

NEW SINGLE FAMILY HOME:

FRIEDMAN RESIDENCE

10 RIDGE ROAD

WEST ORANGE, NJ

LOT: 10, BLOCK: 80.03

ENERGY CODE COMPLIANCE:

REVISED (02/20/23)
ALL CONSTRUCTION SHALL CONFORM WITH THE REQUIREMENTS OF THE ENERGY SUBCODE N.J.I.C.C. 5:23 AND THE 2021 INTERNATIONAL ENERGY CONSERVATION CODE (IECC)

COMPLIANCE MUST BE DEMONSTRATED IN ONE OF THE FOUR WAYS LISTED BELOW:

- 1.) COMPLIANCE CALCULATIONS
- 2.) COMPLIANCE WITH RESCHECK (OR OTHER APPROVED BLDG ENERGY SOFTWARE)
- 3.) COMPLIANCE WITH CLEAN ENERGY PROGRAM FOR RESIDENTIAL NEW CONSTRUCTION (FORMERLY NJ ENERGY STAR PROGRAM)
- 4.) COMPLIANCE WITH PRESCRIPTIVE PACKAGE

CONSTRUCTION DRAWINGS:

REFER TO SPECIFICATION DRAWINGS #5-1 AND 5-2 FOR ADDITIONAL NOTES AND INFORMATION, INCLUDING BUT NOT LIMITED TO METHODS FOR LOW AIR LEAKAGE, MINIMUM BASIC REQUIREMENTS FOR HVAC, HEATING AND WINDOWS/DOORS. 1. DOORS & WINDOWS SECTIONS 8.2(D) / 8.4(F) / 8.5 / 8.7.(D)(F) & 8.10. 2. MECHANICAL/PLUMBING SECTIONS SECTIONS 7.1.(E)(F) / 15.4 & 15.5.

INFORMATION USED TO PREPARE COMPLIANCE HAS BEEN PROVIDED BY CONTRACTOR. ARCHITECT SHALL BE NOTIFIED OF ANY CHANGES OR SUBSTITUTIONS PRIOR TO CONSTRUCTION.

REFER TO FULL RES CHECK COMPLIANCE REPORT AND CHECKLIST (UNDER SEPARATE COVER) FOR ADDITIONAL INFORMATION.

IECC 2021 SECTION R408

THIS SECTION ESTABLISHES ADDITIONAL EFFICIENCY PACKAGE OPTIONS TO ACHIEVE ADDITIONAL ENERGY EFFICIENCY. THE BUILDER MUST SELECT ONE OF THE FOLLOWING EFFICIENCY PACKAGE OPTIONS.

ADDITIONAL EFFICIENCY PACKAGE OPTIONS.

OPTION # 1. ENHANCED ENVELOPE PERFORMANCE OPTION.

THE TOTAL BUILDING THERMAL ENVELOPE UA, THE SUM OF U-FACTOR TIMES ASSEMBLY AREA, SHALL BE LESS THAN OR EQUAL TO 95 PERCENT OF THE TOTAL UA RESULTING FROM MULTIPLYING THE U-FACTORS IN TABLE R402.1.2 BY THE SAME ASSEMBLY AREA AS IN THE PROPOSED BUILDING. THE UA CALCULATION SHALL BE PERFORMED IN ACCORDANCE WITH 1.5. THE AREA-WEIGHTED AVER- AGE SHGC OF ALL GLAZED PENETRATION SHALL BE LESS THAN OR EQUAL TO 95 PERCENT OF THE MAXIMUM GLAZED PENETRATION SHGC IN TABLE R402.1.2

OPTION # 2. MORE EFFICIENT HVAC EQUIPMENT PERFORMANCE OPTION.

HEATING AND COOLING EQUIPMENT SHALL MEET ONE OF THE FOLLOWING EFFICIENCIES:

1. GREATER THAN OR EQUAL TO 95 AFUE NATURAL GAS FURNACE AND 16 SEER AIR CONDITIONER.
2. GREATER THAN OR EQUAL TO 10 HSPF/16 SEER AIR SOURCE HEAT PUMP.
3. GREATER THAN OR EQUAL TO 3.5 COP GROUND SOURCE HEAT PUMP.

