RESIDENTIAL

2017 PPRBC

Parcel: 4217006023

Address: 12124 OREGON WAGON TRL, ELBERT

Plan Track #: 136461 **Received: 29-Jul-2021** **(ANDREAL)**

Description:

GARAGE CONVERSION

Contractor:

Type of Unit:

Required PPRBD Departments (3)

Floodplain

(N/A) RBD GIS

Construction

Released for Permit

07/30/2021 8:08:33 AM

Pikes Peak REGIONAL Building Department

michaela

CONSTRUCTION

Mechanical

Released for Permit

07/30/2021 8:38:14 AM

Pikes Peak REGIONAL Building Department

JustinC

MECHANICAL

Release of this plan does not preclude compliance with all applicable codes, ordinances and other pertinent regulations. This plan set must be present on the job site for every inspection.

SPECIFICATIONS

SOILS REPORT: THE SOILS REPORT FORMS PART OF THIS FOUNDATION PLAN; READ IT CAREFULLY. ASK THE ENGINEER ABOUT ANY PART YOU DO NOT UNDERSTAND. CALL THE ATTENTION OF THE ENGINEER TO ANY CHANGES IN SOIL CONDITIONS FROM THAT WHICH ARE DISCUSSED IN THE SOILS REPORT. GENERALLY, AN EXAMINATION OF THE FOUNDATION EXCAVATION BY THE ENGINEER IS REQUIRED PRIOR TO BEGINNING CONSTRUCTION.

SITE DEVELOPMENT: ROUGH GRADE TO LEAVE GOOD DRAINAGE DURING AND AFTER CONSTRUCTION. FINAL GRADE AFTER CONSTRUCTION SHALL BE TWELVE INCHES OF DROP AWAY FROM BUILDING IN THE FIRST TEN FEET. REMOVE TOPSOIL AND ORGANIC MATERIAL FROM WHERE COMPONENTS OF YOUR FOUNDATION AND SLABS WILL GO. IF YOU DISCOVER GROUND WATER, NOTIFY THE ENGINEER. **DO NOT** BUILD ON FROZEN SOIL OR MUD.

SOILS: SOILS ARE A CONSTRUCTION MATERIAL; HOWEVER, WITHOUT PROPER USE, THEY CAN BEHAVE IN UNPREDICTABLE FASHIONS. HERE'S WHAT WE CONSIDER PROPER USE:

– FILL AND COMPACT SOFT SPOTS TO THE DENSITY REQUIRED FOR THAT AREA OF THE FOUNDATION.

– SOIL UNDER LOAD BEARING COMPONENTS OF THE STRUCTURE, SUCH AS WALLS AND PADS, SHALL BE COMPACTED TO 95% MODIFIED PROCTOR DENSITY. BACKFILL AGAINST FOUNDATION WALLS SHALL BE COMPACTED TO 80% MODIFIED PROCTOR DENSITY.

– BACKFILL SHOULD BE MADE IN 6" LAYERS, CALLED LIFTS, WITH EACH LIFT PROPERLY COMPACTED TO THE REQUIRED DENSITY, USING THE PROPER COMPACTING EQUIPMENT. FOUNDATION WALLS DESIGNED TO HAVE BACKFILL ON BOTH SIDES SHALL HAVE FILL BROUGHT UP EQUALLY ON BOTH SIDES, RATHER THAN BACKFILLING ONE SIDE PRIOR TO BACKFILLING THE OTHER. GENERALLY, USE OF A "JUMPING JACK" FOR COHESIVE SOILS (i.e., CLAYEY OR SILTY) OR A VIBRATORY PLATE COMPACTOR FOR GRANULAR SOILS (i.e., SANDY) WILL PROVIDE GOOD RESULTS. THE SOIL SHOULD BE AT THE RIGHT MOISTURE CONTENT; IF IT SEEMS WET OR DRY, NOTIFY THE SOILS ENGINEER FOR ADVICE. **CAUTION:** USING BOOM MOUNTED COMPACTING EQUIPMENT, SUCH AS A SHAKER HEAD OR "STINGER", OR POUNDING THE SOIL WITH A BACKHOE BUCKET EXERTS A TREMENDOUS FORCE; IF USED TO COMPACT BACKFILL AROUND FOUNDATIONS, WALL FAILURE IS LIKELY. LIKEWISE, AUTOS, TRUCKS, FRONT END LOADERS, ETC., ARE NOT COMPACTING EQUIPMENT, AND IF THEY ARE DRIVEN CLOSE (WITHIN TEN FEET) TO A FOUNDATION WALL, IT IS LIKELY THE WALL WILL BOW AND CRACK.

– COMPACTION SHALL BE ACCOMPLISHED SO AS TO FORM A BERM OF DENSE SOIL AGAINST THE SIDE OF THE STRUCTURE TO PROVIDE ADEQUATE LATERAL SUPPORT. EACH LIFT IN THE PROCESS SHALL BE FINISHED ALONG THE ENTIRE LENGTH OF THE WALL BEFORE STARTING ON THE NEXT LIFT. DO NOT COMPACT TOO TIGHTLY OR IN SUCH A FASHION THAT WEDGING OCCURS AGAINST THE FOUNDATION WALL OR BOWING AND CRACKING OF THE WALL CAN OCCUR. GENERALLY, FLOOR JOISTS AND SLABS MUST BE IN PLACE PRIOR TO BACKFILLING AGAINST THE FOUNDATION; THE FOUNDATION DESIGN WILL LIST SPECIFIC EXCEPTIONS. BLOCK BETWEEN THE FOUNDATION WALL AND PARALLEL FLOOR JOISTS AT FOUR FOOT CENTERS ALONG FULL HEIGHT FOUNDATION WALLS.

– DO NOT ALLOW THE BACKFILL TO BECOME SATURATED WITH WATER AT ANY TIME, DURING OR AFTER CONSTRUCTION. THIS PLACES EXCESSIVE PRESSURE AGAINST THE WALL AND CAN CAUSE CRACKING OR BOWING.

– SILL PLATES SHALL BE ANCHORED WITH 1/2" DIAMETER ANCHOR BOLTS AT A MAXIMUM SPACING OF 48 INCHES AND WITHIN 12 INCHES OF PLATE ENDS, UNLESS OTHERWISE NOTED.

CONCRETE: CONCRETE SHALL BE A MINIMUM OF 3,000 PSI WITH A MAXIMUM SLUMP OF 4 INCHES FOR WALLS, PADS AND SHALLOW PIERS AND A MINIMUM OF 3,500 PSI WITH A MAXIMUM 4 INCH SLUMP FOR DEEP DRILLED PIERS UNLESS OTHERWISE SPECIFIED ON THE DRAWINGS. SLUMP MAY BE INCREASED TO 6 INCHES WITH POZZOLAN ADDITIVES IF NO ADDITIONAL WATER IS USED IN THE MIX. BEWARE OF CONCRETE TRUCK OPERATORS WHO WISH TO ADD WATER TO THE CONCRETE AT THE SITE TO MAKE IT MORE WORKABLE. ADDITIONAL WATER WILL DECREASE THE STRENGTH OF THE CONCRETE. THE CONCRETE MUST STAY IN THE FORMS FOR A MINIMUM OF 72 HOURS TO CURE OR BE COVERED WITH CURING SHEETS OR SPRAYED WITH A CURING COMPOUND. THE WATER IN THE CONCRETE IS REQUIRED TO COMPLETE THE CHEMICAL REACTION, AND IF THE CONCRETE IS UNCOVERED TOO SOON AFTER PLACEMENT, IT WILL DRY OUT TO THE DETRIMENT OF THE CONCRETE'S STRENGTH AND APPEARANCE. FOUNDATIONS WHICH HAVE FORMS STRIPPED EARLY END UP WITH AS LITTLE AS HALF THE STRENGTH OF FOUNDATION WALLS WHICH ARE PROPERLY CURED. SIMILARLY, DO NOT ALLOW THE CONCRETE TO FREEZE DURING THE FIRST SEVEN DAYS. THE WATER WITHIN THE CONCRETE FREEZES AND BECOMES UNAVAILABLE FOR THE CHEMICAL REACTION, POSSIBLY CAUSING A DETRIMENT TO THE CONCRETE'S STRENGTH AND APPEARANCE. EXCEPT IN VERY MASSIVE STRUCTURES, THE HEAT OF HYDRATION OF CONCRETE IS GENERALLY NOT SUFFICIENT TO PREVENT FREEZING DURING A TYPICAL COLORADO WINTER NIGHT.

DO NOT LET THE CONCRETE DROP FARTHER THAN TEN FEET WHEN PLACING IT. AVOID DROPPING CONCRETE ON REINFORCING STEEL AS MUCH AS POSSIBLE, AS THIS WILL TEND TO DISPLACE THE STEEL. AFTER PLACEMENT, ROD OR VIBRATE THE CONCRETE TO ELIMINATE JOINTS AND AIR POCKETS, BUT DO NOT CAUSE THE INGREDIENTS TO SEPARATE OR WATER TO POOL AT THE TOP. EXCESSIVE VIBRATION CAN CAUSE DAMAGE TO THE FORMS. **DO NOT** PLACE STRESS AGAINST CONCRETE FOR AT LEAST SEVEN DAYS AFTER PLACEMENT. USE FORMS WHICH ARE PROPERLY OILED AND BRACED. LEAVE THEM IN PLACE UNTIL THE CONCRETE HAS CURED TO THE POINT WHERE IT CAN SUPPORT ITS OWN WEIGHT. REMOVE FORMS CAREFULLY SO AS NOT TO DAMAGE THE CONCRETE; PATCH ANY VOIDS WITH A GROUT USING THE SAME MIXTURE AS THE ORIGINAL CONCRETE, BUT WITHOUT THE COARSE AGGREGATE. PUT CONTROL JOINTS IN SLABS AT NO MORE THAN 12 FEET EACH DIRECTION. USE OF POLY FIBER MESH IN SLABS LESS THAN 6" THICK AND WELDED WIRE FABRIC IN SLABS 6" THICK OR GREATER IS RECOMMENDED TO REDUCE SHRINKAGE CRACKING. IF DEEP DRILLED PIERS (CAISSONS) ARE USED IN THE FOUNDATION, A MAXIMUM OF FOUR HOURS BETWEEN THE DRILLING OF THE HOLE AND THE PLACEMENT OF THE CONCRETE IS ALLOWED, WITH LESS THAN ONE HOUR BEING DESIRED. IF GROUNDWATER IS ENCOUNTERED, IMMEDIATE FILLING IS REQUIRED. UP TO ONE INCH OF WATER IS AUTHORIZED IN CAISSON HOLES PRIOR TO CONCRETE PLACEMENT; DEEPER WATER MUST BE PUMPED OR OTHERWISE FORCED OUT.

STEEL: REINFORCING STEEL IS GRADE 60, UNLESS OTHERWISE CALLED OUT ON THE PLANS. STEEL SHALL BE FREE OF RUST, DIRT, OIL, SCALE, OR ANYTHING ELSE WHICH WILL IMPAIR ITS ABILITY TO ADHERE TO CONCRETE. ALL REINFORCING STEEL SHALL BE SECURELY TIED AT ALL INTERSECTIONS AND SUPPORTED TO PREVENT DISPLACEMENT DURING CONCRETE PLACING OPERATIONS. STEEL MUST NOT BE ANY CLOSER THAN THREE INCHES TO SURFACES WHICH WILL BE EXPOSED TO EARTH AND 2 INCHES FROM OTHER SURFACES. SEE THE REINFORCEMENT DETAILS FOR ADDITIONAL PLACEMENT REQUIREMENTS. OVERLAP AND TIE SPLICES 18 INCHES. BEND AND TIE CORNER 24 INCHES. PLACEMENT OF REINFORCING STEEL ACCORDING TO THE DESIGN IS IMPORTANT IN ORDER TO ALLOW THE STEEL AND CONCRETE TO WORK TOGETHER TO DEVELOP MAXIMUM STRENGTH.

LIABILITY: ALL DESIGN AND CONSTRUCTION REPRESENTS COMPROMISE. THIS FOUNDATION DESIGN HAS BEEN ACCOMPLISHED WITH ECONOMY, CONSTRUCTIBILITY, AND RELIABILITY AS PRIMARY CONSIDERATIONS AND REFLECTS THE CURRENT STANDARDS OF PRACTICE IN THE FRONT RANGE AREA. IT HAS NOT BEEN DESIGNED TO WITHSTAND EVERY CONCEIVABLE EVENT WHICH MIGHT OCCUR, AS THAT WOULD RENDER THE FOUNDATION EXCEPTIONALLY DIFFICULT TO BUILD AND EXCEEDINGLY EXPENSIVE. LIKEWISE, THE DETAILS ARE NOT INTENDED TO PROVIDE STEP–BY–STEP INSTALLATION INSTRUCTIONS; THE IRC/IBC BUILDING CODE PROVIDES OTHER INFORMATION NEEDED FOR FOUNDATION CONSTRUCTION. A WORKING KNOWLEDGE OF THE CODE AS WELL AS PRACTICAL EXPERIENCE IN LOCAL FOUNDATION CONSTRUCTION PRACTICES (IN THE SPECIFIC TYPE OF FOUNDATION BEING BUILT) IS REQUIRED TO COMPLETE THE FOUNDATION. IF YOU OR ANY MEMBER OF THE CONSTRUCTION TEAM HAS **ANY** QUESTION ABOUT ANY PORTION OF THIS FOUNDATION DESIGN, YOU **MUST** CONTACT THIS OFFICE TO RESOLVE THE SITUATION PRIOR TO PROCEEDING WITH CONSTRUCTION. WHILE THE DESIGN OF THIS FOUNDATION SHOULD PROVIDE A STRUCTURE WHICH WILL FUNCTION WELL FOR THE LIFE OF THE BUILDING UNDER NORMAL CIRCUMSTANCES, UNFORESEEN EVENTS, SUCH AS FLOODING, EXCEPTIONAL LOADS, OR EVEN IMPROPER CONSTRUCTION NOT NOTICED DURING BUILDING CAN CAUSE PROBLEMS. THEREFORE, THE LIMITS OF LIABILITY EXTEND TO THE FEE RENDERED FOR THE PROFESSIONAL SERVICES PROVIDED.

MIBAR ENGINEERING LTD.,
6825 SILVER PONDS HEIGHTS
SUITE 101
COLORADO SPRINGS, CO 80908

MIBAR ENGINEERING LTD

OFFICE: (719) 487–0812

COLORADO LICENSED
MOLLY S. TOWLE
11/5/2020
43835
PROFESSIONAL ENGINEER

Project: 20506	Project Name and Address
Sheet: 1 of 2	JASON PORTER
Date: 11/5/2020	DETACHED GARAGE REMODEL
	12124 OREGON WAGON TRAIL
Drawn by: GRR	LOT #22, FILING #2–B,
Checked by: MST	THE TRAILS SUBDIVISION,
	EL PASO COUNTY, COLORADO

SPECIAL NOTE: USING CALCIUM CHLORIDE AS AN ACCELERATING ADMIXTURE IS NOT PERMITTED IN THIS DESIGN.

SPECIAL NOTE: IF AN INDIVIDUAL PERFORMS INSPECTIONS, OTHER THAN MIBAR ENGINEERING OR LOCAL BUILDING OFFICIAL, THAT INDIVIDUAL WILL ASSUME ALL LIABILITY FOR THIS FOUNDATION DESIGN.

