# WINTER GARDEN RETAIL

MARSH ROAD AT CR 545 (ALAVON RD) WINTER GARDEN, FL 34787

# **CONTACT INFORMATION**

# **DEVELOPER**

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# ARCHITECTURAL DESIGN:

FISHER AND ASSOCIATES. LLC 2315 BELLEAIR ROAD CLEARWATER, FLORIDA 33764 PHONE: (727) 443-4436 FAX: (727) 531-6653

# STRUCTURAL ENGINEERING:

**CENTER FOR INNOVATIVE STRUCTURES** 5706 S. MACDILL AVE. TAMPA, FLORIDA 33611 PHONE: (813) 835-5311 FAX: (813) 835-5503

# MECHANICAL, ELECTRICAL & PLUMBING ENGINEERING:

**COLWILL ENGINEERING** 4750 EAST ADAMO DRIVE TAMPA, FLORIDA 33605 PHONE: (813) 241-2525 FAX: (813) 241-2424

# FIRE PROTECTION DESIGN:

COLWILL ENGINEERING 4750 EAST ADAMO DRIVE TAMPA, FLORIDA 33605 PHONE: (813) 241-2525 FAX: (813) 241-2424

# **CIVIL ENGINEERING:**

KPM FRANKLIN 6300 HAZELTINE NATIONAL DRIVE, SUIT 118 ORLANDO, FLORIDA 32822 PHONE: (407) 410-8624

# **DRAWING LIST**

# **ARCHITECTURAL**

A0.1 COVER SHEET A0.2 INFORMATION SHEET ADA ACCESSIBILITY A0.4 U.L. DESIGNS

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FLOOR PLAN DOOR SCHEDULE & DETAILS A4.1 EXTERIOR ELEVATIONS

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M1.0 MECHANICAL FLOOR PLAN M2.0 MECHANICAL NOTES, SCHEDULES M2.1 MECHANICAL NOTES, SCHEDULES

# **PLUMBING**

P1.0 PLUMBING FLOOR PLAN P2.0 PLUMBING NOTES & SCHEDULES

# FIRE PROTECTION

FP1.0 FIRE PROTECTION PLAN

# **MUNICIPALITY**

300 W PLANT STREET WINTER GARDEN, FL 34787 PHONE: (407) 877-5136 FAX: (407) 656-0839

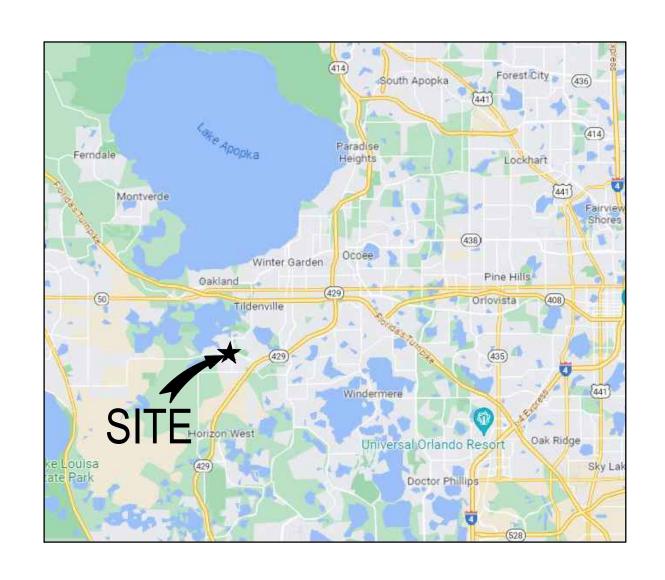
# VICINITY MAP





WINTER GARDEN

WINTER GARDEN BUILDING DIVISION



N.T.S.

## **BUILDING DATA** FLORIDA BUILDING CODE - 7TH EDITION (2020)

APPLICABLE CODES:

FLORIDA BUILDING CODE - 7TH EDITION (2020) BUILDING: FLORIDA PLUMBING CODE - 7TH EDITION (2020) PLUMBING: FLORIDA MECHANICAL CODE - 7TH EDITION (2020) MECHANICAL: NATIONAL ELECTRIC CODE 2017 (NFPA 70) **ELECTRICAL**: FLORIDA ACCESSIBILITY CODE - 7TH EDITION (2020) ACCESSIBILITY:

FLORIDA FIRE PREVENTION CODE - 7TH EDITION (2020) - WITH NFPA - 1 & 101, 2018 EDITION. FIRE PROTECTION: FLORIDA BUILDING CODE - 7TH EDITION (2020) - ENERGY CONSERVATION

OCCUPANCY: MIXED OCCUPANCY: GROUP M (MERCANTILE) & GROUP A-2 (ASSEMBLY): (FBC - CHAPTER 3)

TYPE II-B (FBC TABLE 503) - SPRINKLED THROUGHOUT **CONSTRUCTION TYPE:** 75 FEET (TABLE 504.3) ALLOWABLE BUILDING HEIGHT: ALLOWABLE NUMBER OF STORIES: 3 STORIES (TABLE 504.4

NUMBER OF STORIES PROVIDED: ALLOWABLE AREA: 50,000 S.F. (FBC TABLE 506.2) AREA PROVIDED: TOTAL PROVIDED = 10,709 S.F.

**ENERGY CONSERVATION:** BUILDING ENERGY EFFICIENCY IS COMPLIANT WITH CRITERIA AS SET FORTH IN

CHAPTER 4 [CE], SECTION C407 "TOTAL BUILDING PERFORMANCE"

PROTECTION: FBC CHAPTER 6 - TABLE 601

PRIMARY STRUCTURAL FRAME: **BEARING WALLS:** EXTERIOR INTERIOR

NONBEARING WALLS & PARTITIONS: **EXTERIOR** INTERIOR FLOOR CONSTRUCTION AND SECONDARY MEMBERS

FBC SECTION 803: WALL AND CEILING FINISHES - GROUP A-2, SPRINKLERED

-CLASS C - CORRIDORS, ROOMS AND ENCLOSED SPACES FLAME SPREAD 76 - 200: SMOKE DEVELOPED 0 - 450 -CLASS B - EXIT ENCLOSURES AND EXIT PASSAGEWAYS FLAME SPREAD 26 - 75; SMOKE DEVELOPED 0 - 450

ROOF CONSTRUCTION AND SECONDARY MEMBERS

FBC SECTION 804: INTERIOR FLOOR FINISH - GROUP A-2. SPRINKLERED

DOC FF-1 "PILL TEST" (CPSC 16 CFR, PART 1630)

			STATEWIDE PRODUCT A				
MANUFACTURER	PRODUCT CATEGORY	APPROVAL NUMBER	PRODUCT MODEL NO. OR NAME	SERIES	ATTACHMENT METHOD	APPROVAL ENTITY	APPROVAL DATE
CARLISLE SYNTEC SYSTEMS	ROOFING	FL1601.1-R12	1601.1 EPDM SINGLE PLY ROOF SYSTEMS	SYSTEM NUMBER "W-1"	SURE-SEAL HP FASTENEER WITH SURE-SEAL INSULATION PLATE, MIN. 1-INCH WOOD PENETRATION, 1 PER 2.0 SQ. FT.	FLORIDA	10/13/2020
CECO DOOR PRODUCTS	EXTERIOR DOORS	FL16355.2-R3	16355.2 FLUSH SINGLE COMMERCIAL STEEL DOORS	ASSEMBLY 6	(4) T4A3386 NRP 4-1/2" X 4-1/2" HINGES	FLORIDA	02/09/2021
YKK AP AMERICA	EXTERIOR DOORS	FL16554-R12	16554.1 35H OUTSWING SYSTEM (HVHZ) (IMPACT)	STOREFRONT DOORS	(3) PAIR BUTTS - OFFSET PIVOTS BY DOOR SUPPLIER	FLORIDA	02/07/2023
YKK AP AMERICA	PANEL WALLS	FL14218-R13	14218.4 YHS 50 FI ALUMINUM STOREFRONT SYSTEM (HVHZ) (IMPACT)	INSULATED IMPACT STOREFRONT SYSTEM	1/4" DIA. TAPCON OR 1/4" DIA. ULTRACON THRU 1X BUCKS INTO MASONRY WITH 1-3/4" EMBED.	FLORIDA	02/14/2023
MAYNE COATINGS CORP.	PANEL WALLS	FL20075-R3	20075.1 LONGBOARD SIDING	LONGBOARD SIDING	THE SIDING IS ATTACHED USING QUICK-SCREEN CLIPS WITH 2 INCH LONG #8 CORROSION RESISTANT SCREWS THROUGH THE SHEATHING INTO THE STUDS AT SPACING OF 16 INCHES ON CENTER.	FLORIDA	11/03/2022

FISH

RELEASED FOR: 12.11.23 12.08.23 PERMIT CONSTR.

**REVISIONS:** 

WILLIAM JOE FISHER ARCHITECT 0010829

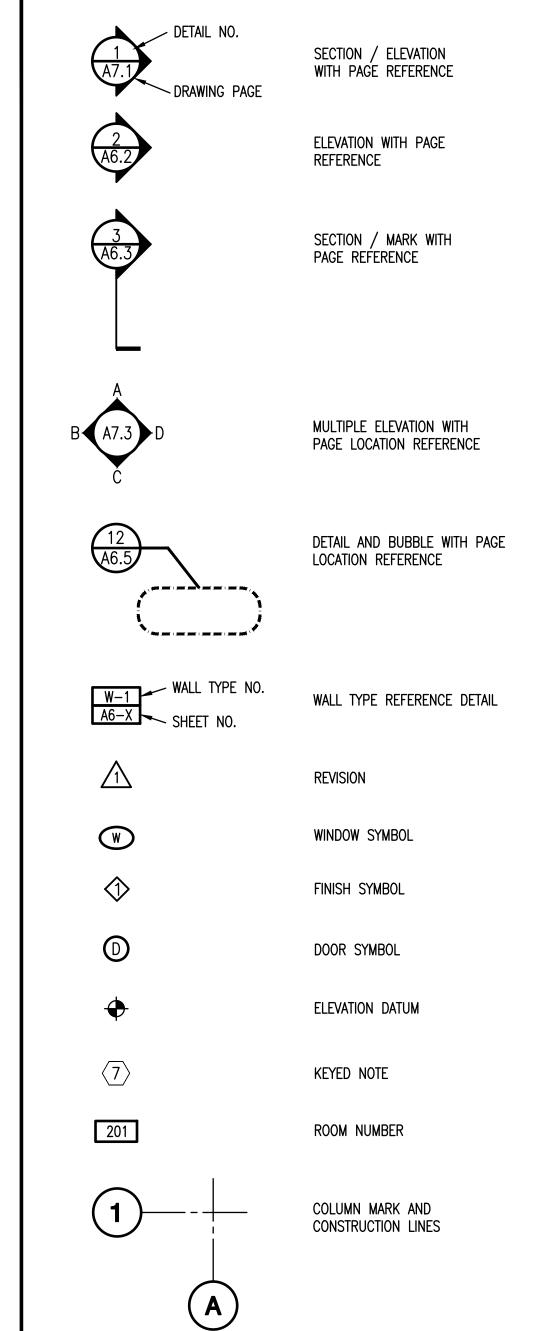
A.B. ANCHOR BOLT GA. GAUGE Q.T. QUARRY TILE A/C AIR CONDITION GAL. GALLON ACOUS. ACOUSTICAL GALV. GALVANIZED RISER (OR) RADIUS ADJ. "ADJUSTABLE, ADJACENT" G.B. GRAB BAR R.C. RUNNER CHANNEL A.D.O. AUTOMATIC DOOR OPENER G.C. GENERAL CONTRACTOR R.C.P. REINFORCED CONCRETE PIPE A.F.F. ABOVE FINISHED FLOOR G.M. GALVANIZED METAL R.D. ROOF DRAIN A.H.C.A. AGENCY FOR HEALTH CARE ADMINISTRATION G.M.L. GALVANIZED METAL LATH RECP. RECEPTACLE A.H.U. AIR HANDLER UNIT G.M.S. GALVANIZED METAL STUD REF. REFERENCE ALUMINUM GND. GROUND REFR. REFRIGERATOR ALT. ALTERNATE GYP. GYPSUM REG. REGLET (OR) REGULATOR ANOD. ANODIZE(D) GYP.BD. GYPSUM WALLBOARD A.P. REINF REINFORCEMENT ACCESS PANEL REQD. REQUIRED APPROX. **APPROXIMATE** REV. REVISION ARCH. ARCHITECT ROOM AUTO. AUTOMATIC H.B. HOSE BIBB R.O. ROUGH OPENING H.C. HOLLOW CORE(OR)HANDICAP HDW. **HARDWARE** HDWD. HARDWOOD B.G. BUMPER GUARD HGT. HEIGHT BLDG. S.A.B. BUILDING SOUND ATTENUATING BLANKET H.M. HOLLOW METAL BM. B.O. B/O BEAM S.C. SOLID CORE HORIZ. HORIZONTAL BOTTOM OF H.PT. SCHD. SCHEDULE HIGH POINT BOTTOM OF S.D. SOAP DISPENSER HR. HOUR BOT. SEAL BOTTOM SEALANT H.R. HANDRAIL BRNG. SECT. BEARING H.S. HEAT STRENGTHENED SECTION B.U.R. BUILT UP ROOF H.S.V. SQUARE FEET HEAT SEAMED VINYL SQ. FT. SQUARE FEET HTG. HEATING SHELVING: SHELVES HVAC HEATING VENTILATION AND AIR CONDITIONING CAB. CABINET SHEET C.B. CATCH BASIN SIM. SIMILAR CER. CERAMIC S.M. SHEET METAL C.F.C.I. CONTR. FURNISHED CONTR. INSTALLED ICU INTENSIVE CARE UNIT S.M.S. SHEET METAL SCREW C.G. C.I. C.J. CORNER GUARD INSIDE DIAMETER (OR) IDENTIFICATION SPEC. SPECIFICATIONS CAST IRON SPF. SOUNDPROOF CONTROL JOINT INCL. INCLUDE (D) (ING) S.S. STAINLESS STEEL CL CENTER LINE INSUL. **INSULATION** STA. STANCHION CLG. CEILING STD. STL. INT. INTERIOR STANDARD CLO. CLOSET INV. INVERT (ED) STEEL CLR. CLEAR I.P. ISOLATION PANEL STOR. STORAGE CONCRETE MASONRY UNIT CMU. I.P.S. STRL. STRUCTURAL INSIDE PIPE DIAMETER COL. COLUMN SUSP. I.T. ISOLATION TRANSFORMER SUSPENDED COM. COMMON I.V.T. S.Y. INTRANENOUS TRACK SQUARE YARD CONC. CONCRETE MASONRY UNIT CONST. CONSTRUCTION CONT. CONTINUOUS CONTR. CONTRACTOR JAN. JST. **JANITOR** TREAD (OR) TOILET TABLE CORR. CORRIDOR JOIST C.O. CASED OPENING JOINT T.B. TEST BORING CP CARPET T.C. TOILET COMPARTMENT C.S. C.T. CTR. CONCRETE SEALED TEL. TELEPHONE CERAMIC TILE TEMP. TEMPERED: TEMPORARY: TEMPERATURE COUNTER (OR) CENTER KICK PLATE K.P. THK. CTSK. COUNTER SINK K.S. KNEE SPACE T.P.D. TOILET PAPER DISPENSER T.O. T/O TOP OF TOP OF TREAT **TREATMENT** DA DELAYED ACTION LENGTH T.V. **TELEVISION** DBL. DOUBLE LAB. LABORATORY TYP. TYPICAL D.E. DEPT. DOUBLE EGRESS L.A. LAY IN ACOUSTICAL DEPARTMENT LAM. LAMINATE DET. DETAIL LAV. LAVATORY D.F. LBL. DRINKING FOUNTAIN UNDERCUT LABEL DIA. DIAG. DIAMETER L.F. LINEAR FEET U.C. UNDER COUNTER DIAGONAL LOCKER LKR. U.O.N. UNLESS OTHERWISE NOTED DIM. DIMENSION LIGHT WEIGHT LT. WT. UTIL UTILITY DISPENSER (OR) DISPOSER DISP. DN. D.R. DR. DOWN DRESSING ROOM DOCTOR (OR) DOOR **MASONRY** DWG(S). MATL MATERIAL VINYL BASE DRAWING(S) MAX. MIN. V.C.T. DWR. DRAWER MAXIMUM VINYL COMPOSITION TILE VERT. MINIMUM VERTICAL VEST. VESTIBULE MECH. MECHANICAL MTL. METAL V.I.F. VERIFY IN FIELD EACH MFR. MANUFACTURER V.W.C. VINYL WALL COVERING EXPANSION BOLT E.B. MFD. MANUFACTURED E.J. EXPANSION JOINT M.H. MANHOLE ELEC. ELEV. ELECTRICAL MISC MISCELLANEOUS MLDG. M.O. ELEVATOR MOLDING ESC. EMER. E.R. E.P. ESCALATOR (OR) ESCAPE MASONRY OPENING WALL BUMPER **EMERGENCY** MOISTURE RESISTANCE WATER CLOSET: WALL COVERING EMERGENCY RELEASE (OR) EMER. ROOM METAL STUD WHEEL CHAIR ELECTRICAL PANEL MTD. MOUNTED WOOD EQ. EQUAL MUL. MULLION WATER HEATER EQUIP. EQUIPMENT WROUGHT IRON E.S. E.T. EXPOSED STRUCTURE WITHOUT ELAPSED TIME WHERE OCCURS E.W.C. ELECTRIC WATER COOLER N.I.C. NOT IN CONTRACT WATER PROOF EXP. EXPANSION (OR) EXPOSED NO. NUMBER WASTE RECEPTACLE EXST. EXT. EXISTING NOM. NOMINAL WEIGHT **EXTERIOR** N.T.S. NOT TO SCALE W.W.F. WELDED WIRE FABRIC W.W.M. WELDED WIRE METAL OVER ALL FIRE ALARM 0.A. FIRE ALARM CONTROL PANEL 0.C. F.A.C.P. ON CENTER F.A.P. FIRE ALARM PULL STATION 0.D. OUTSIDE DIAMETER (OR) OVERALL DIMENSION 0.F.C.I. F.C. OWNER FURNISHED CONTRACTOR INSTALLED FURRING CHANNEL 0.F.0.I. F.D. FIELD DIMENSION (OR) FLOOD DRAIN OWNER FURNISHED OWNER INSTALLED FDN. FOUNDATION OVER HEAD F.E. FIRE EXTINGUISHER OPG. OPENING F.E.C. F.F.E. FIRE EXTINGUISHER CABINET 0.S. OVERFLOW SCUPPER FINISHED FLOOR ELEVATION F.H.C. FIRE HOSE CABINET FIN. FINISHED FLOOR ELEVATION **FLOOR** PREFABRICATED FLASH PLATE: PLASTIC LAMINATE FLASHING PLAS. PLBG. FLUOR. FLUORESCENT PLASTER F.N.D. FEMININE NAPKIN DISPOSAL PLUMBING F.N.V. PLWD. PLYW00D FEMININE NAPKIN VENDOR FPRF. PR. PAIR FIRE PROOFING POINT F.R. FIRE RATED (ING) P.T. PRESSURE TREATED FR. FRAME F.T. P.T.D. PAPER TOWEL DISPENSER FIRE TREATED FT. FOOT (OR ) FEET PTN. PARTITION FTG. FURR. FUT. PVC POLY VINYL CHLORIDE FOOTING **FURRING FUTURE** F.W. FLUSH WOOD **ABBREVIATIONS** 

# **GENERAL NOTES**

ALL ENTRANCE DOOR INTERIORS.

BE ACCEPTED)

- 1. EMERGENCY LIGHTING SHALL MEET REQUIREMENTS OF FFPC 6TH EDITION INCLUDING NFPA 1 & 101,
- 2. EXIT LIGHTING SHALL MEET REQUIREMENTS OF FFPC 6TH EDITION INCLUDING NFPA 1 & 101, 2018
- 3. ALL EXTERIOR DOOR LOCKS SHALL COMPLY WITH FFPC 6TH EDITION INCLUDING NFPA 1 & 101, 2018 EDITION. THUMB TURN LOCKS TO COMPLY WITH EXCEPTION #2. INDICATING LOCKS ARE REQUIRED ON
- 4. PORTABLE FIRE EXTINGUISHERS ON PLANS SHALL BE IN COMPLIANCE WITH FFPC 6TH EDITION INCLUDING NFPA 1 & 101, 2015 EDITION. THERE SHALL BE A MINIMUM OF ONE EXTINGUISHER PER EVERY 2,500 SQ. FT. MINIMUM SIZE 2A10BC TYPE.
- 5. THE PROJECT COMPLIES WITH THE ADA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION.
- 6. THE ENTIRE BUILDING IS TO BE FULLY FIRE SPRINKLED IN STRICT ACCORDANCE WITH ALL REQUIRED CODES. AREA TO BE SPRINKLED SHALL INCLUDE 100% OF THE RETAIL SPACE.
- 7. ALL EXPOSED MASONRY TO HAVE "STRUCK" HORIZONTAL JOINTS AND "SMOOTH" VERTICAL JOINTS BOTH INTERIOR AND EXTERIOR. PROVIDE 1/2" RADIUS ON ALL EXPOSED CORNERS OF BEAMS AND
- 8. ALL STRUCTURAL AND MISCELLANEOUS STEEL SHALL RECEIVE ONE COAT OF GRAY STANDARD SHOP PAINT. TOUCH-UP BURN MARKS, LABELS AND DISTURBED AREAS IN FIELD (NO OTHER COLOR WILL
- 9. SEE SHEET A3.1 FOR RETAIL SHOP DOOR AND FINISH SCHEDULES.
- 10. THERE SHALL BE A MAXIMUM OF 1/2" FINISHED FLOOR ELEVATION BETWEEN ADJACENT FLOOR
- 11. THE FOLLOWING SHALL BE STENCILED ON BOTH SIDES OF ALL RATED WALLS "1HR. FIRE ASSEMBLY. SEAL ALL PENETRATIONS".
- 12. CONTRACTOR TO PROVIDE JOB SITE MOCKUP OF ALL EXTERIOR FINISHES AND COLORS FOR ARCHITECT APPROVAL PRIOR TO COMMENCEMENT OF BLOCK INSTALLATION. SAMPLES MUST BE APPROVED BY OWNER AND ARCHITECT PRIOR TO FINISH INSTALLATIONS.
- 13. SUITE NUMBERS SHALL BE DISPLAYED AT ALL EGRESS DOORS FOR EACH SUITE.
- 14.  $\langle w x \rangle$  = SEE DETAIL 14/A6.1 FOR PARTITION TYPES.



