank diam and 1/4 in. dam head. As an alternate, No. 6 bugle head drywall screws, 1-7/8 in. long, may be substituted for the 6d cement coated nails.

See Wallboard, Gypsum 1, 1/K/NY, statement for comment of coated nails. See Wallboard, Gypsum* (CKNX) category for names of Classified

companies.

3. Joints and Naitheads—Wallboard joints of outer layer covered with tape and joint compound. Nail, heads of outer layer covered with joint compound. As an alternate, norn 3/32 in. thick gypsum veneer plaster may be applied to the entire surface of Classified veneer baseboard.

4. Sheathing—(Optional)—Septum may be sheathed with min 0.5 in. thick plywood or Mineral and Fiber Boards."

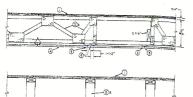
See Mineral and Fiber Boards (CERZ) category for names of Classified 5. Batts and Blankets*—3-1/2 in. max thickness glass or mineral fiber batt insulation. Optional when sheathing (Item 4) is used on both balves of wall.

See Batts and Blankets (BZJZ) category for list of Classified companies. *Bearing the UL Classification Marking

Searing the UE Classification Marking

UL DESIGN NO. L534

Design No. L534



Flooring Systems—The finish flooring may consist of any one of the following systems:

1. Flooring Systems—The finish flooring may consist of any one of the following systems:

System No. 1

Finish Flooring—4 ft by 8 ft by 23/32 in. thick interior plywood with exterior glue and 1 & 6 edge detail along 8 ft sides. Plywood loxtailed perpendicular to trusses with the opinist singagered 4. F. Plywood loxtailed perpendicular to trusses with the diplinist singagered 4. F. Plywood secured to trusses with construction adhesive and No. 6d ringed shank nails. Antherist was populed as 3/8 in. dam bead to top chord of trusses and groove edges of alywood. Nails spaced 12 in. 01. slong each truss. As an option, or gystem concrete may be placed on the floring. These Regregate (FIZ) and the state of the floring. These Regregate (FIZ) and the state of the floring. The state of insulating concrete shall be 3/4 in. The max thickness shall be determined by jub site conditions. A thin plastic or paper vapor retarder may be placed on plywood prior to pouring the concrete.

See Pertite Aggregate (FIZ) and Vermiculties Aggregate (CIZ).

1. The state of the state of the floring the state of the state of

joint.

S. Screw, Wallboard — In, long, Type S, 9/64 in, diam, self-drillling and self-tapping, Sugle head.

Finishing System — (Mct shown) — Paper tape embedded in cementibious compound over joints with edges of compound feathered out and exposed screw heads covered with compound. As an alternate, nom 3/332 in, thick veneer plaster may be applied to the entire surface of gyant.

1 HOUR FIRE

Approx. Ceiling

5 pst FM FC 172, 2-25-72

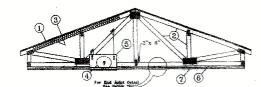
illboard. ng the UL Classification Marking

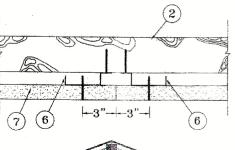
UL DESIGN P522

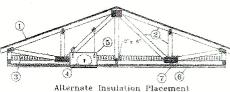
Fire Resistance Ratings - ANSI/UL 263

Design No. P522 January 28, 2003

Finish Rating - 25 Min (See Items 3 or 3A)







1. Roofing System* — Any UL Class A, B or C Roofing System (TGFU) or Prepared Roof Covering (TFWZ), acceptable for use over nom 15/52 in, thick wood structural panels, min, grade "C-D" or "Roofing". Nom 15/52 in, thick wood structural panels secured to russes with No of ringed shank nails spaced 12 in OC along each truss. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails. Construction adhesive may be used with either the nails or staples.

2. Trusses — Pitched or parallel chord wood trusses, spaced a max of 24 in. OC, fabricated from nom 2 by 4 lumber, with lumber oriented vertically or horizontal Truss members secured together with 0.040 in. thick galv steel plates. Plates, have \$716 in. long teeth projecting perpendicular to the plane of the plate. The teeth are pairs facing each other (made by the same punch), forming a split tooth type plate Each tooth has a chies ploint on its outside edge. These points are diagonally operated other for each pair. The top half of each tooth has a twist for stiffness: The p each outer for each pair. The dop had re-coal rodon mas a ways for shiftness. The pairs are repeated on approximately 7/8 in. centers with four rows of seek per inch of plat width. Where the trues intersects with the interior face of the exterior walls, the min truss depth shall be 3/4 in. with a mili nowf slope of 3/12 and a min. are a in the plane of the truss of 21 sqft. Where the truss interesects with the interior face of the exterior walls, the min truss depth may be reduced to 3 in. if the bars and blankets (Item 3) are used as shown in the above illustration (Alternake Insulation Placement and are firmly packed against the intersection of the bottom chords and the pieveod seedling.

3. Batts and Blankets* — (Optional) — Glass fiber insulation, secured to the wood structural panels with supples spaced 12 in OC or to the trusses with 0.090 in. Jiam galv stell wires spaced 12 in. OC Any giass fiber insulation bearing the UL Classification Marking as to Surface Burning (Limeractristics and/or Fize Resistance, having a madeasity of 0.5 pcf. As an option, the insulation may be fitted in the concealed space disped over the resilient channel (gypour wallboard ceiling membrane when resilient channels and gypour wallboard attachment is modified as specified in Items 6 and 7. The finished rating his only been determined when the insulation is secured to the decking.

3A. Loose Fill Material* — As an alternate to Item 3 — Any thickness of Item material bearing the U. Classification Marking for Surface Burning Character having a min density of 0.5 pcf, fitted in the concealed space, draped over the rehannel/gypsum wallboard ceiling membrane when resilient channels and gypsum wallboard stachment is modified as specified in Items 6 and 7. The firished rawhen loose fill material is used has not been determined.

Air Duct* — Any UL Class 0 or Class 1 flexible air duct installed in accordance with the instructions provided by the damper manufacturer.

C&S AIR PRODUCTS -- Model RD-521

POTTORFF - Model CFD-521

6. Furring Channels — Resilient channels, nom. 1/2 in. deep by 2-3/8 in. wide at the base and 1-3/8 in. wide at the face, formed from 0.020 in. thick galv steel. Installed perpendicular to the transes (tien 2), spaced a max of 16 in. OC when no insulation (tem 3 or 3A) is fitted in the concealed space, draped over the resilient insulation (tem 3 or 3A) is fitted in the concealed space, draped over the resilient channel (speams wallboard cetting membrane. Two occurses of resilient channel positioned 6 in. OC at wallboard butt-joints (3 in. from each end of wallboard). Channels orjected opposite at wallboard butt-joints. Channel spities overlapped 4 in. beneath wood trusses. Channels secured to each truss with 1-1/4 in. long Type S

7. Gypsum Board* — One layer of nom 5/8 in, thick by 48 in, wide boards, installed with long dimension parallel to trusses. Attached to the resilient channels using 1 in, long Type 5 bugs-head screws. Screws spaced a max of 12 in. OC along butsed onlying the state of the screen of the concentration of the screen of the scr

 ${\bf CANADIAN\ GYPSUM\ COMPANY-Types\ C,\ IP-X2,\ IPC-AR.}$

UNITED STATES GYPSUM CO -- Types C, IP-X2, IPC-AR.

USG MEXICO S A DE C V -- Types C, IP-X2, IPC-AR.

od in two cousts to joints and screw-heads; paper tape. 2 in wide, embedded in two cousts to joints and screw-heads; paper tape. 2 in wide, embedded in giver of compound over all joints. As an alternate, nom 3/2 in, thick wener or may be applied to the entire surface of gypsum wallboard. Alternate Ceilins frame—Not Shown.

a. Main runners — Installed perpendicular to Structural Steel Members - Nom 12 ft long, 15/16 in. or 1-1/2 in. wide face, spaced 4 ft OC. Main runners lung a min of 2 in. from bottom chord of Structural Steel Members with 12 SWG galv steel wire. Wires located a max of 48 in. OC.

b. Cross tees or channels — Nom 4 ft long, 15/16 in. or 1-1/2 in. wide face or cross channels, nom 4 ft long, 1-1/2 wide face. installed perpendicular to the main runners, spaced 16 in. OC. Additional cross tees or channels used at 8 in. from each side of butted willbander and joints. The cross tees or channels may be rivested or screw-attached to the wall angle or channels to facilitize the ceilitize artifallation.

CGC INTERIORS, DIV OF CGC INC - Type DGL or RX.

USG INTERIORS INC - Type DGL or RX.

10. Gypsum Board* — For use with Steel Framing Members (Item 9) when Batts and Blankets* (Item 6) are not used. One lover of nom 5/8 in. think by 48 in. wide-boards, installed with long dimension parallel to the control of the steel of the control of the contro willboard spects shall 1 willboard spects shall 1 willboard spects shall 1 willboard spects spaced 12 in. OC. Joints treated as described in Item 7. Fo will Steel Francing Members? (Item 9) when Basts and Blankses? (Item 6) are used. Ratings limited to 1 Hour -578 in. thick, 4 ft wide, installed with long utments on perpendicular to cross tees with side joints centered along main runners and end joints centered along eross tees. Fastened to cross tees with 1 in. long steel willboard servers spaced 8 in. OC along and joints. Fastened or cross tees with 2 in. Long wallboard servers spaced on the contract spaced 3 in. OC along and joints. Fastened or cross tees will in. In. long wallboard servers paced on the contract spaced 3 in. OC along and sign fine fastened with the contract of the sheets shall be staggered with spacing between joints on adjacent board 1 to less than 4 ft OC.

CANADIAN GYPSUM COMPANY — Type C or IP-X7

UNITED STATES GYPSUM CO - Type Cox 1P-Y2 USG MEXICO S A DE C V --- Type C or IP-X2.

*Bearing the UL Classification Mark

GYPSUM ASSOC. FILE WP8105

GA FILE NO. WP 8105

GYPSUM WALLBOARD, GYPSUM SHEATHING, WOOD STUDS

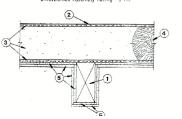
Exterior Side: One layer 5/e* type X gypsum sheathing, 48* wide, applied parallel to studs with galvanized roofing nalls, 19/e* long, 0.120* shank, 7/e* or 1/e* heads, 7* o.c. in field, 4* o.c. perimeter. Joints of gypsum sheathing may be left untreated. Exterior cladding to be attached through sheathing to studs. Wallboard and sheathing nailed to top and bottom plates at 7* o.c. Interior Side: One layer 5/e* type X gypsum wallboard or water resistant backer board or veneer base applied parallel with or at right angles to 2 x 4 wood studs, 24* o.c. with 6d coated nalls 1*/e* long, 0.0915* shank, 1/e* heads, 7* o.c. (LOAD-BEARING)



Approx. Weight: 7 psf Fire Test: See WP 3510

UL DESIGN NO. P517

FIRE RESISTANCE DIRECTORY (BXRH) FIRE RESISTANCE RATINGS - ANSI/UL263 (BXUV) -- Continued Design No. P517



1. Wood Beam—Min 4-1/2 in, wide by 9-1/2 in, deep size wood beam operen in accordance with manufacture's specifications.

Roof Covering—Consisting of her mooped or cold application materials conspatible with building unit described herein which provides Class A, 3 or coverings. See Endoring Neurania and Systemo Oricery-Noof Covering Consisting of single pip, Roofing Membrane' stills is either hallascot, adhered or mechanically strached as permitted under the respective manufacture's Classification. See Fire sertatures Discribery—Hoofing Membranes (CHCI) as extractives Discribery—Hoofing Membranes (CHCI) as foamed plastic core facult on the control of the con

ARCHITECT AIA, GRUBER, MORTON M.

Median Pointe
Apartment Homes
80 Brighton Hill Road Ja, Rich

6

A7.1

GENERAL NOTES AND REQUIREMENTS

- Coordinate and verify all dimensions and details with the architectural drawings. Notify the Architect immediately of any discrepancies.
- If field conditions vary from those indicated on the drawings and necessitate changes to the drawings, contact the Engineer

 Output

 Description

 Outpu
- 3. Submit shop drawings for review prior to fabrication for the
 - Wood Roof and Floor Trusses
 Concrete mix design
 Concrete Reinforcing
 Metal Stairs
- Submit concrete tests performed by an ACI certified testing laboratory for seven and twenty-eight day concrete test cylinder breaks.
- 5. Concrete test reports will be available at job site.
- Contractor shall be responsible for bracing and shoring of the structure during construction to ensure stability.
- 7. All truss plans shall be available on job site during the times
- 8. Design complies with the Building Code.
- Proof of welder certification shall be available at the job site during times of inspection.

FOUNDATION NOTES

- Foundations are designed to bear on residual soil or compacted fill with an allowable bearing capacity of 2000 psf. Bearing capacity must be verified by a Geotechnical Engineer prior to concrete placement. If soil test disclose a lesser bearing capacity, this foundation system is void and must be
- 2. Footings shall bear 12" minimum into undisturbed earth or mechanically compacted engineered fill. Exterior wall footings shall bear a minimum of 12" below finished grades. Fill soils shall have compaction tests performed by a geotechnical engineer before pouring foundations.

GENERAL CONCRETE NOTES

- 1. All materials and workmanship shall conform to project specifications. All detailing, fabrication, accessories and placement of reinforcing shall conform to the ACI Manual of Standard Practice for Detailing Reinforced Concrete Structures. Design is in accordance with ACI 318 "Building Code Requirements for Reinforced Concrete"
- Concrete shall be normal weight gray concrete and develop a minimum compressive strength of 3000 psi at 28 days, unless otherwised specified.
- 3. Reinforcing bars shall be deformed bars conforming to .615: Grade 40 - #3 bars. Grade 60 - #4 bars and larger.
- 4. Welded wire fabric reinforcing shall conform to ASTM A 185.
- 5. Where the length of a bar is given, and it is to be hooked. the hook shall be in addition to the length given.
- 6. Depths of the footing shown on the drawings are minimum Footing elevation may be lowered if found necessary by
- No horizontal construction joints will be permitted in slabs or walls.
- All construction joints shall be rough surface and cleaned before the next concrete pour.
- Where openings occur in slabs, place the reinforcing that normally occurs in line with the opening equally to either side of the opening. Cut no steel in the field.
- Mechanical, electrical and architectural drawings shall be checked for embedded items and penetrations before pouring.

STRUCTURAL WOOD FRAMING NOTES

- All workmanship shall conform to the National Design Specification For Wood Construction, published by the National Forest Products Association, and the Standar
- Lumber sizes specified on the plans are minimum nominal dimensions.
- 3. All lumber shall be identified by an affixed grade mark of a
- Unless noted otherwise, lumber for beams, headers, and joists shall be Southern Yellow Pine #2. Lumber for rafters shall be Spruce-Pine-Fir #2, and lumber for studs shall be Spruce-Pine-Fir Stud Grade.
- Finger jointed Spruce-Pine-Fir #2 lumber meeting product standard SPS1 and C/QC101.97 can be used for rafters. Finger jointed Stud Grade Spruce-Pine-Fir lumber meeting product standard SPS3 and C/QC101.97 can be used for studs.
- All lumber and wood structural panel members, including preservative-treated, 2 inch thick and less, shall contain not more than 19% moisture at the time of installation.
- 7. Provide pressure treated lumber at all locations specified on
- Provide Simpson Strong-Tie, or approved equal, connectors at all locations shown on the plans.
- Laminated Veneer Lumber (LVL) shall be Microllam beams as manufactured by Trus Joist Macmillan, or equal.
- 10. Glulam beams are to be 24F-V3 lamination combination with
- Wood I-Joists shall be the size and manufacturer indicated on the plans, or approved equal. Installation shall be in accordance with the manufacturer's recommendations.
- Number of posts indicated are "jack studs" below header or beam. Provide, also. (1) full height "king stud" in addition to jack studs.
- Provide 1/2" plywood fill between multiple beams/headers where required for finish.
- 14. Load bearing walls must align at each level, typ. all units.
- 15. Shear walls noted will extend entire length or width of bldg., as applicable.
- 16. Double studs at end of shear walls
- 17. Use a doubled top plate and stagger all splices 4·0° min. Secure plates together with 6·16d nails on each side of each splice at all party walls. Drive all nails through and clinch. Use longest pieces of wood from outside inward, to splice Use longest pieces of near center of panel.
- 18. All gyp. bd. indicated in the shear wall schedule shall be applied vertically or, if applied horizontally, shall be fully blocked with purlins so that all edges are supported and nailed

PRE-ENGINEERED WOOD ROOF TRUSSES

- by manufacturer. russes shall be designed by a professional engine registered where project is located and the drawings
- review prior to fabrication. Drawings shall show truss profile, web and chord member sizes, member forces, and
- 4. Web and chord members shall be a minimum size of 2 x 4.
- Provide connection and installation details for all trusses, showing temporary and permanent bracing and bridging locations in accordance with truss plate Institute's "Handling, Installation and Bracing Metal Plate connected Wood Trusses", H1B-91.
- 6. Where trusses bear on another truss, truss manufactures

- Engineer-of-record.

 8. All truss plans shall be available on the site during the times of inspection and shall be are clear indication that they have been reviewed and approved by the architect of engineer of record.

DESIGN LOADS

Roof Truss Design Loads:

Top Chord Live Load = 20 psf Top Chord Dead Load = 10 psf

Bottom Chord Live Load = 0 psf Bottom Chord Dead Load = 10 ps

Top Chord Dead Load = 17 psf

Floor Truss Design Loads:

Top Chord Live Load = 40 psf

Bottom Chord Live Load = 0 psf

Bottom Chord Dead Load = 5 psf

Deck Live Loads: 40 psf

Breezeway Live Loads: 100 psf Stair Loads: 100 psf

Basement walls designed for 45 lbs/cf equivalent fluid pressure.

Wind Load: Design for 96 mph wind per Building Code

lw = 1.0Exposure/Catagory B

Seismic Load: Design per Section 1617 of the Building Code

Selsmic Use Group I Site Class D Set = 0.40g Set = 0.40g Site smic Design Catagory C Basic Siesmic Force Resisting System Bearing wall system with light framed shear panels R = 6 Simplified Analysis Procedure

Truss diagrams are for conceptual chord configurations only. Member configuration and sizes are to be determined

and calculations shall bear his seal.

3. Submit shop drawings for all trusses to the Architect for

- shall provide all required connection hardware.

 of inspection and shall bear clear indication that they have been reviewed and approved for construction by the Project
- Roof framing is not designed to support mechanical equipment.
- All truss plans shall be available on job site during the times Engineer-of-record.

SHEAR WALL SCHEDULE

SHEAK WAI	LL JUNE	DOLE					
BLDG	3 STORY						
LEVEL	BUILDING	SW1	SW2	SW3	SW4	SW5	NOTES
	3	EXTERIOR: 5/8" GYPSUM SHEATHING ATTACHED TO STUDS, 16" O.C., TOP AND BOTTOM PLATES, BLOCKED WITH 6d COOLER OR WALLBOARD NAILS AT 4" O C. TO ALL MEMBERS	AND BOTTOM PLATES, BLOCKED, WITH 6d COOLER OR WALLBOARD NAILS AT	EXTERIOR: 7/16" APA RATED SHEATHING ATTACHED TO STUDS, 16" O.C., TOP AND BOTTOM PLATES, BLOCKED WITH 8d NAILS AT 8" O.C. AT PANEL EDGES AND 12" O.C. IN FIELD OF PANEL.	5/8" GYPSUM BOARD ATTACHED TO STUDS, 16" O.C. MAXIMUM, TOP AND BOTTOM PLATES, UNBLOCKED, WITH 6d COOLER OR WALLBOARD	5/8" CYPSUM BOARD ATTACHED TO STUDS, 16" O.C., TOP AND BOTTOM PLATES, BLOCKED WITH 6d COOLER OR WALLBOARD NAILS AT 4" O.C. TO ALL MEMBERS. ATTACH SOLE PLATE TO	
	2	INTERIOR:5/8° GYPSUM BOARD ATTACHED TO STUDS, 16° O C., TOP AND BOTTOM PLATES, BLOCKED WITH 6d COOLER OR WALLBOARD NAILS AT 4° O C TO ALI, MEMBERS.	4" O.C. TO ALL MEMBERS. ATTACH SOLE PLATE TO FOUNDATION WITH 1/2" Ø ANCHOR BOLTS AT 24" O.C. ATTACH UPPER LEVEL SOLE PLATES TO WOOD FRAMING BELOW WITH 2 ROWS OF 16d	INTERIOR:5/8" GYPSUM BOARD ATTACHED TO STUDS, 16" O.C., TOP AND BOTTOM PLATES, BLOCKED WITH 6d COOLER OR WALLBOARD NAILS AT 4" O.C. TO ALL MEMBERS.	NAILS AT 7" O.C. TO ALL MEMBERS. ATTACH SOLE PLATE TO FOUNDATION WITH 1/2" & ANCHOR BOLTS AT 48" O.C. ATTACH UPPER LEVEL SOLE PLATES TO FRAMING BELOW WITH 16d NAILS	FOUNDATION WITH 1/2" & ANCHOR BOLTS AT 48" O.C. ATTACH UPPER LEVEL SOLE PLATES TO WOOD FRAMING BELOW WITH 16d NAILS AT 6" O.C. PROVIDE DOUBLE STUD AT EACH END OF SHEAR WALL.	
	1	ATTACH SOLE PLATE TO FOUNDATION WITH 1/2" Ø ANCHOR BOLTS AT 48" O.C. ATTACH UPER LEVEL SOLE PLATES TO WOOD FRAMING BELOW WITH 164 NAILS AT 6" O.C. PROVIDE DOUBLE STUD AT EACH END OF SHEAR WALL.	WITH Z ROWS OF TOO NAILS AT 6" O.C. PROVIDE DOUBLE STUD AT EACH END OF SHEAR WALL.	ATTACH SOLE PLATE TO FOUNDATION WITH 1/2° Ø ANCHOR BOLTS AT 48° O.C. ATTACH UPPER LEVEL SOLE PLATES TO WOOD FRAMING BELOW WITH 188 NAILS AT 6° O.C. PROVIDE DOUBLE STUD AT EACH END OF SHEAR WALL.	BELOW WITH TOO NAILS		

	TABLE 2304.9.1 FASTENER SCHEDULE	
CONNECTION	FASTENING a,m	LOCATION
Joist to sill or girder	3-8d common 3-3" x 0,131" nail 3-3" 14 gage staple	toenail
Bridging to joist	2-8d common 2-3" x 0.131" nail 2-3" 14 gage staple	toenail each end
1" x 5" subfloor or less to each joist	2-8d common	face nail -
Wider than 1" x 6" subfloor to each joist	3-8d common	face nail
5. 2" subfloor to joist or girder	2-16d common	blind and face nail
Sole plate to joist or blocking	16d at 16" о.с. 3" x 0.131" пай at 8" о.с.	typical face nail
Sole plate to joist or blocking at braced wall panel	3" 14 gage staple at 12" o.c 3-16d per 16" 3" x 0.131" nail per 16" 3" 14 gage staple per 16"	braced wall panels
7. Top plate to stud	3 14 gage staple per (6) 2-16d common 3-3" x 0.131" nail 3-3" 14 gage staple	end nail
Stud to sole plate		toenail
	3-31 14 gage staple 2-16d common 3-31 0.131 nail	end nail
Double studs	3-3" 14 gage staple	face nail
	3" x 0.131" nali at 8" o.c. 3" 14 gage staple at 8" o.c.	1
Double top plates	16d at 16" o.c. 3" x 0.131" nail at 12" o.c. 3" 14 gage staple at 12" o.c.	typical face nail
Double top plates	8-16d cammon 12-3" x 0.131" nail 12-3" 14 gaga staple typical face nail	lap splice
11. Blocking between joist or rafters to top plate	3-8d common 3-3" x 0.131" nail	toenail
Rim joist to top plate	3-3" 14 gage staple 9d at 6" (152 mm)o.c	toeneil
	3" x 0.131" nail at 6" o.c. 3" 14 gage staple at 6" o.c.	
 Top plates, laps and intersections 	2-16d common 3-3" x 0.131" nail 3-3" 14 gage staple	face nail
Continuous header, two pieces	18d common	16" o.c. along edge
5. Ceiling joists to plate	3-8d common 5-3" x 0.131" nall	toenail
6. Continuous header to stud	5-3" 14 gage staple 4-8d common	toenail
7. Ceiling joists, laps over partitions (See Section 2308, 10.4.1, Table 2308.10.4.1)	3-16d common minimum, Table 2308 10.4.1	face nail
Ceiling joists to parallel	4-3" x 0.131" na8 4-3" 14 gage staple 3-16d common minimum, table 2308.10.4.1	
e. Ceiling joists to parallel rafters (See Section 2308.10.4.1, Table 2308.10.4.1)	4-3" x 0.131" nail	face nail
9 Raiter to plate	4-3" 14 gage staple 3-8d common	toenail
(See Section 2308.10.1. Table 2308.10.1)	3-3" x 0.131" nail 3-3" 14 gage staple 2-8d common	
1" diagonal brace to each stud and plate	2-8d common 2-3" x 0.131" nail 2-3" 14 gage staple face nail	face nail
1. 1" x 8" sheathing to each bearing wall	2-8d common	face naif
Wider than 1" x 8" sheathing to each bearing	3-8d common	face nail
8. Build-up corner studs	16d common 3" x 0.131" nail	24° o.c. 16° o.c.
5. Build-up corner studs	3" 14 gage staple 16d.common	16" o.c.
Built-up girder and beams	3" x 0.131" nail 3" 14 gage staple 20d common 32" o.c.	16" o.c. 16" o.c.
. Don't p grout the teams	3" x 0.131" nari 24" o.c. 3" 14 gage staple 24" o.c.	face nail at top and bottom staggered on opposite sides
	2-20d common 3-3" x 0.131" nail 3-3" 14 gage staple	face nail at ends and at each splice
2" planks	16d common	at each bearing
i. Collar tie to rafter	3-10d common 4-3" x 0.131" nail 4-3" 14 gage staple face nail	face nail
. Jack rafter to hip	3-10d common 4-3" x 0 131" nail 4-3" 14 gage steple	toenail
	2-16d common 3-3 x 0.131" neil 3-3" 14 gage staple	face nail
. Roof rafter to 2-by ridge bearn	2-16d common 3-3" x 0.131" nail 3-3" 14 gage staple	toenail -
	2-16d common 3-3 x 0 131' nai 3-3' 14 gage staple	face nail
joist to band joist	3-16d common 5-3" x 0.131" nail 5-3" 14 gage staple	face nail
Ledger strip	3-16d common 4-3" x 0.131" nail 4-3" 14 gage staple	face nail
Wood structural panels and particleboard: b	1/2" and less 6d c.1	
Subfloor, roof and wall sheathing (to framing):	2 3/8" x 0.113 nas ¹¹ 1 3/4" 16 gage ⁰ 19/32" to 3/4" 8d ^d or 5d ⁰	
Single Floor (combination subflooder layment to	2 3/8" x 0.113" nail ^P 2' 16 gage ^p	
(raming):	7/8" to 1" 8d ^c 1 1/8" to 1 1/4" 10d ^d or 8d ^e 3/4" and less 5d ^e	
Developed to the control of the cont	7/8" to 1" 8d" 1 1/8" to 1 1/4" 10d ^d or 8d ^e	
Panel siding (to framing)	1/2" or less 6d ^f 5/8" 8d ^f	
. Fiberboard sheathing ⁹ .	1/2" No. 11 gage roofing nati ⁿ 6d common nati No. 16 gage staple ⁱ	
	25/32" No. 11 gage staple 8d common nail No. 16 gage staple	
. Interior paneling	1/4	4d ^j
	3/8'	5d ^k

NOTES TO TABLE 2304.9.1

- Common or box noils are permitted to be used except where otherwise stated.
 Nails spaced at 6 inches on center at edges. It clines an intermediate supports except 6 inches at supports where spans are 48 inches or more. For nailing of wood structural panel and participational displaying and share wolls, refer to Section 2305. Nails for well sheathing are permitted to be common.
 Dot or cashing.
 Common.
 Deformed share.
 Deformation states and states of the states of

- Panel supports at 24 inches Casing or finish nails spaced 6 inches on panel edges, 12 inches at intermediate supports
- For roof sheathing applications, 8d rails are the minimum required for wood structural panels. Staples shall have a minimum crown width of 7/15 inch
- For roof sheathing applications, fasteners spaced 4 inches on center at edges, 8 inches at intermediate supports
- Fasteners spaced 4 inches on center at edges, 8 inches at intermediate supports for subtloor and wall sharting and 3 inches on center at edges, 6 inches at intermediate supports for roof sheathing.

٧	r astoriors apocou i interes on benter at euges, o niches at hits niculate.

HEAD	ER SCHEDULE				
MARK	SIZE	LEVEL	JACK	KING	SILL
^		3RD	1	2	1
<h1></h1>	(2) 2x10 SYP #2	2ND	2	2	1
		1ST	2	1	. 1
\wedge		3RD	2	3	1
(H2)	(2) 2x12 SYP #2	2ND	3	3	1
$\overline{}$		157	2	1	. 1
$\overline{}$		3RD	2	3	1
(H3)	(2) 2x12 SYP #2	2ND	4	4	1
Manual Contract		1ST	2	1	3000
\wedge		3RD	2	3	1
(H4)	(2) 1 3/4" x 11 1/4" LVL	2ND	4	4	1
\sim		1ST	3	2	1

Steel Brick Lintel Clear Span To 4'-0" L4 x 4 x 1/4 6'-0" L6 x 4 x 5/16 LLV

L7 x 4 x 3/8 LLV

L6 x 4 x 3/8 LLV BOLTED TO HEADER

Steel Brick Lintel Notes:

OVER 8'-0"

8'-0"

1. Above Table Assumes Arching Action.

2. 4" Minimum End Bearing Required.

3. Lintel Shall Be Hot Dipped Galvanized U.N.O. A Company of the conference of

BEAMS



FRAMING

18" DEEP FLOOR TRUSSES DESIGNED BY TRUSS MANUFACTURER

3 STORY	WALL CONSTRUCTION
BUILDING	SPF STUDS (SPRUCE—PINE—FIR)
THIRD FLOOR	LOAD BEARING: (1)2x4 AT 16" O.C. NON-LOAD BEARING: (1)2x4 AT 24" O.C.
SECOND FLOOR	LOAD BEARING: (1)2x4 AT 16" O.C. NON-LOAD BEARING: (1)2x4 AT 24" O.C.
FIRST FLOOR	LOAD BEARING: (1)2x6 AT 16" O.C.
	NON-LOAD BEARING: (1)2x4 AT 24" O.C.

ROOF_DECK
5/8" OSB NAILING PATTERN: 10d NAILS AT 6" O.C. AT PERIMETER
EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS. USE PLY-CLIPS
AT UNSUPPORTED EDGES.

SUBFLOOR
3/4" T&G OSB. NAILING PATTERN: 8d NAILS AT 6" O.C. AT
PERIMETER EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS.



