

**Champion Home Builders, Inc.**  
**DBA Highland Manufacturing**  
**Model: 290-KBM-3266S33005**

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**Plans package**

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State of Colorado  
Division of Housing

Apr 12 2024



**APPROVED PLANS**  
Subject to field inspection  
**OC INSPECTION REQUIRED**

Highland Manufacturing  
A Division of Champion Home Builders, Inc  
1660 Rowe Ave  
Worthington, MN 56187  
Phone: 507-376-9460

## DESIGN CRITERIA: COLORADO

2021 INTERNATIONAL RESIDENTIAL CODE - WITH AMENDMENTS  
2023 NATIONAL ELECTRICAL CODE - WITH AMENDMENTS  
2021 INTERNATIONAL ENERGY CONSERVATION CODE - WITH AMENDMENTS  
8 CCR 1302-14 ADMINISTRATIVE RULES

HOME LOCATION: 820 SOUTH STREET, VRAIN AVE., ESTES PARK, COLORADO 80517

LOCAL AUTHORITY HAVING JURISDICTION: LARIMER COUNTY, CO

SIZE: 30'-0" x 76'-0"; 66' HOUSE; 10' PORCH

FLOOR AREA: 2,280.00 SQ.FT.; 1,980.00 SQ.FT. FINISHED; 300 SQ.FT.; UNFINISHED (PORCH)

ATTIC VENTILATION (1/300): 7.60 TOTAL (3.80 SQ.FT.- SOFFIT; 3.80 SQ.FT. - RIDGE VENT)

## DESIGN LOADS:

LOCATION WIND SPEED: 175 MPH (VULT) = 136 MPH (VASD)

TRUSS DESIGN LOADS: 77.0 PSF (RLL) = 100 PSF (GSL)

ROOF DESIGN LOAD: 42 PSF

ROOF DEAD LOAD: 15 PSF

FLOOR LIVE LOAD: 40 PSF

FLOOR DEAD LOAD: 10 PSF

WALL DEAD LOAD: 5 PSF

SEISMIC DESIGN: ZONE C

CONSTRUCTION TYPE: VB

OCCUPANCY: R3

NUMBER OF FLOORS: SINGLE STORY

- WARM AIR REGISTER  
 OR - COLD AIR RETURN  
 - AIR TO AIR EXCHANGE LOCATION (MN ONLY)  
 - REQUIRED SUPPORT POST LOCATION

## NOTES:

ANY HEATING EQUIPMENT AND DUCTS INSTALLED ARE FOR THE MAIN MANUFACTURED UNIT ONLY.

## ATTENTION LOCAL INSPECTIONS DEPARTMENT:

THE FOLLOWING ITEMS HAVE NOT BEEN COMPLETED BY CHAMPION HOMES AND ARE TO BE COMPLETED ONSITE BY THE CONTRACTOR AND INSPECTED BY THE AUTHORITY HAVING JURISDICTION:

- FOUNDATION CONSTRUCTION AND ALL EARTH WORK.
- SERVICE CONNECTIONS FOR ELECTRICAL, GAS, WATER AND WASTE.
- ANY PLUMBING OR HVAC NOT INSTALLED OR SITE INSTALLED BELOW FLOOR SYSTEM IS TO BE COMPLETED BY A LICENSED TRADE PROFESSIONAL.
- BASEMENT/CRAWL SPACE WALL INSULATION.
- SHIP LOOSE SIDING/SHUTTERS.
- RIDGE CAP/VENT AND SET-UP OF FOLD DOWN TRUSSES IF APPLICABLE.
- UNIT TO UNIT CONNECTIONS.
- DECKS OR PORCHES.
- INSTALLATION OF INTERIOR DOORS ON MATE LINE AND FINISHING.
- FIELD EXTENSION OF GAS VENTS AND/OR CHIMNEYS TO THE EXTERIOR.
- INSTALLATION OF STAIRS TO THE BASEMENT.
- SITE INSTALLED DOORS OR WINDOWS.
- GARAGES.
- EXTERIOR DISCONNECTING MEANS & SURGE PROTECTION AT THE SERVICE PANEL.

## WINDOW SCHEDULE

CALL SIZE	ROUGH OPENING	LIGHT AREA (SQ.FT.)	VENT AREA (SQ.FT.)	ROOM AREA (SQ.FT.)	U VALUE
1076SG SAFETY	10 1/4" x 76 1/4" (5.42 SQ.FT.)	3.16	0	39.5 (LIGHT ONLY)	.26
2424	24 1/4" x 24 1/4" (4.08 SQ.FT.)	16.27	7.94	29	.26
2448SG SAFETY	24 1/4" x 48 1/4" (8.13 SQ.FT.)	5.99	2.95	74	.26
3008	30 1/4" x 15 1/4" (1.73 SQ.FT.)	1.01	0	12.6 (LIGHT ONLY)	.26
3015	30 1/4" x 8 1/4" (3.20 SQ.FT.)	1.87	0	23.4 (LIGHT ONLY)	.26
3036	30 1/4" x 36 1/4" (7.62 SQ.FT.)	5.55	2.64	66	.26
3042	30 1/4" x 42 1/4" (8.88 SQ.FT.)	7.10	0	88.8 (LIGHT ONLY)	.33
3061	30 1/4" x 61 1/4" (12.87 SQ.FT.)	10.13	5.12	127	.34
3608	36 1/4" x 8 1/4" (2.08 SQ.FT.)	1.21	0	15.1 (LIGHT ONLY)	.26
3661 EGRESS	36 1/4" x 15 1/4" (15.41 SQ.FT.)	12.43	6.11	153	.26
4661 EGRESS	46 1/4" x 61 1/4" (19.67 SQ.FT.)	16.27	7.94	199	.26
6040	60 1/4" x 40 1/4" (16.84 SQ.FT.)	13.80	7.19	174	.26
7224	72 1/4" x 24 1/4" (12.17 SQ.FT.)	10.26	0	128.3 (LIGHT ONLY)	.26
8260	82 1/4" x 60 1/4" (34.41 SQ.FT.)	30.55	8.31	208	.26

## DOOR SCHEDULE - EXTERIOR

3680	38" x 83" (22.06 SQ.FT.)	0	15	375 (VENT ONLY)	.17
7280	72 1/2" x 85 3/4" (40.50 SQ.FT. - PATIO)	33.36	16.30	408	.33
7580	75 1/2" x 83" (43.25 SQ.FT. - ATRIUM)	33.36	16.30	408	.33

## DOOR SCHEDULE - INTERIOR

CALL SIZE	ROUGH OPENING	UNDER CUT SIZE (IN)	RETURN AIR USABLE (SQ.IN.)	ROOM AREA MAX (SQ.FT.)
2480	25 1/2" x 83 1/4"	2.5	30.0	150
3080	31 1/2" x 83 1/4"	2.5	37.5	188
3680	37 1/2" x 83 1/4"	2.5	45.0	225
4880	49 1/2" x 83 1/4"	2.5	60.0	300

## ELECTRICAL CIRCUIT DIRECTORY

CIRCUIT#	CIRCUIT DESCRIPTION	BREAKER	WIRE
1	KITCHEN	#*20	12-2/WG
2	KITCHEN	#*20	12-2/WG
3	REFRIGERATOR	#*20	12-2/WG
4	WASHER	#*20	12-2/WG
5	LIVING ROOM	#15	14-2/WG
6	ENTRY/WIP/BEDROOM#3	#15	14-2/WG
7	BEDROOM #3/PRIMARY BATH	#15	14-2/WG
8	DINING ROOM/PORCH	#15	14-2/WG
9	RANGEHOOD	#20	12-2/WG
10	UTILITY/SMOKE ALARMS	#15	14-2/WG
11	DRYER	*30	10-3/WG
13	DISHWASHER	+*#20	12-2/WG
14	WATER HEATER	20	10/2
15	DINING ROOM RECPTS	#20	12-2/WG
16	WALL OVEN	+40	8-3/WG
17	FURNACE BLOWER FAN	20	12-2/WG
18	EXTERIOR RECEPTS (WP REQ'D)	#*20	12-2/WG
20	UTILITY	#*20	12-2/WG
23	KITCHEN	#15	14-2/WG
24	BATH #2/M.CLOSET/PRIM'Y BEDR	#15	14-2/WG
27	FREEZER	#*20	12-2/WG
30	BATHROOMS	#*20	12-2/WG
33	MICROWAVE	#*20	12-2/WG

\* GFCI PROTECTED # AFCI PROTECTED + LOCKOUT REQ'D WP = WEATHER PROOF

ALL BATH FANS ARE 50 CFM W/ 4" ROUND FLEX DUCT.

"RETAILER NAME" LOT MODEL.

FINAL DESTINATION OF HOUSE MAY BE WITHIN THE

STATE OF COLORADO AS LONG AS IT MEETS THE ABOVE

LISTED CODE REQUIREMENTS AND THE FOLLOWING

## DESIGN REQUIREMENTS:

1. MAX WIND SPEED = 175 MPH
2. MAX ROOF SNOW LOAD = 46.2 PSF
3. MAX ELEVATION = 6,100 FEET

SINGLE POLE SWITCH  
(D DENOTES DIMMER)  
(3 DENOTES 3-WAY)  
(4 DENOTES 4-WAY)

GENERAL LIGHTING RECEPTACLE  
120 VOLT - 15 AMP

GENERAL LIGHTING RECEPTACLE  
120 VOLT - 15 AMP  
G.F.I. PROTECTED

SMALL APPLIANCE RECEPTACLE  
120 VOLT - 20 AMP

SMALL APPLIANCE RECEPTACLE  
120 VOLT - 20 AMP  
G.F.I. PROTECTED

- ALL EXTERIOR RECEPTACLES AND LIGHTS ARE WEATHER PROOF.
- ALL LIGHTS OVER SHOWERS/TUBS ARE SUITABLE FOR WET LOCATIONS.
- CIRCUIT NUMBERS MAY VARY AND NOT ALL CIRCUITS ARE IN USE.

## NOTES:

- DATA PLATE AND ALL 3rd PARTY LABELS SHALL BE LOCATED ON THE INSIDE OF THE KITCHEN SINK CABINET PANEL.

- STATE LABELS LOCATED BY DATA PLATE.

- NEC: ALL 15 & 20-AMP CIRCUITS SUPPLYING POWER INSTALLED IN KITCHENS, LIVING ROOMS, PARLORS, LIBRARIES, FAMILY ROOMS, DINING, DENS, BEDROOMS, SUNROOMS, CLOSETS, HALLWAYS, LAUNDRY AREAS, OR SIMILAR ROOMS SHALL HAVE AFCI PROTECTION.

ACCESS FOR TUB/WHIRLPOOL DRAIN & MOTOR IS REQUIRED.

- TUBS SHALL HAVE INTEGRAL TILING FLANGE OR A SPACE MUST BE MAINTAINED FOR SEALING BETWEEN THE PLATFORM & BASE.

## ELECTRICAL LEGEND

	240 VOLT RECEPTACLE		CEILING LIGHT		CEILING VENT FAN WITH LIGHT
	HEAT TAPE RECEPTACLE 120 VOLT - 20 AMP (GFCI)		WALL LIGHT		CEILING VENT FAN
	THERMOSTAT		LED CAN LIGHT - HIGH EFFICACY		P.F. PREP PADDLE FAN PREP
	SD		SD/CO		CO
	PENDANT LIGHT		PADDLE FAN		
	LED PUCK / UNDER CABINET LIGHT		SPECIAL PURPOSE CONNECTION		
	JUNCTION BOX		COMMUNICATIONS PORT (TV, INTERNET, OR PULL BOX)		

- IF FURNACE IS INSTALLED, INSTALLATION PER IRC (MRC FOR MI) & THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.

