

#### **GENERAL SITE NOTES:**

- SURFACE DRAINAGE SHALL BE DIVERTED TO A STORM SEWER CONVEYANCE OR OTHER APPROVED POINT OF COLLECTION THAT DOES NOT CREATE A HAZARD. LOTS SHALL BE GRADED TO DRAIN SURFACE WATER AWAY FROM THE FOUNDATION WALLS. THE GRADE SHALL FALL NOT FEWER THAN 6 INCHES WITHIN THE FIRST 10 FEET ALL SITE WORK TO BE DESIGNED AND COMPLETED BY OTHERS
- ALL FOOTERS AND FOUNDATION SUPPORTS TO BE POURED IN UNDISTURBED SOIL; IF
- APROX. TOPOGRAPHY LINES FROM KGIS. GEN. CONTRACTOR TO MANAGE GRADING, SOIL CHANGES, AND ANY OTHER SITE WORK SLOPE SOIL AWAY FROM HOUSE
- ALL SPOT ELEVATIONS ARE APPROXIMATIONS TO BE FIELD VERIFIED BY CONTRACTOR. FINISHED GRADE ON SITE TO SLOPE AWAY FROM HOUSE FOUNDATION. DIMENSIONS DEPICTED ON SITE PLAN ARE MEASURED FROM OUTSIDE FACE OF

PORCH FFE 885.67' PORCH FFE 27' - 7" TO P.L. HOUSE FFE 888.13' \_\_14' - 0"<u>\_\_</u> GARAGE WIDTH 888.13' 1' - 0" TO P.L. OVERALL HOUSE WIDTH FIRE SEP. DIST 50' - 0" PROPERTY WIDTH CONCRETE EXISTING SIDEWALK DRIVEWAY -MIMOSA AVE MAX. CURB CUT

# 515 MIMOSA AVENUE

# PROJECT SUMMARY

NEW CONSTRUCTION SINGLE FAMILY RESIDENCE AT 515 MIMOSA AVENUE. THE PROGRAM INCLUDES A TWO-STORY CONDITIONED AREA OF 2,727 SF, 2-CAR GARAGE WITH ACCESS OFF EXISTING MIMOSA AVENUE AND A CRAWLSPACE.

- A. LOT SIZE: ≈ 0.17 ACRES (≈ 7,350 SF)
- B. PARCEL ID: 109AB008 C. ZONING DISTRICT: SW-3
- D. CITY BLOCK: 26222 E. OWNER: GORDON AND STACY SAVAGE

**CONSTRUCTION TYPE**: SLAB ON GRADE + CRAWLSPACE; TYPE V-B CONSTRUCTION

- SLAB ON GRADE @ GARAGE & FRONT OF HOUSE + CRAWL SPACE @ BACK OF HOUSE
- OPEN WEB FLOOR TRUSSES (FINAL SIZE & DESIGN TBD BY TRUSS MANUF.) PREFAB. ROOF TRUSSES (FINAL SIZE & DESIGN TBD BY TRUSS MANUF.)
- BOARD AND BATTEN & BRICK VENEER FINISH
- CLAPBOARD & VERTICAL WOOD-LIKE SIDING ALUMINUM WINDOWS & EXTERIOR DOORS

UTILITIES: WATER, ELECTRICITY, SEWAGE, GAS; COORDINATE UTILITIES W/ KUB

MECHANICAL: MECHANICAL SYSTEM TBD BY MECH. SUB OR ENGINEER AND APPROVED IN FIELD BY KNOXVILLE CODES INSPECTIONS

SUPPORTS - TO BE DESIGNED, DRAWN, AND SPECIFIED BY MANUFACTURER IN FRAMING PACKAGE

# CODES & ZONING

**DIMENSIONAL STANDARDS FOR SW-3 ZONING** 

	REQ'D
ONT SETBACK (S.B.):	10' MAX
Ontage @ S.B.:	40% MIN
E SETBACK:	25' MAX
AR SETBACK:	3' MIN
T SIZE:	3 ACRES
OG COVERAGE:	80% MAX

**BUILDING HEIGHT:** 

OPEN SPACE COV.:

S MAX 0.17 ACRES 25' & 2 STORIES 2 STORIES & ATTIC; 26'-8"

41.6% (3,060 SF) 0.6 (4,407.72 GFA / 7350 SF)

MINIMUM REQUIRED: 2 PER DU MAXIMUM ALLOWED: 2 PARKING SPACES PER RESIDENTIAL UNIT

**TOTAL PROVIDED:** 2 PARKING SPACES

OCCUPANCY: SINGLE FAMILY RESIDENTIAL

APPLICABLE CODES
2018 INTERNATIONAL RESIDENTIAL CODE

2018 INTERNATIONAL FIRE CODE

2018 INTERNATIONAL PLUMBING CODE 2018 INTERNATIONAL MECHANICAL CODE

2018 INTERNATIONAL ENERGY CONSERVATION CODE CITY OF KNOXVILLE ZONING CODE

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# CONTACTS

GORDON AND STACY SAVAGE

blknt92@gmail.com / stacysavage2@icloud.com

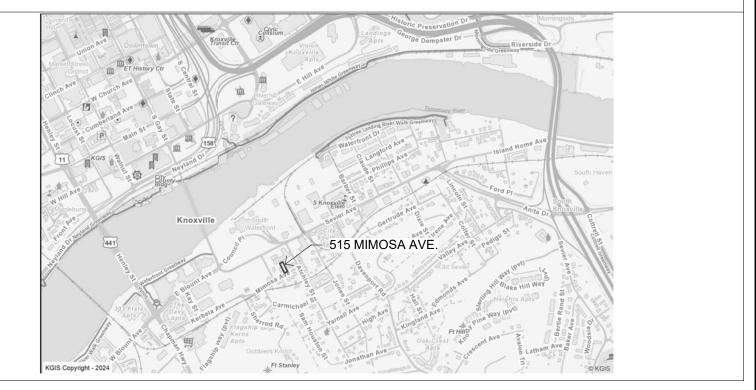
PROJECT ARCHITECT
HEYOH DESIGN & DEVELOPMENT, LLC.