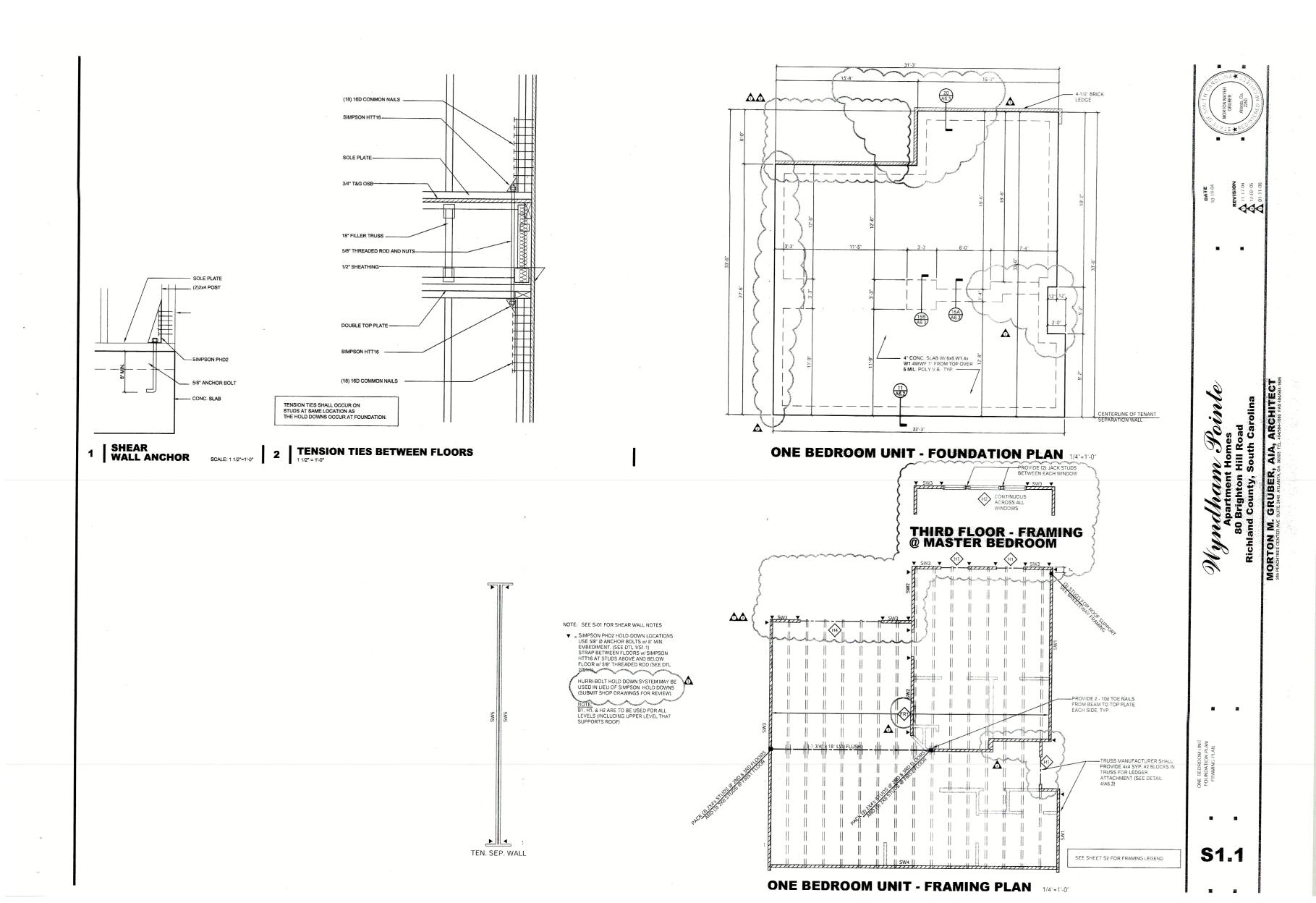
Pointe lomes ill Road outh Carolina ARCHITEC AIA,

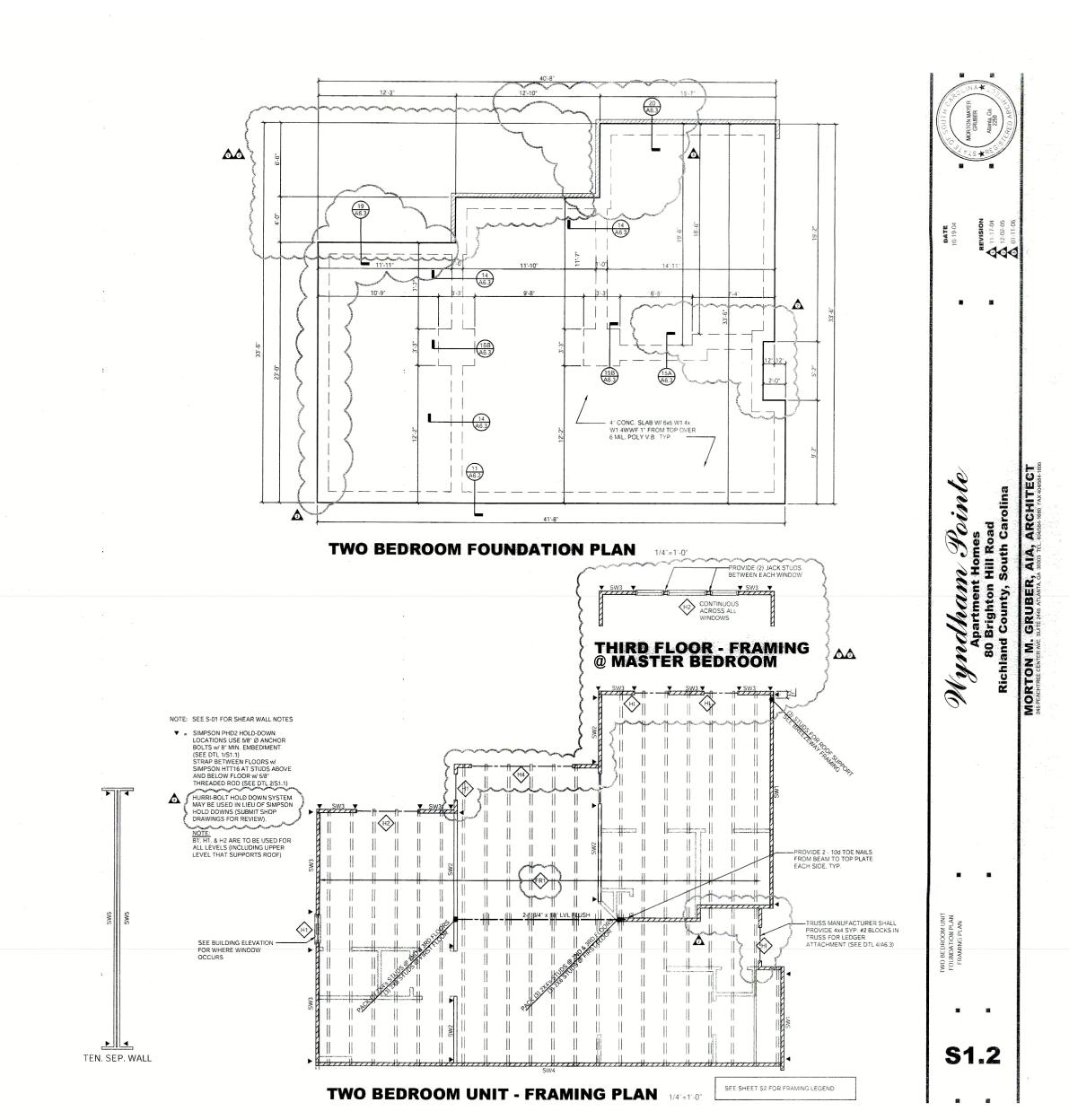
Wyndham C Apartment Hom 80 Brighton Hill R Richland County, South MORTON M. GRUBER,

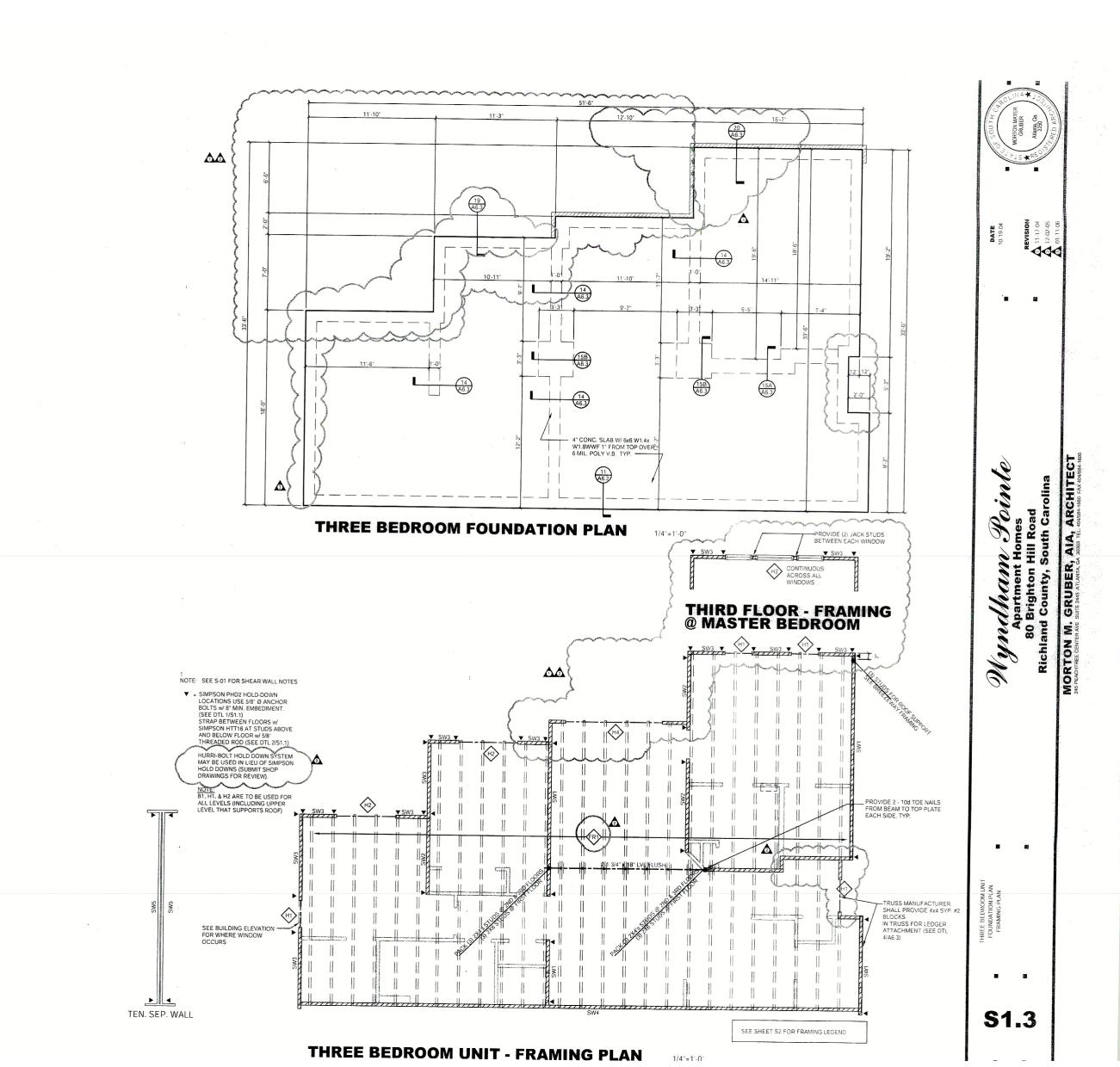
Mynds

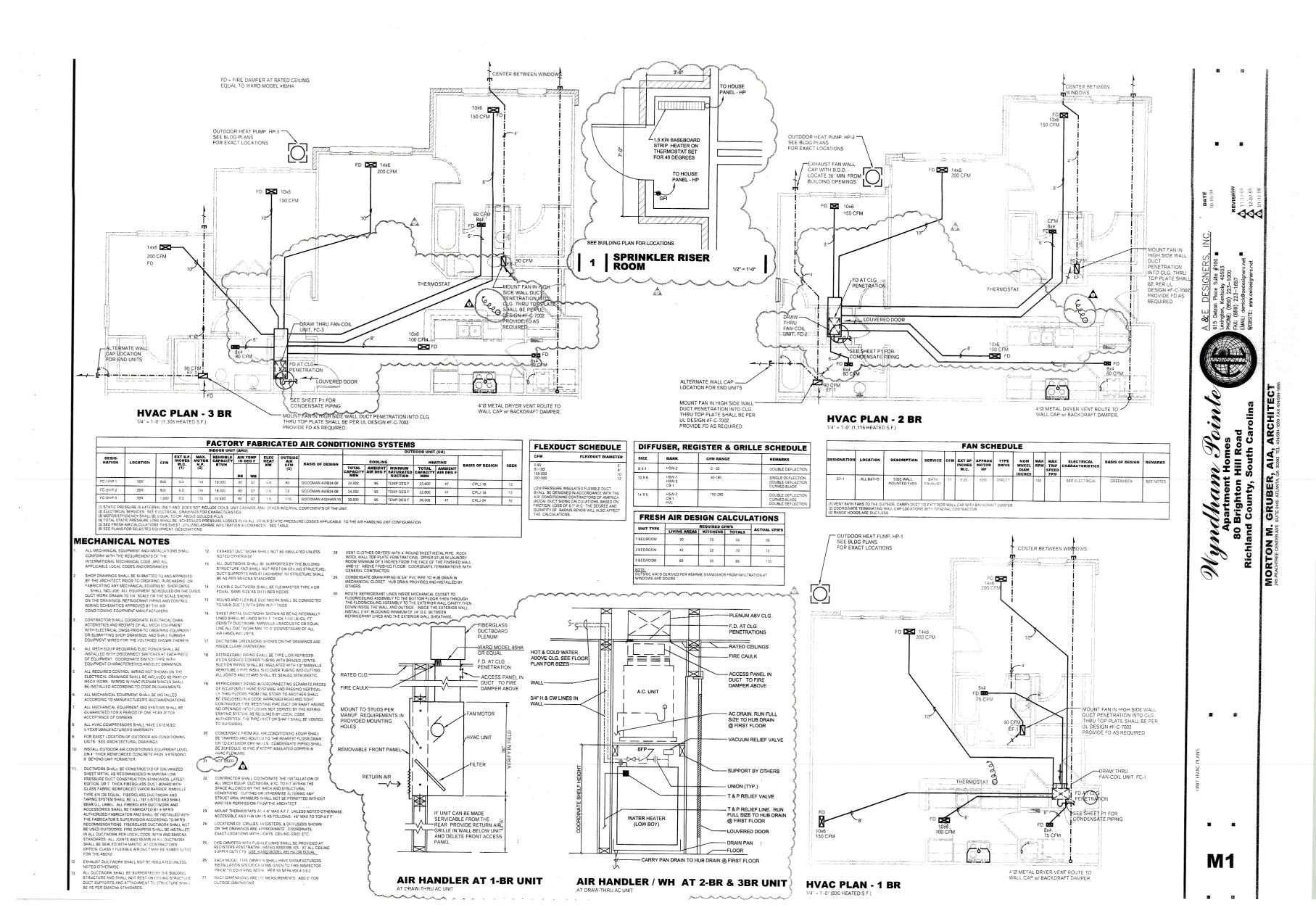
Δ

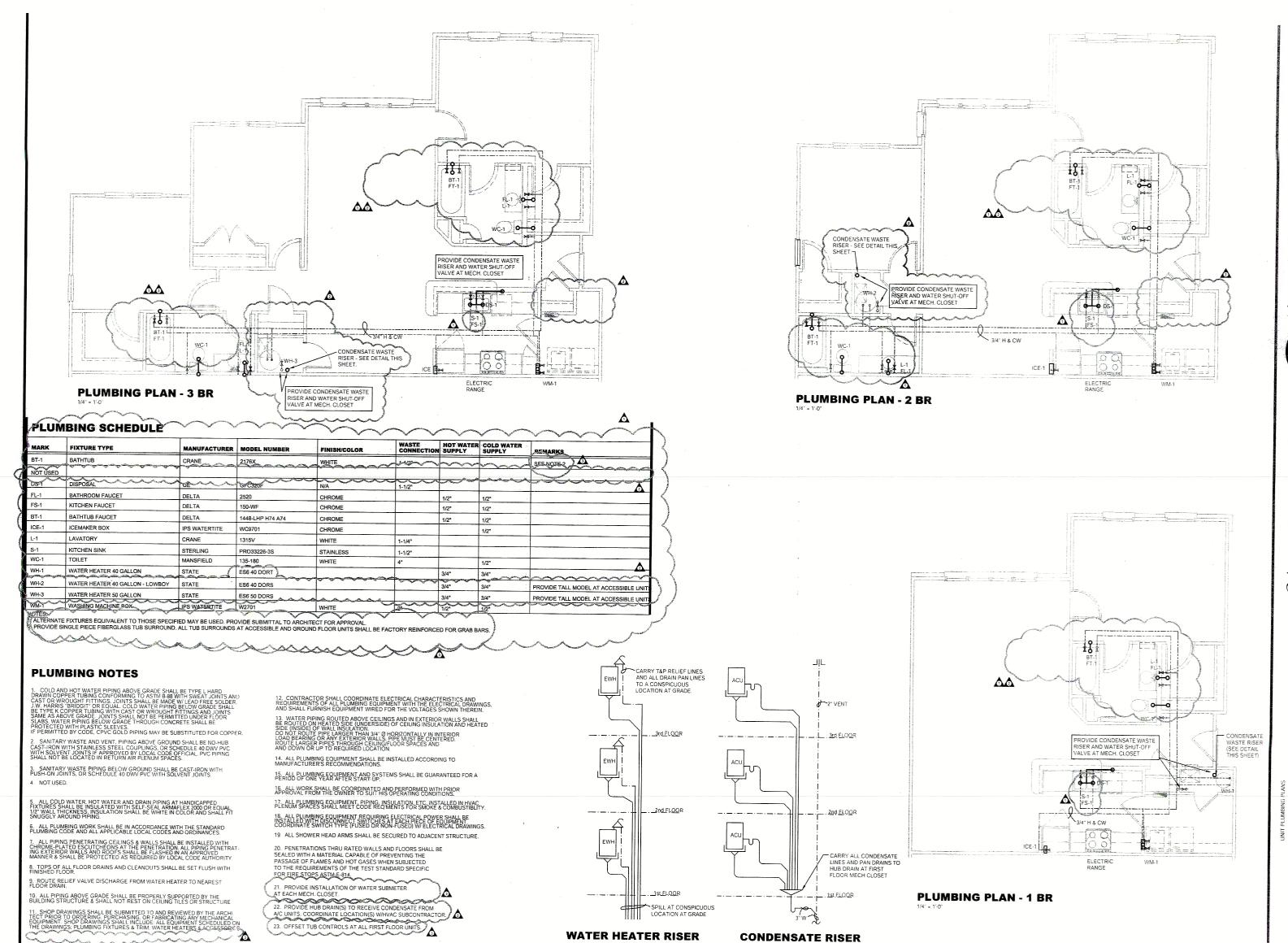
S0.1





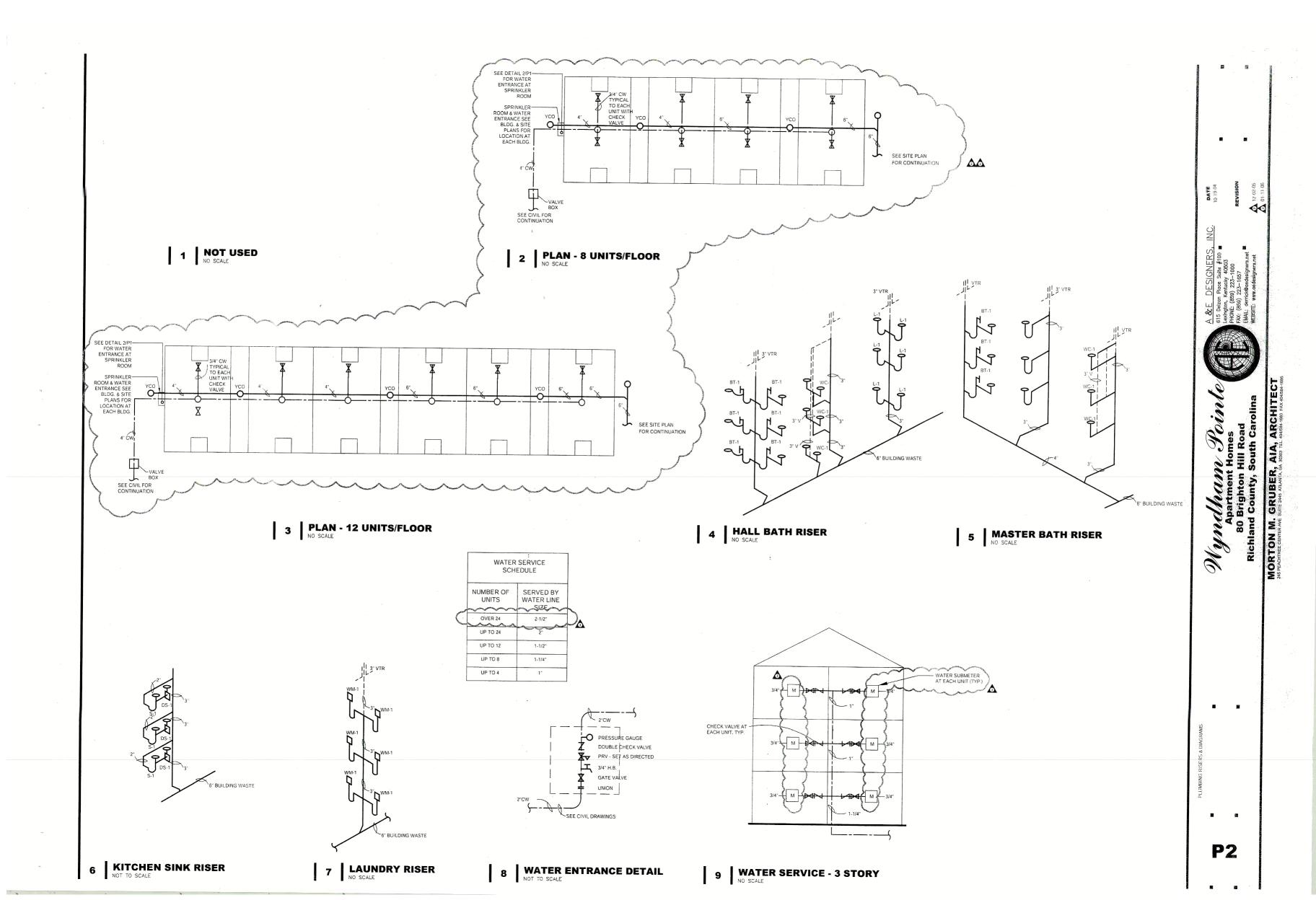


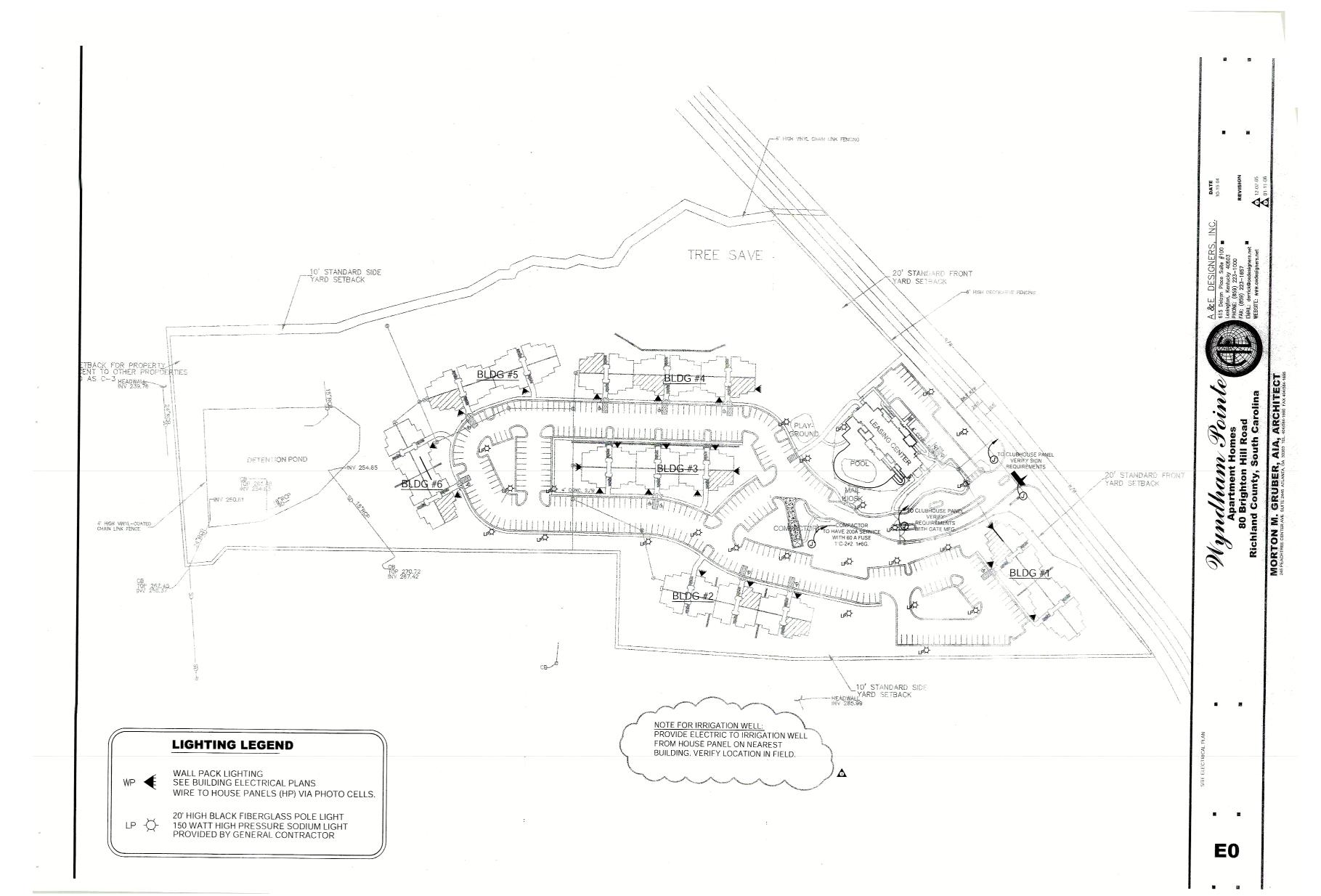




Myndham Pointe Apartment Homes
80 Brighton Hill Road
Richland County, South Carolina

P1





⊕ /**●**

 \Diamond

60A/3/3R

G.F.C.I. DUPLEX RECEPTACLE OUTLET WALL MTD AT 16" A.F.F./ABV CTR AT 48" A.F.F. TO TOP OF BOX.

SPLIT WIRED DUPLEX RECEPTACLE. ONE RECEPTACLE SHALL BE SWITCHED PER PLANS. DOUBLE DUPLEX RECEPTACLE OUTLET WALL MTD AT 16" A.F.F./ABV CTR AT 48" A.F.F.

TO TOP OF BOX. SINGLE POLE SINGLE THROW TOGGLE SWITCH MOUNTING HEIGHT AT 48" A.F.F.

TO TOP OF BOX. SPECIAL PURPOSE RECEPTACLE OUTLET NEMA CONFIGURATION TO MATCH PLUG MOUNTING HEIGHT AT 16" A.F.F.

 \odot

RACEWAY INSTALLED CONCEALED IN WALL AND/OR ABOVE CEILING

CONDUIT UP \ CONDUIT DOWN JUNCTION BOX: CEILING \ WALL \ FLOOR MTD

WRAPAROUND FLUORESCENT FIXTURE-OVERHEAD

OUTLET AND EXIT LIGHT FIXTURE.
CEILING \ WALL MOUNTED. PROVIDE
ARROWS AS INDICATED ON DRAWINGS

RECESSED MOUNTED PANEL BOARD

NONFUSIBLE DISCONNECT SWITCH RATING/POLES/NEMA ENCLOSURE

TELEPHONE OUTLET, WALL MTD @ 16" AFF \ ABOVE COUNTER AT 6" AFF.

FUSIBLE DISCONNECT SWITCH RATING/POLES/NEMA ENCLOSURE/FUSE RATING

OUTLET AND EGRESS AND/OR EMERGENCY LIGHT

EQUIPMENT AS INDICATED

MOTOR PATED SWITCH

EXHAUST FAN

6-PAIR CABLE, MIN. FIRE ALARM MANUAL STATION WALL MOUNTING AT 48" AFF FIRE ALARM HORN/VISUAL DEVICE PROVIDE AND INSTALL A DUPLEX RECEPTACLE ADJACENT TO
 WATER HEATER FOR CONNECTION OF ELECTRIC HEAT TRACE
 COORDINATE LOCATION WITH DIVISION 15.

10. LOCATION OF DISCONNECTS TO BE REACHABLE/ACCESSIBLE.

SMOKE DETECTOR (120V) WIBATTERY BACK-UP AND SQUND IN UNITS WAMILLTRUE STATIONS, PROVIDE AUXILIARY CONTACTS REQUIRED FOR SYNCHRONOUS OPERATION WHEN ANY DETECTOR IS ACTIVATED.

SMOKE DETECTORS IN HC. ACCESSIBLE UNITS SHALL INCLUDE STROBES/MSUAL ALARMS FOR THE HEARING IMPAIRED.

CONNECT TO RANGE EXHAUST HOOD. PROVIDE AND INSTALL NEMA 5-20R RECEPTACLE FOR HOOD. MOUNT @ 72* A.F.F.

PROVIDE J-BOX, COVER PLATE, & PULL WIRE FOR FUTURE TENANT SECURITY EQUIPMENT, MOUNT AT 54" A.F.F. (48" A.F.F. AT TOP OF BOX AT FHAHC UNITS)

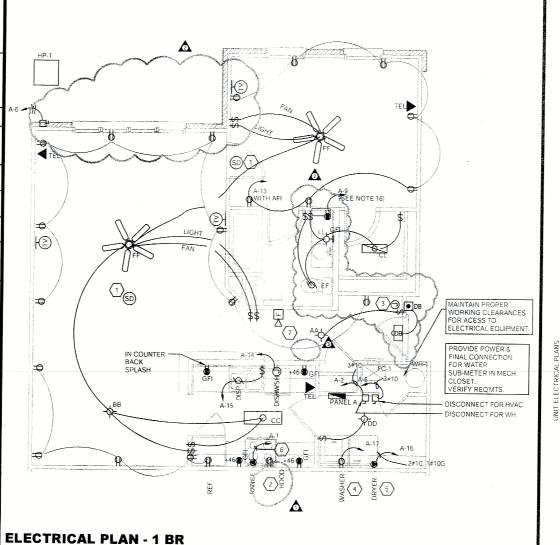
CONNECT TO WASHER. PROVIDE: AND INSTALL NEMA 5-20R RECEPTACLE FOR WASHER. MOUNT @ 36" A.F.F.

COMBINATION FIRE ALARM HORN/SPEAKER AS REQUIRED PROVIDE COMBINATION HORN/VISUAL DEVICE IN UNITS DEEMED ACCESSIBLE BY GA ACCESSIBLE CODE MOUNT ® 80°A F.F. SEE SHEET A1.4.

LIGHT FIXTURE SCHEDULE (APARTMENTS)

LIGHTING AVAILABLE FROM: ALLEN CARLQUIST

	TYPE	Description	MANUFACTURER	CATALOG NUMBER	LAMPS	VOLTS	MOUNTING
S ID	AA	8" 1-LAMP MUSHROOM	EPI	EPI 104431 BN	(1) 60W A19	120v	CEILING SURFACE MOUNTED
	BB:	CHANDELIER 3-LIGHT NICKEL FINISH	EPI .	EPI 102100 BN	(3) 60w A19 CLEAR	120v	PENDANT
	CC	9"x48" WRAP AROUND FLUORESCENT	TEXAS FLUORESCENTS	TEX MPUF 232	(2) F32T12	120v	CEILING SURFACE MOUNTED
	CL	24" FLUORESCENT WITH LENSE			(1) F20T12	120v	CEILING SURFACE MOUNTED
	DD	MUSHROOM LIGHT	NATIONS CHOICE (LIGHTING PRODUCTS)	NCH 3620 BN	(2) 60w A19	120v	CEILING SURFACE MOUNTED
	FF	52" 5 BLADE FAN WITH LIGHT	FAN - ROYAL	ROY 1059 BP	(2) 60W	120v	PENDANT
			LIGHT KIT - ROYAL	ROY 1RP8 BP			
	нн	10" 2 LIGHT MUSHROOM	-	EPI 104431 BN	(2) 60w A19	120v	CELING SURFACE MOUNTED
	'n	EXTERIOR WALL LANTERN		TRA 44835 BK	60w A19 CL	120v	WALL MOUNTED
							;
	LL	3 LIGHT BATH VANITY		EPI 106046 BN	(3) 60w A19	120v	WALL SURFACE MTD
	MM	5 LIGHT BATH VANITY		EPI 106051 BN	(6) 60w A19	120v	WALL SURFACE MTD
	NN	KEYLESS WITH PULL CHAIN		AMP LH 2P	(1) 60W A19	120v	CEILING SURFACE MOUNTED
	SD	SMOKE DETECTOR WITH BATTERY BACKUP	LIGHTING PRODUCTS	TEX USI 1204	-	120v	CEILING SURFACE MOUNTED



DATE 10-19-04

444

Myndham Pointe
Apartment Homes
80 Brighton Hill Road
Richland County, South Carolina MORTON M.

E1

● DB

SMOKE DETECTOR-HARD WIRED DOOR BELL PUSH BUTTON

DB DOOR BELL

ALARM DESIGNER SHALL VERIFY ALL REQUIREMENTS AND IS RESPONSIBLE FOR FINAL DESIGN. INFORMATION ON THESE DRAWINGS IS FOR REFERENCE ONLY. SPRINKLER SYSTEM SHALL BE CONNECTED TO FIRE ALARM PER CODE REQUIREMENTS.

2. AUDIBLE ALARMS SHALL PRODUCE A MINIMUM OF 80 dB THROUGHOUT THE BUILDING AND THE SOUND SHALL NOT EXCEED THE AMBIENT AND ROOM NOISE BY 15 dB WITH ALL DOORS CLOSED AND ALL EQUIPMENT IN SERVICE. ALL SYSTEMS SHALL BE A MINIMUM DESIGN OF STYLE (TABLE 3-3). NPPA 72D.

3. PROVIDE APPROVED USED HARD WIRE SMOKE DETECTORS IN THE CORRIDORS AND THE BEDROOMS OF EACH LIVING UNIT. TO SOUND AN AUDIBLE ALARM SHALL PRODUCE A MINIMUM OF 80 dB THROUGHOUT THE BUILDING AND THE SOUND SHALL EXCEED THE AMBIENT AND ROOM NOISE BY 15 dB AT PILLOW LEVEL WITH DOOR CLOSED.

4. PROVIDE PHOTOCELL AND CONTROL RELAYS TO CONTROL

PROVIDE PHOTOCELL AND CONTROL RELAYS TO CONTROL BREEZEWAY LIGHTING IN EACH BUILDING AS SHOWN ON DWGS. LOCATE CONTRACTORS ADJACENT TO PANEL HP.

PROVIDE ELECTRICAL DEVICES IN ALL APARTMENT UNITS AS SHOWN ON ELECTRICAL FLOOR PLANS. CIRCUIT THESE DEVICES PER THE PANEL SCHEDULE AND THE N.E.C. REFER TO ARCH DRAWINGS FOR DEVICE LAYOUT.

VERIFY ALL MECHANICAL REQUIREMENTS WITH MECHANICAL CONTRACTOR AND MAKE ADJUSTMENTS TO PANEL BOARDS ANI SERVICES IF EQUIPMENT IS NOT AS NOTED. ALL SERVICE ENTRANCE CONDUCTORS SHALL BE COPPER IN CONFORMANCE WITH PROJECT SPECIFICATIONS, UNLESS OTHERWISE NOTED.

I. PROVIDE A LETTER FROM POWER COMPANY STATING
THE SHORT CIRCUIT FAULT CURRENT AVAILABLE AT THE
SECONDARY OF THE UTILITY COMPANY TRANSFORMER. THIS
INFORMATION SHALL BE USED TO DETERMINE THE FINAL
A.I.C. RATINGS OF THE PANEL BOARDS AND ALL EQUIPMENT.

ALL JUNCTION BOXES. RECEPTACLE BOXES, OR OTHER ELECTRICAL PENETRATIONS IN FIRE RATED ASSEMBLIES SHALL BEAR A UL RATING GREATER OR EQUAL TO SAID ASSEMBLY.

13. PREWIRES ALL UNITS FOR SECURITY SYSTEM

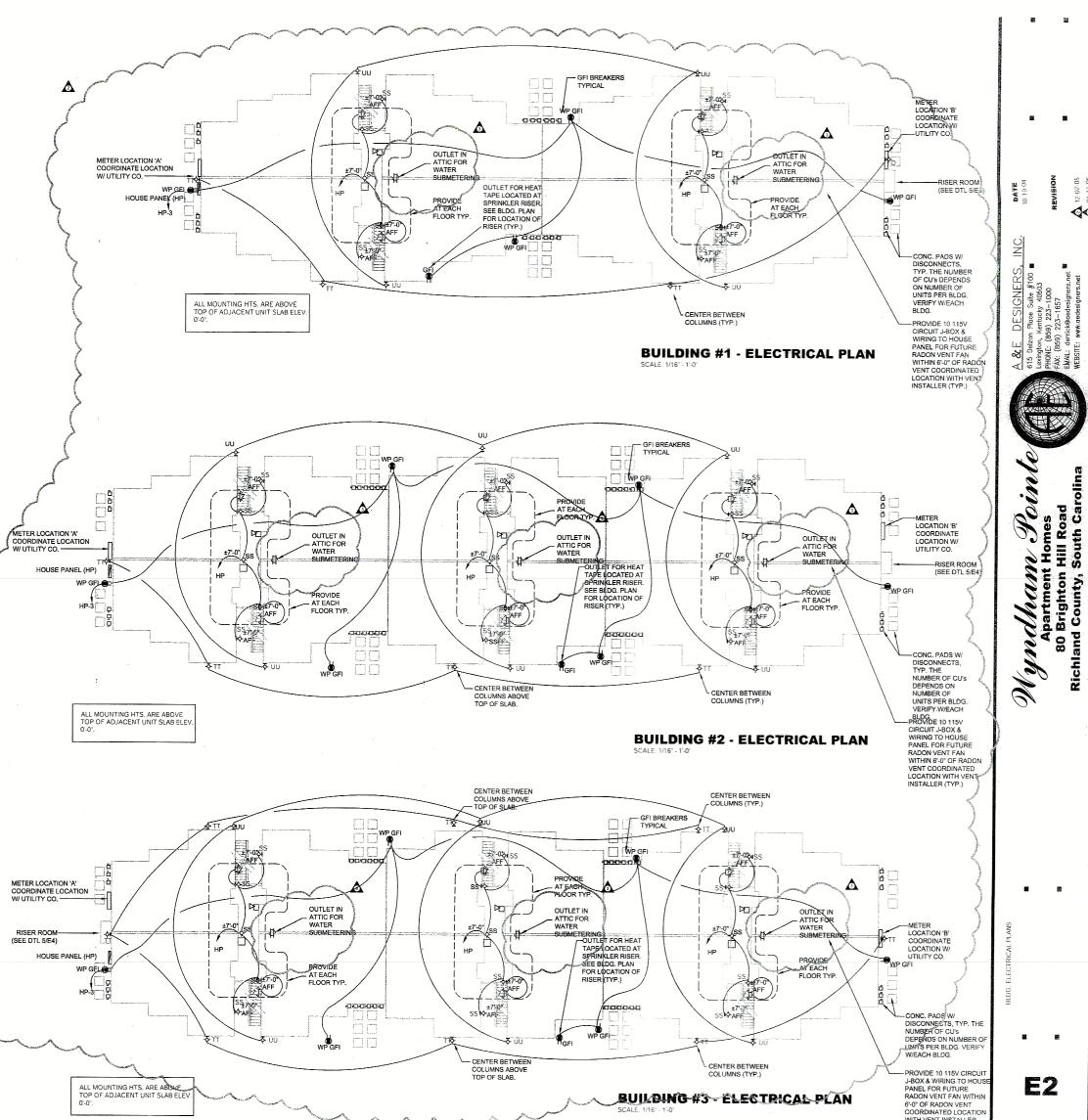
14. FIRE ALARM SYSTEM SHALL COMPLY WITH ALL REQUIREMENTS OF THE STATE FIRE MARSHAL

ALL BRANCH CIRCUITS THAT SUPPLY BEDROOM RECEPTACLES SHALL BE PROTECTED BY AN ARC-FAULT CIRCUIT INTERRUPTER

IN EACH UNIT. ONE BRANCH CIRCUIT SHALL BE DEDICATED TO SERVE ONLY THE BATHROOM RECEPTACLE OUTLETS. THIS CIRCUIT SHALL SERVE NO OTHER OUTLETS.