- IF WATER HEATER IS INSTALLED, IT IS FLOOR MOUNTED WITH A PAN. PAN DRAIN TERMINATION PER IRC. ALL WATER HEATERS ARE SEISMICALLY SECURED WITH STRAPS AT THE TOP AND BOTTOM 1/3.

- AIR LEAKAGE TEST SHALL BE CONDUCTED BY OTHERS AFTER SET UP PER IECC. REQUIRED MECHANICAL VENTILATION SHALL BE INSTALLED ON SITE BY OTHERS.

- SPRINKLER SYSTEMS MAY BE REQUIRED PER LOCAL CODES. SPRINKLER SYSTEMS ARE NOT INSTALLED AT THE FACTORY & IF REQUIRED, WILL BE INSTALLED ON SITE BY OTHERS.

- ALL SETBACK DISTANCES TO PROPERTY LINES AND/OR ADJACENT BUILDINGS ON THE LOT ARE THE RESPONSIBILITY OF THE HOMEOWNER & SHALL FOLLOW IRC R302.1(1) OR (2) AS APPLICABLE TO THE SPRINKLER SYSTEM DESIGN FOR THE HOME.

## MODIFICATIONS

## PROJECT:

KBM-3266S33005  
76'-0" x 30'-0" 3BD 3BT  
CUSTOMER: TARCZALI

DRAWN BY: EDDIE ANSTINE

DATE: 03-14-24

SCALE: N.T.S.

## TITLE:

COVER SHEET

FILENAME: 004959 (KBM-3266S33005) (TARCZALI)

## SHEET:

CS-101  
S# 4959

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1600 ROWE AVE. WORTHINGTON, MN 56187



APPROVED PLANS  
Subject to field inspection  
OC INSPECTION REQUIRED

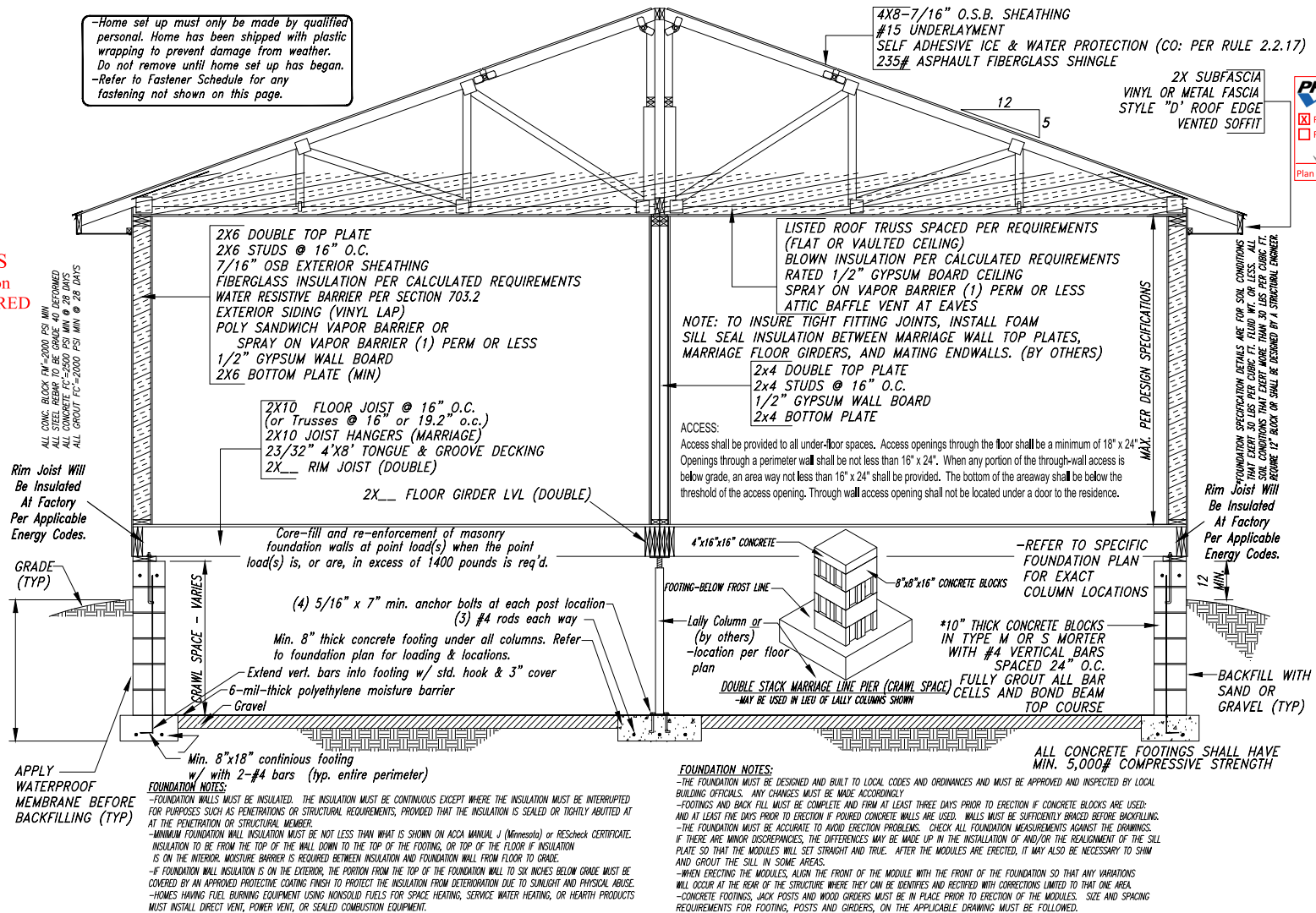
State of Colorado  
Division of Housing

Apr 12 2024



APPROVED PLANS  
Subject to field inspection  
OC INSPECTION REQUIRED

-Home set up must only be made by qualified personal. Home has been shipped with plastic wrapping to prevent damage from weather. Do not remove until home set up has begun.  
-Refer to Fastener Schedule for any fastening not shown on this page.



1600 ROWE AVE. WORTHINGTON, MN 56187

MODIFICATIONS

PROJECT: KBM-3266S33005  
76'-0" x 30'-0" 3BD 3BT  
CUSTOMER: TARCZALI

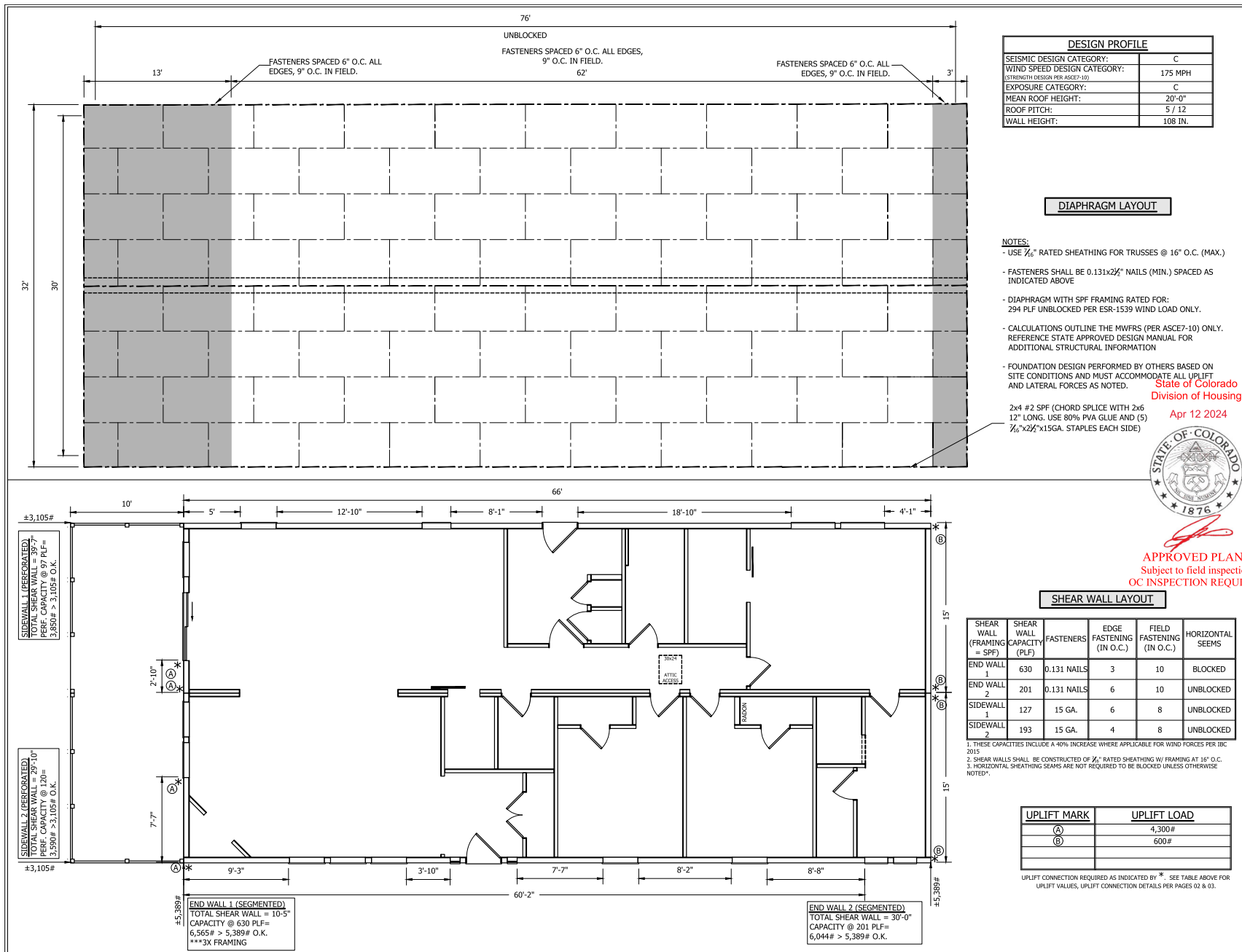
DRAWN BY: EDDIE ANISTINE  
DATE: 03-14-24  
SCALE: N.T.S.

TITLE: CROSS SECTION  
(CRAWLSPACE)  
TYP - CONDITIONED

FILENAME: 004959 (KBM-3266S33005) (TARCZALI)

SHEET: CX-101(CC)  
S# 4959

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DESIGN PROFILE	
SEISMIC DESIGN CATEGORY:	C
WIND SPEED DESIGN CATEGORY:	175 MPH
(STRENGTH DESIGN PER ASCE7-10)	
EXPOSURE CATEGORY:	C
MEAN ROOF HEIGHT:	20'-0"
ROOF PITCH:	5 / 12
WALL HEIGHT:	108 IN.