DESIGN LOADS:

2015 INTERNATIONAL RESIDENTIAL CODE (IRC)
2017 PIKES PEAK REGIONAL BUILDING CODE (PPRBC)
SITE ELEVATION OVER 7,000 FT

ROOF LOADS:	40 PSF LL / 15 PSF DL
EXTERIOR WALLS:	W/STUCCO - 15 PSF DL
CONCRETE:	150 PCF DL
WIND LOADS:	130 MPH (ULTIMATE), EXPOSURE "C"
SOIL BEARING:	5,000 PSF (UNDISTURBED NATIVE SOIL)

FOUNDATION WALLS:

8" CONCRETE WALL WITH ASPHALT EMULSION WATERPROOFING OR EQUIVALENT (TYP., U.N.O.) (MAX. 4 FT TALL)

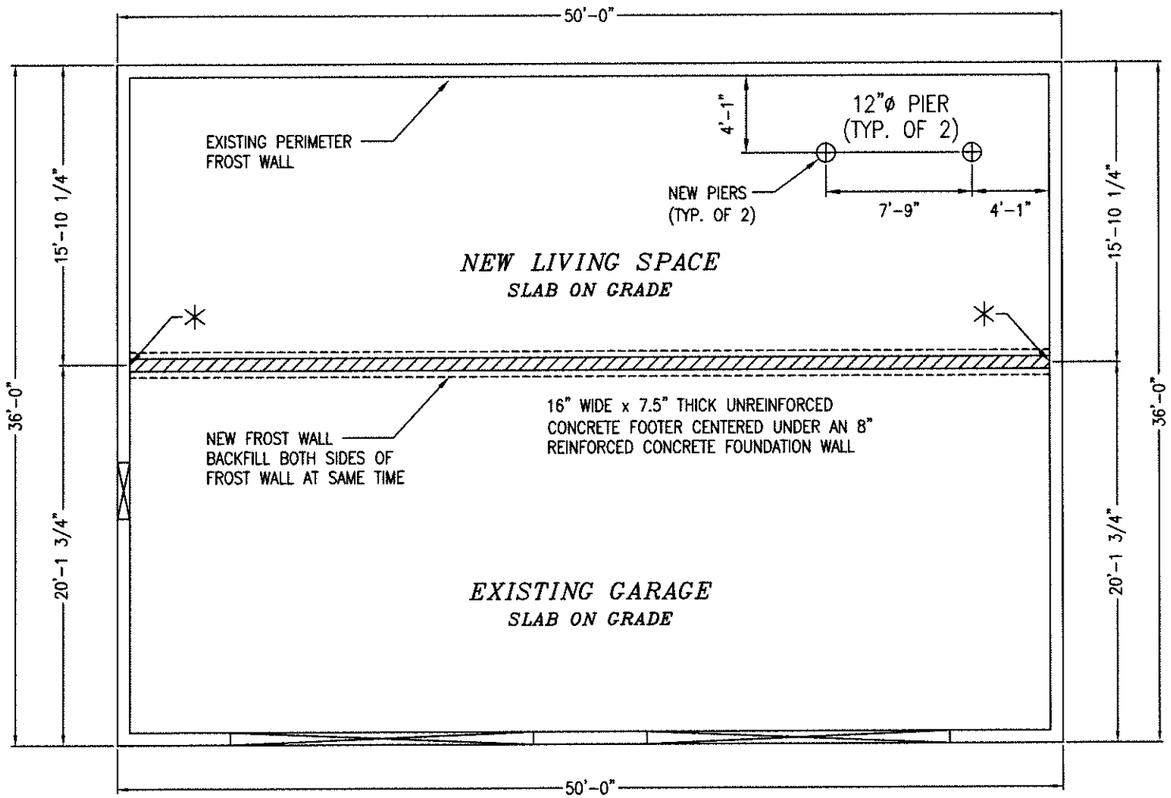
UNREINFORCED FOOTERS:

16" WIDE x 7.5" THICK UNREINFORCED CONCRETE FOOTER CENTERED UNDER AN 8" REINFORCED CONCRETE FOUNDATION WALL (U.O.N.)

✳ TIE NEW WALL TO EXISTING WALL WITH #4/60 DOWELS @ 12" O.C. (MINIMUM 4) AND EPOXY 4" INTO THE EXISTING FOUNDATION WALL AND EXTEND 18" INTO NEW WALL (TWO LOCATIONS)

HORIZONTAL REINFORCEMENTS FOR WALL HEIGHTS:
4' OR LESS -- FOUR #4/60 REBAR
PLACE TWO-#4/60 REBAR 3" TO 6" FROM THE TOP OF THE CONCRETE, AND PLACE TWO-#4/60 REBAR 3" TO 6" FROM THE BOTTOM OF THE CONCRETE

VERTICAL REINFORCEMENTS FOR WALL HEIGHTS:
4'-0" OR LESS -- SEE NOTE BELOW
FOR WALLS WITH NO VERTICAL STEEL (WALLS LESS THAN 4' IN HEIGHT) STUB VERTICAL #4/60 REBAR PIECES (MINIMUM OF 12" IN LENGTH) INTO THE FOOTER AT A MAXIMUM SPACING OF 4' O.C.

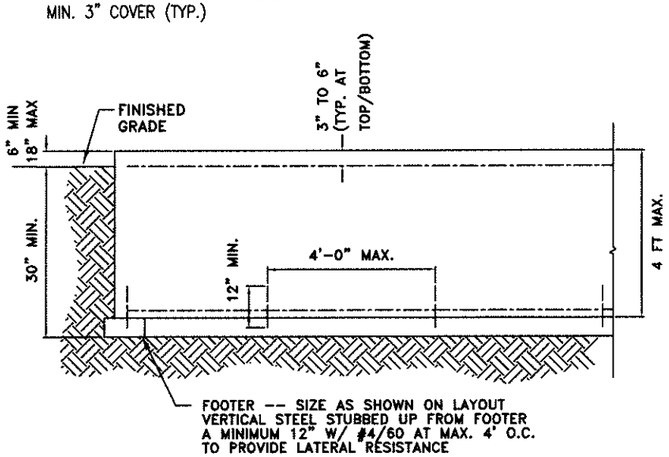


GARAGE REMODEL FOUNDATION DESIGN - PLAN VIEW
1/8" = 1'

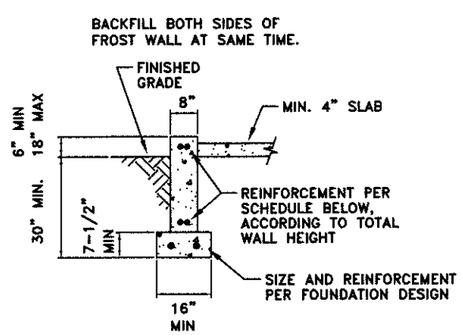
FOOTERS MUST BE PLACED ON UNDISTURBED NATIVE SOIL. AN OPEN HOLE OBSERVATION IS REQUIRED TO VERIFY SOIL CONDITIONS FOR ALL FOUNDATION COMPONENTS BEFORE ANY CONCRETE IS POURED.

BUILDER TO VERIFY ALL DIMENSIONS PRIOR TO ANY CONSTRUCTION. SEE THE ARCHITECTURAL PLANS FOR ANY ADDITIONAL DIMENSIONS.

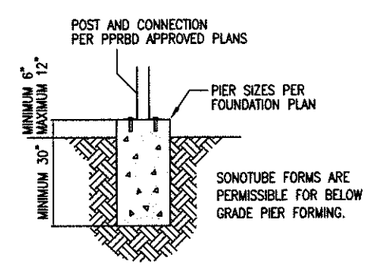
MIN. 18" OVERLAP FOR SPLICES
MIN. 3" COVER (TYP.)



FOUNDATION WALL - FRONT VIEW
NOT TO SCALE



FROST WALL DETAIL
NOT TO SCALE



PIER DETAIL
NOT TO SCALE

General Notes

1. THE SPECIFICATIONS, SOILS REPORT, AND OPEN HOLE LETTER ARE PART OF THIS DESIGN.
2. LOAD BEARING COMPONENTS SUSCEPTIBLE TO THE WEATHER SHALL BE FINISHED TO A MINIMUM OF 30" BELOW AND 6" ABOVE FINISHED GRADE.
3. FOOTER AND PIER SIZES SHOWN ON THIS DESIGN ARE MINIMUM AND MAY BE UP SIZED.
4. WALL THICKNESSES SHOWN ARE NOMINAL. WALL HEIGHTS VARY, REFER TO ARCHITECTURAL DRAWINGS AND DETAIL SHEETS.
5. IF WALL HEIGHTS EXCEED 4 FEET, OR IF ANY UNFORESEEN CONDITIONS ARISE, CONTACT THE ENGINEER.
6. PLACE AND COMPACT BACKFILL IN LIFTS ALONG ENTIRE LENGTH OF WALL. SEE SPECIFICATIONS.

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07/30/2021 8:08:00 AM
Pikes Peak REGIONAL Building Department
michaela
CONSTRUCTION

FOUNDATION DESIGN:
5,000 PSF (GEOQUEST #18-0986, DATED: 11/12/18)

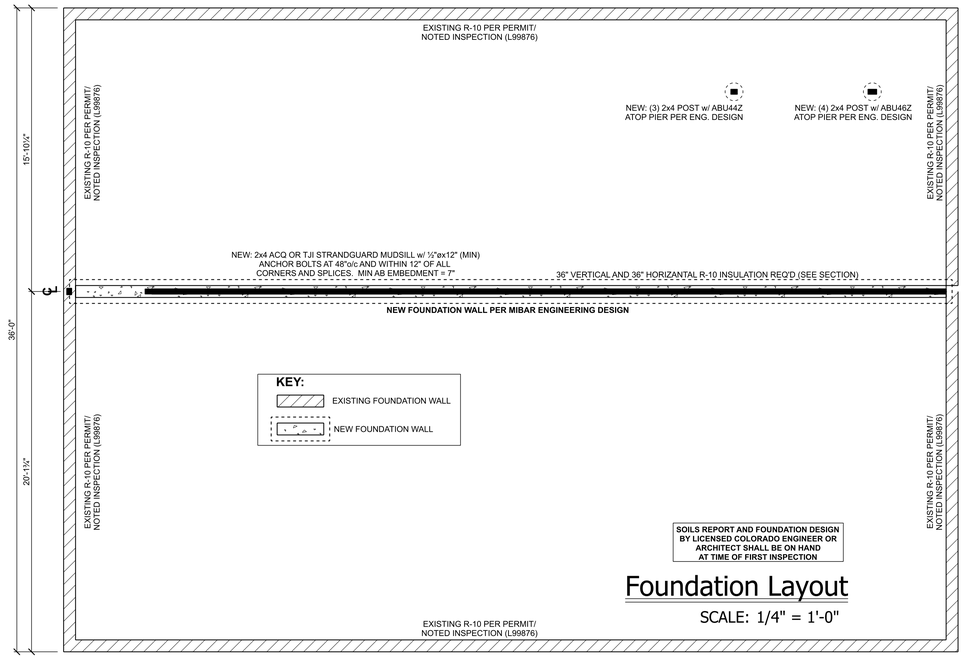
PROVIDE COPY OF OPEN HOLE REPORT TO MIBAR. SOIL BEARING MUST BE 5,000 PSF OR HIGHER FOR THIS FOUNDATION DESIGN TO BE VALID.

No.	Revision/Issue/Change	Date

MIBAR ENGINEERING LTD.
6825 SILVER PONDS HEIGHTS
SUITE 101
COLORADO SPRINGS, CO 80908
MIBAR ENGINEERING
OFFICE: (719) 487-0812

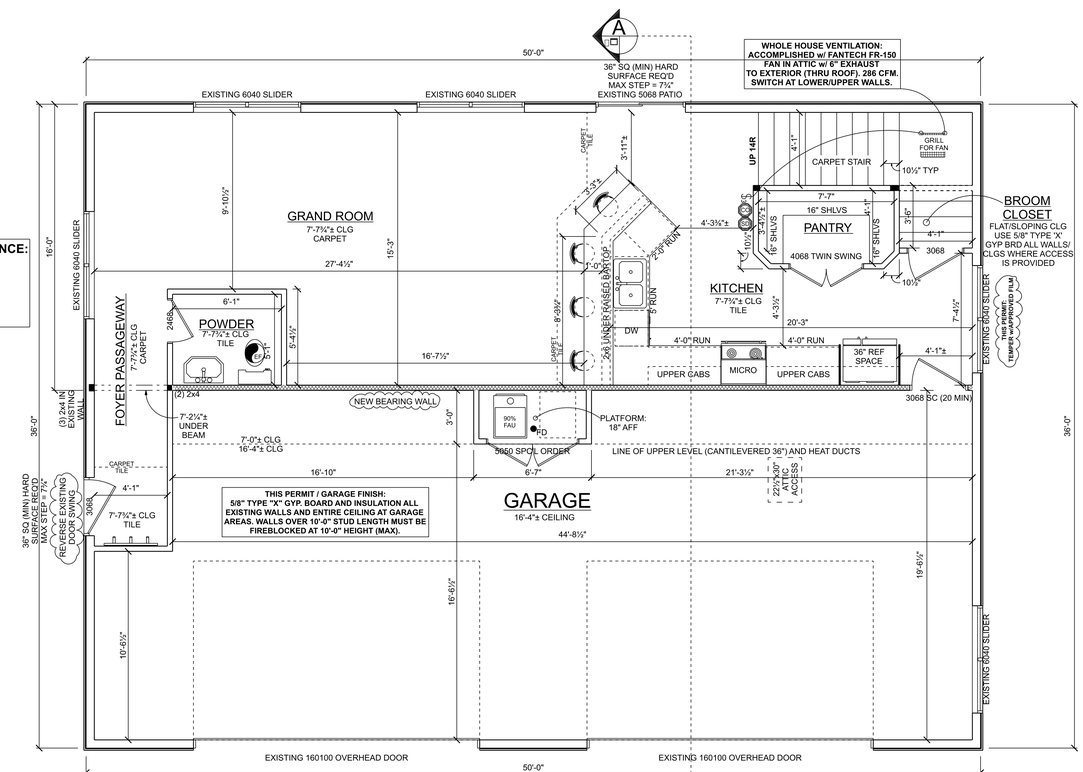
COLORADO LICENSED
MOLLY S. TOLLE
11/5/2020
43835
PROFESSIONAL ENGINEER

Project: 20506	Project Name and Address:
Sheet: 2 of 2	JASON PORTER
Date: 11/5/2020	DETACHED GARAGE REMODEL
Scale: 1/8"=1'	12124 OREGON WAGON TRAIL
Drawn by: GRR	LOT #22, FILING #2-B,
Checked by: MST	THE TRAILS SUBDIVISION,
	EL PASO COUNTY, COLORADO



Foundation Layout

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



Main Level Floor Plan

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

ALL EXTERIOR WINDOWS/DOORS ARE EXISTING.
NO NEW EXTERIOR OPENINGS

BATH EXHAUST TO TERMINATE AT BUILDING EXTERIOR.

LIVING AREA THIS LEVEL: 843.5 SQ.FT.

PREVIOUS PERMIT NUMBERS FOR REFERENCE:

HOUSE PERMIT: G03765
DETACHED 2-CAR: G02224
ADD'N TO TWO CAR DETACHED: L98912
SUBJECT EXISTING BUILDING: L99876

SPECIFICATIONS:

1) BUILDING IS EXISTING. SEE PERMIT L99876.

   Typical EXISTING exterior walls are 2x6 studs at 16" o/c with 7/16" OSB typical. NO additional openings proposed.
2) NEW floor framing shall be 11-7/8" TJI 210 joists at 16" o/c. Floor sheathing shall be 3/4" OSB (tongue and groove) glued and nailed to floor joists per American Plywood Association specifications and recommendations
3) New 2x4 bearing wall atop new concrete foundation wall as shown.
4) All interior walls shall be 2x4 studs at 16" o/c (typical); unless noted to the contrary.
5) Typical wall finish shall be textured 1/2" gypsum board. Use 5/8" type "X" gypsum board at all garage common walls, ceilings, & structural members.
6) All stairs or steps to grade shall have a maximum rise of 7¾" and a minimum run of 10". All stairs shall be a minimum of 3'-1" wide, to include landings.
7) Windows shall be by builder with double pane insulated low E glass. All windows must have a U-value as specified in the Energy Calcs.
8) Fascia shall be 5/4"x7½" textured ProTrim over 2x6 sub-fascia w/ 4/4x3½" overlay on front gables ONLY. Soffit material shall be 7/16" masonite (typical).
9) Exhaust duct up through attic space, minimum R-6 insulation & 25' max run.

FLOOR FRAMING NOTES:

1) Typical floor system shall be framed 11-7/8" TJI 210 joists @ 16"o/c. (Floor will be engineered to minimum of L/480 live load deflection.) Floor sheathing shall be 3/4" OSB (tongue and groove) glued and nailed to floor joists per American Plywood Association specifications and recommendations. See plan for ledgers and related connections to existing bearing walls.
2) Exterior headers are EXISTING. One new header as noted. All others are noted. Beams and headers shown on the framing plan shall take precedence.
4) Insulate building as noted.

NOTE: PROVIDE COMBUSTION AIR PATH TO ALL GAS FIRED EQUIPMENT PER: 2015 IRC G2407.

NOTE: ALL BATH EXHAUST TO TERMINATE AT EXTERIOR.

NOTE: MINIMUM 100 SQUARE INCH MAKEUP AIR REQUIRED AT CLOTHES DRYER LOCATION.