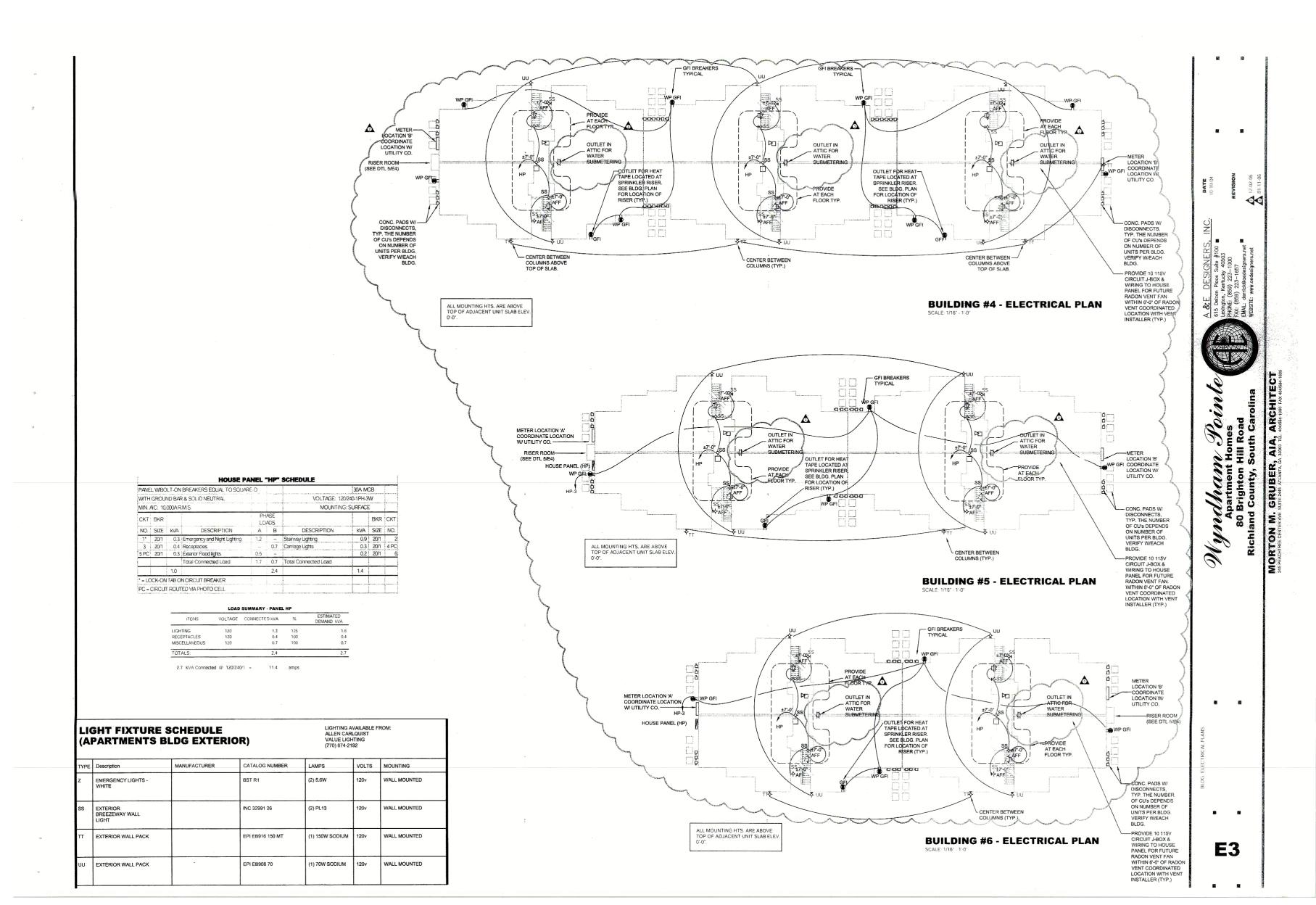
ELECTRICAL PANEL AT ACCESSIBLE UNITS SHALL BE MOUNTED AT 48" MAX A.F.F. TO TOP OF HIGHEST OPERABLE PART.

LIGHT FIXTURE SCHEDULE LIGHTING AVAILABLE FROM: ALLEN CARLQUIST VALUE LIGHTING (770) 874-2192 (APARTMENTS BLDG EXTERIOR) MANUFACTURER CATALOG NUMBER VOLTS MOUNTING EMERGENCY LIGHTS -WHITE BST R1 (2) 5.6W WALL MOUNTED EXTERIOR BREEZEWAY WALL LIGHT INC 32991 26 (2) PL13 WALL MOUNTED EXTERIOR WALL PACK WALL MOUNTED EXTERIOR WALL PACK EPI EB908 70 1) 70W SODIUM WALL MOUNTED HOUSE PANEL "HP" SCHEDULE PANEL WBOLT-ON BREAKERS E WITH GROUND BAR & SOLID NEUTRAL BKR CKT NO. SIZE KVA 0.3 Emergency and Night Lighting 0.4 Receptacles * = LOCK-ON TAB ON CIRCUIT BREAKER PC = CIRCUIT ROUTED VIA PHOTO CELL ITEMS VOLTAGE CONNECTED kVA TOTALS:



44

MORTON M. GRUBER, AIA, ARCHITECT 242 PERCHTRES CENTERANE SUITE 2445 ATLANTA, 6A 32303 TEL 104/1584-1680 FXX.104/1594-168



Power Service 120/240V, 1 phase, 3 wir.

> (VA) 4.500 11.300 1.050 4,500 29.650

First 10 KVA @ 100% Remainder @ 40% 7,860 Heet Pump (2.6 KVA) & Indoor Unit With Supplementary Heat (5.8 KVA) @ 65% Amperes @ 240V = 100.9A

Building No. Building Type

PANE	L EQ. TO) ITE LC	DAD CENTER			VOLTAGE: 1	125A. N 20/240-1P		
MIN. A	JC: 10,0	00A.R	.M.S.			MOUNTING	S: FLUSH		
CKT BKR				PH	ASE			BKR	CKT
NO.	SIZE	kVA	DESCRIPTION	A	В	DESCRIPTION	kVA	SIZE	NO.
1	50/2	5.7	Range	8.6	- 12	Elect Heat	2.9	30/2	_
3		5.6	Verify Load		8.5	Verify Load	2.9		
5	30/2	2.3	Water Heater	3.6		Heat Pump	1.3	15/2	
7		2.2	Verify Load		3.5	Verify Load	1.3		
9	20/1	0.5	GFI Bath Recepts.	1.0		Kitchen Ltg & Recepts	0.5	20/1	11
11	20/1	0.5	Lighting & Fans		1.2	GFC Recepts - micro	0.7	20/1	1
13	20/1	1.2	Bedroom with Arc Fault	2.3		Dishwasher	1.1	20/1	1
15	20/1	0.5	Disposer		3.3	Orver	2.8	30/2	11
17	20/1	1.5	Washer	4.3		,	2.8		11
		19.9		36	. 2		16.3		

Load Calculations Two Bedroom Apartment -1,075 sq. ft.

2,600 VA 5,800 VA Load (VA) 4,500 5,600 11,300 4.500 1.050 30,175 First 10 KVA @ 100% Remainder @ 40% 6,370 24,440

Panel shall be 125A and feeder shall be sized for minimum 125A. USE 1/0 SER AL.

	FO TO	ITELO	AD CENTER				125A N	41.0	
						VOLTAGE: 1			
AN, A	JC: 10,0	00A. R	M.S.			MOUNTING		U-344	
CKT	BKR			PH	ASE			BKR	CKT
NO.	SIZE	kVA	DESCRIPTION	A	В	DESCRIPTION	kVA	SIZE	NO.
1	50/2	5.7	Range	8.6		Elect Heat	2.9	30/2	2
3 -		5.6	Verify Load		8.5	Verify Load	2.9		4
5	30/2	2.3	Water Heater	3.5	**	Heat Pump	1.3	15/2	6
7		2.2	Verify Load		3.5	Verify Load	1.3		В
9 -	20/1	0.5	GFI Bath Recepts.	1.0	-	Kitchen Ltg & Recepts	0.5	20/1	10
11	20/1	0.5	Lighting & Fans	**	1.2	GFCI Recepts-micro	0.7	20/1	12
13	20/1	1.2	Bedrooms with arc fault	2.3		Dishwasher	1.1	20/1	14
15	20/1	0.5	Disposer		3.3	Dryer .	2.8	30/2	16
17	20/1	1.5	Washer	4.3			2.8		.18

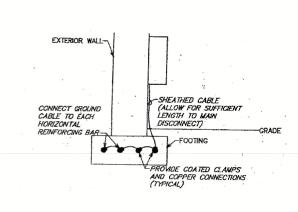
Table -2 Summary of Connected & Demand Loads

		Service	Point	Connected Lo	ad (KVA)	Demand Load (KV	A) (Note 1)
		A	<u>B</u>				
Bida. No.	Bido. Type	No. of Units	No. of Units	Service Point-A	Service Point-B	Service Point-A	Service Point-B
1	A	12 3-BR 1 H	12 3-8R	518.0	515.8	212.4	211.5
2	В	6 1-BR 12 2-BR 1 H	6 1-BR 12 2-BR	694.5	691.5	264.0	262.8
3	В	6 1-BR 12 2-BR 1 H	6 1-BR 12 2-BR	694.5	691.5	264.0	262.8
4	С	6 3-BR 12 2-BR 1 H	6 3-BR 12 2-BR	723.1	721.1	274.8	274.0
5	A	12 3-8R 1 H	12 3-BR	518.0	515.8	212.4	211.5
6	D	12 2-BR 1 H	12 2-BR	465.2	463.2	190.7	190.0

Service Point-B

Unit Type	Connected Load (KVA)
1 BR	38.05
2 BR	38.60
3 BR	42.98

Building No.	Connected Load (V
1	2.200
2	3,000
3	3.000
4	3,000
5	2.200
6	2.200



UFER GROUND DETAIL

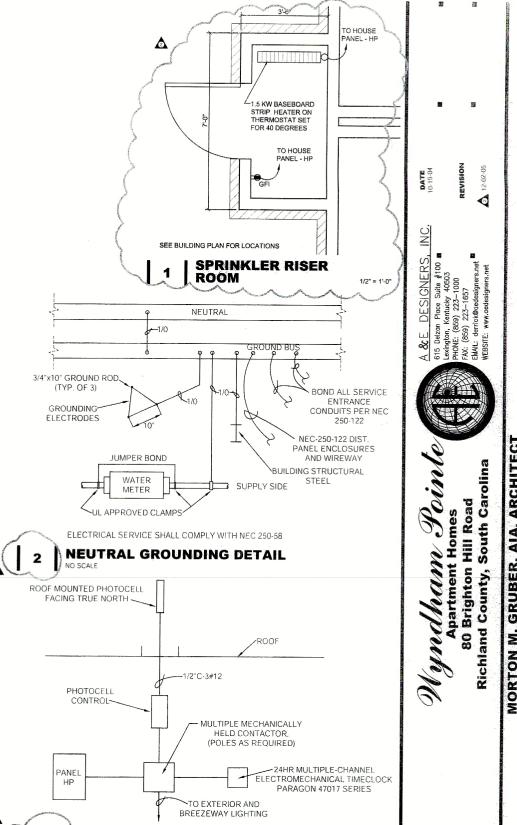
3,300 VA 8,900 VA

27.395

Load (VA) 11.300 1.050 Demand Load First 10 KVA @ 100% 10,000 Remainder @ 40% 8,310 Heat Pump (3.3 KVA) & Indoor Unit with Supplementary Heat (8.9 KVA) @ 65% 9,085

Panel shall be 125A and feeder shall be sized for minimum 125A. USE 1/0 SER AL

PANEL EQ. TO ITE LOAD CENTER					-		125A, N	/LO	
						VOLTAGE: 1		H-3W	
	IC: 10,0	900A.R	LM.S.			MOUNTING	FLUSH		
CKT	BKR			PH	ASE			BKR	CKT
NO.	SIZE	kVA	DESCRIPTION	. A	В	DESCRIPTION	kVA	SIZE	NO.
1	50/2	5.7	Range	10.2		Elect Heat	4.5	40/2	- 2
3		5.6	Verify Load		10.0	Verify Load	4.4		4
5	30/2	2.3	Water Heater	3.9		Heat Pump	1.6	20/2	6
7		2.2	Verify Load		3.9	Verify Load	1.7		8
9	20/1	1.0	Living/Dining Ltg & Recepts	1.5		Kitchen Ltg & Recepts	0.5	20/1	10
11	20/1	0.8	Bedrooms Ltg & Recepts		1.5	GFCI Recepts - micro	0.7	20/1	12
13	20/1	0.8	Bedrooms Ltg & Recepts	1.9		Dishwasher	1.1	20/1	14
15	20/1	0.5	Disposer	**	3.3	Drver	2.8	30/2	16
17	20/1	1,5	Washer	4.3			2.8	0.004	18



EXTERIOR LIGHTING CONTROL DETAIL WIRES 2x4 BLOCKING TO ADJACENT STUDS FIRE CAULK
NOTE: AS ALTERNATE
"PUTTY PADS" MAY BE
USED ELEC. BOX ELEC. BOX 7/16" OSB-(EXTERIOR) -7/16" OSB STRUCTURAL

TYP, DETAIL AT OUTLET BOX PROJECTION AT WALLS OUTLET BOX

5/8" TYPE "X" GYP, BD

TYP. DETAIL FOR BACK TO BACK BOXES AT PARTY WALLS

- WIRES 2x4 BLOCKING TO ADJACENT STUDS FIRE CAULK
NOTE: AS ALTERNATE
"PUTTY PADS" MAY BE
USED ELEC BOX OR 5/8" GYP. BD. (INTERIOR)

TYP. DETAIL FOR INTERIOR OR

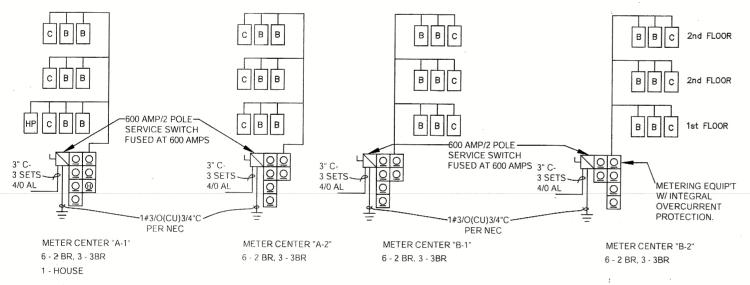
E4

MORTON M. GRUBER, AIA, ARCHITECT 248 PEACHTREE GENTER AVE SUITE 2445 ATLANTA, GA 30303 TEL 404594-1680 FAX 404694-1

TYPE "A" BUILDINGS #1 & #5 METER CENTERS

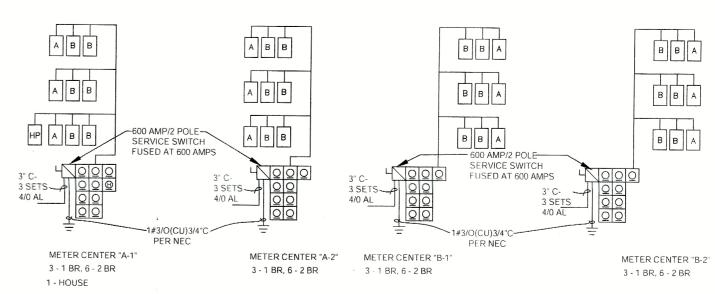
NOT TO SCALE

NOTE: ALL METERS SHALL BE RATED AT 42,000 AMPERE INTERRUPTING CAPACITY.



TYPE "C" BUILDING #4 METER CENTERS NOT TO SCALE

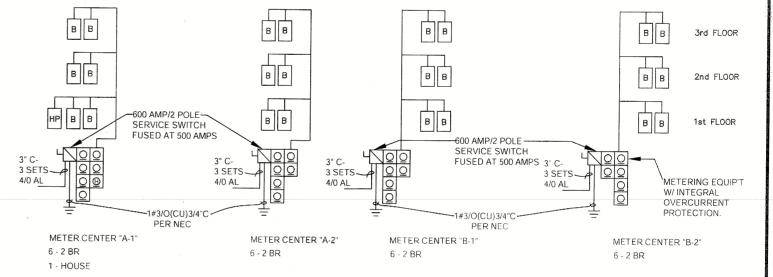
NOTE: ALL METERS SHALL BE RATED AT 42,000 AMPERE INTERRUPTING CAPACITY.



TYPE "B" BUILDINGS #2 & #3 METER CENTERS

NOT TO SCALE

NOTE: ALL METERS SHALL BE RATED AT 42,000 AMPERE INTERRUPTING CAPACITY.



TYPE "D" BUILDING #6 METER CENTERS NOT TO SCALE

NOTE: ALL METERS SHALL BE RATED AT 42,000 AMPERE INTERRUPTING CAPACITY

GENERAL NOTES:

- 1. AT EACH SERVICE LOCATION, PROVIDE A PERMANENT PLAQUE OR DIRECTORY PER N.E.C. 230-2(e) WHICH DENOTES OTHER SERVICE LOCATIONS AND AREA SERVED IN EACH BUILDING.
- 2. AT ELECTRICAL SUBCONTRACTOR'S OPTION, EACH OF THE SPLIT METER CENTERS, "A-1, A-2" AND "B-1, B-2", MAY BE COMBINED INTO A SINGLE "A" AND "B" METER CENTER WITH A COMBINED SERVICE CAPACITY, E.G., SEE TABLE 3 ON SHEET E4 FOR THE MINIMUM COMBINED SERVICE CAPACITY RATINGS.

Wyndham Pointe

-

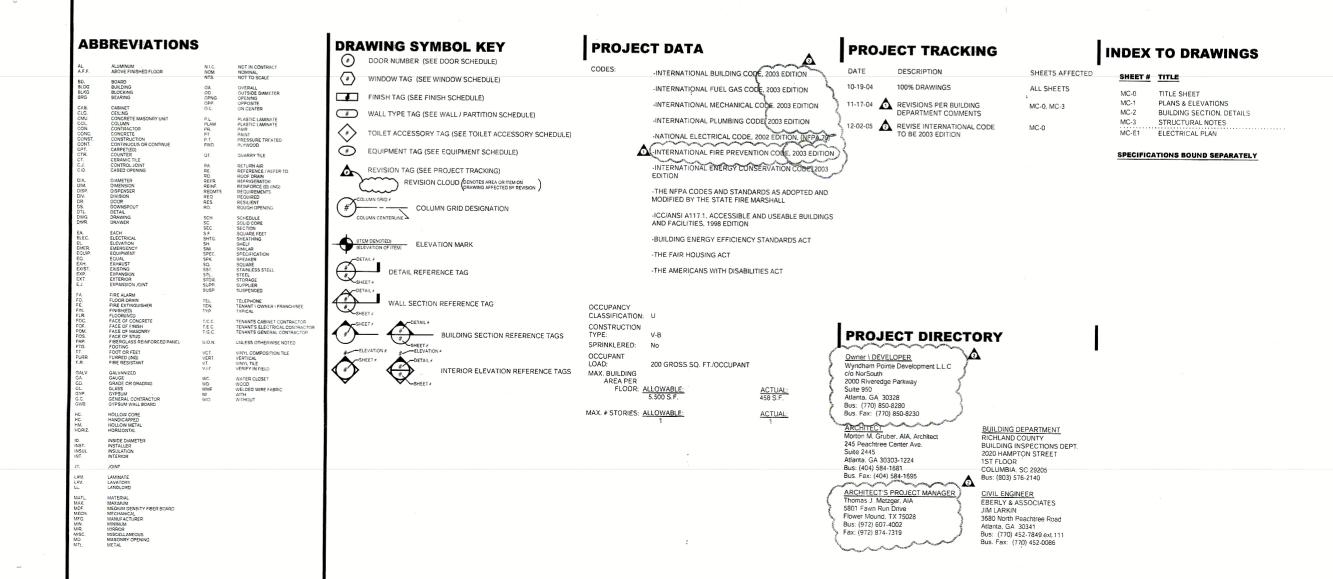
E5

GENERAL NOTES

- THESE NOTES SHALL APPLY UNLESS OTHERWISE INDICATED BY DRAWINGS OR SPECIFICATIONS
- ALL WORK INCLUDING CIVIL MECHANICAL PLUMBING, & ELECTRICAL SHALL BE PERFORMED IN STRICT COMPLIANCE WITH ALL APPLICABLE FEDERAL. STATE, & LOCAL CODE REQUIREMENTS, AND IN ACCORDANCE WITH ACCEPTED CONSTRUCTION INDUSTRY STANDARDS.
- CONTRACTOR SHALL OBTAIN AND PAY FOR ALL APPLICABLE PERMITS, INSPECTIONS AND APPROVALS, INCLUDING THOSE RELATED TO BUILDING AND SIGNAGE.
- ALL COMBUSTIBLE INTERIOR FINISHES SHALL BE EITHER CLASS A: 'B', OR 'C' MATERIALS WITH FLAME SPREAD RATING NOT TO EXCEED 200. IF REQUESTED, CONTRACTOR SHALL PROVIDE TO THE FIRE SERVICES AUTHORITY TEST DATA VERIFYING COMPLIANCE.
- PRIOR TO TURNING BUILDING OVER TO OWNER, REPAIR OR REPLACE ALL MATERIALS, GLASS, OR ASSEMBLIES DAMAGED OR BROKEN DURING CONSTRUCTION.
- AT ALL RATED WALLS AND RATED CEILINGS. ALL PLUMBING, ELECTRICAL & HVAC PENETRATIONS SHALL BE SEALED WITH APPROVED FIRESTOPPING MATERIAL.
- SEAL ALL PENETRATIONS FLOOR DECK WITH INSULATION FRAMER SHALL PROVIDE IN-WALL BLOCKING AS REQUIRED AT TOILET ACCESSORIES.
- FRAMER TO CAULK PLATES WHERE INDICATED WITH NON-HARDENING BUTYL OR APPROVED EQUAL MATERIAL TO ACHIEVE WATER SEAL.

Wyndham Pointe

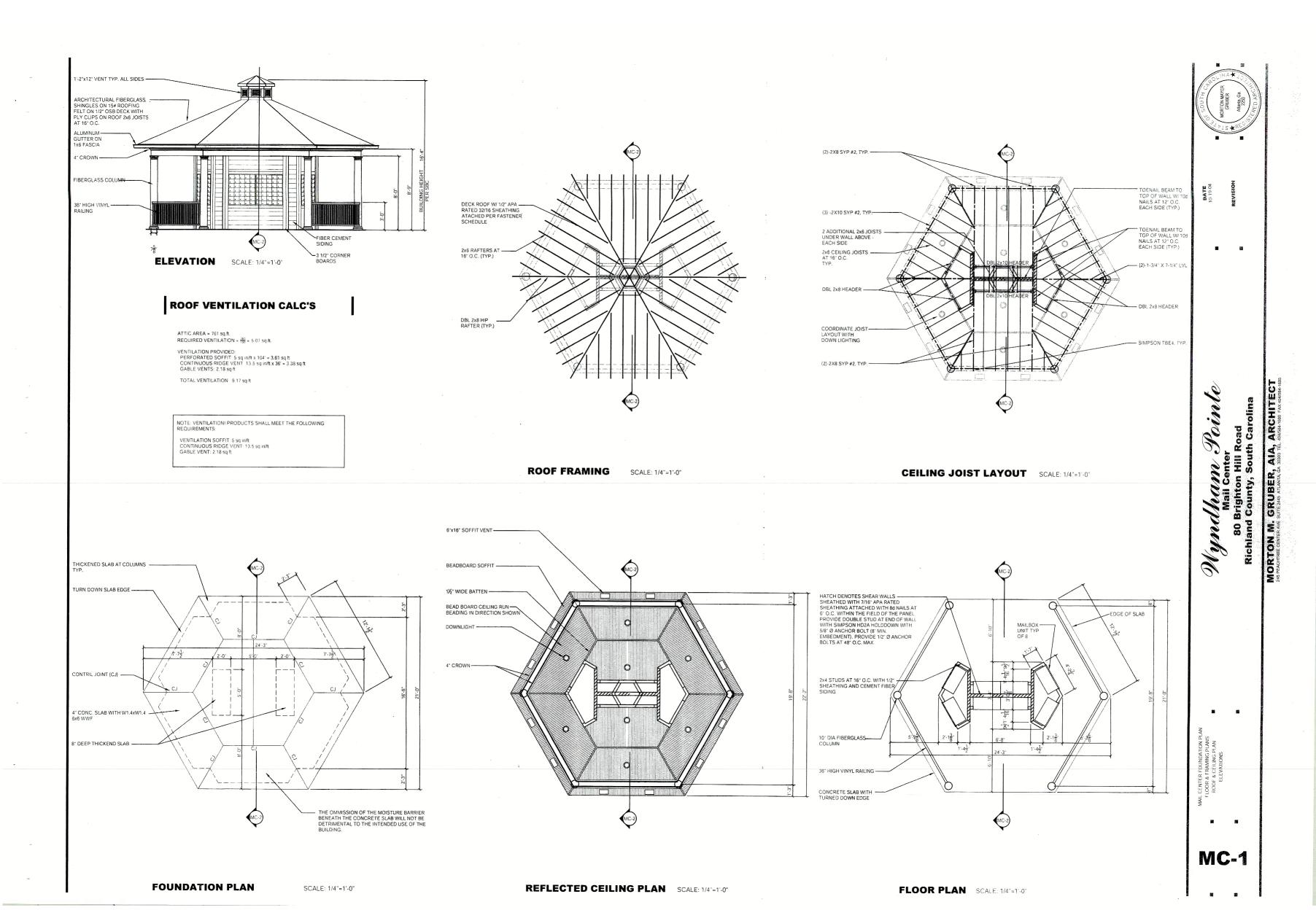
Apartment Homes 80 Brighton Hill Road Richland County, South Carolina MAIL CENTER

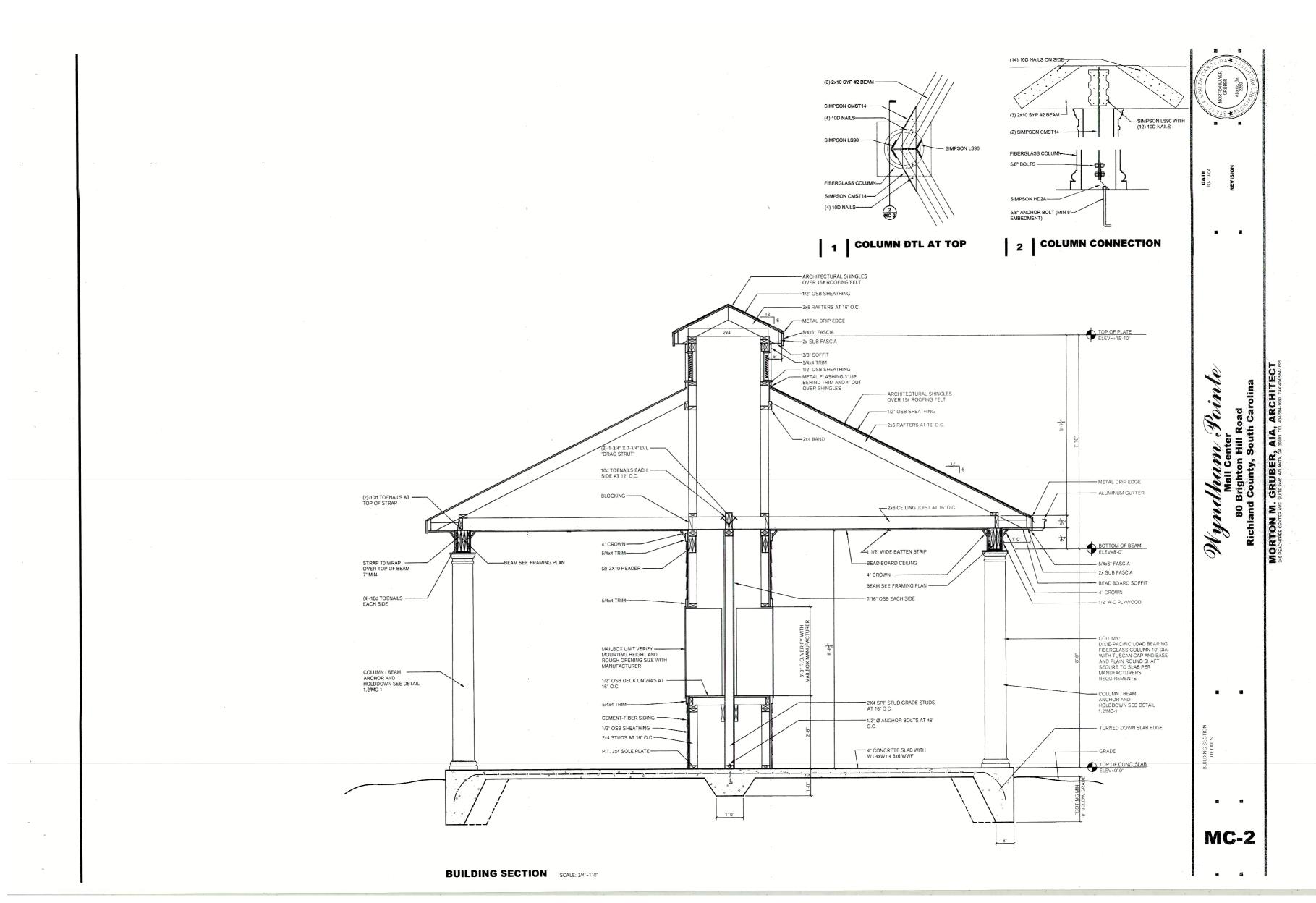


Pointe

Wyndham Joure Mail Center 80 Brighton Hill Road

MC-0





MAIL CENTER

GENERAL NOTES AND REQUIREMENTS

- If field conditions vary from those indicated on the drawings and necessitate changes to the drawings, contact the Engineer before proceeding.
- 3. Submit shop drawings for review prior to fabrication for the
- Submit concrete tests performed by an ACI certified testing laboratory for seven and twenty-eight day concrete test cylinder breaks.
- 5. Concrete test reports will be available at job site.
- Contractor shall be responsible for bracing and shoring of the structure during construction to ensure stability.
- 7. All truss plans shall be available on job site during the times
- of inspections.

 8. Design complies with the Building Code
- Proof of welder certification shall be available at the job site during times of inspection.

FOUNDATION NOTES

- 1. Foundations are designed to bear on residual soil or compacted fill with an allowable bearing capacity of 2000 psf. Bearing capacity must be verified by a Geotechnical Engineer prior to concrete placement. If soil test disclose a lesser bearing capacity, this foundation system is void and must be redocited.
- Footings shall bear 12" minimum into undisturbed earth or mechanically compacted engineered fill. Exterior wall footings shall bear a minimum of 12" below finished grades. Fill soils shall have compaction tests performed by a geotechnical engineer before pouring foundations.
- Soils under footings to be at 98% Standard Proctor Density; oils under slab to be at least 95% Standard Proctor Density.

GENERAL CONCRETE NOTES

- All materials and workmanship shall conform to project specifications. All detailing, fabrication, accessories, and placement of reinforcing shall conform to the ACI Manual of Standard Practice for Detailing Reinforced Concrete Structures. Design is in accordance with ACI 318 "Building Code Requirements for Reinforced Concrete"
- Concrete shall be normal weight gray concrete and develop a minimum compressive strength of 3000 psi at 28 days, unless otherwise specified.
- 3. Reinforcing bars shall be deformed bars conforming to ASTM A 615 : Grade 40 - #3 bars. Grade 60 - #4 bars and larger.
- 4. Welded wire fabric reinforcing shall conform to ASTM A 185.
- 6. Depths of the footing shown on the drawings are minimum. Footing elevation may be lowered if found necessary by the Engineer.
- 7. No horizontal construction joints will be permitted in
- All construction joints shall be rough surface and cleaned before the next concrete pour.
- side of the opening. Cut no steel in the field.
- Mechanical, electrical and architectural drawings shall be checked for embedded items and penetrations before
- 11. Lap all reinforcing min. 24" at all splices.

SIRUCTURAL WOOD FRAMING NOTES

- Code.

 Lumber sizes specified on the plans are minimum nominal dimensions.
- All lumber shall be identified by an affixed grade mark of a fumber grading or inspecting agency.
- Unless noted otherwise, lumber for beams, headers, and joists shall be Southern Yellow Pine #2. Lumber for rafters shall be Spruce-Pine-Fir #2, and lumber for studs shall be Spruce-Pine-Fir Stud Grade.
- Finger jointed Spruce-Pine-Fir #2 lumber meeting product standard SPS1 and C/QC101.97 can be used for rafters. Finger jointed Stud Grade Spruce-Pine-Fir lumber meeting product standard SPS3 and C/QC101.97 can be used for studs.
- All lumber and wood structural panel members, including preservative-treated, 2 inch thick and less, shall contain not more than 19% moisture at the time of installation.
- Provide pressure treated lumber at all locations specified on the drawings.
- 8. Provide Simpson Strong-Tie, or approved equal, connectors at all locations shown on the plans.
- Laminated Veneer Lumber (LVL) shall be Microllam beams as manufactured by Truss Joist Macmillan, or equal.
- Glulam beams are to be 24F-V3 lamination combination with camber radius of 1600 feet, unless noted otherwise on the plans. Members shall be marked in accordance with ANSI Standard A190.1. No holes or notches are to be cut in glulams without written approval from the engineer.
- Wood I-Joists shall be the size and manufacturer indicated on the plans, or approved equal. Installation shall be in accordance with the manufacturer's recommendations.

PRE-ENGINEERED WOOD ROOF TRUSSES

- Truss diagrams are for conceptual chord configurations only. Member configuration and sizes are to be determined by manufacturer.

 Trusses shall be designed by a professional engineer registered in the state where project is located and the drawings and calculations shall bear their seal.

 Submit shop drawings for all trusses to the Architect for review prior to fabrication. Drawings shall show truss profile, web and chord member sizes, member forces, and reaction forces.
- 4. Web and chord members shall be a minimum size of 2 x 4.
- Provide connection and installation details for all trusses, showing temporary and permanent bracing and bridging locations in accordance with truss plate Institute's "Handling, Installation and Bracing Metal Plate connected Wood Trusses", H1B-91.
- shall provide all required connection hardware.
- Roof framing is not designed to support mechanical equipment.
 All truss plans shall be available on job site during the times of inspection and shall bear clear indication that they have been reviewed and approved for construction by the Project Architect o Engineer-of-record.