#### DIAPHRAGM LAYOUT

## CHAMPION HOME BUILDERS

755 W. BIG BEAR RD., SUITE 1000, TUCUMCARI, NM 88401  
PHONE: 505-674-4800

ENGINEER'S / ARCHITECT'S SEAL



APPROVER'S SEAL



MODIFICATIONS

### TITLE: ROOF DIAPHRAGM SHEARWALL LAYOUT

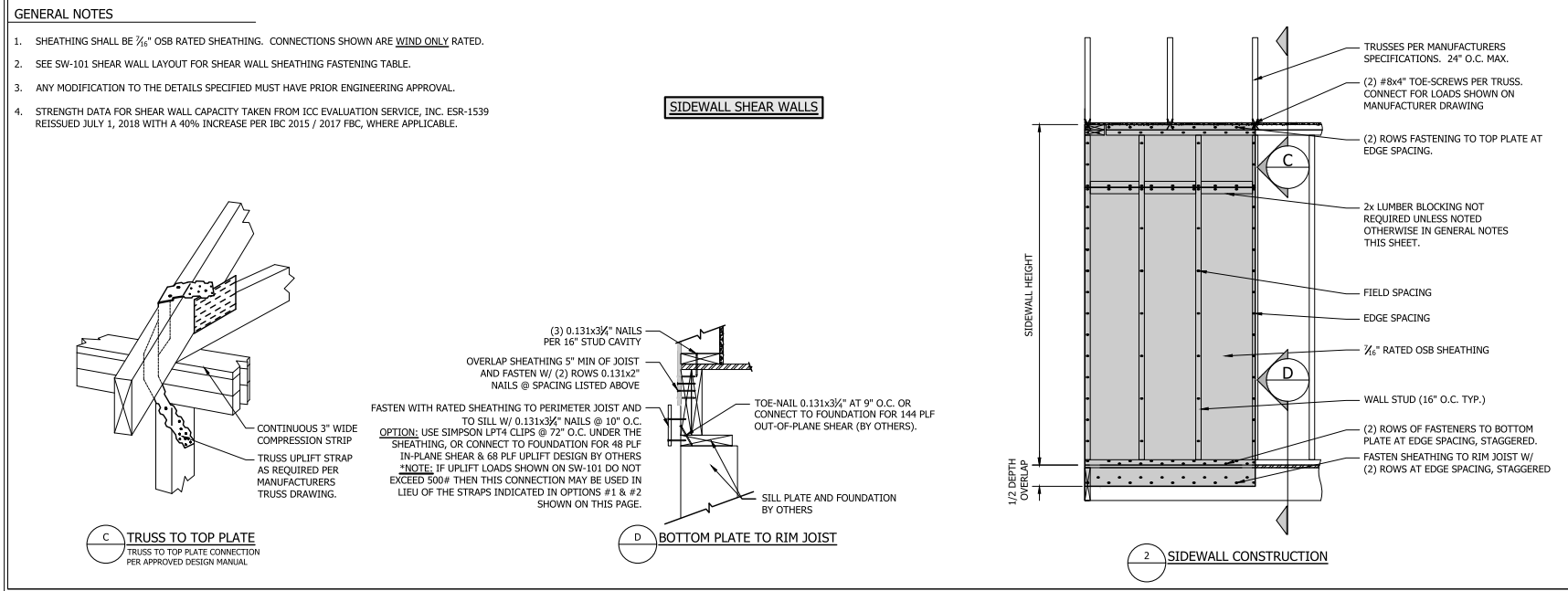
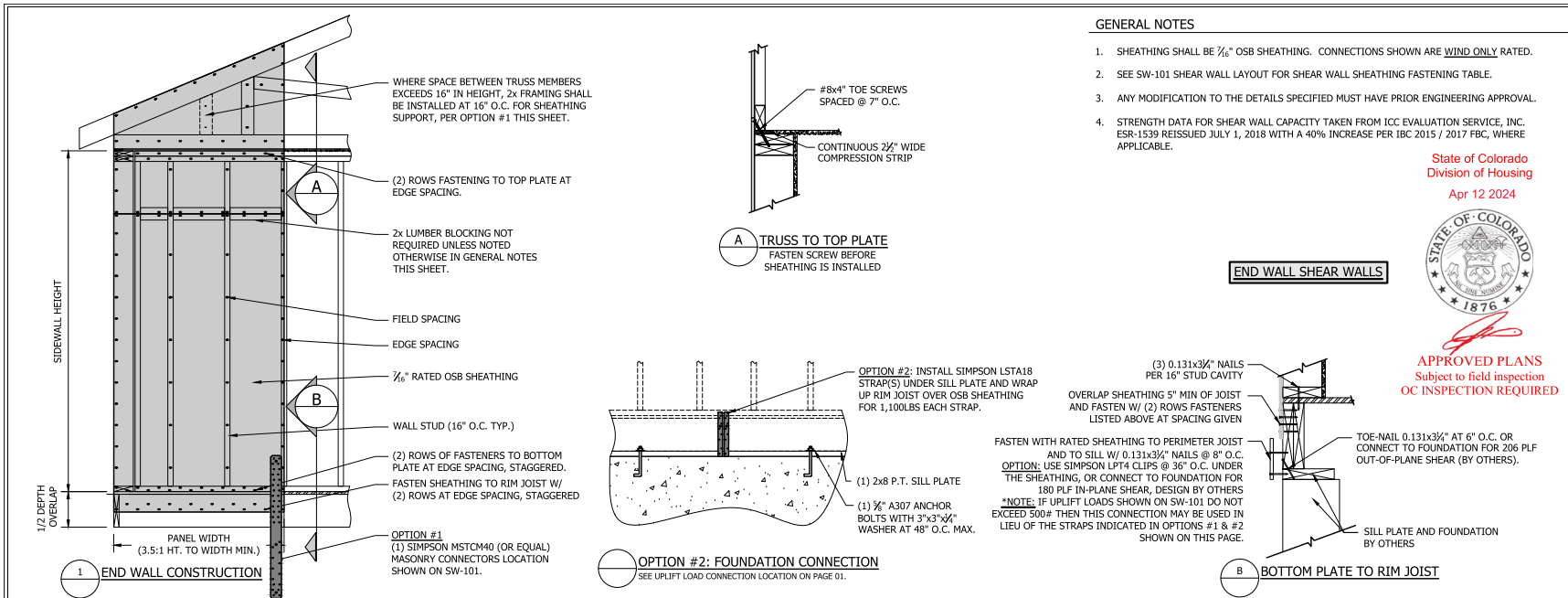
MWFRS  
MODEL:  
290-TARCZALI

DATE: 3/11/2024 SCALE:  
DRAWN BY: CORP. CHECKED BY:  
CALCS: ATTACHED

FILENAME:  
SHEET NO.:  
SW-101

PAGE:  
1 OF 4

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# CHAMPION

## HOME BUILDERS

755 W. 180th AVE, SUITE 1000, THORNTON, CO 80261  
PHONE: 303-461-4000

ENGINEER'S / ARCHITECT'S SEAL

APPROVER'S SEAL

MODIFICATIONS

TITLE: **SHEAR WALL END WALL DETAILS**  
MWFRS

MODEL: **290-TARCZALI**

DATE: 3/11/2024 SCALE:

DRAWN BY: CORP. CHECKED BY:

CALCS: ATTACHED

FILENAME:

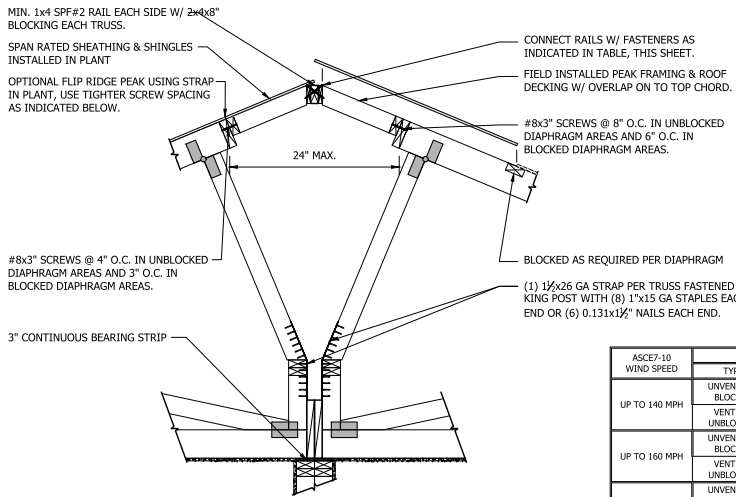
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**SW-102**

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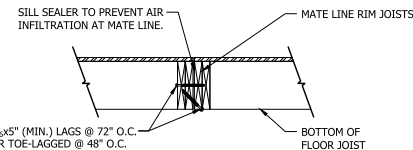
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3 HINGED ROOF CONNECTION W/ RIDGE VENT  
RIDGE VENT MUST NOT OCCUR IN BLOCKED DIAPHRAGM AREAS

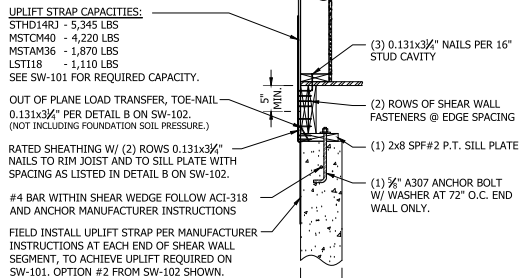
ASCE7-10 WIND SPEED	FASTENING REQUIREMENTS		
	TYPE	$\frac{3}{8}$ " LAGS	#10 SCREWS
UP TO 140 MPH	UNVENTED / BLOCKED	11" O.C.	6" O.C.
	VENTED / UNBLOCKED	2 PER BLOCK	3 PER BLOCK
UP TO 160 MPH	UNVENTED / BLOCKED	9" O.C.	5" O.C.
	VENTED / UNBLOCKED	2 PER BLOCK	4 PER BLOCK
UP TO 180 MPH	UNVENTED / BLOCKED	7" O.C.	4" O.C.
	VENTED / UNBLOCKED	3 PER BLOCK	5 PER BLOCK



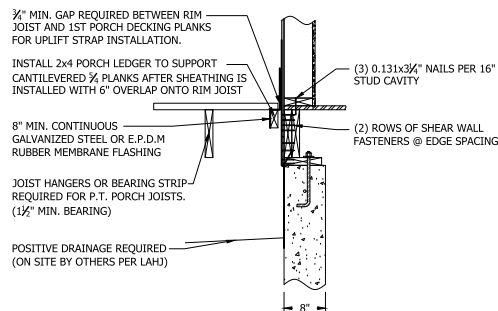
NOTE: THIS CONNECTIONS DOES NOT ACCOMMODATE UPLIFT LOADS DUE TO PIER-SET. SEE PAGE 2 FOR EXTRA LOADING. CONNECTION MUST BE DESIGNED BY OUTSIDE ENGINEERING PROFESSIONAL

4 MULTI-SECTION FLOOR CONNECTION

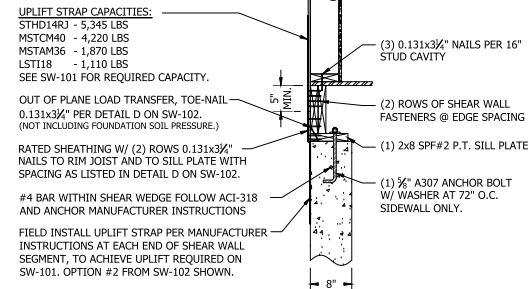
THIS MWFRS PACKAGE ASSUMES A PERIMETER FOUNDATION SET, FOR ALL OTHER FOUNDATION TYPES, DESIGN BY OTHERS.