LOGAN HIGGINS LICENSE #: 106363

133c S Gay Street, Knoxville, TN 37902

OFFICE PHONE: 865-236-0430 EMAIL: admin@heyohdesign.com

VICINITY MAP



**REVIEW CYCLE 1** 

Project

SAVAGE RESIDENCE

Number: 224010

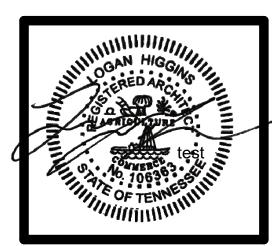
Client: GORDON + STACY SAVAGE

NEW CONSTRUCTION SINGLE FAMILY

RESIDENCE

Location: 515 MIMOSA AVENUE KNOXVILLE, TN 37920

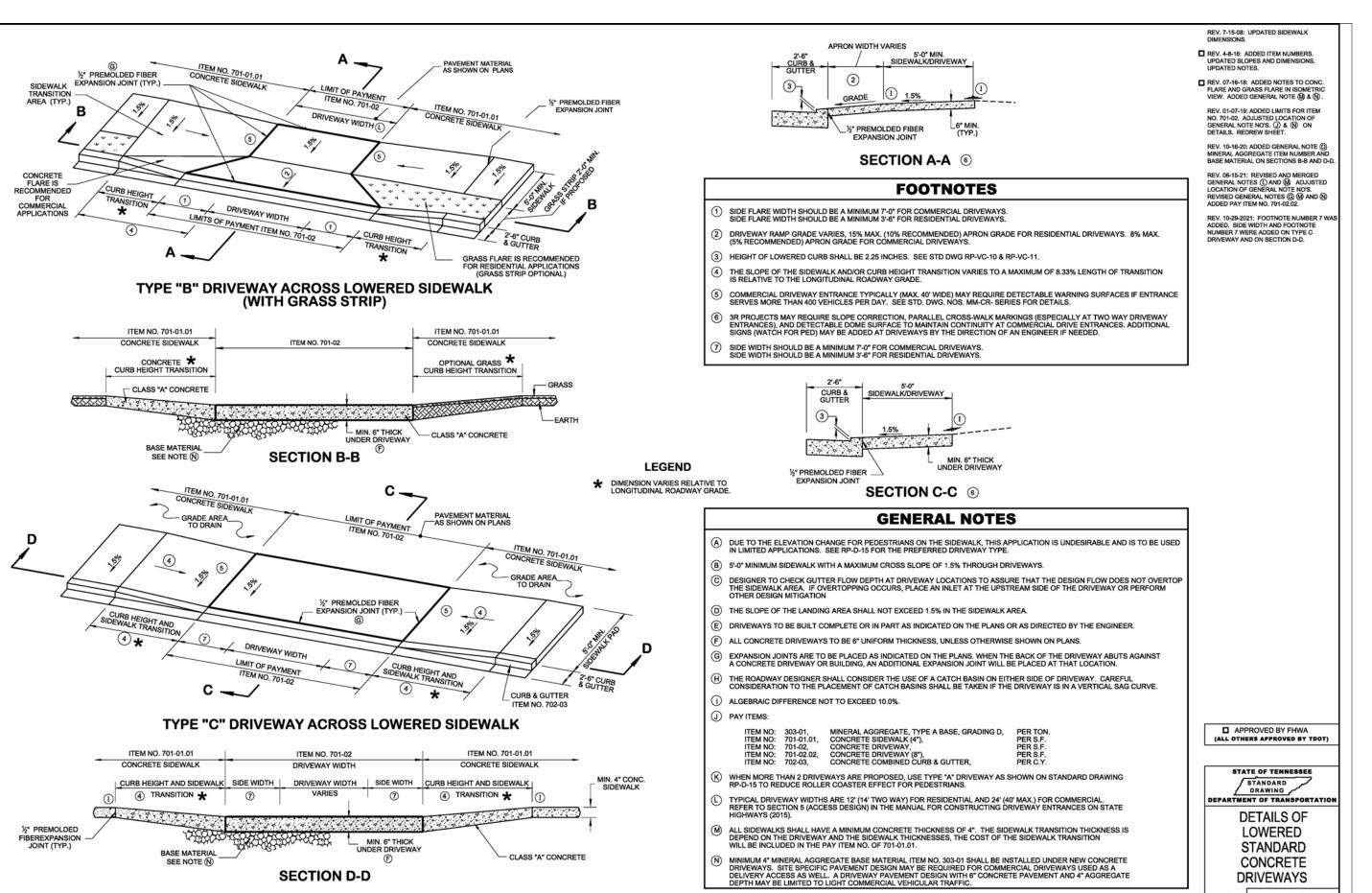


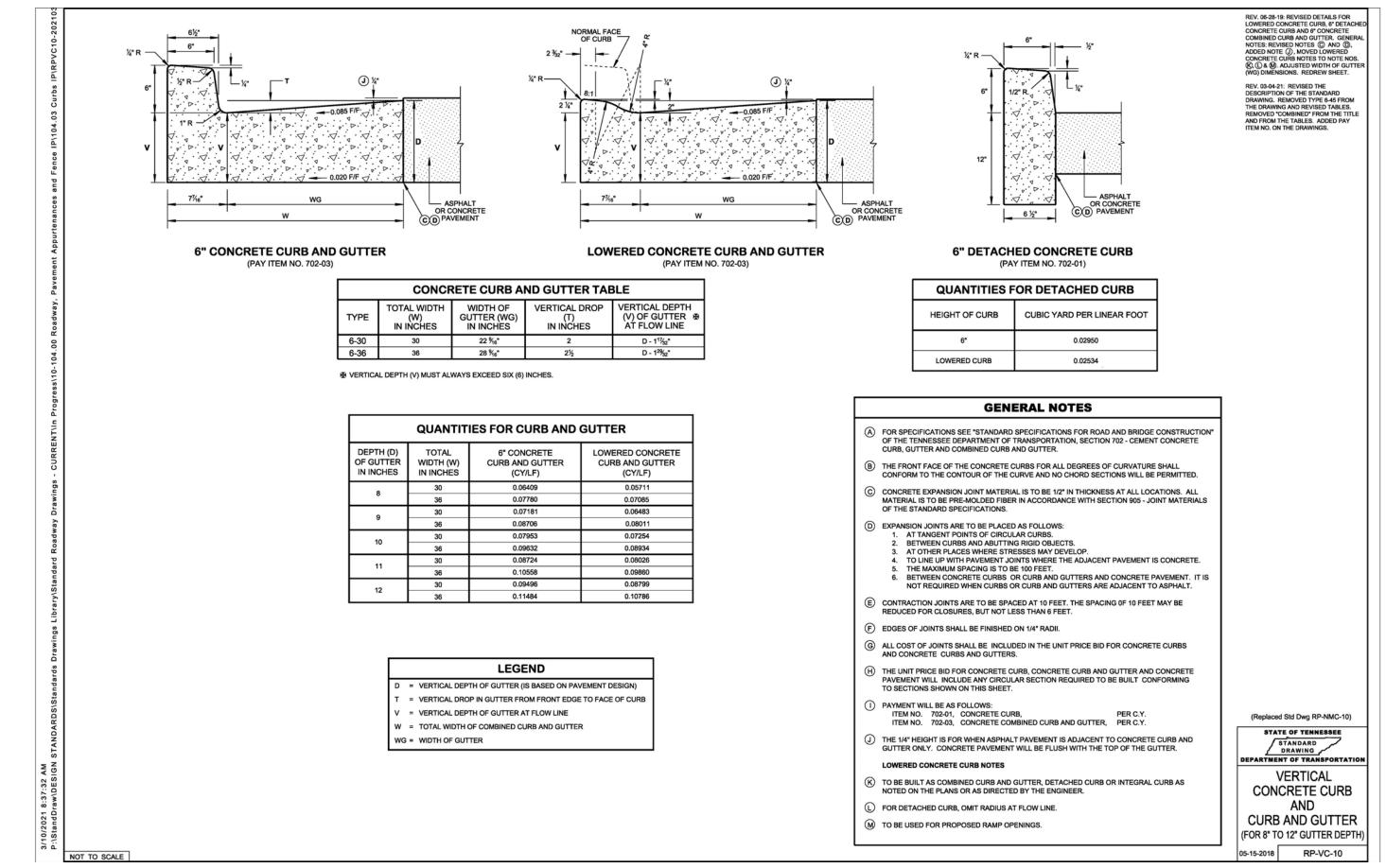


CHECKED BY: DRAWN BY: 11.19.2024

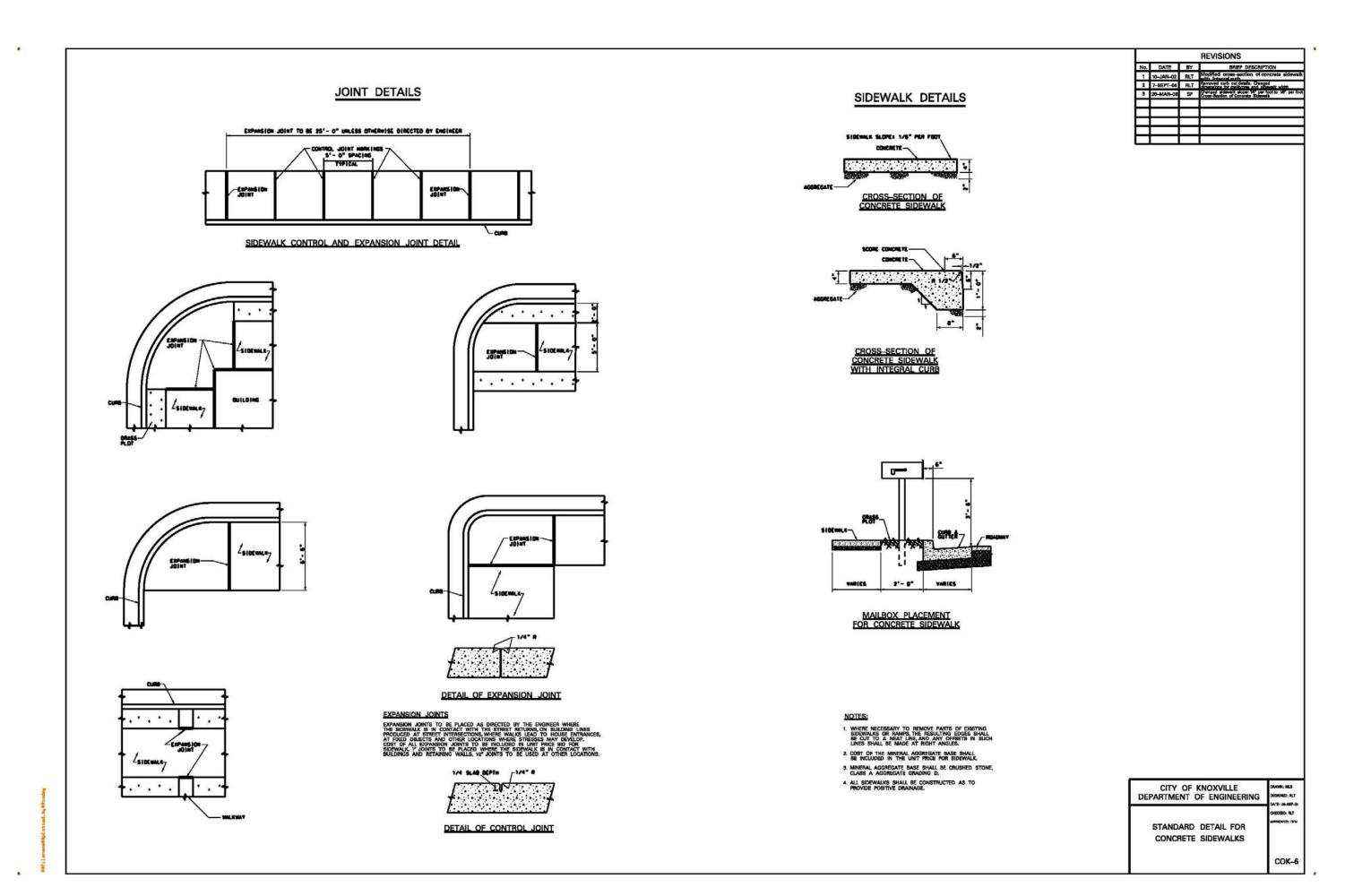
1/8" = 1'-0"

COVER





10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26



FOR REFERENCE ONLY NOT TO SCALE REVISION

No. REVISION

SAVAGE RESIDENCE

Number: **224010** 

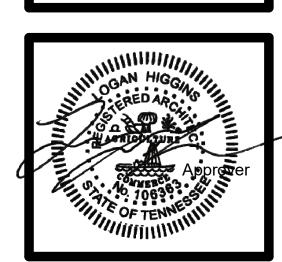
Client: gordon + stacy

GORDON + STACY SAVAGE

INTO:
NEW CONSTRUCTION
SINGLE FAMILY

Location:

515 MIMOSA AVENUE KNOXVILLE, TN 37920



HECKED BY: SRD/LH
RAWN BY: AL/SRD

10.30.2024

SHEET

G102

2 OF 12

TDOT

M. ALL FOOTINGS SHALL BE CENTERED UNDER WALL OR COLUMN, UNLESS OTHERWISE NOTED ON PLANS.

FOOTING SIZES SHOWN ARE ONLY TYPICAL FOR STATED SOIL PRESSURES & CONTINENT COMPACTION, WHICHEVER IS MORE RESTRICTIVE.

#### **FOUNDATION CMU NOTES**

Ο.

FROST PROTECTION: ALL MASONRY SHALL BE PROTECTED AGAINST FREEZING FOR NOT LESS THAN 48 HOURS AFTER INSTALLATION, & SHALL NOT BE CONSTRUCTED BELOW 28 DEGREES F ON RISING TEMPERATURES, OR BELOW 36 DEGREES F

P. BONDING: MASONRY WALLS & PARTITIONS SHALL BE SECURELY ANCHORED OR BONDED AT POINTS WHERE THEY INTERSECT BY ONE OF THE FOLLOWING METHODS: ANY CMU BASEMENT AND/OR FOUNDATION WALL WITH MORE THAN 3'-0" OF EARTH AGAINST IT, TO BE REINFORCED WITH #4 REBAR VERTICAL IN GROUT-FILLED CMU CELLS

AT 48" O.C. ALL CMU WALLS MORE THAN SIX COURSES IN HEIGHT, TO BE REINFORCED WITH TRUSS-TYPE WIRE REINFORCING IN HORIZONTAL MORTAR JOINTS AT 16" O.C., & #4 REBAR

VERTICAL IN GROUT-FILLED CMU CELLS AT 48" O.C. TIE ALL CMU WALLS TO CONCRETE FOOTINGS AT EACH VERTICAL REBAR, OR AT 48" O.C.,

& AT EACH CORNER, & ON BOTH SIDES OF OPENINGS. REINFORCE OPENINGS IN CMU WALLS WITH ONE #4 REBAR IN ONE GROUT-FILLED CELL-COLUMN ON EACH SIDE OF OPENING, CONTINUOUS FROM CONCRETE FOOTING, THROUGH LINTEL, TO BOND BEAM AT TOP OF WALL.