- Provide 2" nominal framing at all unsupported edges of shear wall structural panels.
- 2. See MC-1 for shear wall specification and holddown locations

DESIGN LOADS

Roof Truss Design Loads:

Bottom Chord Live Load = 0 psf Bottom Chord Dead Load = 10 psf

Wind Load: Design for 90 mph wint per Building Code

lw = 1.0 Exposure Category B

Seismic Load: Design per Section 1617 of the Building Code

Seismic Use Group I
Site Class D
S_m= 0.30g
S_m= 0.18g
Seismic Design Category C
Basic Selsmic Force Resisting System
Bearing wall system with light framed shear panels
R = 6 for wood sheathed
Simplified Analysis Procedure
Seismic Base Shear
Transverse = 372lb
Longitudinal = 372lb

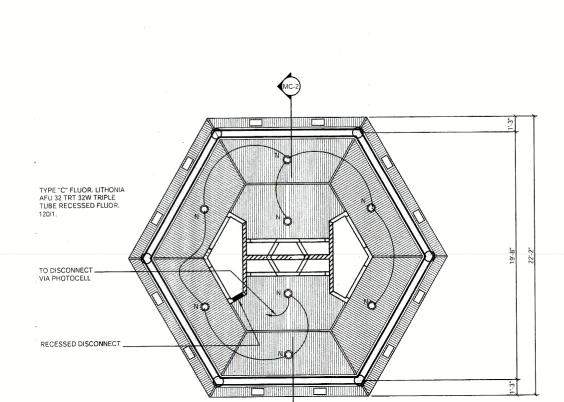
TABLE 2304.9.1 FASTENER SCHEDULE

	FASTENER SCHEDULE	
CONNECTION	FASTENING ^{8,m}	LOCATION
Joist to sill or grider	3-8d common 3-3" x 0 131" nail 3-3" 14 gage staple	toenail
Bridging to joist	2-8d common 2-3" x 0 131" neil 2-3" 14 gage steple	toenail each end
1" x 6" subfloor or less to each joist	2-8d common	face nail
Wider than 1' x 6' subfloor to each joist	3-8d common	face nail
5. 2" subfloor to joist or grider	2-16d common	blind and face neil
Sole plate to joist or blocking	16d at 16" o.c. 3" x 0.131" nall at 8" o.c. 3" 14 gage staple at 12" o.c.	typical face nail
Sole plate to joist or blocking at braced wall panel	3-16d per 16" 3" x 0.131" nat per 16" 3" 14 gage staple per 16"	braced wall panels
7 Top plate to stud	2-16d common 3-3" x 0.131" neil 3-3" 14 gage steple	end nail
Stud to sole plate	4-8d common 4-3" x 0.131" nail	toenail
	3-3" 14 gage steple 2-16d common 3-3" x 0.131" nati 3-3" 14 gage steple	end nail
Double studs	16d at 24' o.c. 3" x 0 131' naii at 8" o.c. 3" 14 gage stapte at 8" o.c.	face nail
10. Double top plates	16d at 16" o.c. 3" x 0.131" nail at 12" o.c	typical face nail
Double top plates	3" 14 gage staple at 12" o.c. 8-16d common 12-3" x 0.131" nati	lap splice
Blocking between joist or reflers to top plate	12:3" 14 gage staple typical face rail 3:8d common	toenail
12 Rim joist to top plate	3-3" x 0.131" neil 3-3" 14 gage steple 8d at 6" (152 mm)o.c.	toenail
13. Top plates, laps and	3° x 0.131° nail at 5° о.с. 3° 14 gage staple at 6° о.с. 2-16d солялоп	face nail
intersections	3-3" x 0.131" nail 3-3" 14 gage staple	
14. Continuous header, two pieces	16d common	16" o.c. along edge
15. Ceiling joists to plate	3-8d common 5-3" x 0.131" nail 5-3" 14 gage staple	toenail -
16 Continuous header to stud	4-Bd common	toenail
17. Celling joists, laps over partitions (See Section 2308 10.4.1, Table 2308.10.4.1)	3-18d common minimum. Table 2308,10.4.1 4-3" x 0.131" nai! 4-3" 14 gage staple	, and the state of
Ceiling joists to parallel rafters (See Section 2308.10.4.1.)	3-16d common minimum. table 2308.10.4.1 4-3" x 0.131" nail	face nail
Table 2308.10.4(1) 19 Rafter to plate (See Section 2308.10.1, Table 2308.10.1)	4-3" 14 gage staple 3-8d common	toenail
Table 2308.10.1) 20. 1" diagonal brace to each stud and plate	3-3" x 0.131" neil 3-3" 14 gage staple 2-8d common	face nail
	2-3" x 0.131" naii 2-3" 14 gage stapte face naii 2-8d common	face nail
21 1" x 8" sheathing to each bearing wall 22. Wider than 1" x 8" sheathing		-
to each bearing 23. Build-up corner studs	3-8d common	face nail
	3" x 0.131" nail 3" 14 gage staple	15° c.c. 16° c.c.
23. Build-up corner studs	16d common 3" x 0.131" nail 3" 14 gage staple	24" o.c. 16" o.c. 16" o.c.
24. Built-up girder and beams	20d common 32" c.c. 3" x 0.131" nail 24" c.c.	face nail at top and bottom staggered
	3" 14 gage staple 24" o.c. 2-20d common 3-3" x 0.131" nasi	on opposite sides face nail at ends and at each splice
25. 2" planks	3-3" x 0.131" nasi 3-3" 14 gage stapie	at each bearing
26. Collar tie to rafter	3-10d common 4-3" x 0.131" nail	face nail
27. Jack rafter to hip	4-3" 14 gage staple face naii 3-10d common 4-3" x 0.131" naii 4-3" 14 gage staple	toenail
	4-3 14 gage stapic 2-16d common 3-3 x 0.131" nail 3-3" 14 gage stapile	face neit
28. Roof rafter to 2-by ridge beam	2-16d common 3-3" x 0.131" neil	toenail
	3-3" 14 gage steple 2-16d common 3-3" x 0.131" nail	face nati
29. joist to band joist	3-3" 14 gage stapte 3-16d common 5-3" x 0.131" nati 5-3" 14 gage stapte	face neil
30 Ledger strip	3-16d common 4-3" x 0.131" nail 4-3" 14 gage staple	face nail
31 Wood structural panels and particleboard: b Subfloor, roof and wall sheathing (to framing)	1/2" and less 6d ^{c.1} 2 3/6" x 0 113 nail ¹¹ 1 3/4" 16 gage ⁰	
Single Floor (combination subflooder layment to	19/32" to 3/4" 86 ^d or 6d ^e 2 3/8" x 0.113" nail ^P 2" 16 gage ^p	
subflooder layment to (raming)	7/8° to 1° 8d ^C 1 1/8° to 1 1/4° 10d ^d or 8d ⁶ 3/4° and less 6d ⁶	
32 Panel siding (to framing)	7/8" to 1" 8d [®] 1 1/8" to 1 1/4" 10d ⁶ or 8d [®] 1/2" or less 6d ^f	
33 Fiberboard sheathing: 9	5/8" 8d ^f 1/2" No. 11 gage roofing neat ⁿ	
	Ed common nail No. 16 gage stapte ¹ 25/32 No.11 gage roofing nail ¹	
34. Interior paneling	8d common rail No. 18 gage staple ¹	4d ^j
	3/8"	€d ^k



Myndham Pointe
Mail Center
80 Brighton Hill Road
Richland County, South Carolina

MC-3



MC-2

ELECTRICAL RISER

RECESSED FLUSH 60A NEMA WEATHERPROOF

PHOTOCELL FOR LIGHTING

0.3 KVA LIGHTING X 125% = 0.4KVA 0.4 KVA CONNECTED @120/240/1 = 1.6 AMPS

ELECTRICAL PLAN

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

LIGHTING FIXTURE SCHEDULE FIXTURE: ROYAL 8150H TRIM: ROYAL 8591CL O_N

Myndham Pointe

Mail Center

80 Brighton Hill Road
Richland County, South Carolina

MORTON M. GRUBER, AIA, ARCHITECT
245 PEACHTREE CENTER AVE SUITE 246 ATLANTA, GA 30303 TEL 404594-1886 FAX 404594-1886

DATE 10-19-04

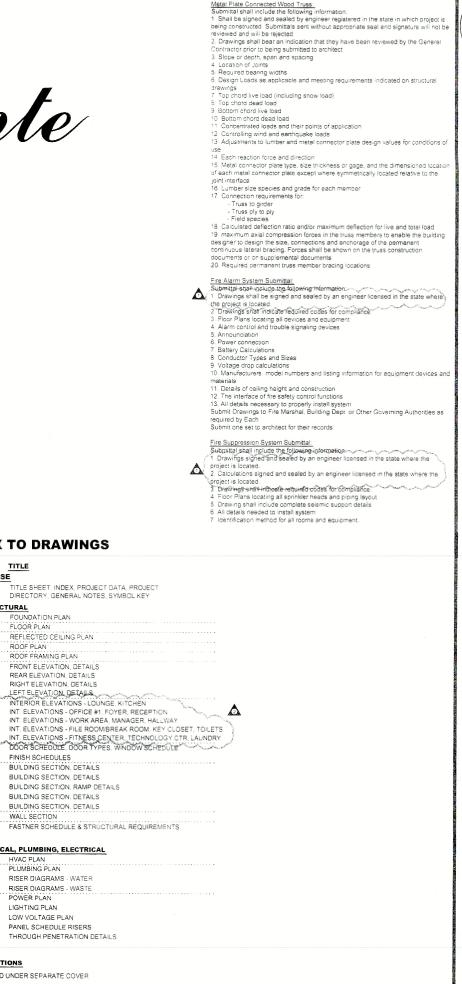
GENERAL NOTES

- THESE NOTES SHALL APPLY UNLESS OTHERWISE INDICATED BY DRAWINGS OR SPECIFICATIONS.
- CONTRACTOR SHALL OBTAIN AND PAY FOR ALL APPLICABL PERMITS, INSPECTIONS AND APPROVALS. INCLUDING THOS RELATED TO BUILDING AND SIGNAGE
- ALL COMBUSTIBLE INTERIOR FINISHES SHALL BE EITHER CLASS A B., OR 'C' MATERIALS WITH FLAME SPREAD RATING NOT TO EXCEED 200. MATERIAL SHALL BE APPROPRIATE CLASS FOR SPACE IN WHICH IT IS USED PER CODES. IF REQUESTED, CONTRACTOR SHALL PROVIDE TO THE FIRE SERVICES AUTHORITY TEST DATA VERIFYING COMPLIANCE.
- AT ALL RATED WALLS AND RATED CEILINGS ALL PLUMBING ELECTRICAL & HVAC PENETRATIONS SHALL BE SEALED WITH APPROVED FIRESTOPPING MATERIAL
- FRAMER SHALL PROVIDE IN-WALL BLOCKING AS REQUIRED AT BATH ACCESSORIES.
- FRAMER TO CAULK PLATES WHERE INDICATED WITH NON-HARDENING BUTYL OR APPROVED EQUAL MATERIAL TO ACHIEVE WATER SEAL
- (FIRE ALARM CONTRACTOR) SHALL SUBMIT SHOP DRAWINGS FOR APPROVAL AND OBTAIN A FIRE ALARM SYSTEM PERMIT PRIOR TO INSTALLATION ANY FIRE ALARM PLANS INCLUDED IN THIS SET OF PLANS ARE FOR REFERENCE ONLY. NOT FOR PERMIT
- SIGNS, LOCATION, NUMBER AND SIZE ARE NOT APPROVED UNDER THIS BUILDING PERMIT, A SEPARATE SIGN AND LOCATION PERMIT IS REQUIRED FOR EACH SIGN.
- BRICK TIES: 9 GAGE CORR METAL BRICK TIES @ 16° O C VERTICALLY & 32" O.C. HORIZONTALLY WEEPS: 3/16" Ø MIN. PROVIDE WEEP HOLES AT 32" O.C. MIN. IN THE FOLLOWING AREAS LINTELS. BASE OF WALL, LEDGES, AND AT ALL FLASHING.

- SUBMIT SHOP DRAWINGS TO ARCHITECT FOR SIMULATED STONE/PRECAST LINTELS WITH DETAILS INDICATING SIZE . REINFORCEMENT AND END BEARING CONDITIONS IF LINTEL USED ARE NOT STRUCTURAL PROVIDE LINTEL ANGLE PER L SCHEDULE SHEET ST.
- POST OCCUPANCY LOAD SIGNS PROVIDED BY BUILDING DEPARTMENT IN THE FOLLOWING LOCATIONS: LOUNGE, ACTIVITY ROOM, FITNESS CENTER.

Wyndham Pointe

Apartment Homes 80 Brighton Hill Road Richland County, South Carolina **CLUBHOUSE**



SUBMITTAL REQUIREMENTS

ABBREVIATIONS

PLASTIC LAMINATE PLASTIC LAMINATE PAIR PAINT PRESSURE TREATED PLYWOOD

CABINET CEILUNG CONCRETE MASON CONTROL TO SELECTION CONTROL TO SELECTION

GALVANIZED
GAUGE
GRADE OR GRADING
GLEBS
GYPSUM
GENERAL CONTRACTOR
GYPSUM WALL BOAND

LAMINATE. LAVATORY LANDLORD

FINISH TAG (SEE FINISH SCHEDULE) # WALL TYPE TAG (SEE WALL / PARTITION SCHEDULE) # EQUIPMENT TAG (SEE EQUIPMENT SCHEDULE)

INTERIOR ELEVATION REFERENCE TAGS

(ITEM DENOTED) ELEVATION MARK

DETAIL REFERENCE TAG

DRAWING SYMBOL KEY

DOOR NUMBER (SEE DOOR SCHEDULE)

WINDOW TAG (SEE WINDOW SCHEDULE)

REVISION TAG (SEE PROJECT TRACKING) REVISION CLOUD (DENOTES AREA OR LIEM ON DRAWING AFFECTED BY REVISION)

--- COLUMN GRID DESIGNATION

WALL SECTION REFERENCE TAG

TOILET ACCESSORY TAG (SEE TOILET ACCESSORY SCHEDULE)

BUILDING AREA

AREA PER TABLE

-INTERNATIONAL MECHANICAL CODE, 2003 EDITION -INTERNATIONAL PLUMBING CODE, 2003 EDITION NATIONAL ELECTRICAL CODE, 2002 EDITION, INFPA 70) A -INTERNATIONAL FIRE PREVENTION CODE 2003 EDITION INTERNATIONAL ENERGY CONSERVATION CODE, 2003 -ICCIANSI A117.1, ACCESSIBLE AND USEABLE BUILDINGS 01-11-06 A REMOVE STONE WAINSCOT ON EXTERIOR, DELETE KITCHEN AND REVISE LOUNGE & FOYER, MISC REVISIONS.
-BUILDING ENERGY EFFICIENCY STANDARDS ACT -BUILDING ENERGY EFFICIENCY STANDARDS ACT -THE FAIR HOUSING ACT -THE AMERICANS WITH DISABILITIES ACT SPRINKLERED. OCCUPANT LOAD: GENERAL OFFICE AREA = 1973 SF/100 = 20 = 503 SF/15 = 34 = 1071 SF/7 = 153 TOTAL:

PROJECT DATA

POOL EQUIPMENT = 173 SF/200 = 1

INTERNATIONAL BUILDING CODE, 2003 EDITION

-INTERNATIONAL FUEL GAS CODE 2003 EDITION

MAINT. & POOL STORAGE = 1042 SF/300= 4

08-21-06 REVISIONS TO POWER, LIGHTING AND CEILING PLANS PROJECT DIRECTORY Owner \ DEVELOPER

PROJECT TRACKING

100% DRAWINGS

11-17-04 REVISIONS PER BLDG DEPT AND
OWNER COMMENTS ADD EQUIP
SCHED., TOILET ACCESSORY SCHED.
ADD DRAINS TO DOWNSPOUTS AT
PLANTERS, ADD DISHWASHER,
REVISE PLUMBING FIXTURE SCHED.

12-02-05 🛕 ADD MAINT. & POOL FURN STOR,

DELETE ACTIVITY ROOM, ASSIST MGR & CONF ROOM. REARRANGE LAYOUT PER OWNERS REQUIREMENTS

DESCRIPTION

c/o NorSouth 2000 Riveredge Parkway Suite 950 Atlanta, GA 30328 Bus: (770) 850-8280 Bus. Fax. (770) 850-8230

ARCHITECT'S PROJECT MANAGER
Thomas J. Metzger, AIA
5801 Fawn Run Drive

BUILDING DEPARTMENT RICHLAND COUNTY

SHEETS AFFECTED

ALL SHEETS

CH-T1, CH-A2.1, CH-A4.1, CH-A7.1, CH-A7.4, CH0A7.6 CH-A8.1, CH-A8.2 CH-A9.4, CH-A11. CH-P1.1, CH-P2.1, CH-P2.2, CH-E1.1

ALL SHEETS

ALL SHEETS

Atlanta, GA 30341 Bus: (770) 452-7849 ext.11 Bus. Fax: (770) 452-0086

TO BE BOUND UNDER SEPARATE COVER

INDEX TO DRAWINGS

FOUNDATION FLOOR PLAN

REFLECTED CEILING PLAN ROOF PLAN

ROOF FRAMING PLAN

FINISH SCHEDULES

HVAC PLAN PLUMBING PLAN

POWER PLAN LIGHTING PLAN LOW VOLTAGE PLAN

BUILDING SECTION, DETAILS BUILDING SECTION RAMP DETAILS

BUILDING SECTION, DETAILS

RISER DIAGRAMS - WATER

PANEL SCHEDULE RISERS

THROUGH PENETRATION DETAILS

SHEET # TITLE

ARCHITECTURAL

CLUBHOUSE

CH-A8.2 CH-A9.1

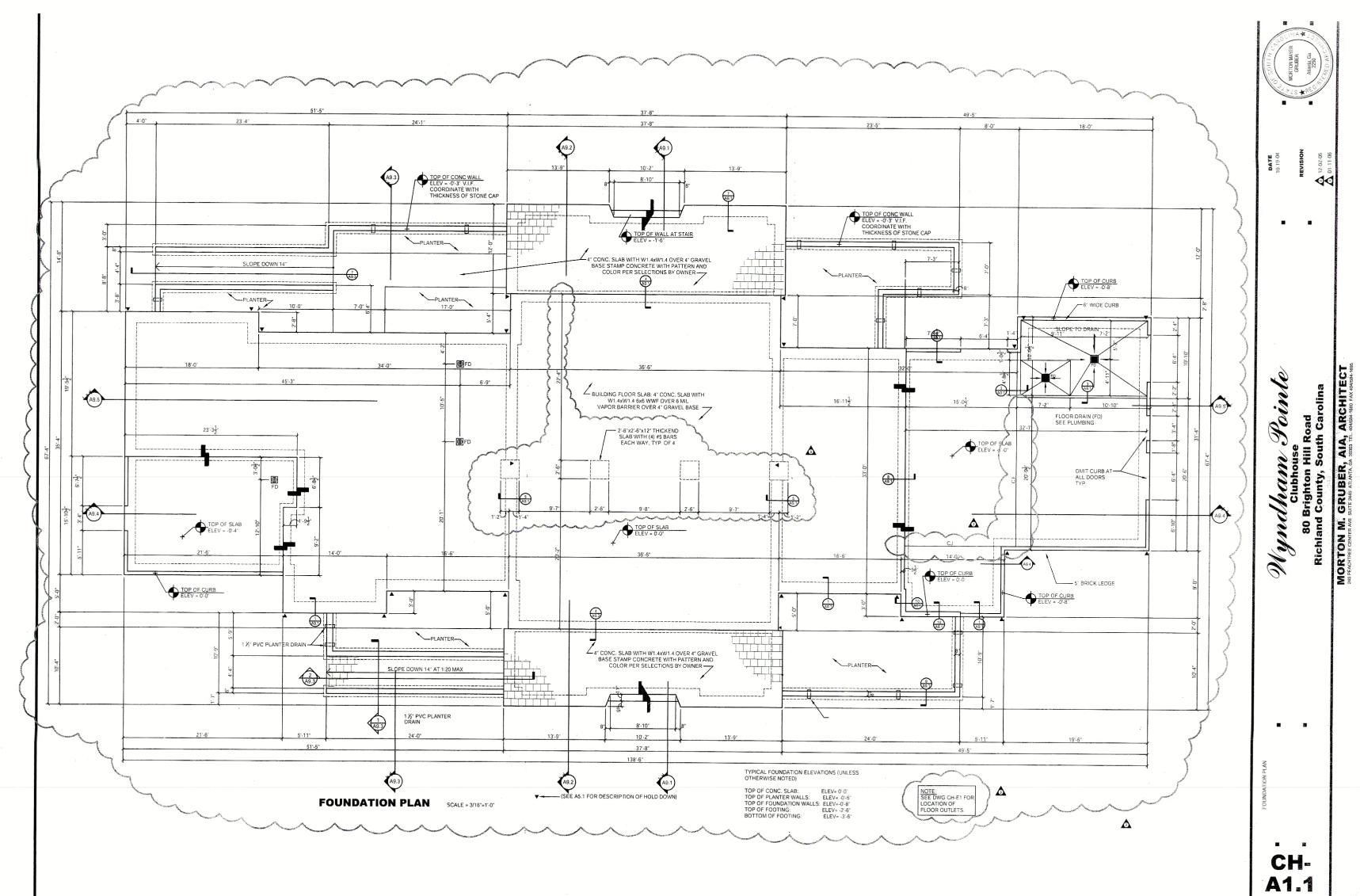
CH-A9.5

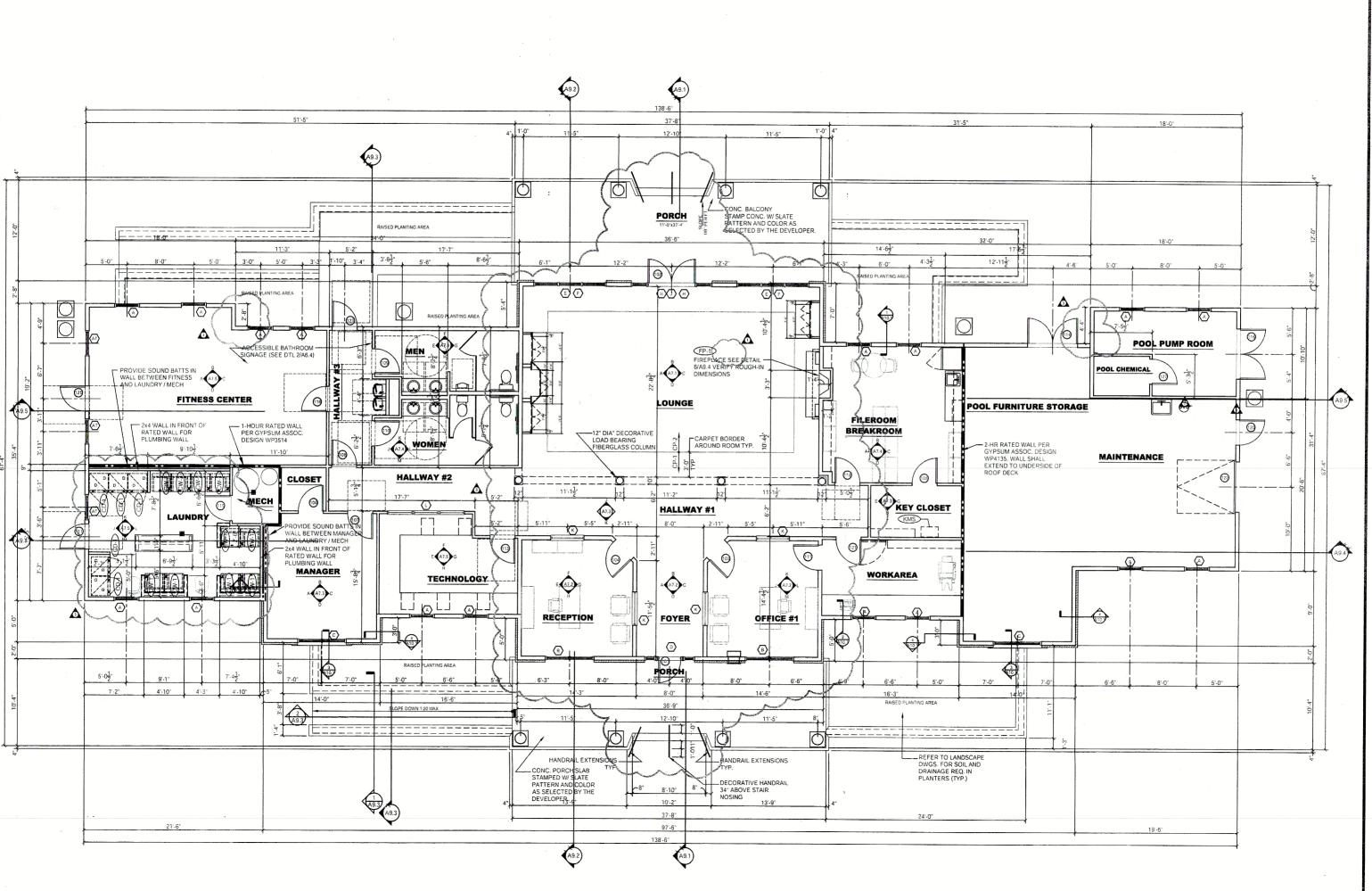
CH-P2.2 CH-E1.1

CH-E2.1

Wyndham Clubhou 80 Brighton H

CH-T1



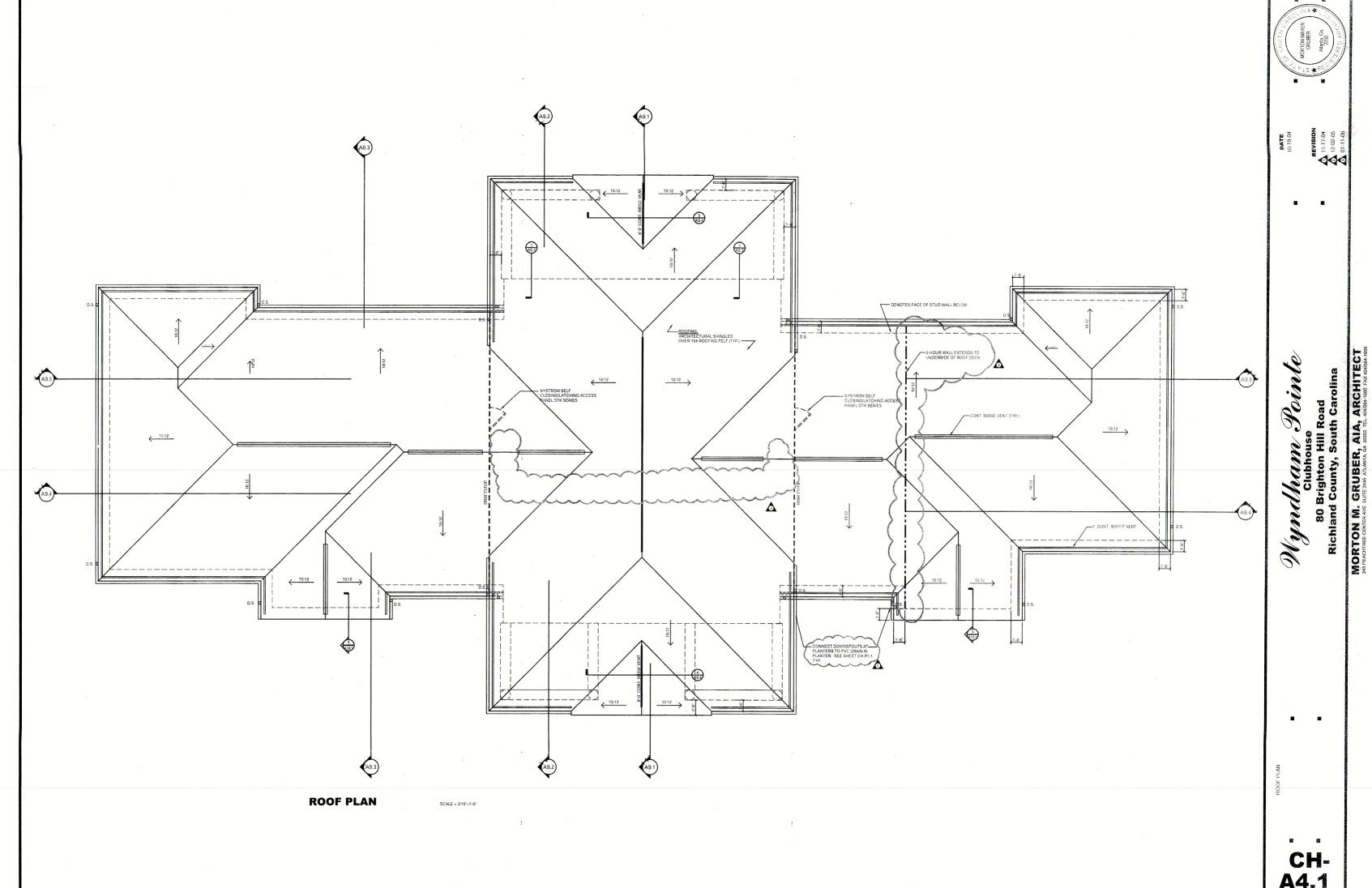


444

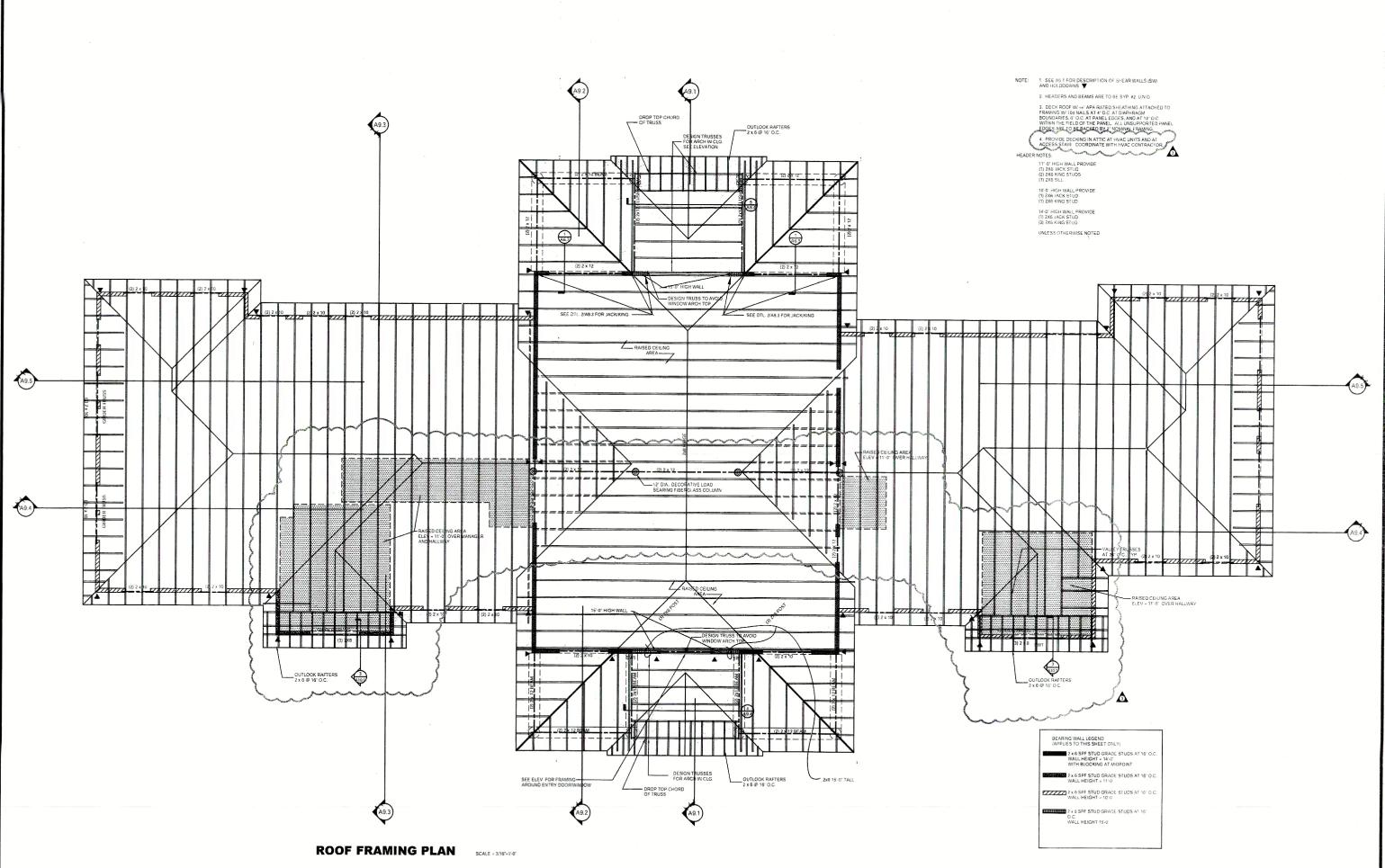
MORTON M. GRUBER, AIA, ARCHITECT 245 PEACHIRE CENTER AND SUITABLE OF SUITE 2445 AILANIA, OA 30303 TEL A04588-1889 FAX AND SUITE 2445 AILANIA, OA 30303 TEL A04588-1889 FAX AND SUITE 2445 Wyndham Pointe Clubhouse
80 Brighton Hill Road
Richland County, South Carolina