Released for Permit
07/30/2021 8:07:58 AM
Pikes Peak REGIONAL Building Department
michaela
CONSTRUCTION

CODE INFORMATION:

2017	Pikes Peak Regional Building Code (2017 PPRBC)
2015	International Residential Code (2015 IRC)*
2015	International Energy Conservation Code* (IECC)
2015	International Mechanical Code*
2015	International Fuel Gas Code*
2015	International Plumbing Code**
2017	National Electric Code**
*	As amended by 2017 PPRBC
**	Or the latest edition adopted by the State of Colorado

STRUCTURAL DESIGN LOADS:

	Live Load	Dead Load	Total Load
Floor	40 psf	16 psf	56 psf

AREA TABLE: INTERIOR REMODEL

MAIN LEVEL FLOOR PLAN	843.5 SQ. FT.
UPPER LEVEL FLOOR PLAN	950.0 SQ. FT.
TOTAL FINISHED	1,793.5 SQ. FT.
LOT SIZE	2.51 ACRES

Nighthawk Design
a Hawk Companies, Inc. Business
5180 Whip Trail , Colorado Springs, Colorado 80917-2620
Rod Wiebe Dennis Asher Dave Tenace Christopher Wiebe
719.477.9460 [office] hawkcompanies@gmail.com 719.491.1227 [cell]

HOMEOWNER
Jason Porter: DECK WORKS
719-661-3403
deckworks1@comcast.net

THE AUXILIARY DWELLING CONVERSION PROJECT
INTERIOR REMODEL
12124 Oregon Wagon Trail, Ebert, Colorado 80106
Shedule Number: 4217006023
Lot 22, The Trails Filing Number 2-B

October 26, 2020

PAGE A1

REVISION	DATE
CONCEPTUAL	10-09-2020
SUBMITTAL	10-26-2020

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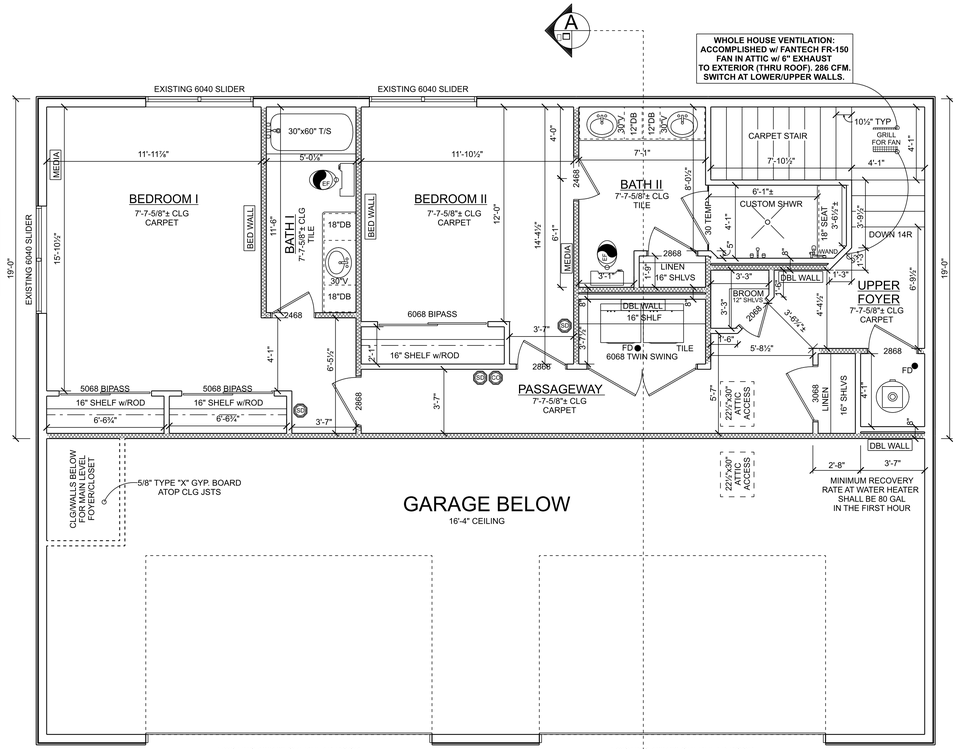
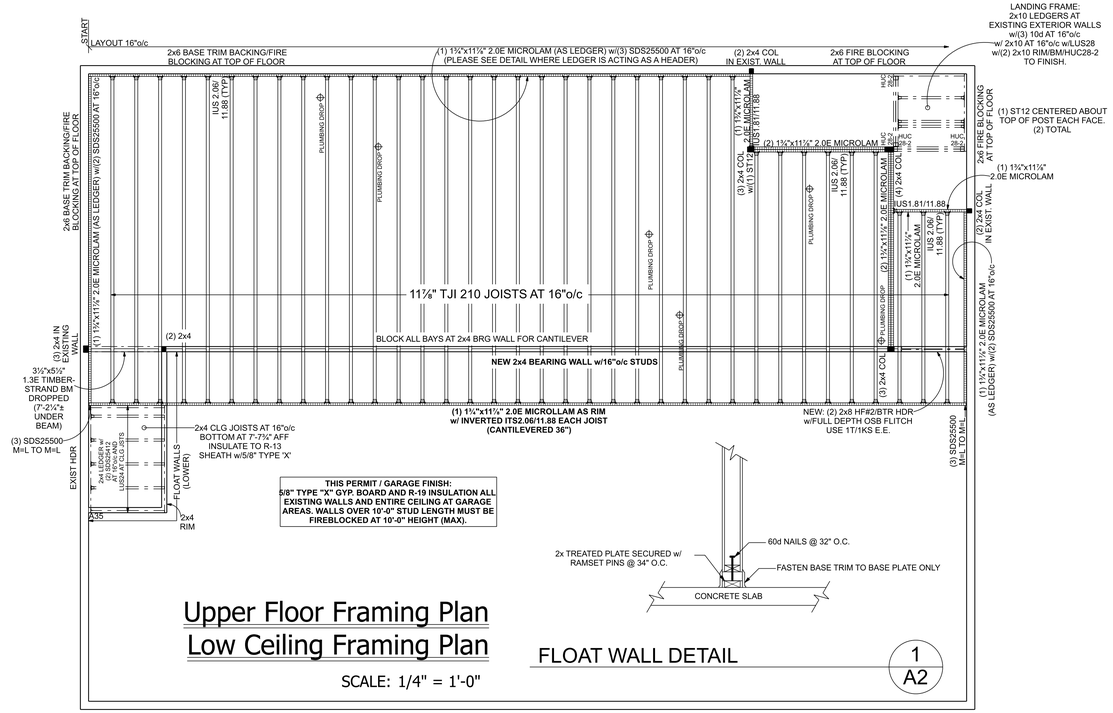


Upper Level Floor Plan

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

ALL EXTERIOR WINDOWS/DOORS ARE EXISTING. NO NEW EXTERIOR OPENINGS



Upper Floor Framing Plan
Low Ceiling Framing Plan

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

FLOAT WALL DETAIL 1 / A2

SPECIFICATIONS:

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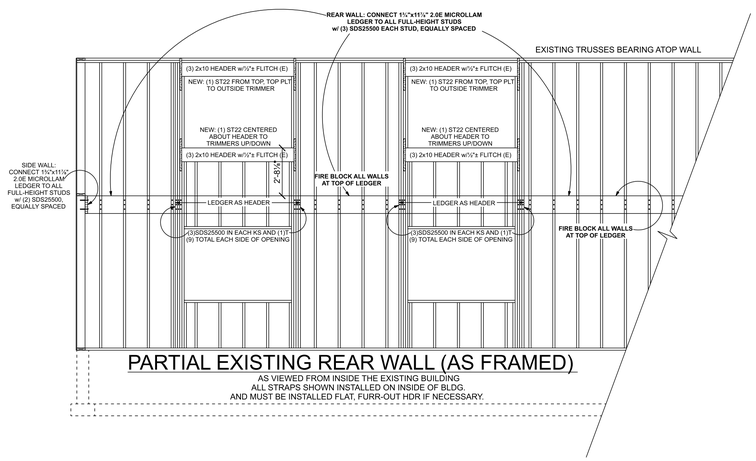
CONCEPTUAL	10-09-2020
SUBMITTAL	10-26-2020



PARTIAL EXISTING REAR WALL (AS FRAMED)

AS VIEWED FROM INSIDE THE EXISTING BUILDING
ALL STRAPS SHOWN INSTALLED ON INSIDE OF BLDG.
AND MUST BE INSTALLED FLAT, FURR-OUT HDR IF NECESSARY.

SPECIFICATIONS:

1) BUILDING IS EXISTING. SEE PERMIT L99876.

   Typical EXISTING exterior walls are 2x6 studs at 16" o/c with 7/16" OSB typical. NO additional openings proposed.
2) NEW floor framing shall be 11-7/8" TJI 210 joists at 16" o/c. Floor sheathing shall be 3/4" OSB (tongue and groove) glued and nailed to floor joists per American Plywood Association specifications and recommendations
3) New 2x4 bearing wall atop new concrete foundation wall as shown.
4) All interior walls shall be 2x4 studs at 16" o/c (typical); unless noted to the contrary.
5) Typical wall finish shall be textured 1/2" gypsum board. Use 5/8" type "X" gypsum board at all garage common walls, ceilings, & structural members.
6) All stairs or steps to grade shall have a maximum rise of 7¾" and a minimum run of 10". All stairs shall be a minimum of 3'-1" wide, to include landings.
7) Windows shall be by builder with double pane insulated low E glass. All windows must have a U-value as specified in the Energy Calcs.
8) Fascia shall be 5/4"x7¼" textured ProTrim over 2x6 sub-fascia w/ 4/4x3½" overlay on front gables ONLY. Soffit material shall be 7/16" masonite (typical).
9) Exhaust duct up through attic space, minimum R-6 insulation & 25' max run.

FLOOR FRAMING NOTES:

1) Typical floor system shall be framed 11-7/8" TJI 210 joists @ 16"o/c. (Floor will be engineered to minimum of L/480 live load deflection.) Floor sheathing shall be 3/4" OSB (tongue and groove) glued and nailed to floor joists per American Plywood Association specifications and recommendations. See plan for ledgers and related connections to existing bearing walls.
2) Exterior headers are EXISTING. One new header as noted. All others are noted. Beams and headers shown on the framing plan shall take precedence.
4) Insulate building as noted.

Nighthawk Design
a Hawk Companies, Inc. Business
5180 Whip Trail , Colorado Springs, Colorado 80917-2620
Rod Wiebe Dennis Asher Dave Tenace Christopher Wiebe
719.477.9460 [office] hawkcompanies@gmail.com 719.491.1227 [cell]

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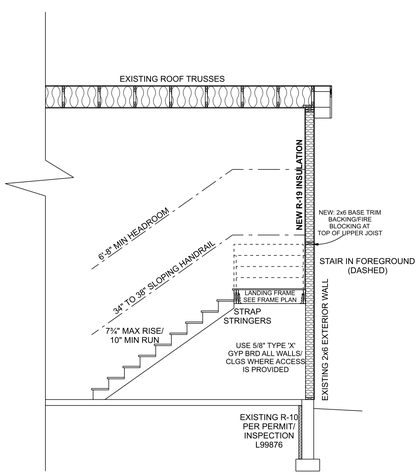
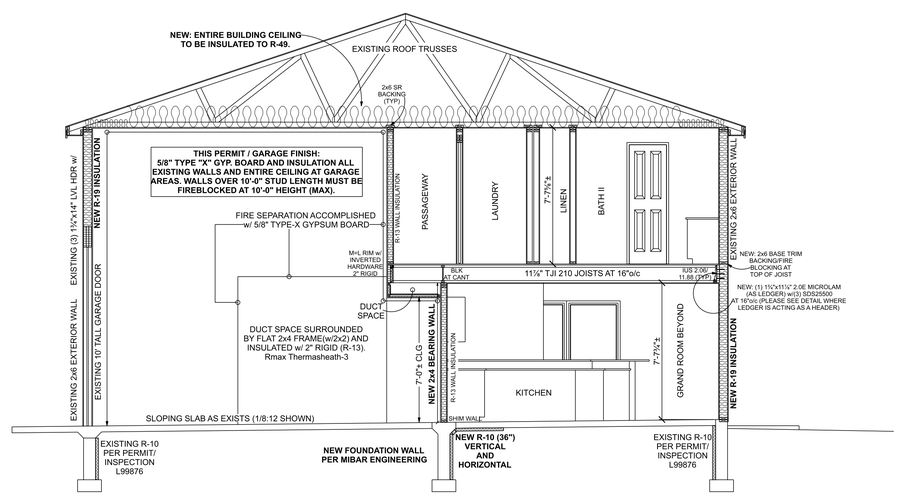
07/30/2021 8:08:00 AM
Pikes Peak REGIONAL Building Department
michaela
CONSTRUCTION



Partial Stair Section

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



Section A-A

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

CODE INFORMATION:

2017	Pikes Peak Regional Building Code (2017 PPRBC)
2015	International Residential Code (2015 IRC)*
2015	International Energy Conservation Code* (IECC)
2015	International Mechanical Code*
2015	International Fuel Gas Code*
2015	International Plumbing Code**
2017	National Electric Code**
*	As amended by 2017 PPRBC
**	Or the latest edition adopted by the State of Colorado

STRUCTURAL DESIGN LOADS:

	Live Load	Dead Load	Total Load
Floor	40 psf	16 psf	56 psf

AREA TABLE: INTERIOR REMODEL

MAIN LEVEL FLOOR PLAN	843.5 SQ. FT.
UPPER LEVEL FLOOR PLAN	950.0 SQ. FT.
TOTAL FINISHED	1,793.5 SQ. FT.
LOT SIZE	2.51 ACRES

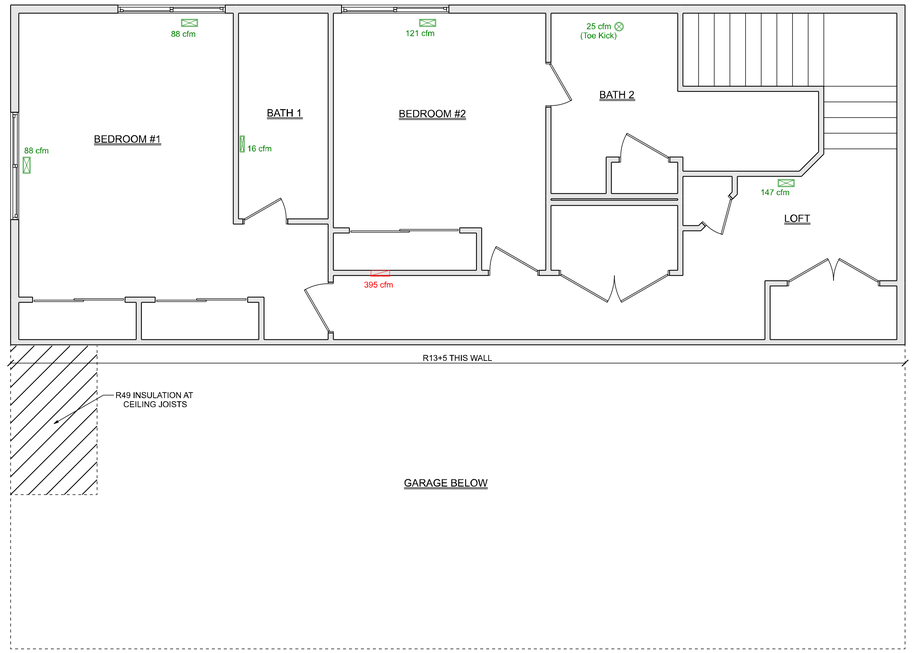
HOMEOWNER
Jason Porter: DECK WORKS
719-661-3403
deckworks1@comcast.net

THE AUXILIARY DWELLING CONVERSION PROJECT
INTERIOR REMODEL
12124 Oregon Wagon Trail, Elbert, Colorado 80106
Shedule Number: 4217006023
Lot 22, The Trails Filing Number 2-B