FOR MULTIPLE COOLING SYSTEMS, ALL SYSTEMS SHALL MEET OR EXCEED THE MINIMUM EFFICIENCY REQUIREMENTS IN THIS SECTION AND SHALL BE SIZED TO SERVE 100 PERCENT OF THE COOLING DESIGN LOAD. FOR MULTIPLE HEATING SYSTEMS, ALL SYSTEMS SHALL MEET OR EXCEED THE MINIMUM EFFICIENCY REQUIREMENTS IN THIS SECTION AND SHALL BE SIZED TO SERVE 100 PERCENT OF THE HEATING DESIGN LOAD.

OPTION # 3. REDUCED ENERGY USE IN SERVICE WATER- HEATING OPTION.

THE HOT WATER SYSTEM SHALL MEET ONE OF THE FOLLOWING EFFICIENCIES:

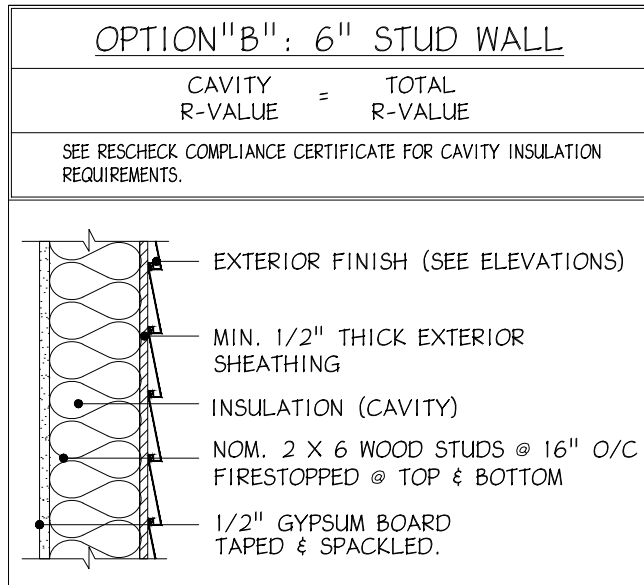
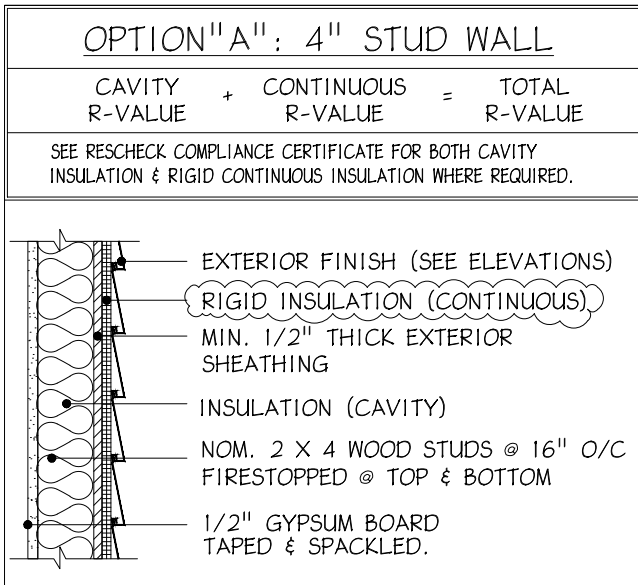
1. GREATER THAN OR EQUAL TO 0.82 EF FOSSIL FUEL SERVICE WATER-HEATING SYSTEM.
2. GREATER THAN OR EQUAL TO 2.0 EF ELECTRIC SERVICE WATER- HEATING SYSTEM.
3. GREATER THAN OR EQUAL TO 0.4 SOLAR FRACTION SOLAR WATER- HEATING SYSTEM.

OPTION # 4. MORE EFFICIENT DUCT THERMAL DISTRIBUTION SYSTEM OPTION.