5 END WALL UPLIFT CONNECTION



5B PORCH FOUNDATION CONNECTION  
ALL OTHER CONNECTIONS PER END WALL DETAIL SW-103



6 SIDEWALL UPLIFT CONNECTION

State of Colorado  
Division of Housing  
Apr 12 2024



APPROVED PLANS  
Subject to field inspection  
OC INSPECTION REQUIRED

## CHAMPION HOME BUILDERS

755 W. TWO BEARS ROAD, SUITE 1000, TRUCKEE, NH 03091  
PHONE: 603-467-4300

ENGINEER'S / ARCHITECT'S SEAL



APPROVER'S SEAL



MODIFICATIONS

## TITLE: CONNECTION DETAILS MWFRS

MODEL:  
290-TARCZALI

DATE: 3/11/2024 SCALE:  
DRAWN BY: CORP. CHECKED BY:  
CALCS: ATTACHED

FILENAME:  
SHEET NO.:

SW-103

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SIMPSON MTS16 (OR EQUAL, 800# MIN.) STRAP INSTALLED PER MANUFACTURERS INSTRUCTIONS EACH TRUSS

COMMON TRUSS SPACED AT 1/2 MANUFACTURERS DESIGN SPACING IN PORCH AREA.

(2) PLY HEADER PER EXTERIOR SECTION OF CHB MANUAL W/ 1/2" FILLERS. ATTACH PLIES WITH (2) ROWS 0.131x3/4" NAILS @ 6" O.C.

1.5"x1.5"x11 GA. (MIN) ANGLE FASTENED WITH (8) #10 WOOD SCREWS OF SUFFICIENT LENGTH TO PROVIDE 2.5" PENETRATION INTO RECEIVING MEMBER THROUGH EACH ANGLE.

4x4 P.T. SPF #2 POST

SIMPSON MTS16 (OR EQUAL, 800# MIN.) STRAP INSTALLED PER MANUFACTURERS INSTRUCTIONS EACH TRUSS

COMMON TRUSS SPACED AT 1/2 MANUFACTURERS DESIGN SPACING IN PORCH AREA.

4x4 P.T. SPF #2 POST

1/2 P.T. DECKING TYPICAL

1.5"x1.5"x11 GA. (MIN) ANGLE FASTENED WITH (8) #10 WOOD SCREWS OF SUFFICIENT LENGTH TO PROVIDE 2.5" PENETRATION INTO RECEIVING MEMBER THROUGH EACH ANGLE.

CONNECT TO FOUNDATION FOR 3,300# SUGGESTED: SIMPSON MSTCM60 W/ (26) 0.148x1 1/2" NAILS INTO 2x6 STUD & FOUNDATION CONNECTION PER MANUFACTURERS INSTRUCTIONS.

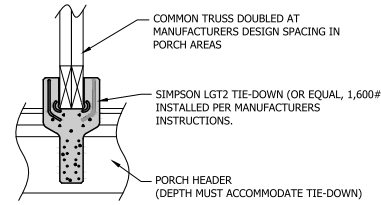
7 PORCH GABLE END VEIW

State of Colorado  
Division of Housing

Apr 12 2024



APPROVED PLANS  
Subject to field inspection  
OC INSPECTION REQUIRED



E DOUBLE TRUSS OPTION

(4) 2"x26 GA STRAP FROM HEADER TO COLUMN FASTENED W/ (8) 0.131x1 1/2" NAILS EACH END

HEADER SIZE AS INDICATED IN EXTERIOR SECTION OF CHB MANUAL W/ 1/2" FILLERS. ATTACH PLIES WITH (2) ROWS 0.131x3/4" NAILS @ 6" O.C.

4x4 P.T. SPF #2 POST

1.5"x1.5"x11 GA. (MIN) ANGLE FASTENED WITH (8) #10 WOOD SCREWS OF SUFFICIENT LENGTH TO PROVIDE 2.5" PENETRATION INTO RECEIVING MEMBER THROUGH EACH ANGLE.

(2) P.T. BLOCKS SAME DEPTH AS FLOOR JOIST FASTENED TOGETHER AND TO RIM WITH 90% PVA GLUE AND (20) 0.131x3/4" NAILS EVENLY SPACED.

### GENERAL NOTES:

THESE CALCULATIONS ARE BASED ON THE FOLLOWING DESIGN CRITERIA:

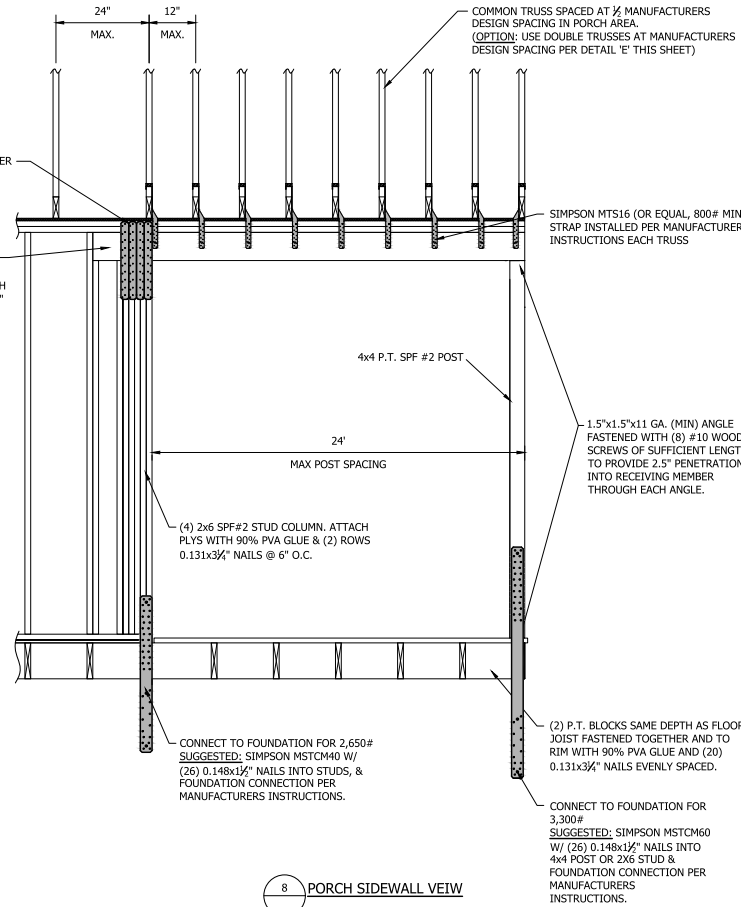
- 180 MPH ASCE7-10 / 139 MPH PER 2017 FBC LOADS
- EXPOSURE D
- MEAN ROOF HEIGHT OF 30'
- LOAD = 80 PSF UPLIFT (REDUCED FOR DEAD LOAD)

### HOME CRITERIA

- 182" BOX WIDTH W/ 8" SIDEWALL OVERHANG MAX.
- 8' PORCH WITH A 12" GABLE WALL OVERHANG MAX..
- 3:12 TO 6:12 ROOF PITCH (LOADS BASED ON 3:12, WORST CASE FOR UPLIFT)

\*CONNECTION IS TYPICAL FOR BOTH SIDE WALL AND MATE LINE POSTS.

NOTE: THE DETAILS ON THIS PAGE REFER TO THE DESIGN OF THE PORCH POSTS ONLY. ALL OTHER PARTS OF THE MAIN WIND FORCE RESISTING SYSTEM AND SEQUENT TIE-DOWNS ARE SHOWN ON PREVIOUS PAGES. THE STRAPS ON THIS PAGE ARE REQUIRED IN ADDITION TO THE STRAPS FOR THE MWFRS.



8 PORCH SIDEWALL VEIW

## CHAMPION HOME BUILDERS

755 W. BIG BEAVER ROAD, SUITE 1000 TROY, MI 48064  
PHONE: 313-467-4800

ENGINEER'S / ARCHITECT'S SEAL



APPROVER'S SEAL



MODIFICATIONS

TITLE:  
**HIGH WIND PORCH  
COLUMN DESIGN**  
MWFRS

MODEL:  
**290-TARCZALI**

DATE: 3/11/2024 SCALE:  
DRAWN BY: CORP. CHECKED BY:  
CALCS: ATTACHED

FILENAME:  
SHEET NO.:  
**SW-104**

PAGE: 4 OF 4

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## ELECTRICAL CIRCUIT DIRECTORY

CIRCUIT#	CIRCUIT DESCRIPTION	BREAKER	WIRE
1	KITCHEN	#*20	12-2/WG
2	KITCHEN	#*20	12-2/WG
3	REFRIGERATOR	#*20	12-2/WG
4	WASHER	#*20	12-2/WG
5	LIVING ROOM	#15	14-2/WG
6	ENTRY/WIP/BEDROOM#3	#15	14-2/WG
7	BEDROOM #3/PRIMARY BATH	#15	14-2/WG
8	DINING ROOM/PORCH	#15	14-2/WG
9	RANGEHOOD	#20	12-2/WG
10	UTILITY/SMOKE ALARMS	#15	14-2/WG
11	DRYER	*30	10-3/WG
13	DISHWASHER	*#20	12-2/WG
14	WATER HEATER	20	10/2
15	DINING ROOM RECPTS	#20	12-2/WG
16	WALL OVEN	+40	8-3/WG
17	FURNACE BLOWER FAN	20	12-2/WG
18	EXTERIOR RECPTS (WP REQ'D)	#*20	12-2/WG
20	UTILITY	#*20	12-2/WG
23	KITCHEN	#15	14-2/WG
24	BATH #2/M.CLOSET/PRIMY BEDR	#15	14-2/WG
27	FREEZER	#*20	12-2/WG
30	BATHROOMS	#*20	12-2/WG
33	MICROWAVE	#*20	12-2/WG

\* GFCI PROTECTED # AFCI PROTECTED + LOCKOUT REQ'D WP = WEATHER PROOF  
ALL BATH FANS ARE 50 CFM W/ 4" ROUND FLEX DUCT

## Electrical calculation - 100 Amps or greater

Serial # 4959 Model KBM-3266S33005  
Delivery Point City Estes Park State CO  
Construction type: Residential Factor 3.00

Unit	Length	Width	Area
A	76	0	1140
B	76	0	1140
C			0
Total Area			2280
x Construction factor			3.00
General lighting			6840
			Watts

## Circuits

Qty	Items	Watts	Load calculations
General Lighting		6,840	= 6.84 KW
5	Small Appliance	1,500	= 7.5 KW
1	Water Heater	4,500	= 4.5 KW
1	Furnace blower	150	= 0.15 KW
1	Elec. F. Place	1,500	= 0 KW
1	Range	6,400	= 6.4 KW
1	Cooktop	6,400	= 0 KW
1	Wall Oven	7,700	= 7.7 KW
1	Dishwasher	1,400	= 1.4 KW
1	Rangehood	150	= 0.15 KW
3	Bath Fans	100	= 0.3 KW
1	Clothes Washer	1,500	= 1.5 KW
1	Dryer	5,000	= 5 KW
Total Load			41.44 KW

## Heating and Cooling Equipment

Heat	23KW	22,000	0	= 0.00 KW
1	Cooling Equip	6,800	6,800	= 6.80 KW
Heating load factor (65%)				0.00 KW
Cooling load factor (100%)				6.80 KW

First 10 KW of total load @ 100% 10.00 KW  
31.44 Remainder of total load @ 40% 12.58 KW  
Heating or Cooling equipment load 6.80 KW  
Total design load 29.38 KW  
Minimum required amperage 122.40 Amps  
(Total design load/240\*1000)

Install 200 amp, 120/240 volt, single phase, service panel

SINGLE POLE SWITCH  
(D DENOTES DIMMER)  
(3 DENOTES 3-WAY)  
(4 DENOTES 4-WAY)

GENERAL LIGHTING RECEPTACLE  
120 VOLT - 15 AMP  
GENERAL LIGHTING RECEPTACLE  
120 VOLT - 15 AMP  
G.F.I. PROTECTED  
SMALL APPLIANCE RECEPTACLE  
120 VOLT - 20 AMP  
SMALL APPLIANCE RECEPTACLE  
120 VOLT - 20 AMP  
G.F.I. PROTECTED

- ALL EXTERIOR RECEPTACLES AND LIGHTS ARE WEATHER PROOF.  
- ALL LIGHTS OVER SHOWERS/TUBS ARE SUITABLE FOR WET LOCATIONS.  
- CIRCUIT NUMBERS MAY VARY AND NOT ALL CIRCUITS ARE IN USE.