GENERAL SYMBOLS

Project Date:03/31/2 Project No.: 223015

WILLIAM JOE FISHER ARCHITECT 0010829

RETAIL BUILDING AT MARSH ROAD AT CR 54 WINTER GARDEN, FL 347

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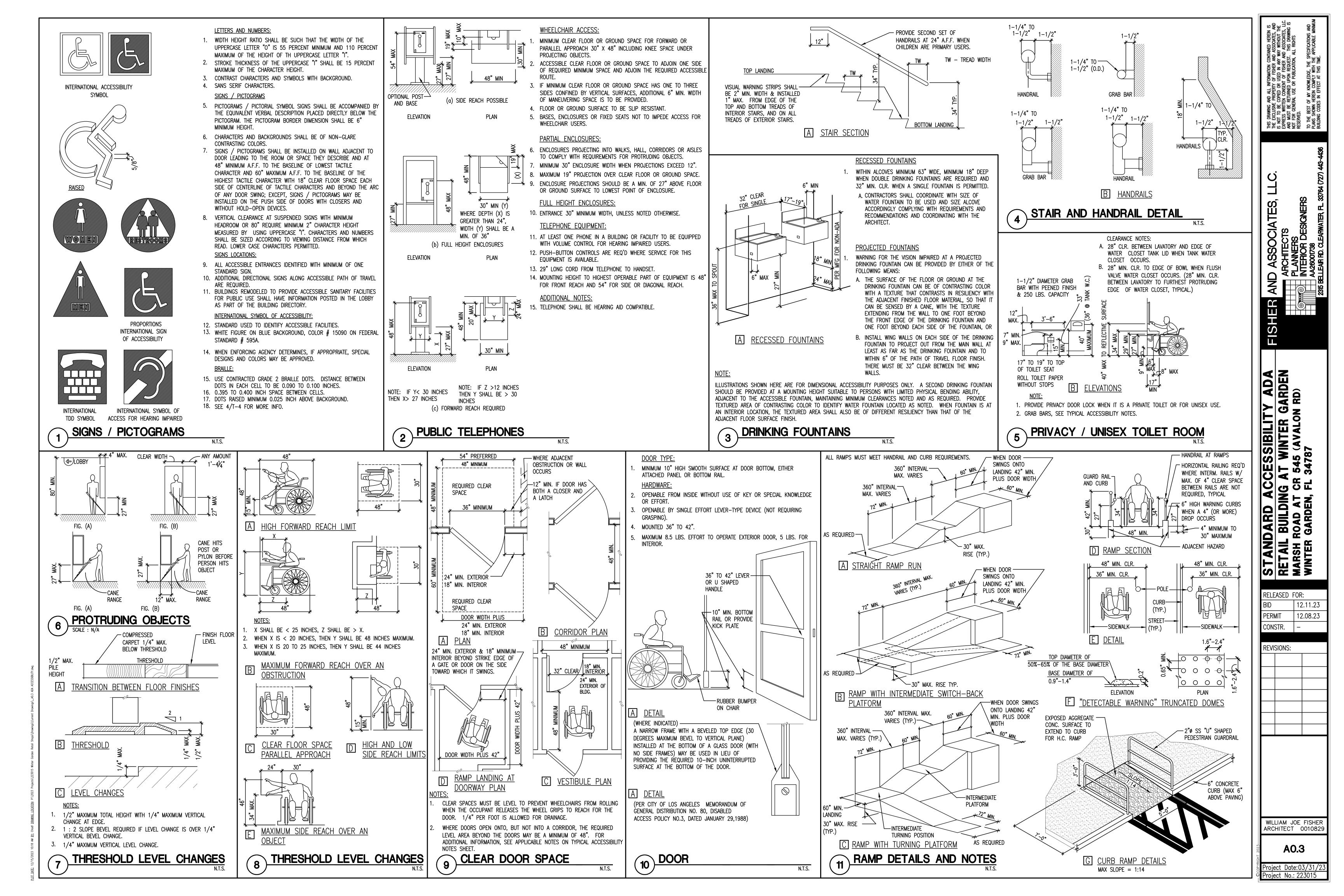
REVISIONS:

12.11.23

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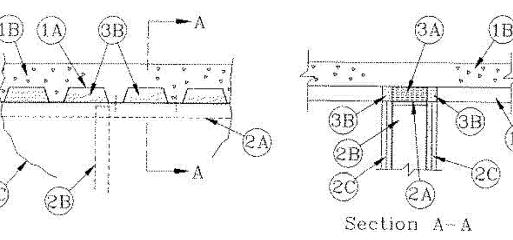


# **KEY NOTES:**

- ROOF ASSEMBLY ANY ROOF ASSEMBLY CLASSIFIED BY UNDERWRITERS LABORATORIES INC. IN THE UL FIRE RESISTANCE DIRECTORY (ALL "P" SERIES DESIGNS).
- U.L. ONE HOUR WALL ASSEMBLY DESIGN #U419 (BEYOND)
- THE JOINT TREATMENT SYSTEM SHALL CONSIST OF A FORMING MATERIAL AND A FILL MATERIAL SEAL IN THE FLUTES OF THE STEEL DECK AS FOLLOWS:
- FORMING MATERIAL MINIMUM 3 1/2" THICKNESS OF THERMAFIBER SAFING INSULATION WITH NOMINAL DENSITY OF 4 PCF FIRMLY PACKED INTO FLUTES OF STEEL DECK ABOVE CEILING TRACK.
- FILL MATERIAL (BEYOND @ 1 HR WALL) FIRECODE COMPOUND INSTALLED TO FILL THE FLUTES OF THE STEEL DECK ABOVE THE GYPSUM WALLBOARD ON EACH SIDE OF THE WALL ASSEMBLY. A MINIMUM 1/2" THICKNESS OF FIRECODE COMPOUND IS REQUIRED ON EACH SIDE OF THE WALL FOR 1 HR. ASSEMBLY RATING
- TYPE 'X' G.W.B. PANEL SEAM LOCATED DIRECTLY BENEATH JOIST GIRDER. FDGE OF FACH PANEL TO BE SCRIBED AROUND JOIST GIRDER PROFILE.
- FILL, VOID OR CAVITY MATERIAL MINIMUM 5/8" THICKNESS OF FIRECODE COMPOUND INSTALLED SUCH THAT A MINIMUM 3/8" CROWN IS FORMED AROUND THE PENETRATED ITEM, OVERLAPPING MINIMUM 1' ONTO THE WALLBOARD SURFACE AT THE JOINT BETWEEN THE G.W.B. WALL AND THE JOIST GIRDER.
- 2ND LAYER OF TYPE 'TYPE X' G.W.B. FIT TIGHT TO JOIST GIRDER (MAX 5/8" JOINT AROUND JOIST GIRDER)
- PROFILE OF BARJOIST (BEYOND).
- PROFILE OF JOIST GIRDER.



6 JOIST GIRDER / WALL PENETRATION



# ASSEMBLY RATTINGS - 1 & 2 HR (SEE ITEM 3B)

- Floor Assembly The fire-rated fluted steel deck/concrete floor assembly shall be constructed of the materials and in the manner described in the individual Floor-Ceiling Design in the UL Fire Resistance Directory and shall include the following construction features:
  - A. Steel Floor and Form Units\* Max 3 in. deep galv steel fluted floor units.
  - B. Concrete Min 2-1/2 in. thick reinforced concrete, as measured from the top plane of the floor units.

1A. Roof Assembly - As an alternate to Item 1, Floor Assembly, the fire-rated roof assembly shall be constructed of the materials and in the manner described in the individual P700, P800 or P900 series Roof-Ceiling Designs in the UL Fire Resistance Directory and shall contain max 1-1/2 in. deep galy steel fluted roof units. The hourly fire rating of the roof assembly shall be equal to or greater than the hourly fire rating of the wall assembly. In the case of spray-applied protection materials on the steel roof units, the joint system shall be installed prior to the spray-applied protection

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

A. Steel Floor And Ceiling Runners - Floor and ceiling runners of wall assembly shall consist of min 25 ga galv steel channels sized to accommodate steel studs (Item 2B). Ceiling runner to be provided with 1-1/2 in. flanges. Ceiling runner secured to valleys of steel floor units (Item 1A) with steel fasteners or by welds spaced

B. **Studs -** Steel studs to be min 2-1/2 in. wide. Stud spacing not to exceed 24 in. OC.

C. Gypsum Board\* - Wallboard sheets installed to a min total thickness of 1/2 or 1 in. on each side of wall for 1 or 2 ratings, respectively. Wall to be constructed as specified in the individual Wall and Partition Design in the UL Fire Resistance Directory. Wallboard to be butted tight to the bottom of the steel floor units.

3. Joint System - The joint system consists of a forming material and a fill material in the flutes of the steel floor units, as

A. Forming Materials\* - Min 2-1/2 in. thickness of min 4 pcf density mineral wool batt insulation firmly packed into flutes of steel floor units above ceiling runner as a permanent form. Forming material to be recessed from edges of ceiling runner on each side of wall as required to accommodate the required thickness of fill material.

THERMAFIBER INC - Type SAF

B. Fill, Void or Cavity Material\* - Dry mix material mixed with water at a rate of 2.1 parts dry mix to 1 part water, by weight, in accordance with accompanying installation instructions. A min 1/2 in. thickness of fill material installed on each side of the wall in the flutes of the steel floor units, flush with each surface of the wallboard for the 1 hr Assembly Rating. A min 1 in. thickness of fill material is required on each side of the wall for the 2 hr Assembly Rating.

UNITED STATES GYPSUM CO - Type FC

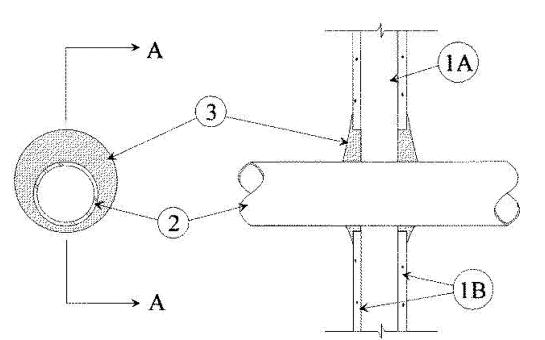
B1. Fill, Void or Cavity Material\* - Not Shown - Two component fill material used as an alternate to Item 3B Ready-mixed component mixed with accelerator component at a rate of 66 parts of ready-mixed component to 1 part of accelerator component by weight in accordance with the accompanying installation instructions. Applied as described in Item 3B to a min thickness of 1/2 in. for the 1 hr Assembly Rating, and to a min thickness of 1 in. for the 2 hr Assembly Rating.

UNITED STATES GYPSUM CO - Type RFC

\*Bearing the UL Classification Mark

# 7 HW-S-0001 - JOINT SYSTEM - 1 & 2 HR

HW-S-0001.DWG



# **SECTION A-A**

THROUGH-PENETRATION FIRESTOP SYSTEMS

F RATING - 1 HR

# T RATINGS - 0 AND 1 HR (See Item 2)

1. Wall Assembly - The fire rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300 or U400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:

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

B. Gypsum Board\* - The gypsum wallboard type, thickness (min 5/8 in.), number of layers, and orientation shall be as specified in the individual Wall and Partition Design. Max diam of opening is 7 in. 2. **Through-Penetrants** - One metallic pipe, conduit, or tubing to be installed either concentrically or eccentrically

within the firestop system. Pipe, conduit, or tubing to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes, conduits or tubing may be used: A. Steel Pipe - Nom 4 in. diam (or smaller) Schedule 10 (or heavier) steel pipe. The annular space shall be a

min 1/4 in. to max 1-1/4 in. When steel pipe is used, T Rating is 0 hr. B. Conduit - Nom 4 in. diam or smaller steel electrical metallic tubing or steel conduit. The annular space

shall be a min 1/4 in. to max 1-1/4 in. When conduit is 1/2 in. diam or less, T Rating is 1 hr. C. Copper Tubing - Nom 4 in. diam (or smaller) Type M (or heavier) copper tubing. The annular space shall

be a min 1/4 in. to max 1-1/4 in. When copper tubing is used, T Rating is 0 hr. 3. Fill. Void or Cavity Material\* - Min 5/8 in. thickness of fill material applied within the annulus flush with both surfaces of the wall. Additional fill material installed such that a min 3/8 in. crown is formed around the penetrating item, overlapping min 1 in. onto the wallboard surface. Dry mix material mixed at a rate of 2.1 parts dry mix to 1 part water by weight in accordance with the accompanying installation instructions.

# **UNITED STATES GYPSUM CO** - Type FC

3A. Fill. Void or Cavity Material\* - Not Shown - Two component fill material used as an alternate to Item 3. Min 5/8 in. thickness of fill material applied within the annulus flush with both surfaces of the wall. Additional fill material installed such that a min 3/8 in. crown is formed around the penetrating item, overlapping min 1 in. onto the wallboard surface. Ready-mixed component mixed with accelerator component at a rate of 66 parts of ready-mixed component to 1 part of accelerator component by weight in accordance with the accompanying installation instructions.

UNITED STATES GYPSUM CO - Type RFC

\*Bearing the UL Classification Mark







Nonbearing Wall Ratings - 1, 2, 3 or 4 Hr (See Items 4 & 5)

corrosion-protected steel, min depth to accommodate stud size, with min 1-1/4 in. long legs, attached to floor and ceiling

1A. Framing Members\* - Floor and Ceiling Runners - Not shown - In lieu of Item 1 - For use with Item 2A, proprietary

1B. Framing Members\* - Floor and Ceiling Runners - (Not shown - In lieu of Item 1) - For use with Item 2A, proprietary

1C. Framing Members\* - Floor and Ceiling Runner - Not shown - In lieu of Item 1 - For use with Item 2C, proprietary

1D. Framing Members\* - Floor and Ceiling Runner - Not shown - In lieu of Item 1 - For use with Item 2D, proprietary

channel shaped runners, 1-1/4 in. wide by 3-5/8 in. deep fabricated from min 0.020 in. thick galv steel, attached to floor and

1E. Framing Members\*- Floor and Ceiling Runners - (Not shown) - In lieu of Item 1 - Channel shaped, attached to floor

1F. Floor and Ceiling Runners - (Not shown)-For use with Item 2B- Channel shaped, fabricated from min 20 MSG

corrosion-protected or galv steel, min depth to accommodate stud size, with min 1 in. long legs, attached to floor and ceiling

1G. Framing Members\*- Floor and Ceiling Runners - (Not shown, As an alternate to Item 1) - For use with Items 2F, 5F

or 5G or 5I only, channel shaped, fabricated from min. 0.015 in. (min bare metal thickness) galvanized steel, attached to

1H. Framing Members\* - Floor and Ceiling Runner - Not shown - In lieu of Item 1 - For use with Item 2G, proprietary

(min bare metal thickness) galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max.

5, spaced a max of 24 in. OC. Studs to be cut 3/8 to 3/4 in. less than assembly height.

channel shaped runners, minimum width to accommodate stud size, with 1- 1/8 in. long legs fabricated from min 0.015 in.

2A. Framing Members\* - Steel Studs - In lieu of Item 2 - Proprietary channel shaped studs, min. depth as indicated unde Item 5, fabricated from min. 0.015 in. (min bare metal thickness) galvanized steel, spaced a max of 24 in. OC. Studs to be

cut 3/4 in. less than assembly height. Allowable use of studs is shown in the table below. For direct attachment of gypsum

2B. Steel Studs - (As an alternate to Item 2, For use with Items 5B & 5E) Channel shaped, fabricated from min 20 MSG

corrosion-protected or galv steel, 3-1/2 in. min depth, spaced a max of 16 in. OC. Studs friction-fit into floor and ceiling

2C. Framing Members\* - Steel Studs - (As an alternate to Item 2, For use with Items 5C or 5I) - Proprietary channel

shaped studs. 3-5/8 in, deep spaced a max of 24 in, OC. Studs to be cut 3/4 in less than the assembly height and installed

2D. Framing Members\* - Metal Studs - Not shown - In lieu of Item 2 - For use with Item 1D, proprietary channel shaped

steel studs, min depth as indicated under Item 5, spaced a max if 24 in. OC, fabricated from min 0.020 in. thick galv steel.

2E. Framing Members\*- Steel Studs - In lieu of Item 2 - For Use with Item 1E- Channel shaped studs, min depth as

2F. Framing Members\*- Steel Studs - (Not shown, As an alternate to Item 2) -For use with Items 1G, 5F or 5G or 5I only.

channel shaped studs, min depth as indicated under Item 5F, 5G or 5I, fabricated from min. 0.015 in. (min bare metal

thickness) galvanized steel, spaced a max of 24 in. OC. Studs to be cut 3/4 in. less than assembly height.

indicated under Item 5, spaced a max of 24 in. OC. Studs to be cut 3/4 in. less than assembly height.

ALLSTEEL & GYPSUM PRODUCTS INC - Type SUPREME Framing System

QUAIL RUN BUILDING MATERIALS INC - Type SUPREME Framing System

STEEL CONSTRUCTION SYSTEMS INC - Type SUPREME Framing System

UNITED METAL PRODUCTS INC - Type SUPREME Framing System

CLARKDIETRICH BUILDING SYSTEMS - CD ProSTUD

SOUTHEASTERN STUD & COMPONENTS INC - ProSTUD

DMFCWBS L L C - ProSTUD

MBA BUILDING SUPPLIES - ProSTUD

SCAFCO STEEL STUD MANUFACTURING CO - Type SUPREME Framing System

with a ½ in. gap between the end of the stud and track at the bottom of the wall. For direct attachment of gypsum board

channel shaped runners, 3-5/8 in. deep attached to floor and ceiling with fasteners 24 in. OC max.

channel shaped, min. 2-1/2 in. deep, fabricated from min. 0.015 in. (min bare metal thickness) galvanized steel, attached to

channel shaped, min. 3-5/8 in. deep, fabricated from min. 0.015 in. (min bare metal thickness) galvanized steel, attached to

1 Floor and Ceiling Runners - (Not shown) - For use with Item 2 - Channel shaped, fabricated from min 25 MSG

floor and ceiling with fasteners 24 in. OC max. Effective thickness is 0.034 in.

floor and ceiling fasteners 24 in. OC. max. Effective thickness is 0.034 in.

CALIFORNIA EXPANDED METAL PRODUCTS CO - Viper25™ Track

CALIFORNIA EXPANDED METAL PRODUCTS CO - Viper20™ Track

ALLSTEEL & GYPSUM PRODUCTS INC - Type SUPREME Framing System

QUAIL RUN BUILDING MATERIALS INC - Type SUPREME Framing System

STEEL CONSTRUCTION SYSTEMS INC - Type SUPREME Framing System

UNITED METAL PRODUCTS INC - Type SUPREME Framing System

SCAFCO STEEL STUD MANUFACTURING CO - Type SUPREME Framing System

**BUILDING PRODUCTS DIV** - Type SUPREME Framing System

**CLARKDIETRICH BUILDING SYSTEMS** - UltraSTEEL®.

**CLARKDIETRICH BUILDING SYSTEMS** - UltraSTEEL®.

with fasteners 24 in. OC max.

CRACO MFG INC - SmartTrack™

INC - Viper25™ Track

INC - Viper20™ Track

MARINO/WARE, DIV OF WARE INDUSTRIES

TELLING INDUSTRIES L L C - Viper25™ Track

ceiling with fasteners spaced 24 in. OC max.

MARINO/WARE, DIV OF WARE INDUSTRIES

**TELLING INDUSTRIES L L C** - Viper20™ Track

and ceiling with fasteners 24 in. OC. max.

CONSOLIDATED FABRICATORS CORP.

floor and ceiling with fasteners 24 in. OC. max.

**MBA BUILDING SUPPLIES** - ProTRAK

DMFCWBS L L C - ProTRAK

**CLARKDIETRICH BUILDING SYSTEMS** - CD ProTRAK

SOUTHEASTERN STUD & COMPONENTS INC - ProTRAM

TELLING INDUSTRIES L L C - TRUE-TRACK™

SUPER STUD BUILDING PRODUCTS - The Edge

**CLARKDIETRICH BUILDING SYSTEMS** - UltraSTEEL®.

runners. Studs to be cut 5/8 to 3/4 in. less than assembly height.

CALIFORNIA EXPANDED METAL PRODUCTS CO - Viper25™

Studs cut 3/8 in. to 3/4 in. less in lengths than assembly heights.

CALIFORNIA EXPANDED METAL PRODUCTS CO - Viper20™

**BUILDING PRODUCTS DIV** - Type SUPREME Framing System

board only. Effective thickness is 0.034 in.

CRACO MFG INC - SmartStud™

INC - Viper25™

INC - Viper20™

MARINO/WARE, DIV OF WARE INDUSTRIES

MARINO/WARE, DIV OF WARE INDUSTRIES

TELLING INDUSTRIES L L C - Viper20™

CONSOLIDATED FABRICATORS CORP,

TELLING INDUSTRIES L L C - Viper25™

2G. Framing Members\* - Metal Studs - Not shown - In lieu of Item 2 - For use with Item 1H, proprietary channel shaped steel studs, minimum width indicated under Item 5, 1-1/4 in. deep fabricated from min 0.015 in. (min bare metal thickness) galvanized steel. Studs 3/8 in. to 3/4 in. less in lengths than assembly heights.

SUPER STUD BUILDING PRODUCTS - The Edge

3. Wood Structural Panel Sheathing - (Optional, For use with Item 5 Only.)- (Not Shown) - 4 ft wide, 7/16 in. thick oriented strand board (OSB) or 15/32 in. thick structural 1 sheathing (plywood) complying with DOC PS1 or PS2, or APA Standard PRP-108, manufactured with exterior glue, applied horizontally or vertically to the steel studs. Vertical joints centered on studs, and staggered one stud space from wallboard joints. Attached to studs with flat-head self-drilling tapping screws with a min. head diam. of 0.292 in. at maximum 6 in. OC. in the perimeter and 12 in. OC. in the field. When used, fastener lengths for gypsum panels increased by min. 1/2 in.

4. Batts and Blankets\* - (Required as indicated under Item 5) - Mineral wool batts, friction fitted between studs and runners Min nom thickness as indicated under Item 5. See Batts and Blankets (BKNV or BZJZ) Categories for names of Classified

4A. Batts and Blankets\* - (Optional) - Placed in stud cavities, any glass fiber or mineral wool insulation bearing the UL Classification Marking as to Surface Burning Characteristics and/or Fire Resistance. See Batts and Blankets (BKNV or BZJZ) Categories for names of Classified companies

5. **Gypsum Board\*** - Gypsum panels with beveled, square or tapered edges, applied vertically or horizontally. Vertical joints centered over studs and staggered one stud cavity on opposite sides of studs. Vertical joints in adjacent layers (multilayer systems) staggered one stud cavity. Horizontal joints need not be backed by steel framing. Horizontal edge joints and horizontal butt joints on opposite sides of study need not be staggered. Horizontal edge joints and horizontal butt joints in adjacent layers (multilayer systems) staggered a min of 12 in. The thickness and number of layers for the 1 hr, 2 hr, 3 hr and 4 hr ratings are as follows:

## Gypsum Board Protection on Each Side of Wal

Rating, Hr	Min Stud Depth, in. Items 2, 2D, 2E, 2G and 2F	Min Stud Depth, in. Item 2A	No. of Layers & Thkns of Panel	Min Thkns of Insulation (Item 4)
1	3-1/2	3-5/8	1 layer, 5/8 in. thick	Optional
1	2-1/2	3-5/8	1 layer, 1/2 in. thick	1-1/2 in.
1	1-5/8	3-5/8	1 layer, 3/4 in. thick	Optional
2	1-5/8	2-1/2	2 layers, 1/2 in. thick	Optional
2	1-5/8	2-1/2	2 layers, 5/8 in. thick	Optional
2	3-1/2	3-5/8	1 layer, 3/4 in. thick	3 in.
3	1-5/8	2-1/2	3 layers, 1/2 in. thick	Optional
3	1-5/8	2-1/2	2 layers, 3/4 in. thick	Optional
3	1-5/8	2-1/2	3 layers, 5/8 in. thick	Optional
4	1-5/8	2-1/2	4 layers, 5/8 in. thick	Optional
4	1-5/8	2-1/2	4 layers, 1/2 in. thick	Optional
4	2-1/2	2-1/2	2 layers, 3/4 in. thick	2 in.