THE THERMAL DISTRIBUTION SYSTEM SHALL MEET ONE OF THE FOLLOWING EFFICIENCIES:

1. 100 PERCENT OF DUCTS AND AIR HANDLERS LOCATED ENTIRELY WITHIN THE BUILDING THERMAL ENVELOPE.
2. 100 PERCENT OF DUCTLESS THERMAL DISTRIBUTION SYSTEM OR HYDRONIC THERMAL DISTRIBUTION SYSTEM LOCATED COMPLETELY INSIDE THE BUILDING THERMAL ENVELOPE.
3. 100 PERCENT OF DUCT THERMAL DISTRIBUTION SYSTEM LOCATED IN CONDITIONED SPACE AS DEFINED BY SECTION R403.3.2.

OPTION # 5. IMPROVED AIR SEALING AND EFFICIENT VENTILATION SYSTEM OPTION. THE MEASURED AIR LEAKAGE RATE SHALL BE LESS THAN OR EQUAL TO 3.0 ACH50, WITH EITHER AN ENERGY RECOVERY VENTILATOR (ERV) OR HEAT RECOVERY VENTILATOR (HRV) INSTALLED. MINIMUM HRV AND ERV REQUIREMENTS, MEASURED AT THE LOWEST TESTED NET SUPPLY AIRFLOW, SHALL BE GREATER THAN OR EQUAL TO 75 PERCENT SENSIBLE RECOVERY EFFI- CIENCY (SRE), LESS THAN OR EQUAL TO 1.1 CUBIC FEET PER MINUTE PER KWATT (0.3 m3/min/kwatt) AND SHALL NOT USE REGULATION AS A DEFROST STRATEGY. IN ADDITION, THE ERV SHALL BE GREATER THAN OR EQUAL TO 50 PERCENT LATENT RECOVERY/ MOISTURE TRANSFER (LRMT).



EXTERIOR INSUL./FRAMING OPTIONS

NO SCALE

- NOTE:
- 1) MANUFACTURER'S SETTLED R-VALUES SHALL BE USED IN BLOWN INSULATION INSTALLATIONS.
 - 2) ADJUST INTERIOR DIMENSIONS AS REQ'D. TO ACCOMMODATE OPTION SELECTED.
 - 3) ALL INSULATION VALUES ARE MINIMUM.
 - 4) BATT INSULATION TO FIT IN STUD CAVITY WITH NO COMPRESSION.
 - 5) FOR FOAM INSULATION, CONSULT ARCHITECT.
 - 6) BUILDER SHALL SUBMIT ALL ENERGY CODE & OPTIONAL INFORMATION TO CONSTRUCTION OFFICIAL FOR APPROVAL PRIOR TO START OF FRAMING.
 - 7) BUILDER SHALL COORDINATE & ADJUST ALL TRIM, EXTERIOR JAMBS, PENETRATIONS AS REQUIRED TO SUITE JOB CONDITIONS PRIOR TO FRAMING.

INSPECTION

WORK DONE IN LOW-RISE RESIDENTIAL BUILDINGS IS INSPECTED TO VERIFY:

- (1) THE INSULATION SPECIFIED ON THE PLANS IS THE INSULATION INSTALLED.

INSULATION -- N.J.A.C. 5:23-2.18(b)(1)(i)(c) REQUIRES INSPECTORS TO VERIFY THAT THE INSULATION LEVELS INSTALLED MATCH THE ONES: (A) USED IN THE CALCULATIONS, (B) SHOWN IN THE PRESCRIPTIVE PACKAGE TABLE OR (C) FOUND IN THE RESCHECK PRINTOUT. THE ONE EXCEPTION TO INSPECTOR VERIFICATION OF THE INSULATION LEVELS IS A HOME ENROLLED IN THE NJ CLEAN ENERGY PROGRAM WHERE COMPLIANCE IS VERIFIED BY A THIRD PARTY. IN ALL CASES, OTHER ENERGY SUBCODE REQUIREMENTS, SUCH AS PIPING AND DUCTWORK INSULATION, STILL APPLY. WITH SPECIFIC REGARD TO DUCTWORK (SECTION R403.3):