October 26, 2020

PAGE A3

REVISION	DATE
CONCEPTUAL	10-09-2020
SUBMITTAL	10-26-2020



Upper Level Mechanical Plan

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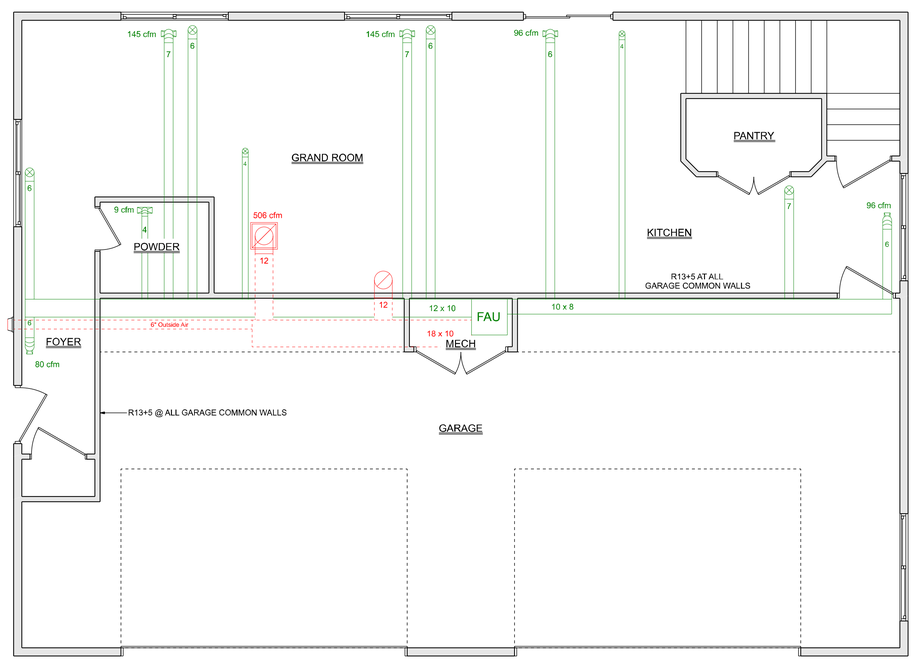

Main Level Mechanical Plan

SCALE: 1/4" = 1'-0"
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07/30/2021 7:58 AM
Pikes Peak REGIONAL Building Department
Justin C
MECHANICAL

MECHANICAL SPECIFICATIONS

1. ROOM BY ROOM HEAT LOSS/GAIN WORKSHEETS COMPLETED WITH RIGHT-SUITE UNIVERSAL 2018 IN ACCORDANCE WITH 2015 IECC.
2. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH 2015 IECC AND IMC REGULATIONS.
3. SUPPLY AIR AND RETURN AIR DUCTS SHALL BE CONSTRUCTED OF GALVANIZED METAL AS SET FORTH IN 2015 IMC AND SMACNA STANDARDS.
4. ALL JOINTS ON DUCTWORK SHALL BE MASTIC SEALED. DUCT TAPE IS NOT ACCEPTABLE.
5. DUCTWORK IN UNCONDITIONED AREAS TO BE R8 INSULATED TO COMPLY WITH 2015 IECC (AS AMENDED).
6. CONDITIONED ROOMS WITH NON-DEDICATED RETURN AIR MUST HAVE DOORS UNDERCUT 1" OR 14x6 TRANSFER GRILL ON WALL. BATHROOMS MUST ONLY HAVE DOORS UNDERCUT FOR MAKE-UP AIR.
7. LOCATE ALL DUCTWORK IN GARAGE CEILING ABOVE CEILING INSULATION.
8. CONTRACTOR MAY LOCATE MECHANICAL EQUIPMENT IN AN ALTERNATIVE CONFIGURATION THAN SHOWN ON THE DRAWINGS DUE TO CONFLICTS, AS LONG AS THE INTENDED SYSTEM FUNCTION IS NOT AFFECTED.
9. THESE DRAWINGS ARE DIAGRAMMATIC IN NATURE AND ARE NOT INTENDED TO SHOW ALL TRANSITIONS, OFFSETS, ETC. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND PROVIDE ALL NECESSRY FITTINGS TO COMPLETE THE INTENT OF THE DRAWINGS.

DUCT SIZING MAY BE INCREASED NOT DECREASED

MECHANICAL LEGEND

FLOOR REGISTER
CEILING REGISTER
TOE KICK — XX cfm (Toe Kick)
SUPPLY TO ABOVE
RETURN PIPE TO ABOVE
OUTSIDE AIR — 6" Outside Air
RETURN AIR WALL GRILL
RETURN AIR CEILING GRILL
R8 FLEX DUCT
SUPPLY DUCT — DUCT SIZE (WIDTH X HEIGHT) — TRUNK REDUCTION
RETURN DUCT — DUCT SIZE (WIDTH X HEIGHT) — TRUNK REDUCTION

GENERAL CONDITIONS AND LIMITED LIABILITY

IT IS THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS TO BE GUIDELINES FOR CONSTRUCTION. THEY HAVE BEEN PREPARED WITHOUT THE CONSULATION OF AN ARCHITECT OT LICENSED COLORADO ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING ANY QUESTIONS AND MEANINGS IN THESE WORKING DRAWINGS AND SPECIFICATIONS. THE CONTRACTOR SHALL NOTIFY THE DESIGNER, IN WRITING, OF ANY ERRORS, OMISSIONS, OR UNSUITABLE DETAILING WHICH MAY CAUSE CONSTRUCTION PROBLEMS. THE DESIGNER'S LIABILITY REGARDING ERRORS AND/OR OMISSIONS WILL BE LIMITED TO THE CORRECTION OF THE ORIGINAL DRAWINGS. CONSULTANTS LIABILITY IS THE SAME.

SHEET SCHEDULE

MEMBER AIBD
AMERICAN INSTITUTE of BUILDING DESIGN
Creating where people live

Design By:
Latigo Home Design, LLC
2165 State Rte. 76, Willow Springs, MO. 65793
Dennis Asher - Professional Member AIBD
417.252.9768 [cell] latigohomedesign@gmail.com

Section Letter
Drawing Location
Page Number
SOFTPLAN Version 2020

NightHawk Design
5180 Whip Trail
Colorado Springs, CO. 80917
(719) 477-9460
hawkcompanies@gmail.com

12124 Oregon Wagon Trail
Duct Design

Revision	Date
Duct Design Submittal	10/21/2020

Oct 21, 2020

M1

Load Short Form
Entire House
Latigo Home Design, LLC

Job: 12124 Oregon Wagon Trail
Date: Oct 21, 2020
By: Dennis Asher

2165 State Route 76, Willow Springs, MO 65793 Phone: (719) 243-7163 Email: dennis@latigohomedesign.com

Project Information

For: NightHawk Design
5180 Whip Trail, Colorado Springs, CO 80917-2620
Phone: (719) 477-9460
Email: HawkCompanies@gmail.com

Design Information

	Htg	Clg
Outside db (°F)	***0***	***90***
Inside db (°F)	72	75
Design TD (°F)	72	15
Daily range	-	H
Inside humidity (%)	30	30
Moisture difference (gr/lb)	38	-6

Infiltration	
Method	Simplified
Construction quality	Average
Fireplaces	0

HEATING EQUIPMENT

Make	Goodman Mfg.
Trade	GOODMAN
Model	GMSS920603BN
AHRI ref	7367472
Efficiency	92.1 AFUE
Heating input	60000 Btuh
Heating output	55000 Btuh
Temperature rise	73 °F
Actual air flow	866 cfm
Air flow factor	0.037 cfm/Btuh
Static pressure	0.50 in H2O
Space thermostat	

COOLING EQUIPMENT

Make	Goodman Mfg.
Trade	GOODMAN
Cond	GSX130241E
Coil	CAPF1824C6
AHRI ref	202683875
Efficiency	11.5 EER, 14 SEER
Sensible cooling	19550 Btuh
Latent cooling	3450 Btuh
Total cooling	23000 Btuh
Actual air flow	***866*** cfm
Air flow factor	0.056 cfm/Btuh
Static pressure	0.50 in H2O
Load sensible heat ratio	1.00

ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
Mech	19	0	0	0	***0***
Foyer	75	2162	399	80	***22***
Powder	36	233	15	9	***1***
Grand Room	399	5202	5199	192	***291***
Kitchen/Pantry	347	5079	3447	188	***193***
Bath 1	62	424	118	16	***7***
Bedroom 2	185	1534	2167	57	***121***
Bedroom 1	274	4156	3159	154	***177***
Loft	309	3976	792	147	***44***
Bath 2	121	666	200	25	***11***

Bolditalic values have been manually overridden

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.

Entire House	1826	23432	15497	866	***866***
Other equip loads		10481	1182		
Equip. @ 0.95 RSM			15845		
Latent cooling			0		
TOTALS	1826	33913	15845	866	***866***

Bolditalic values have been manually overridden

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.

Return Branch Detail Table

Name	Grille Size (in)	Htg (cfm)	Clg (cfm)	TEL (ft)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Stud/Joist Opening (in)	Duct Matl	Trunk
rb1	0x 0	468	506	218.0	0.060	645	12.0	0x 0		ShMt	rt1
rb2	0x 0	398	360	102.0	0.060	506	12.0	0x 0		ShMt	rt1

Return Trunk Detail Table

Name	Trunk Type	Htg (cfm)	Clg (cfm)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Duct Material	Trunk
rt1	Peak AVF	866	866	0.060	693	14.5	10 x 18	ShtMetl	

wrightsoft Right-Suite® Universal 2019 19.0.20 RSU14844
...gon Trail\3 DWG\s\12124 Oregon Wagon Trail.rup Calc = MJ8 Front Door faces: N
2020-Oct-21 13:02:39
Page 2

Duct System Summary
Entire House
Latigo Home Design, LLC

Job: 12124 Oregon Wagon Trail
Date: Oct 21, 2020
By: Dennis Asher

2165 State Route 76, Willow Springs, MO 65793 Phone: (719) 243-7163 Email: dennis@latigohomedesign.com

Project Information

For: NightHawk Design
5180 Whip Trail, Colorado Springs, CO 80917-2620
Phone: (719) 477-9460
Email: HawkCompanies@gmail.com

	Heating	Cooling
External static pressure	0.50 in H2O	0.50 in H2O
Pressure losses	0.23 in H2O	0.23 in H2O
Available static pressure	0.27 in H2O	0.27 in H2O
Supply / return available pressure	0.145 / 0.122 in H2O	0.145 / 0.122 in H2O
Lowest friction rate	***0.100*** in/100ft	***0.100*** in/100ft
Actual air flow	866 cfm	***866*** cfm
Total effective length (TEL)	478 ft	

Supply Branch Detail Table

Name		Design (Btuh)	Htg (cfm)	Clg (cfm)	Design FR	Diam (in)	H x W (in)	Duct Matl	Actual Ln (ft)	Ftg.Eqv Ln (ft)	Trunk
Bath 1	h	424	16	7	0.100	4.0	0x 0	ShMt	24.3	205.0	st2
Bath 2	h	666	25	11	0.100	4.0	0x 0	ShMt	25.0	180.0	st1
Bedroom 1	c	1580	77	88	0.100	6.0	0x 0	ShMt	33.7	195.0	st2
Bedroom 1-A	c	1580	77	88	0.100	6.0	0x 0	ShMt	34.7	225.0	st2
Bedroom 2	c	2167	57	121	0.100	***6.0***	***0x 0***	ShMt	20.3	205.0	st2
Foyer	h	2162	80	22	0.100	6.0	0x 0	ShMt	28.7	160.0	st2
Grand Room	c	2600	96	145	0.100	7.0	0x 0	ShMt	35.0	190.0	st2
Grand Room-A	c	2600	96	145	0.100	7.0	0x 0	ShMt	21.7	205.0	st2
Kitchen/Pantry	c	1724	94	96	0.100	6.0	0x 0	ShMt	22.3	190.0	st1
Kitchen/Pantry-A	c	1724	94	96	0.100	6.0	0x 0	ShMt	28.7	160.0	st1
Loft-A	h	3976	147	44	0.100	7.0	0x 0	ShMt	25.3	170.0	st1
Powder	h	233	9	1	0.100	4.0	0x 0	ShMt	26.3	180.0	st2

Supply Trunk Detail Table

Name	Trunk Type	Htg (cfm)	Clg (cfm)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Duct Material	Trunk
st2	Peak AVF	507	618	0.100	741	11.5	10 x 12	ShtMetl	
st1	Peak AVF	359	248	0.100	647	9.4	8 x 10	ShtMetl	

Bolditalic values have been manually overridden

Static Pressure and Friction Rate
Entire House
Latigo Home Design, LLC

Job: 12124 Oregon Wagon Trail
Date: Oct 21, 2020
By: Dennis Asher

2165 State Route 76, Willow Springs, MO 65793 Phone: (719) 243-7163 Email: dennis@latigohomedesign.com

Project Information

For: NightHawk Design
5180 Whip Trail, Colorado Springs, CO 80917-2620
Phone: (719) 477-9460
Email: HawkCompanies@gmail.com

Available Static Pressure

	Heating (in H2O)	Cooling (in H2O)
External static pressure	0.50	0.50
Pressure losses		
Coil	0.06	0.06
Heat exchanger	0	0
Supply diffusers	0.03	0.03
Return grilles	0.04	0.04
Filter	0.10	0.10
Humidifier	0	0
Balancing damper	0	0
Other device	0	0
Available static pressure	0.27	0.27

Total Effective Length

	Supply (ft)	Return (ft)
Measured length of run-out	9	3
Measured length of trunk	25	15
Equivalent length of fittings	225	200
Total length	260	218
Total effective length	478	

Friction Rate

	Heating (in/100ft)		Cooling (in/100ft)	
Supply Ducts	***0.100***	OK	***0.100***	OK
Return Ducts	***0.060***	OK	***0.060***	OK

Fitting Equivalent Length Details

Supply 4AD=60, 2I0=65, 9K=65, 1C=35: TotalEL=225

Return 6M=20, 6C6=115, 5A=40, 6CB=25: TotalEL=200

Bolditalic values have been manually overridden

Released for Permit
07/30/20 7:50 AM
Pikes Peak REGIONAL Building Department
Justin C
MECHANICAL

MEMBER AIBD AMERICAN INSTITUTE of BUILDING DESIGN
Creating where people live

Design By:
Latigo Home Design, LLC
2165 State Rte. 76, Willow Springs, MO. 65793
Dennis Asher - Professional Member AIBD
417.252.9768 [cell] latigohomedesign@gmail.com

Section Letter
A2 A6 — Drawing Location, Page Number
SOFTPLAN Version 2020

MECHANICAL SPECIFICATIONS

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DUCT SIZING MAY BE INCREASED NOT DECREASED

MECHANICAL LEGEND

FLOOR REGISTER
CEILING REGISTER
TOE KICK — XX cfm (Toe Kick)
SUPPLY TO ABOVE
RETURN PIPE TO ABOVE
OUTSIDE AIR — 6" Outside Air
RETURN AIR WALL GRILL
RETURN AIR CEILING GRILL
R8 FLEX DUCT
SUPPLY DUCT — DUCT SIZE (WIDTH X HEIGHT) — TRUNK REDUCTION
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SHEET SCHEDULE

NightHawk Design
5180 Whip Trail
Colorado Springs, CO. 80917
(719) 477-9460
hawkcompanies@gmail.com

12124 Oregon Wagon Trail
Duct Design

Revision	Date
Duct Design Submittal	10/21/2020

Oct 21, 2020

M2

Pikes Peak REGIONAL Building Department

INTERNATIONAL ENERGY CONSERVATION CODE (IECC)
RESIDENTIAL INSULATION CERTIFICATE - *EL PASO COUNTY ONLY*

This certificate is based on the 2015 International Energy Conservation Code (IECC), as amended by the 2017 Pikes Peak Regional Building Code. This certificate is applicable to One- and Two- family Dwellings as well as Townhouses, R2, R-3 and R-4 buildings three stories or less in height. *This certificate is required to be submitted as part of the plan review package*.

ADDRESS OR MASTER #: 12124 Oregon Wagon Trail (Existing Buildir

METHOD OF ENERGY CODE COMPLIANCE:

The IECC provide various option for compliance with minimum standards. Check the box to indicate the method of compliance.