CGC INC - 1/2 in. thick Type C, IP-X2 or IPC-AR; WRC, 5/8 in. thick Type AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, WRX or WRC: 3/4 in. thick Types IP-X3 or ULTRACODE UNITED STATES GYPSUM CO - 1/2 in. thick Type C, IP-X2, IPC-AR or WRC; 5/8 in. thick Type SCX, SGX, SHX, WRX,

IP-X1, AR, C, WRC, FRX-G, IP-AR, IP-X2, IPC-AR; 3/4 in. thick Types IP-X3 or ULTRACODE

USG MEXICO S A DE C V - 1/2 in. thick Type C, IP-X2, IPC-AR or WRC; 5/8 in. thick Type AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, WRX, WRC or; 3/4 in. thick Types IP-X3 or ULTRACODE

When Item 7B, Steel Framing Members\*, is used, Nonbearing Wall Rating is limited to 1 Hr. Min. stud depth is 3-1/2 in., min. thickness of insulation (Item 4) is 3 in., and two layers of gypsum board panels (1/2 in. or 5/8 in. thick) shall be attached to furring channels as described in Item 6. One layer of gypsum board panels (1/2 in. or 5/8 in. thick) attached to opposite side of stud without furring channels as described in Item 6.

5A. Gypsum Board\* - (As an alternate to Item 5) - 5/8 in. thick, 24 to 54 in. wide, applied horizontally as the outer layer to one side of the assembly. Secured as described in Item 6.

of Wall table. Nom 5/8 in. or ¾ in. thick lead backed gypsum panels with beveled, square or tapered edges, applied

vertically. Vertical joints centered over study and staggered min 1 stud cavity on opposite sides of study. Gypsum board

CGC INC - Type SHX. UNITED STATES GYPSUM CO - Type FRX-G, SHX.

USG MEXICO S A DE C V - Type SHX.

5B. Gypsum Board\* - (Not Shown) - As an alternate to Item 5 when used as the base layer on one or both sides of wall when 5/8 in or 3/4 in. thick products are specified. For direct attachment only to steel studs Item 2B, (not to be used with Item 3) - Nom 5/8 in. or ¾ in. may be used as alternate to all 5/8 in. or ¾ in. shown in Item 5, Wallboard Protection on Each Side

secured to 20 MSG steel studs Item 2B with 1-1/4 in. long Type S-12 steel screws spaced 8 in. OC at perimeter and 12 in. 2. Steel Studs - Channel shaped, fabricated from min 25 MSG corrosion-protected steel, min depth as indicated under Item OC in the field. To be used with Lead Batten Strips (see Item 11) or Lead Discs or Tabs (see Item 12). RAY-BAR ENGINEERING CORP - Type RB-LBG

5C. Gypsum Board\* - (For Use With Item 2C) Rating Limited to 1 Hour. 5/8 in. thick, 48 in. wide, Gypsum panels with beyeled, square or tapered edges, applied vertically or horizontally. (Vertical Application) - The gypsum board is to be installed on each side of the studs with 1 in, long Type S coated steel screws spaced 8 in, OC starting 4 in, from the edge of the board at the vertical edges and 12 in. OC starting 6 in. from the edge of the board at the center of each board. Gypsum boards are to be secured to the top and bottom track with screws spaced 8 in. OC starting 4 in. from the board edge. Fasteners shall not penetrate through both the stud and the track at the same time. Vertical joints are to be centered over studs and staggered one stud cavity on opposite sides of studs. (Horizontal Application) - The gypsum board is to be installed on each side of the studs with 1 in. long Type S coated steel screws spaced 8 in. OC starting 4 in. from the edge of the board at the vertical edges and 12 in. OC starting 6 in. from the edge of the board at the center of each board. Gypsum boards are to be secured to the top and bottom track with screws spaced 8 in. OC starting 4 in. from the board edge. Fasteners shall not penetrate through both the stud and the track at the same time. All horizontal joints are to be backed as outlined under section VI of Volume 1 in the Fire Resistive Directory.

CGC INC - Type SCX.

UNITED STATES GYPSUM CO - Type SCX, SGX.

USG MEXICO S A DE C V - Type SCX.

5D. Gypsum Board\* - (As an alternate to Item 5) - 5/8 in. thick, 48 in. wide, applied vertically or horizontally. Secured as described in Item 6. For use with Items 1 and 2 only.

UNITED STATES GYPSUM CO - Type USGX.

5E. **Gypsum Board\*** - (Not Shown) - (As an alternate to Item 5 when used as the base layer on one or both sides of wall when 1/2 in. or 5/8 in thick products are specified, For direct attachment only to steel studs Item 2B, not to be used with Item 3). Nominal 5/8 in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Wallboard secured to studs with 1-1/4 in. long Type S-12 (or No. 6 by 1-1/4 in. long bugle head fine driller) steel screws spaced 8 in. OC at perimeter and 12 in. OC in the field.

NEW ENGLAND LEAD BURNING CO INC, DBA

NELCO - Nelco

5F. Gypsum Board\* - (As an alternate to Item 5) - For use with Items 1G and 2F and limited to 1 Hour Rating only, Gypsum panels with beveled, square or tapered edges, applied vertically, and fastened to the steel studs with 1 in. long Type S screws spaced 8 in. OC along vertical and bottom edges and 12 in. OC in the field. Vertical joints centered over studs and staggered one stud cavity on opposite sides of studs. Steel stud depth shall be a minimum 3-5/8 in.

**UNITED STATES GYPSUM CO** - 5/8 in. thick Type SCX, SGX.

5G. Gypsum Board\* - (As an alternate to Item 5) - For use with Items 1G and 2F only, Gypsum panels with beveled, square or tapered edges, applied vertically or horizontally, as specified in the table below and fastened to the steel studs as described in Item 6. Vertical joints centered over studs and staggered one stud cavity on opposite sides of studs. Vertical joints in adjacent layers (multilayer systems) staggered one stud cavity. Horizontal joints need not be backed by steel framing. Horizontal edge joints and horizontal butt joints on opposite sides of studs need not be staggered. Horizontal edge joints and horizontal butt joints in adjacent layers (multilayer systems) staggered a min of 12 in. The thickness and number of layers for the 2 hr, 3 hr and 4 hr ratings are as follows:

Gypsum Board Protection on Each Side of Wall

Rating, Hr	Min Stud Depth, in. Item 2F	No. of Layers & Thickness of Panel	Min Thkns of Insulation (Item 4)
2	1-5/8	2 layers, 1/2 in. thick	Optional
2	1-5/8	2 layers, 5/8 in. thick	Optional
3	1-5/8	3 layers, 1/2 in. thick	Optional
3	1-5/8	3 layers, 5/8 in. thick	Optional
4	1-5/8	4 layers, 5/8 in. thick	Optional
4	1-5/8	4 layers, 1/2 in. thick	Optional

CGC INC - 1/2 in. thick Type C, IP-X2 or IPC-AR;, 5/8 in. thick Type AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, or; 3/4

UNITED STATES GYPSUM CO - 1/2 in. thick Type C, IP-X2, IPC-AR or; 5/8 in. thick Type SCX, SGX, SHX, IP-X1, AR, C, , FRX-G. IP-AR. IP-X2. IPC-AR: 3/4 in. thick Types IP-X3 or ULTRACODE USG MEXICO S A DE C V - 1/2 in. thick Type C, IP-X2, IPC-AR or; 5/8 in. thick Type AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, or; 3/4 in. thick Types IP-X3 or ULTRACODE

5H. **Gypsum Board\*** - (Not Shown) - As an alternate to Item 5 when used as the base layer on one or both sides of wall when 5/8 or 3/4 in thick products are specified. For direct attachment only to steel studs Item 2B, (not to be used with Item 3) - Nom 5/8 or 3/4 in, may be used as alternate to all 5/8 or 3/4 in, shown in Item 5. Wallboard Protection on Each Side of Wall table. Nom 5/8 or 3/4 in, thick lead backed gypsum panels with beyeled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Gypsum board secured to 20 MSG steel studs Item 2B with 1-1/4 in. long Type S-12 steel screws spaced 8 in. OC at perimeter and 12 in. OC in the field. To be used with Lead Batten Strips (see Item 11A) or Lead Discs (see Item 12A).

MAYCO INDUSTRIES INC - Type X-Ray Shielded Gypsum

5l. **Gypsum Board\*** - (As an alternate to Item 5) - Nom. 5/8 in. thick gypsum panels with beveled, square or tapered edges installed as described in Item 5. Steel stud minimum depth shall be as indicated in Item 5.

CGC INC - Type ULX

**UNITED STATES GYPSUM CO - Type ULX** 

USG MEXICO S A DE C V - Type ULX

6. Fasteners - (Not shown) - For use with Items 2 and 2F - Type S or S-12 steel screws used to attach panels to studs (Item 2) or furring channels (Item 7). Single layer systems: 1 in. long for 1/2 and 5/8 in. thick panels or 1-1/4 in. long for 3/4 in. thick panels, spaced 8 in. OC when panels are applied horizontally, or 8 in. OC along vertical and bottom edges and 12 in. OC in the field when panels are applied vertically. Two laver systems: First laver- 1 in, long for 1/2 and 5/8 in, thick panels or 1-1/4 in. long for 3/4 in. thick panels, spaced 16 in. OC. Second layer- 1-5/8 in. long for 1/2 in., 5/8 in. thick panels or 2-1/4 in. long for 3/4 in. thick panels, spaced 16 in. OC with screws offset 8 in. from first layer. Three-layer systems: First layer-1 in. long for 1/2 in., 5/8 in. thick panels, spaced 24 in. OC. Second layer- 1-5/8 in. long for 1/2 in., 5/8 in. thick panels, spaced 24 in. OC. Third layer- 2-1/4 in. long for 1/2 in., 5/8 in. thick panels or 2-5/8 in. long for 5/8 in. thick panels, spaced 12 in. OC. Screws offset min 6 in. from layer below. Four-layer systems: First layer- 1 in. long for 1/2 in., 5/8 in. thick panels, spaced 24 in. OC. Second layer- 1-5/8 in. long for 1/2 in., 5/8 in. thick panels, spaced 24 in. OC. Third layer- 2-1/4 in. long for 1/2 in. thick panels or 2-5/8 in. long for 5/8 in. thick panels, spaced 24 in. OC. Fourth layer- 2-5/8 in. long for 1/2 in. thick panels or 3 in. long for 5/8 in. thick panels, spaced 12 in. OC. Screws offset min 6 in. from layer below.

6A. Fasteners - (Not shown) -For use with Item 2A - Type S or S-12 steel screws used to attach panels to studs (Item 2A). Single layer systems: 1 in. long for 1/2 and 5/8 in. thick panels or 1-1/4 in. long for 3/4 in. thick panels, spaced 8-1/2 in. OC with additional screws 1 in. and 2-1/2 in. from edges of the board when panels are horizontally. or 8 in. OC along vertical and bottom edges and 12 in. OC in the field when panels are applied vertically. Two laver systems applied vertically: First layer- 1 in. long for 1/2 and 5/8 in. thick panels or 1-1/4 in. long for 3/4 in. thick panels, spaced 16 in. OC. Second layer- 1-5/8 in. long for 1/2 in., 5/8 in. thick panels or 2-1/4 in. long for 3/4 in. thick panels, spaced 16 in. OC with screws offset 8 in. from first layer. Two layer systems applied horizontally: First layer- 1 in. long for 1/2 and 5/8 in. thick panels or 1-1/4 in. long for 3/4 in. thick panels, spaced 16 in. OC starting 8 in. from each edge of the board with an additional screw placed 1-1/4 in. from each edge of the board. Second layer- 1-5/8 in. long for 1/2 in., 5/8 in. thick panels or 2-1/4 in. long for 3/4 in. thick panels, spaced 16 in. OC starting 8 in. from each edge of the board with an additional screw placed 1-1/4 in. from each edge of the board with screws offset 8 in. from first layer, Three-layer systems: First layer- 1 in. long for 1/2 in., 5/8 in. thick panels, spaced 24 in. OC. Second layer- 1-5/8 in. long for 1/2 in., 5/8 in. thick panels, spaced 24 in. OC. Third layer- 2-1/4 in long for 1/2 in., 5/8 in. thick panels or 2-5/8 in. long for 5/8 in. thick panels, spaced 12 in. OC. Screws offset min 6 in. from layer below. For all layers, an additional screw shall be placed 1-1/4 in. from each edge of the board. Four-layer systems: First layer- 1 in. long for 1/2 in., 5/8 in. thick panels, spaced 24 in. OC. Second layer- 1-5/8 in. long for 1/2 in., 5/8 in. thick panels, spaced 24 in. OC. Third layer- 2-1/4 in. long for 1/2 in. thick panels or 2-5/8 in. long for 5/8 in. thick panels, spaced 24 in, OC. Fourth layer- 2-5/8 in, long for 1/2 in, thick panels or 3 in, long for 5/8 in, thick panels, spaced 12 in, OC. Screws offset min 6 in. from layer below. For all layers, an additional screw shall be placed 1-1/4 in. from each edge of the board. 7. Furring Channels - (Optional, not shown, for single or double layer systems) - Resilient furring channels fabricated from

min 25 MSG corrosion-protected steel, spaced vertically a max of 24 in. OC. Flange portion attached to each intersecting stud with 1/2 in. long Type S-12 steel screws. Not for use with Item 5A and 5E.

7A. Framing Members\* - (Not Shown) - (Optional on one or both sides, not shown, for single or double layer systems) - As an alternate to Item 7, furring channels and Steel Framing Members as described below: a. Furring Channels - Formed of No. 25 MSG galv steel. 2-3/8 in. wide by 7/8 in. deep, spaced max. 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Gypsum board attached to furring channels as described in Item 6. Not for use with Item 5A and 5E.

b. Steel Framing Members\* - Used to attach furring channels (Item 7Aa) to studs (Item 2). Clips spaced max. 48 in. OC. RSIC-1 clips secured to study with No. 8 x 1-1/2 in, minimum self-drilling, S-12 steel screw through the center grommet. RSIC-V clips secured to studs with No. 8 x 9/16 in. minimum self-drilling, S-12 steel screw through the center hole. Furring channels are friction fitted into clins PAC INTERNATIONAL INC - Types RSIC-1, RSIC-V.

7B. Framing Members\* - (Optional, Not Shown) - As an alternate to Item 7, for single or double layer systems, furring

channels and Steel Framing Members on only one side of studs as described below: a. Furring Channels - Formed of No. 25 MSG galv steel, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Batts and Blankets placed in stud cavity as described in Item 5. Two layers of gypsum board attached to furring channels as described in Item 5. Not for use with Item 5A and 5E. b. Steel Framing Members\* - Used to attach furring channels (Item 7Ba) to one side of studs (Item 2) only. Clips spaced 48 in. OC., and secured to studs with two No. 8 x 2-1/2 in. coarse drywall screws, one through the hole at each end of the clip. Furring channels are friction fitted into clips. KINETICS NOISE CONTROL INC - Type Isomax

7C. Framing Members\* - Optional - Not Shown - Used as an alternate method to attach resilient channels (Item 7). Clips attached at each intersection of the resilient channel and the steel studs (Item 2). Resilient channels are friction fitted into clips, and then clips are secured to the steel stud with min. 1 in. long Type S-12 steel screws through the center hole of the clip and the resilient channel flange.

KEENE BUILDING PRODUCTS CO INC - Type RC Assurance.

7D. Framing Members\* - (Not Shown) - (Optional on one or both sides, not shown, for single or double layer systems) - As an alternate to Item 7, furring channels and Steel Framing Members as described below: a. Furring Channels - Formed of No. 25 MSG galv steel. 2-3/8 in. wide by 7/8 in. deep, spaced max. 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Gypsum board attached to furring channels as

described in Item 6. Not for use with Item 5A and 5E. b. Steel Framing Members\* - Used to attach furring channels (Item 7Aa) to studs (Item 2). Clips spaced max. 48 in. OC. GENIECLIPS secured to studs with No. 8 x 1-1/2 in. minimum self-drilling, S-12 steel screw through the center grommet. Furring channels are friction fitted into clips.

**PLITEQ INC** - Type GENIECLIP

8. Joint Tape and Compound - Vinyl or casein, dry or premixed joint compound applied in two coats to joints and screw heads of outer layers. Paper tape, nom 2 in. wide, embedded in first layer of compound over all joints of outer layer panels. Paper tape and joint compound may be omitted when gypsum panels are supplied with a square edge.

9. Siding, Brick or Stucco - (Optional, not shown) - Aluminum, vinyl or steel siding, brick veneer or stucco, meeting the requirements of local code agencies, installed over gypsum panels. Brick veneer attached to studs with corrugated metal wall ties attached to each stud with steel screws, not more than each sixth course of brick.

10. Caulking and Sealants\* - (Optional, not shown) - A bead of acoustical sealant applied around the partition perimeter for sound control.

UNITED STATES GYPSUM CO - Type AS

11. Lead Batten Strips - (Not Shown, For Use With Item 5B) - Lead batten strips, min 1-1/2 in. wide, max 10 ft long with a max thickness of 0.125 in. Strips placed on the interior face of studs and attached from the exterior face of the stud with two 1 in, long Type S-12 pan head steel screws, one at the top of the strip and one at the bottom of the strip. Lead batten strips to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C". Lead batten strips required behind vertical joints of lead backed gypsum wallboard (Item 5B) and optional at remaining stud locations. Required behind vertical joints.

11A. Lead Batten Strips - (Not Shown, For Use With Item 5H) Lead batten strips, 2 in. wide, max 10 ft long with a max thickness of 0.0625 in. Strips placed on the face of studs and attached to the stud with two min. 1 in. long min. Type S-8 par head steel screws, one at the top of the strip and one at the bottom of the strip or with one min. 1 in. long min. Type S-8 pan head steel screw at the top of the strip. Lead batten strips to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C". Lead batten strips required behind vertical joints of lead backed gypsum wallboard (Item 6) and optional at remaining stud locations.

12. Lead Discs or Tabs - (Not Shown, For Use With Item 5B) - Used in lieu of or in addition to the lead batten strips (Item 11) or optional at other locations - Max 3/4 in. diam by max 0.125 in. thick lead discs compression fitted or adhered over steel screw heads or max 1/2 in. by 1-1/4 in. by max 0.125 in. thick lead tabs placed on gypsum boards (Item 5B) underneath screw locations prior to the installation of the screws. Lead discs or tabs to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C".

12A. Lead Discs - (Not Shown, for use with Item 5H) Max 5/16 in. diam by max 0.0625 in. thick lead discs compress fitted or adhered over steel screw heads. Lead discs to have a purity of 99.9% meeting the Federal Specification QQ-L-201f,

13. Lead Batten Strips - (Not Shown, For Use With Item 5E) Lead batten strips, 2 in. wide, max 10 ft long with a max thickness of 0.142 in. Strips placed on the face of studs and attached to the stud with two min. 1 in. long min. Type S-8 pan head steel screws, one at the top of the strip and one at the bottom of the strip or with one min. 1 in. long min. Type S-8 pan head steel screw at the top of the strip. Lead batten strips to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C". Lead batten strips required behind vertical joints of lead backed gypsum wallboard (Item 5E) and optional at remaining stud locations.

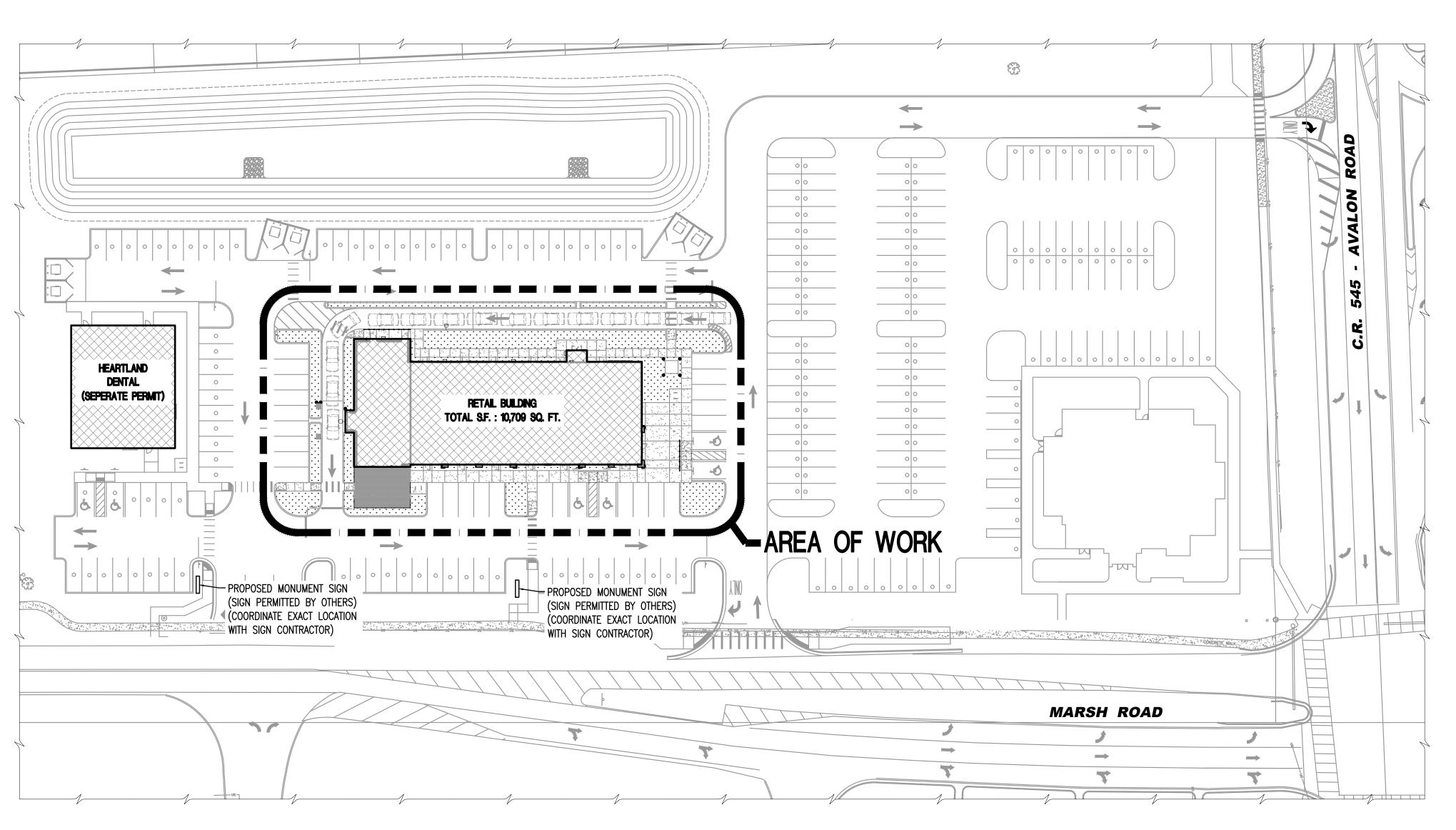
14. Lead Tabs - (Not Shown, For Use With Item 5E) 2 in. wide, 5 in. long with a max thickness of 0.142 in. Tabs friction-fit around front face of stud, the stud folded back flange, and the back face of the stud. Tabs required at each location where a screw (that secures the gypsum boards, Item 5E) will penetrate the steel stud. Lead tabs to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C". Lead tabs may be held in place with standard adhesive tape if necessary.