REINFORCE CORNERS OF CMU STRUCTURES WITH ONE #4 REBAR IN EACH OF THREE ADJACENT, GROUT-FILLED CELL-COLUMNS AT CORNERS, CONTINUOUS FROM CONCRETE FOOTING TO BOND BEAM AT TOP OF WALL.

OVERLAP ALL REBAR SPLICES 24" MINIMUM. COVERAGE OF ALL REBAR TO BE 3" MINIMUM. W. ALL MASONRY AND/OR CONCRETE WALLS BELOW GRADE SHALL BE DAMP-PROOFED & WATERPROOFED AS REQUIRED BY I.R.C., SECTION R406.

DESIGNED BY THE MANUFACTURER'S ENGINEER, WHO SHALL BE REGISTERED IN THE STATE OF TENNESSEE; STAMPED, APPROVED SHOP DRAWINGS SHALL BE ONSITE BEFORE **ERECTION BEGINS.** 

#### SITE NOTES

GENERAL CONTRACTOR TO VERIFY THE EXISTING TOPOGRAPHIC LEVELS, LOCATIONS OF TREES, & THE PROPOSED HOUSE LOCATION. GENERAL CONTRACTOR TO COMMUNICATE TO OWNER & ARCHITECT ANY RECOMMENDED CHANGES BEFORE THE START OF ANY

GENERAL CONTRACTOR TO HAVE A LICENSED ENGINEER OR LICENSED SURVEYOR STAKE OUT OR VERIFY THE HOUSE LOCATION TO ENSURE THAT THE HOUSE DOES NOT ENCROACH ON ANY SETBACKS OR EASEMENTS, UNLESS THE ENCROACHMENT IS ALLOWED BY ZONING & BUILDING CODES. GENERAL CONTRACTOR TO COMMUNICATE TO

OWNER & ARCHITECT ANY ENCROACHMENT ISSUES. GENERAL CONTRACTOR TO COORDINATE FINISH TOPOGRAPHIC GRADING & PAVING OF WALKS, DRIVEWAYS, PATIOS, ETC., AS REQUIRED FOR POSITIVE DRAINAGE AWAY FROM THE HOUSE.

GENERAL CONTRACTOR TO COORDINATE ALL LANDSCAPING WITH THE OWNER, & DETERMINE WHETHER THE LANDSCAPING PACKAGE IS TO BE PROVIDED BY THE GENERAL CONTRACTOR OR BY OTHERS.

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12

BOUNDARY INFORMATION, TOPOGRAPHIC INFORMATION, & OTHER SITE INFORMATION IS TAKEN FROM KNOX COUNTY G.I.S. MAPS, BOUNDARY SURVEY BY OTHER DOCUMENTS PROVIDED BY THE OWNER.

ALL GROUND DISTURBED BY CONSTRUCTION SHALL BE REPAIRED/REPLACED WITH TOPSOIL: THIS SHALL BE GRADED. RAKED. SEEDED. MULCHED. & WATERED PER SPECIFICATIONS. UNLESS OTHER LANDSCAPING IS INDICATED.

IN ALL AREAS, PROVIDE POSITIVE DRAINAGE; SLOPE GRADE AWAY FROM BUILDINGS; MAINTAIN & EXTEND EXISTING SWALES; PROVIDE FRENCH DRAIN TO GRADE WHERE SURFACE SLOPE DOES NOT PROVIDE ADEQUATE DRAINAGE.

14 | 15

THESE PLANS ARE DESIGNED TO MEET OR EXCEED THE REQUIREMENTS OF THE INTERNATIONAL RESIDENTIAL CODE, LOCAL ORDINANCES & REGULATIONS, ETC.; THESE ARE TO BE CONSIDERED AS PART OF THE SPECIFICATIONS OF THIS BUILDING. CONTRACTOR SHALL VERIFY REQUIREMENTS WITH THE LOCAL CODES ENFORCEMENT OFFICER & TO AMEND THE PROPOSED CONSTRUCTION AS REQUIRED.

B. CONTRACTOR SHALL USE STANDARD CONSTRUCTION DETAILS & PROCEDURES TO ENSURE A STRUCTURALLY SOUND & WEATHERPROOFED FINISHED PRODUCT. CONTRACTOR TO NOTIFY THE OWNER & THE ARCHITECT OF ANY ITEMS WHICH ARE PERCEIVED

CONTRACTOR SHALL VERIFY WITH CODES ENFORCEMENT THAT ALL WORK & CONSTRUCTION MEETS OR EXCEEDS ALL SEISMIC CODES

WINDOW SIZES INDICATED ON THE PLAN ARE NOTED BY GENERIC SASH SIZES. CONTRACTOR TO COORDINATE ROUGH OPENING

G. PROVIDE FLASHING ABOVE ALL WINDOWS, DOORS & OTHER OPENINGS TO THE EXTERIOR. PROVIDE WEEPS AT MASONRY CAVITY

H. PROVIDE TYVEK "HOUSE WRAP" MOISTURE BARRIER OVER ALL EXTERIOR WALLS. FLASH ALL WINDOW & OTHER OPENINGS IN EXTERIOR

PLUMBING SUBCONTRACTOR TO BE RESPONSIBLE FOR ADHERING TO ALL APPLICABLE CODES & SAFETY REQUIREMENTS

ALL PLUMBING & MECHANICAL VENT STACKS TO BE LOCATED CLOSE TOGETHER IN THE ATTIC. VENT STACKS TO BE LOCATED TO THE REAR OF THE HOUSE, AWAY FROM PROMINENT VIEW. ALL VENT STACKS TO BE PRIMED & PAINTED TO CLOSELY MATCH ROOF COLOR.

HVAC SUBCONTRACTOR TO FULLY COORDINATE ALL SYSTEM DATA & REQUIREMENTS WITH THE EQUIPMENT SUPPLIER. HVAC SUBCONTRACTOR TO PROVIDE FINAL SYSTEM LAYOUT DRAWING & SUBMIT IT TO THE GENERAL CONTRACTOR, OWNER, & EQUIPMENT

ALL LAVATORIES & BATHS SHALL BE MECHANICALLY VENTILATED THROUGH NON-COMBUSTIBLE DUCTS TO PROVIDE & CHANGE AIR

b. ALL KITCHEN RANGE HOODS SHALL BE MECHANICALLY VENTILATED THROUGH NON-COMBUSTIBLE DUCTS TO EXTRACT AIR AT THE

PROVIDE SOLID METAL DUCTING TO EXTERIOR FOR ALL EXHAUST FANS, KITCHEN COOKTOP HOOD VENT, & DRYER VENT.

F. ALL MECHANICAL & PLUMBING VENT STACKS, INCLUDING GAS FLUES, TO BE LOCATED TOGETHER IN THE ATTIC TO MINIMIZE ROOF PENETRATIONS. VENT STACKS TO BE LOCATED TO THE REAR OF THE HOUSE, AWAY FROM PROMINENT VIEW. ALL VENT STACKS & FLUES

ELECTRICAL PLAN(S) ILLUSTRATE BASIC DESIGN INTENT ONLY. ELECTRICAL CONTRACTOR TO BE RESPONSIBLE FOR ADHERING TO ALL APPLICABLE CODES & SAFETY REQUIREMENTS. VERIFY FIXTURE SELECTION & LOCATION WITH OWNER. UTILIZE LED FIXTURES WHEREVER

LIGHT FIXTURE TO BE INSTALLED AS CLOSELY AS POSSIBLE TO THE LOCATION SHOWN ON THE ELECTRICAL PLAN(S). FIELD VERIFY LIGHT

GENERAL CONTRACTOR & ELECTRICAL SUBCONTRACTOR TO REVIEW THE PLANS & WALK THROUGH THE JOB TO VERIFY THAT THE DESIGN INTENT IS MAINTAINED. GENERAL CONTRACTOR TO NOTIFY THE ARCHITECT IF ANY ITEMS ARE DIFFERENT FROM THE ELECTRICAL

GAS OR ELECTRICAL SERVICE TO BE PROVIDED AS REQUIRED FOR ALL APPLIANCES & EQUIPMENT, SUCH AS REFRIGERATOR, FREEZER, DISH WASHER, DISPOSAL, COOKTOP, OVENS, WASHER, DRYER, HVAC EQUIPMENT, ALARM PANEL, ETC. PROVIDE OUTLET ABOVE RANGE

PROVIDE HARDWIRED SMOKE DETECTORS, WITH BATTERY BACKUP, ON ALL FLOORS & IN EACH BEDROOM. VERIFY WITH LOCAL CODE

PROVIDE FOR HVAC UNIT(S). NUMBER OF UNITS TO BE DETERMINED BY THE LOCAL MECHANICAL CONTRACTOR.