- [x] 1. Prescriptive Method (*IECC Section R402.1.2)*
- [ ] 2. U-factor Alternative[1] (*IECC Section R402.1.4)*
- [ ] *3.* Total UA Alternative[1] (*IECC Section R402.1.5)*
- [ ] *4.* ResCheck[1] (*IECC Section R402.1.5)*
- [ ] *5.* Simulated Performance Alternative[2] (*IECC Section R405). Available only to design professionals licensed in the State of Colorado or by qualified persons as approved by the Building Official.*
- [ ] 6. Energy Rating Index Compliance Alternative[2] (*IECC Section R406). Available only to design professionals licensed in the State of Colorado or by qualified persons as approved by the Building Official.*

[1] *Please attach documentation and calculations to substantiate compliance.*
[2] *If the Simulated Performance or ERI Alternative is selected please attach necessary documentation to show compliance. Complete third party documentation of compliance must be submitted at time of final inspection.*

MINIMUM INSULATION VALUES FOR PRESCRIPTIVE METHOD

Door and Window U-Factor	Skylight U-Factor	Ceiling R-Value	Wood Frame Wall R-Value	Mass Wall R-Value	Floor R-Value	Basement Wall R-Value	Slab R-Value/Depth	Crawlspace Wall R-Value
0.32	0.55	49	20 or 13+5	13/17	30	10/13	10/2 ft	15/19

INSULATION DATA:

Enter the appropriate values for the scope of work that coincide with the compliance method selected above. This data is required for all methods of compliance

20 Wall R-Value (wood frame or mass)
49 Ceiling R-Value
_____ Floor R-Value
_____ Basement Wall R-Value
_____ Crawlspace Wall R-Value
10 Slab perimeter R-Value (*24" minimum)*
.32 Glazing U-Factor
_____ Door(s) U-Factor

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07/30/2021 8:07:52 AM
Pikes Peak REGIONAL Building Department
michaela
CONSTRUCTION

***INSPECTION REQUIREMENTS*:**

Section R402.4 of the IECC requires the thermal envelope to be sealed to limit infiltration. The IECC requires the thermal envelope to be visually inspected and tested to demonstrate compliance with building envelope tightness requirements. Selection of the method of compliance shall occur when the Building Frame Inspection is scheduled. Below is a summary of the methods.

1. Third party visual inspection and testing with documentation required at time of final inspection.
2. RBD visual inspection and third party testing with documentation required at time of final inspection.

NOTE: *The Simulated Performance and Energy Rating Index Alternatives requires third party inspections.*

Pikes Peak REGIONAL Building Department

RESIDENTIAL HVAC EQUIPMENT CERTIFICATE

Provide this certificate with heat loss, or optional heat gain, calculations for all new residential construction and additions. This form is part of the permanent record.

ADDRESS OR MASTER PLAN #: 12124 Oregon Wagon Trail

***CALCULATIONS*:**

[×]Duct Design [×]New Structure [ ]Existing Structure [ ]Performance Test
[ ]New Addition Only [ ]Existing Structure + New Addition (requires separate calculation for each)

1. Envelope heat loss 28,540 BTU/hr
2. Infiltration heat loss (.35 ach max) 5,373 BTU/hr
3. Envelope heat gain (optional) BTU/hr
4. Infiltration heat gain (optional) BTU/hr
5. Total heat loss (add lines 1 and 2)** 33,913 BTU/hr
6. Total heat gain (add lines 3 and 4 - optional) BTU/hr
7. Type of heating appliance Goodman GMSS920603BN [×]New [ ]Existing
   BTU/hr input 60,000 / 1 Location Garage Area served Entire House
8. Type of heating appliance [ ]New [ ]Existing
   BTU/hr input / Location Area served
9. Condenser Model # GSX130241E [×]New [ ]Existing
   BTU/hr input / Location Area served
10. Coil Model # CAPF1824C6 [×]New [ ]Existing
    BTU/hr input / Location Area served

SUMMARY:

A. Input of heating appliance(s)* 60,000 BTU/hr
B. Altitude derate (x .72/.80) 80% 48,000 BTU/hr
C. Efficiency derate (output) 92.1% 44,208 BTU/hr
D. Electrical heating (1 watt = 3.413 BTU/hr) 0 BTU/hr
E. **Total Heating Output**** 44,208 BTU/hr
F. **Total Cooling** BTU/hr

*If using high/low fired equipment, assign sum of the low fires on this line.

Applicant Signature Dennis Asher Digitally signed by Dennis Asher Date: 2020.10.21 13:20:05 -05'00' Date 10/21/2020

Print name & company Dennis Asher / Latigo Home Design LLC Phone (417) 252-9768

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07/30/2021 8:57:24 AM
Justin C
MECHANICAL
08/07/2018

IECC/IRC VENTILATION VERIFICATION (New Homes Only)

- Indicate method of compliance with ***Whole –house Mechanical Ventilation System*** *(M1507.3)* (check all that apply)

  [×] Outside Air/Supply [ ] Exhaust

- List ***Fan Type/Description, CFM, and Location*** of **ALL** exhaust fans, *including kitchen hoods*. Check box if fan is part of Whole-house Mechanical Ventilation System. (Example: *Exhaust fan, 120 CFM, Master Bathroom [x])*

Exhaust Fan, 100 cfm, Bath 1 [ ]

Exhaust Fan, 100 cfm, Bath 2 [ ]

Exhaust Fan, 100 cfm, Powder [ ]

[ ]

FAU: Outside Air via 6" Flex = 90 cfm [×]

[ ]

[ ]

[ ]

- Indicate ***Ventilation Control*** (check one)

  [×] Constant [ ] Intermittent:_____% per Table M1507.3.3(2)

- Specify location of ***Whole House Ventilation Manual Override Control Switch***, if known, otherwise note as **To Be Determined.**

TBD

TABLE M1507.3.3(1)
CONTINUOUS WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM AIRFLOW RATE REQUIREMENTS

DWELLING UNIT FLOOR AREA (square feet)	NUMBER OF BEDROOMS				
	0 - 1	2 - 3	4 - 5	6 - 7	> 7
	Airflow in CFM				
< 1,500	30	45	60	75	90
1,501 - 3,000	45	60	75	90	105
3,001 - 4,500	60	75	90	105	120
4,501 - 6,000	75	90	105	120	135
6,001 - 7,500	90	105	120	135	150
> 7,500	105	120	135	150	165

For SI: 1 square foot = 0.0929 m^2, 1 cubic foot per minute = 0.0004719 m^3/s.

TABLE M1507.3.3(2)
INTERMITTENT WHOLE-HOUSE MECHANICAL VENTILATION RATE FACTORS[a, b]

RUN-TIME PERCENTAGE IN EACH 4-HOUR SEGMENT	25%	33%	50%	66%	75%	100%
Factor[a]	4	3	2	1.5	1.3	1.0

a. For ventilation system run time values between those given, the factors are permitted to be determined by interpolation.
b. Extrapolation beyond the table is prohibited.

Dwelling Unit Floor Area: 1870

Number of Bedrooms: 2

Required Airflow: Airflow 60

Provided: 90

Method of Compliance: FAU: Outside Air via 6" Flex = 90 cfm

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08/07/2018

Building Analysis
Entire House
Latigo Home Design, LLC

Job: 12124 Oregon Wagon Trail
Date: Oct 21, 2020
By: Dennis Asher

2165 State Route 76, Willow Springs, MO 65793 Phone: (719) 243-7163 Email: dennis@latigohomedesign.com

Project Information

For: NightHawk Design
5180 Whip Trail, Colorado Springs, CO 80917-2620
Phone: (719) 477-9460
Email: HawkCompanies@gmail.com

Design Conditions

Location:
Colorado Springs Muni AP, CO, US
Elevation: 6171 ft
Latitude: 39°N

Outdoor:	**Heating**	**Cooling**
Dry bulb (°F)	***0***	***90***
Daily range (°F)	-	26 (H)
Wet bulb (°F)	-	59
Wind speed (mph)	7.5	7.5

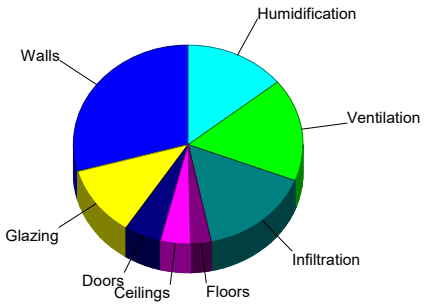
Indoor:	**Heating**	**Cooling**
Indoor temperature (°F)	72	75
Design TD (°F)	72	15
Relative humidity (%)	30	30
Moisture difference (gr/lb)	38.5	-6.4

Infiltration:

Method	Simplified
Construction quality	Average
Fireplaces	0

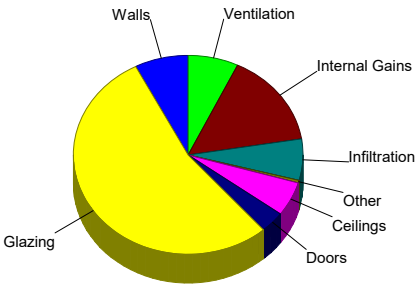
Heating

Component	Btuh/ft²	Btuh	% of load
Walls	4.6	9963	29.4
Glazing	23.0	3901	11.5
Doors	23.0	1774	5.2
Ceilings	1.4	1428	4.2
Floors	1.0	993	2.9
Infiltration	3.7	5373	15.8
Ducts		0	0
Piping		0	0
Humidification		4806	14.2
Ventilation		5676	16.7
Adjustments		0	
Total		**33913**	**100.0**



Cooling

Component	Btuh/ft²	Btuh	% of load
Walls	0.6	1261	7.6
Glazing	53.0	8981	53.8
Doors	7.5	578	3.5
Ceilings	0.9	931	5.6
Floors	0.1	67	0.4
Infiltration	0.8	1119	6.7
Ducts		0	0
Ventilation		1182	7.1
Internal gains		2560	15.3
Blower		0	0
Adjustments		0	
Total		**16679**	**100.0**



Latent Cooling Load = 0 Btuh
Overall U-value = 0.058 Btuh/ft²-°F

Data entries checked.

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Component Constructions
Entire House
Latigo Home Design, LLC

Job: 12124 Oregon Wagon Trail
Date: Oct 21, 2020
By: Dennis Asher

2165 State Route 76, Willow Springs, MO 65793 Phone: (719) 243-7163 Email: dennis@latigohomedesign.com

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Design Conditions

Location:
Colorado Springs Muni AP, CO, US
Elevation: 6171 ft
Latitude: 39°N

Outdoor:	**Heating**	**Cooling**
Dry bulb (°F)	***0***	***90***
Daily range (°F)	-	26 (H)
Wet bulb (°F)	-	59
Wind speed (mph)	7.5	7.5

Indoor:	**Heating**	**Cooling**
Indoor temperature (°F)	72	75
Design TD (°F)	72	15
Relative humidity (%)	30	30
Moisture difference (gr/lb)	38.5	-6.4

Infiltration:

Method	Simplified
Construction quality	Average
Fireplaces	0

Construction descriptions	**Or**	**Area** ft²	**U-value** Btuh/ft²-°F	**Insul R** ft²-°F/Btuh	**Htg HTM** Btuh/ft²	**Loss** Btuh	**Clg HTM** Btuh/ft²	**Gain** Btuh
Walls								
Exterior 2x6 R-20: 2x6 R-20	se	302	0.065	20.0	4.68	1412	0.80	240
	sw	668	0.065	20.0	4.68	3128	0.80	532
	nw	255	0.065	20.0	4.68	1195	0.80	203
	all	1225	0.065	20.0	4.68	5735	0.80	976
Partitions								
Partition 2x4 R13 plus 5: Garage Partition 2x4 R13+5		918	0.064	18.0	4.61	4229	0.31	285
Windows								
Standard Window 32U: Standard Window .32U; 6.67 ft head ht	se	48	0.320	0	23.0	1106	48.5	2326
	sw	97	0.320	0	23.0	2227	48.5	4685
	nw	25	0.320	0	23.0	568	39.8	982
	all	169	0.320	0	23.0	3901	47.2	7993
Doors								
Standard Door 32U: Standard Door .32U	se	21	0.320	0	23.0	484	7.50	158
	sw	35	0.320	0	23.0	806	7.50	263
	n	21	0.320	0	23.0	484	7.50	158
	all	77	0.320	0	23.0	1774	7.50	578
Ceilings								
Standard Attic R-49: Vented Attic R-49		950	0.020	49.0	1.44	1368	0.94	892
		42	0.020	49.0	1.44	60	0.94	39
	all	992	0.020	49.0	1.44	1428	0.94	931
Floors								
Floor over Unheated: Floor over Garage		116	0.049	19.0	2.76	321	0.58	67
Slab On Grade: Slab On Grade Insulated		93	0.100	10.0	7.20	672	0	0

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Project Summary
Entire House
Latigo Home Design, LLC

Job: 12124 Oregon Wagon Trail
Date: Oct 21, 2020
By: Dennis Asher

2165 State Route 76, Willow Springs, MO 65793 Phone: (719) 243-7163 Email: dennis@latigohomedesign.com

Project Information

For: NightHawk Design
5180 Whip Trail, Colorado Springs, CO 80917-2620
Phone: (719) 477-9460
Email: HawkCompanies@gmail.com

Notes:

Design Information

Weather: Colorado Springs Muni AP, CO, US

Winter Design Conditions

Outside db	***0***	°F
Inside db	72	°F
Design TD	72	°F

Summer Design Conditions

Outside db	***90***	°F
Inside db	75	°F
Design TD	15	°F
Daily range	H	
Relative humidity	30	%
Moisture difference	-6	gr/lb

Heating Summary

Structure	23432	Btuh
Ducts	0	Btuh
Central vent (90 cfm)	***5676***	Btuh
Outside air		
Humidification	4806	Btuh
Piping	0	Btuh
Equipment load	33913	Btuh

Infiltration

Method	Simplified
Construction quality	Average
Fireplaces	0

	Heating	**Cooling**
Area (ft²)	1826	1826
Volume (ft³)	14605	14605
Air changes/hour	***0.35***	***0.35***
Equiv. AVF (cfm)	85	85

Sensible Cooling Equipment Load Sizing

Structure	15497	Btuh
Ducts	0	Btuh
Central vent (90 cfm)	***1182***	Btuh
Outside air		
Blower	0	Btuh
Use manufacturer's data	n	
Rate/swing multiplier	0.95	
Equipment sensible load	15845	Btuh

Latent Cooling Equipment Load Sizing

Structure	103	Btuh
Ducts	0	Btuh
Central vent (90 cfm)	***-313***	Btuh
Outside air		
Equipment latent load	0	Btuh
Equipment Total Load (Sen+Lat)	15845	Btuh
Req. total capacity at 0.85 SHR	1.6	ton

Heating Equipment Summary

Make	Goodman Mfg.
Trade	GOODMAN
Model	GMSS920603BN
AHRI ref	7367472

Efficiency	92.1	AFUE
Heating input	60000	Btuh
Heating output	55000	Btuh
Temperature rise	73	°F
Actual air flow	866	cfm
Air flow factor	0.037	cfm/Btuh
Static pressure	0.50	in H2O
Space thermostat		

Cooling Equipment Summary

Make	Goodman Mfg.
Trade	GOODMAN
Cond	GSX130241E
Coil	CAPF1824C6
AHRI ref	202683875

Efficiency	11.5 EER, 14 SEER	
Sensible cooling	19550	Btuh
Latent cooling	3450	Btuh
Total cooling	23000	Btuh
Actual air flow	***866***	cfm
Air flow factor	0.056	cfm/Btuh
Static pressure	0.50	in H2O
Load sensible heat ratio	1.00	

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AED Assessment
Entire House
Latigo Home Design, LLC

Job: 12124 Oregon Wagon Trail
Date: Oct 21, 2020
By: Dennis Asher

2165 State Route 76, Willow Springs, MO 65793 Phone: (719) 243-7163 Email: dennis@latigohomedesign.com

Project Information

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Phone: (719) 477-9460
Email: HawkCompanies@gmail.com

Design Conditions

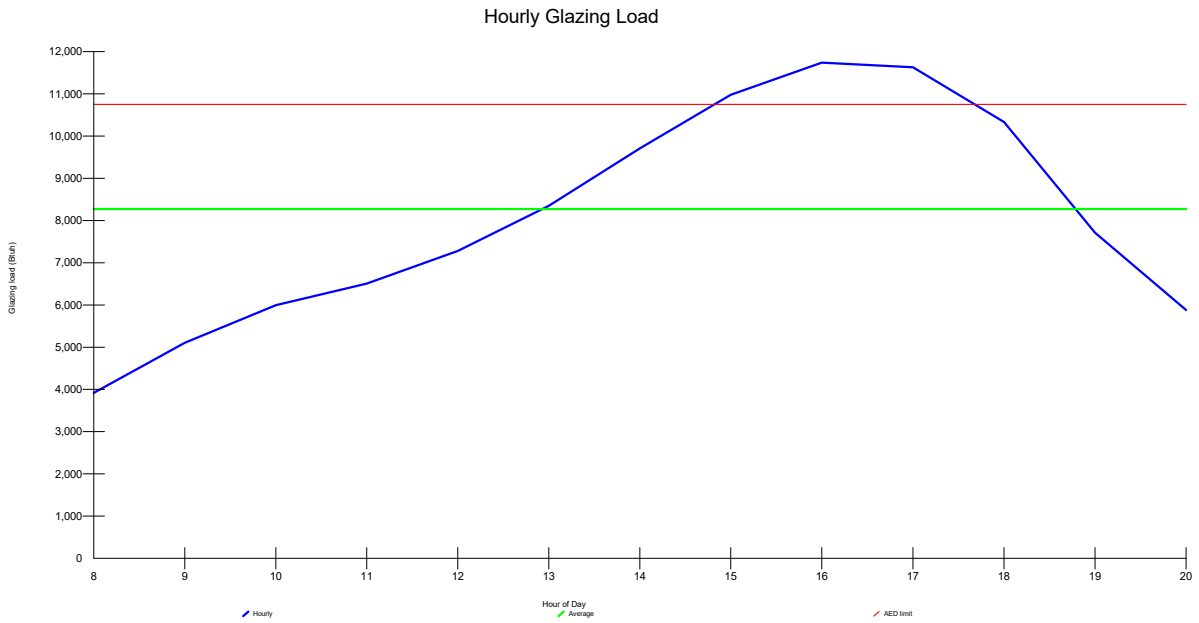
Location:
Colorado Springs Muni AP, CO, US
Elevation: 6171 ft
Latitude: 39°N

Outdoor:	**Heating**	**Cooling**
Dry bulb (°F)	***0***	***90***
Daily range (°F)	-	26 (H)
Wet bulb (°F)	-	59
Wind speed (mph)	7.5	7.5

Indoor:	**Heating**	**Cooling**
Indoor temperature (°F)	72	75
Design TD (°F)	72	15
Relative humidity (%)	30	30
Moisture difference (gr/lb)	38.5	-6.4

Infiltration:

Test for Adequate Exposure Diversity



Maximum hourly glazing load exceeds average by 41.9%.