\*Bearing the UL Classification Mark

AT AT L 34 EN THE UL DESIGN
RETAIL BUILD
MARSH ROAD A
WINTER GARDE

RELEASED FOR: 12.11.23 PERMIT 12.08.23 CONSTR. REVISIONS:

WILLIAM JOE FISHER ARCHITECT 0010829





FISHER AND ASSOCIATES, LLC.

ARCHITECTS
PLANNERS
INTERIOR DESIGNERS
AA2600738

ARCHITECTURAL SITE PLAN
RETAIL BUILDING AT WINTER GAI
HARSH ROAD AT CR 545 (AVALON RI
WINTER GARDEN, FL 34787

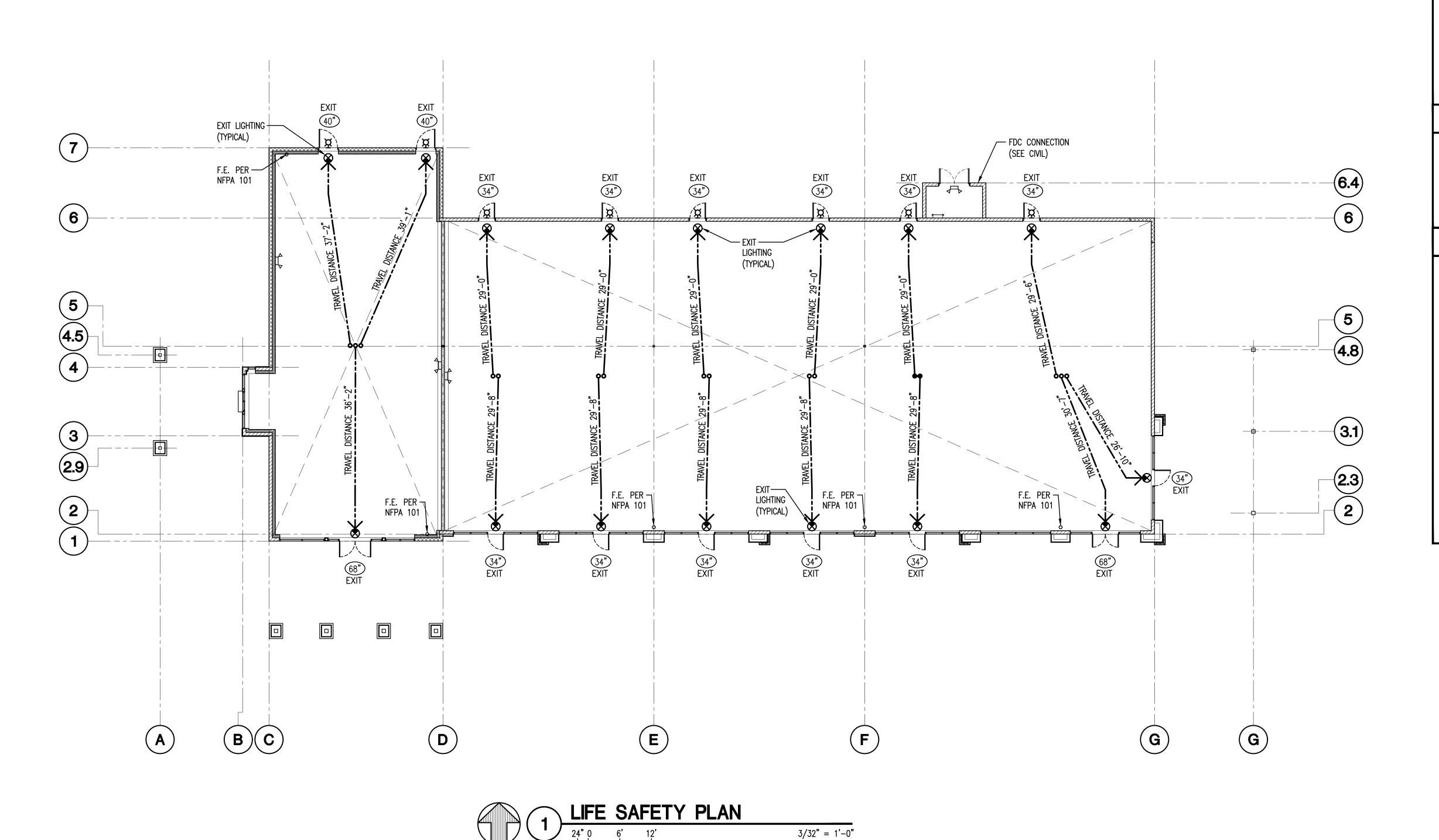
PERMIT 12.08.23

CONSTR. –

REVISIONS:

WILLIAM JOE FISHER ARCHITECT 0010829

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# LIFE SAFETY PLAN CALCULATIONS

FUTURE COFFEE SHOP CALCULATED OCCUPANT LOAD:

ASSEMBLY A-2 OCCUPANCY (UNCONCENTRATED) 2,530 S.F. (GROSS) / 15 S.F. PER PERSON = 168.6 OCCUPANTS

TOTAL OCCUPANTS: EGRESS WIDTH PER OCCUPANT: EGRESS WIDTH REQUIRED: EGRESS WIDTH PROVIDED:

.2" (FBC TABLE 1005.1)  $169 \times .2" = 33.8"$ 

FUTURE RETAIL TENANTS

"RETAIL" (MERCANTILE OCCUPANCY) 8,100 S.F. (GROSS) / 60 S.F. PER PERSON = 135.00 OCCUPANTS TOTAL OCCUPANTS:

EGRESS WIDTH PER OCCUPANT: EGRESS WIDTH REQUIRED: EGRESS WIDTH PROVIDED:

.2" (FBC TABLE 1005.1)  $135 \times .2" = 27"$ 

# LIFE SAFETY NOTES

PORTABLE FIRE EXTINGUISHERS SHALL BE IN COMPLIANCE WITH FFPC 7TH EDITION INCLUDING NFPA 1 & 101, 2018 EDITION. THERE SHALL BE A MINIMUM OF ONE EXTINGUISHER PER EVERY 2,500 SQ. FT. MINIMUM SIZE 2A10BC TYPE.

# MALTESE CROSS

OWNER SHALL PROVIDE, AT EACH MAIN ENTRY, THIS APPROVED FIRE SYMBOL, THE MALTESE CROSS", PRIOR TO RECEIVING A CERTIFICATE OF OCCUPANCY.

PLACEMENT: 24" TO THE LEFT OF EACH MAIN ENTRY. 4'-0" A.F.F., MIN. TO BOTTOM OF SYMBOL. 6'-0" A.F.F., MAX. TO TOP OF SYMBOL.

8"x8" MIN. SIZE:

A BRIGHT RED REFLECTIVE COLOR.

MOUNTING: SYMBOL TO BE PERMANETLY ATTACHED TO THE FACE OF THE STRUCTURE ON A CONTRASTING BACKGROUND OR MOUNTED ON A CONTRASTING BASE MATERIAL WHICH IS THEN PERMANETLY ATTACHED TO THE FACE OF THE STRUCTURE.

69A-60.008: NOTICE REQUIRED FOR STRUCTURES WITH LIGHT-FRAME TRUSS TYPE CONSTRUCTION. THE SYMBOL SHALL WARN PERSONS CONDUCTING FIRE CONTROL AND OTHER EMERGENCY OPERATIONS OF THE EXISTENCE OF THE LIGHT FRAME TYPE CONSTRUCTION IN THE STRUCTURE.

DIVISION OF STATE FIRE MARSHALL RULE: 69A-60.008 EFFECTIVE: 08-14-2009

8" MINIMUM

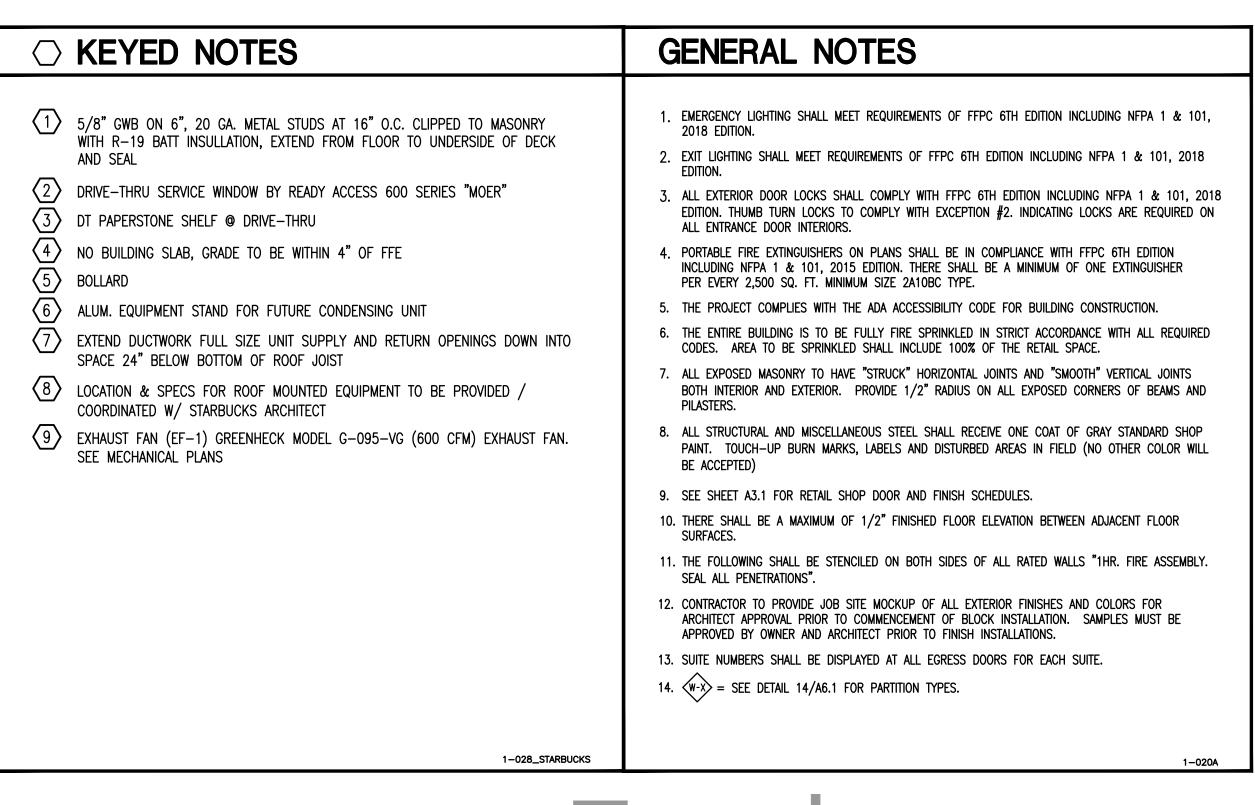
LIFE SAFETY PLAN
RETAIL BUILDING AT WINTER GAI
MARSH ROAD AT CR 545 (AVALON RI
WINTER GARDEN, FL 34787

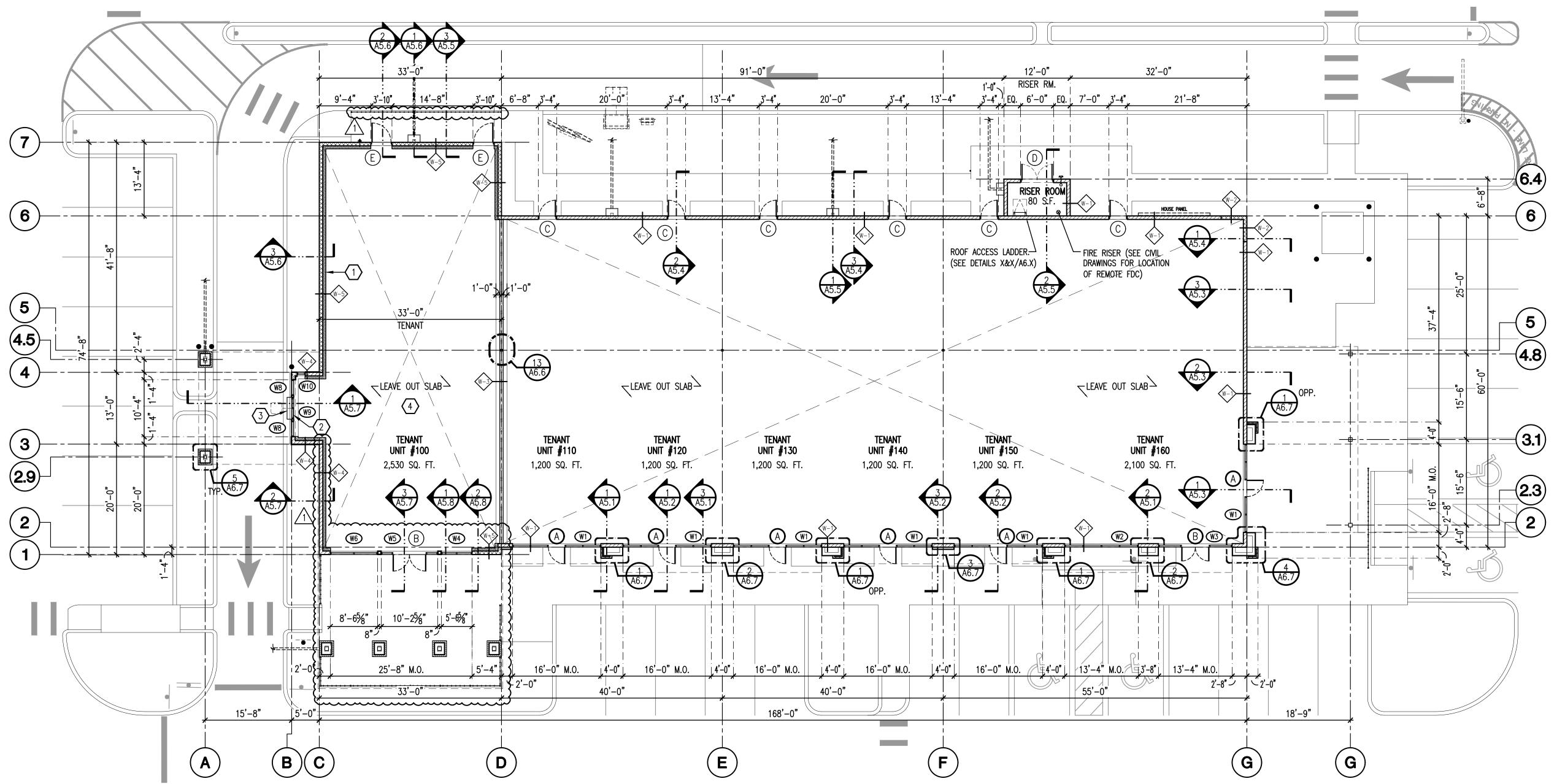
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A1.2





FLOOR PLAN

24" 0 6' 12' 3/32" = 1'-0"

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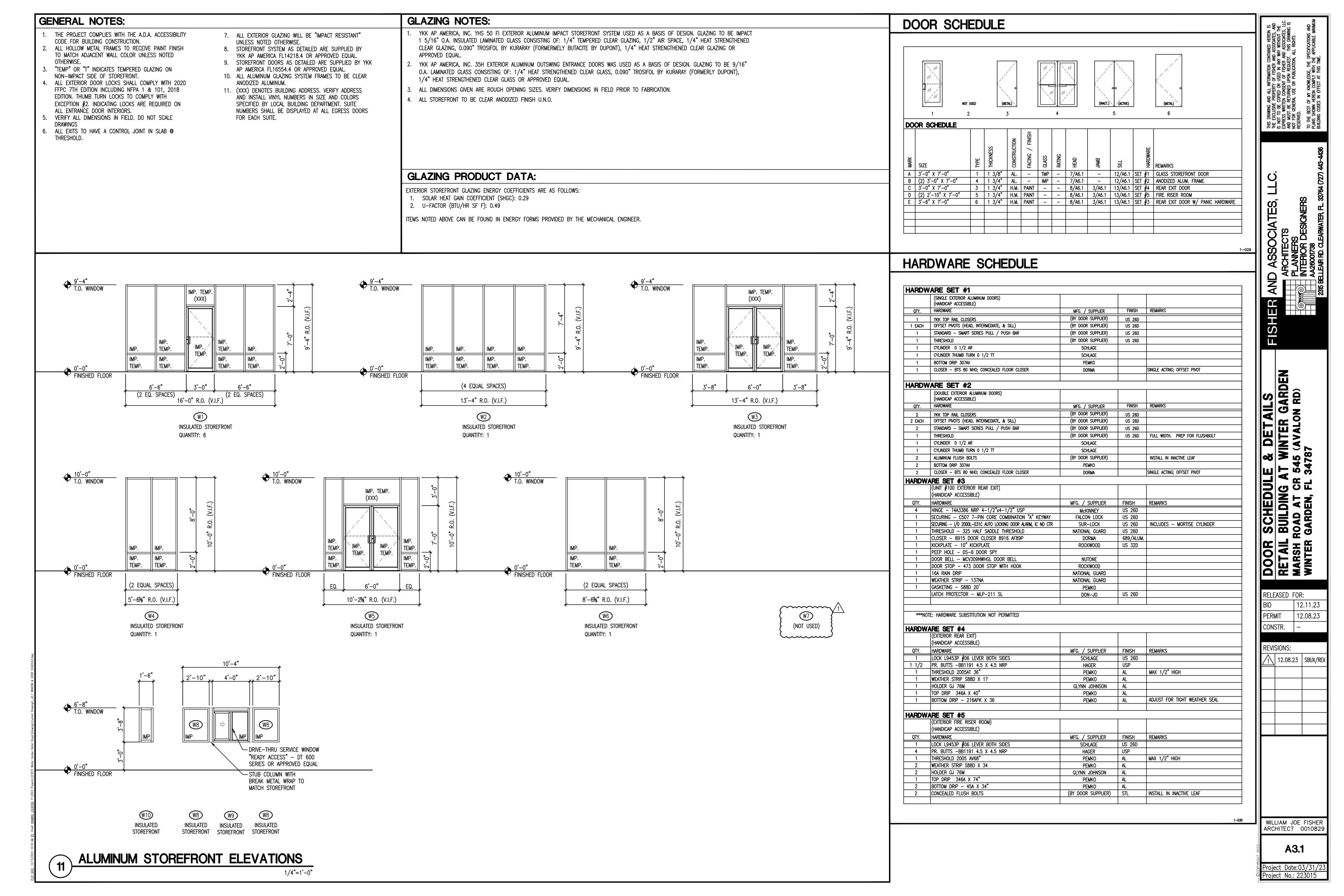
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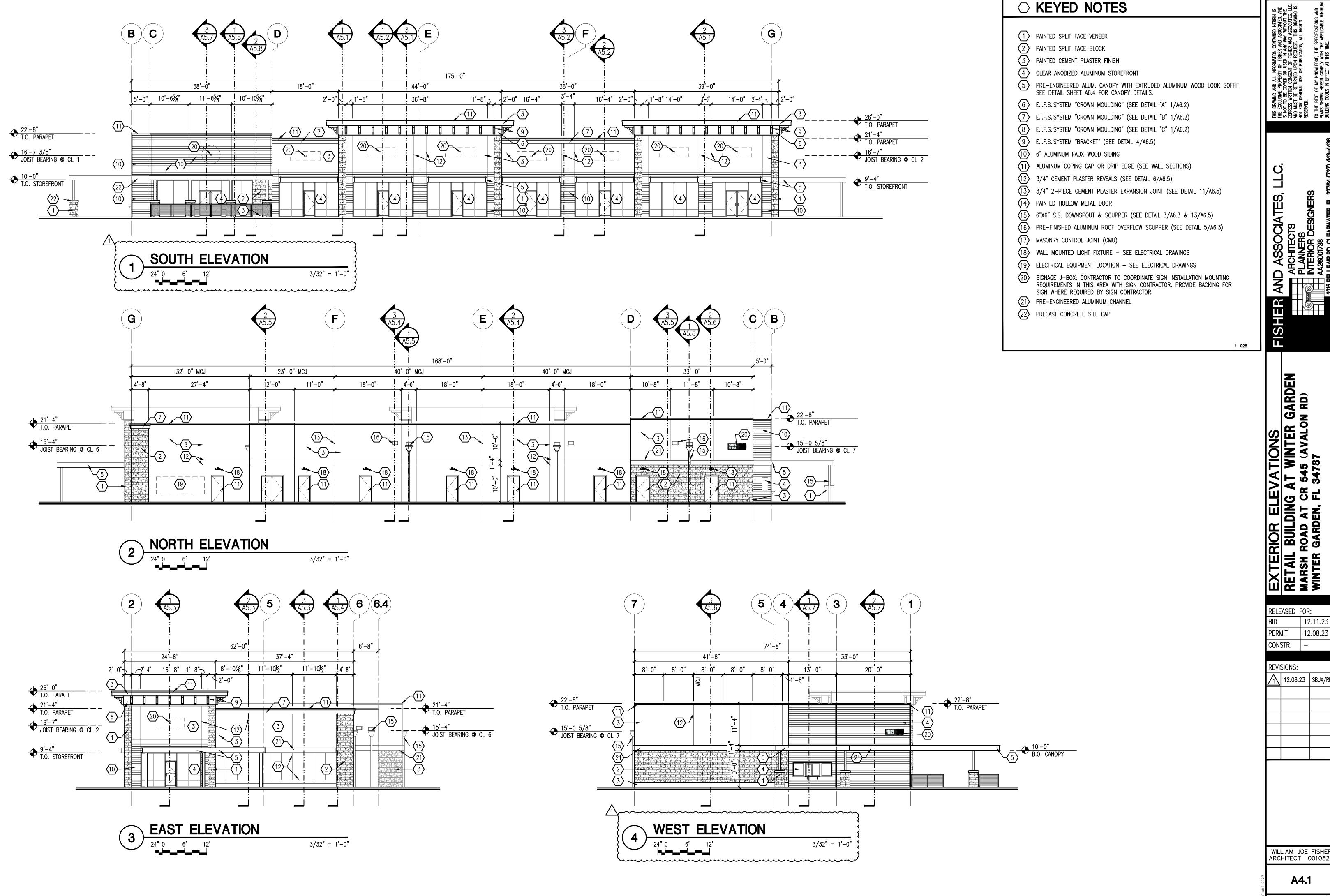
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A2.1