EXISTING PANEL BOX MAY REQUIRE 'RELOCATION; PANEL BOX TO BE SIZED TO ACCOMMODATE ALL CALCULATED LOADS, & PROVIDE FOR

V. DECORATIVE LIGHT FIXTURES TO BE SELECTED BY THE OWNER, & COORDINATED WITH THE GENERAL CONTRACTOR. THE OWNER TO

X. ELECTRIC & GAS METERS TO BE LOCATED AWAY FROM ANY PROMINENT VIEW. (VERIFY WITH LOCAL UTILITY.)

GROUNDING ELECTRODE SYSTEM:

A. ALL ELECTRODES SPECIFIED IN SECTIONS E3608.1.1, E3608.1.2, E3608.1.3, E3608.1.4 E3608.1.5 AND E3608.1.6 THAT ARE PRESENT AT EACH BUILDING OR STRUCTURE SERVED SHALL BE BONDED TOGETHER TO FORM THE GROUNDING ELECTRODE SYSTEM. WHERE NONE OF THESE ELECTRODES ARE PRESENT, ONE OR MORE OF THE ELECTRODES SPECIFIED IN SECTIONS E3608.1.3, E3608.1.4, E3608.1.5 AND E3608.1.6 SHALL BE INSTALLED AND USED. (250.50) (IRC 2018 E3608.1) B. CONCRETE-ENCASED: A CONCRETE ENCASED ELECTRODE CONSISTING OF NOT LESS THAN 20 FEET (6096 MM) OF EITHER OF THE

FOLLOWING SHALL BE CONSIDERED AS A GROUNDING ELECTRODE: 1. ONE OR MORE BARE OR ZINCGALVANIZED OR OTHER ELECTRICALLY CONDUCTIVE COATED STEEL REINFORCING BARS OR RODS NOT LESS THAN 1/2 INCH (13 MM) IN DIAMETER, INSTALLED IN ONE CONTINUOUS 20-FOOT (6096 MM) LENGTH, OR IF IN MULTIPLE PIECES CONNECTED TOGETHER BY THE USUAL STEEL TIE WIRES, EXOTHERMIC WELDING, WELDING, OR OTHER EFFECTIVE MEANS TO CREATE A 20-FOOT (6096 MM) OR GREATER LENGTH. (IRC 2018 E3608.1.2)

C. REBAR TYPE ENCASED: WHERE A GROUNDING ELECTRODE CONDUCTOR OR BONDING JUMPER IS CONNECTED TO A REBAR EXTENDED FROM THE LOCATION OF A REBAR-TYPE CONCRETE-ENCASED ELECTRODE INSTALLED IN ACCORDANCE WITH SECTION E3608.1.2, THE POINT OF CONNECTION TO THE REBAR EXTENSION SHALL BE IN AN ACCESSIBLE LOCATION THAT IS NOT SUBJECT TO CORROSION OF THE REBAR. THE REBAR EXTENSION SHALL NOT BE EXPOSED TO CONTACT WITH THE EARTH WITHOUT CORROSION PROTECTION. [250.68 (C) (3)] (IRC 2018 E3611.5).

### ABBREVIATIONS LEGEND:

WITH THE OWNER, &	/ (BBI (E VI) (	TIONS ELSEND:					
E PROVIDED BY THE	B.O.	BOTTOM OF	LH	LEFT HAND	PERP.	PERPENDICULAR	
OTHER SITE INFORMATION IS	CONT.	CONTINUOUS	LVL	LAMINATED VENEER LUMBER	RH	RIGHT HAND	
	D	DEEP	MAN.	MANUFACTURER	SPEC'D	SPECIFIED	
Y BY, &	DIA.	DIAMETER	MAX.	MAXIMUM	SPECS	SPECIFICATIONS	
	E/W	EAST/WEST	MECH.	MECHANICAL	TBD	TO BE DETERMINED	
AIRED/REPLACED WITH	EXT.	EXTERIOR	MIN.	MINIMUM	T.O.	TOP OF	`
ED, & WATERED PER	FFE	FINISH FLOOR ELEVATION	MM/MIL	MILLIMETER	TPO	THERMOPLASTIC POLYOLEFIN	
ED.	GYP.	GYPSUM	N/S	NORTH/SOUTH	TYP.	TYPICAL	
AWAY FROM BUILDINGS;	IECC	INTERNATIONAL ENERGY	O.C.	ON CENTER	W	WIDE	
RAIN TO GRADE WHERE		CONSERVATION CODE	OPT.	OPTIONAL	W/	WITH	Ι,
	INFO	INFORMATION	OSB	ORIENTED STRAND BOARD	,		'
	INT.	INTERIOR	O.W.T.	OPEN WEB TRUSSES			
16 17 18	19 20	21 22	23	24 25 26	27	28 29 30 31	1
10	1 ., 1 20				<i></i> /		· I

**REVISION REVISION** 

> Project SAVAGE **RESIDENCE**

224010 Number:

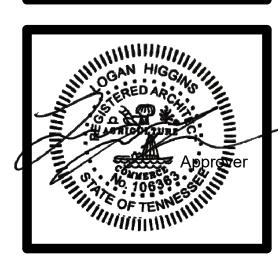
Client: **GORDON + STACY** 

**SAVAGE** 

NEW CONSTRUCTION SINGLE FAMILY RESIDENCE

Location: 515 MIMOSA AVENUE KNOXVILLE, TN 37920

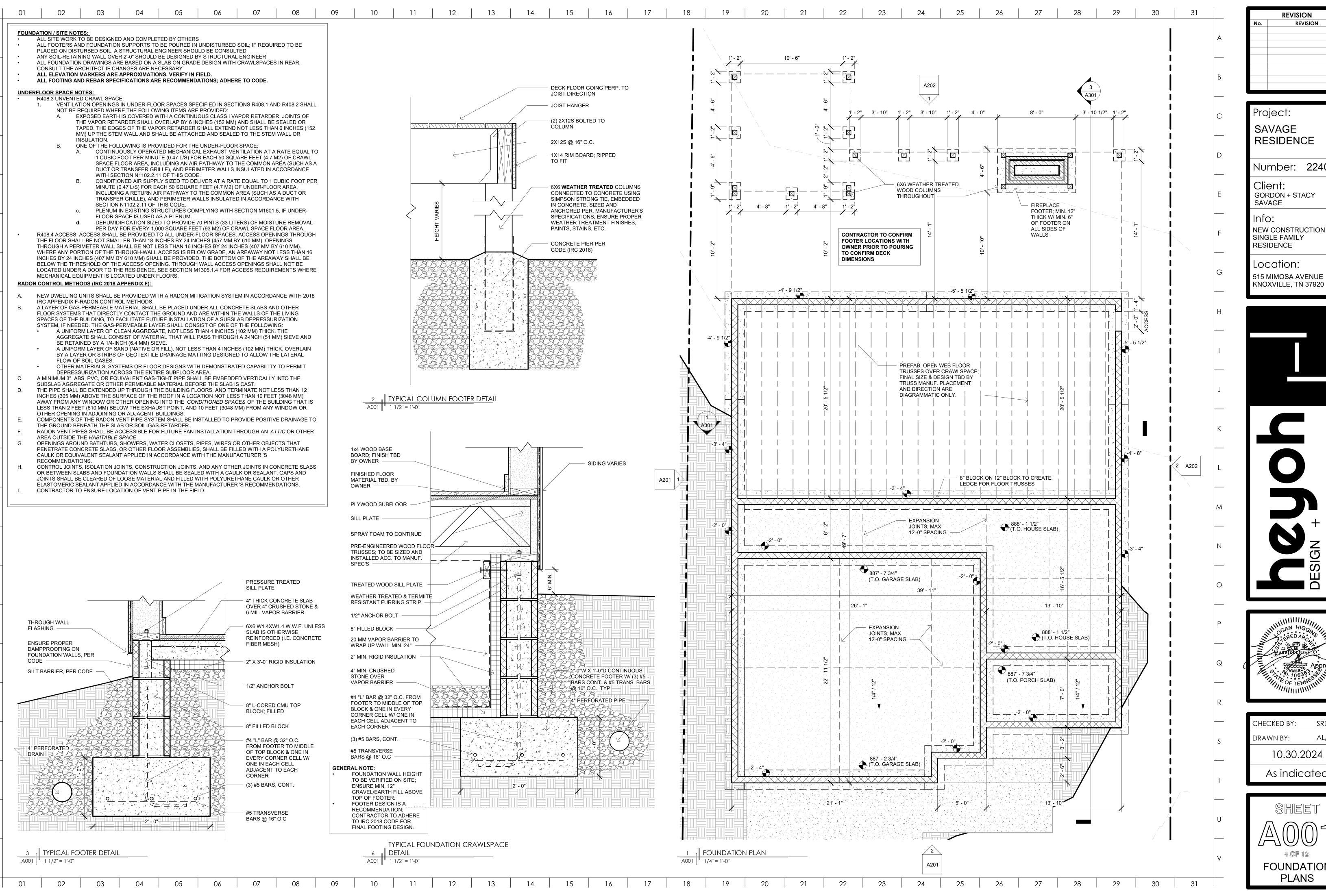




CHECKED BY: AL/SRD DRAWN BY:

10.30.2024

GENERAL NOTES



Project SAVAGE

Number: 224010

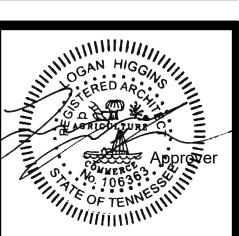
GORDON + STACY

SAVAGE

**NEW CONSTRUCTION** SINGLE FAMILY RESIDENCE

Location: 515 MIMOSA AVENUE

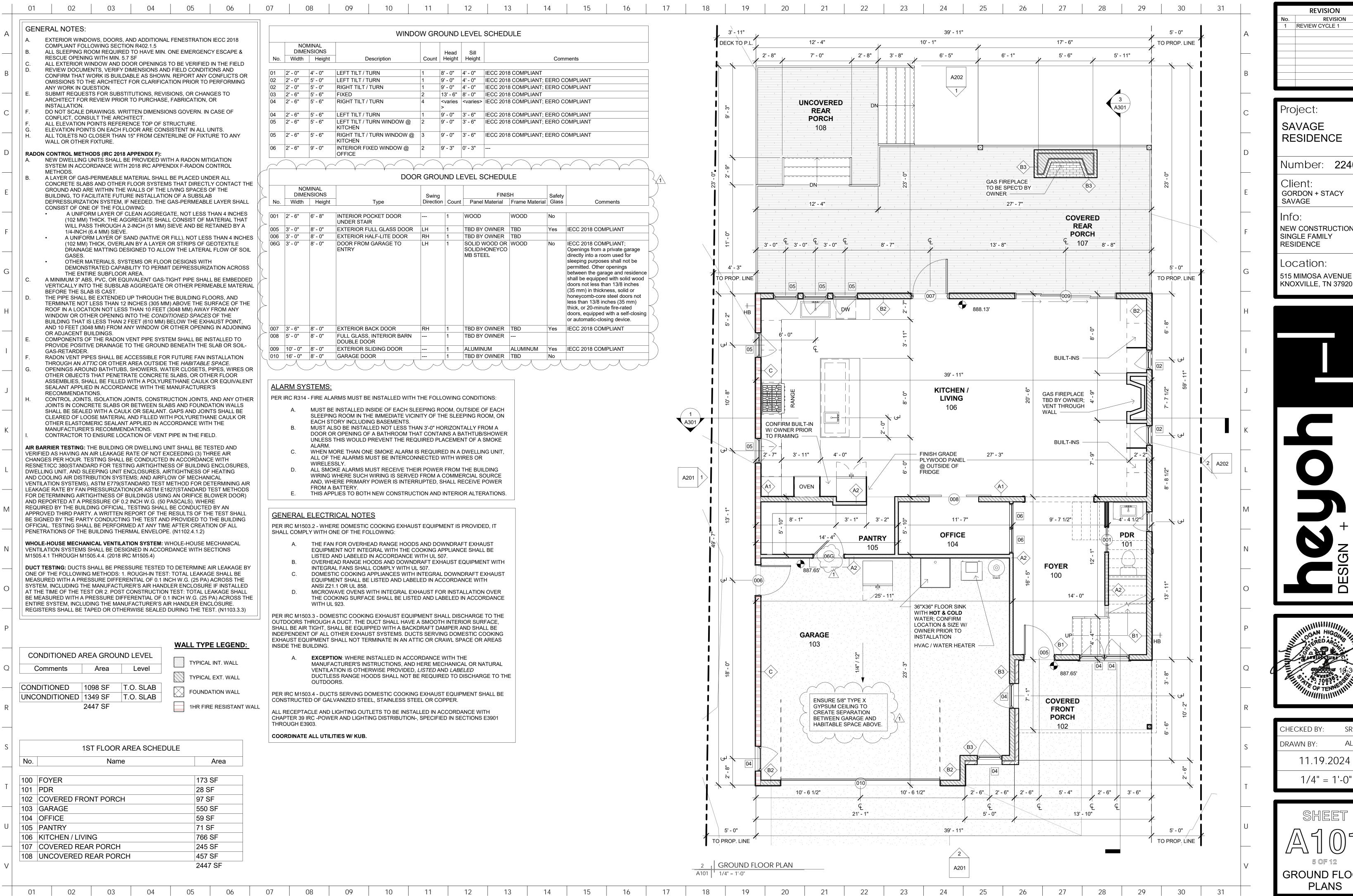




CHECKED BY: AL/SRD DRAWN BY: 10.30.2024

As indicated

**FOUNDATION PLANS** 



**REVISION** REVISION REVIEW CYCLE 1

> Project SAVAGE

**RESIDENCE** 

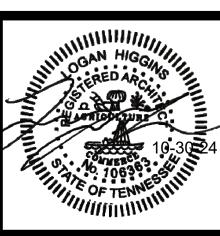
224010 Number:

Client: **GORDON + STACY** SAVAGE

**NEW CONSTRUCTION** SINGLE FAMILY RESIDENCE

Location: 515 MIMOSA AVENUE

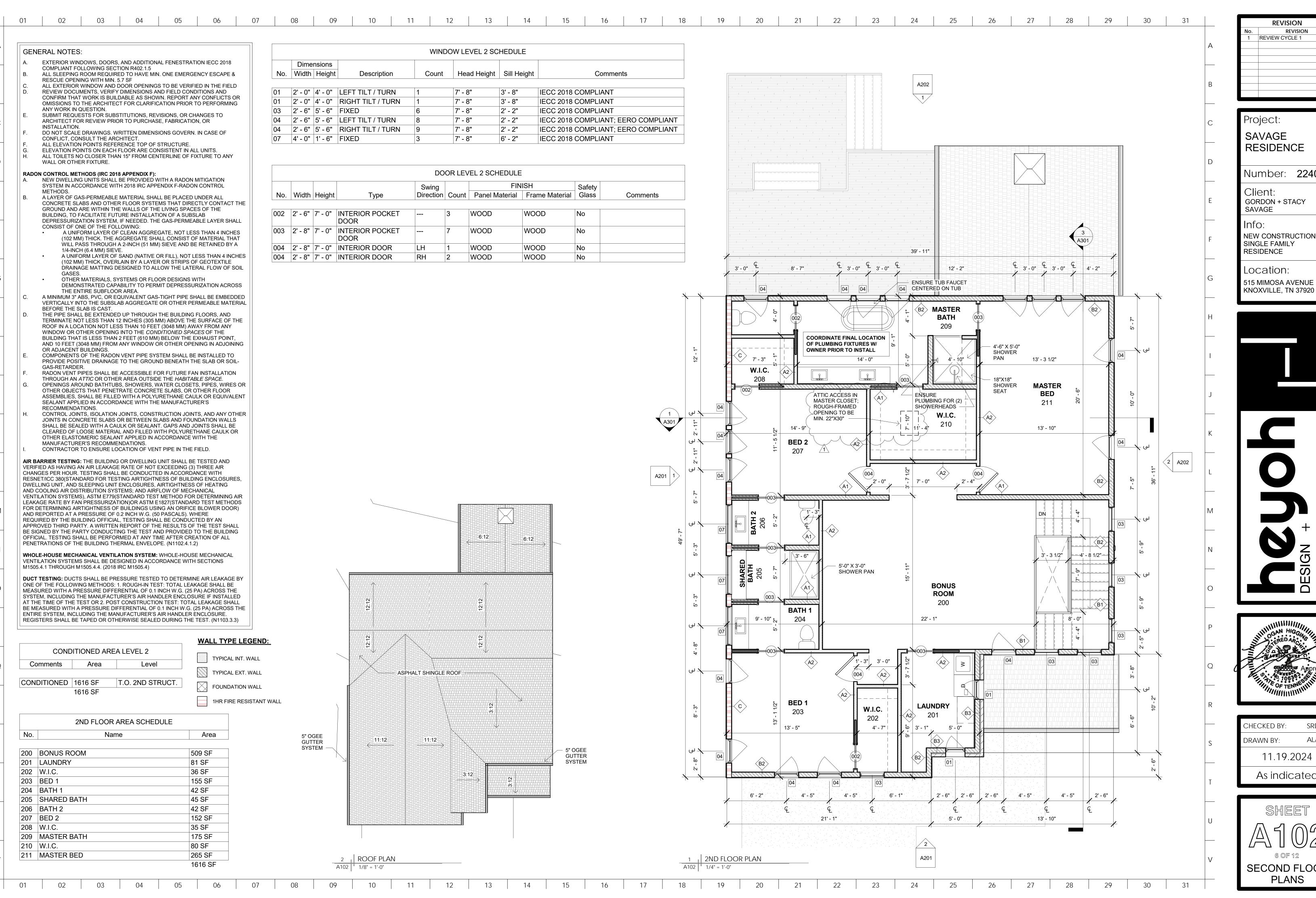




CHECKED BY: AL/SRD DRAWN BY: 11.19.2024

1/4" = 1'-0"

**GROUND FLOOR PLANS** 



REVISION REVISION **REVIEW CYCLE 1** 

Project

SAVAGE **RESIDENCE** 

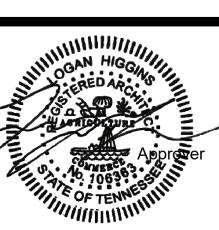
Number: 224010

Client: **GORDON + STACY** 

NEW CONSTRUCTION SINGLE FAMILY

Location: 515 MIMOSA AVENUE





CHECKED BY: AL/SRD DRAWN BY: 11.19.2024

As indicated

SECOND FLOOR

**PLANS** 

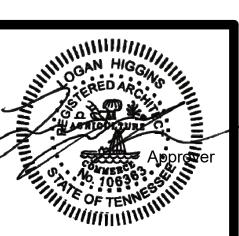


SAVAGE

Client: GORDON + STACY

**NEW CONSTRUCTION** SINGLE FAMILY RESIDENCE

Location: 515 MIMOSA AVENUE



CHECKED BY: AL/SRD DRAWN BY:

10.30.2024

1/4" = 1'-0"

**ELEVATIONS** 



Project

SAVAGE RESIDENCE

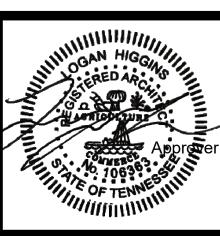
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Client: GORDON + STACY

**NEW CONSTRUCTION** SINGLE FAMILY

Location: 515 MIMOSA AVENUE



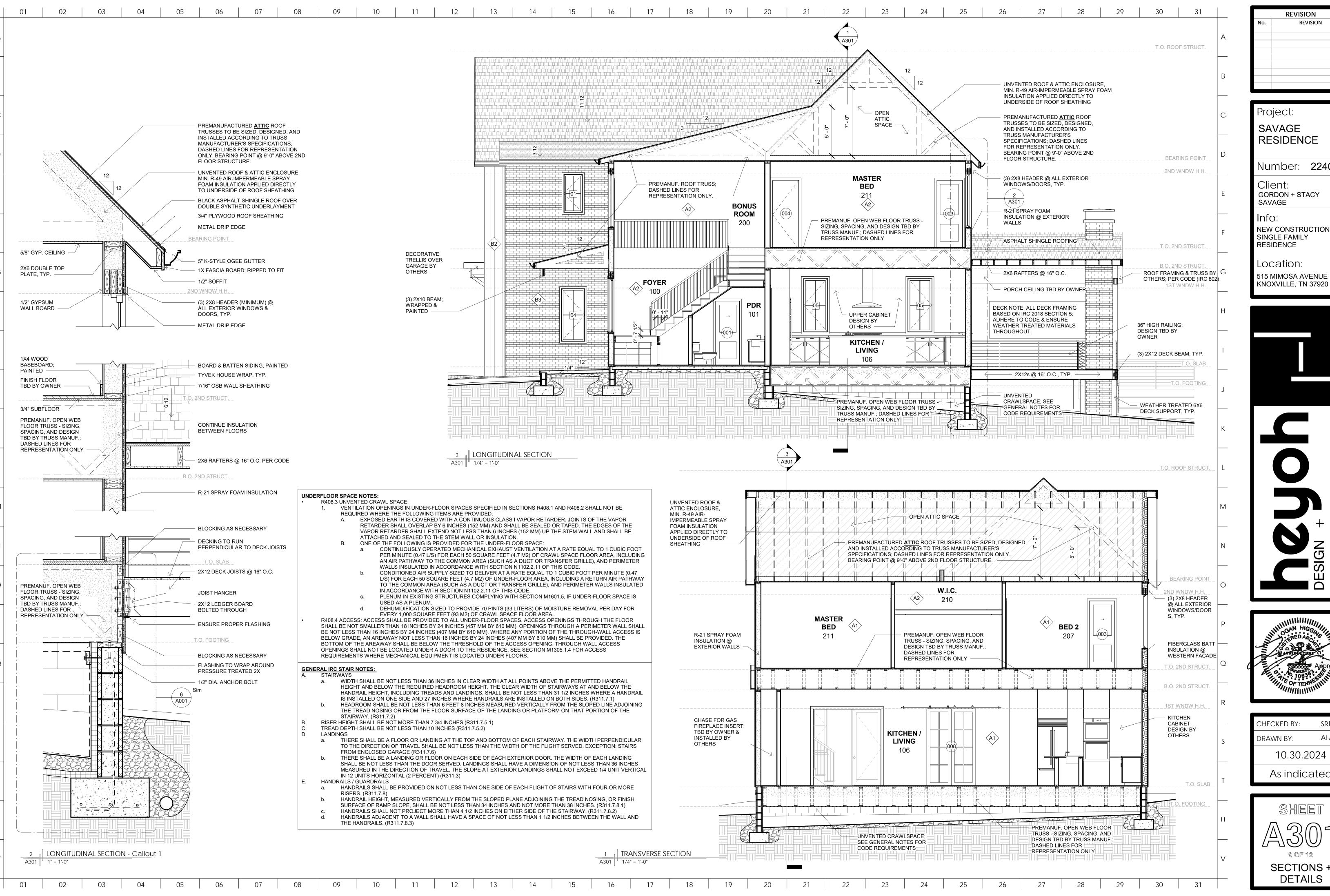


CHECKED BY: AL/SRD DRAWN BY:

10.30.2024

1/4" = 1'-0"

**ELEVATIONS** 



Project

SAVAGE **RESIDENCE** 

Number: 224010

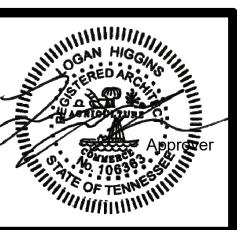
Client: **GORDON + STACY** 

SAVAGE

**NEW CONSTRUCTION** SINGLE FAMILY RESIDENCE

Location: 515 MIMOSA AVENUE



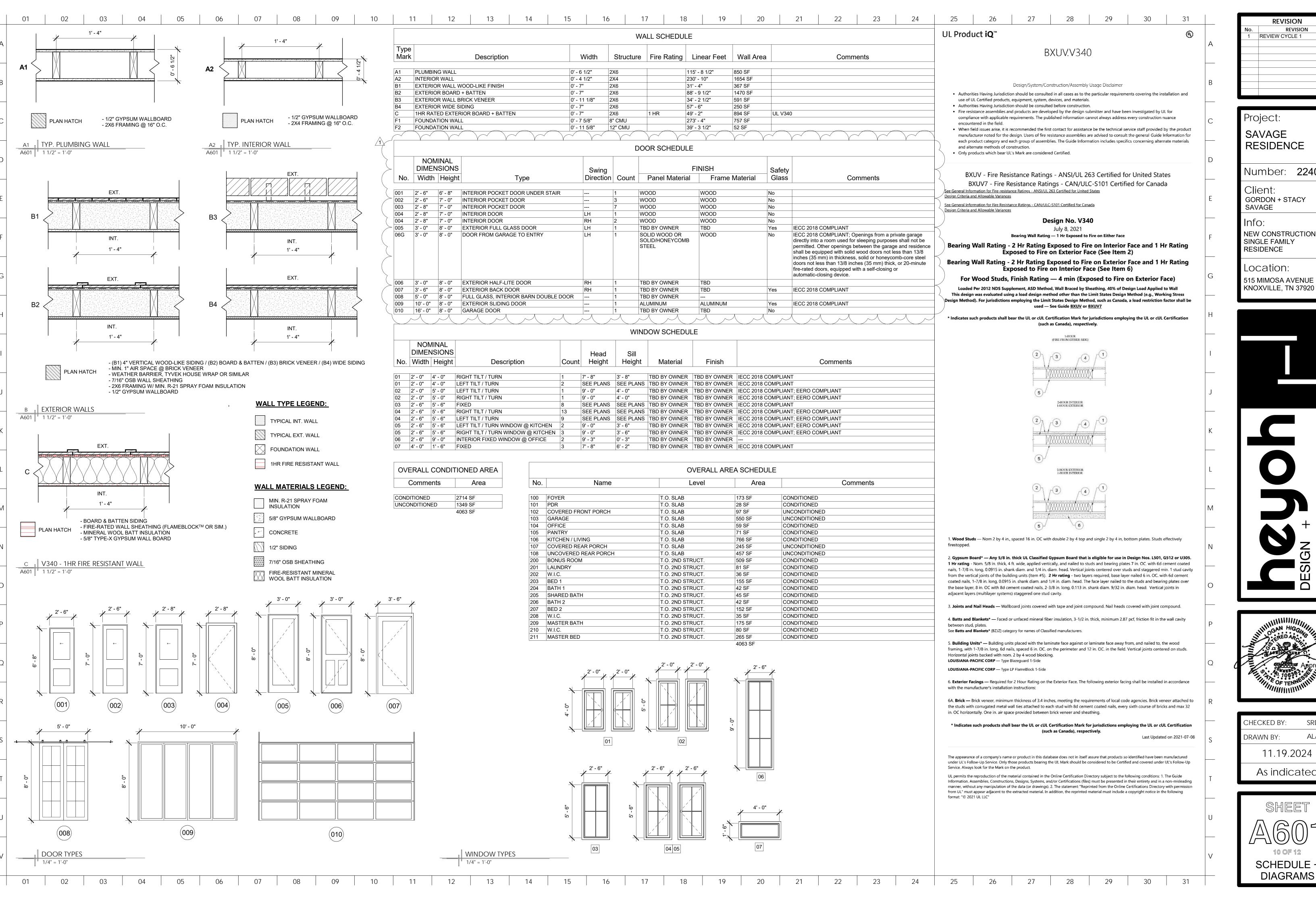


CHECKED BY: AL/SRD DRAWN BY:

10.30.2024

As indicated

**SECTIONS + DETAILS** 



**REVISION** REVIEW CYCLE 1

Project

SAVAGE **RESIDENCE** 

Number: 224010

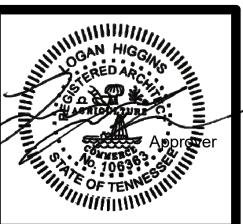
Client: **GORDON + STACY** 

Info:

**NEW CONSTRUCTION** SINGLE FAMILY RESIDENCE

Location: 515 MIMOSA AVENUE





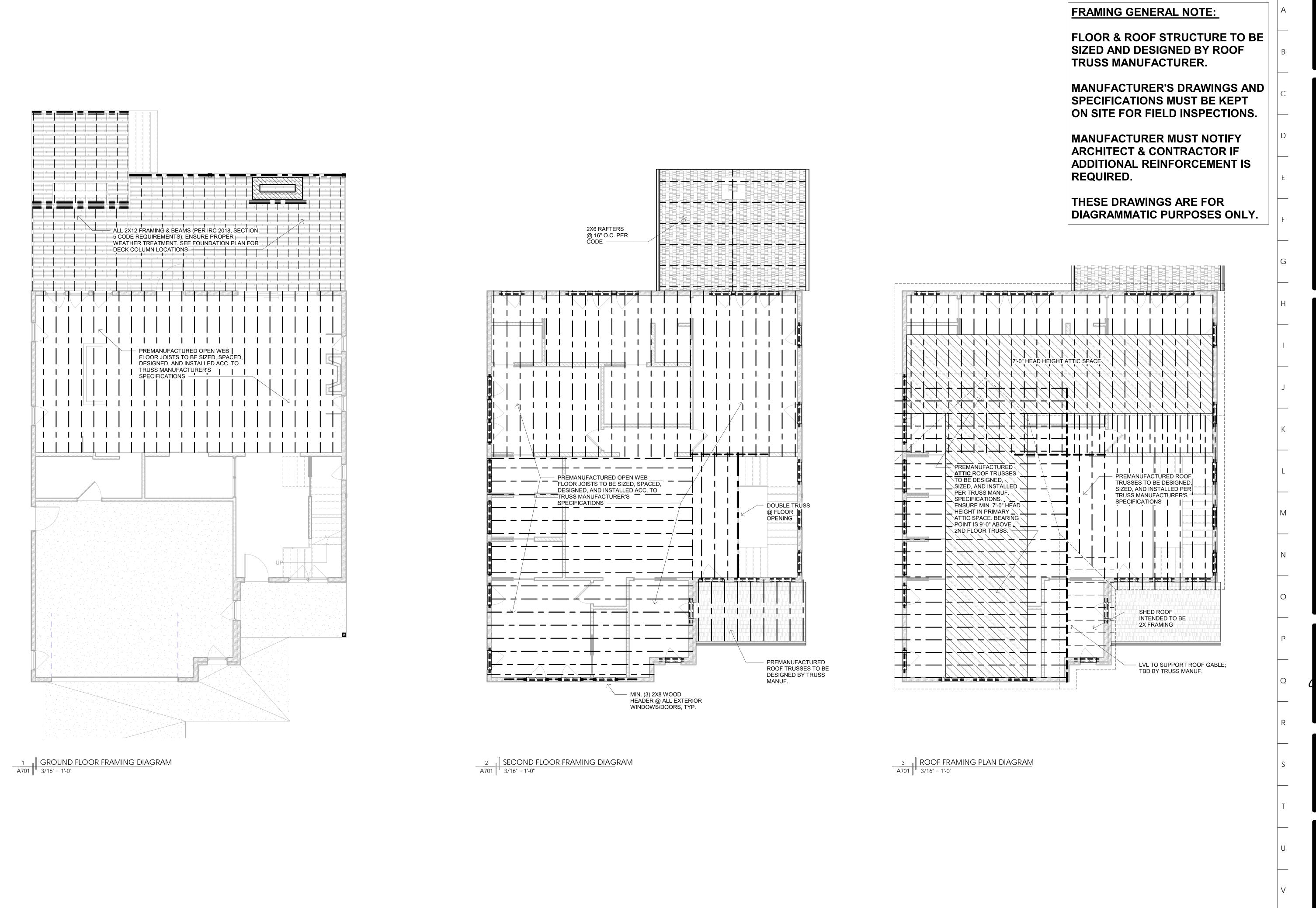
CHECKED BY:

AL/SRD DRAWN BY: 11.19.2024

As indicated

SCHEDULE +

**DIAGRAMS** 



REVISION

No. REVISION

Project:

SAVAGE RESIDENCE

Number: **224010** 

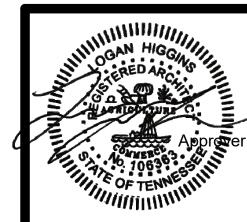
Client: GORDON + STACY SAVAGE

Info:

NEW CONSTRUCTION
SINGLE FAMILY
RESIDENCE

Location: 515 MIMOSA AVENUE KNOXVILLE, TN 37920





CHECKED BY: SRD/LH
DRAWN BY: AL/SRD
10.30.2024

3/16" = 1'-0"

SHEET

A 7 0 1

11 0 F 12

STRUCTURAL DIAGRAMS

# GENERAL NOTES REGARDING STRUCTURAL ELEMENTS

#### **DESIGN CODES & SPECIFICATIONS**

PROJECT STATE: TENNESSEE

**BUILDING CODE:** 2018 INTERNATIONAL RESIDENTIAL CODE

"MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES"

"BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE"

STEEL CODE:

**DESIGN LOADS:** 

"SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS"

WOOD CODE:

"NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION WITH 2012

ADDITIONAL APPLICABLE CODES AND SPECIFICATIONS ARE LISTED IN THE 2018 IRC MATERIAL PROPERTIES, AS STATED IN THESE CONSTRUCTION DOCUMENTS, ARE BASED UPON MATERIALS CURRENTLY AVAILABLE FOR CONSTRUCTION AND MAY NOT CORRESPOND WITH TABLES PROVIDED IN THE CODES AND SPECIFICATIONS LISTED ABOVE. WHERE POSSIBLE, THESE CODES HAVE BEEN USED IN THEIR ENTIRETY. WHERE THESE CODES REFERENCE OBSOLETE INFORMATION, INFORMATION BASED UPON CURRENT INDUSTRY STANDARDS HAS BEEN SUBSTITUTED AS NECESSARY.