CH-**A2.1**

A3.1



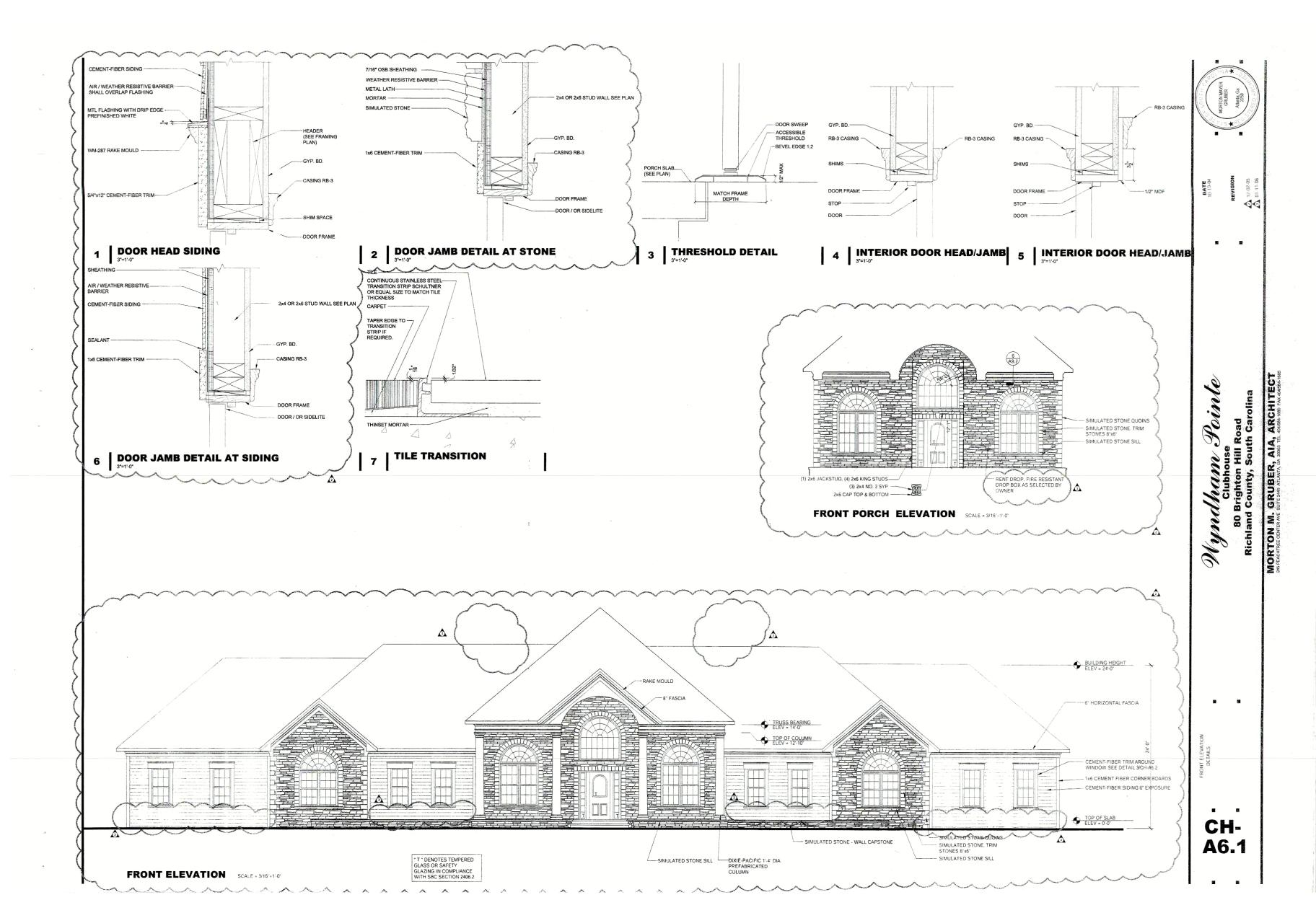
CH-A4.1

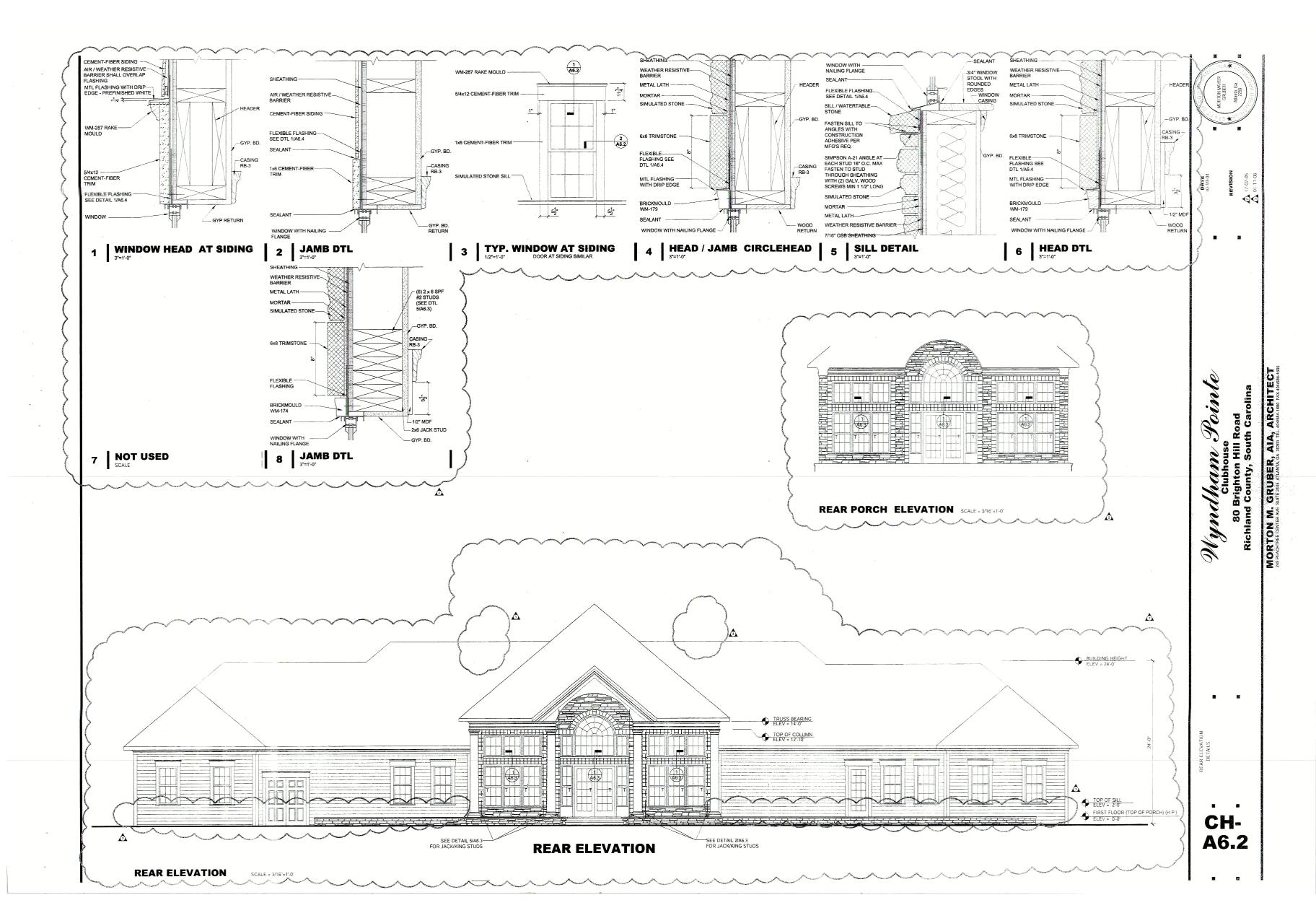


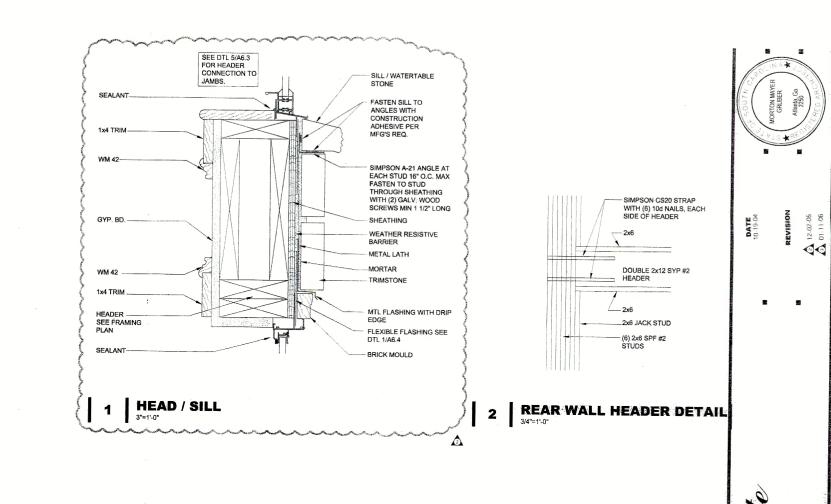
MORTON M. GRUBER, AIA, ARCHITECT 245 PEACHTREE CENTER AVE SUITE 2445 ATLANTA, OA 30303 TEL 404/584-1680 FAX 404/584-168

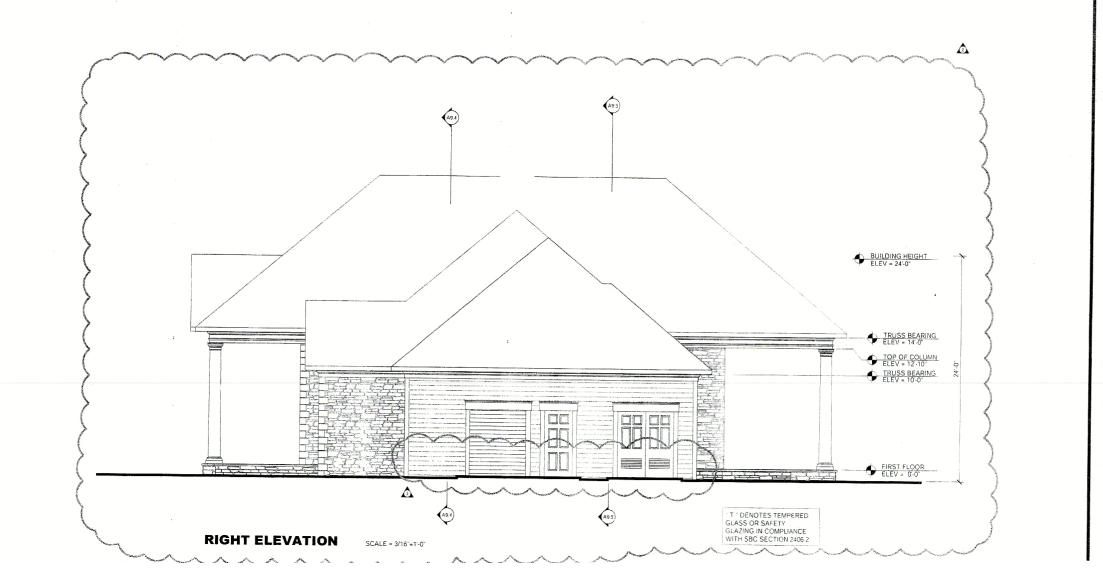
Wyndham Pointe Clubhouse
80 Brighton Hill Road
Richland County, South Carolina

CH-A5.1





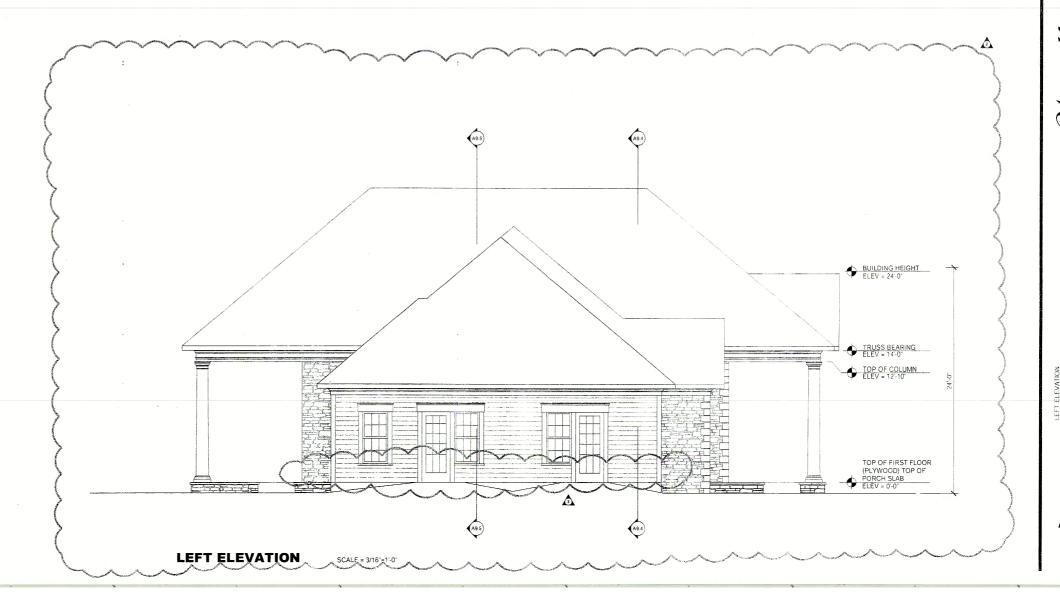




Myndham Pointe Clubhouse
80 Brighton Hill Road
Richland County, South Carolina

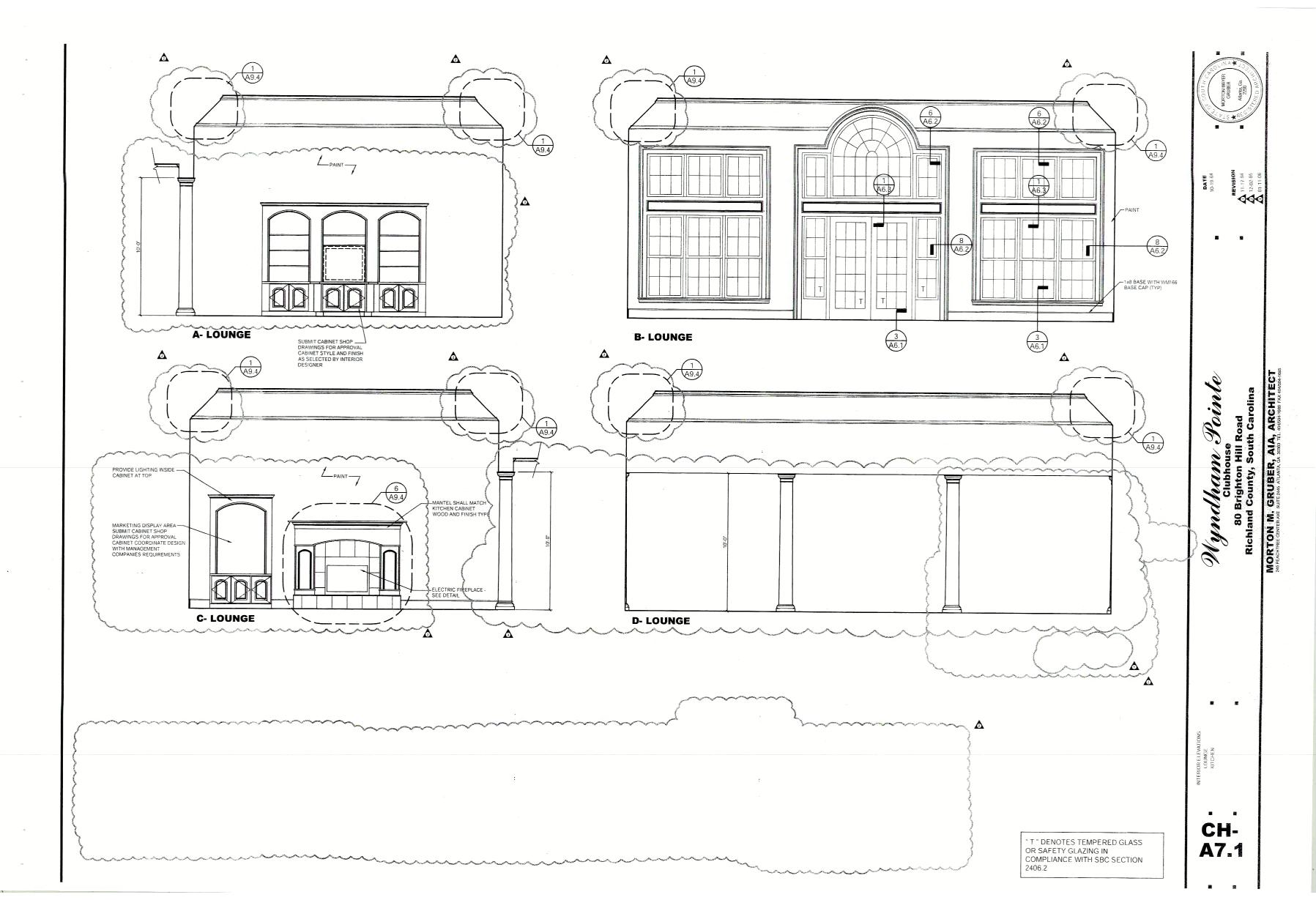
MORTON M. GRUBER, AIA, ARCHITECT 245 PEACHITECT 245 PEACHITEE CENTER AVE SUITE 245 ATLANTA, CA. 2003 TEL. 404584-1695 FAX 404584-1695

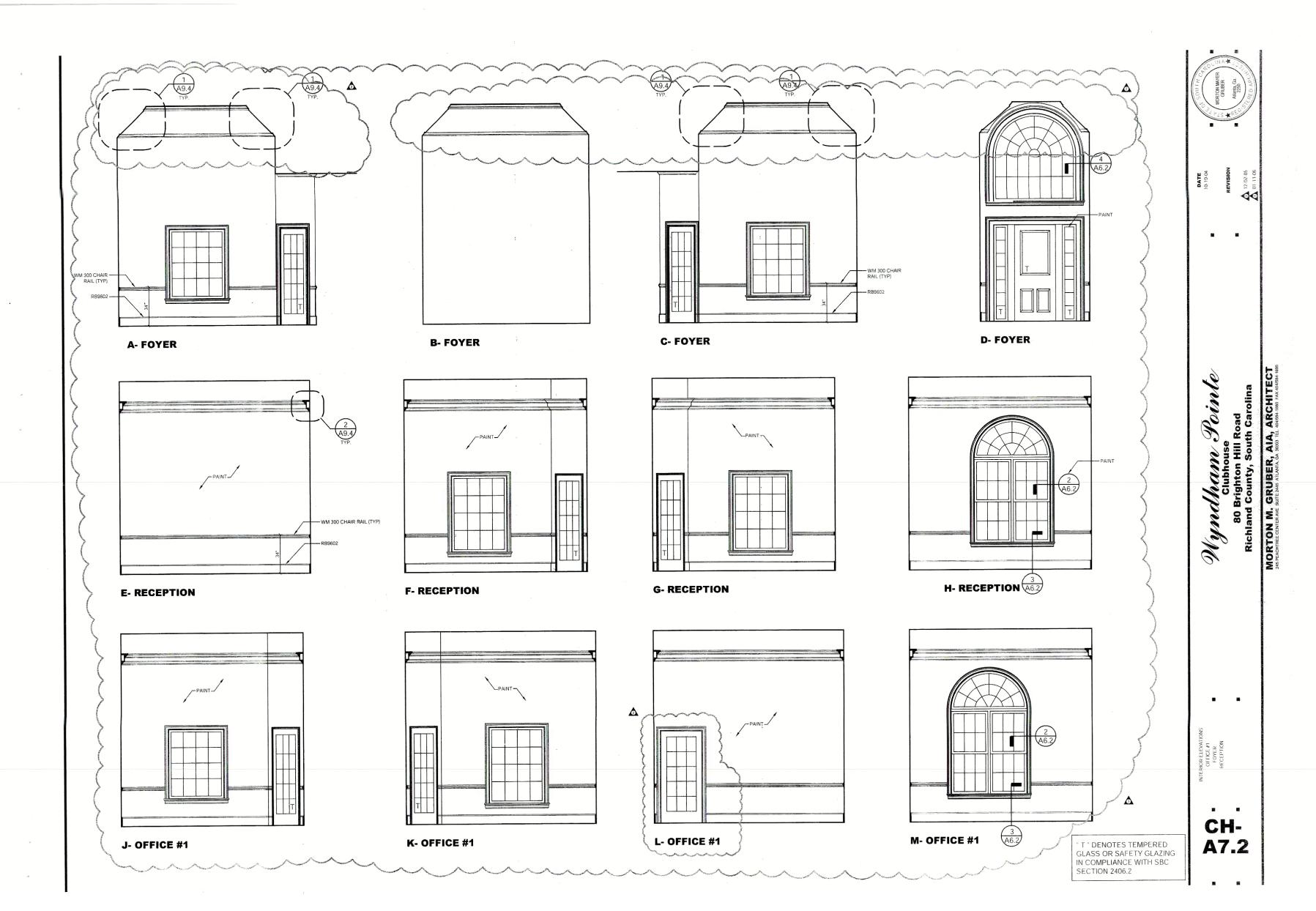
CH-A6.3

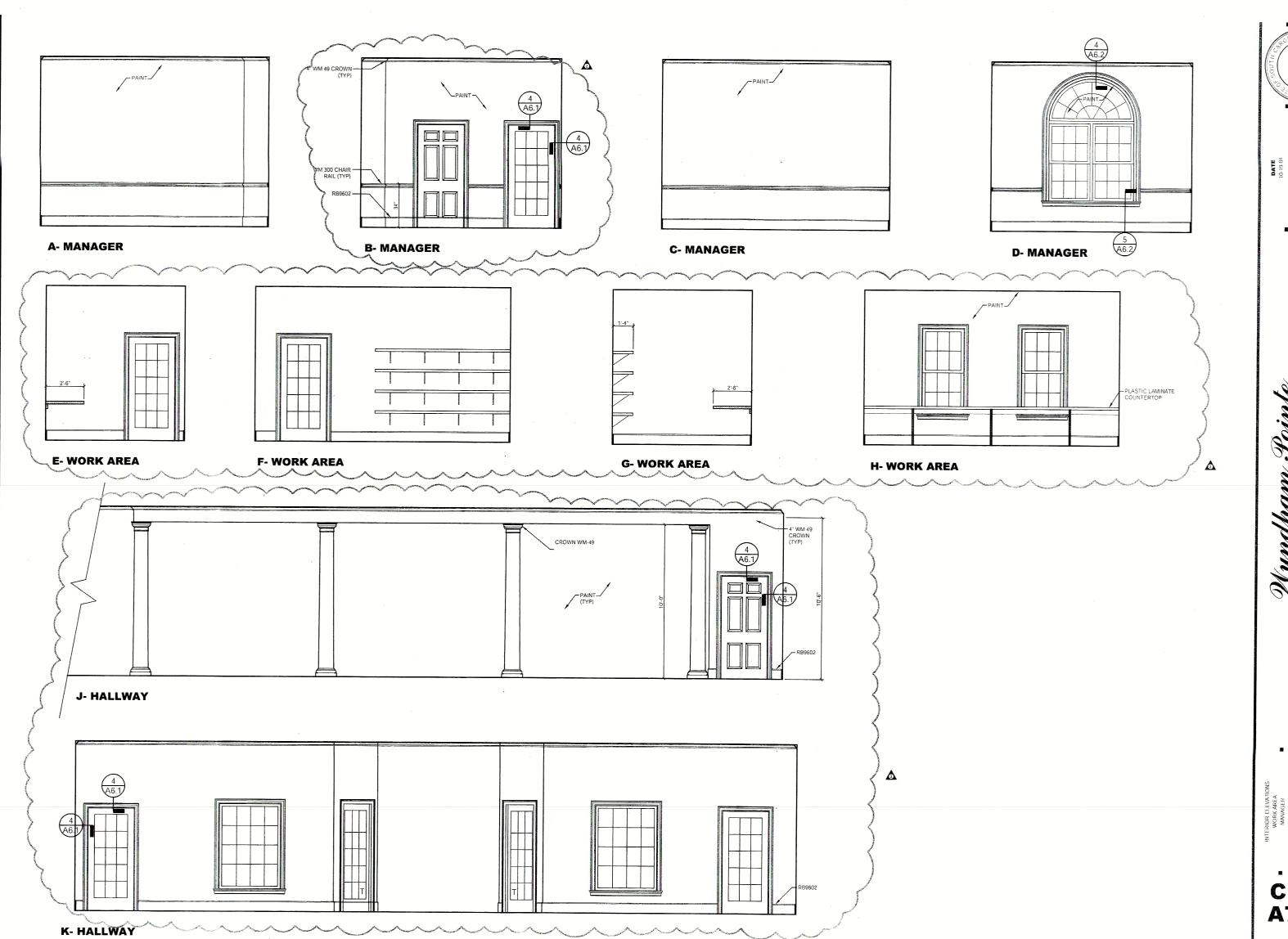


MORTON M. GRUBER, AIA, ARCHITECT 245 PEACHTREC CENTER AVE. 401 30203. TEL. 404/384-1809. FAX 404/384-1805 Myndham Pointe Clubhouse
80 Brighton Hill Road
Richland County, South Carolina