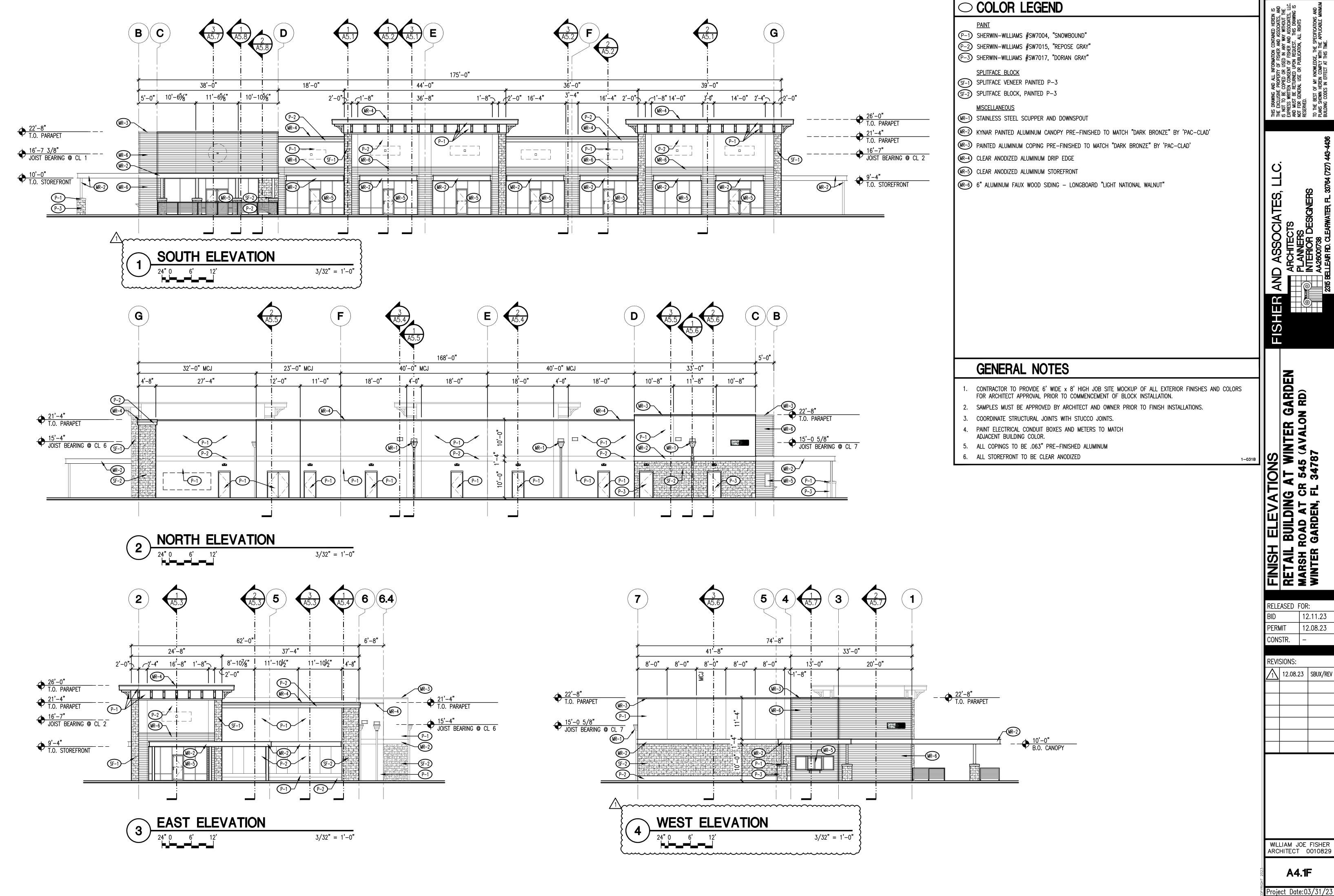




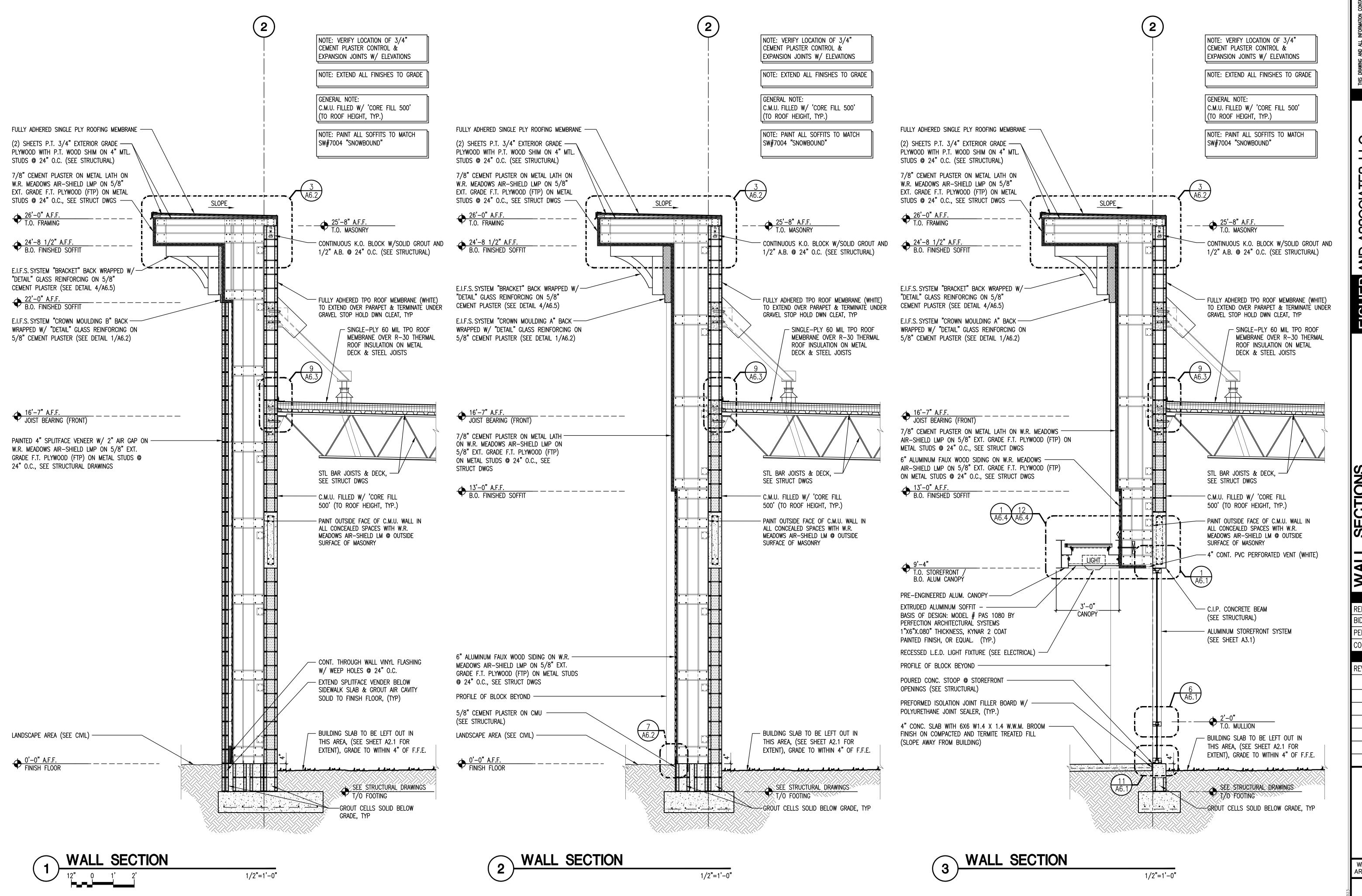
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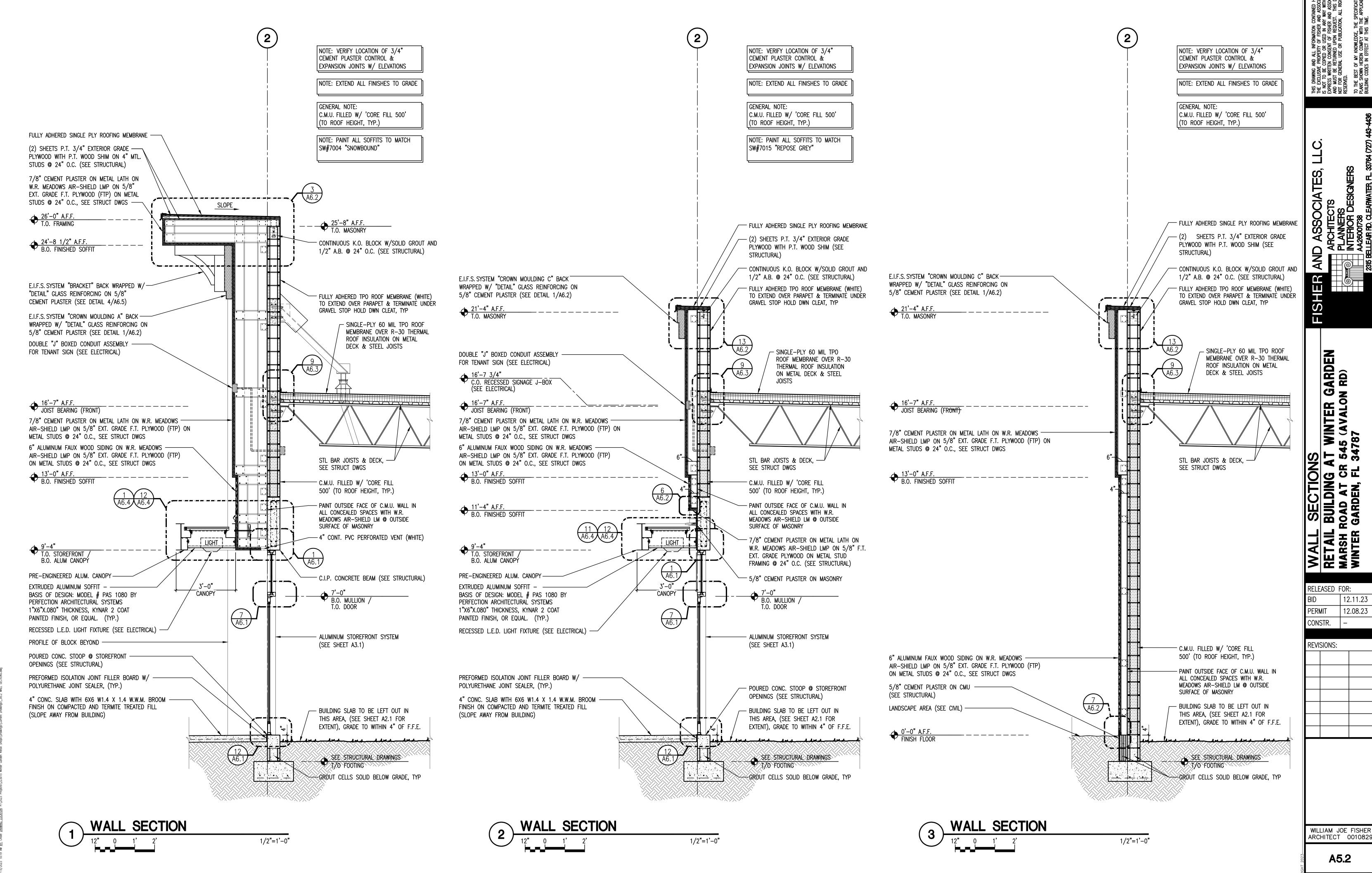
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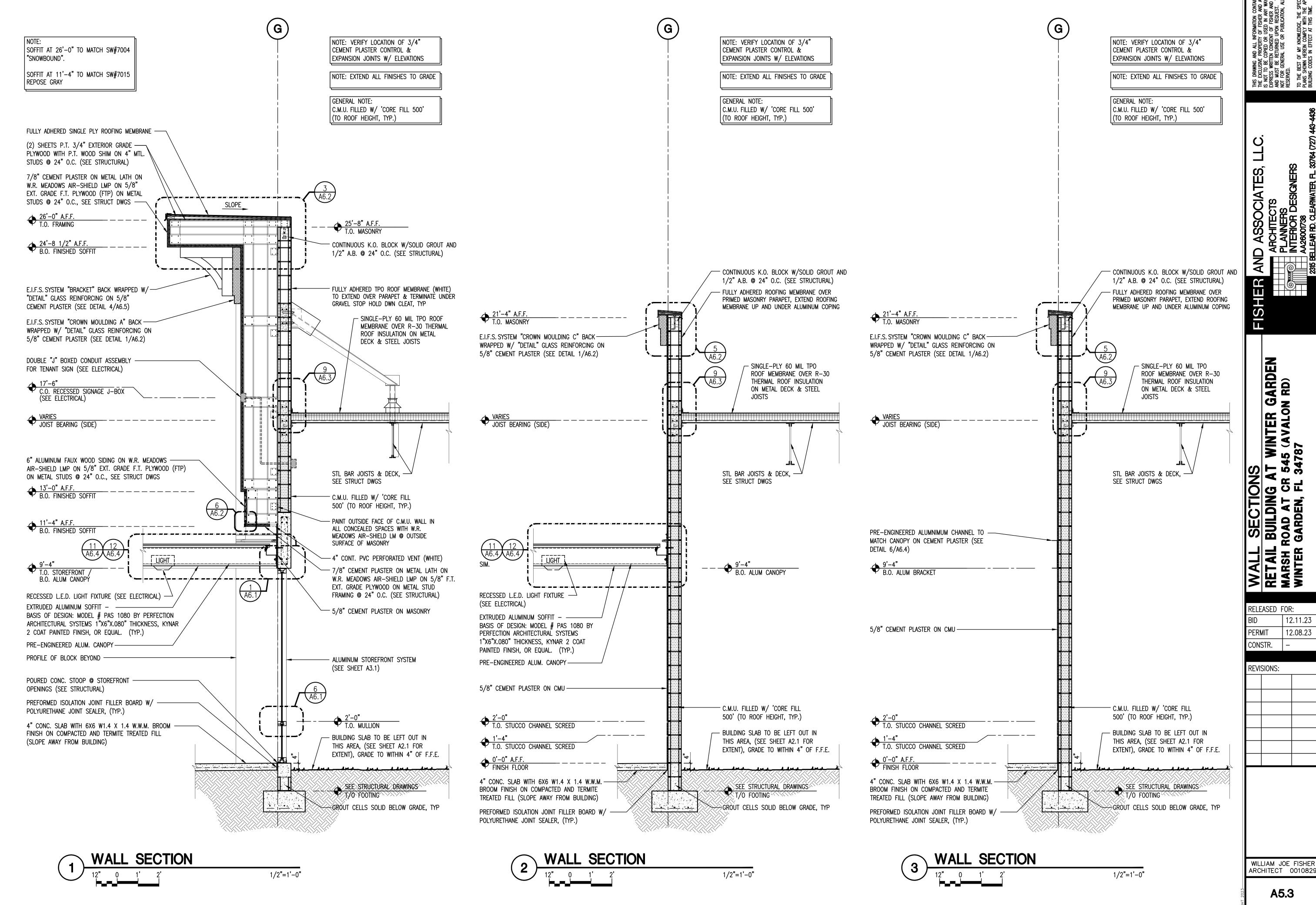


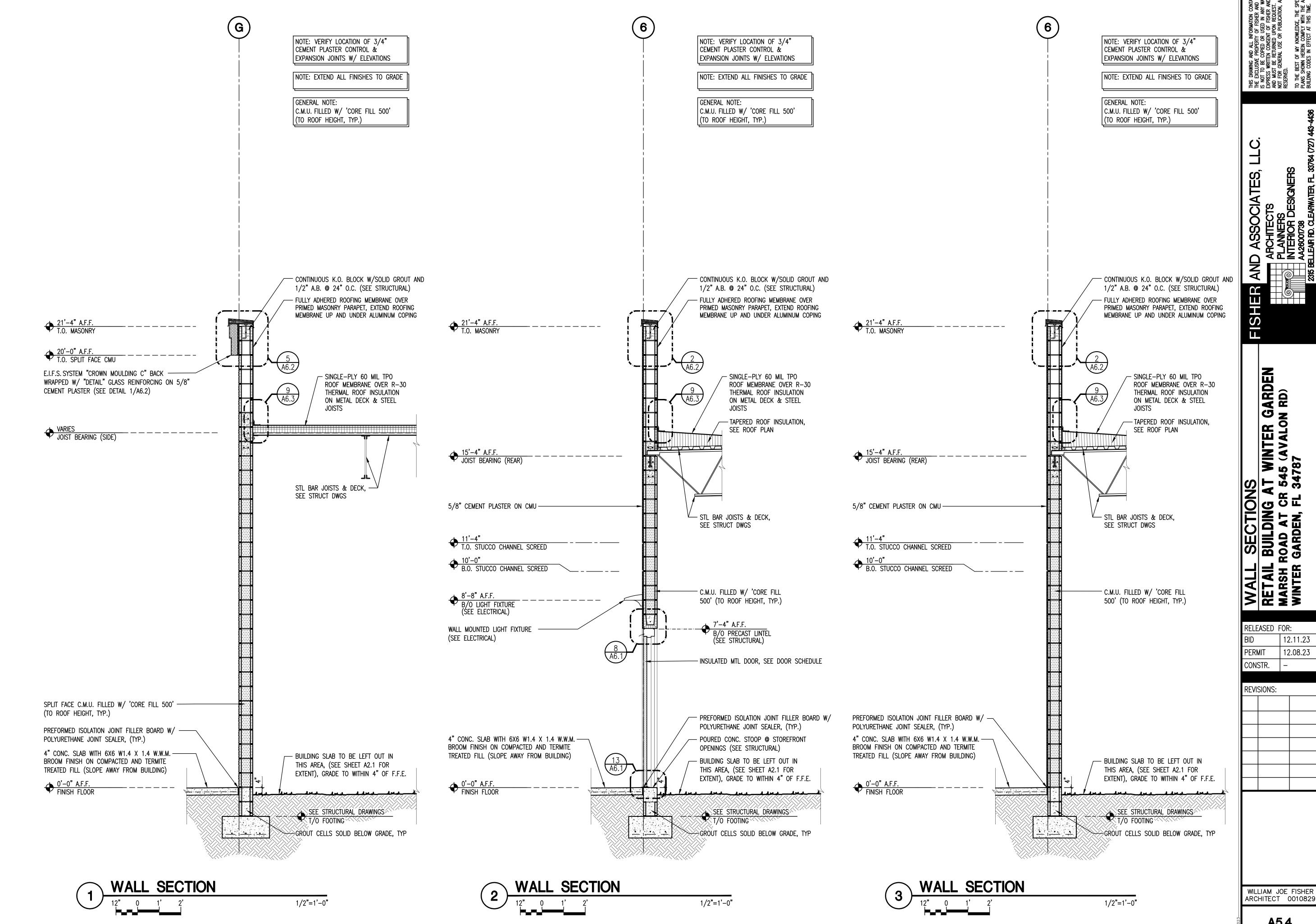
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PLANS SHOWN F
BUILDING CODES 8 WINTER GASS (AVALON 1 L BUILDING AT
ROAD AT CR 54
GARDEN, FL 34 WALL RETAIL MARSH R RELEASED FOR: 12.11.23 12.08.23 PERMIT CONSTR. **REVISIONS:** WILLIAM JOE FISHER ARCHITECT 0010829