## ELECTRICAL LEGEND

240 VOLT RECEPTACLE	CEILING LIGHT	CEILING VENT FAN WITH LIGHT
HEAT TAPE RECEPTACLE 120 VOLT - 20 AMP (GFCI)	WALL LIGHT	CEILING VENT FAN
THERMOSTAT	LED CAN LIGHT - HIGH EFFICACY	P.F. PREP PADDLE FAN PREP
SD SD/CO CO	PENDANT LIGHT	PADDLE FAN
MAIN PANEL	LED PUCK / UNDER CABINET LIGHT	SPECIAL PURPOSE CONNECTION
	JUNCTION BOX	COMMUNICATIONS PORT (TV, INTERNET, OR PULL BOX)

## NOTES:

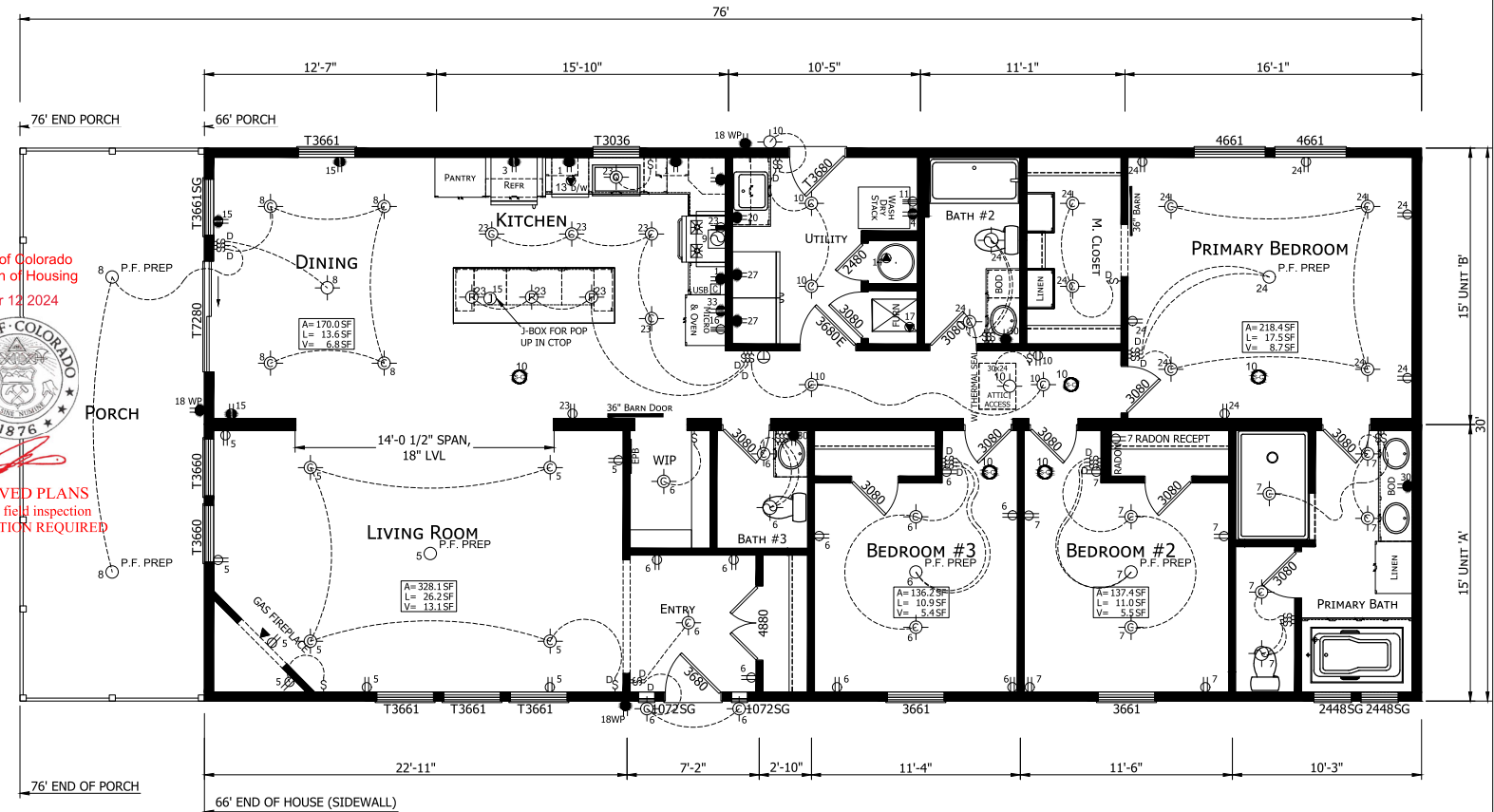
1. THE BATH FANS ARE 50 CFM WITH 4" ROUND FLEX DUCT.
2. SEE RF PAGE FOR MARRIAGE LINE BEAM SIZES.
3. SIDE WALL HEADERS [(3) ON EDGE 2X6S] PER WA05.01
4. END WALL HEADERS [(3) FLAT 2X6S] PER WA06.01



State of Colorado  
Division of Housing  
Apr 12 2024



APPROVED PLANS  
Subject to field inspection  
OC INSPECTION REQUIRED



## MODIFICATIONS

PROJECT: KBM-3266S33005  
76'-0" x 30'-0" 3BD 3BT  
CUSTOMER: TARCZALI

DRAWN BY: EDDIE ANSTINE  
DATE: 03-14-24  
SCALE: 5/32" = 1'-0"

TITLE: APPROVAL PLAN

FILENAME: 004959 (KBM-3266S33005) (TARCZALI)

## SHEET:

AE-101  
S# 4959

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NOTES:

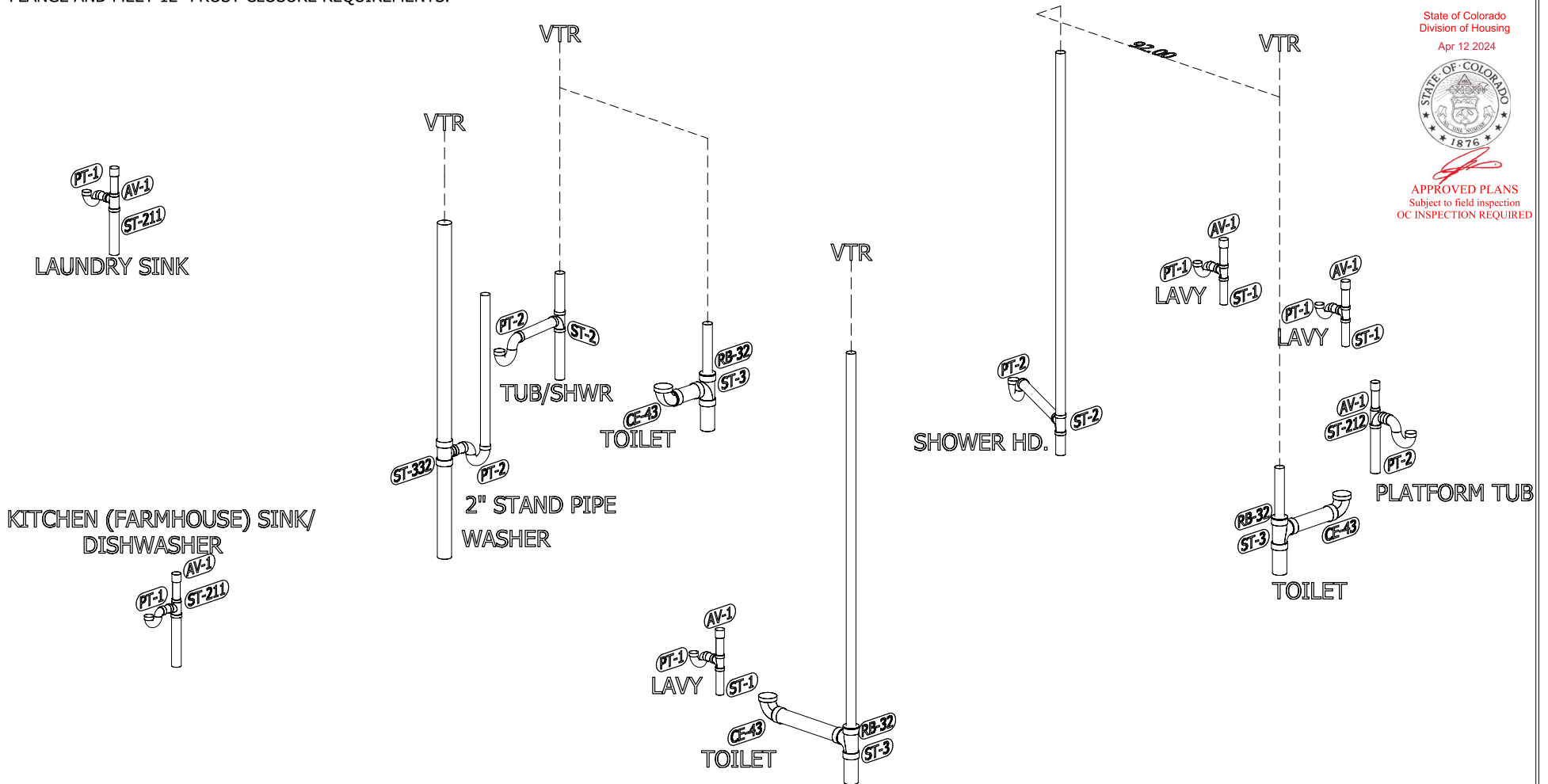
1. ALL PIPE SIZES DETERMINED BY THE FITTINGS ON EACH SIDE OF THE PIPE.
2. IF THE DISHWASHER OR GARBAGE DISPOSAL IS INSTALLED, IT SHALL BE CONNECTED VIA AIR GAP.
3. ALL VENT THRU ROOF (VTR) PENETRATIONS SHALL HAVE A MINIMUM 3" ROOF FLANGE AND MEET 12" FROST CLOSURE REQUIREMENTS.



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Apr 12 2024



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1600 ROWE AVE. WORTHINGTON, MN 56187

MODIFICATIONS

PROJECT:  
KBM-3266S33005  
76'-0" x 30'-0" 3BD 3BT  
CUSTOMER: TARCZALI  
DRAWN BY: EDDIE ANSTINE  
DATE: 03-14-24  
SCALE: N.T.S.