DUCTS LOCATED OUTSIDE CONDITIONED SPACE, SUPPLY AND RETURN DUCTS LOCATED OUTSIDE CONDITIONED SPACE ARE TO BE INSULATED TO AN R-VALUE OF NOT LESS THAN R-8 FOR DUCTS 3 INCHES (76 MM) IN DIAMETER AND LARGER AND NOT LESS THAN R-6 FOR DUCTS SMALLER THAN 3 INCHES (76 MM) IN DIAMETER. (FOR DUCTWORK TO BE CONSIDERED INSIDE A CONDITIONED SPACE, COMPLIANCE WITH SECTION R403.3.2 IS REQUIRED.)

- (2) THE SEALING (AIR TIGHTNESS) OF THE BUILDING THERMAL ENVELOPE (THIS IT TO BE DONE THROUGH A VISUAL INSPECTION AND A BLOWER DOOR TEST).

SEALING -- SPECIFIC AIR LEAKAGE SEALING REQUIREMENTS WITHIN THE IECC-R ARE AS FOLLOWS:

- BUILDING THERMAL ENVELOPE TIGHTNESS, AIR LEAKAGE, OR TIGHTNESS, IS TO BE VERIFIED IN TWO WAYS:

(1) VISUAL INSPECTION PER SECTION R402.4.1.1 AND (2) TESTING PER SECTION R402.4.1.2. UCC INSPECTORS WILL ALREADY BE INSPECTING FOR THE TYPE/LOCATION OF INSULATION INSTALLED AND SOME AIR BARRIER ITEMS, SO A VISUAL INSPECTION WILL BE PARTIALLY COMPLETED. ITEMS INSPECTED BY THE ENFORCING AGENCY AND THE REMAINING ITEMS ARE ALSO TO BE VERIFIED BY A PERSON INDEPENDENT OF THE INSTALLER (I.E. THIRD PARTY) AND APPROVED BY THE CODE OFFICIAL. VERIFICATION WILL ALSO REQUIRE DOCUMENTATION SHOWING THE RESULTS OF THE BLOWER DOOR TEST CONDUCTED IN ACCORDANCE WITH ANSI/RESNET/ICC 380, ASTM E779 OR ASTM E1827 BY A PERSON INDEPENDENT OF THE INSTALLER (I.E. THIRD PARTY) AND APPROVED BY THE CODE OFFICIAL. THIS WILL BECOME PART OF THE PERMIT FILE AND WILL FURTHER DEMONSTRATE COMPLIANCE. IN OTHER WORDS, A UCC CODE INSPECTOR(S) WILL FIELD-VERIFY THAT THE BUILDING THERMAL ENVELOPE TIGHTNESS COMPLIES WITH TABLE R402.4.1.1, AN INDEPENDENT PARTY WILL VERIFY THE SAME AND TESTING WILL BE DOCUMENTED BY AN INDEPENDENT PARTY MEETING SECTION R402.4.1.2. THE IECC-R ESTABLISHES NO CREDENTIALS FOR PERSONS PERFORMING THESE INSPECTIONS AND BOTH THIRD PARTIES CAN BE THE SAME PERSON/COMPANY. IN ALL CASES, COMPLIANCE DOCUMENTATION WILL INCLUDE UCC-F392, THE AIR BARRIER AND INSULATION CHECKLIST.

EXCEPTION: TESTING FOR ADDITIONS IS NOT REQUIRED PROVIDED THE VISUAL INSPECTION IS COMPLETE AS INDICATED ABOVE.

- (1) DUCT TIGHTNESS THROUGH AN AIR LEAKAGE TEST.