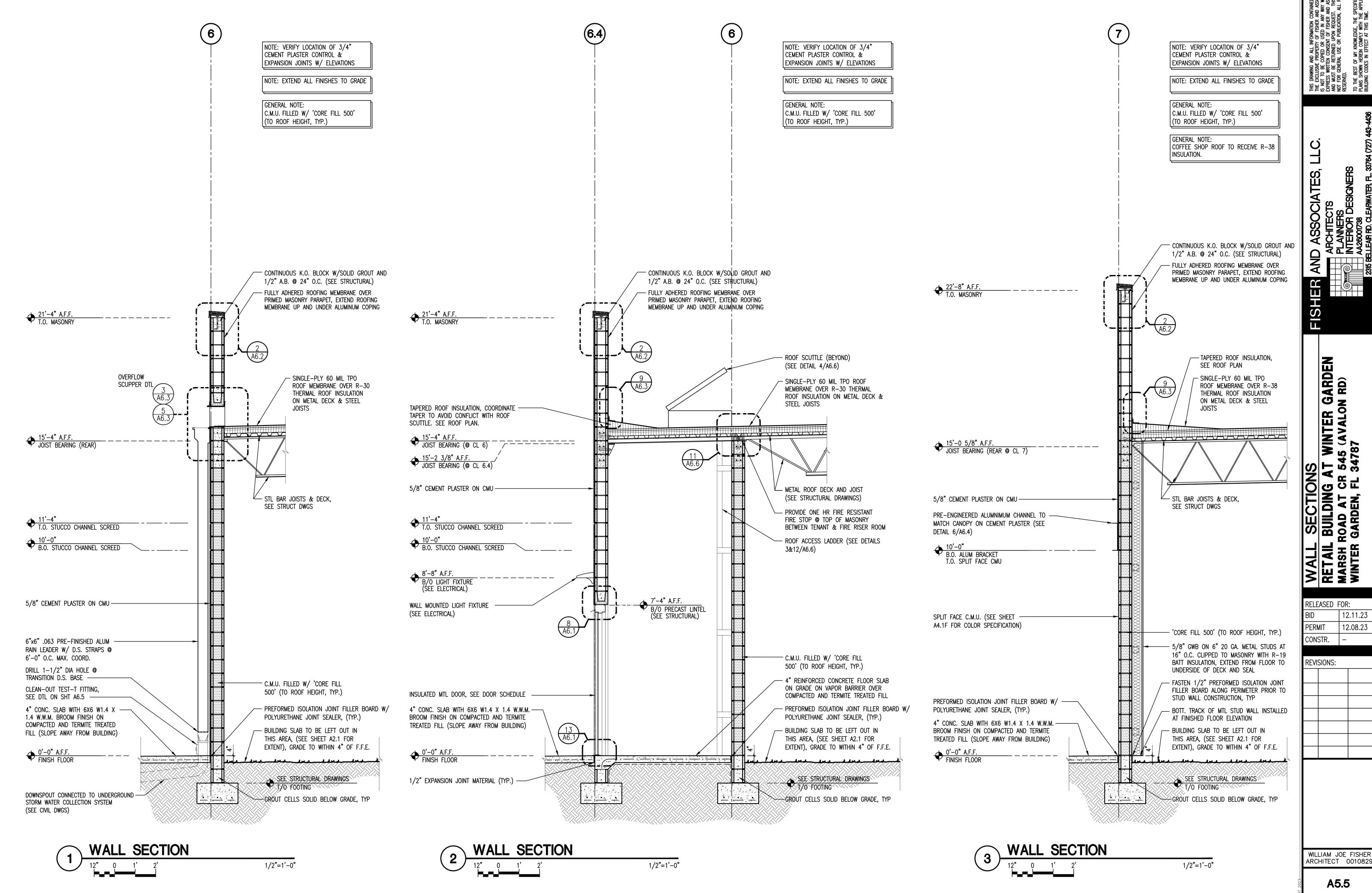


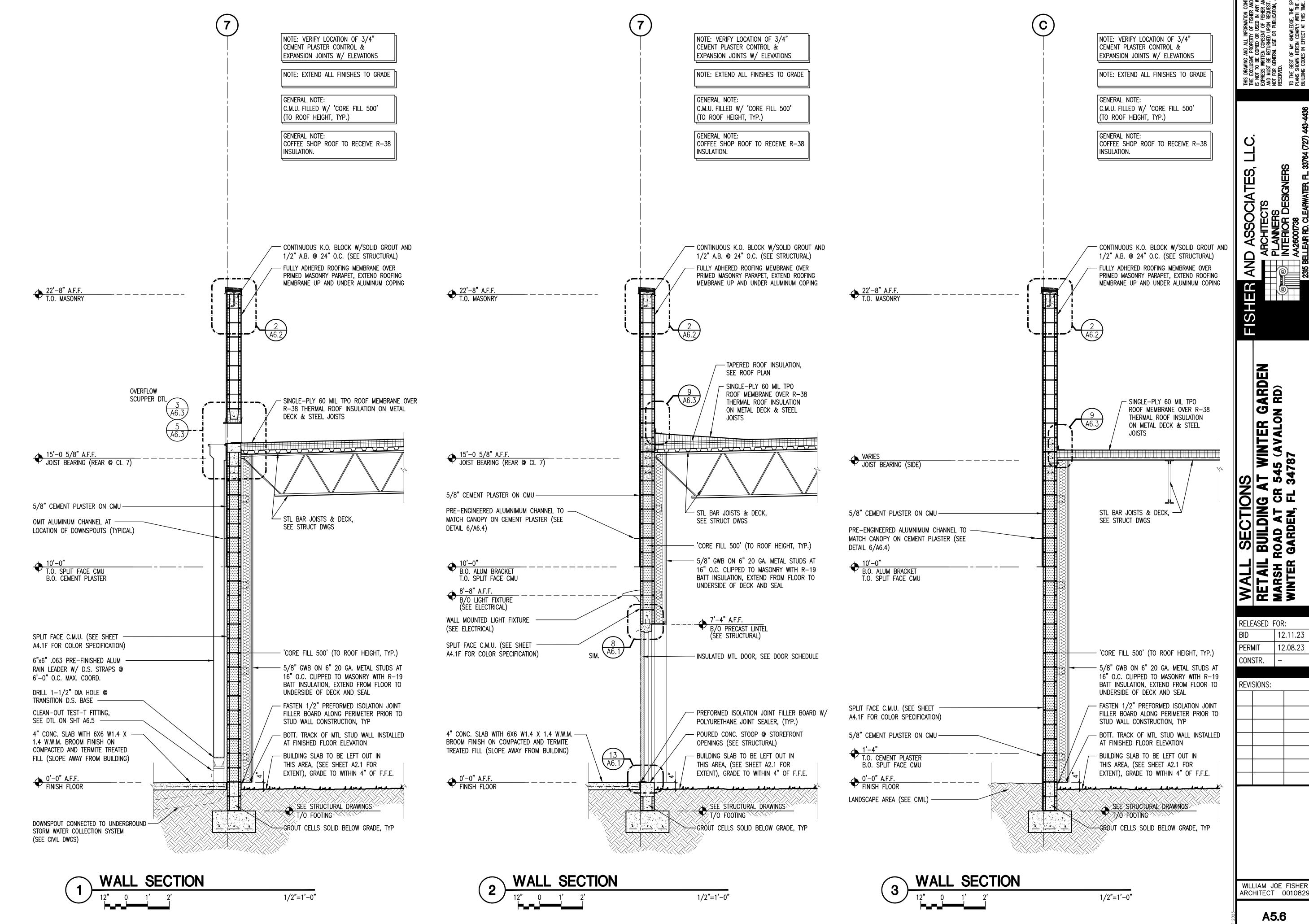


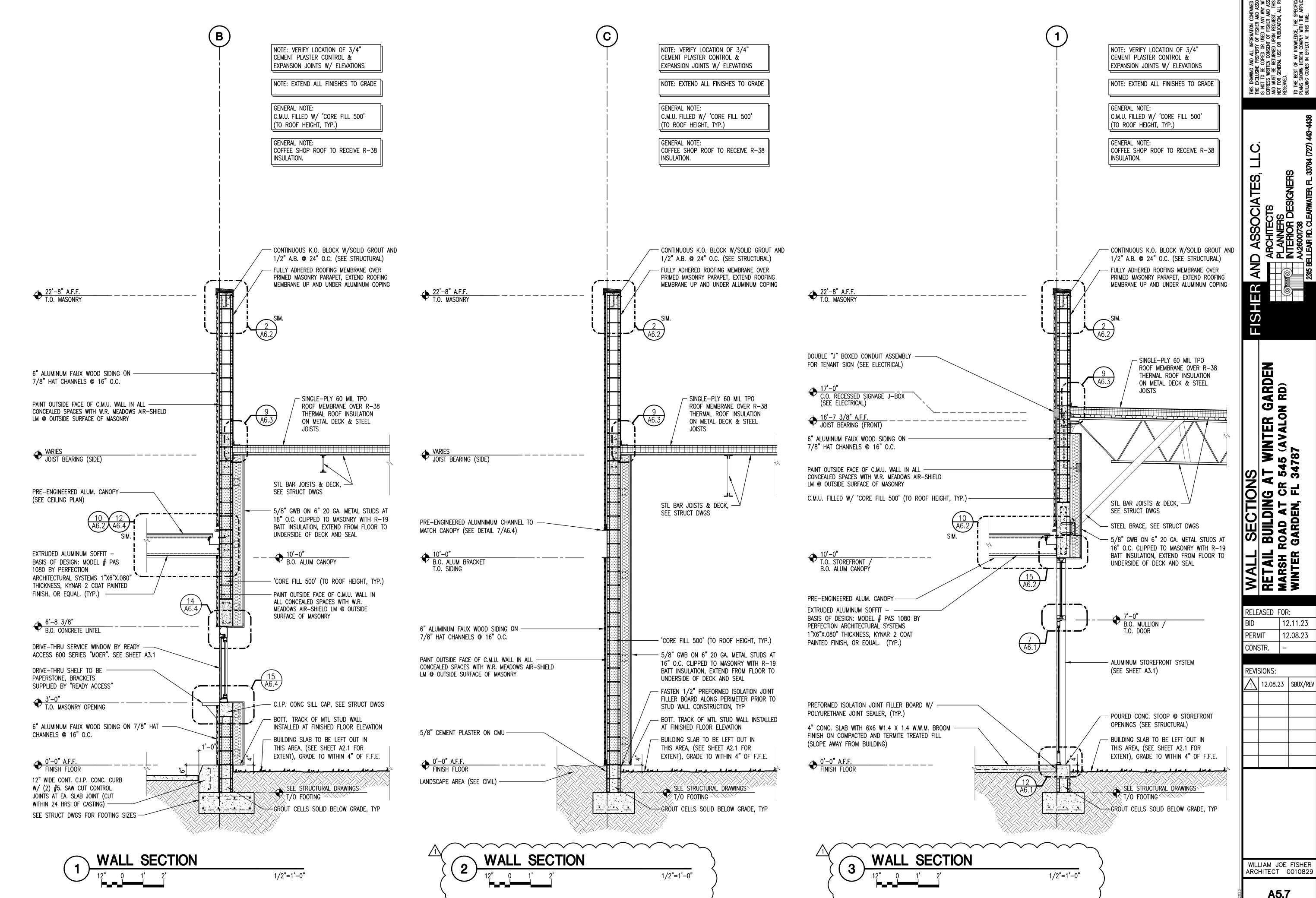
**A5.4** 

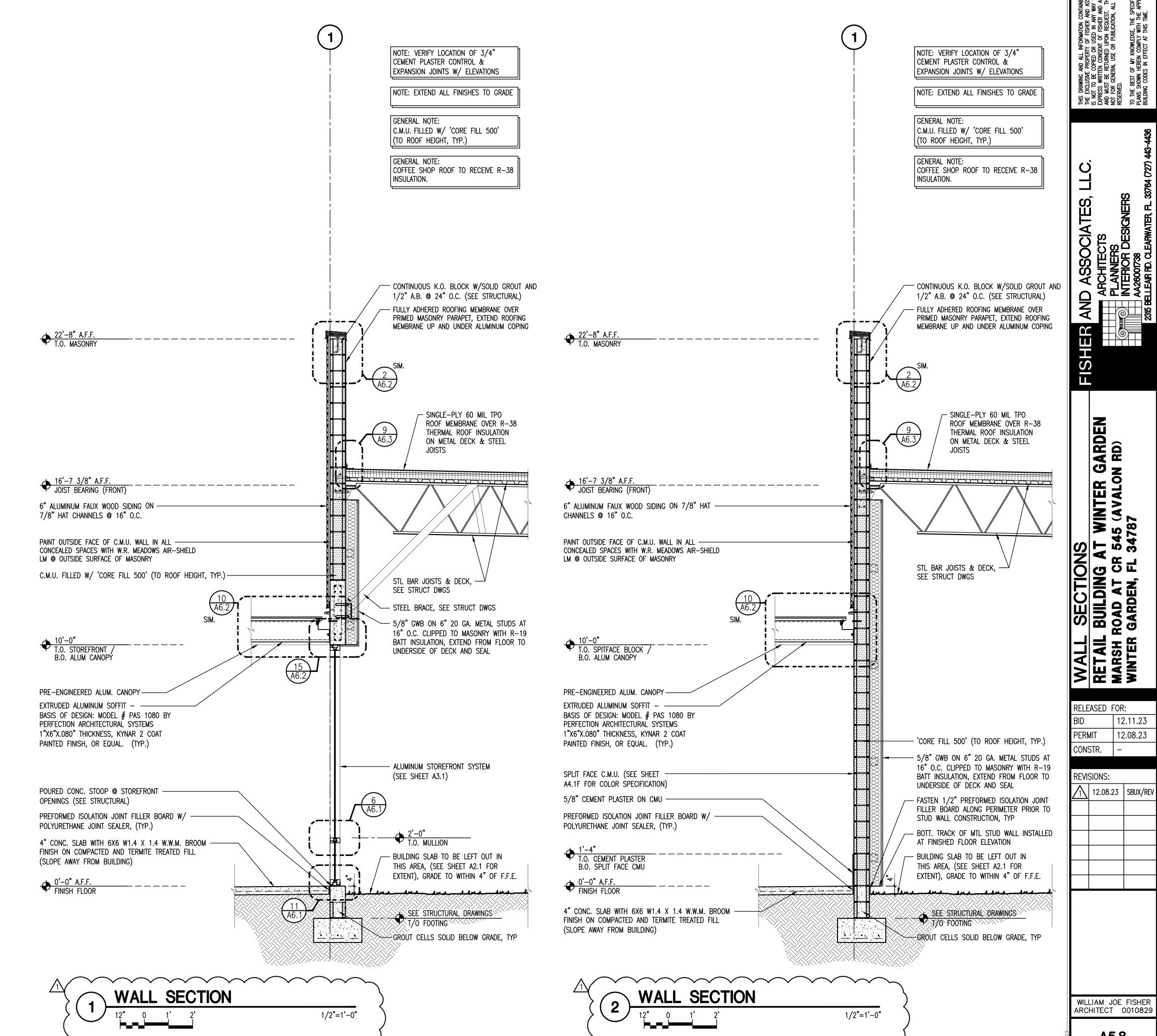
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Project No.: 223015