#### **DESIGN LOADS:**

**STRUCTURAL DESIGN CODES:** 2018 EDITION OF IBC & ASCE 7-10

ROOF: 20 psf ROOF 100 psf ELEVATED SLABS RESIDENTIAL FLOOR

#### **DRAWINGS**

- CHANGES TO THE CONTRACT DOCUMENTS SHALL BE CLOUDED ON SHOP DRAWINGS OR REQUESTED IN WRITING. THE CONTRACTOR IS LIABLE FOR ANY DEVIATIONS UNLESS REVIEWED AND ACKNOWLEDGED BY THE HEYOH OR CONTRACTED ENGINEERS. SHOP DRAWING SUBMITTALS SHALL BE CHECKED FOR CONFORMANCE WITH THE DESIGN CONCEPT AND THE INFORMATION SHOWN ON THE CONSTRUCTION DOCUMENTS
- ALL STRUCTURAL OPENINGS AROUND OR AFFECTED BY MECHANICAL, ELECTRICAL, AND PLUMBING EQUIPMENT SHALL BE VERIFIED WITH EQUIPMENT PURCHASED BEFORE PROCEEDING WITH STRUCTURAL WORK AFFECTED.
- HEYOH LLC OR ANY OF ITS EMPLOYEES SHALL NOT HAVE CONTROL OR BE RESPONSIBLE FOR CONSTRUCTION MEANS AND METHODS, TECHNIQUES, PROCEDURES, OR SEQUENCES FOR THE ACTS OR OMISSIONS OF THE CONTRACTOR OR ANY OTHER PERSONS PERFORMING THE WORK, OR FOR THE FAILURE OF ANY OF THEM TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- RE: ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR EMBEDS, OPENINGS, SLEEVES, ETC NOT SHOWN ON THE STRUCTURAL DRAWINGS.

#### **EXISTING CONDITIONS:**

IN ANY SITUATION WHERE EXISTING CONDITIONS AND/OR STRUCTURES ARE TO BE CONSIDERED, CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS AND IN THE CASE OF ANY DISCREPANCIES, CONTRACTOR SHALL NOTIFY HEYOH OR ENGINEER IMMEDIATELY.

#### **BUILDING SYSTEMS**

CONTRACTOR SHALL PROVIDE NECESSARY BRACING & SHORING AS REQ'D. UNTIL BLDG. SYSTEMS HAVE BEEN COMPLETED. STRUCTURE SHALL NOT BE CONSIDERED STABLE UNTIL ALL STRUCTURAL ELEMENTS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

# **FOUNDATIONS**

- A. THE FOUNDATION DESIGN IS BASED UP AN ASSUMED ALLOWABLE SOIL BEARING PRESSURE OF 2,000 PSF FOR SPREAD AND STRIP FOOTINGS. CONTRACTOR IS RESPONSIBLE FOR ENGAGING A GEOTECHNICAL TESTING AGENCY TO VERIFY ASSUMED ALLOWABLE BEARING PRESSURE AND TO ENSURE THAT ANTICIPATED TOTAL SETTLEMENT WILL NOT EXCEED 1".
- COORDINATE ALL FOOTING STEPS W/ UTILITIES.
- IF FOOTING ELEVATIONS SHOWN OCCUR IN DISTURBED, UNSTABLE, OR UNSUITABLE SOIL, THE ENGINEER SHALL BE NOTIFIED.
- D. CONTRACTOR TO COORDINATE LOCATION AND SIZE OF FOOTING STEPS AND SHOULD ADJUST AS REQUIRED TO MAINTAIN 1'-0" MINIMUM COVER OVER TOP OF FOOTING AND MEET LOCAL FROST DEPTH CRITERIA.

#### **CONCRETE**

- UNLESS NOTED OTHERWISE, ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI AT 28 DAYS.
- SLAB-ON-GRADE, ALL CONCRETE EXPOSED TO WEATHER, CONCRETE OVER METAL DECKS

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- & ALL CONCRETE WALLS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI. ALL CONCRETE EXPOSED TO WEATHER SHALL HAVE LIMESTONE AGGREGATE AND
- LIMIT AIR CONTENT TO 3% FOR SLAB-ON-GRADE CONCRETE

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- MAXIMUM W/C RATIO FOR SLAB-ON-GRADE SHALL BE 0.50.
- MAXIMUM W/C RATIO FOR ALL OTHER CONCRETE SHALL BE 0.55
- PROVIDE 3/4" CHAMFER AT ALL EXPOSED CORNERS OF BEAMS, WALLS, ETC.
- ALL SLAB-ON-GRADE CONSTRUCTION SHALL FOLLOW THE RECOMMENDATIONS OF "GUIDE FOR CONCRETE FLOOR AND SLAB CONSTRUCTION, ACI 302.1R-04"
- A MIN. 6 mil VAPOR BARRIER SHALL BE PROVIDED BELOW SLAB-ON-GRADE AT ALL LOCATIONS. VAPOR BARRIER SHALL BE LAPPED AND TAPED AS REQUIRED BY MANUFACTURER. RE: ARCH FOR ADDITIONAL VAPOR BARRIER REQUIREMENTS
- UNLESS NOTED OTHERWISE BY STRUCTURAL DOCUMENTS, MINIMUM COVER FOR REINFORCING SHALL BE AS FOLLOWS:
- CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH EXPOSED TO EARTH OR WEATHER
- #5 OR SMALLER #6 OR LARGER
- NOT EXPOSED TO EARTH OR WEATHER OR IN CONTACT WITH GROUND SLABS, WALLS, JOISTS

#11 OR SMALLER **ALL OTHER** 

PRIMARY REINFORCEMENT, TIES, STIRRUPS, SPIRALS 1 1/2"

#### REINFORCING STEEL

BEAMS, COLUMNS

- WELDED WIRE FABRIC SHALL BE IN ACCORDANCE WITH ASTM A185. WIRE FABRIC LOCATED IN CONCRETE SLABS SHALL BE LOCATED IN THE CENTER OF THE SLAB, U.N.O. BY STRUCTURAL DOCUMENTS. SUPPORTS USED SHALL BE SPACED A MAXIMUM OF 3'-0" O.C. IN ANY DIRECTION. ALL OTHER WIRE FABRIC SHALL MEET THE MINIMUM COVER REQUIREMENTS AS LISTED UNDER THE CONCRETE SECTION OF THIS SHEET. ALL WELDED WIRE FABRIC SHALL BE LAPPED ON CROSS WIRE SPACING PLUS 6" (10", MIN)
- REINFORCING STEEL SHALL COMPLY WITH ASTM A615 GRADE 60 WITH THE FOLLOWING REQUIREMENTS: (a) ACTUAL YIELD STRENGTH BASED ON MILL TESTS DOES NOT EXCEED 78 ksi. RETESTS SHALL NOT EXCEED THIS VALUE BY MORE THAN ADDITIONAL 3000 psi, (b) Fu / Fy SHALL NOT BE LESS THAN 1.25. (Fy = ACTUAL YIELD TENSILE STRENGTH, Fu = ACTUAL ULTIMATE TENSILE STRENGTH)
- REINFORCING STEEL AND ACCESSORIES SHALL BE DETAILED, FABRICATED, AND PLACED IN ACCORDANCE WITH THE LATEST EDITION OF THE A.C.I. DETAILING MANUAL
- CONCRETE: ALL TENSION REINFORCEMENT LAPS SHALL BE PER THE CONCRETE LAP SCHEDULE. LAP COMPRESSION REINFORCEMENT 22 BAR DIAMETERS (18" MIN.) REINFORCING SHALL BE CONTINUOUS AROUND CORNERS AND INTERSECTIONS
- ALL REINFORCEMENT SHALL BE HELD SECURELY IN POSITION WITH STANDARD ACCESSORIES IN CONFORMANCE WITH CRSI MANUAL OF STANDARD PRACTICE AND ACI 315 DURING THE PLACING OF CONCRETE.
- ALL HOOKS IN REINFORCEMENT SHALL BE AN ACI STANDARD HOOK, UNLESS NOTED
- WELDING REINFORCEMENT IS NOT PERMITTED UNLESS USING ASTM A706 GRADE 60

### BRACING CONCRETE AND MASONRY WALLS

CONTRACTOR SHALL PROVIDE ANY NECESSARY TEMPORARY BRACING FOR ALL WALLS BACK FILLING SHALL NOT OCCUR UNTIL PERMANENT LATERAL RESTRAINTS ARE INSTALLED.