CH-A6.4

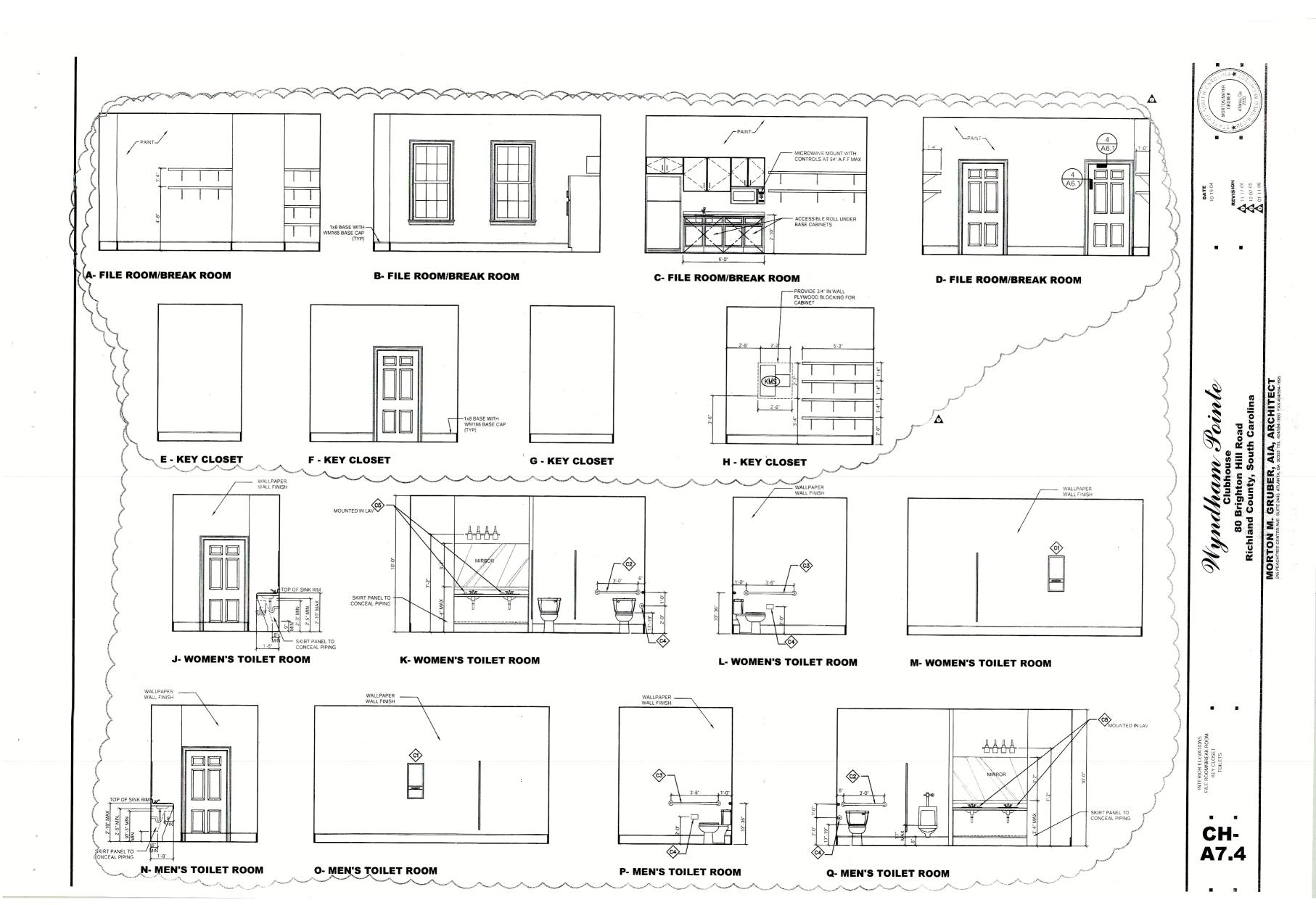




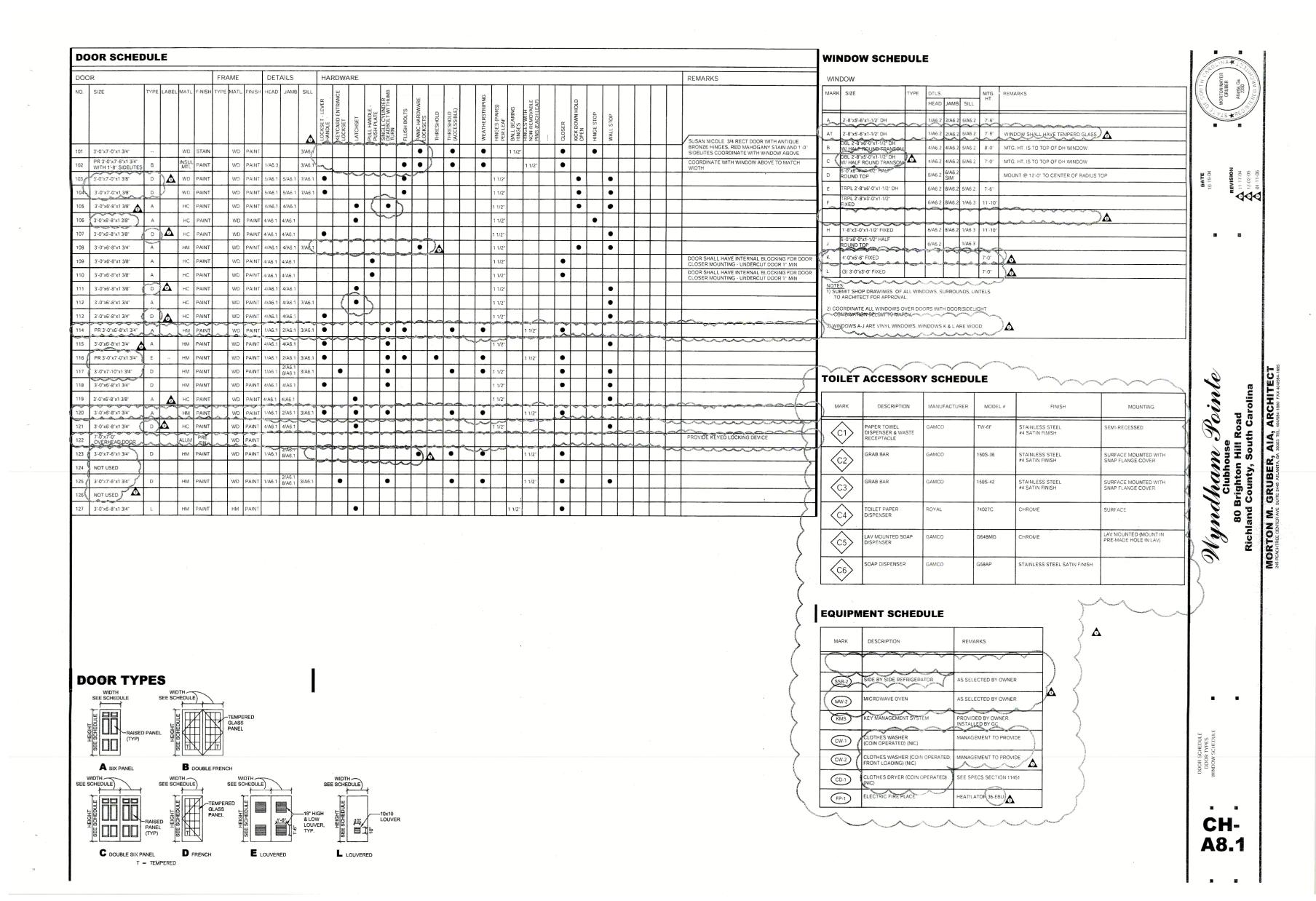


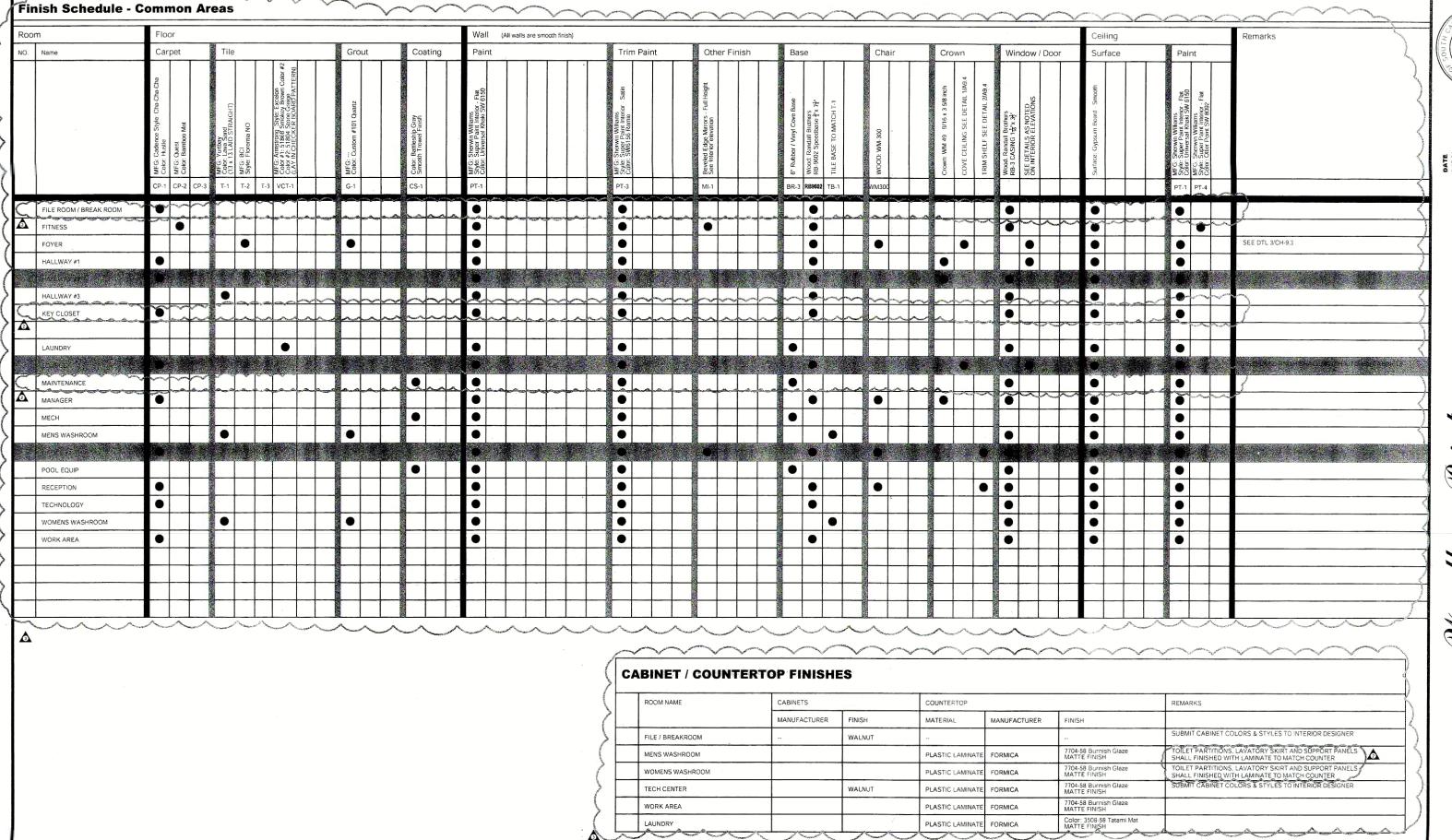


CH-A7.3





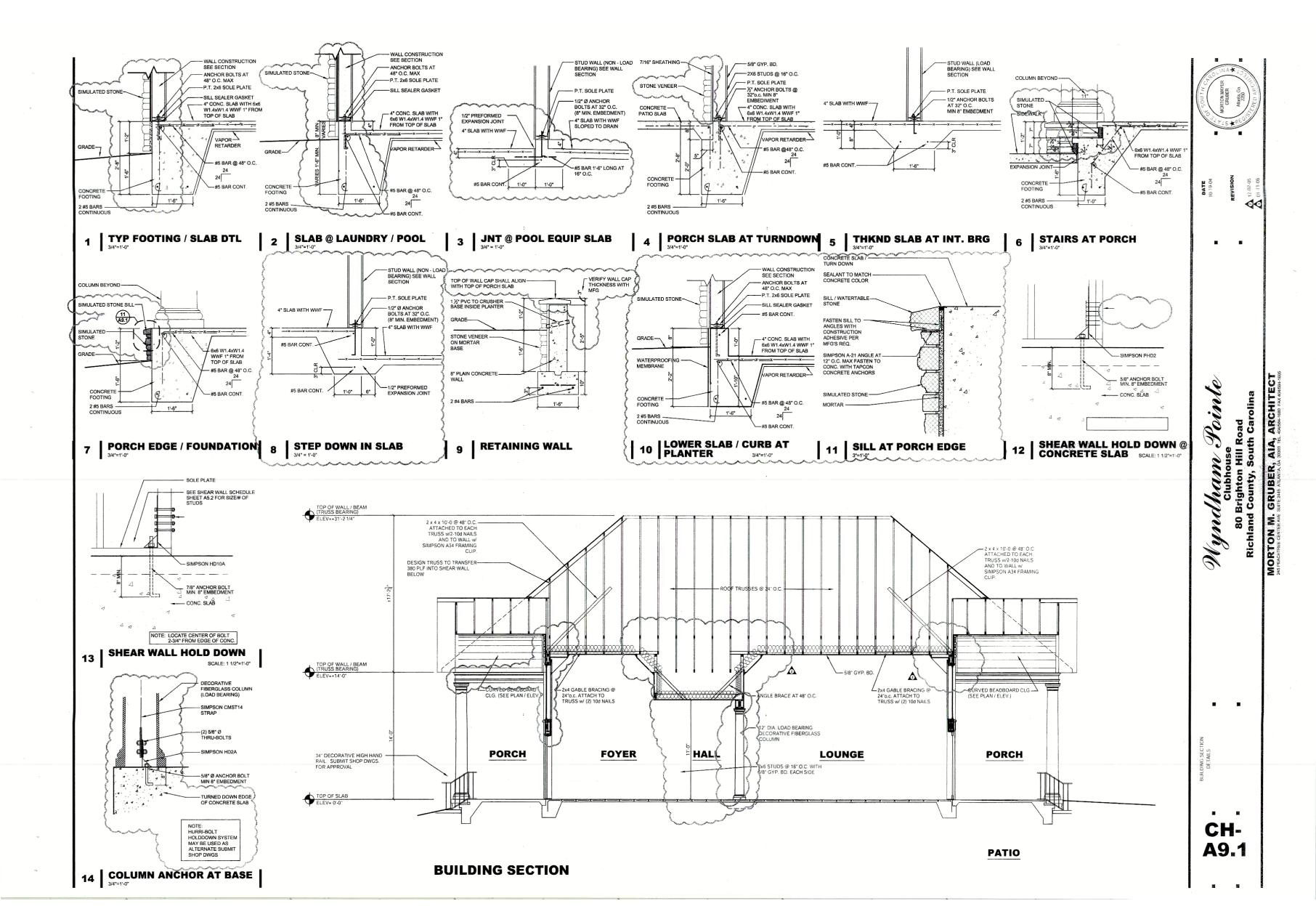


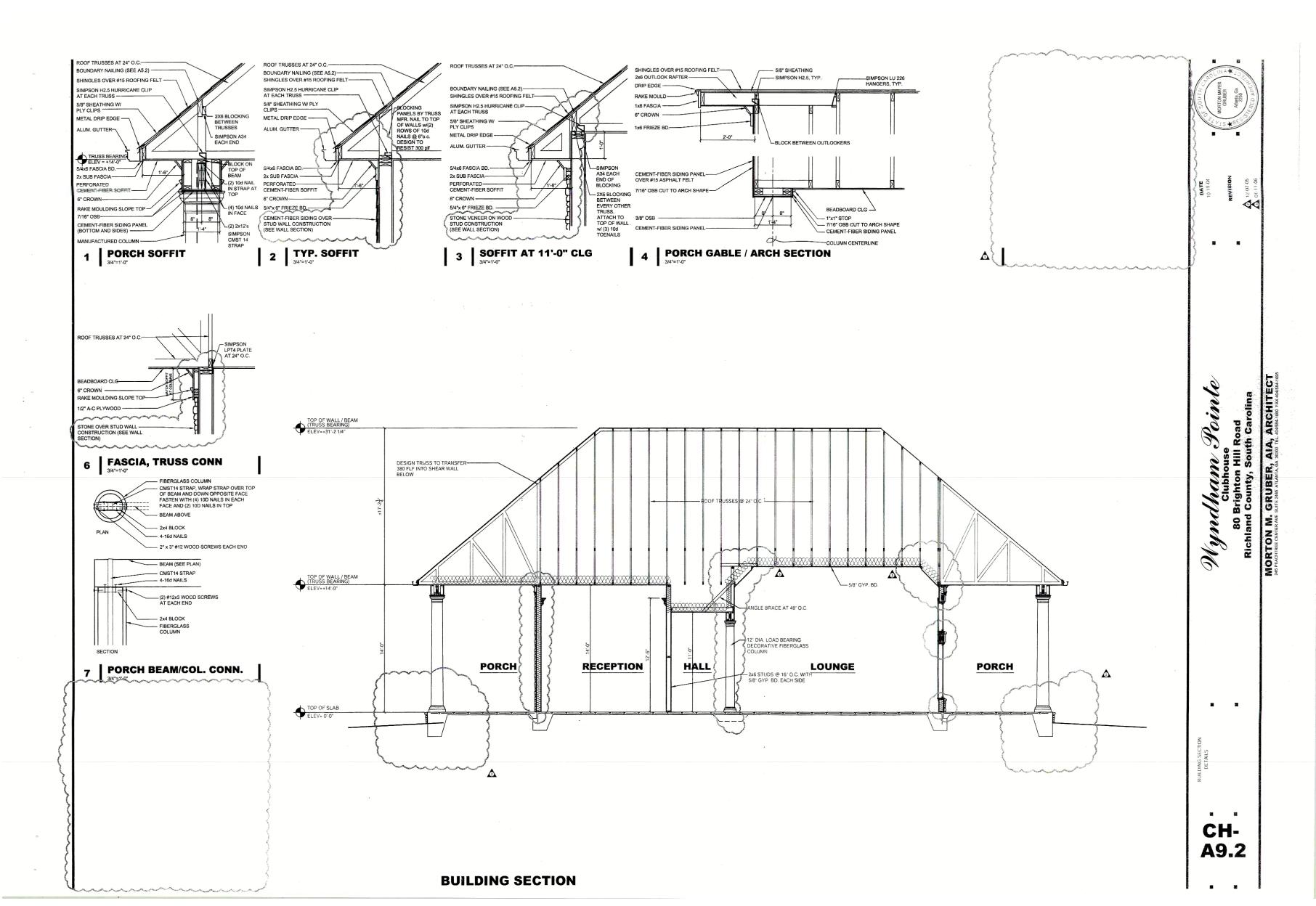


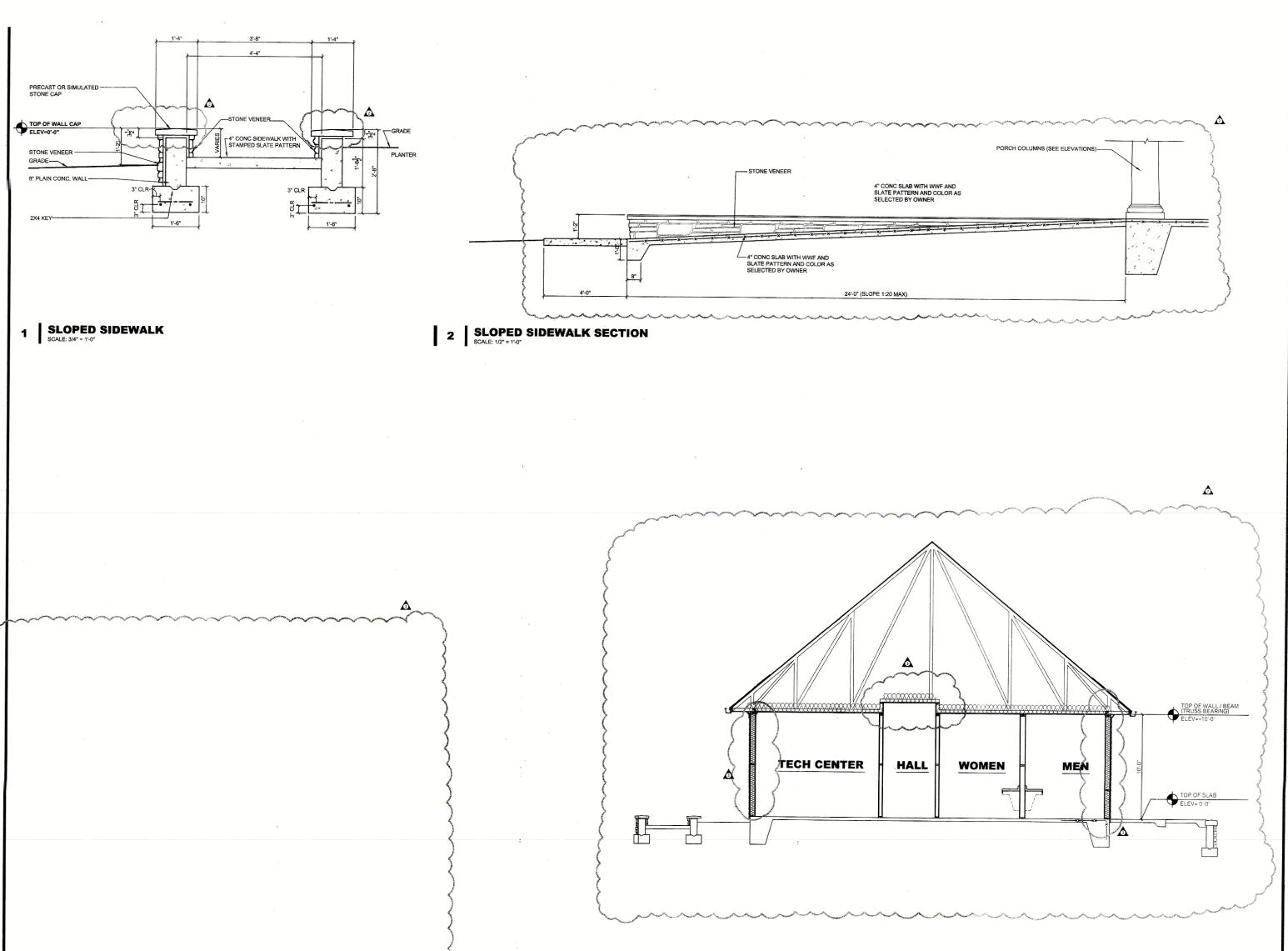
	EXTERIOR F	INISHES	
	MATERIAL	MANUFACTURER	FINISH
C	CEMENT FIBER SIDING		PAINT COLOR AS SELECTED BY OWNER
	STONE VENEER	CENTURION STONE	CALIFORNIA RUSTIC
	STAMPED CONC. PORCH		SLATE PATTERN COLOR AS SELECTED BY OWNER
	ROOFING	ELK	PRESTIGE RAISED 30 YEAR ARCHITECTURAL COLOR: WEATHERWOOD
	TRIM AND SOFFIT PAINT	SHERWIN WILLIAMS	EXTERIOR - GLOSS WHITE

Myndham Pointe
Clubhouse
80 Brighton Hill Road
Richland County, South Carolina
MORTON M. GRUBER, AIA, ARCHITECT

. . CH-A8.2







BUILDING SECTION

MORTON MAYER STANDS AMERIE GE

REVISION 12.02.05

10.19.04
REVISION
12.02.05

Myndham Bointe Carolina

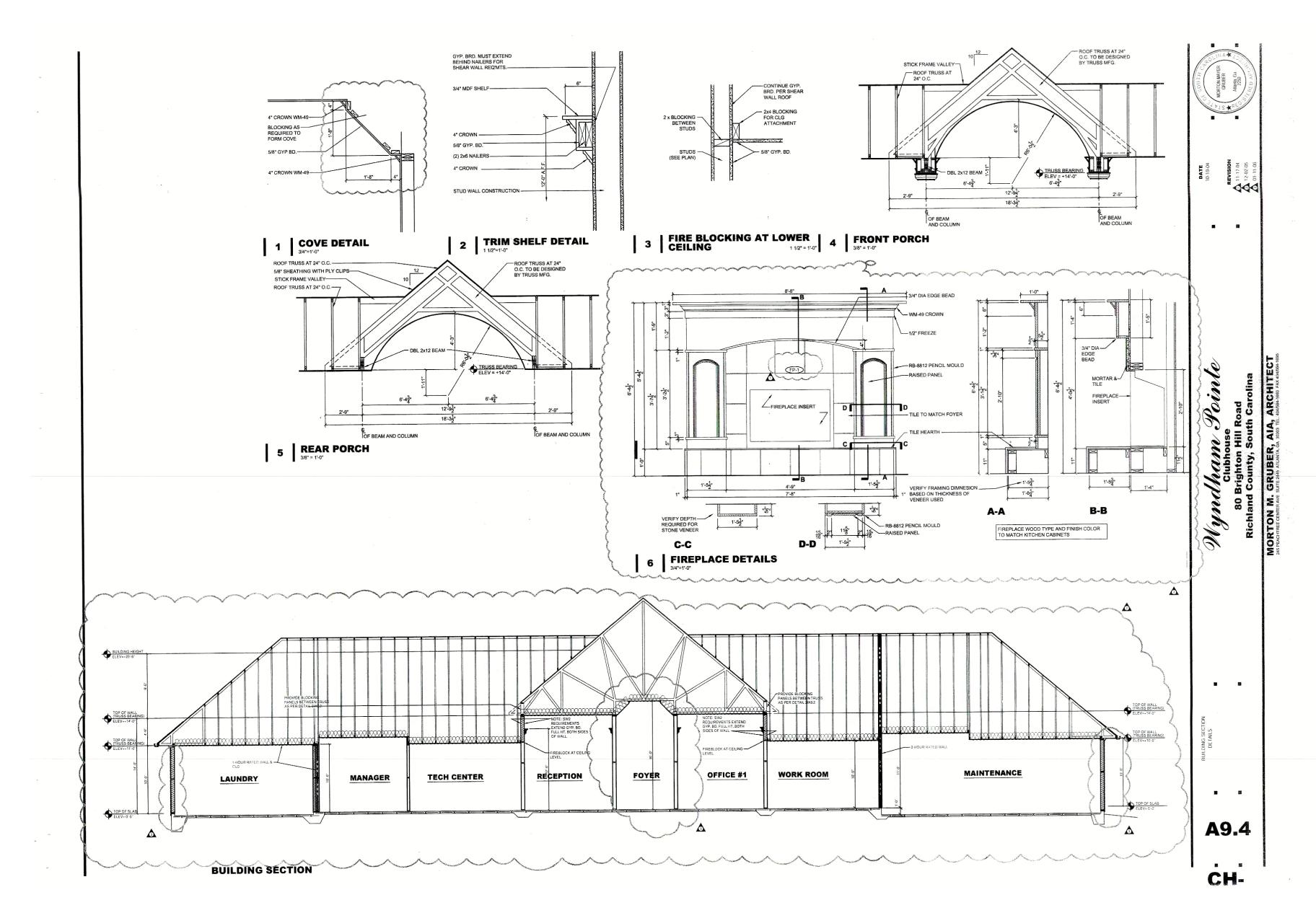
Richland County, South Carolina

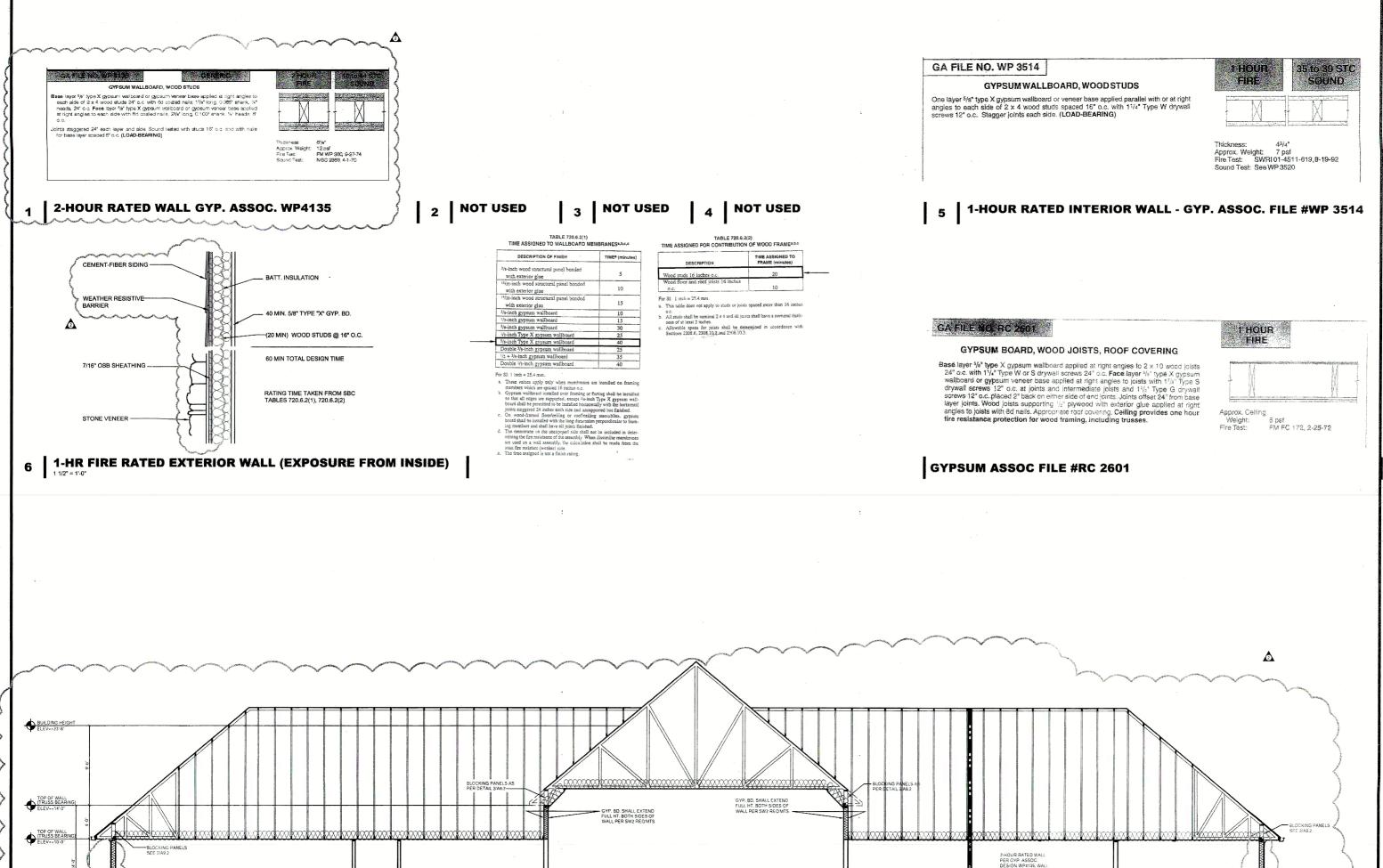
MORTON M. GRUBER, AIA, ARCHITECT

200 PEROLINEE CENTER AND STANDARD FAX ADMOST-1600 FAX ADMOST-1600 FAX ADMOST-1600 FAX ADMOST-1600 FAX ADMOST-1600 FAX ADMOST-1600

BUILDING SECTION
DETAILS

CH-A9.3





LOUNGE

FILE / BREAKROOM

DECK POOL FURN

POOL EQUIP.

FITNESS

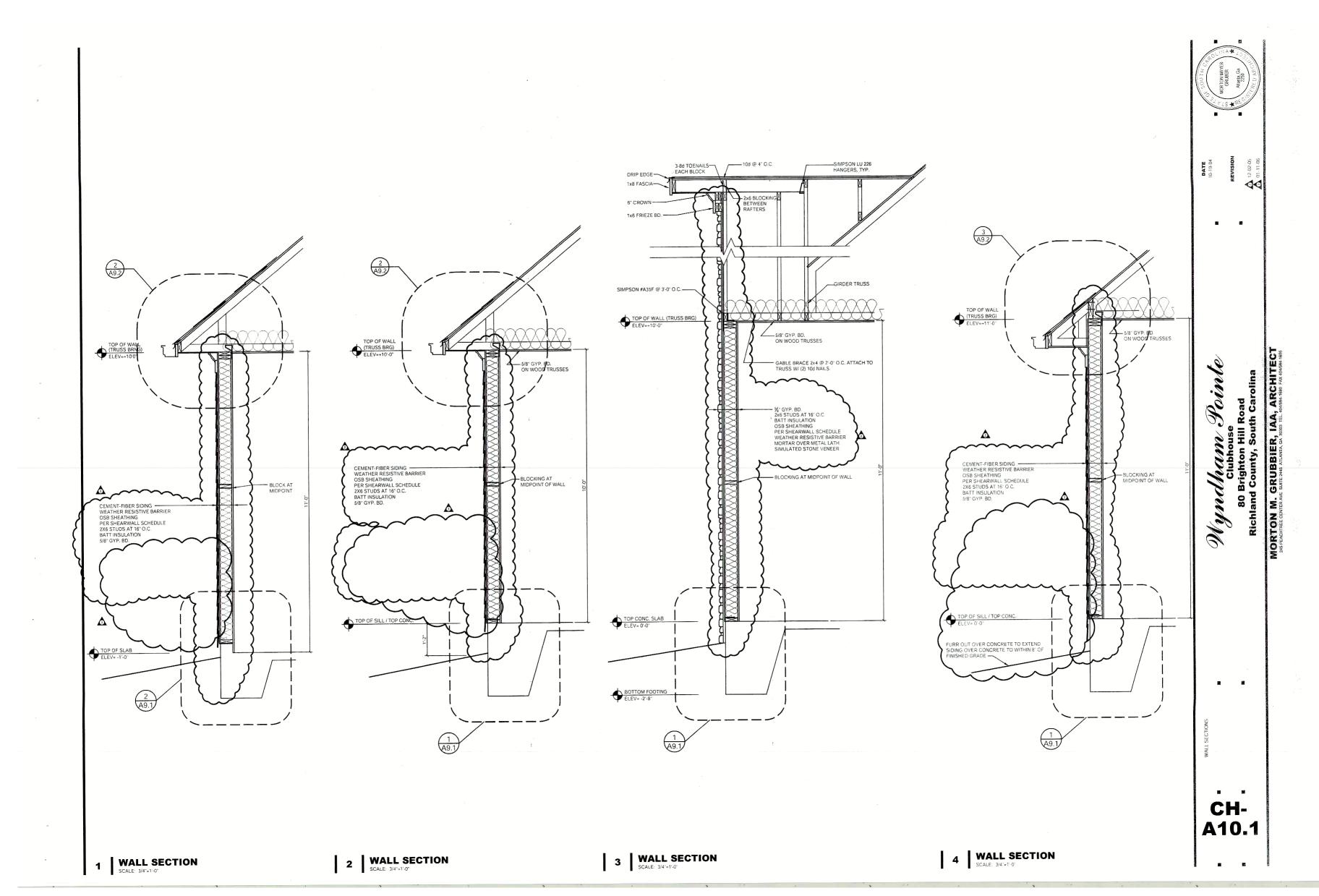
HALL

WOMEN'S

BUILDING SECTION

Pointe

CH-A9.5



GENERAL NOTES AND REQUIREMENTS

- Coordinate and verify all dimensions and details with the architectural drawings. Notify the Architect immediately of any discrepancies.
- If field conditions vary from those indicated on the drawings and necessitate changes to the drawings, contact the Engineer before proceeding.
- 3. Submit shop drawings for review prior to fabrication for the
 - Wood Roof and Floor Trusses (sealed by registered engineer)
 Concrete mix design
 Concrete Reinforcing
 Wrought Iron Guardfalls (sealed by registered engineer)
- Submit concrete tests performed by an ACI certified testing laboratory for seven and twenty-eight day concrete test cylinder breaks.
- 5. Concrete test reports will be available at job site.
- Contractor shall be responsible for bracing and shoring of the structure during construction to ensure stability.
- 7. All truss plans shall be available on job site during the times
- Proof of welder certification shall be available at the job site during times of inspection.

FOUNDATION NOTES

- 1. Foundations are designed to bear on residual soil or compacted If votinations are designed to bear of restouts soil or comp fill with an allowable bearing capacity of 2000 psf. Bearing capacity must be verified by a Geotechnical Engineer prior to concrete placement. If soil test disclose a Jesser bearing capacity, this foundation system is void and must be re-designed.
- 2. Footings shall bear 30" minimum into undisturbed earth or mechanically compacted engineered fill. Exterior wall footings shall bear a minimum of 30° below finished grades Fill soils shall have compaction tests performed by a geotechnical engineer before pouring foundations.
- Solls under footings to be at 98% Standard Proctor Density;
 oils under slab to be at least 95% Standard Proctor Density.
- 4. All anchor bolts shall have min. 8" embedment into concrete.

GENERAL CONCRETE NOTES

- 1. All materials and workmanship shall conform to project specifications. All detailing, fabrication accessories, and placement of reinforcing shall conform to the ACI Manual of Standard Practice for Detailing Reinforced Concrete Structures. Design is in accordance with ACI 318-99 "Building Code Requirements for Reinforced Concrete"
- 2 Concrete shall be normal weight gray concrete and develop a minimum compressive strength of 3000 psi at 28 days, unless otherwise specified.
- Reinforcing bars shall be deformed bars conforming to ASTM A 615 : Grade 40 #3 bars Grade 60 #4 bars and larger.
- 4. Welded wire fabric reinforcing shall conform to ASTM A 185.
- Where the length of a bar is given, and it is to be hooked, the hook shall be in addition to the length given.
- Depths of the footing shown on the drawings are minimum.
 Footing elevation may be lowered if found necessary by
 the Engineer
- No horizontal construction joints will be permitted in slabs or walls.
- All construction joints shall be rough surface and cleaned before the next concrete pour.
- Where openings occur in slabs, place the reinforcing that normally occurs in line with the opening equally to either side of the opening. Cut no steel in the field.
- Mechanical, electrical and architectural drawings shall be checked for embedded items and penetrations before
- 11. Minimum Lap Splice Lengths
 - Compression #4 15° #6 23"
 - Tension #4 29"

 - #6 43
- LINTEL SCHEDULE OPENING WIDTH LINTEL SIZE BICK VENEER
- L 3 x 3 x 3/16 L 4 x 3-1/2 x 5/16 LLV L 7 x 4 x 3/8 LLV OVER 4'-8'
- NOTE: Provide 8" min. bearing each end. LLV = Long Leg Vertical LLH = Long Leg Horizontal COORDINATE LINTEL ANGLE SIZE WITH CAST LINTELS

- STRUCTURAL WOOD FRAMING NOTES

 All workmanship shall conform to the National Design
 Specification For Wood Construction, published by the
 National Forest Products Association, and the Building
- Lumber sizes specified on the plans are minimum nominal
- All lumber shall be identified by an affixed grade mark of a lumber grading or inspecting agency.
- Unless noted otherwise, lumber for beams, headers, and joists shall be Southern Yellow Pine #2. Lumber for rafters shall be Spruce-Pine-Fir #2, and lumber for studs shall be Spruce-Pine-Fir Stud Grade.
- Finger jointed Spruce-Pine-Fir #2 lumber meeting product standard SPS1 and C/QC101.97 can be used for rafters. Finger jointed Stud Grade Spruce-Pine-Fir lumber meeting product standard SPS3 and C/QC101.97 can be used for studs
- All lumber and wood structural panel members, including preservative-treated, 2 inch thick and less, shall contain not more than 19% moisture at the time of installation.
- Provide pressure treated lumber at all locations specified on the drawings.
- Provide Simpson Strong-Tie, or approved equal, connectors at all locations shown on the plans.
- Laminated Veneer Lumber (LVL) shall be Microllam beams as manufactured by Trus Joist Macmillan, or equal.
- Glulam beams are to be 24F-V3 lamination combination with camber radius of 1600 feet, unless noted otherwise on the plans. Members shall be marked in accordance with ANSI Standard A190.1. No holes or notches are to be cut in glulams without written approval from the engineer.
- Wood I-Joists shall be the size and manufacturer indicated on the plans, or approved equal. Installation shall be in accordance with the manufacturer's recommendations.
- Number of posts indicated are "jack studs" below header or beam. Provide, also, (1) full height "king stud" in addition to jack studs.
- Provide 1/2" plywood fill between multiple beams/headers where required for finish.
- 14. Load bearing walls must align at each level, typ. all units.
- Shear walls noted will extend entire length or width of bldg., as applicable.
- 16. Double studs at end of shear walls
- 17. Use a doubled top plate and stagger all splices 4-0" min. Secure plates together with 6-16d nails on each side of each splice at all party walls. Drive all nails through and clinch. Use longest pieces of wood from outside inward, to splice near center of panel.
- 18. All gyp. bd. & OSB indicated in the shear wall schedule shall be applied vertically or, if applied horizontally, shall be fully blocked with purlins so that all edges are supported and

PRE-ENGINEERED WOOD ROOF TRUSSES

- Truss diagrams are for conceptual chord configurations only. Member configuration and sizes are to be determined. by manufacturer
- Trusses shall be designed by a professional engineer registered in the State and the drawings and calculations shall bear their seal.
- Submit shop drawings for all trusses to the Architect for review prior to fabrication. Drawings shall show truss profile, web and chord member sizes, member forces, and reaction forces.
- 4. Web and chord members shall be a minimum size of 2 x 4.
- Provide connection and installation details for all trusses, showing temporary and permanent bracing and bridging locations in accordance with trus plate Institute's "Handling, Installation and Bracing Metal Plate connected Wood Trusses", H1B-91.
- 6. Where trusses bear on another truss, truss manufacturer being the state of the state of
- Roof framing is not designed to support mechanical equipment.
- All pre-engineered truss shop drawings shall be available on job site during the times of inspection and shall bear clear indication that they have been reviewed and approved by the structural engineer of record.

GENERAL MASONRY NOTES

- BRICK: QUEEN SIZE, RUNNING BOND
- CMU: 4", 8" x 16 CMU F'm = 1,500 PSI CONFORMING TO ASTM C90 TYPE II GRADE "N"
 - MORTAR: TYPE N PER ASTM C270
- Reinforcing bars shall be deformed bars conforming to ASTM A 615: Grade 40 #3 bars. Grade 60 - #4 bars and larger.
- ALL MATERIAL AND WORKMANSHIP SHALL CONFORM TO BUILDING CODE REQUIREMENTS FOR STRUCTURAL MASONRY ACI 530-99.
- 5. GROUT: COMPRESSION STRENGTH = 2000 PSI PER ASTM C476
- ALL MASONRY VENEER SHALL BE ATTACHED WITH 9-GAUGE CORRUGATED METAL TIES @16" O.C. VERT. & 32" O.C. HORIZONTAL MAX.

ROOF DECK (PER TABLE 2306.3.1) 5/8" OSB. NAILING PATTERN: 100 NAILS AT 6" O.C. AT PERIMETER EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS. USE PLY-CLIPS AT UNSUPPORTED EDGES.

3/4" T&G OSB. NAILING PATTERN: 10d NAILS AT 6" O.C. AT BOUNDRY & PANEL EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS.

DESIGN CODES	& REGULATIONS

GENERAL STRUCTURAL NOTES

1. Design Codes and Criteria

The structural design is based on the 1994 Standard Building Code

2. Design loads are as follows:

Dead And Colateral Loads:

Rafters = 10 psf (Superimposed)

Top Chord Dead Load = 4 psf (Superimposed)
Top Chord Collateral Load = 1.5 psf (Superimposed)
Bot Chord Dead Load = 4.5 psf (Superimposed)
Bot Chord Collateral Load = 1.5 psf (Superimposed)

Roof Trusses

Top Chord Dead Load = 10 psf (Superimposed)
Bot Chord Dead Load = 4.0 psf (Superimposed)

Roof Live Loads: Roof = 20 psf (With applicable reductions)

Roof Conc. Loads: Indicated on plan.

Rain Loads: Roof Slope = Not Applicable

Handrails and guards:

50 plf applied in any direction at top 200 lb concentrated load applied in any direction and at any location at top 50 lb applied horizontally over 1 sf to intermediate components

Ground Snow Load Pg = 20 psf Sloped Roof Snow Load Ps = 14 psf Snow Exposure Factor Ce = 1.0 Thermal Factor Ct = 1.0 Snow Load Importance factor Is = 1.0

Wind Loads:

Basic Wind Speed V=80 mph
Wind Load Importance Factor Iv = 1.0
Wind Exposure Category = B
Internal Pressure Coefficient = ±..18 (With Applicable Reductions)

Component Roof Design Pressure = 18 psf Component Wäll Design Pressure = 16 psf

Earthquake Loads:

Peak velocity - rated acceleration, Av = 0.12 Peak acceleration Aa = 0.10 Seismic Hazard Exposure Group = I Seismic Performance Category = C Soil-Profile Type/Site Coefficient = S4/2.0 Basic Structural System and Seismic-Resisting System =

Bearing Wall Systems

Light Framed Walls with Wood Shear Panels Response Modification Coeff. R = 6.5, Cd = 4

Analysis Procedure = Equivalent Lateral Force Procedure

- Structural drawings indicate typical and certain specific conditions only. Shop drawings shall detail all
 conditions in accordance with specified standards and the specific requirements of this project as
 indicated on the drawings.
- 4. Furnish and install all necessary attachments, anchorage's and accessories to provide a complete structurally sound building with a continuous load path. Bring any discontinuities to the attention of the Structural Engineer immediately
- 5. FIELD VERIFY existing conditions prior to commencement of fabrication or construction. Bring any discrepancies to the attention of the Structural Engineer immediately. Stairs including hand and guardraits shall be Vendor designed per the above loads, code and current NAAMM Standards unless otherwise indicated on the drawings.