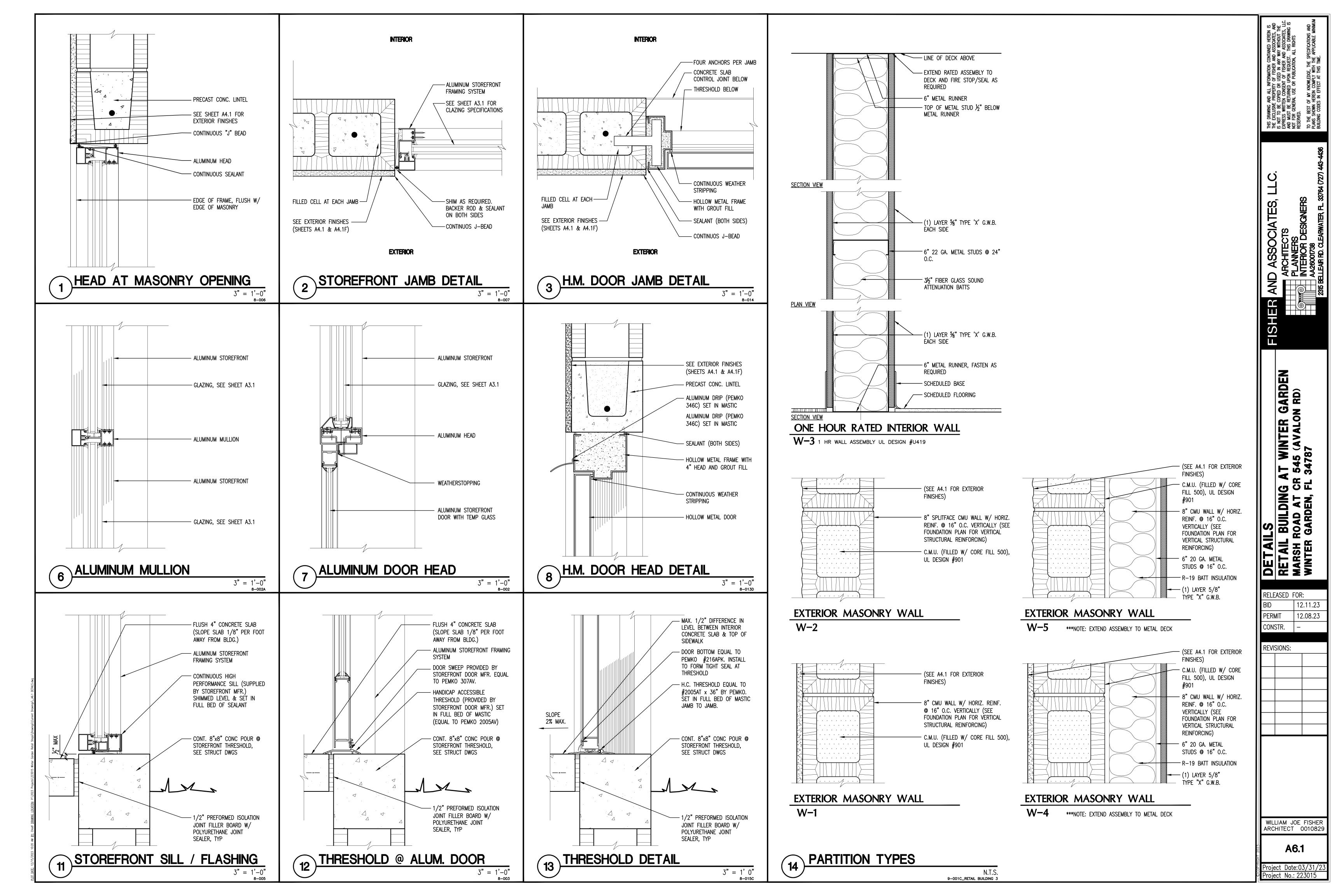


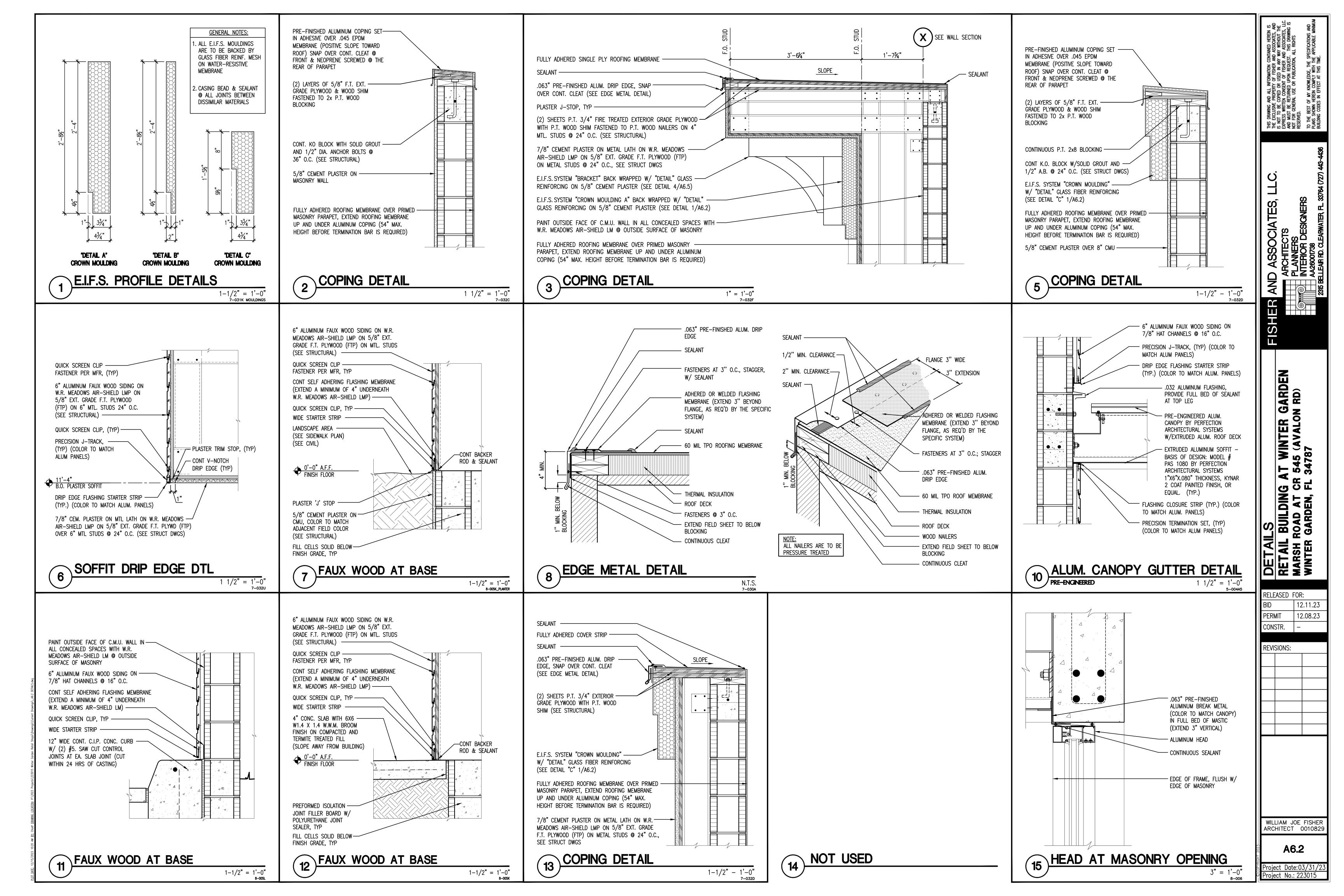


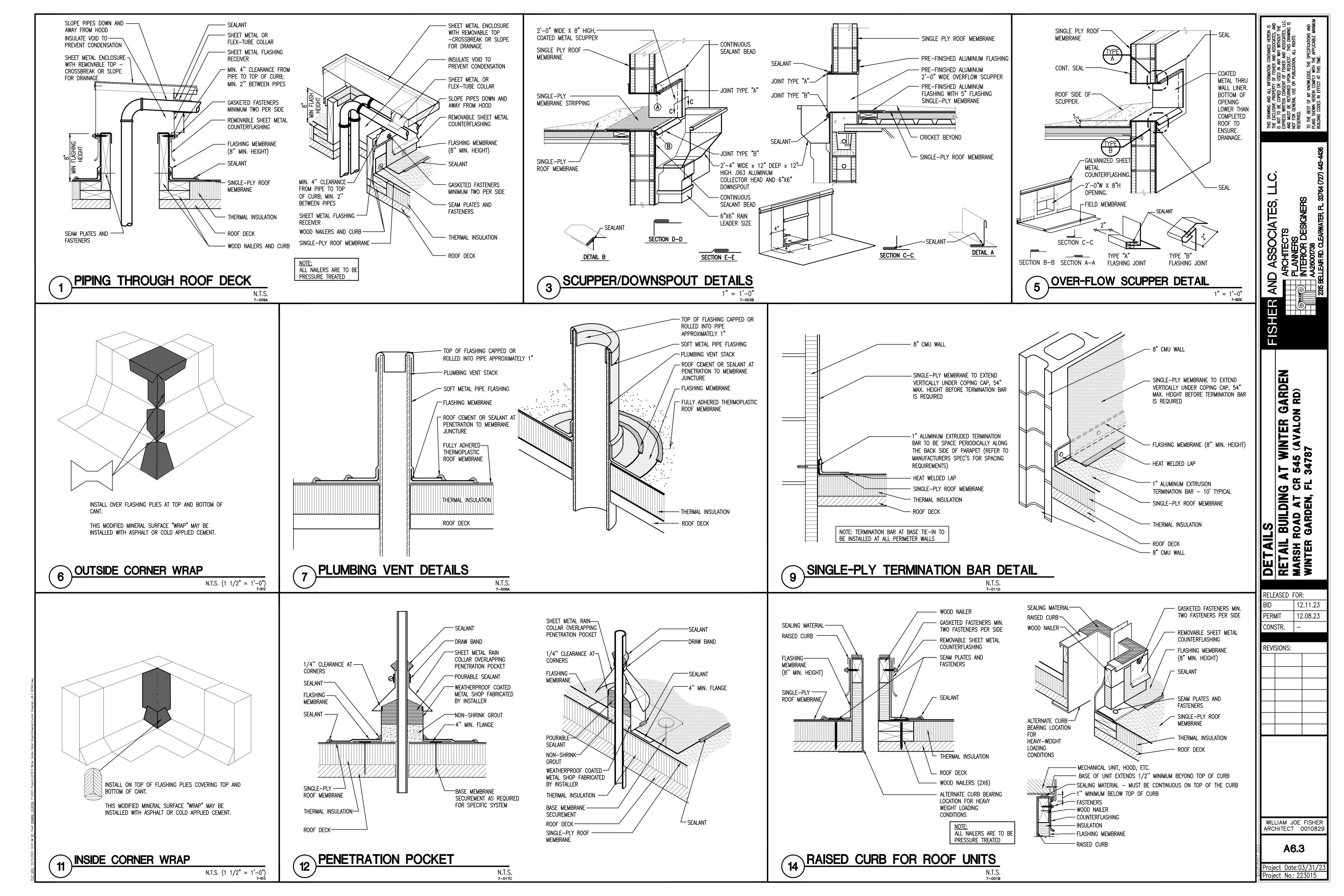


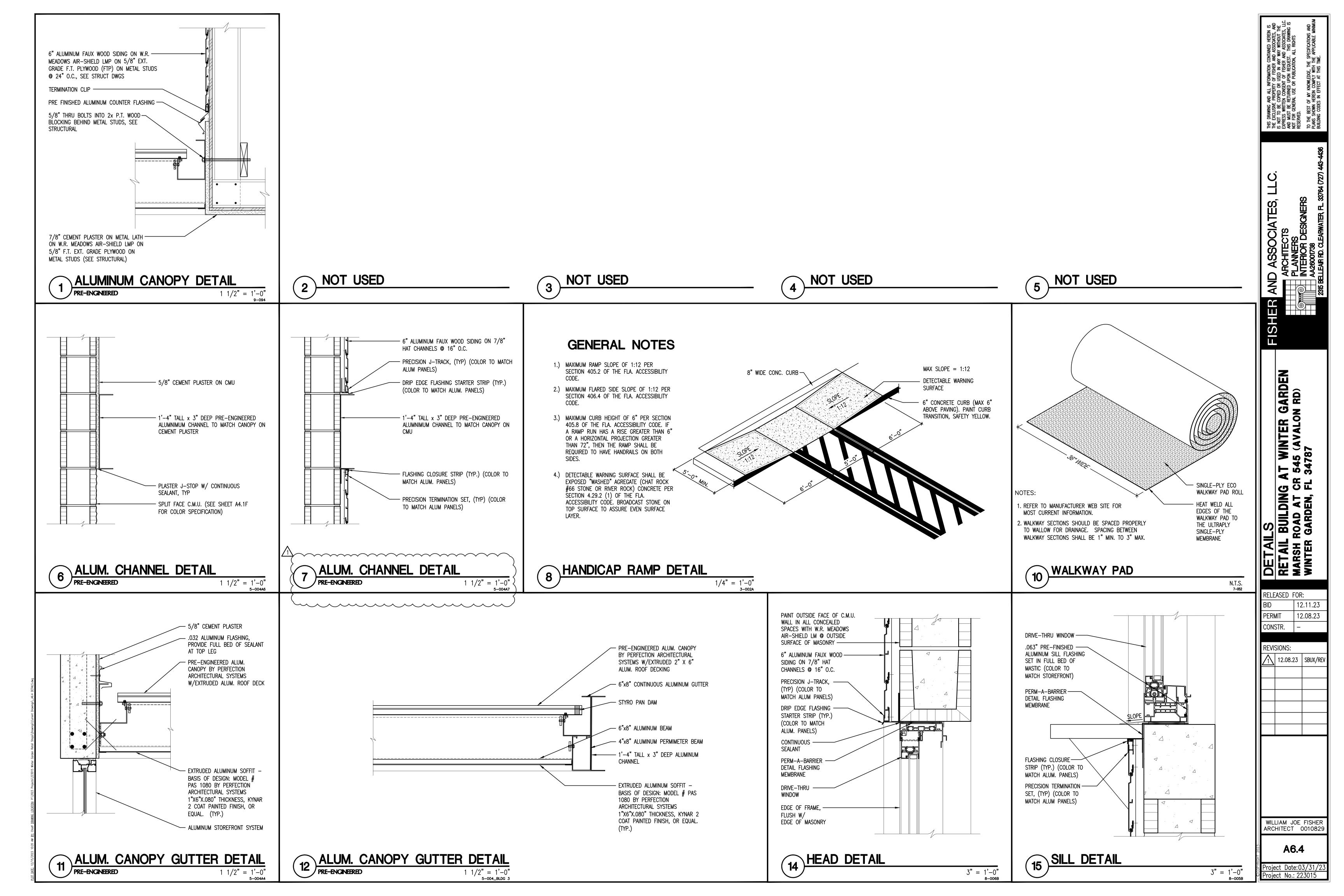


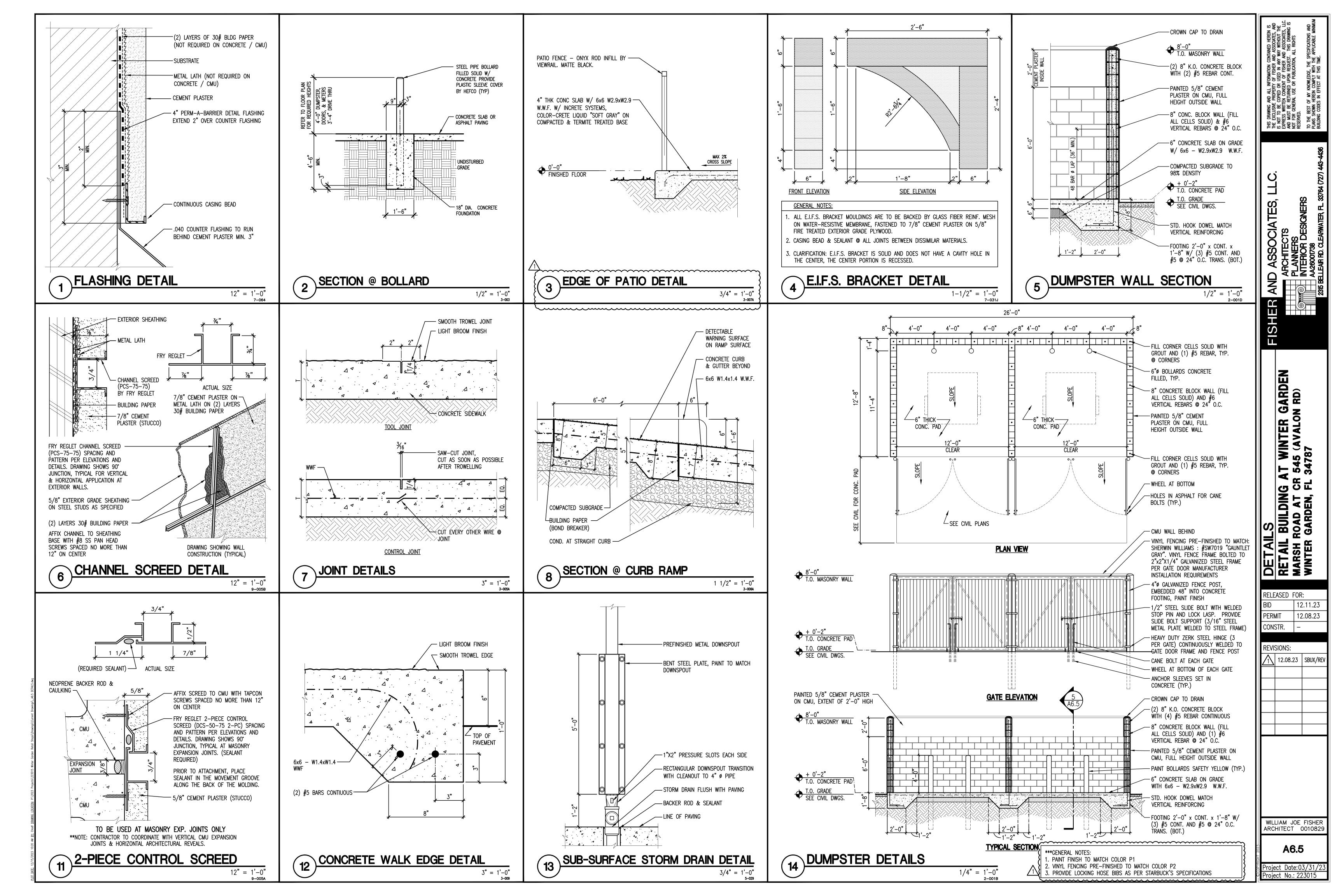
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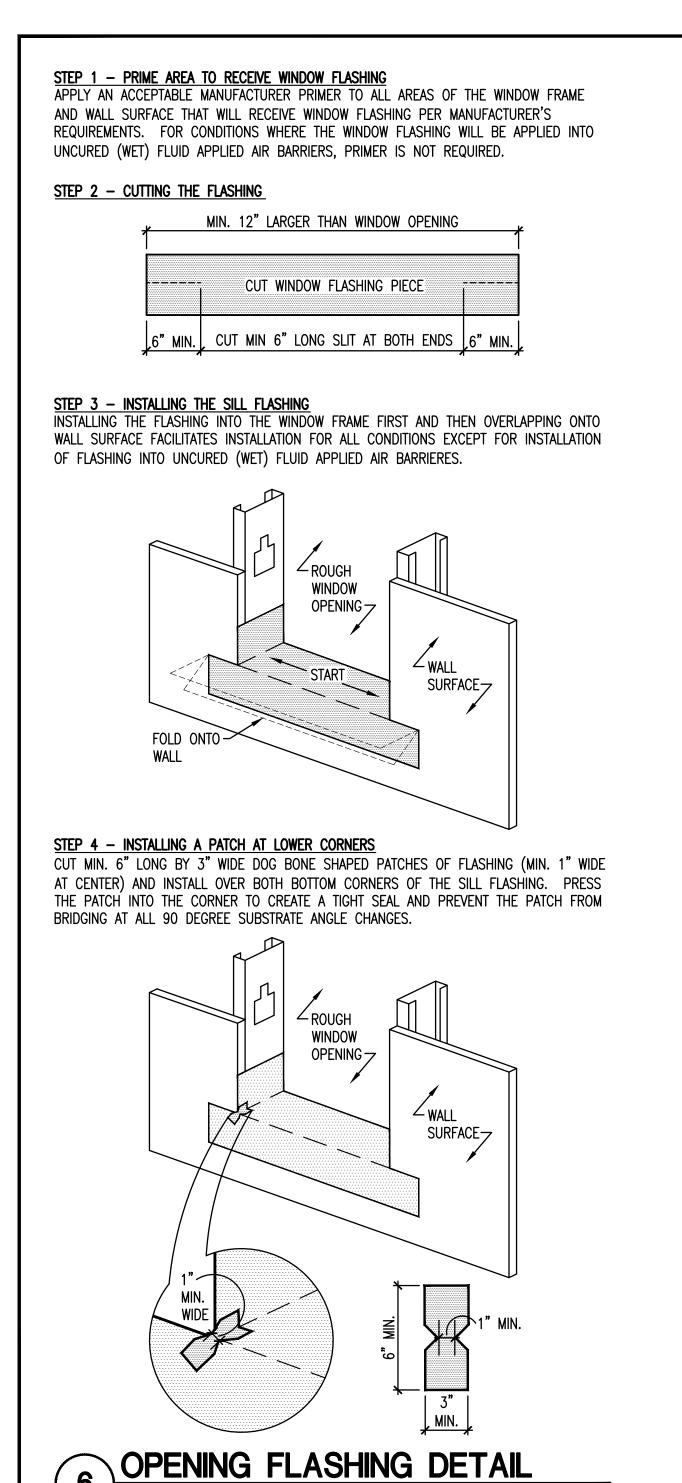