TITLE:  
DRAIN LINE  
PLAN  
FILENAME: 004959 (KBM-3266S33005) (TARCZALI)

SHEET:  
D-101  
S# 4959  
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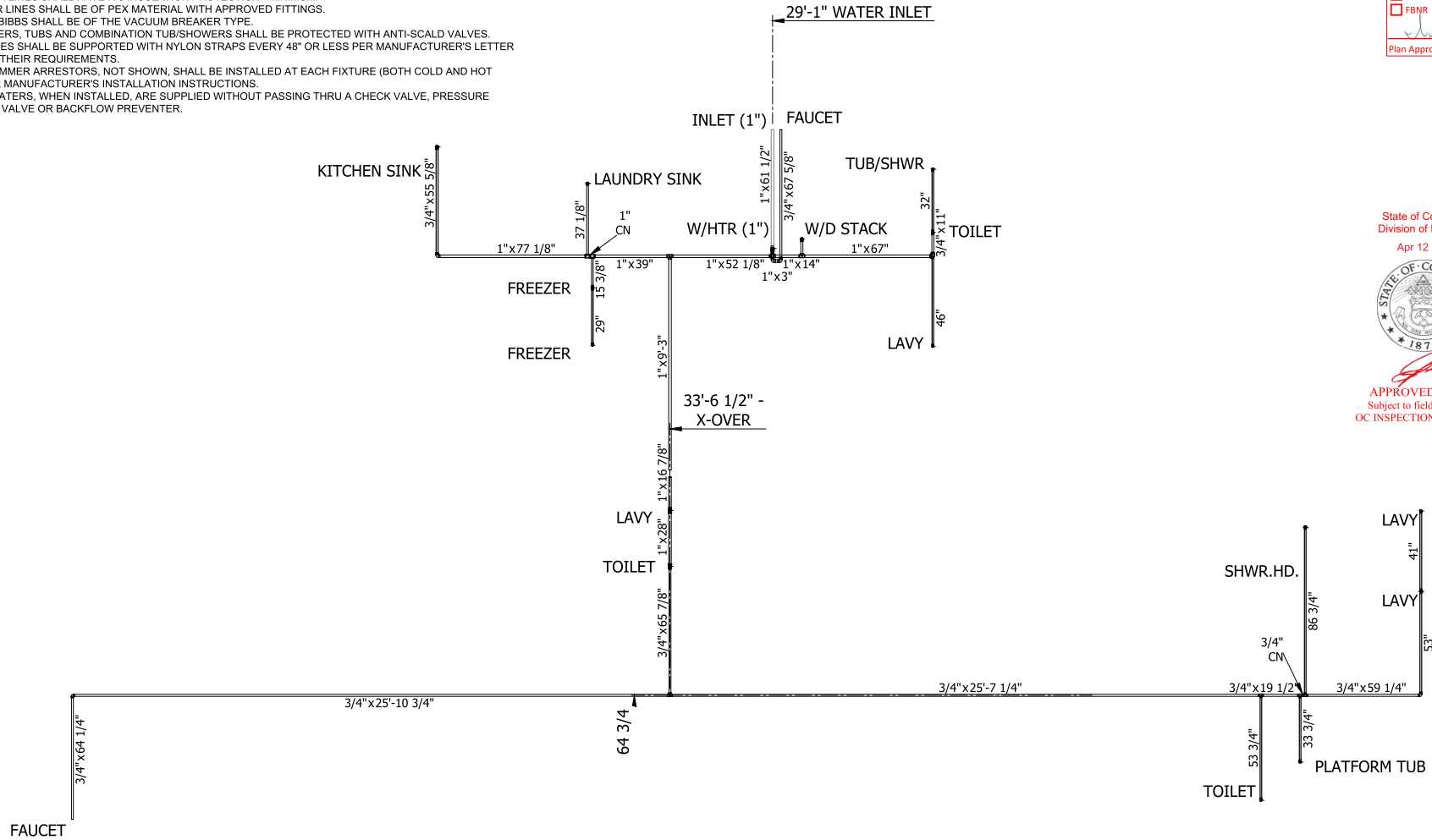
1. ALL PIPE SIZES 1/2" UNLESS OTHERWISE SPECIFIED.
2. MAXIMUM DEVELOPED LENGTH, IN FEET, FROM INLET = 62'.
3. DESIGN PRESSURE RANGE IS 46 TO 60 PSI.
4. HOT WATER LINES SHALL HAVE R-3 INSULATION PROTECTION - MINIMUM.
5. ALL WATER LINES SHALL BE OF PEX MATERIAL WITH APPROVED FITTINGS.
6. ALL HOSE BIBBS SHALL BE OF THE VACUUM BREAKER TYPE.
7. ALL SHOWERS, TUBS AND COMBINATION TUB/SHOWERS SHALL BE PROTECTED WITH ANTI-SCALD VALVES.
8. WATER LINES SHALL BE SUPPORTED WITH NYLON STRAPS EVERY 48" OR LESS PER MANUFACTURER'S LETTER UPDATING THEIR REQUIREMENTS.
9. WATER HAMMER ARRESTORS, NOT SHOWN, SHALL BE INSTALLED AT EACH FIXTURE (BOTH COLD AND HOT LINES) PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
10. WATER HEATERS, WHEN INSTALLED, ARE SUPPLIED WITHOUT PASSING THRU A CHECK VALVE, PRESSURE REDUCING VALVE OR BACKFLOW PREVENTER.



State of Colorado  
Division of Housing  
Apr 12 2024



APPROVED PLANS  
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OC INSPECTION REQUIRED



1600 ROWE AVE. WORTHINGTON, MN 56187

## MODIFICATIONS

PROJECT:  
KBM-3266S33005  
76'-0" x 30'-0" 3BD 3BT  
CUSTOMER: TARCZALI

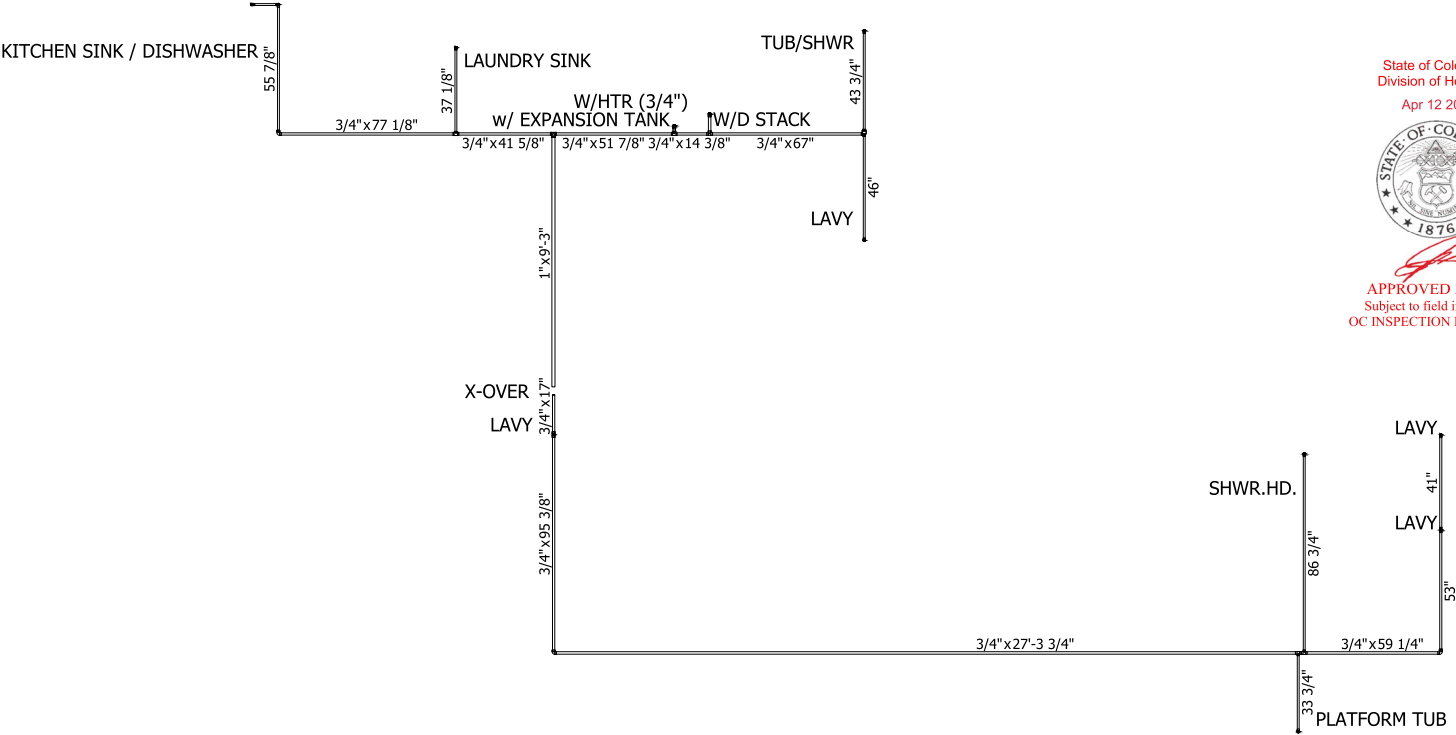
DRAWN BY: EDDIE ANSTINE  
DATE: 03-14-24  
SCALE: N.T.S.

TITLE:  
WATER LINE  
PLAN  
(COLD)  
FILENAME: 004959 (KBM-3266S33005) (TARCZALI)

SHEET:  
WP-101(C)  
S# 4959

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- NOTES:
- 1. ALL PIPE SIZES 1/2" UNLESS OTHERWISE SPECIFIED.
  - 2. MAXIMUM DEVELOPED LENGTH, IN FEET, FROM INLET = 62'.
  - 3. DESIGN PRESSURE RANGE IS 46 TO 60 PSI.
  - 4. HOT WATER LINES SHALL HAVE R-3 INSULATION PROTECTION - MINIMUM.
  - 5. ALL WATER LINES SHALL BE OF PEX MATERIAL WITH APPROVED FITTINGS.
  - 6. ALL HOSE BIBBS SHALL BE OF THE VACUUM BREAKER TYPE.
  - 7. ALL SHOWERS, TUBS AND COMBINATION TUB/SHOWERS SHALL BE PROTECTED WITH ANTI-SCALD VALVES.
  - 8. WATER LINES SHALL BE SUPPORTED WITH NYLON STRAPS EVERY 48" OR LESS PER MANUFACTURER'S LETTER UPDATING THEIR REQUIREMENTS.
  - 9. WATER HAMMER ARRESTORS, NOT SHOWN, SHALL BE INSTALLED AT EACH FIXTURE (BOTH COLD AND HOT LINES) PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
  - 10. WATER HEATERS, WHEN INSTALLED, ARE SUPPLIED WITHOUT PASSING THRU A CHECK VALVE, PRESSURE REDUCING VALVE OR BACKFLOW PREVENTER.



State of Colorado  
Division of Housing  
Apr 12 2024



APPROVED PLANS  
Subject to field inspection  
OC INSPECTION REQUIRED



1600 ROWE AVE. WORTHINGTON, MN 56187

MODIFICATIONS

PROJECT:  
KBM-3266S33005  
76'-0" x 30'-0" 3BD 3BT  
CUSTOMER: TARCZALI

DRAWN BY: EDDIE ANSTINE  
DATE: 03-14-24  
SCALE: N.T.S.