House does not have adequate exposure diversity (AED), based on AED limit of 30%.

AED excursion: 988 Btuh (PFG - 1.3*AFG)

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Right-J® Worksheet
Entire House
Latigo Home Design, LLC

Job: 12124 Oregon Wagon Trail
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By: Dennis Asher

2165 State Route 76, Willow Springs, MO 65793 Phone: (719) 243-7163 Email: dennis@latigohomedesign.com

1	Room name	Entire House	Mech
2	Exposed wall	181.3 ft	0 ft
3	Room height	8.0 ft	8.0 ft heat/cool
4	Room dimensions		6.3 x 3.0 ft
5	Room area	1825.7 ft²	19.0 ft²

	Ty	Construction number	U-value (Btuh/ft²-°F)	Or	HTM (Btuh/ft²) Heat	HTM (Btuh/ft²) Cool	Area (ft²) or perimeter (ft) Gross	N/P/S	Load (Btuh) Heat	Load (Btuh) Cool	Area (ft²) or perimeter (ft) Gross	N/P/S	Load (Btuh) Heat	Load (Btuh) Cool
6	W	Exterior 2x6 R-20	0.065	se	4.68	0.80	371	302	1412	240	0	0	0	0
.	G	Standard Window 32U	0.320	se	23.04	48.46	48	0	1106	2326	0	0	0	0
.	D	Standard Door 32U	0.320	se	23.04	7.50	21	21	484	158	0	0	0	0
.	W	Exterior 2x6 R-20	0.065	sw	4.68	0.80	800	668	3128	532	0	0	0	0
11	G	Standard Window 32U	0.320	sw	23.04	48.46	97	0	2227	4685	0	0	0	0
	D	Standard Door 32U	0.320	sw	23.04	7.50	35	35	806	263	0	0	0	0
	W	Exterior 2x6 R-20	0.065	nw	4.68	0.80	280	255	1195	203	0	0	0	0
	G	Standard Window 32U	0.320	nw	23.04	39.81	25	0	568	982	0	0	0	0
	P	Partition 2x4 R13 pl	0.064	-	4.61	0.31	939	918	4229	285	99	99	455	31
	D	Standard Door 32U	0.320	n	23.04	7.50	21	21	484	158	0	0	0	0
	C	Standard Attic R-49	0.020	-	1.44	0.94	950	950	1368	892	0	0	0	0
	C	Standard Attic R-49	0.020	-	1.44	0.94	42	42	60	39	0	0	0	0
	F	Floor over Unheated	0.049	-	2.76	0.58	116	116	321	67	0	0	0	0
	F	Slab On Grade	0.100	-	7.20	0.00	876	93	672	0	19	0	0	0

6	c) AED excursion									988				-1
	Envelope loss/gain								18059	11818			455	30
12	a) Infiltration								5373	1119			0	0
	b) Room ventilation								0	0			0	0
13	Internal gains:	Occupants @	230				2			460	0			0
		Appliances/other								2100				0
	Subtotal (lines 6 to 13)								23432	15497			455	30
	Less external load								0	0			0	0
	Less transfer								0	0			0	0
	Redistribution								0	0			-455	-30
14	Subtotal								23432	15497			0	0
15	Duct loads						0%	0%	0	0	-0%	0%	0	0
	Total room load								23432	15497			0	0
	Air required (cfm)								866	866			0	0

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Entire House
Latigo Home Design, LLC

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		Foyer	Powder
1	Room name	Foyer	Powder
2	Exposed wall	15.0 ft	0 ft
3	Room height	8.0 ft heat/cool	8.0 ft heat/cool
4	Room dimensions	5.0 x 15.0 ft	6.3 x 5.7 ft
5	Room area	75.0 ft²	35.9 ft²

	Ty	Construction number	U-value (Btuh/ft²-°F)	Or	HTM (Btuh/ft²) Heat	HTM (Btuh/ft²) Cool	Foyer Area (ft²) or perimeter (ft) Gross	Foyer N/P/S	Foyer Load (Btuh) Heat	Foyer Load (Btuh) Cool	Powder Area (ft²) or perimeter (ft) Gross	Powder N/P/S	Powder Load (Btuh) Heat	Powder Load (Btuh) Cool
6	W	Exterior 2x6 R-20	0.065	se	4.68	0.80	120	99	463	79	0	0	0	0
.	G	Standard Window 32U	0.320	se	23.04	48.46	0	0	0	0	0	0	0	0
.	D	Standard Door 32U	0.320	se	23.04	7.50	21	21	484	158	0	0	0	0
.	W	Exterior 2x6 R-20	0.065	sw	4.68	0.80	0	0	0	0	0	0	0	0
11	G	Standard Window 32U	0.320	sw	23.04	48.46	0	0	0	0	0	0	0	0
	D	Standard Door 32U	0.320	sw	23.04	7.50	0	0	0	0	0	0	0	0
	W	Exterior 2x6 R-20	0.065	nw	4.68	0.80	0	0	0	0	0	0	0	0
	G	Standard Window 32U	0.320	nw	23.04	39.81	0	0	0	0	0	0	0	0
	P	Partition 2x4 R13 pl	0.064	-	4.61	0.31	131	131	602	41	51	51	233	16
	D	Standard Door 32U	0.320	n	23.04	7.50	0	0	0	0	0	0	0	0
	C	Standard Attic R-49	0.020	-	1.44	0.94	0	0	0	0	0	0	0	0
	C	Standard Attic R-49	0.020	-	1.44	0.94	42	42	60	39	0	0	0	0
	F	Floor over Unheated	0.049	-	2.76	0.58	0	0	0	0	0	0	0	0
	F	Slab On Grade	0.100	-	7.20	0.00	75	15	108	0	36	0	0	0

6	c) AED excursion									-10				0
	Envelope loss/gain								1717	306			233	15
12	a) Infiltration								444	93			0	0
	b) Room ventilation								0	0			0	0
13	Internal gains:	Occupants @	230				0			0	0			0
		Appliances/other								0				0
	Subtotal (lines 6 to 13)								2162	399			233	15
	Less external load								0	0			0	0
	Less transfer								0	0			0	0
	Redistribution								0	0			0	0
14	Subtotal								2162	399			233	15
15	Duct loads						-0%	0%	0	0	-0%	0%	0	0
	Total room load								2162	399			233	15
	Air required (cfm)								80	22			9	1

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		Grand Room	Kitchen/Pantry
1	Room name	Grand Room	Kitchen/Pantry
2	Exposed wall	40.7 ft	37.7 ft
3	Room height	8.0 ft heat/cool	8.0 ft heat/cool
4	Room dimensions	1.0 x 399.1 ft	21.7 x 16.0 ft
5	Room area	399.1 ft²	346.7 ft²

	Ty	Construction number	U-value (Btuh/ft²-°F)	Or	HTM (Btuh/ft²) Heat	HTM (Btuh/ft²) Cool	Grand Room Area (ft²) or perimeter (ft) Gross	Grand Room N/P/S	Grand Room Load (Btuh) Heat	Grand Room Load (Btuh) Cool	Kitchen/Pantry Area (ft²) or perimeter (ft) Gross	Kitchen/Pantry N/P/S	Kitchen/Pantry Load (Btuh) Heat	Kitchen/Pantry Load (Btuh) Cool
6	W	Exterior 2x6 R-20	0.065	se	4.68	0.80	99	75	349	59	0	0	0	0
.	G	Standard Window 32U	0.320	se	23.04	48.46	24	0	553	1163	0	0	0	0
.	D	Standard Door 32U	0.320	se	23.04	7.50	0	0	0	0	0	0	0	0
.	W	Exterior 2x6 R-20	0.065	sw	4.68	0.80	227	178	833	142	173	138	647	110
11	G	Standard Window 32U	0.320	sw	23.04	48.46	49	0	1121	2359	0	0	0	0
	D	Standard Door 32U	0.320	sw	23.04	7.50	0	0	0	0	35	35	806	263
	W	Exterior 2x6 R-20	0.065	nw	4.68	0.80	0	0	0	0	128	103	484	82
	G	Standard Window 32U	0.320	nw	23.04	39.81	0	0	0	0	25	0	568	982
	P	Partition 2x4 R13 pl	0.064	-	4.61	0.31	85	85	393	26	173	152	702	47
	D	Standard Door 32U	0.320	n	23.04	7.50	0	0	0	0	21	21	484	158
	C	Standard Attic R-49	0.020	-	1.44	0.94	0	0	0	0	0	0	0	0
	C	Standard Attic R-49	0.020	-	1.44	0.94	0	0	0	0	0	0	0	0
	F	Floor over Unheated	0.049	-	2.76	0.58	0	0	0	0	0	0	0	0
	F	Slab On Grade	0.100	-	7.20	0.00	399	41	293	0	347	38	271	0

6	c) AED excursion									269				373
	Envelope loss/gain								3543	4018			3963	2015
12	a) Infiltration								1205	251			1116	233
	b) Room ventilation								0	0			0	0
13	Internal gains:	Occupants @	230				0			0	0			0
		Appliances/other								900				1200
	Subtotal (lines 6 to 13)								4748	5169			5079	3447
	Less external load								0	0			0	0
	Less transfer								0	0			0	0
	Redistribution								455	30			0	0
14	Subtotal								5202	5199			5079	3447
15	Duct loads						-0%	0%	0	0	-0%	0%	0	0
	Total room load								5202	5199			5079	3447
	Air required (cfm)								192	291			188	193

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Date: Oct 21, 2020
By: Dennis Asher

2165 State Route 76, Willow Springs, MO 65793 Phone: (719) 243-7163 Email: dennis@latigohomedesign.com

		Bath 1	Bedroom 2
1	Room name	Bath 1	Bedroom 2
2	Exposed wall	5.0 ft	12.3 ft
3	Room height	8.0 ft heat/cool	8.0 ft heat/cool
4	Room dimensions	5.0 x 12.3 ft	12.3 x 15.0 ft
5	Room area	61.7 ft²	185.0 ft²

	Ty	Construction number	U-value (Btuh/ft²-°F)	Or	HTM (Btuh/ft²) Heat	HTM (Btuh/ft²) Cool	Area (ft²) or perimeter (ft) Gross	N/P/S	Load (Btuh) Heat	Load (Btuh) Cool	Area (ft²) or perimeter (ft) Gross	N/P/S	Load (Btuh) Heat	Load (Btuh) Cool
6	W	Exterior 2x6 R-20	0.065	se	4.68	0.80	0	0	0	0	0	0	0	0
.	G	Standard Window 32U	0.320	se	23.04	48.46	0	0	0	0	0	0	0	0
.	D	Standard Door 32U	0.320	se	23.04	7.50	0	0	0	0	0	0	0	0
.	W	Exterior 2x6 R-20	0.065	sw	4.68	0.80	40	40	187	32	99	75	349	59
11	G	Standard Window 32U	0.320	sw	23.04	48.46	0	0	0	0	24	0	553	1163
	D	Standard Door 32U	0.320	sw	23.04	7.50	0	0	0	0	0	0	0	0
	W	Exterior 2x6 R-20	0.065	nw	4.68	0.80	0	0	0	0	0	0	0	0
	G	Standard Window 32U	0.320	nw	23.04	39.81	0	0	0	0	0	0	0	0
	P	Partition 2x4 R13 pl	0.064	-	4.61	0.31	0	0	0	0	0	0	0	0
	D	Standard Door 32U	0.320	n	23.04	7.50	0	0	0	0	0	0	0	0
	C	Standard Attic R-49	0.020	-	1.44	0.94	62	62	89	58	185	185	266	174
	C	Standard Attic R-49	0.020	-	1.44	0.94	0	0	0	0	0	0	0	0
	F	Floor over Unheated	0.049	-	2.76	0.58	0	0	0	0	0	0	0	0
	F	Slab On Grade	0.100	-	7.20	0.00	0	0	0	0	0	0	0	0

6	c) AED excursion									-3				465
	Envelope loss/gain								276	87			1169	1861
12	a) Infiltration								148	31			365	76
	b) Room ventilation								0	0			0	0
13	Internal gains:	Occupants @	230				0			0	1			230
		Appliances/other								0				0
	Subtotal (lines 6 to 13)								424	118			1534	2167
	Less external load								0	0			0	0
	Less transfer								0	0			0	0
	Redistribution								0	0			0	0
14	Subtotal								424	118			1534	2167
15	Duct loads						-0%	0%	0	0	-0%	0%	0	0
	Total room load								424	118			1534	2167
	Air required (cfm)								16	7			57	121

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MECHANICAL

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.

wrightsoft®

Right-J® Worksheet
Entire House
Latigo Home Design, LLC

Job: 12124 Oregon Wagon Trail
Date: Oct 21, 2020
By: Dennis Asher

2165 State Route 76, Willow Springs, MO 65793 Phone: (719) 243-7163 Email: dennis@latigohomedesign.com

		Bedroom 1	Loft
1	Room name	Bedroom 1	Loft
2	Exposed wall	31.7 ft	31.7 ft
3	Room height	8.0 ft heat/cool	8.0 ft heat/cool
4	Room dimensions	1.0 x 274.0 ft	1.0 x 308.7 ft
5	Room area	274.0 ft²	308.7 ft²

	Ty	Construction number	U-value (Btuh/ft²-°F)	Or	HTM (Btuh/ft²) Heat	HTM (Btuh/ft²) Cool	Area (ft²) or perimeter (ft) Gross	N/P/S	Load (Btuh) Heat	Load (Btuh) Cool	Area (ft²) or perimeter (ft) Gross	N/P/S	Load (Btuh) Heat	Load (Btuh) Cool
6	W	Exterior 2x6 R-20	0.065	se	4.68	0.80	152	128	599	102	0	0	0	0
.	G	Standard Window 32U	0.320	se	23.04	48.46	24	0	553	1163	0	0	0	0
.	D	Standard Door 32U	0.320	se	23.04	7.50	0	0	0	0	0	0	0	0
.	W	Exterior 2x6 R-20	0.065	sw	4.68	0.80	101	77	362	62	101	101	474	81
11	G	Standard Window 32U	0.320	sw	23.04	48.46	24	0	553	1163	0	0	0	0
	D	Standard Door 32U	0.320	sw	23.04	7.50	0	0	0	0	0	0	0	0
	W	Exterior 2x6 R-20	0.065	nw	4.68	0.80	0	0	0	0	152	152	711	121
	G	Standard Window 32U	0.320	nw	23.04	39.81	0	0	0	0	0	0	0	0
	P	Partition 2x4 R13 pl	0.064	-	4.61	0.31	141	141	651	44	259	259	1192	80
	D	Standard Door 32U	0.320	n	23.04	7.50	0	0	0	0	0	0	0	0
	C	Standard Attic R-49	0.020	-	1.44	0.94	274	274	395	257	309	309	444	290
	C	Standard Attic R-49	0.020	-	1.44	0.94	0	0	0	0	0	0	0	0
	F	Floor over Unheated	0.049	-	2.76	0.58	38	38	105	22	78	78	216	45
	F	Slab On Grade	0.100	-	7.20	0.00	0	0	0	0	0	0	0	0