DUCT TIGHTNESS. DUCT TIGHTNESS MUST BE VERIFIED BY WAY OF A LEAKAGE TEST REGARDLESS OF LOCATION. THE PERMIT HOLDER MAY VERIFY DUCT TIGHTNESS THROUGH TESTING EITHER AT POST-CONSTRUCTION OR DURING ROUGH-IN. THE TIMING OF THIS TEST IS THE PERMIT HOLDER'S CHOICE. THE BENEFIT TO A POST-CONSTRUCTION TEST IS THAT THE QUALIFICATIONS FOR PASSING ARE LESS STRINGENT THAN A ROUGH-IN TEST. THE BENEFIT TO A ROUGH-IN TEST IS THAT THE DUCTWORK SHOULD BE MUCH MORE ACCESSIBLE TO FIX IF IT DOES NOT PASS. THE REQUIREMENTS FOR TESTING AND PASSING CRITERIA CAN BE FOUND AT SECTION R403.3.5 AND R403.3.6. AGAIN, A COPY OF THE TEST RESULTS WILL BECOME PART OF THE PERMIT FILE. THE IECC-R ESTABLISHES NO CREDENTIALS FOR PERSONS PERFORMING THIS TEST.

NOTE THAT SECTIONS R403.3.7 DOES NOT PERMIT THE USAGE OF FRAMING CAVITIES (E.G. STUD WALL CAVITIES, SPACE BETWEEN SOLID FLOOR JOISTS) TO BE USED AS DUCTS OR PLENUMS FOR SUPPLY OR RETURN AIR.

CERTIFICATE -- AS PER SECTION R401.3.4 OF THE IECC-R, A PERMANENT CERTIFICATE IS TO BE POSTED ON A WALL IN THE SPACE WHERE THE FURNACE IS LOCATED. A UTILITY ROOM OR AN APPROVED LOCATION INSIDE THE BUILDING, WHERE LOCATED ON AN ELECTRICAL PANEL, THE CERTIFICATE SHALL NOT COVER OR OBSTRUCT THE VISIBILITY OF THE CIRCUIT DIRECTORY LABEL, SERVICE DISCONNECT LABEL OR OTHER REQUIRED LABELS.

PLAN REVIEW SHALL BE IN ACCORDANCE WITH THE NEW JERSEY UNIFORM CONSTRUCTION CODE INCLUDING ALL AMENDMENTS AND THE INTERNATIONAL RESIDENTIAL CODE, NJ 2021 EDITION

BUILDING	INTERNATIONAL RESIDENTIAL CODE 2021 (N.J.A.C. 5:23-3.21)
ELECTRICAL	NATIONAL ELECTRICAL CODE 2020 (N.J.A.C. 5:23-3.16)
ENERGY	INTERNATIONAL ENERGY CONSERVATION CODE 2021 (N.J.A.C. 5:23-3.18)
PLUMBING	NATIONAL STD. PLUMBING CODE 2021 (N.J.A.C. 5:23-3.15)
MECHANICAL	INTERNATIONAL MECHANICAL CODE 2021 (N.J.A.C. 5:23-3.20)
FUEL GAS	INTERNATIONAL FUEL GAS CODE 2021 (N.J.A.C. 5:23-3.22)
REHAB.	N.A.
BARRIER FREE	N.A.

N.J.I.C.C. REQUIREMENTS

1. USE GROUP	RS (IRC)
2. CONSTRUCTION TYPE	98
3. DESIGN LOADS	
	LIVE (PSF) DEAD (PSF)
• SLEEPING ROOMS	30 12
• NON-SLEEPING ROOMS	40 12
• BATHROOM (W/ TILE)	40 25
• ENTRY & KITCHEN (W/ TILE)	40 25
• STAIRS	40 15
• CEILINGS W/ STORAGE	00 10
• CEILINGS W/O STORAGE	10 10
• VOLUME CEILING	30 15
• ROOF	SEE NOTE #6 12
• EXT. WOOD DECK	40 10
• BALCONY	60 12
• PASSENGER GARAGE	50 0
4. ARCHITECTURAL AREA (SQUARE FEET)	
• LIVING AREA	
• FIRST FLOOR	2,032 SQ.FT.
• SECOND FLOOR	986 SQ.FT.
• TOTAL LIVING AREA	3,018 SQ.FT.
• BASEMENT AREA	1,611 SQ.FT.
• GARAGE AREA	635 SQ.FT.
5. GROSS VOLUME (CU. FT.)	62,486 CU.FT.
6. REFER TO CLIMATIC & GEOGRAPHIC DESIGN CHART FOR ADDITIONAL INFORMATION AND NOTES.	