TITLE:  
WATER LINE  
PLAN  
(HOT)

FILENAME: 004959 (KBM-3266S33005) (TARCZALI)

SHEET:  
WP-101(H)  
S# 4959

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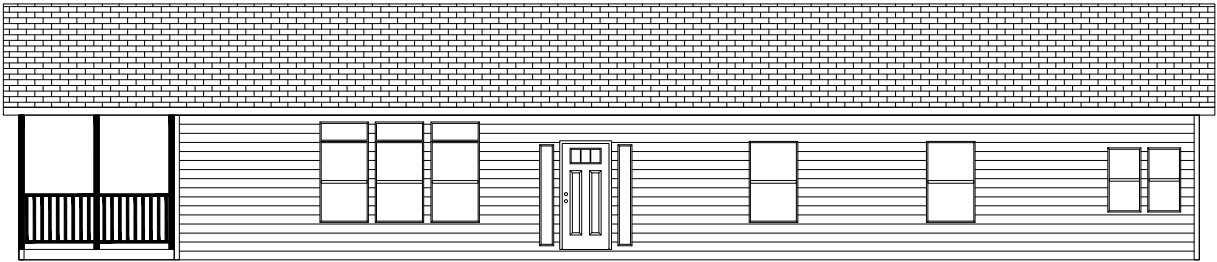


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Division of Housing  
Apr 12 2024

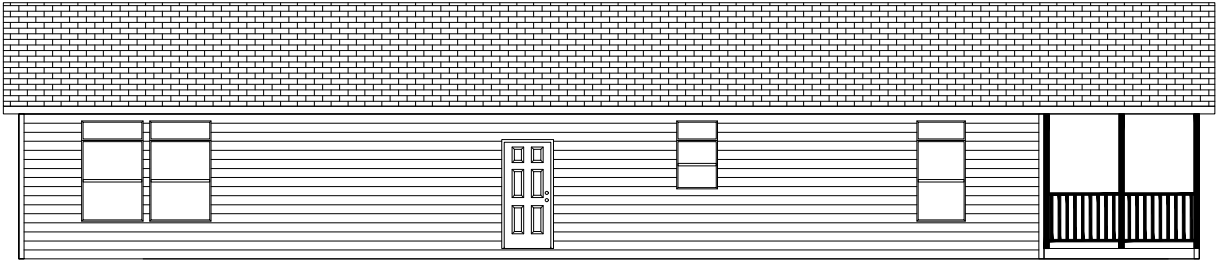


APPROVED PLANS  
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FRONT ELEVATION



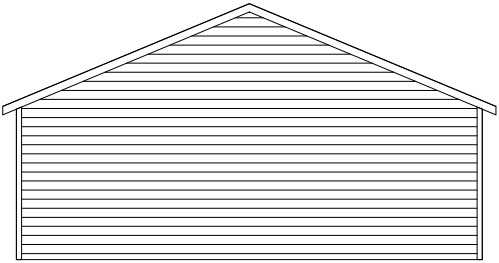
REAR ELEVATION



LEFT ELEVATION



RIGHT ELEVATION



MODIFICATIONS

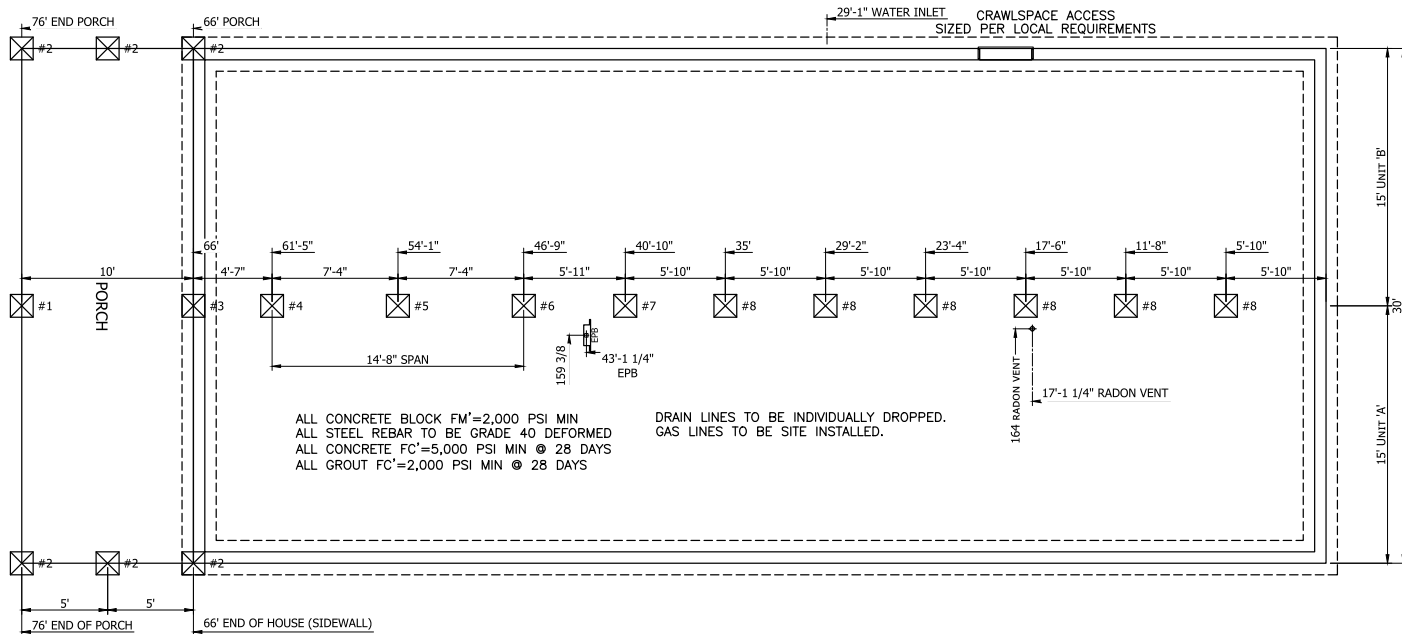
PROJECT: KBM-3266S33005  
76'-0" x 30'-0" 3BD 3BT  
CUSTOMER: TARCZALI  
DRAWN BY: EDDIE ANSTINE  
DATE: 03-14-24  
SCALE: 1/8" = 1'-0"

TITLE: ELEVATIONS PLAN  
FILENAME: 004959 (KBM-3266S33005) (TARCZALI)

SHEET: EV-101  
S# 4959  
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Division of Housing  
Apr 12 2024



APPROVED PLANS  
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#### FOUNDATION NOTES:

- REFER TO TYPICAL CROSS SECTION
- TUB ACCESS TO BE ADDED IN THE BASEMENT IF PLUMBING IS CONCEALED.
- DEALER/INSTALLER MAY USE I-BEAM UNDER MATE WALL TO INCREASE JACK POST SPACING. CONSULT A LOCAL PROFESSIONAL ENGINEER.
- UNCONDITIONED CRAWL SPACE: (SEE HVAC PLAN)
- CRAWL SPACE ACCESS & VENTILATION PER LOCAL CODES OR IRC R408.1 & R408.2, WHICHEVER IS MORE RESTRICTIVE
- CONDITIONED CRAWL SPACE: (SEE HVAC PLAN)
- NO VENT OPENINGS REQUIRED
- VAPOR RETARDER REQUIRED (6 MIL MIN. THICK), ALL JOINTS SEALED MIN 6" UP ONTO CRAWL WALLS
- INSULATE CRAWL WALLS PER RESCHECK/ENERGY CALCULATIONS (THERMAL BARRIER OVER FOAM INSULATION)
- EGRESS BASEMENT WINDOW REQUIREMENTS:
- THE CLEAR HORIZONTAL DIMENSIONS SHALL ALLOW THE WINDOW WELL TO BE FULLY OPENED AND PROVIDE A MINIMUM ACCESSIBLE NET CLEAR OPENING OF 9 SQUARE FEET, WITH A MINIMUM DIMENSION OF 36".
- WINDOW WELLS WITH A VERTICAL DEPTH OF MORE THAN 44" SHALL BE EQUIPPED WITH AN APPROVED PERMANENTLY AFFIXED LADDER OR STAIRS THAT ARE ACCESSIBLE WITH THE WINDOW IN THE FULLY OPENED POSITION. THE LADDER OR STAIRS SHALL NOT ENCROACH INTO THE REQUIRED DIMENSIONS OF THE WINDOW WELL BY MORE THAN 6".
- AT LEAST ONE EGRESS BASEMENT WINDOW IS REQUIRED AND IT MAY BE PLACED AT THE DISCRETION OF THE LOCAL ENGINEER'S DESIGN.
- FOUNDATION DRAIN:
- THE DRAIN SHALL CONSIST OF GRAVEL, CRUSHED STONE OR DRAIN TILE.
- GRAVEL OR CRUSHED STONE DRAINS SHALL CONTAIN NOT MORE THAN 10% MATERIAL THAT PASSES A NO. 4 SIEVE. THE DRAIN SHALL EXTEND A MINIMUM OF 12" BEYOND THE OUTSIDE EDGE OF THE FOOTING. THE DEPTH SHALL BE SUCH THAT THE BOTTOM OF THE DRAIN IS NOT HIGHER THAN THE BOTTOM OF THE BASE MATERIAL UNDER THE FLOOR AND THE TOP OF THE DRAIN IS NOT LESS THAN 6" ABOVE THE SPREAD PORTION OF THE FOOTING. THE TOP OF THE DRAIN SHALL BE COVERED WITH AN APPROVED FILTER MEMBRANE MATERIAL.
- DRAIN TILE OR PERFORATED PIPE SHALL BE PLACED SUCH THAT THE INVERT OF THE PIPE OR TILE IS NOT HIGHER THAN THE FLOOR ELEVATION. THE TOP OF THE JOINTS OR THE PERFORATIONS SHALL BE PROTECTED WITH AN APPROVED FILTER MEMBRANE MATERIAL. THE PIPE OR TILE SHALL BE PLACED ON TOP OF A MINIMUM OF 2" OF GRAVEL OR CRUSHED STONE COMPLYING WITH THIS SECTION AND COVERED BY A MINIMUM OF 6" OF THE SAME MATERIAL.

DUE TO EXTERIOR WALL SHEATHING, OPTIONAL MARRIAGE WALL SHEATHING, OR POSSIBLE MARRIAGE LINE GAPS, IT IS PERMISSIBLE TO ADD 1" TO 1½" TO THE TOTAL WIDTH OF THE FOUNDATION DIMENSION SHOWN ON THIS DRAWING.

FOOTING SIZES: USE SITE SPECIFIC SOIL BEARING CAPACITY

30'-0" WIDE FLOOR W/ DOUBLE LVL BEAMS PER HALF LVL TO BE 1½" X 9½", 2.0E, 2,900 Fb (MINIMUM)  
ASSUMED LOADS ARE 80/15 PSF & 40/10 PSF & 5 PSF.  
ALL LOADS ARE BASED ON ACTUAL SUPPORT PIER SPACING.  
FINAL FOUNDATION IS TO BE DESIGNED BY A LOCAL PROFESSIONAL ENGINEER.

POSTS WHICH ARE NOT LOCATED AT CONCENTRATED LOADS OR LVL SPLICE LOCATIONS MAY BE MOVED AS LONG AS THE MAXIMUM POST SPACING IS NOT EXCEEDED. MAXIMUM ALLOWABLE PIER SPACING:

1. FLOOR & ROOF LOADS = 6'-9"
2. FLOOR LOADS ONLY = 8'-1"

PIER	LOAD TYPE	LOAD (#)
PIER #1	(CONCENTRATED LOADS)	12,500
PIER #2	(FLOOR LOADS ONLY)	4,600
PIER #3	(FLOOR & ROOF LOADS)	10,300
PIER #4	(CONCENTRATED LOADS)	17,000
PIER #5	(FLOOR LOADS ONLY)	6,600
PIER #6	(CONCENTRATED LOADS)	22,500
PIER #7	(FLOOR & ROOF LOADS)	14,900
PIER #8	(FLOOR & ROOF LOADS)	14,800

#### NOTICE:

THE FLOOR IS NOT INSULATED IN THE FACTORY.  
IT IS THE RESPONSIBILITY OF THE RETAILER  
AND/OR CUSTOMER TO INSULATE THE FLOOR  
AND/OR FOUNDATION WALLS TO BRING THE  
HOME INTO THERMAL ENVELOPE COMPLIANCE  
PER THE PROVIDED THERMAL CALCULATIONS.