6	c) AED excursion									-79				-20
	Envelope loss/gain								3218	2734			3038	597
12	a) Infiltration								938	195			938	195
	b) Room ventilation								0	0			0	0
13	Internal gains:	Occupants @	230				1			230	0			0
		Appliances/other								0				0
	Subtotal (lines 6 to 13)								4156	3159			3976	792
	Less external load								0	0			0	0
	Less transfer								0	0			0	0
	Redistribution								0	0			0	0
14	Subtotal								4156	3159			3976	792
15	Duct loads						-0%	0%	0	0	-0%	0%	0	0
	Total room load								4156	3159			3976	792
	Air required (cfm)								154	177			147	44

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wrightsoft®

Right-J® Worksheet
Entire House
Latigo Home Design, LLC

Job: 12124 Oregon Wagon Trail
Date: Oct 21, 2020
By: Dennis Asher

2165 State Route 76, Willow Springs, MO 65793 Phone: (719) 243-7163 Email: dennis@latigohomedesign.com

1	Room name	Bath 2
2	Exposed wall	7.3 ft
3	Room height	8.0 ft heat/cool
4	Room dimensions	1.0 x 120.7 ft
5	Room area	120.7 ft²

	Ty	Construction number	U-value (Btuh/ft²-°F)	Or	HTM (Btuh/ft²) Heat	HTM (Btuh/ft²) Cool	Area (ft²) or perimeter (ft) Gross	Area N/P/S	Load (Btuh) Heat	Load (Btuh) Cool	Area or perimeter Gross	Area N/P/S	Load Heat	Load Cool
6	W	Exterior 2x6 R-20	0.065	se	4.68	0.80	0	0	0	0				
.	G	Standard Window 32U	0.320	se	23.04	48.46	0	0	0	0				
.	D	Standard Door 32U	0.320	se	23.04	7.50	0	0	0	0				
.	W	Exterior 2x6 R-20	0.065	sw	4.68	0.80	59	59	275	47				
11	G	Standard Window 32U	0.320	sw	23.04	48.46	0	0	0	0				
	D	Standard Door 32U	0.320	sw	23.04	7.50	0	0	0	0				
	W	Exterior 2x6 R-20	0.065	nw	4.68	0.80	0	0	0	0				
	G	Standard Window 32U	0.320	nw	23.04	39.81	0	0	0	0				
	P	Partition 2x4 R13 pl	0.064	-	4.61	0.31	0	0	0	0				
	D	Standard Door 32U	0.320	n	23.04	7.50	0	0	0	0				
	C	Standard Attic R-49	0.020	-	1.44	0.94	121	121	174	113				
	C	Standard Attic R-49	0.020	-	1.44	0.94	0	0	0	0				
	F	Floor over Unheated	0.049	-	2.76	0.58	0	0	0	0				
	F	Slab On Grade	0.100	-	7.20	0.00	0	0	0	0				

6	c) AED excursion				-5		
	Envelope loss/gain			448	155		
12	a) Infiltration			217	45		
	b) Room ventilation			0	0		
13	Internal gains:	Occupants @ 230	0		0		
		Appliances/other			0		
	Subtotal (lines 6 to 13)			666	200		
	Less external load			0	0		
	Less transfer			0	0		
	Redistribution			0	0		
14	Subtotal			666	200		
15	Duct loads		-0% 0%	0	0		
	Total room load			666	200		
	Air required (cfm)			25	11		

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MECHANICAL

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.

Goodman®

Air Conditioning & Heating

GMSS92 / GCSS92

Single-Stage, Multi-Speed Gas Furnace Up to 92% AFUE

Heating Input: 40,000–120,000 BTU/h

Contents

Standard Features

- Heavy-duty aluminized-steel tubular heat exchanger
- Stainless-steel secondary heat exchanger
- Single-stage gas valve
- Durable Silicon Nitride igniter
- Multi-speed blower motor
- Quiet single-speed induced draft blower
- Self-diagnostic control board
- All models comply with California 40 ng/J Low NOx emissions standard
- AHRI Certified; ETL Listed

Cabinet Features

- Designed for multi-position installation — GMSS92: upflow, horizontal left or right GCSS92: downflow, horizontal left or right
- Certified for direct vent (2-pipe) or on-direct vent (1-pipe)
- Easy-to-install top venting with optional side venting
- Convenient left or right connection for gas and electrical service
- Cabinet air leakage (Q_{Leak}) ≤ 2%
- Heavy-gauge steel cabinet with durable finish
- Foil-faced insulated heat exchanger cabinet
- Airtight solid bottom or side return with easy-cut tabs for effortless removal in bottom air-inlet applications

LIFETIME HEAT EXCHANGER LIMITED WARRANTY* 10 YEAR PARTS LIMITED WARRANTY* Intertek AHRI CERTIFIED ISO 9001

* Complete warranty details available from your local dealer or at www.goodman the Lifetime Heat Exchanger Limited Warranty (good for as long as you own your Parts Limited Warranty, online registration must be completed within 60 days o registration is not required in California or Québec.

	GMSS92 0402BNA	GMSS92 0603BNA	GMSS92 0803BNA	GMSS92 0804CNA	GMSS92 0805CNA	GMSS92 1004CNA	GMSS92 1005CNA	GMSS92 1205DNA
HEATING DATA								
High Fire Input[1]	40,000	60,000	80,000	80,000	80,000	100,000	100,000	120,000
High Fire Output[1]	36,840	55,260	73,680	73,680	73,680	92,100	92,100	110,520
AFUE[2]	92	92	92	92	92	92	92	92
Temperature Rise Range (°F)	30 - 60	35 - 65	35 - 65	35 - 65	25 - 55	35 - 65	35 - 65	35 - 65
Vent Diameter[3]	2" - 3"	2" - 3"	2" - 3"	2" - 3"	2" - 3"	2" - 3"	2" - 3"	3"
NO. OF BURNERS	2	3	4	4	4	5	5	6
CIRCULATOR BLOWER								
Available AC @ 0.5" ESP	1.5 - 3	1.5 - 3	1.5 - 3	3 - 5	3 - 5	3 - 5	3 - 5	3 - 5
Size (D x W)	10" x 8"	10" x 8"	10" x 8"	10" x 10"	11" x 10"	10" x 10"	11" x 10"	11" x 11"
Horsepower @ 1075 RPM	⅓	⅓	⅓	½	¾	½	¾	¾
Speed	4	4	4	4	4	4	4	4
ELECTRICAL DATA								
Min. Circuit Ampacity[4]	9.6	9.6	9.6	11.7	13.7	11.7	13.7	13.7
Max. Overcurrent Device (amps)[5]	15	15	15	15	15	15	15	15
SHIPPING WEIGHT (LBS)	109	112	115	137	138	139	140	152

1 Natural Gas BTU/h

2 DOE AFUE based upon Isolated Combustion System (ICS)

3 Installer must supply one or two PVC pipes: one for combustion air (optional) and one for the flue outlet (required). Vent pipe must be either 2" or 3" in diameter, depending upon furnace input, number of elbows, length of run and installation (1 or 2 pipes). The optional Combustion Air Pipe is dependent on installation/code requirements and must be 2" or 3" diameter PVC.

4 Minimum Circuit Ampacity = (1.25 x Circulator Blower Amps) + ID Blower amps. Wire size should be determined in accordance with National Electrical Codes. Extensive wire runs will require larger wire sizes.

5 Maximum Overcurrent Protection Device refers to maximum recommended fuse or circuit breaker size. May use fuses or HACR-type circuit breakers of the same size as noted.

NOTES

- All furnaces are manufactured for use on 115 VAC, 60 Hz, single-phase electrical supply.
- Gas Service Connection ½" FPT
- Important: Size fuses and wires properly and make electrical connections in accordance with the National Electrical Code and/or all existing local codes.
- For bottom return: Failure to unfold flanges may reduce airflow by up to 18%. This could result in performance and noise issues.
- For servicing or cleaning, a 24" front clearance is required. Unit connections (electrical, flue and drain) may necessitate greater clearances than the minimum clearances listed above. In all cases, accessibility clearance must take precedence over clearances from the enclosure where accessibility clearances are greater.

(CFM & TEMPERATURE RISE VS. EXTERNAL STATIC PRESSURE)

MODEL	MOTOR SPEED	TONS AC[1]	EXTERNAL STATIC PRESSURE, (INCHES WATER COLUMN)												
			0.1		0.2		0.3		0.4		0.5		0.6	0.7	0.8
			CFM	RISE	CFM	RISE	CFM	RISE	CFM	RISE	CFM	RISE	CFM	CFM	CFM
GMSS92 0402BNA	High	3	1,498	N/A	1,446	N/A	1,368	N/A	1,302	N/A	1,227	N/A	1,145	1,059	954
	Med	2.5	1,223	N/A	1,182	N/A	1,153	30	1,099	31	1,051	32	982	901	813
	Med-Lo	2	983	35	971	35	945	36	919	37	878	39	813	746	659
	Low	1.5	816	42	794	43	758	45	734	46	678	50	637	597	523
GMSS92 0603BNA	High	3	1,494	N/A	1,428	36	1,362	38	1,294	39	1,231	42	1,162	1,076	972
	Med	2.5	1,203	42	1,178	43	1,147	45	1,101	46	1,045	49	986	927	831
	Med-Lo	2	977	52	965	53	939	54	904	57	866	59	801	763	639
	Low	1.5	801	64	786	65	751	N/A	714	N/A	714	N/A	680	635	596
GMSS92 0803BNA	High	3	1,459	47	1,397	49	1,339	51	1,270	54	1,202	57	1,107	1,049	952
	Med	2.5	1,191	57	1,166	58	1,137	60	1,086	63	1,033	N/A	973	889	797
	Med-Lo	2	985	N/A	967	N/A	932	N/A	900	N/A	859	N/A	805	731	620
	Low	1.5	808	N/A	785	N/A	758	N/A	726	N/A	679	N/A	629	590	513
GMSS92 0804CNA	High	5	2,115	N/A	2,050	N/A	1,973	35	1,915	36	1,810	38	1,695	1,587	1,467
	Med	4	1,802	38	1,739	39	1,725	40	1,665	41	1,612	42	1,532	1,443	1,320
	Med-Lo	3.5	1,517	45	1,509	45	1,496	46	1,475	46	1,441	47	1,388	1,304	1,205
	Low	3	1,213	56	1,225	56	1,216	56	1,194	57	1,179	58	1,135	1,084	1,005
GMSS92 0805CNA	High	5	2,284	30	2,231	31	2,170	31	2,103	32	2,037	33	1,945	1,836	1,750
	Med	4	1,865	37	1,869	36	1,775	38	1,732	39	1,684	40	1,619	1,548	1,480
	Med-Lo	3.5	1,594	43	1,571	43	1,530	45	1,492	46	1,454	47	1,414	1,355	1,293
	Low	3	1,411	48	1,366	50	1,325	51	1,296	53	1,251	54	1,200	1,147	1,096
GMSS92 1004CNA	High	5	2,082	41	1,997	43	1,943	44	1,847	46	1,749	49	1,669	1,560	1,443
	Med	4	1,823	47	1,782	48	1,711	50	1,659	51	1,574	54	1,513	1,402	1,305
	Med-Lo	3.5	1,565	54	1,545	55	1,529	56	1,487	57	1,441	59	1,365	1,287	1,196
	Low	3	1,261	N/A	1237	N/A	1,242	N/A	1,216	N/A	1,179	N/A	1,145	1,098	1,034
GMSS92 1005CNA	High	5	2,137	40	2,073	41	2,031	42	1,949	44	1,879	45	1,811	1,734	1,625
	Med	4	1,793	48	1,754	49	1,704	50	1,648	52	1,590	54	1,534	1,451	1,371
	Med-Lo	3.5	1,558	55	1,518	56	1,477	58	1,425	60	1,376	62	1,316	1,242	1,170
	Low	3	1,370	62	1,325	64	1,288	N/A	1,237	N/A	1,191	N/A	1,134	1,086	1,024
GMSS92 1205DNA	High	5	2,256	45	2,192	47	2,133	48	2,054	50	1,986	51	1,907	1,834	1,718
	Med	4	1,805	57	1,762	58	1,722	59	1,677	61	1,618	63	1,563	1,507	1,441
	Med-Lo	3.5	1,565	65	1,513	N/A	1,480	N/A	1,415	N/A	1,392	N/A	1,346	1,269	1,198
	Low	3	1,368	N/A	1,326	N/A	1,278	N/A	1,238	N/A	1,208	N/A	1,165	1,093	1,052

[1] at 0.5" ESP

NOTES

- CFM in chart is without filter(s). Filters do not ship with this furnace, but must be provided by the installer. If the furnace requires two return filters, this chart assumes both filters are installed.
- All furnaces ship as high-speed cooling and medium-speed heating. Installer must adjust blower cooling & heating speed as needed.
- For most jobs, about 400 CFM per ton when cooling is desirable.
- INSTALLATION IS TO BE ADJUSTED TO OBTAIN TEMPERATURE RISE WITHIN THE RANGE SPECIFIED ON THE RATING PLATE.
- This chart is for information only. For satisfactory operation, external static pressure should not exceed value shown on the rating plate. The shaded area indicates ranges in excess of maximum static pressure allowed when heating.
- The above chart is for U.S. furnaces installed at 0-2000 feet. At higher altitudes, a properly derated unit will have approximately the same temperature rise at a particular CFM, while ESP at the CFM will be lower.

MINIMUM FILTER SIZES

	GMSS92 0402BNA	GMSS92 0603BNA	GMSS92 0803BNA	GMSS92 0804CNA	GMSS92 0805CNA	GMSS92 1004CNA	GMSS92 1005CNA	GMSS92 1205DNA
Filter Size (in²) (Qty)	(1) 16 x 25 (side or bottom)				(1) 20 x 25 (bottom) or (2) 16 x 25 (side)	(1) 16 x 25 (side or bottom)	(1) 20 x 25 (bottom) or (	

Note: Other size filters of equal or greater dimensions may be used. Filters may also be centrally located.

Goodman®
Air Conditioning & Heating

Indoor Coils

CAPF, CAUF,CAPT, CHPF, & CSCF

Cased, Painted Upflow, Downflow, Uncased Upflow, Downflow, Horizontal "A" & Horizontal Slab Indoor Coils

Standard Features

- Piston models suitable for use with R-410A and R-22 refrigerants
- Mold-resistant thermoplastic drain pans feature a low water-retention design
- Check flowrater expansion device for heat pump or cooling-only applications
- Rifled aluminum tubing and louvered aluminum fin coils
- Factory-installed TXV in high-efficiency coils for use with R-410A refrigerant
- AHRI Certified; ETL Listed

Cased Coil Cabinet Features

- Galvanized-steel cabinet with leather-grain finish
- Foil-face insulation
- Architectural Gray paint finish on cased coils
- Split-seam front for easy access
- 17½", 21", and 24½" CHPF coils have one 3½" adapter plate
- 17½", 21", and 24½" CAPF coils have two 1¾" adapter plates

Accessories

- Field-Installed Expansion Valve Kits
- Field-Installed High-Temperature Drain Pan Kits; maximum temperature rating is 400ºF
- See full list of accessories on Page 12.

CAUF
Uncased

CAPF
Cased

CHPF
Horizontal "A"

CAPT
Cased with TXV Option

CSCF
Horizontal Slab

Note: Do not use these coils on oil furnaces or any applications where the temperature on the drain pan may exceed 300° F. If these coils are applied with an oil furnace or another application where high temperatures threaten or jeopardize the durability of the drain pan, you must replace the factory-installed drain pan with a high-temperature drain pan. High-temperature drain pan kits are available as field-installed accessories.

10 YEAR PARTS LIMITED WARRANTY* R-410A REFRIGERANT

* Complete warranty details available from your local dealer or at www.goodmanmfg.com. To receive the 10-Year Parts Limited Warranty, online registration must be completed within 60 days of installation. Online registration is not required in California or Québec.