	Table 2306.1 Fastening Schedule	
Connection	Fastener	Number or Spacing
Joist to band joist, face nail	16d common	3
Joist to sill or girder, toe nail Bridging to joist, toe nail each end	8d common 8d common	3 2
Ledger strip	16d common	3 at each joist
1x6 or less subfloor to each joist, face nail Over 1x6 subfloor to each joist, face nail	8d common 8d common	2
2-inch subfloor to joist or girder, blind and face nail	16d common	3 2
Sole plate to joist or blocking, face nail	16d common	16" o.c.
Top or sale plate to stud, end nail Stud to sale plate, toe nail	16d common 8d common	2
Doubled studs, face nail	10d common	24" o.c.
Doubled top plates, face nail Fop plates, tap and intersections face nail	10d common	16" o.c.
Continuous header, two pieces	16d common	2-16d or 3-19d common 16" o.c. along each edge
Ceiling joists to plate, toe nail	8d common	3
Continuous header to stud, toe nail Ceiling joists, laps over partitions, face nail	8d common	3 3-16d or 4-19d common
Ceiling joists to parallel rafters, face nail	-	3-16d or 4-10d common
Rafter to plate, toe nail -inch brace to each stud and plate, face nail	8d common 8d common	3 2
x8 or less sheathing to each bearing, face nail	8d common	2
Over 1x8 sheathing to each bearing, face nail	8d common	3
Built-up comer studs Built-up girders and beams, of three members	16d common 20d common	24" o.c. 32" o.c. at top and bottom
	Loc common	and staggered 2 ends
Name and the	#C.	and at each splice.
connection	Fastener	Number or Spacing
-inch planks tuds to sole plate, end nail	16d common 16d common	2 each bearing
Vood Structural Panel and Particleboard Subflooring?	rod common	2 each end
15/32", 1/2"	6d common, annular or	6" o.c. edges and
	spiral thread	12" o.c. intermediate
19/32"-3/4"	8d common or 6d annular	6" o.c. edges and
41.440	or spiral thread	12" o.c. intermediate
1", 1 1/8"	10d common or 8d annular or spiral thread	6" o.c. edges and 6" o.c. intermediate
15/32*,.1/2*	16 ga galvanized wire staples, 3/8"	4" c.c. edges and
	minimum crown 1 5/8" length	4" o.c. eages and 7" o.c. intermediate
9/32*, 5/8*	16 ga galvanized wire staples, 3/8"	2 1/2" o.c. edges and
food Structural Panel and Particleboard Roof & Wall Sheathing	minimum crown 1 5/8* length	4" o.c. intermediate
/2" or less	6d common	6" o.c. edges and
0/001		12" o.c. intermediate
19/32* or greater	8d common	6" o.c. edges and 12" o.c. intermediate
5/16" - 1/2"	16 ga galvanized wire staples, 3/8*	4* o.c. edges and
	min. crown. Length of 1* plus	8° o.c. intermediate
	wood structural panel or particleboard thickness	
f		-
Connection	Fastener	Number or Spacing
9/32* - 3/4*	16 ga galvanized wire staples, 3/8* min. crown. Length of 1* plus wood structural panel or particleboard thickness	2" o.c. edges and 5" o.c. intermediate
iberboard Sheathing ¹	1 1/2* galvanized roofing nail	3" o.c. at edges
25/32*	6d common wall 1 3/4* galvanized roofing nail	6" at other bearings
	8d common nail	3" o.c. at edges 6" o.c. at other bearings
ypsum Sheathing	11 ga 1 1/2" galvanized	4* o.c. at edges
1/2" 5/8"	7/16* head	8' o.c. at other bearings
	11 ga 1 3/4" galvanized 7/16" head	4" o.c. at edges
psum Waliboard	1 3/8' drywall nail 2	8" o.c. at other bearings
1/2*		7* o.c. on ceilings 8* o.c. on walls
5/8*	1 1/2' drywali nail 2	7" o.c. on ceilings
irticleboard Siding		8" o.c. on walls
5/16" - 1/2" ³ 5/8" ⁵	64 4	
3/4* 6	8d 4 8d 4	
irdboard Lap Siding	8d 8 corrosion-resistant	10 last 2
Direct to Studs ⁵	with minimum shank	16 inch e.c. at too and bottom edges
	diameter of 0.099 inch	and
	and minimum head diameter of 0.240 inch	
		Number or Spacing
	Fastener	
ardboard Lap Siding	10d ⁶ corrosion	16 inch o.c. at top
	1006 corrosion resistant with	
ardboard Lap Siding	10d ⁶ corrosion resistant with minimum shank dameter of 0.099 inch	16 inch o.c. at top
ardboard Lap Siding	100° corresion resistant with minimum shank dameter of 0.099 inch and minimum head	16 inch o.c. at top
ardboard Lap Siding Over Sheething	10d ⁶ corrosion resistant with minimum shank diameter of 0.099 inch and minimum head diameter of 0.240 inch	16 inch o.c. at top and bottom edges
ardboard Lap Siding Over Sheething	10df corrosion resistant with minimum shank diameter of 0.099 inch and minimum head diameter of 0.240 inch 6df corrosion-resistant with minimum shank	16 inch o.c. at top and bottom edges 6 inch o.c. at edges
ardboard Lap Siding Over Sheathing ardboard Panel Siding	10d ⁶ corrosion resistant with minimum shank diameter of 0,099 inch and minimum head diameter of 0,240 inch 6df corrosion-resistant with minimum shank diameter of 0,092 inch 0,002 inch	16 inch o.c. at top and bottom edges
ardboard Lap Siding Over Sheething ardboard Panel Siding Direct to Studis	10d ⁶ corrosion resistant with minimum shank diameter of 0.099 inch and minimum head diameter of 0.240 inch 6d ⁶ corrosion-resistant with minimum shank diameter of 0.092 inch and minimum head	16 inch o.c. at top and bottom edges 6 inch o.c. at edges and 12 inch o.c. at
ardboard Lap Siding Over Sheathing eardboard Panel Siding Direct to Sturis	10uf corrosion resistant with minimum shank diameter of 0.090 inch and minimum head diameter of 0.240 inch 6uf corrosion-resistant with minimum shank diameter of 0.062 inch and minimum head diameter of 0.225 inch and diameter of 0.255 inch	16 inch o.c. at top and bottom edges 6 inch o.c. at edges and 12 inch o.c. at intermediate supports
ardboard Lap Siding Over Sheathing eardboard Panel Siding Direct to Sturis	10d ⁶ corrosion resistant with minimum shank diameter of 0.099 inch and minimum head diameter of 0.240 inch 6df corrosion-resistant with minimum shank diameter of 0.092 inch and minimum head diameter of 0.092 inch shank diameter of 0.092 inch with minimum head diameter of 0.225 inch 8df corrosion resistant with minimum shank	16 inch o.c. at top and bottom edges 6 inch o.c. at edges and 12 inch o.c. at
ardboard Lap Siding Over Sheathing eardboard Panel Siding Direct to Sturis	10df corrosion resistant with minimum shock of 0.059 inch and minimum head diameter of 0.240 inch 6df corrosion-resistant with minimum head diameter of 0.062 inch and minimum head diameter of 0.062 inch and minimum head diameter of 0.255 inch 8df corrosion resistant with minimum shank diameter of 0.262 inch 8df corrosion resistant with minimum shank diameter of 0.082 inch 8df corrosion of 0.	16 inch o.c. at top and bottom edges 6 inch o.c. at edges and 12 inch o.c. at intermediate supports 6 inch o.c. at edges
ardboard Lap Siding Over Sheething eardboard Panel Siding Direct to Studs eardboard Panel Siding Over Sheething Over Sheething	10d ⁶ corrosion resistant with minimum shank diameter of 0.099 inch and minimum head diameter of 0.240 inch 6df corrosion-resistant with minimum shank diameter of 0.092 inch and minimum head diameter of 0.092 inch shank diameter of 0.092 inch with minimum head diameter of 0.225 inch 8df corrosion resistant with minimum shank	16 inch o.c. at top and bottom edges 6 inch o.c. at edges and 12 inch o.c. at intermediate supports 6 inch o.c. at edges and 12 inch o.c. at
ardboard Lap Siding Over Sheething airdboard Panel Siding Direct to Studs ardboard Panel Siding Over Sheething Over Sheething	10uf corrosion resistant with minimum shank diameter of 0.099 inch and minimum head diameter of 0.240 inch 6uf corrosion-resistant with minimum shank diameter of 0.062 inch and minimum head diameter of 0.025 inch 8uf corrosion resistant with minimum shank diameter of 0.026 inch and minimum shank diameter of 0.025 inch and minimum head diameter of 0.025 inch	16 inch o.c. at top and bottom edges 6 inch o.c. at edges and 12 inch o.c. at intermediate supports 6 inch o.c. at edges and 12 inch o.c. at intermediate supports
endiciant Panel Siding Direct to Studs andiciant Panel Siding Over Sheathing 25.4 mm: product sheathing may be stapled using 16 oa galyanize	10df corrosion resistant with minimum shank diameter of 0.099 inch and minimum head diameter of 0.240 inch 6df corrosion-resistant with minimum head diameter of 0.092 inch and minimum head diameter of 0.092 inch and minimum head diameter of 0.225 inch diameter of 0.292 inch and minimum shank diameter of 0.292 inch and minimum head diameter of 0.292 inch diameter of 0.225 inch	16 inch o.c. at top and bottom edges 6 inch o.c. at edges and 12 inch o.c. at intermediate supports 6 inch o.c. at edges and 12 inch o.c. at intermediate supports
ardboard Lap Siding Over Sheathing ardboard Panel Siding Direct to Studs Direct to Studs ardboard Panel Siding Over Sheathing Over Sheathing 25.4 mm : propage sheathing may be stapled using 16 ga galvanize e midinum crown of 716° and spaced 3° o.c. at edges an wall neils shall continue	10df corrosion resistant with minimum shank diameter of 0.999 inch and minimum head diameter of 0.240 inch 6df corrosion-resistant with minimum head diameter of 0.092 inch and minimum head diameter of 0.092 inch and minimum head diameter of 0.255 inch 9df corrosion resistant with minimum shank diameter of 0.252 inch and minimum head diameter of 0.252 inch diameter of 0.252 inch diameter of 0.253 inch diameter of 0.255 inch	16 inch o.c. at top and bottom edges 6 inch o.c. at edges and 12 inch o.c. at intermediate supports 6 inch o.c. at edges and 12 inch o.c. at intermediate supports
ardboard Lap Siding Over Sheathing ardboard Panel Siding Direct to Studs Indoord Panel Siding Over Sheathing Over Sheathing 25.4 mm : propaged sheathing may be stapted using 16 ga galvanize or midimum crown of 7/16* and spaced 3* o.c. at edges an wall realis shall conform to ASTM C 514.	10uf corrosion resistant with minimum shank diameter of 0.099 inch and minimum head diameter of 0.240 inch 65f corrosion-resistant with minimum shank diameter of 0.092 inch and minimum head diameter of 0.092 inch soft corrosion resistant with minimum shank diameter of 0.092 inch and minimum shank diameter of 0.095 inch and minimum head diameter of 0.095 inch and minimum head diameter of 0.095 inch di ctaples 1 1/6° tong for 1/2° sheathing and d6° o.c. at other bearings.	16 inch o.c. at top and bottom edges 6 inch o.c. at edges and 12 inch o.c. at intermediate supports 6 inch o.c. at edges and 12 inch o.c. at intermediate supports
ardboard Lap Siding Over Sheathing seroboard Panel Siding Direct to Studs Direct to Studs indooard Panel Siding Over Sheathing 25.4 mm : who ard sheathing may be stapled using 16 ga galvanize is miolinum crown of 7/16" and spaced 3" o.c. at edges an wall rails shall comhom to ASTM C 514. ng Applied to 5/8" net wood sheathing, 15/32" wood struct	10uf corrosion resistant with minimum shank diameter of 0.099 inch and minimum head diameter of 0.240 inch 65f corrosion-resistant with minimum shank diameter of 0.092 inch and minimum head diameter of 0.092 inch soft corrosion resistant with minimum shank diameter of 0.092 inch and minimum shank diameter of 0.095 inch and minimum head diameter of 0.095 inch and minimum head diameter of 0.095 inch di ctaples 1 1/6° tong for 1/2° sheathing and d6° o.c. at other bearings.	16 inch o.c. at top and bottom edges 6 inch o.c. at edges and 12 inch o.c. at intermediate supports 6 inch o.c. at edges and 12 inch o.c. at intermediate supports
ardboard Lap Siding Over Sheathing ardboard Panel Siding Direct to Studs Indboard Panel Siding Over Sheathing 25.4 mm into and sheathing may be stapled using 16 ga galvanize a mildinum crown of 7/16" and spaced 3" o.c. at edges an will mails shall crown on a STATE CS.	10d ⁶ corrosion resistant with minimum shank diameter 00 1099 inch and minimum head diameter 01 240 inch 6d ⁶ corrosion-resistant with minimum head diameter 01 0092 inch and diameter 01 0092 inch and minimum head diameter 01 0292 inch diameter 01 0292 inch and minimum head diameter 01 0292 inch normal diameter 01 0292 inch and minimum head diameter 01 0292 inch and	16 inch o.c. at top and bottom edges 6 inch o.c. at edges and 12 inch o.c. at intermediate supports 6 inch o.c. at edges and 12 inch o.c. at intermediate supports

DATE 10-19-

₽₫

Soim Wyndham Jour Clubhouse 80 Brighton Hill Road Richland County, South Carol

AIA,

GRUBI

Ž

MORTON

CH-A11.1 A design of the later of the la

PORCH

LOUNGE

HALLWAY #1

FOYER

PORCH

NOTE: ADDITIONAL KEY CARD ACCESS REQUIRED AT POOL GATES AND PEDESTRIAN ENTRY GATE TO PROPERTY

Δ

OFFICE #1

CARD

CLOSET

CON

WOMEN

HALLWAY #2

TECHNOLOGY

 ∇ ∇

RECEPTION

Δ

M

LOW VOLTAGE PLAN SCALE = 3/16"=11-0"

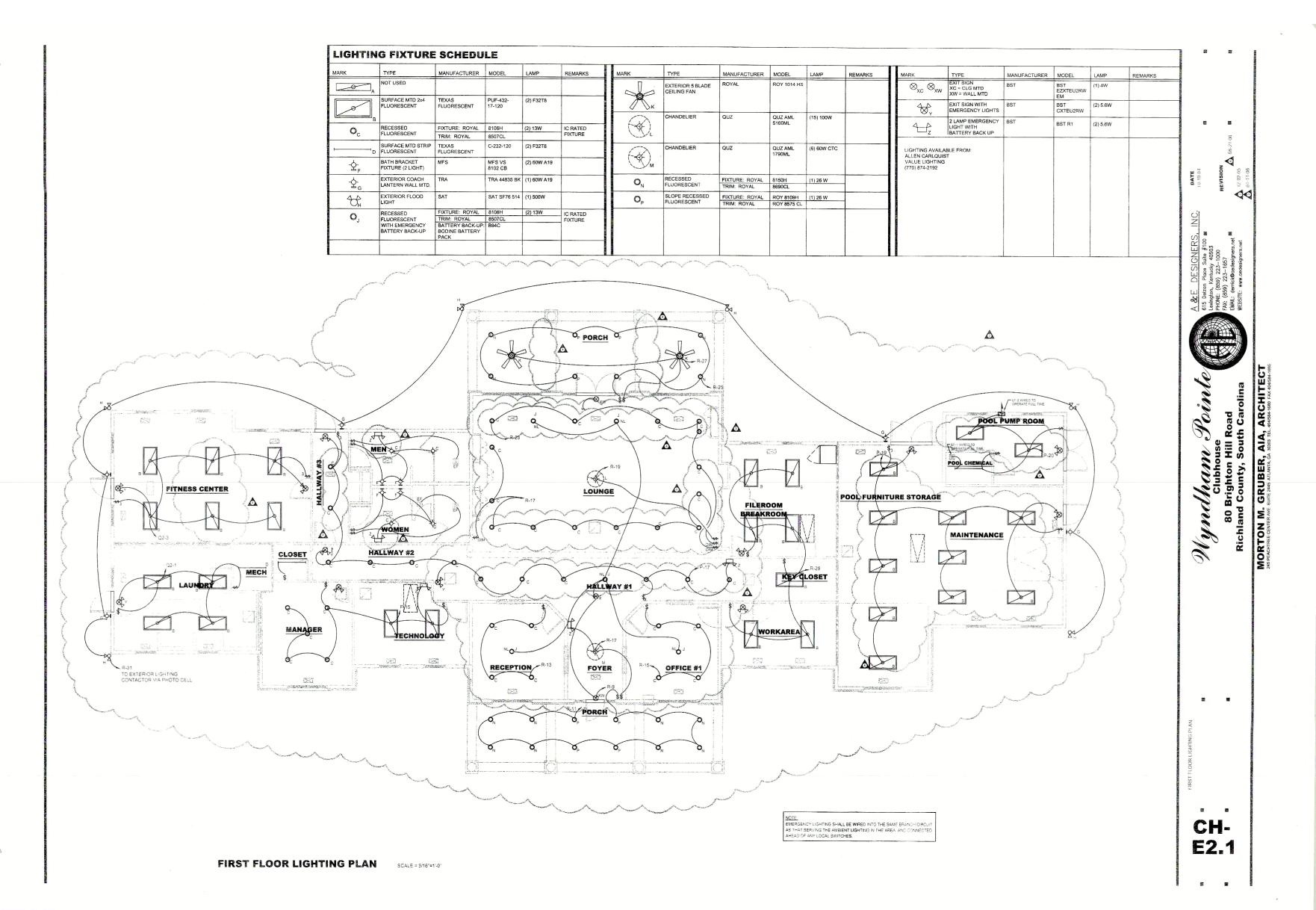
M

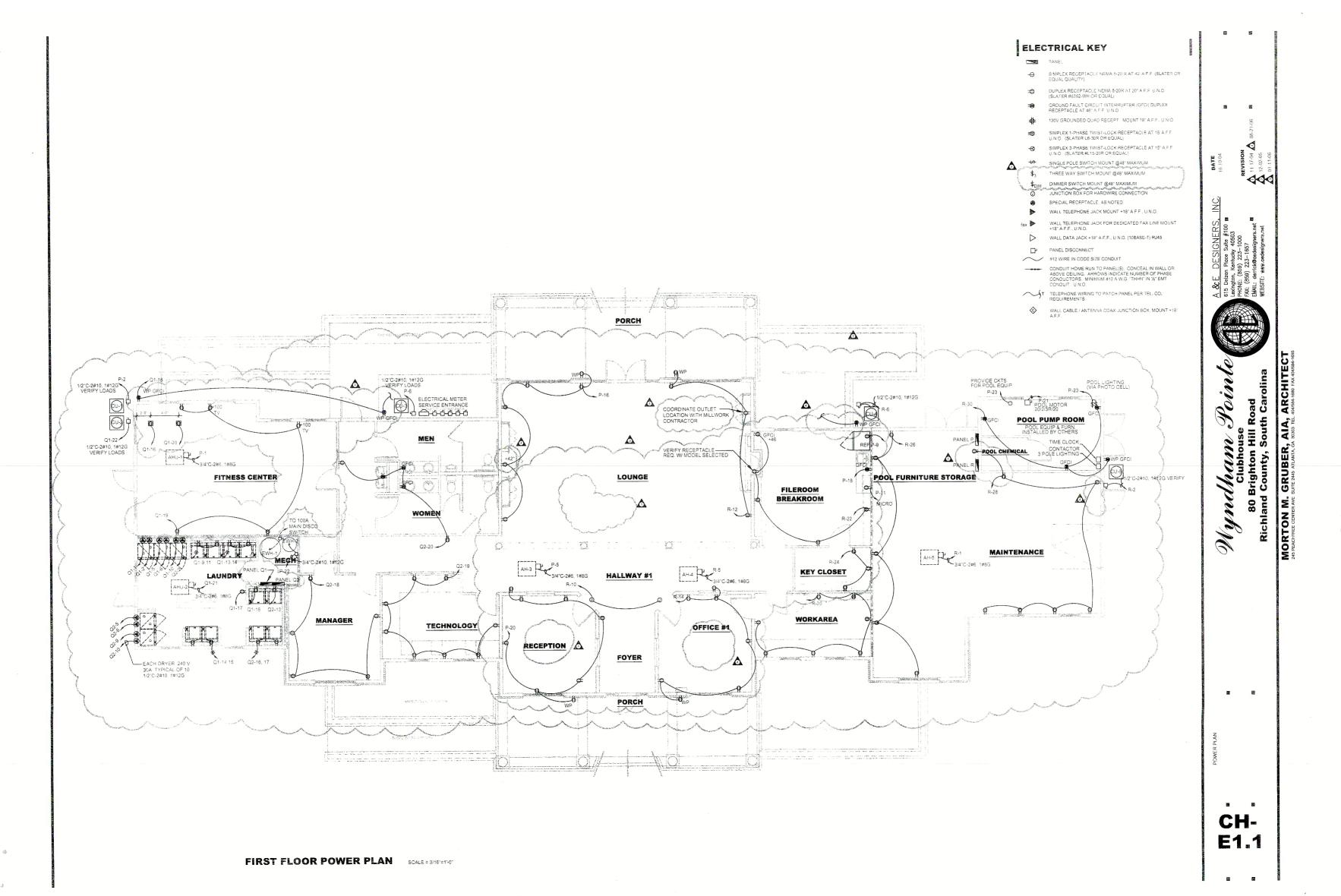
CARD

FITNESS CENTER

LAUNDRY

CH-E3.1





. . CH-P2.2

3. SANITARY WASTE PIPING BELOW GROUND SHALL BE CAST-IRON WITH PUSH-ON JOINTS, OR SCHEDULE 40 DWV PVC WITH SOLVENT JOINTS.

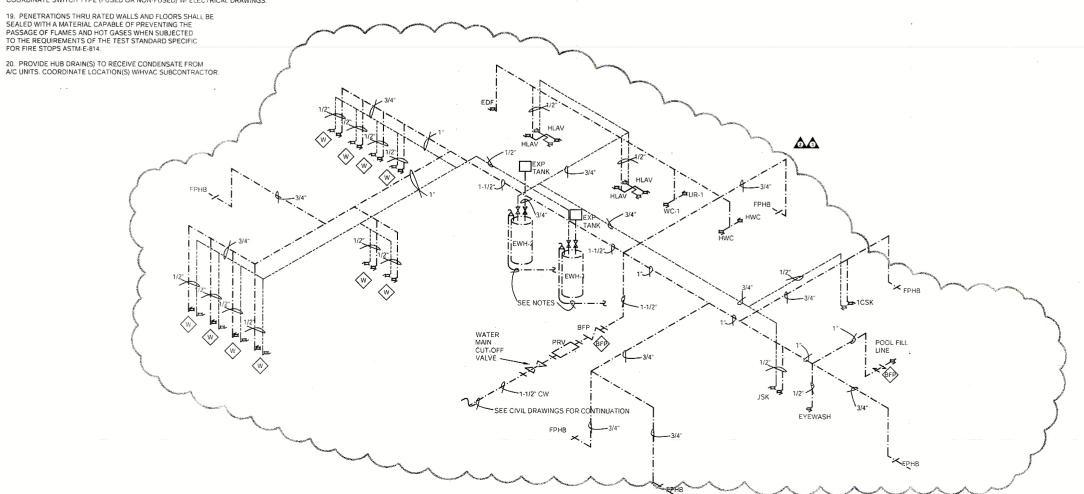
9. ROUTE RELIEF VALVE DISCHARGE FROM WATER HEATER TO NEAREST FLOOR DRAIN.

15. ALL PLUMBING EQUIPMENT AND SYSTEMS SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR AFTER START-UP.

16. ALL WORK SHALL BE COORDINATED AND PERFORMED WITH PRIOR APPROVAL FROM THE OWNER TO SUIT HIS OPERATING CONDITIONS

17. ALL PLUMBING EQUIPMENT, PIPING, INSULATION, ETC. INSTALLED IN HVAC PLENUM SPACES SHALL MEET CODE REQ'MENTS FOR SMOKE & COMBUSTIBLITY

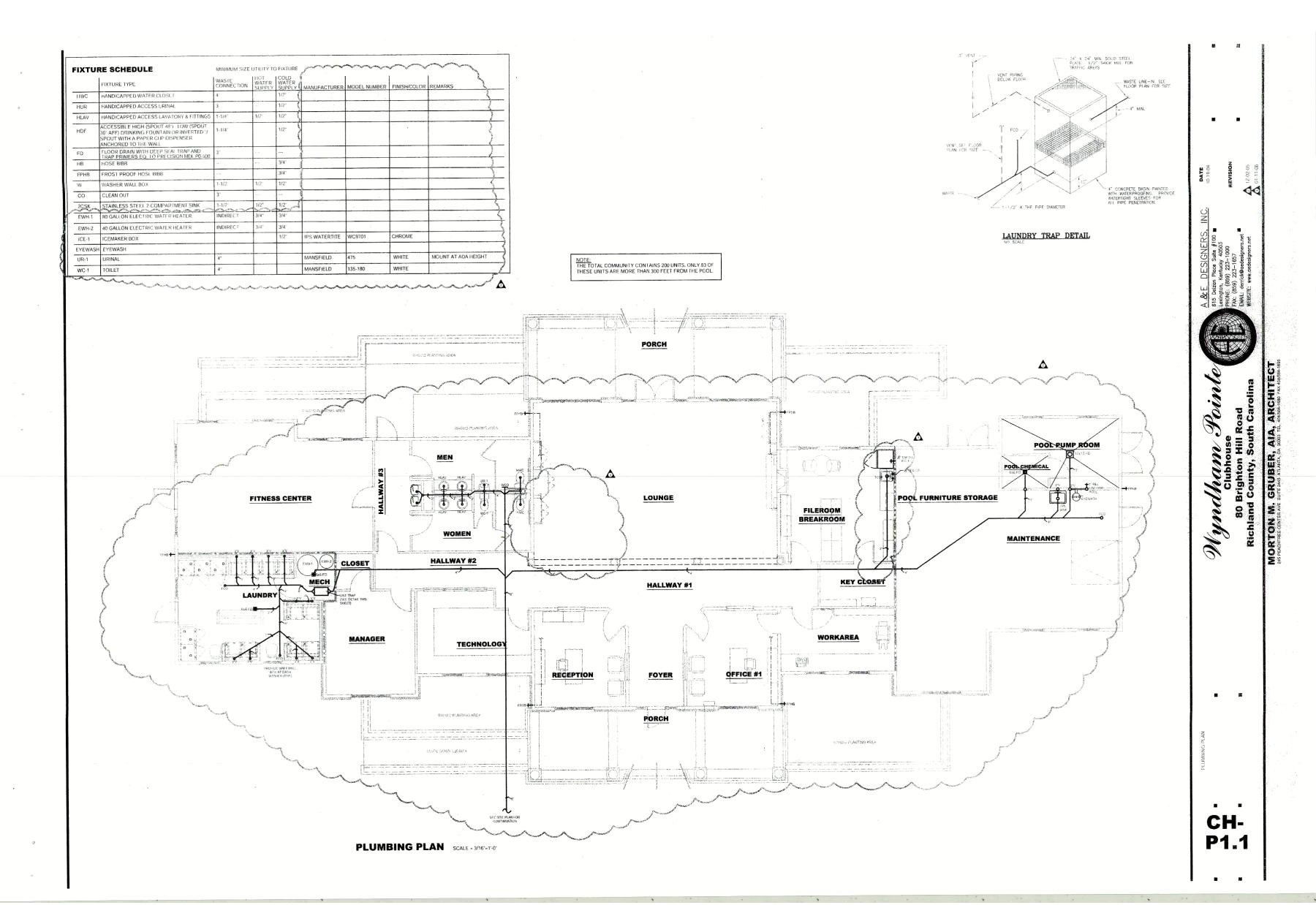
LEGEND COLD WATER -----



Wyndham Pointe Clubhouse 80 Brighton Hill Road Richland County, South Carolina

CH-

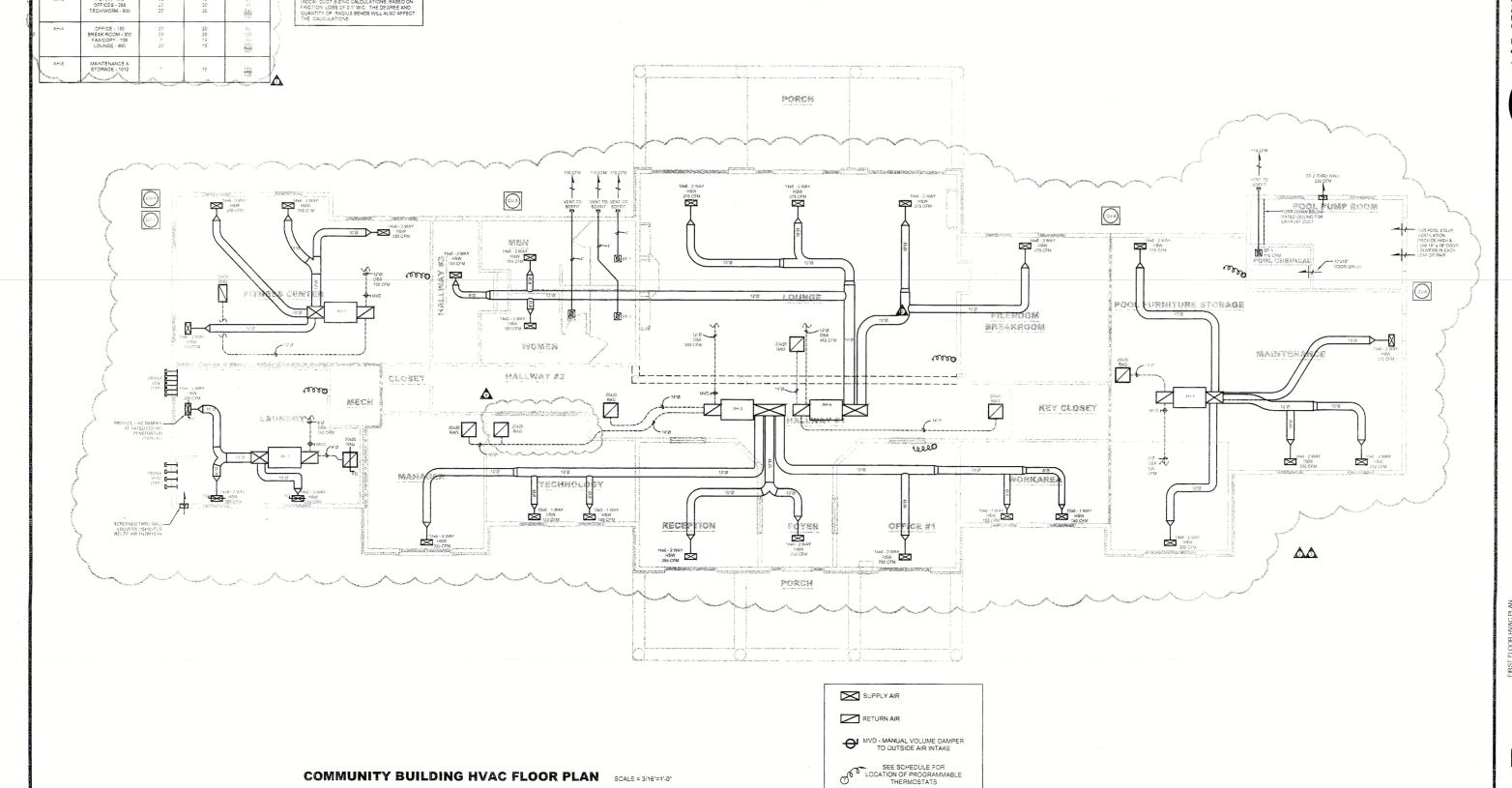
P2.1



DESIGNATION	LOCATION	DESCRIPTION	SERVICE	CFM	EXT SP INCHES W.C.	APPROX MOTOR HP	TYPE DRIVE		MAX RPM	MAX TRIP SPEED FPM	ELECTRICAL CHARACTERISTICS	BASIS OF DESIGN	REMARKS
EF-1	TOILETS AND CHEMICAL STORAGE	CEILING MOUNTED FANS	TOILET EXHAUST	110	0.25	50W	DIRECT		700		SEE ELECTRICAL	NUTONE MODEL 672-R	SEE NOTE (1) (2) (3)
EF-2	POOL EQUIPMENT	THRU WALL	POOL EQUIP	235	0.25	109W	DIRECT	-	700		SEE ELECTRICAL	CARNES OR PENN	SEE NOTE (1) (2) (3)

DIFFUSER, REGISTER & GRILLE SCHEDULE				
SIZE	MARK	CFM RANGE	REMARKS	
8 X 4	HSW-2	0 - 60	DOUBLE DEFLECTION	
10 X 6	HSW-1 HSW-2 CB-1	90-180	SINGLE DEFLECTION DOUBLE DEFLECTION CURVED BLADE	
14 X 6	HSW-2 CB-1 HVL	190-280	DOUBLE DEFLECTION CURVED SLADE DOUBLE DEFLECTION	

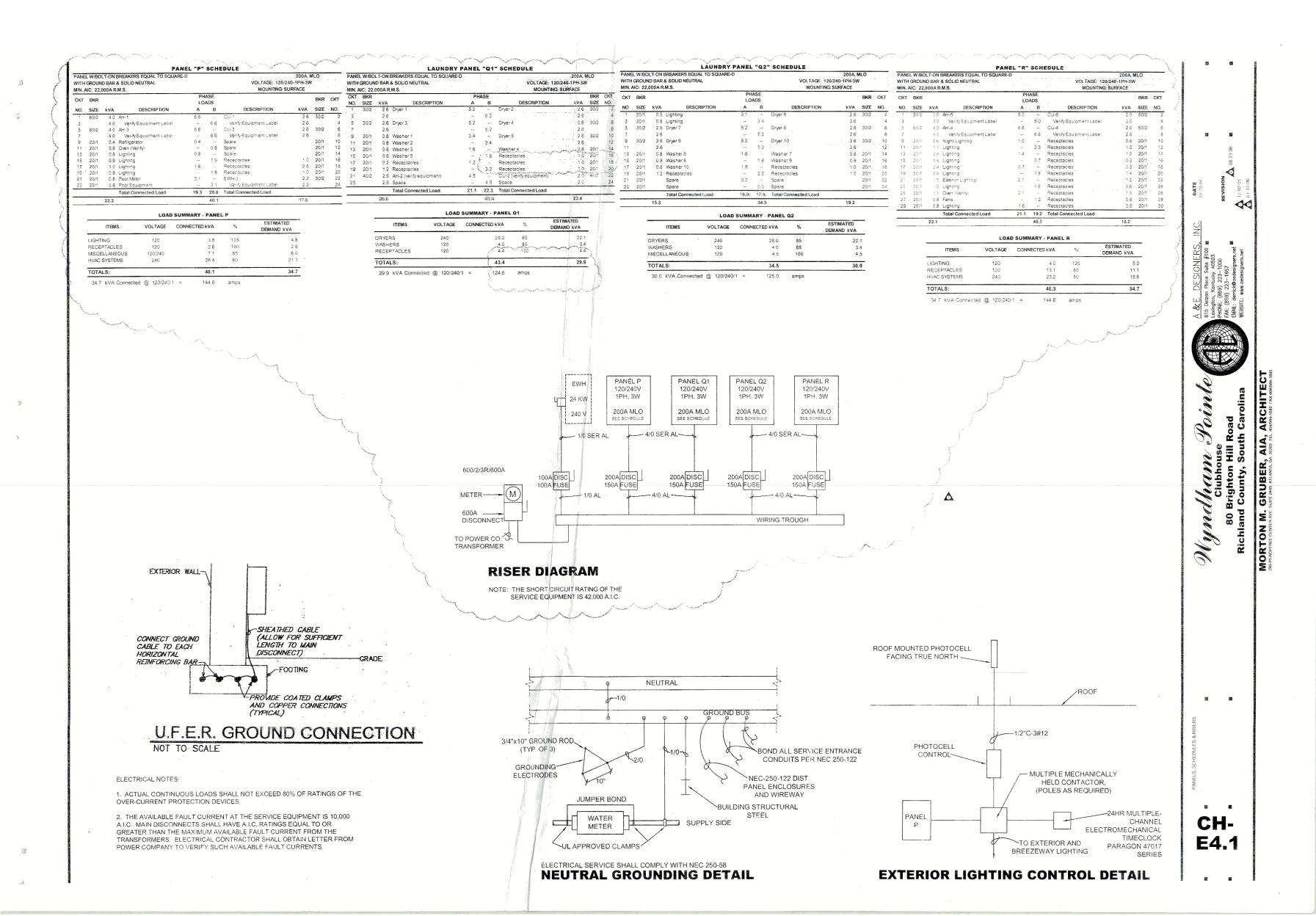
VENTILA	TION CALCULATIONS
POOL EQUIPMENT	ROOM:
ROOM VOLUME x 10 10' x 14' x 10' x 10 €	
POOL CHEMICAL S	TORAGE:
ROOM VOLUME x 10 4' x 4' x 10' x 10 鉄 / 60	



Myndham Fointe Clubhouse 80 Brighton Hill Road Richland County, South Carolina

DATE 0.19-04

CH-M1.1



1. Floor — Celling Assembly — The 1-hr fire-roted solid or trussed lumber joist floor-ceiling assembly shall be constructed of the materials and in the manner specified in the individual LS00 Series Floor-Ceiling Designs in the UL Fire Resistance Directory. The 2 hr fire-roted wood joist floor-ceiling assembly shall be constructed of the materials and in the manner specified in the Design No. LS05, LS11 or LS36 in the UL Fire Resistance Directory. The F Rating of the firestop system is equal to the rating of the floor-ceiling and wall assemblies. The general construction features of the floor-ceiling and wall assemblies. The general construction features of the floor-ceiling assemblies are summarized below:

A Flooring System — Lumber or plymod subfloor with finish floor of lumber, plywood or Floor Topping Mattures as specified in the individual Floor-ceiling Design. Max cliem of floor pening is 3 in.