Generated by REScheck-Web Software

Compliance Certificate

Project Friedman Residence

Energy Code: **2021 IECC**
Location: **Orange, New Jersey**
Construction Type: **Single-family**
Project Type: **New Construction**
Conditioned Floor Area: **4,695 ft2**
Glazing Area: **24%**
Climate Zone: **4 (5896 HDD)**
Permit Date:
All Electric: **false**
Is Renewable: **false**
Solar Ready: **false**
Has Charger: **false**
Has Battery: **false**
Has Heat Pump: **false**
Electric Ready: **false**
Responsive Water Heating: **false**
Construction Site: **Owner/Agent:**
10 Ridge Road
West Orange, NJ

Designer/Contractor:
Appel Design Group Architects
23 Vreeland Rd
Ftiorham Park, NJ 07932

Compliance: Passes using UA trade-off

Compliance: **2.1% Better Than Code** Maximum UA: **716** Your UA: **701** Maximum SHGC: **0.40** Your SHGC: **0.30**

The % Better or Worse Than Code Index reflects how close to compliance the house is based on code trade-off rules.

It does NOT provide an estimate of energy use or cost relative to a minimum code home.

Slab-on-grade tradeoffs are no longer considered in the UA or performance compliance path in REScheck. Each slab-on-grade assembly in the specified climate zone must meet the minimum energy code insulation R-value and depth requirements.

Envelope Assemblies

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Prop. U-Factor	Req. U-Factor	Prop. UA	Req. UA
Ceiling: Flat Ceiling or Scissor Truss	1,335	38.0	19.0	0.019	0.024	25	32
Ceiling 1: Cathedral Ceiling	533	38.0	0.0	0.027	0.024	14	13
Wall- First Floor: Wood Frame, 16" o.c.	3,005	21.0	3.0	0.048	0.045	107	100
Door 1: Solid Door (under 50% glazing)	21			0.160	0.300	3	6
Door -- 1: Glass Door (over 50% glazing)	165			0.300	0.300	50	50
SHGC: 0.30							
Window 1: Vinyl Frame	597			0.300	0.300	179	179
SHGC: 0.30							
Wall (2nd Floor): Wood Frame, 16" o.c.	1,418	21.0	3.0	0.048	0.045	55	52
Door: Glass Door (over 50% glazing)	24			0.300	0.300	7	7
SHGC: 0.30							

Project Title: Friedman Residence

Report date: 03/21/24

Data filename:

Page 1 of 10

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Prop. U-Factor	Req. U-Factor	Prop. UA	Req. UA
Window: Vinyl Frame	249			0.300	0.300	75	75
SHGC: 0.30							
Wall - basement: Wood Frame, 16" o.c.	825	21.0	0.0	0.057	0.045	33	26
Door 1: Glass Door (under 50% glazing)	48			0.300	0.300	14	14
Door 2: Glass Door (over 50% glazing)	200			0.300	0.300	60	60
SHGC: 0.30							
Floor: All-Wood Joist/Truss	502	38.0	0.0	0.026	0.047	13	24
Basement Wall: Solid Concrete or Masonry							
Wall height: 9.5'							
Depth below grade: 5.0'	1,320	21.0	0.0	0.050	0.059	66	78
Insulation depth: 9.5'							

Additional Efficiency Package(s)

Required: 1 Proposed: 1

Description	Credits
Efficient HVAC Performance	1.0

Compliance Statement: The proposed building design described here is consistent with the building plans, specifications, and other calculations submitted with the permit application. The proposed building has been designed to meet the 2021 IECC requirements in REScheck Version : REScheck-Web and to comply with the mandatory requirements listed in the REScheck Inspection Checklist.