Airflow Data for CAUF & CAPF

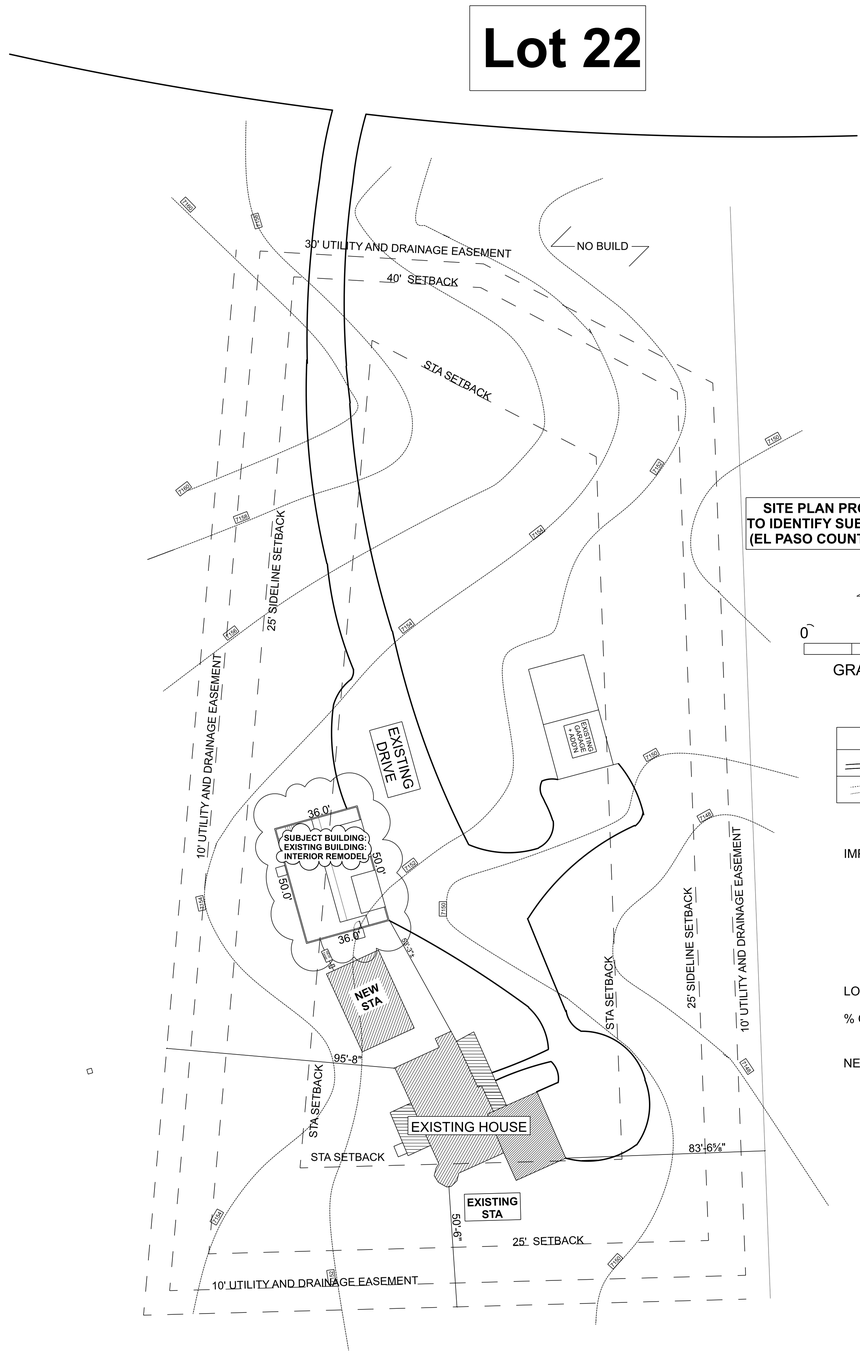
Air Quantity (SCFM) vs. Pressure Drop (in. WC)

	SCFM	400	500	600	700	800	900	1000	1100	1200
CA*F1824A6*	Wet	0.071	0.099	0.142	0.183	0.230	0.280	0.331	0.389	---
	Dry	0.062	0.090	0.122	0.154	0.189	0.231	0.278	0.331	0.390
CA*F1824B6*	Wet	0.021	0.032	0.049	0.071	0.089	0.120	0.128	0.159	0.190
	Dry	0.011	0.022	0.029	0.041	0.052	0.069	0.078	0.101	0.120
CA*F1824C6*	Wet	0.017	0.025	0.043	0.061	0.079	0.107	0.114	0.140	0.164
	Dry	0.011	0.017	0.024	0.035	0.044	0.063	0.075	0.094	0.113

	SCFM	600	700	800	900	1000	1100	1200	1300	1400	1500
CA*F3030A6*	Wet	0.151	0.173	0.204	0.238	0.267	0.281	0.326	0.380	0.406	0.451
	Dry	0.069	0.083	0.117	0.132	0.148	0.183	0.206	0.239	0.290	0.338
CA*F3030B6*	Wet	0.090	0.120	0.150	0.180	0.210	0.240	0.280	0.330	0.370	0.420
	Dry	0.080	0.100	0.130	0.150	0.180	0.210	0.250	0.280	0.320	0.360
CA*F3030C6*	Wet	0.071	0.087	0.120	0.134	0.155	0.180	0.209	0.249	0.284	0.328
	Dry	0.050	0.067	0.098	0.113	0.135	0.169	0.189	0.213	0.245	0.275
CA*F3030D6*	Wet	0.069	0.060	0.090	0.108	0.136	0.168	0.206	0.244	0.288	0.337
	Dry	0.029	0.043	0.070	0.082	0.098	0.125	0.141	0.153	0.177	0.200

	SCFM	600	700	800	900	1000	1100	1200	1300	1400	1500	1600
CA*F3131B26*	Wet	0.041	0.049	0.061	0.078	0.090	0.113	0.131	0.140	0.162	0.178	0.210
	Dry	0.021	0.031	0.039	0.048	0.061	0.072	0.079	0.091	0.110	0.122	0.141
CA*F3131C6*	Wet	0.035	0.034	0.038	0.051	0.059	0.073	0.087	0.094	0.110	0.125	0.145
	Dry	0.014	0.022	0.028	0.036	0.045	0.054	0.061	0.068	0.081	0.091	0.108

	SCFM	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200
CA*F3636A6*	Wet	0.13	0.17	0.220	0.280	0.310	0.380	0.450	0.530	0.610	0.690	0.790	0.870	0.910	0.950	1.030	1.130	1.190
	Dry	0.13	0.16	0.200	0.230	0.280	0.320	0.380	0.450	0.520	0.590	0.670	0.710	0.790	0.870	0.970	1.060	1.160
CA*F3636B6*	Wet	0.11	0.13	0.160	0.180	0.220	0.260	0.300	0.350	0.400	0.460	0.520	0.570	0.600	0.660	0.720	0.790	0.850
	Dry	0.11	0.13	0.160	0.170	0.210	0.240	0.270	0.330	0.370	0.420	0.470	0.520	0.550	0.610	0.660	0.720	0.770
CA*F3636C6*	Wet	0.1	0.12	0.160	0.170	0.210	0.250	0.290	0.340	0.380	0.430	0.480	0.540	0.550	0.610	0.670	0.720	0.780
	Dry	0.09	0.11	0.130	0.140	0.160	0.180	0.220	0.250	0.280	0.320	0.350	0.370	0.410	0.450	0.490	0.530	0.570
CA*F3636D6*	Wet	0.08	0.11	0.130	0.140	0.170	0.200	0.230	0.270	0.310	0.350	0.390	0.430	0.460	0.500	0.560	0.620	0.660
	Dry	0.09	0.11	0.130	0.140	0.160	0.190	0.220	0.240	0.270	0.300	0.340	0.380	0.410	0.440	0.490	0.530	0.580



SITE PLAN PROVIDED FOR NEW SEPTIC LOCATION AND TO IDENTIFY SUBJECT BUILDING FOR SPECIAL USE PERMIT. (EL PASO COUNTY HEALTH AND DEVELOPMENT DIVISIONS)

N

0 — 100

GRAPHIC SCALE IN FEET

SCALE: 1" = 30'-0"

GRADE KEY	
═══	PROPOSED GRADES
·····	EXISTING GRADES

IMPERVIOUS COVERAGE CALCS

STRUCTURE: existing

DRIVEWAY, PATIO AND SIDEWALK: existing

TOTAL IMPERVIOUS AREA: existing SQ.FT

LOT AREA: 2.51 Acres 109,335.6 sq./ft

% OF IMPERVIOUS COVERAGE= existing 109,335.6 sf x 100 = exisiting %

NEW DISTURBED AREA (SEPTIC ONLY) = 900 SF±

"THE AUXILIARY DWELLING CONVERSION PROJECT"

12124 Oregon Wagon Trail, Elbert, Colorado 80106

Schedule Number: 4217006023

Lot 22, The Trails Filing Number 2-B

PREVIOUS PERMIT NUMBERS FOR REFERENCE:

HOUSE PERMIT: G03765
DETACHED 2-CAR: G02224
ADD'N TO TWO CAR DETACHED: L98912
SUBJECT EXISTING BUILDING: L99876

GENERAL NOTES:

- The contractor and homeowner shall review and verify all information on these drawings and be responsible for the same. Report all discrepancies to the designer for proper adjustment.
- All smoke detectors (SD) must be interconnected (Hardwired) and shall have battery back-up. CO detectors with 10' of bedrooms.
- LP gas-burning appliances are not permitted in basement or crawl space areas.
- A Colorado licensed architect or engineer shall design all footings and foundation walls. This report/design shall be incorporated with these drawings and shall be available at the building site at all times.
- All foundations and piers (including deck supports) shall bear on undisturbed soil. All footings and piers shall be protected with a minimum earthen cover of 30" for frost protection.
- All dimensions shown on these drawings are to face of framing members unless specifically indicated to the contrary. Noted dimensions shall take precedence over scaled dimensions. DO NOT SCALE DRAWINGS.
- All structural hardware shown on these drawings shall be as manufactured by Simpson Strong-Tie Company of San Leandro, California. The home designer prior to installation shall approve any substitutions.
- Roof ventilation shall equal 1/150 of the net attic area with 50% located at the eaves and 50% located at the upper portion of the area to be ventilated. A minimum of 1 inch of air space shall be provided between the insulation and the roof sheathing at eaves. (Compliance with 2015 IRC R806.2 is mandatory)
- Dryer to vent to exterior > 36" from any openings.

SPECIFICATIONS:

1) BUILDING IS EXISTING. SEE PERMIT L99876.

   Typical EXISTING exterior walls are 2x6 studs at 16" o/c with 7/16" OSB typical. NO additional openings proposed.
2) NEW floor framing shall be 11-7/8" TJI 210 joists at 16" o/c. Floor sheathing shall be 3/4" OSB (tongue and groove) glued and nailed to floor joists per American Plywood Association specifications and recommendations
3) New 2x4 bearing wall atop new concrete foundation wall as shown.
4) All interior walls shall be 2x4 studs at 16" o/c (typical); unless noted to the contrary.
5) Typical wall finish shall be textured 1/2" gypsum board. Use 5/8" type "X" gypsum board at all garage common walls, ceilings, & structural members.
6) All stairs or steps to grade shall have a maximum rise of 7¾" and a minimum run of 10". All stairs shall be a minimum of 3'-1" wide, to include landings.
7) Windows shall be by builder with double pane insulated low E glass. All windows must have a U-value as specified in the Energy Calcs.
8) Fascia shall be 5/4"x7¼" textured ProTrim over 2x6 sub-fascia w/ 4/4x3½" overlay on front gables ONLY. Soffit material shall be 7/16" masonite (typical).
9) Exhaust duct up through attic space, minimum R-6 insulation & 25' max run.

FLOOR FRAMING NOTES:

1) Typical floor system shall be framed 11-7/8" TJI 210 joists @ 16"o/c. (Floor will be engineered to minimum of L/480 live load deflection.) Floor sheathing shall be 3/4" OSB (tongue and groove) glued and nailed to floor joists per American Plywood Association specifications and recommendations. See plan for ledgers and related connections to existing bearing walls.
2) Exterior headers are EXISTING. One new header as noted. All others are noted. Beams and headers shown on the framing plan shall take precedence.
4) Insulate building as noted.

CODE INFORMATION:

2017	Pikes Peak Regional Building Code (2017 PPRBC)
2015	International Residential Code (2015 IRC)*
2015	International Energy Conservation Code* (IECC)
2015	International Mechanical Code*
2015	International Fuel Gas Code*
2015	International Plumbing Code**
2017	National Electric Code**
*	As amended by 2017 PPRBC
**	Or the latest edition adopted by the State of Colorado

STRUCTURAL DESIGN LOADS:

	Live Load	Dead Load	Total Load
Floor	40 psf	16 psf	56 psf

AREA TABLE: INTERIOR REMODEL

MAIN LEVEL FLOOR PLAN	843.5 SQ. FT.
UPPER LEVEL FLOOR PLAN	950.0 SQ. FT.
TOTAL FINISHED	1,793.5 SQ. FT.
LOT SIZE	2.51 ACRES

NightHawk Design
a Hawk Companies, Inc. Business
5180 Whip Trail , Colorado Springs, Colorado 80917-2620
Rod Wiebe Dennis Asher Dave Tenace Christopher Wiebe
719.477.9460 [office] hawkcompanies@gmail.com 719.491.1227 [cell]

HOMEOWNER
Jason Porter: DECK WORKS
719-661-3403
deckworks1@comcast.net

THE AUXILIARY DWELLING CONVERSION PROJECT
INTERIOR REMODEL

12124 Oregon Wagon Trail, Elbert, Colorado 80106
Shedule Number: 4217006023
Lot 22, The Trails Filing Number 2-B

October 26, 2020

PAGE P1

REVISION	DATE
CONCEPTUAL	10-09-2020
SUBMITTAL	10-26-2020

EL PASO COUNTY
CLERK AND RECORDER
RECORDING DEPARTMENT
(719)520-6200

ISSUED TO: ROB WIEBE

RECEIPT # 510400
DATE 05/10/2021 01:24:05 PM

DOCUMENT #	PGS	FEE
221092400	2	
AFFIDAVIT		18.00
NA-14037195	2	
IMAGE		0.50
Total Amount Due		18.50
CREDIT 167981994		18.50
Total Amount Paid		18.50

THANK YOU
CHUCK BROERMAN
CLERK & RECORDER
Deputy:

RECORDER'S NOTE: COPY

Chuck Broerman
05/10/2021 01:24:05 PM
Doc $0.00 2
Rec $18.00 Pages

El Paso County, CO
221092400

SECOND KITCHEN COMPLIANCE AFFIDAVIT

I, Jason C Porter, applicant or applicant's agent for a Second Kitchen being duly sworn on oath, deposes and says:

I, as applicant, own and hold title to the following described real property (hereinafter referred to as "the PROPERTY"), or have been given authority to represent the owner by an Owner's Affidavit of the PROPERTY for purposes of the above referenced application:

12124 Oregon Wagon Trail — Street Address

LOT 22 THE TRAILS FIL NO 2-B — Legal Description

4217006023 — Assessor Tax Schedule Number

El Paso County, Colorado

I hereby acknowledge and agree to the following:

"I understand that my plans appear to provide for more than one kitchen in a single family dwelling. Pursuant to the El Paso County Land Development Code I understand only one dwelling unit is allowed per lot or parcel in the zoning district in which the proposed home is located. I understand that the County cannot approve the second kitchen unless an affidavit is signed and recorded in the Office of the El Paso County Clerk and Recorder where by I as Owner acknowledge and agree that I will not create a second dwelling unit to be leased or rented. I, hereby agree that I will not establish a second dwelling unit to be rented or leased."

IN WITNESS WHEREOF, the parties hereto have hereunder set their hands and seal this 26 day of March, 2021.

OWNER
STATE OF Colorado

COUNTY OF El Paso

Owner Signature

Print Name, Mailing Address and Phone Number

The foregoing instrument was acknowledged before me this 26 day of March, 2021 by Jason Porter, COUNTY of El Paso.

(Notary Public) My Commission expires 02/22/2023

SCOTT JAEGER
NOTARY PUBLIC - STATE OF COLORADO
NOTARY ID 20194007311
MY COMMISSION EXPIRES FEB 22, 2023

OWNER
STATE OF Colorado)

COUNTY OF El Paso)

Owner Signature

Jason C Porter 12124 Oregon Wagon Trl, Elbert CO 80106
Print Name, Mailing Address and Phone Number

The foregoing instrument was acknowledged before me this 26 day of March, 20 21 by Jason Porter, COUNTY of El Paso.

(Notary Public) My Commission expires 02/22/2023

SCOTT JAEGER
NOTARY PUBLIC - STATE OF COLORADO
NOTARY ID 20194007311
MY COMMISSION EXPIRES FEB 22, 2023