B. Wood Joists* — For 1 hr fire-rated floor-ceiling assemblies nom 10 in. deep (or deeper) lumber, steel or combination lumber and steel joists, trusses or Structural Wood Members* — with bridging as required and with ends firestopped. For 1 hr fire-rated floor-ceiling assemblies, nom 2 by 10 in. lumber joists spaced 16 in. Or with nom 1 by 3 in. lumber bridging and with ends firestopped.

C. Furning Channels — (Net Shown) — Resilient gold steel furning installed perpendicular to wood joists between first and second layers of wallboard in 2 hr fire-rated connects spaced max 24 in. Oc.

D. Wallboard, Oppunit* — Nom 4 fit wide by 5/8 in. thick as specified in the Individual Floor-ceiling Design. First layer of wallboard screw—attached to furning channels.

2. Chase Wall — The through penetrant (Item 3) shall be routed through a 1 or 2 hr fire-rated eingle, double or staggered wood stud/gypsum wallboard chase wall having a fire rating consistent with that of the floor-reciling assembly. The chase wall shall be constructed of the materials and in the manner specified in the individual U300 Sarles and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:
A. Studs – Nom 2 by 6 in. or double 2 by 4 in. lumber studs.
B. Sole Plate – Nom 2 by 6 in. or double 2 by 4 in. lumber plates, tightly butted.

tightly butted.

C. To Picket

C. To Picket

C. To Picket

C. To Picket

The double top plate shall consist of two nom 2 by 5 in.

or two sets of parallel 2 by 4 in. lumber plates, tightly butted. Max

dim of opening is 3 in.

D. Wellboard, Cypsum* - Thickness, type, number of layers and fasteners

D. Wallboard, Oppsum* — Thickness, type, number of layers and fasteners shall be as specified in individual Wall and Partition Design.

3. Through-Penetrunts — One nonmetallic pipe to be installed within the firestop system. An annular space of min 1/4 in. to max 3/8 in. is required within the firestop system. Pipe to be rigidly supported on both sides of the floor-ceiling assembly. The following types of nonmetallic pipes may be used:

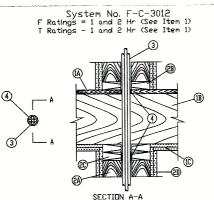
A. Polyvinyl Chloride (PVC) Pipe — Norn 2 in. dlam (or smaller) Schedule 40 solid core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping system.

B. Chlorinated Polyvinyl Chloride (CPVC) Pipe — Norn 2 in. diam (or smaller) SDR17 CPVC pipe for use in closed (process or supply) or vented (farin, waste, or vent) piping systems.

4. Fill, Vald or Carly Material* — Sealant — Min 3/4 in. thickness of fill material applied within the annulus, flush with top surface of floor and a min 3 in. thickness of fill material applied within the annulus, flush with the top and bottom surfaces of both top plates.

HILT CONSTRUCTION CHARLALS, DIV OF HILL Inc. — FS—ONE Sealant

*Bearing the UL Classification Marking



in, or 2 in., respectively.

Wood Joists ⁷ for 1 in fire-rated floor-ceiling assemblies nom 10 in. deep (or deeper) lumber, steel mbination lumber and steel joists, russes or Structural Wood Members* with bridging as required with ands firestopped. For 2 in fire-rated floor-ceiling assemblies, non 2 by 10 in. lumber joists ed 16 in. OC with nom 1 by 3 in. lumber bridging and with ends firestopped.

between-Institutionsemolitiques of waitbusins in 2 ht fire-rated assembly. Furning channels spaced has 24 in. O.C.

D. Gypsum Board* Nom 4 ft wide by 5/8 in. thick as specified in the individual Floor-Ceiling Design.

This layer of waitboard nailed to wood joists. Second layer (2 ht fire-rated assembly) of waitboard sorew-stached to furning channels.

C. hase Wait. The through penetrary (term. 3) shall be routed through a fire-rated single, double or staggered wood suddyspain wellbeid chaise well having a fer neiting consistent with that of the foot-ceiling assembly. Sense will all and Partition Designs in the U.F. Fire Rates and in the manner specifies in the stage of the

Board* Thickness, type, number of layers and fasteners shall be as specified in individual Vall and Partition Design.

Cables - In 1 fire-rated assemblies, aggregate cross-sectional area of cables in opening to be max. If person of the cross-sectional area of the opening (max 2 in. diam bunde). Cables to be rigidly upported on both isides of floor assembly. Any combination of the following types and sizes of copper anductors may be used:

A RG 39 coastid cable with single copper conductor. cellular polyethylene cellular foam insulation and

(PVC) insulation.

E. Max 3C with ground No. 20 AWG Type NM cable with polyvinyl chloride (PVC) insulation.

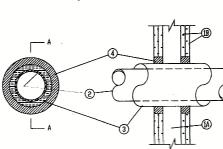
F. Max 3C No. 12 AWG MC (BX) cable with polyvinyl chloride (PVC) insulation.

F. Max 3C No. 12 AWG MC (BX) cable with polyvinyl chloride (PVC) insulation.

4. Fill, Yold or Cavity Material* - Sealant - Min 34 in. trickness of fill material applied within the annulus of the top late. Must with out surface of floor, 4 penerous bead of fill material also applied within the annulus of the top late.

HILTI CONSTRUCTION CHEMICAS, DIV OF HILTI INC - FS611A Sealant or FS-One Sealant 'Bearing the U. Classification Marking

System No. W-L-5028 F Ratings - 1 and 2 Hr (See Item 1) T Ratings - 1/2 and 3/4 Hr (See Item 3)



SECTION A-A

1. Wall Assembly The 1 or 2 hr fire-rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner specified in the individual USOO or U400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:

A Stude Wall framing may consist of either wood stude or steel channel stude. Wood stude to consist of nom 2 by 4 in. lumber spaced 16 in. OC. Steel stude to be min 2-1/2 in. wide and spaced max 24 in. OC.

OC.

B. Cypsum Board* 5/8 in. thick, 4 ft wide with square or topered edges. The gypsum wallboard type, thickness, number of layers, fasterer type and sheet orientation shall be as specified in the individual Hall and Partition Design. Max diam of opening is 7-1/2 in. The hourly F Rotting of the firestop system is equal to the hourly fire rating of the wall assembly in which it is installed.

2. Through Penetrants One metallic pipe, conduit or tubing to be centered within the firestop system. Pipe, conduit or tubing to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes, conduits or tubing may be used:
A. Steel Pipe Nom 4 in. diam (or smaller) Schedule 40 (or heavier)

A Stool Pipe Norn 4 in. dam (or smaller) electrical metallic tubing or steel conduit.

B. Conduit Norn 4 in. diam (or smaller) electrical metallic tubing or steel conduit.

C. Copper Tubing.

D. Copper Pipe Norn 2 in. diam (or smaller) Regular (or heavier) copper tubing.

D. Copper Pipe Norn 2 in. diam (or smaller) Regular (or heavier) copper pipe.

D. Copper Pipe Nom 2 In. diam (or smaller) Regular (or heavier) copper pipe.

3. Tube Insulation — Plastics+ Nom 3/4 in. thick acrylonitrile butadiene/polyninyl chloride (AB/PVC) flexible foam furnished in the form of tubing. An annutar space of min 0 in. (point contact) to max 1-1/2 in. is required within the firestop system. See Plastics+ (QMFZ2) actegory in the Recognized Component Directory for names of manufacturers. Any Recognized Component Directory in the Recognized Component D

the table below: Il Assembly ating Hr ing Hr	Type +	Through Penetrant Max Diam In.	T
1	A or B	4	1/2
1	A, B, C or D	2	3/4
2	A or B	4	1/2
2	A, B, C or D	2	3/4

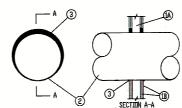
Hindicates penetrunt type as itemized in Item 2.

4. Fill, Vold or Carlify Material* — Seciant Min 5/8 in. or 1-1/4 in. thickness of fill material applied within the annulus, flush with both surfaces of wall for 1 or 2 hr walls, respectively. At the point contact location between pipe covering and gypsum wallboard, a min 1/2 in. diam bead of fill material shall be applied at the pipe covering/gypsum wallboard interface on both surfaces of wall.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FSS11A or FS-ONE Secolat.

*Bearing the UL Classification Mark

System No. W-L-7042 F Ratings - 1 and 2 Hr (See Items 1 and 3) T Rating - 0 Hr



1. Wall Assembly The 1 or 2 hr fire rated willboard/stud wall assembly shall be constructed of the materials and in the manner specified in the individual USO0 or U400 Series Well and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features. A Stude Wall framing may consist of either wood stude or steel charmel stude. Wood stude to consist of either wood stude or steel charmel stude. Wood stude to consist of either wood stude or steel in O.C. Steel stude to be min 2-1/2 in. wide and spaced 24 in. Other Boyers of the Wallboard as required in the individual Well and Partition Design. Max diam of opening is 14-1/2 in. for wood stude wells and 21-bits of steel student with a student of the well assembly in which it is installed.

2. Through Penetrant Got steel duct to be installed concentrically or accentrically within the firestop system. The annular space between the duct and periphery of opening shall be 0 in. (point contact) and max 1-1/2 in. Duct to be rigidly supported on both sides of well assembly.

A Spiral Wound MAC Duck Nom 20 in. diam (or smaller) No. 24 MSG (or heavier) galv steel spiral wound duct.

B. Sheet Metal Duck Nom 12 in. diam (or smaller) No. 28 MSG (or heavier) galv steel spiral wound duct.

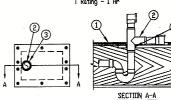
B. Sheet Metal Duck Nom 12 in. diam (or smaller) No. 28 MSG (or heavier) galv steel spiral wound duct.

B. Sheet Metal Duck Nom 12 in. diam bend of secilant shall be inplied at the willboard, or min 1/2 in. diam bend of secilant shall be inplied at the willboard, or min 1/2 in. diam bend of secilant shall be inplied at the willboard,

bly.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC - CP601S
meric Firestop Secient, FS-ONE Secient or CP606 Flexible Firestop

System No. F-C-2205 F Rating - 1 Hr T Rating - 1 Hr



Floor — Celling Assembly The 1 hr fire-roted solld or trussed lumber joist floor-ceiling assembly shall be constructed of the materials and in the manner specified in the individual LSOO Series Floor-Celling Designs in the UL Fire Resid Directory. The general construction features of the Floor-celling persons.

A. Flooring System Lumber or plywood subfloor with finish floor of lumber, phywood or Floor Topping Mixture* as specified in the individual Floor—Ceiling Design. Rectangular cutout in flooring to accommodate the batthub drain piping (term 2) to be max 8 in. by 12 in. Cutout to be patched on underside of subfloor using one loyer of min 3/4 in. thick phywood or min 5/8 in. thick gypsum board (term IC) sized to lay min 2 in. beyond each edge of rectangular cutout. Patch split into two pieces of opening and hole-sawed for bathtub drain piping, Diamy of pening hole sawed through potch to accommodate drain piping (term 2) to be 1/2 in. In larger than outside diam of drain piping and the cut adject the subfloor drain drain piping, with out adject lightly butted, and scree—attached to underside of subfloor with 1-1/4 in. long steel screws spaced max 8 in. OC.

B. Wood Joists* Norn 10 in. deep (or deeper) lumber, steel or combination lumber and steel joists, trusses or Structural Wood Members* with bridging as required and with ends firestopped.

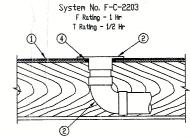
C. Gypsum Board* Nom 5/8 in. thick, 4 ft wide as specified in the individual Floor-Ceiling Design.

2. Drain Piping Nom 1-1/2 in. (or smaller) diam Schedule 40 acrylonitrile butadiene styrene (ABS) or polyvinyl chloride (PVC) pipe and drain fittings cemented together and provided with ABS or PVC bathtub waste/overflow fittings. Annular space shall be 1/4 in.

3. Fill Void or Cavity Materials? — Wrap Strip Nom 1/4 in. thick by 1 in. wide intumescent wrap strip. One layer of wrap strip wrapped around drain piping with ends butted and held in place with masking tape. Wrap strip installed within annulus flush with bottom surface of plywcod or gypsum board patch.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC -- CP 645 Wrap Strip

*Bearing the UL Classification Mark



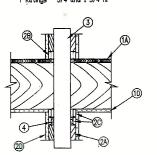
1. Floor-Ceiling Assembly The 1 hr fire-rated solid or trussed lumber joist floor-ceiling assembly shall be constructed of the materials and in the manner specified in the individual L500 Series Floor-Ceiling Designs in the UL Fire Resista Directory. The general construction features of the floor-ceiling assembly are summarized below:

C. Gysum Board* Nom 5/8 in. thick, 4 ft wide as specified in the individual r-Ceiling Design.

2. Closet Florge Actylonitrile butadiene styrene (ABS) or polyvinyl chloride (PVC) closet stub sized to accommodate drain pipe. Closet florge installed over drain piping within floor opening with flange secured to plywood floor with steel screws. Diam of circular opening through flooring (Item 1A) to be max ½ in, larger than outside diam of closet flange.

Drdin Piping Norn 4 in. diam (on smaller) Schedule 40 acrylonitrile butadiene styrene (ABS) or polyvinyl chloride (PvC) drain pipe and 90 degree elbow for use vented (drdin, waste or vent) piping systems. Pipe installed concentrically within firestop system.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC -- FS-ONE Section 5. Water Closet (Not Shown)—Floor mounted vitreous china water closet. *Bearing the UL Classification Mark System No. F-C-2127 F Ratings - 1 and 2 Hr (See Item 1) T Ratings - 3/4 and 1-3/4 Hr



1. Floor-Ceiling Assembly The 1 or 2 hr fire-rated solid or trussed lumber joist floor-ceiling assembly shall be constructed of the materials and in the manner specified in the individual LSOO Series Floor-Ceiling Designs in the U. Fire Resistance Directory. The F Rating of the firestop system is equal to the rating of the floor-ceiling and wall assemblies. The general construction features of the floor-ceiling assembly ore summorized below: A. Floor System Lumber of plywood suffloor with finish floor of lumber, plywood or Floor Topping liksture* as specified in the individual Floor-Ceiling Design. Max diam of floor opening is 5-1/2 in.

B. Wood Joints* Norm 10 in. deep (or deeper) lumber, steel or combination lumber and steel joists, trusses or Structural Wood Members* with bridging as required and with east firestopped.

C. Furfing Channels (Not Shown) — Resilient galv steel furring installed perpendicular to wood joists between wallboard and wood joists as required in the individual Floor-Ceiling Design. Furring channels spaced max 24 in. OC.

n. OC.

D. **Gypsum Board®** Nom 4 ft wide by 5/8 in. thick as specified in individual Floor-Ceiling Design. Wallboard secured to wood joints or ng channels as specified in the individual Floor-Ceiling Design.

furring channels as specified in the individual Floor-Ceilling Design.

2. Chase Wall The through penetrant (Item 3) shall be rated through a 1 or 2 hr first-rated single, double or staggered wood study'gpsum wallboard chase wall constructed of the materials and in the manner specified in the individual USD solvies.

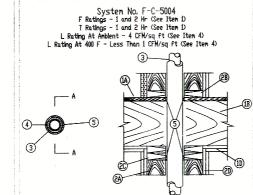
Wall constructed to the stage of the stage of the stage of the fact that the manner specified in the specified specified in the specified specified in the specified spec

smaller) SDR13.5 GPVC pipe for used in closed (process or supply) piping systems.

C. Acrylonitrile Butadiene Styrene (ABS) Pipe Norm 4 in. diam (or smaller) Schedule 40 cellular core ABS pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.

4. Fill, Yold or Carity Material+ — Sealant Min 3/4 in. thickness of fill material applied within the annulus on top surface of floor or sole plate of chase wall. Min 3/4 in. thickness of fill material applied within the annulus of the bottom surface of the lower top plate. Min 1/2 bead of fill material applied of the penetrant/ plate interfaces at point contact locations on both sides of assembly. HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS — ONE Sealan

*Bearing the UL Classification Mark



1. Floor - Ceiling Assembly - The 1 hr. fire-rated solid or trussed lumber joist floor-ceiling assembly shall be constructed of the materials and in the manner specified in the individual L500 Series Floor-Ceiling Designs in the UL Fire Resistance Directory. The 2 hr fire-rated wood joist floor-ceiling assembly shall be constructed of the materials and in the manner specified in the Design No. L505, L511 or L536 in the UL Fire Resistance Directory. The F and T Rating of the firestop system is equal to the rating of the floor-ceiling assembly. The general construction features of the floor-ceiling assembly run and the series of the floor-ceiling assembly. The general construction features of the floor-ceiling assembly. The general construction features of the floor-ceiling assembly and the floor-ceiling assembly and the floor-ceiling assembly and the floor-ceiling assembles nor 10 lumber, plywood or Floor Topping Matcure* as specified in the individual Floor-ceiling Design. Max diem of floor opening is 4 in.

B. Wood Joiste F For 1 hr fire-rated floor-ceiling assembles nor 10 in. deep (or deeper) lumber, steel or combination lumber and steel joists, trusses or Structural Wood Members* with bridging as required and with ends firestoppe. For the fire-rated floor-ceiling assembles, nor larging and with ends firestoppe. (Not Shown) - Resilient glow steel furring installed on the firestoppe. (Not Shown) - Resilient glow steel furring installed on the individual Floor-ceiling Design. First layer of wallboard in Oc.

D. Wallboard, Oppeum* - Nom 4 ft wide by 5/8 in. thick as specified in the individual Floor-ceiling Design. First layer of wallboard assembles in the formal contribution of the properties of the first layer of wallboard and the formal contribution of the first layer of wallboard and the order of the first layer of wallboard and the order of the first layer of wallboard and the order of the first layer of wallboard and the first layer of wallboard and the first layer of wallboard and the first layer of wall

2. Chase Wall — The through penetrant (Item 3) shall be routed through a 1 or 2 hr fire—rated single, double or staggered wood stud/gypsum wellboard chase wall inving a fire rating consistent with that of the floor—celling assembly. The chase well shall be constructed of the materials and in the monner specified in the individual USOO Series Wall and Partition Designs in the U.Fire Resistance Directory and shall include the following construction features:

A. Stude — Nom 2 by 6 in. or double nom 2 by 4 in. lumber studes.

B. Sole Plate — Nom 2 by 6 in. or parallel 2 by 4 in. lumber plates, tightly butted.

B. Sole Plate - Nom 2 by 6 in, or parallel 2 by 4 in, lumber plates, tightly butted.

C. Top Plate - The double top plate shall consist of two nom 2 by 6 in, or two sets of parallel 2 by 4 in, lumber plates, tightly butted. Max diam of opening is 4 in.

D. Wellboard, Oppearing - Thickness, type, number of layers and fasteners shall be as specified in individual Wall and Partition Design.

3. Through Penetrants - One metallic plps, conduit or tubing to be installed within the firestop system. Plps, conduit or tubing to be installed in both sides of floor ossenthy. The following types and sizes of metallic pipes or conduits may be used:

A. Steel Plps - Norn 2 in, diam (or smaller) Schedule 10 (or heavier) steel pipe.

B. Conduit - Norn 2 in, diam (or smaller) steel electrical metallic tubing or steel conduit.

C. Copper Tubing - Norn 2 in, diam (or smaller) Type L (or heavier) copper tubing

D. Copper Plps - Norn 2 in, diam (or smaller) Regular (or heavier) copper plps.

D. Copper Pipe - Nom 2 in. diam (or smaller) Regular (or heavier) copper pipe.

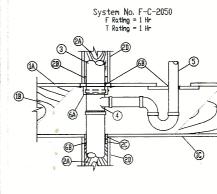
Pipe Covering - Nom 1/2 in. thick hollow cylindrical heavy density (min 3.5 pcf) glass fiber units jacketed on the outside with an all service jacket. Longitudinal joints sealed with metal fasteners or factory-applied self-sealing lap tape. Transverse joints secured with metal fasteners or with but tape supplied with the product. A nom annular space of 1/8 in. is required within the firstop system.

See Pipe and Equipment Covering - Materials (BRGU) category in the Building Materials Directory for names of manufacturers. Any pipe covering material meeting the above specifications and bearing the UL Classfeation Marking with a Flame Spread index of 25 or less and a Smake Developed index of 50 or less may be used.

a Smoke Developed Index of 50 or less may be used.

4A. Tube Insulation — Platites+ — Nom 3/4 in. thick acrylonitrile butadiene/polythyl chioride (AB/PVC) flexible foam furnished in the for of tubing. An annular space of min 1/8 in. to max 3/8 in. is require within the firestop system. See Plastics+ (OMFZ2) category in the Recognized Component Directory for names of manufacturers. Any Recognized Component tube insulation material meeting the above specifications and having a UL 94 Flammabilty Classification of 94-5W may be used.

specifications and having a UL 94 Flammobility Classification or 94—ava.
We be used.
(Note: L. Ratings apply only when glass fiber insulation is used.)
5. FIII, Yold or Carity Moterfall*— Sealant — Min 3/4 in, thickness of fill material applied within the annulus, flush with top surface of filor. A generous bead of fill material also applied within the annulus of the top plote, flush with bottom surface of lower top plote.
HILLI CONSTRUCTION CHEMICALS, DW OF HILLI, Inc. — FS611A Sealant or FS-ONE Sealant
(Note: L. Ratings apply only when FS-ONE Sealant is used.)
*Bearing the UL Classification Marking



1. Floor-Ceiling Assembly — The 1 hr fire-rated wood joist floor-ceiling assembly shall be constructed of the materials and in the manner specified in the individual LSOO Series Floor-Ceiling Designs in the U. Fire Resistance Directory, as summarized below:

A Floor System Lumber or plywood subfloor with finish floor of lumber, plywood or Floor Topping Mature* as specified in the individual Floor-Ceiling Design. Rectangular actuat in flooring to be max 6 in. by 9 in. Curbat to be patched using one larger of min 3/4 in. thick plywood, min 1-1/2 in. bary sood screws spaced max 6 in. 0.C. . Max diam of 1-1/4 in, large wood screws spaced max 6 in. 0.C. . Max diam of opening is 2-1/2 in. for drain place (term 3). Max diam of opening is 2-1/1 in. for vert pipe (term 5). Max diam of opening is 4-3/4 in. for vert pipe (term 5). Max diam of opening is 4-3/4 in. for vert pipe (term 5). Max diam of opening is 4-3/4 in. for vert pipe (term 5). Max diam of opening is 4-3/4 in. for vert pipe (term 5) bead of the control of the individual floor-Ceiling Design.

C. Gypsum Board Nom 4 ft wide by 5/6 in. thick as specified in the individual Floor-Ceiling Design. Vertical direct effecthed to picts or screw-actuached to furning channels as specified in the individual Floor-Ceiling Design.

C. Chaew Wall — The through penetrant (term 3) shall be routed through a 1 hr fire-rated single, double or staggered wood stud/gypsum wallboard chaes wall constructed of the materials and in the manner specified in the individual USOO Series Wall and Partition Designs in the U. Enteres: A Stude Nom 2 by 6 in. lumber or double nom 2 by 4 in. lumber studes.

B. Sode Pade Nom 2 by 6 in. lumber or parallel 2 by 4 in. lumber

A Studa Nom 2 by 6 in. lumber or double nom 2 by 4 in. lumber studas.

B. Sole Plate Nom 2 by 6 in. lumber or parallel 2 by 4 in. lumber plates, tightly butted.

C. Top Plate The double top plate shall consist of two nom 2 by 6 in. lumber plates or 2 sets of parallel nom 2 by 4 in. lumber plates or 2 sets of parallel nom 2 by 4 in. lumber plates, tightly butted. Most diam of pening in 2 by 4 in. lumber plates, tightly butted. Most diam of pening in 2 by 4 in. lumber plates, tightly butted. Most diam of pening in 2 by 4 in. lumber plates, tightly butted. Most diam of pening in 2 by 4 in. lumber plates, tightly butted. Most diam of pening in 2 by 4 in. lumber plates, tightly butted in 3 by 4 in. lumber plates, and fasteners shall be as specified in individual Well and Partition Design.

5. Vent Pipe — Nom 4 in. diam for smaller) Schedule 40 solid core polyvinyl chloride (CPVC) or SIR 17 chlorinated polyvinyl chloride (CPVC) vent pipe. Pipe to be amented into top and bottom sockets of the sanitary tee. An annual of space of min 0 in. (point contact) to max 1/4 in. is required within the firestop system. Pipe to be rigidly supported on both sides of floor assembly.

annular space of min 0 in. (point contact) to max 1/y in. In required within the firestop system. Pipe to be rigidly supported on both sides of floor assembly.

Sanitary Tee — A Schedule 40 (PVC) or SDR 17 (CPVC) sanitary tee shall be demented to the vent pipe in the conceoled space above the ceiling for connection to nom 2 in. diam (or smaller) drain pipe (time 5).

5. Drain Piping — Nom 2 in. diam (or smaller) Schedule 40 solid core (PVC) or SDR 17 (CPVC) drain pipe with or without P—trop. Drain piping to be demented into sanitary tee. An annular space of min 0 in. (point contact) to max 1/4 in. is required within the firestop system.

5. Firestop System — The details of the firestop system shall be as follows:

A Steel Collar Collar foblic reforected from precut 0.017 in. thick (28 MSG) galv steel available from sealant manufacturer. Collar shall be min 2 in. deep with a min 1—1/4 in. wide by 2 in. long anchor tobs for securement to floor surface. Retainer tabs 1—1/4 in. wide by 3/4 in. long and located opposite the anchor tabs are folled 80 degree towards the pipe surface to maintain the annular space around the pipe and to retain the fill material. Collar secured to the surface of floor with wood screws and washers at every other anchor tab. A min 1/2 in. wide statilless steel hose clamp shall be secured to the collar of mid—height.

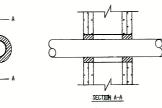
B. Fill, Vold or Cavity Materials — Seciant — Min 3/4 in. thickness of fill material applied within the annulus for the stack and drain pipes, flush with top surface of floor. A min 3/4 in. thickness of fill material applied within the annulus for the stack and drain pipes, flush with top surface of floor. A min 3/4 in. thickness of fill material applied within the annulus for the stack pipe, flush with the bottom surface of the lower top jolate. A min 1/4 in. crown of fill material to be installed around the perimeter of the drain pipe at the top surface of the floor. Fill material to be installed to completely fill the collar. HLTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS611A or FS—ONE Seciant

HILT INC — FS611A or FS-ONE Seciont

C. Firestop Device* Firestop Collar — As an alternate to item A filled with them B above. Firestop collar shall be installed in accordance with the accompanying installation instructions. Collar to be installed and latched around the pipe and secured to underside of floor using the anchor hooks provided with the collar. (Minimum 2 anchor hooks for 1—1/2 and 2 in. diam pipes and 3 anchor hooks for 3 and 4 in. diam pipes and 3 anchor hooks for 3 and 4 in. diam pipes.) The anchor hooks are to be symmetrically installed and secured to the surface of floor with min No. 12 min 3/4 in. long wood screws and washers.

HILT CONSTRUCTION CHEMICALS, DN OF HILTI INC — CP 643 50/1.5 in., CP 643 63/2 in., CP 643 90/3 in. or CP 643 110/4 in. Firestop Collar

*Bearing the UL Classification Marking



ISTRUCTION CHEMICALS, DRY OF HELTI INC - FS-ONE Sectant

CH-

Pointe gradhe

DATE 10-19-04

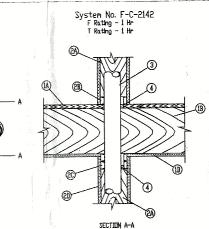
GNERS Suite #100 , 40503 -1000

A & E 615 Delze Lexington, PHONE: (859 EMAIL: de WEBSITE:

Hill Road South Carolina Brighton | MORTON M.

ABA,

GRUBI



1. Floor-Ceiling Assembly The fire-rated solid or trussed lumber joist floor-ceiling assembly shall be constructed of the materials and in the manner specified in individual L500 Series Floor-Ceiling Designs in the UL Fire Resistance Directory. The general construction details of the floor-ceiling assembly are summarized below:

A. Flooring System Lumber or plywood subfloor with finish floor of furnber, plywood or Floor Topping Matures as specified in the individual Floor-Ceiling Design. Max diam of floor opening is 3 in.

B. Wood Joists Nom 2 by 10 in. lumber joists spaced 16 in. 00 with nom 1 by 3 in. Lumber bridging and with ends firestopped. As an alternate to lumber joists, nom 10 in. deep (or deeper) lumber, steel or combination lumber and steel joists, trusses or Structural Wood Wembers* with bridging as required with ends firestopped.

C. Furting Channels (Not shown) — Resilient galv steel furning installed perpendicular to wood joists (Item 18) between willboard (Item 10) and wood joists arequired in the individual Floor-Ceiling Design.

D. Opsum Board* Nom 4 ft wide by 5/8 in. thick as specified in the individual Floor-Ceiling Design.

C. Chase Wall The through penetrant (Item 3) shall be routed through a 1 hr fire-rated single, double or staggered wood stud/gypsum wallboard chase wall constructed of the materials and in the manner specified in the individual USOO Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:

A. Stude Norn 2 by 4 in, lumber studs.

B. Sole Plata Norn 2 by 4 in, lumber plates.

C. Top Plata The double top plate shall consist of two norn 2 by 4 in. lumber plates.

D. Gypsum Boards Thickness, byen, number of layers and fasteners shall be as specified in individual Wall and Partition Design.

3. Through — Penetrants One nonmetallic pipe to be installed either eccentrically or concentrically within the firestop system. The annular space between the through penetrant and the periphery of the opening shall be a min 0 in. (point contact) to a max of 5/8 in. Pipe to be nigitly supported on both sides of the floor-ceiling assembly. The following types and sizes of normetallic properties of the floor-ceiling assembly. The following types and sizes of normetallic properties of the floor-ceiling assembly. The following types and sizes of normetally published to the floor of the fl

material applied within the annulus, flush with top surface of floor and flus with bottom surface of lower top plotts.

HILT CONSTRUCTION CHEMICALS, DV OF HILTI INC - FS - ONE Sealant

1. Well Assembly The 1 or 2 hr fire-roted oppours wellboard/stud well assembly shall be constructed of the montarials and in the manner specified in the individual US00 or U400 Series Well and Partition Designs in the U.F. Fire Resistance Directory and ehall include the following construction features: The Resistance Directory on the unit include the following construction features: The Resistance Directory on the U500 or 10 Series and the U500 or 10 Series will be used to the U500 or 10 Series will be used to the U500 or 10 Series will be used to the U500 or 10 Series will be used to the U500 or 10 Series will be used to the U500 or 10 Series will be used to the U500 or 10 Series will be used to the U500 or 10 Series will be used to the U500 or 10 Series will be u500 or 10 Series will b

ysterne. 1. Fig. Yold or Carlty Materials — Secient For 1 hr F Rating, min 5/8 in. thickness of Mill material opplied within the annulus, flush with both surfaces of Wall. For 2 hr F lating, min 1-1/4 in. thickness of fill material applied within annulus, flush with both

MPE-0

ADDENDUM D NCHMA Certification & Checklist

NCHMA Market Study Index

Introduction: Members of the National Council of Housing Market Analysts provide the following checklist referencing various components necessary to conduct a comprehensive market study for rental housing. By completing the following checklist, the NCHMA Analyst certifies that he or she has performed all necessary work to support the conclusions included within the comprehensive market study. By completion of this checklist, the analyst asserts that he/she has completed all required items per section.

		Page Number(s)
	Executive Summary	,
1	Executive Summary	1
	Scope of Work	
2	Scope of Work	Introduction
	Project Description	
3	Unit mix including bedrooms, bathrooms, square footage, rents, and income targeting	Section A
4	Utilities (and utility sources) included in rent	Section A
5	Target market/population description	Section A
6	Project description including unit features and community amenities	Section A
7	Date of construction/preliminary completion	Section A
8	If rehabilitation, scope of work, existing rents, and existing vacancies	N/A
	Location	
9	Concise description of the site and adjacent parcels	Section B
10	Site photos/maps	Section B
11	Map of community services	Section B
12	Site evaluation/neighborhood including visibility, accessibility, and crime	Section B
	Market Area	
13	PMA description	Section C
14	PMA Map	Section C
	Employment and Economy	•
15	At-Place employment trends	Section D
16	Employment by sector	Section D
17	Unemployment rates	Section D
18	Area major employers/employment centers and proximity to site	Section D
19	Recent or planned employment expansions/reductions	Section D
	Demographic Characteristics	
20	Population and household estimates and projections	Section E
21	Area building permits	Section E
22	Population and household characteristics including income, tenure, and size	Section E
23	For senior or special needs projects, provide data specific to target market	N/A
	Competitive Environment	
24	Comparable property profiles and photos	Section G
25	Map of comparable properties	Section G
26	Existing rental housing evaluation including vacancy and rents	Section G
27	Comparison of subject property to comparable properties	Section G
28	Discussion of availability and cost of other affordable housing options including homeownership, if applicable	Section G
29	Rental communities under construction, approved, or proposed	Section G
30	For senior or special needs populations, provide data specific to target market	N/A

NCHMA Market Study Index

Introduction: Members of the National Council of Housing Market Analysts provide the following checklist referencing various components necessary to conduct a comprehensive market study for rental housing. By completing the following checklist, the NCHMA Analyst certifies that he or she has performed all necessary work to support the conclusions included within the comprehensive market study. By completion of this checklist, the analyst asserts that he/she has completed all required items per section.

		Page Number(s)				
	Affordability, Demand, and Penetration Rate Analysis					
31	Estimate of demand	Section F				
32	Affordability analysis with capture rate	Section F				
33	Penetration rate analysis with capture rate	Section F				
	Analysis/Conclusions					
34	Absorption rate and estimated stabilized occupancy for subject	Section F				
35	Evaluation of proposed rent levels including estimate of market/achievable rents.	Section G				
36	Precise statement of key conclusions	Executive Summary				
37	Market strengths and weaknesses impacting project	Executive Summary				
38	Product recommendations and/or suggested modifications to subject	Executive Summary				
39	Discussion of subject property's impact on existing housing	Executive Summary				
40	Discussion of risks or other mitigating circumstances impacting subject	Executive Summary				
41	Interviews with area housing stakeholders	Section H				
	Other Requirements					
42	Certifications	Addendum B				
43	Statement of qualifications	Addendum A				
44	Sources of data not otherwise identified	N/A				



Formerly known as National Council of Affordable Housing Market Analysts

NCHMA MEMBER CERTIFICATION

This market study has been prepared by Novogradac Consulting LLP, a member in good standing of the National Council of Housing Market Analysts (NCHMA). This study has been prepared in conformance with the standards adopted by NCHMA for the market analysts' industry. These standards include the *Standard Definitions of Key Terms Used in Market Studies*, and *Model Content Standards for the Content of Market Studies*. These Standards are designed to enhance the quality of market studies and to make them easier to prepare, understand, and use by market analysts and by the end users. These Standards are voluntary only, and no legal responsibility regarding their use is assumed by the National Council of Housing Market Analysts.

Novogradac Consulting LLP is duly qualified and experienced in providing market analysis for Affordable Housing. The company's principals participate in the National Council of Housing Market Analysts (NCHMA) educational and information sharing programs to maintain the highest professional standards and state-of-the-art knowledge. Novogradac Consulting LLP is an independent market analyst. No principal or employee of Novogradac Consulting LLP has any financial interest whatsoever in the development for which this analysis has been undertaken.

Rachel B. Denton, MAI

Partner

913-312-4612

Rachel.Denton@novoco.com