1600 ROWE AVE. WORTHINGTON, MN 56187

#### MODIFICATIONS

PROJECT:  
**KBM-3266S33005**  
**76'-0" x 30'-0" 3BD 3BT**  
CUSTOMER: **TARCZALI**  
DRAWN BY: **EDDIE ANISTINE**  
DATE: **03-14-24**  
SCALE: **N.T.S.**



TITLE:  
**PIER AND**  
**FOUNDATION DROPS**  
**PLAN**  
FILENAME: **004959 (KBM-3266S33005) (TARCZALI)**

SHEET:  
**F-101**  
**S# 4959**  
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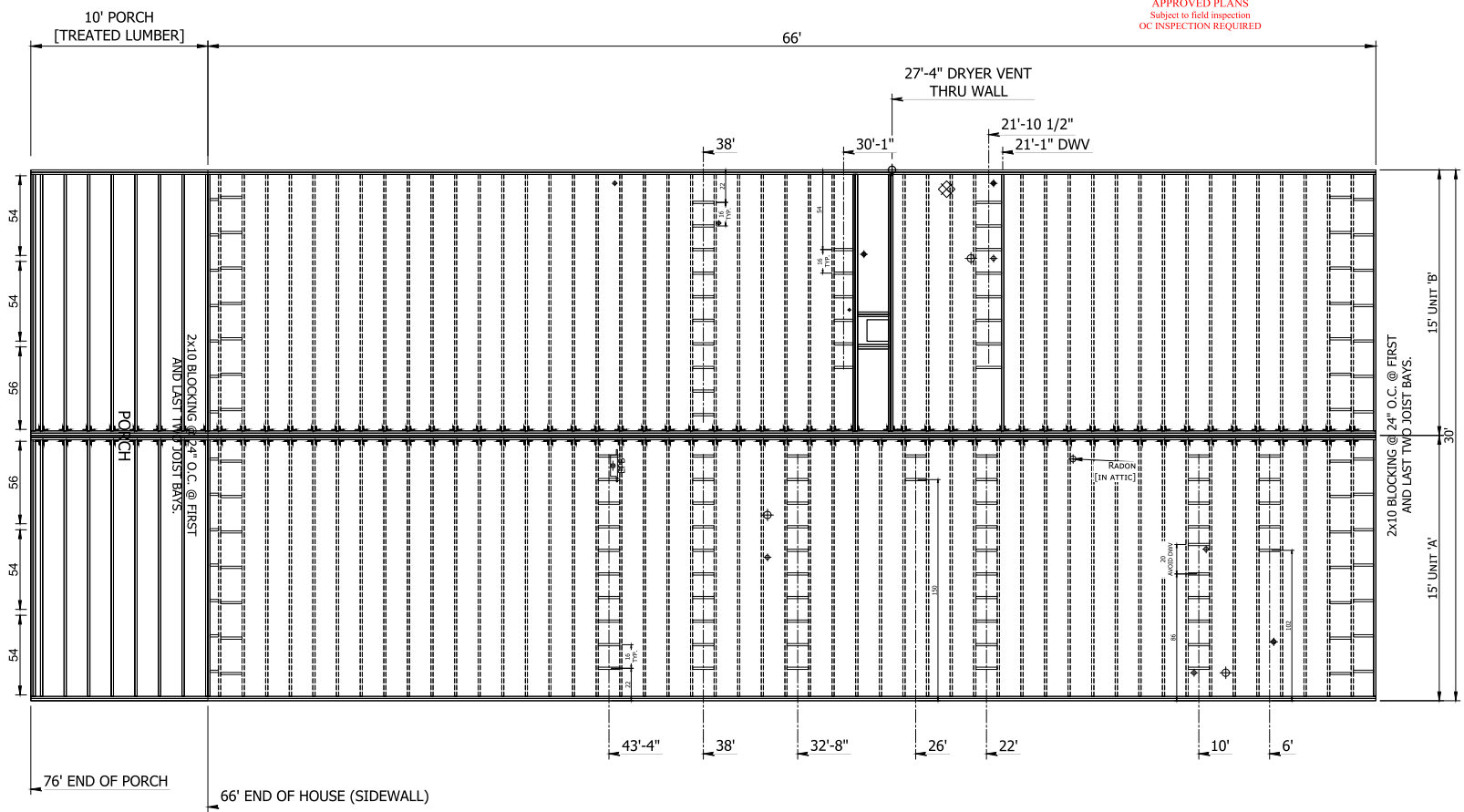



- NOTES:  
FLOOR MATERIAL SPECIFICATIONS:  
1. 2x10 SPF #2 MIN. FOR JOISTS, EXTERIOR RAILS, & BLOCKING - SPACED @ 16" O.C.  
2. 2x10 LVL BEAM FOR MARRIAGE LINE RAILS.  
3. 4'x8'x23/32" OSB DECKING.

State of Colorado  
Division of Housing  
Apr 12 2024



APPROVED PLANS  
Subject to field inspection  
OC INSPECTION REQUIRED



 <p>1600 ROWE AVE. WORTHINGTON, MN 56187</p>	MODIFICATIONS	PROJECT: KBM-3266S33005 76'-0" x 30'-0" 3BD 3BT CUSTOMER: TARCZALI DRAWN BY: EDDIE ANSTINE DATE: 03-14-24 SCALE: 5/32" = 1'-0"	TITLE: FLOOR FRAMING PLAN FILENAME: 004959 (KBM-3266S33005) (TARCZALI)	SHEET: FF-101 S# 4959 PROPRIETARY AND CONFIDENTIAL THESE DRAWINGS AND SPECIFICATIONS ARE ORIGINAL. PROPRIETARY AND CONFIDENTIAL MATERIALS OF CHAMPION. COPYRIGHT © 1996-2024 BY CHAMPION
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# NOTES:

WHOLE HOUSE MECHANICAL VENTILATION HAS NOT BEEN INSTALLED AT THE FACTORY.  
WHEN INSTALLED ON SITE BY OTHERS IT SHALL BE DESIGNED IN ACCORDANCE WITH M1507.3 THROUGH M1507.3.3  
RETURN AIR FOR GUEST BEDROOMS PROVIDED BY A 2 1/2" UNDERCUT OF THE DOORS.

RETURN AIR FROM DOOR UNDERCUTS:

1. 30" DOOR = 188 SQ.FT.
2. 36" DOOR = 225 SQ.FT.

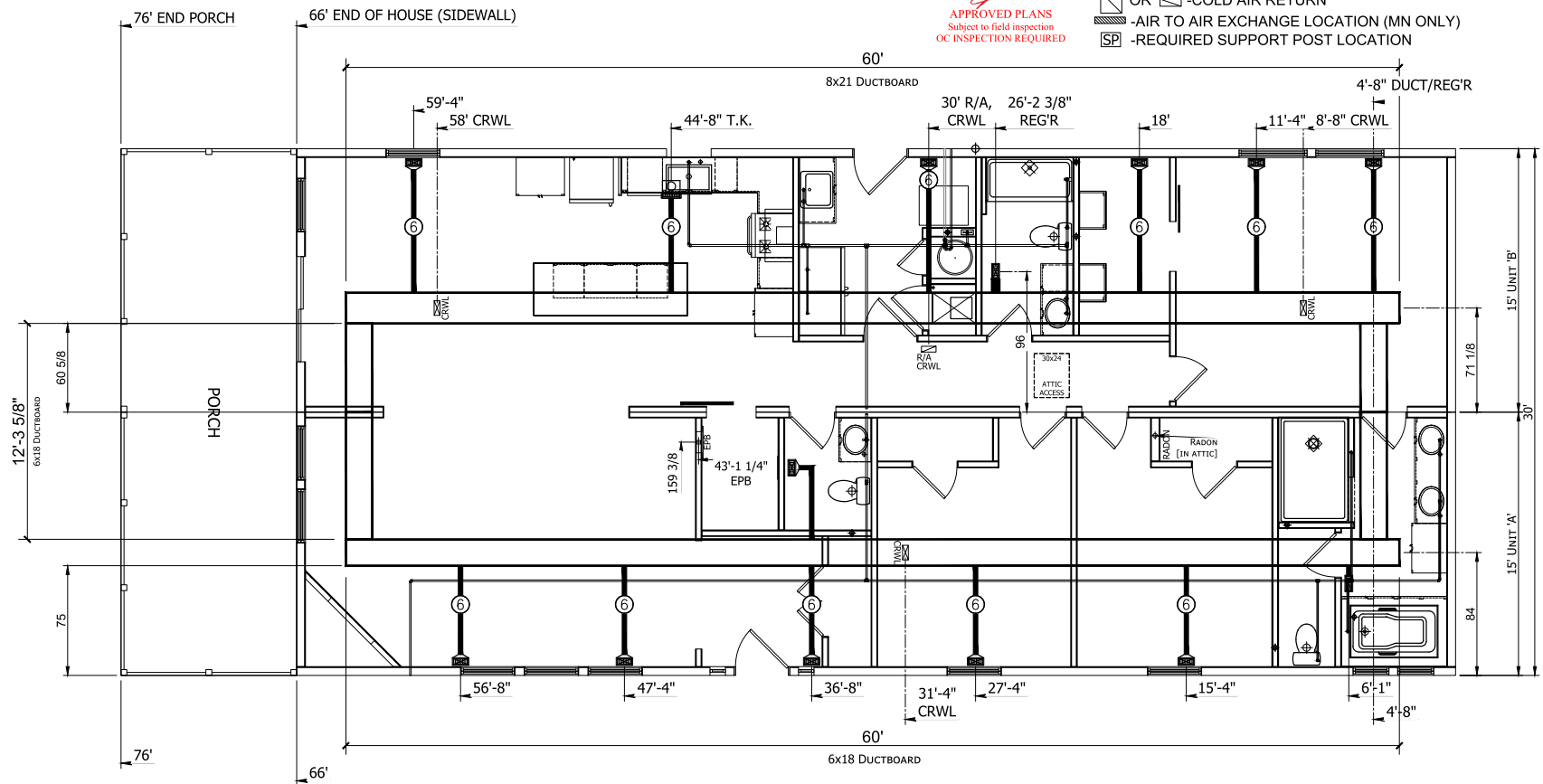
State of Colorado  
Division of Housing  
Apr 12 2024



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- WARM AIR REGISTER
- OR -COLD AIR RETURN
- AIR TO AIR EXCHANGE LOCATION (MN ONLY)
- REQUIRED SUPPORT POST LOCATION



1600 ROWE AVE. WORTHINGTON, MN 56187

MODIFICATIONS

PROJECT: KBM-3266S33005  
76'-0" x 30'-0" 3BD 3BT  
CUSTOMER: TARCZALI

DRAWN BY: EDDIE ANSTINE  
DATE: 03-14-24  
SCALE: 5/32" = 1'-0"

TITLE: MECHANICAL PLAN (PERIMETER)  
FILENAME: 004959 (KBM-3266S33005) (TARCZALI)

SHEET: MP-101(P)  
S# 4959

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