#### **TIMBER**

- A. ALL TIMBER MEMBERS SHALL BE DOUGLAS FIR-LARCH NO.1 & BETTER OR EQUAL. ALLOWABLE WOOD STRESSES AS PROVIDED IN THE NATIONAL DESIGN STANDARD FOR WOOD CONSTRUCTION (NDS), SUPPLEMENT, TABLE 4D.
- THE DESIGN AND CONSTRUCTION OF TIMBER MEMBERS AND CONNECTIONS SHALL FOLLOW ALL REQUIREMENTS OF THE AMERICAN INSTITUTE OF TIMBER CONSTRUCTION
- ALL EXTERIOR TIMBER TO BE PROTECTED FROM WEATHER EXPOSURE

### STRUCTURAL STEEL:

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- ALL ANCHOR BOLTS SHALL BE ASTM F1554-GR36, UNLESS NOTED OTHERWISE PROVIDE MIN. 1-1/2" NON-SHRINK GROUT UNDER COLUMN BASE PLATES, U.N.O. FABRICATOR SHALL SUPPLY ADEQUATE GROUT BED FOR INSTALLATION AND ADJUSTMENT
- OF LEVELING NUTS. ALL PLATES AND ANGLES SHALL CONFORM TO ASTM A36. ALL STRUCTURAL STEEL SHAPES SHALL CONFORM TO ASTM A992, GRADE 50. RECTANGULAR HOLLOW STRUCTURAL SECTIONS SHALL CONFORM TO ASTM A500, GRADE B WITH YIELD STRENGTH

= 46 KSI. ROUND HOLLOW STRUCTURAL SECTIONS SHALL CONFORM TO ASTM A500,

- GRADE B WITH YIELD STRENGTH = 42 KSI. ALL WELDS SHALL BE MADE IN ACCORDANCE WITH THE LATEST PRACTICES OF A.W.S. USE E-70XX SERIES ELECTRODES.
- ALL STEEL, INCLUDING FASTENERS, EXPOSED TO WEATHER SHALL BE HOT DIP
- GALVANIZED. WELDING SHALL BE PERFORMED BY OPERATORS QUALIFIED IN ACCORDANCE WITH AWS TESTS FOR THE TYPES OF WELDING REQUIRED FOR THIS PROJECT. ALL WELDERS MUST BE CERTIFIED FOR THE TYPE OF WELDING SPECIFIED AND SHALL BE IN ACCORDANCE WITH AN APPROVED WPS. ALL QUALITY PROCEDURES AND PERSONNEL SHALL BE IN ACCORDANCE WITH AWS D1.1.

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#### **WOOD FRAMING**

- A. THE FOLLOWING NOTES SHALL APPLY TO ALL WOOD FRAME APPLICATIONS, U.N.O. ELSEWHERE IN THESE CONSTRUCTION DOCUMENTS.
- B. ALL SHEARWALL AND BEARING WALL WOOD FRAMING (INCLUDING HEADERS) SHALL BE NO. 2 K.D. SOUTHERN PINE OR EQUAL. ALLOWABLE WOOD STRESSES AS PROVIDED IN THE NATIONAL DESIGN STANDARD FOR WOOD CONSTRUCTION (NDS), SUPPLEMENT TABLE 4B INCLUDING ALL ADDENDA. ALL REMAINING WOOD FRAMING SHALL BE CONTRACTOR'S CHOICE, U.N.O.
- FRAMING CONNECTIONS FOR 2x WOOD FRAMING SHALL USE SIMPSON FRAMING FASTENERS OR EQUAL. WHERE FRAMING CONNECTORS ARE NOT SHOWN USE THE MINIMUM FASTENERS AND NAILING PATTERNS SHOWN ON THE GENERAL NOTES SHEET AND IN ACCORDANCE WITH CHAPTER 23 OF THE BUILDING CODE. IN THE EVENT OF ANY DISCREPANCIES WITH BETWEEN THE BUILDING CODE AND THE GENERAL NOTES SHEET THE MORE STRINGENT REQUIREMENT SHALL APPLY.
- D. PLYWOOD ROOF SHEATHING SHALL BE APA RATED SHEATHING, MIN. 5/8" THICKNESS, TYP.
- PLYWOOD WALL SHEATHING SHALL BE APA RATED SHEATHING, MIN. 7/16" THICKNESS,
- ALL EXTERIOR WALL AND ROOF SHEATHING SHALL BE EXPOSURE I OR EXTERIOR GRADE
- PLYWOOD ROOF SHEATHING SHALL BE FASTENED TO WOOD FRAMING MEMBERS TO ACT AS AN UNBLOCKED PLYWOOD DIAPHRAGM. FASTEN PLYWOOD TO FRAMING MEMBERS WITH 8d NAILS SPACED AT 6" ON CENTER MAXIMUM AT ALL SUPPORTED EDGES AND 12" O.C. WITHIN THE FIELD OF THE PANEL, U.N.O. FASTENER PENETRATION INTO WOOD FRAMING SHALL BE 1 1/2" MINIMUM. FACE GRAIN OF PLYWOOD SHALL BE PERPENDICULAR TO THE FRAMING MEMBERS, U.N.O.
- ALL WOOD FRAMING AND RELATED COMPONENTS SHALL CONFORM TO THE NATIONAL DESIGN SPECIFICATION (NDS) FOR WOOD CONSTRUCTION.
- STUDS SHALL HAVE FULL BEARING ON A 2" NOMINAL OR LARGER PLATE OR SILL. PLATE OR SILL WIDTH TO EQUAL OR EXCEED STUD WIDTH.
- COMBUSTIBLE FRAMING SHALL BE A MINIMUM OF 2", BUT SHALL NOT BE LESS THAN THE DISTANCE SPECIFIED IN CHAPTER 21 OF THE BUILDING CODE AND THE INTERNATIONAL MECHANICAL CODE, FROM FLUES, CHIMNEYS AND FIREPLACES, AND 6" AWAY FROM FLUE OPENINGS.
- WOOD COLUMNS AND POSTS SHALL BE FRAMED TO PROVIDE FULL END BEARING
- ALL FOUNDATION PLATES/SILLS SHALL BE BOLTED TO THE FOUNDATION w/ 1/2" DIA. BOLTS @ 4'-0" O.C. MAX. SIMPSON MASA MUDSILL ANCHORS @ 3'-0" O.C., OR EQ., MAY BE SUBSTITUTED @ EXTERIOR WALLS. MINIMUM OF 2 ANCHORS PER WALL
- SILL PLATES SHALL OVERLAP AT CORNERS AND WALL INTERSECTIONS.
- ALL SLEEPERS AND SILLS SHALL BE MADE OF PRESSURE TREATED WOOD. JOISTS AS USED IN THIS SECTION REFERS TO 2X FRAMING MEMBERS USED AS ROOF RAFTERS OR FLOOR JOISTS. NOTCHES AT JOIST ENDS SHALL NOT EXCEED ONE FOURTH THE DEPTH OF JOIST. HOLES BORED FOR PIPE OR CABLE SHALL BE WITHIN THE MIDDLE THIRD OF THE JOIST DEPTH AND THE DIAMETER OF SUCH HOLES SHALL NOT EXCEED ONE THIRD THE JOIST DEPTH OR 1", WHICHEVER IS GREATER. ALL OTHER REQUIRED HOLES OR NOTCHES MUST BE APPROVED BY STRUCTURAL ENGINEER. CONTRACTOR NOTE: THIS SECTION DOES NOT APPLY TO ENGINEERED WOOD MEMBERS: LVL OR PSL. CONTACT
- ENGINEER PRIOR TO NOTCHING OR DRILLING IN ENGINEERED WOOD MEMBERS POST BASES AND CAPS FOR 4X4 AND 6X6 POSTS SHALL BE SIMPSON ABX SERIES AT BASE AND PCX SERIES AT CAP, TYP. U.N.O. EQUIVALENT MANUFACTURERS MAY BE USED.
- HEADERS FRAMING INTO THE SIDE OF A COLUMN SHALL BE SUPPORTED WITH A SIMPSON HUCX SERIES CONCEALED HANGER, OR EQ. MODEL, TYP. U.N.O. EQUIVALENT MANUFACTURERS MAY BE USED.
- PRESSURE TREAT LUMBER IN ACCORDANCE WITH THE MANUAL OF RECOMMENDED
- PRACTICE OF THE AMERICAN WOOD PRESERVERS ASSOCIATION (AWPA). ALL NAILS SUBJECT TO WEATHERING TO BE GALVANIZED (TYP. U.N.O.). ALL SHEARWALL
- NAILS TO BE GALVANIZED, TYP. ALL NAILS SPECIFIED WITHIN DRAWINGS SHALL BE COMMON NAILS (TYP, U.N.O.).

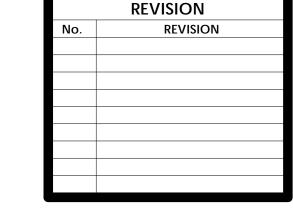
## WOOD NAILING SCHEDULE:

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A. THIS NAILING SCHEDULE IS TYPICAL UNLESS OTHERWISE NOTED OR DETAILED. ALL NAILS SHALL BE COMMON WIRE NAILS (NO CLIPPED HEAD NAILS).

**CONNECTION TYPE NAILING** JOIST TO SILL OR GIRDER. TOE NAIL EACH SIDE (3) 8d BRIDGING TO JOIST, TOE NAIL EACH END (2) 8d 16d @ 16" O.C. SOLE PLATE TO JOIST OR BLOCKING, FACE NAIL TOP PLATE TO STUD, END NAIL (2) 16d DOUBLE STUDS, FACE NAIL 16d @ 24" O.C. DOUBLED TOP PLATES, FACE NAIL (2) 16d @ 24" O.C CONTINUOUS HEADER, TWO PIECES 16d @ 16" O.C. CEILING JOISTS TO PLATE, TOE NAIL (3) 8d CONTINUOUS JOISTS TO PLATE, TOE NAIL (3) 8d CEILING JOISTS, LAPS OVER PARTITIONS, FACE NAIL (3) 16d RAFTER TO PLATE, TOE NAIL (3) 8d **BUILT-UP CORNER STUDS** 16d @ 24" O.C. CEILING JOISTS TO PARALLEL RAFTERS. FACE NAIL (3) 16d PLYWOOD SHEATHING SEE PLANS

TYPICAL NAIL SHANK DIAMETER AND LENGTHS							
TYPE	DESCRIPTION	6d	8d	10d	16d		
COMMON	LENGTH	2"	2 1/2"	3"	3 1/2"		
NAILS	DIAMETER	0.113"	0.131"	0.148"	0.162"		
	HEAD DIAMETER	0.266"	0.281"	0.312"	0.344"		



Project SAVAGE

224010 Number:

**RESIDENCE** 

Client: **GORDON + STACY** 

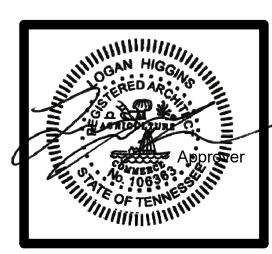
**SAVAGE** 

NEW CONSTRUCTION SINGLE FAMILY

RESIDENCE

Location: 515 MIMOSA AVENUE KNOXVILLE, TN 37920





CHECKED BY: AL/SRD DRAWN BY: 10.30.2024

GEN. STRUCT.

NOTES