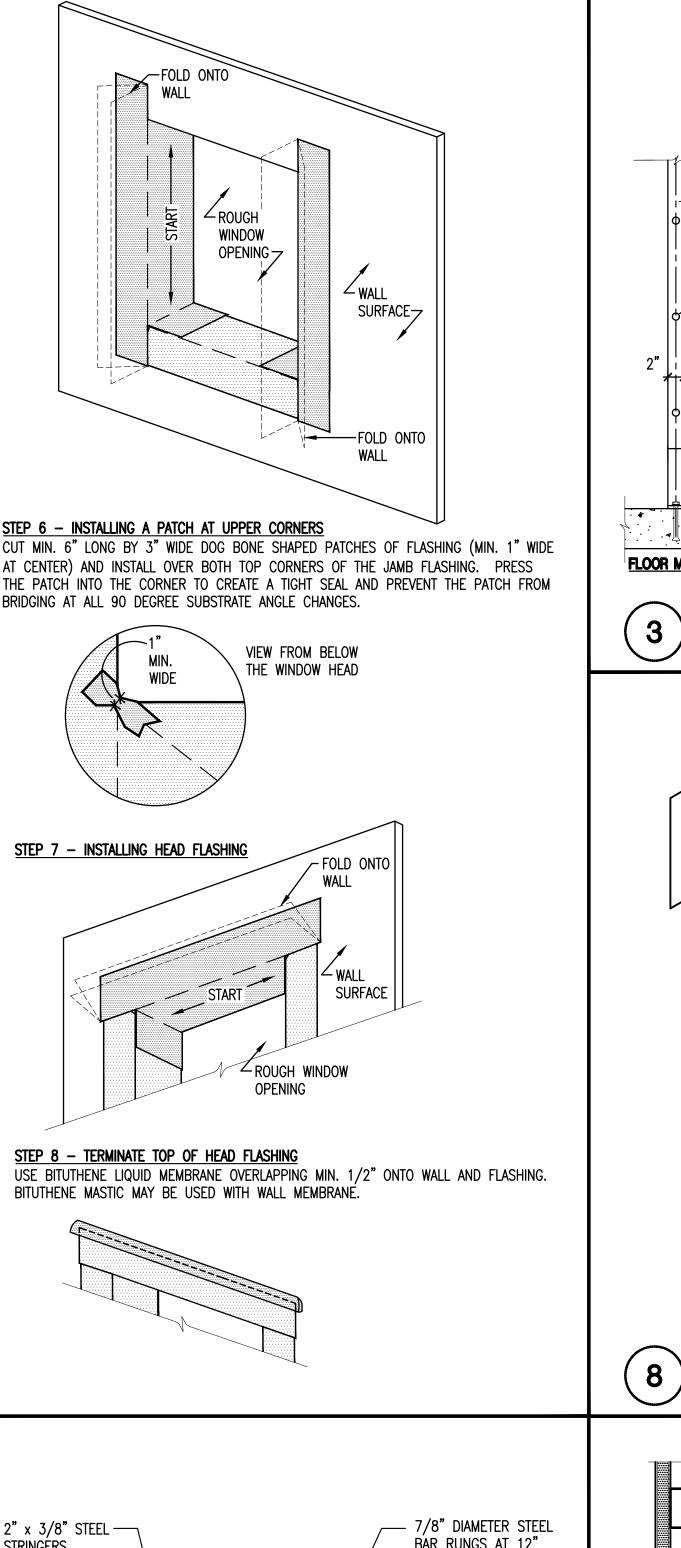




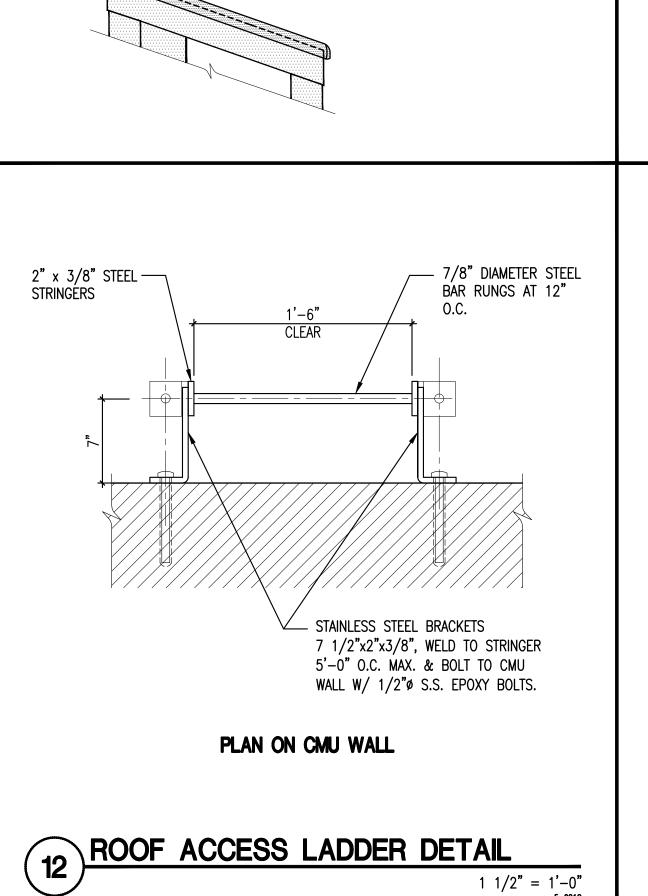


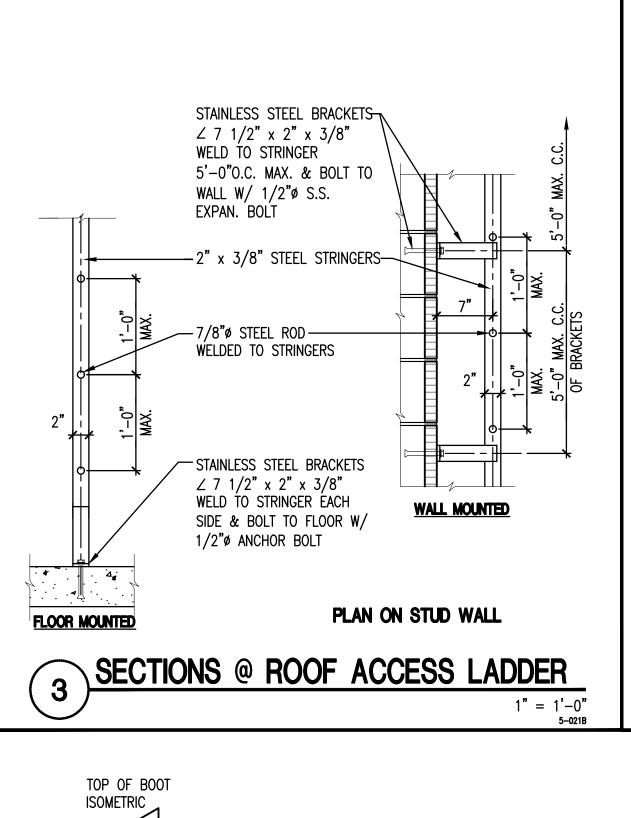




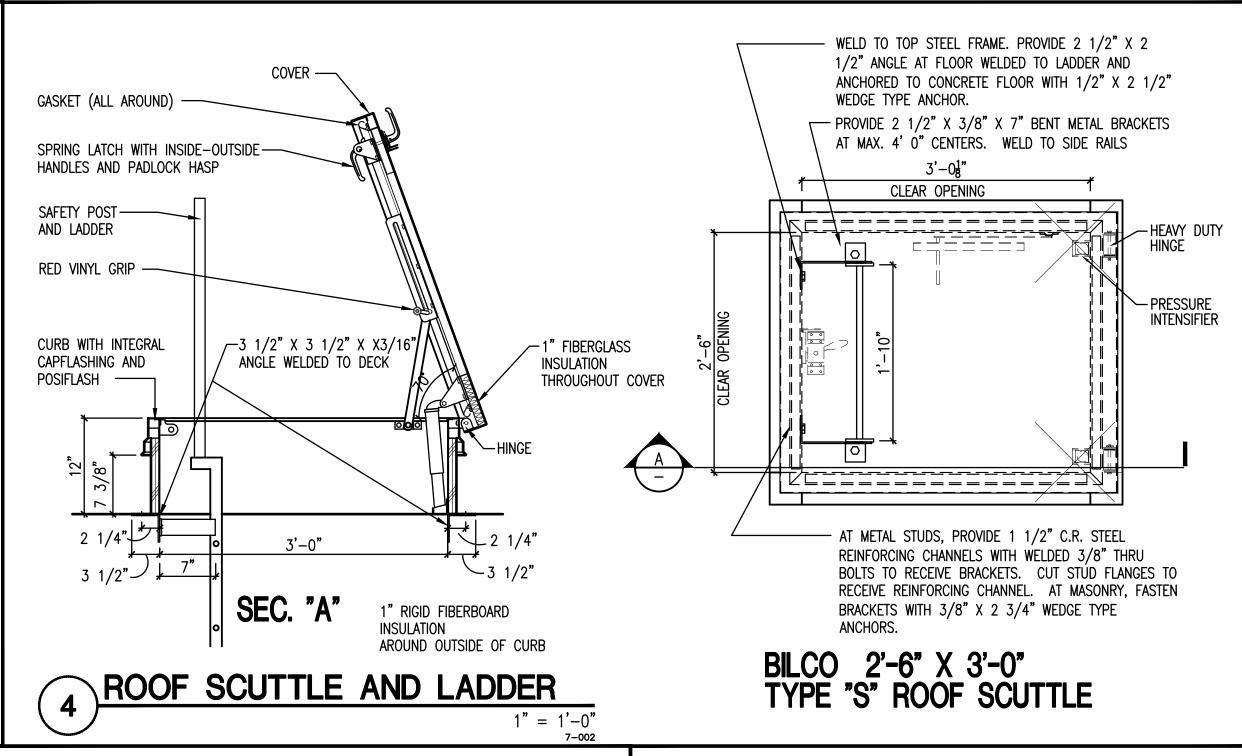


STEP 5 - INSTALLING JAMB FLASHING



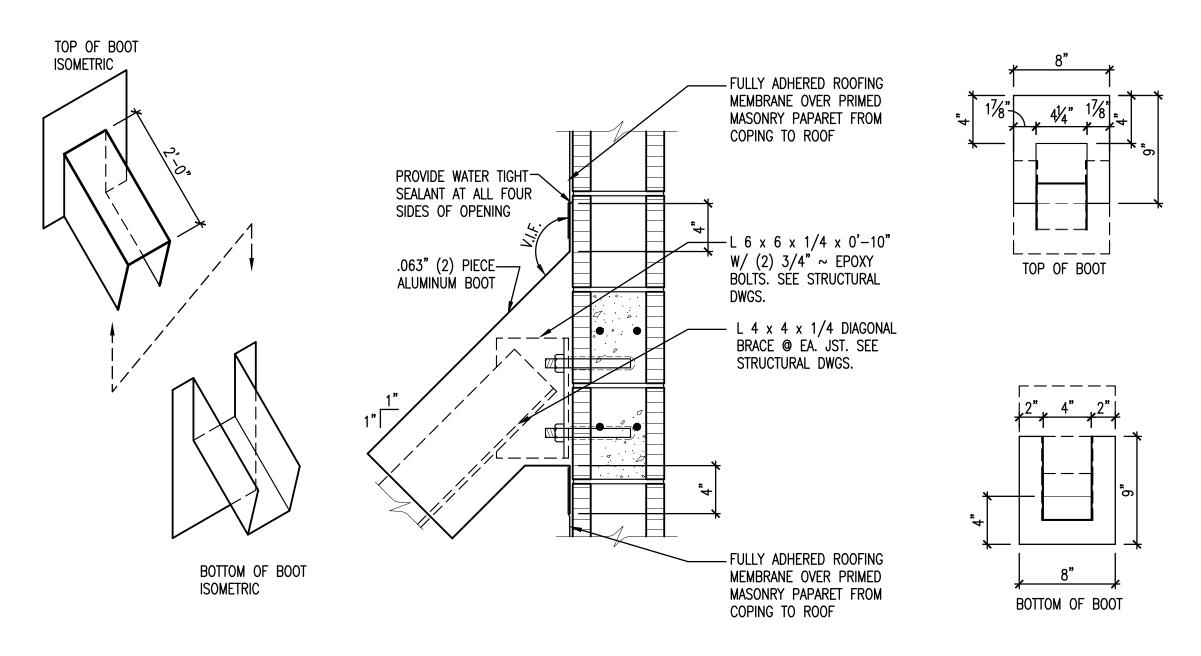


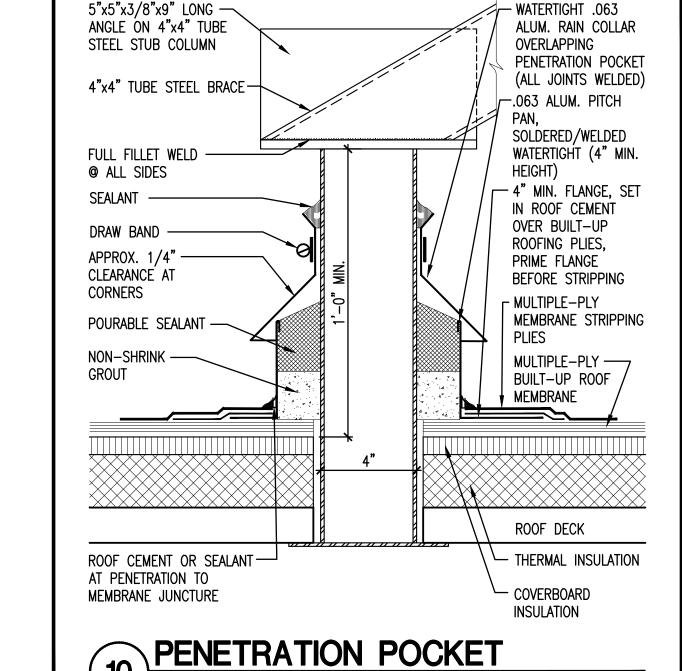
(2) PIECE ALUMINUM BOOT DETAIL

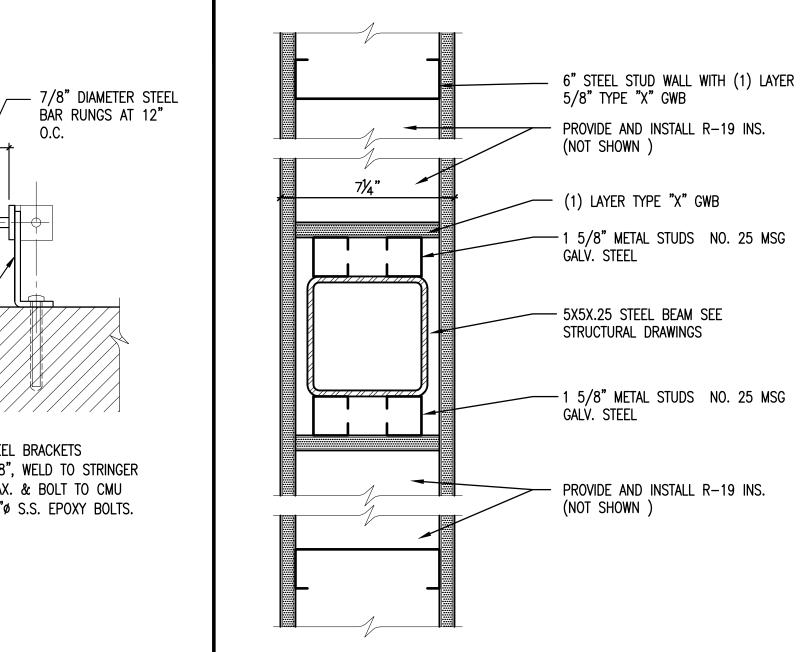


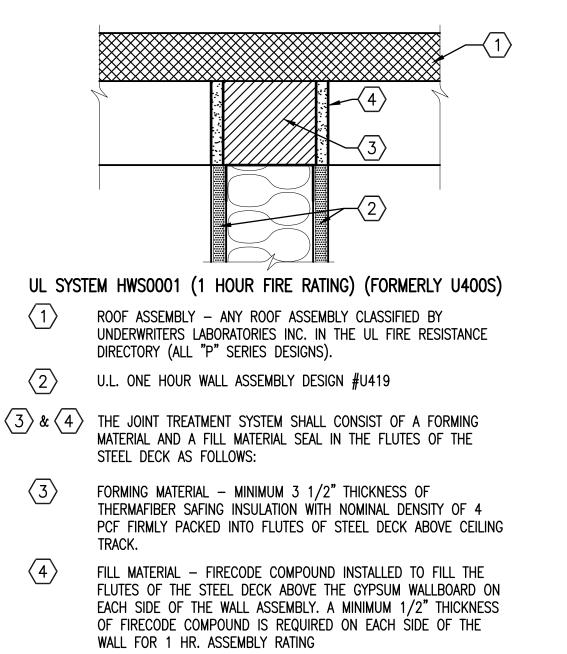
STUD

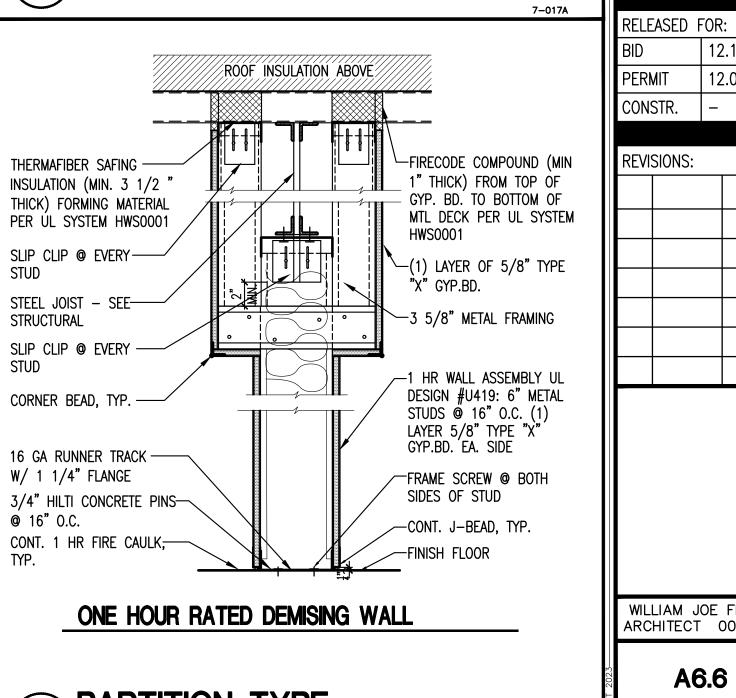
STUD

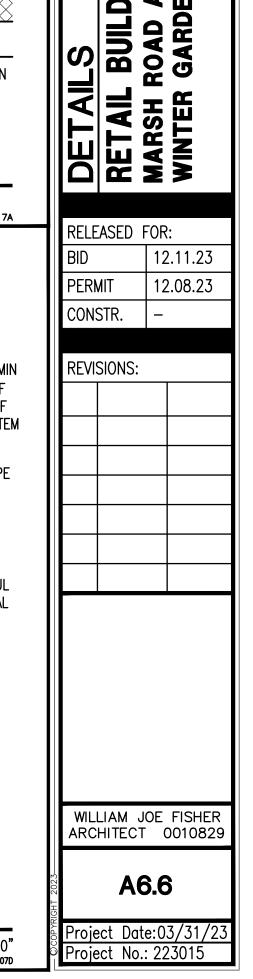












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WINTER G/15 (AVALON 1787

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G A CR

DIN AT EN,

HR. FIRE RESISTANCE ASSY.

CLASS "A" ROOFING ASSEMBLY.

MIN 4PCF MINERAL WOOL, MIN.

MIN. 1/8" WET THICKNESS OF FILL

MATERIAL SPRAYED OR TROWELLED

C.M.U. WALL

DETAIL BASED UPON UL

APPLICATION DETAIL.

#HW-S-0007 REFER TO LISTING

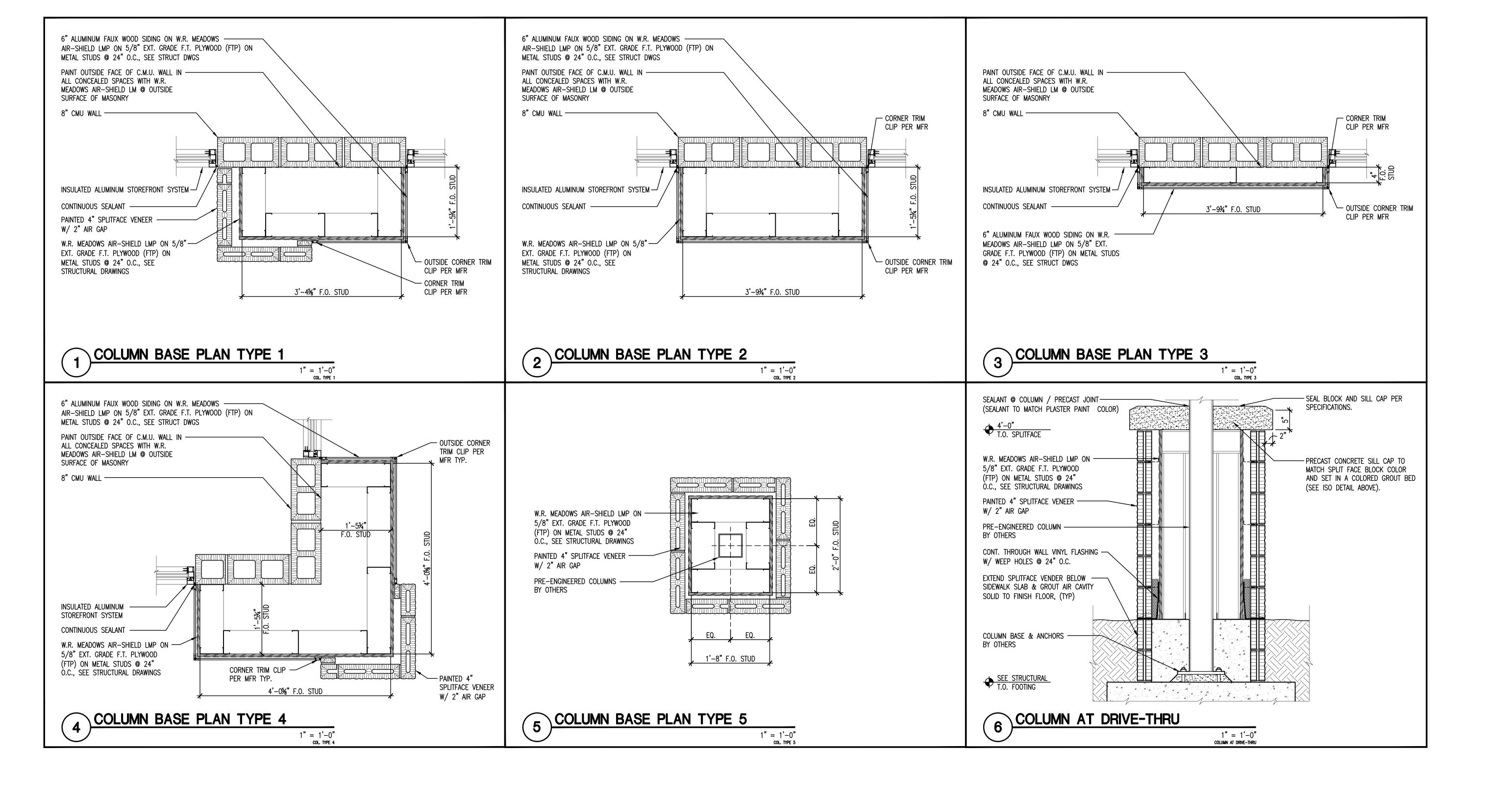
FOR SPECIFIC PRODUCT AND

THICKNESS TO BE 2 1/2"

- MAX. 3" DEEP FLUTE UNIT

**COLUMN WRAP DETAIL** 3" = 1'-0" FIRE STOP AT STUD WALL

**PARTITION TYPE**  $1 \ 1/2" = 1'-0"$ 



DETAILS
RETAIL BUILDING AT WINTER GARDEN
MARSH ROAD AT CR 545 (AVALON RD)
WINTER GARDEN, FL 34787

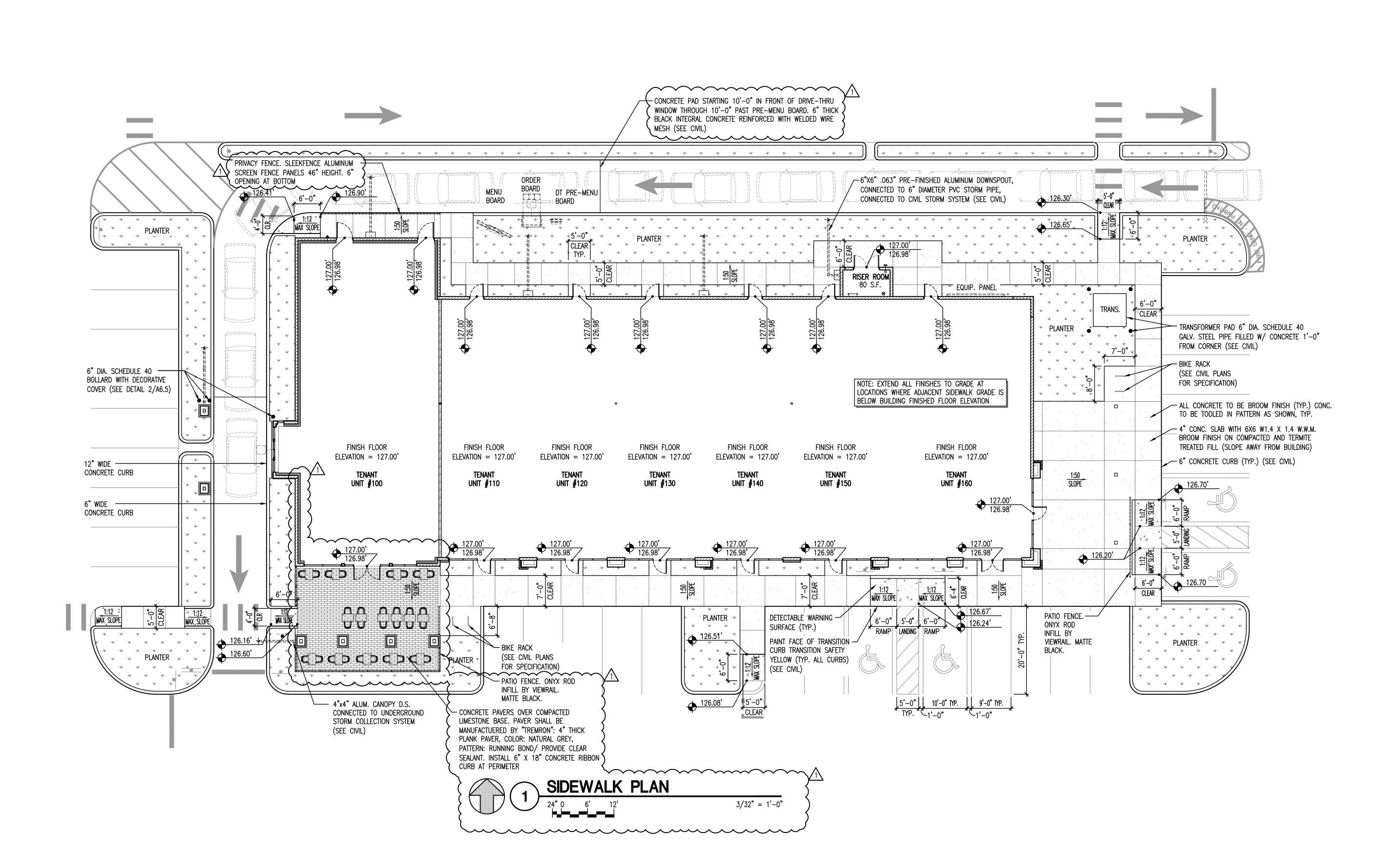
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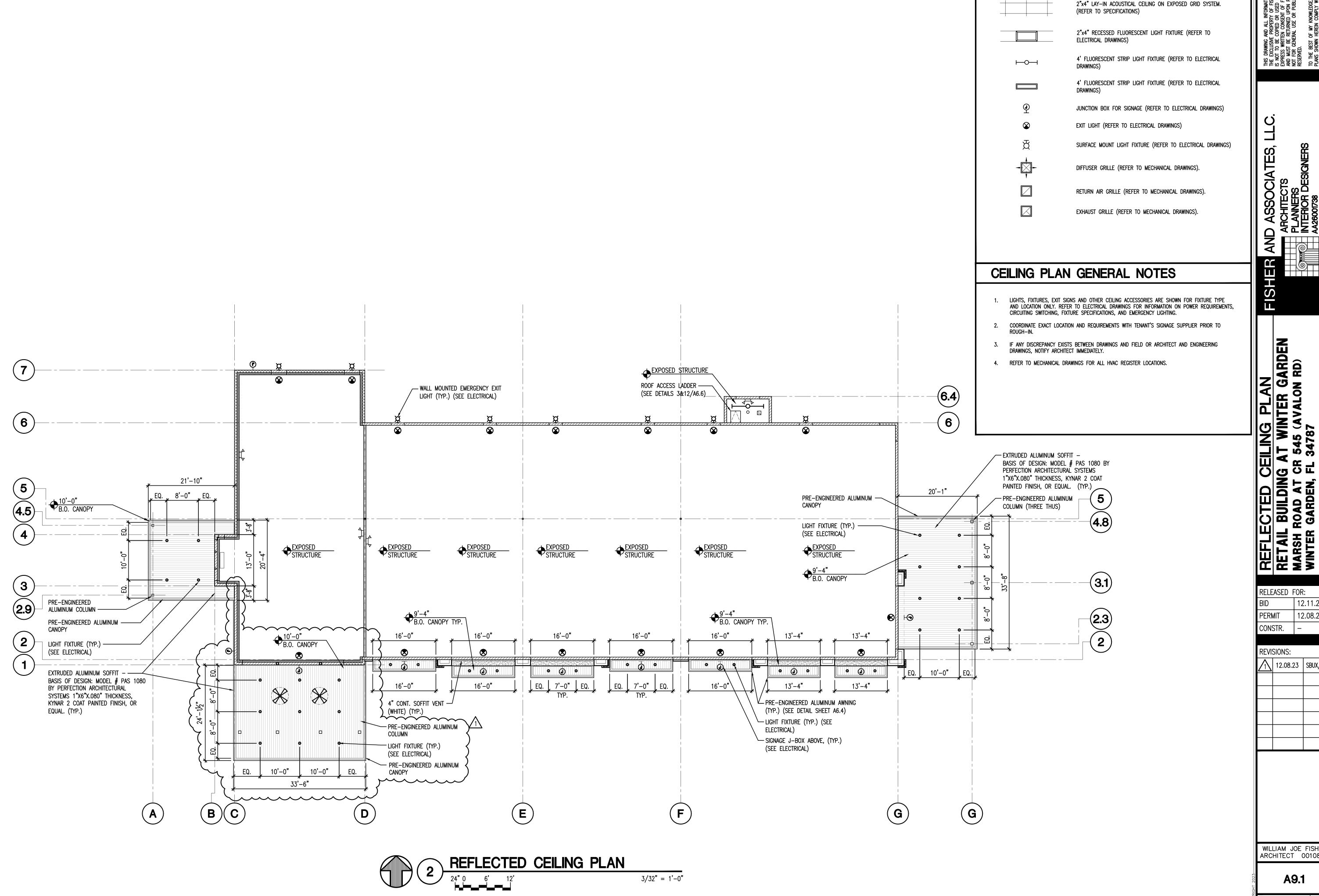
WILLIAM JOE FISHER ARCHITECT 0010829

A6.7



SIDEWALK PLAN
RETAIL BUILDING AT
MARSH ROAD AT CR 54
WINTER GARDEN, FL 347 RELEASED FOR: PERMIT CONSTR. REVISIONS: 12.08.23 SBUX/REV WILLIAM JOE FISHER ARCHITECT 0010829

12.11.23 12.08.23



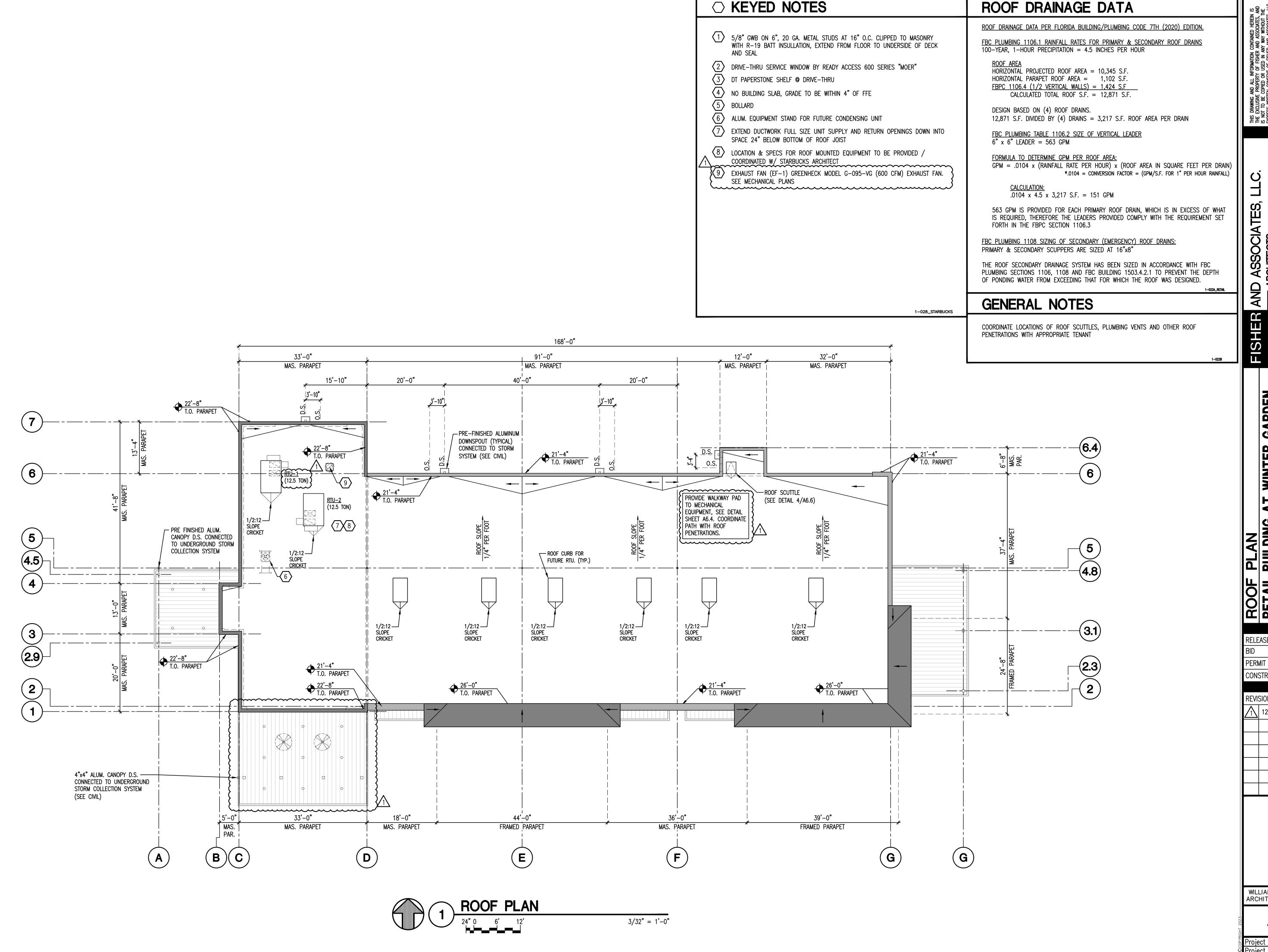
CEILING PLAN LEGEND

WALLS TO DECK ABOVE WITH BATT INSULATION

12.11.23 12.08.23

12.08.23 SBUX/REV

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T WINTER GARDEN 545 (AVALON RD) 4787 ROOF PLAN
RETAIL BUILDING AT
MARSH ROAD AT CR 54

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A10.1