Name - Title

Signature

Date

DRAWING LIST

	ISSUE FOR PERMIT	DESCRIPTION
	3-21-24	C-1 COVER SHEET
	3-21-24	A-1 FRONT AND LEFT SIDE ELEVATIONS
	3-21-24	A-2 REAR AND RIGHT SIDE ELEVATIONS
	3-21-24	A-3 FOUNDATION PLAN
	3-21-24	A-4 FIRST FLOOR PLAN
	3-21-24	A-5 SECOND FLOOR PLAN
	3-21-24	A-6 ROOF FRAMING PLAN
	3-21-24	E-1 BASEMENT ELECTRICAL PLAN
	3-21-24	E-2 FIRST FLOOR ELECTRICAL PLAN
	3-21-24	E-3 SECOND FLOOR ELECTRICAL PLAN
	3-21-24	T-1A TYPICAL SECTIONS AND DETAILS
	3-21-24	T-2B TYPICAL SECTIONS AND DETAILS
	3-21-24	T-WB1 STANDARD WALL BRACING DETAILS
	3-21-24	T-WB2 ALTERNATE WALL BRACING DETAILS
	3-21-24	R-1 RADON MITIGATION & FIREPLACE DETAILS
	3-21-24	TD-1 TYPICAL DECK DETAILS
	3-21-24	S-1 OUTLINE SPECIFICATIONS
	3-21-24	S-2 OUTLINE SPECIFICATIONS

SCHEDULE OF STRUCTURAL MATERIALS

	DESCRIPTION	PROPERTIES
FOUNDATION	CONCRETE MASONRY UNITS (CMU)	
FOUNDATION	POURED-IN-PLACE CONCRETE	REFER TO FOUNDATION WALL CHART FOR WALL THICKNESS, BACK FILL HEIGHT, AND REINFORCING REQUIREMENTS. REFER TO WALL SECTION DETAIL A-7-2A (CONC.) FOR ADDITIONAL INFORMATION.
GENERAL FRAMING	DOUGLAS FIR # 2 (SEE DWGS. FOR SIZES)	F _b = 900 PSI (BASE FIBER STRESS) F _v = 95 PSI (BASE SHEAR) E = 1,600,000 PSI (MOD. OF ELAST.)
ROOF / CEILING FRAMING	DOUGLAS FIR # 2 (SEE DWGS. FOR SIZES)	F _b = 900 PSI (BASE FIBER STRESS) F _v = 95 PSI (BASE SHEAR) E = 1,600,000 PSI (MOD. OF ELAST.)
TRUSS ROOF FRAMING		
FLOOR FRAMING	TRUSS JOIST (SEE DWGS. FOR SIZES)	TJI-PRO SERIES SEE FLOOR PLANS AND/OR SHOP DRAWINGS FOR SERIES
SUB-FLOOR	PLYWOOD 19/32" (MIN.) OR OSB: 19/32" THICK	GRADE C-D, PLUGGED-APA SPAN RATED FOR 16" O.C. OR BETTER
UNDERLAYMENT: OR HARDWOOD FLOOR	PLYWOOD - 1/4" (MIN.) OR 19/32" WITH TILE OR - 13/16" THICK FIN. FLR.	APA SPAN RATED FOR 16" O.C. OR BETTER - COORDINATE WITH FINISH FLOOR REQUIREMENTS - GRADE AS SELECTED SEE NOTE # 3
ALTERNATE COMBINED SUB-FLOOR AND UNDERLAYMENT	PLYWOOD - 3/4" THICK OSB: 3/4" THICK	"TSTUR" - FLOOR" - APA SPAN RATED FOR 16" O.C. OR BETTER COORDINATE WITH FINISH FLOOR REQUIREMENTS. SEE NOTE # 3
WALL SHEATHING	PLYWOOD 7/16" (MIN.) OR OSB: 7/16" THICK	GRADE C-D (EXTERIOR)-APA SPAN RATED FOR 16" O.C. OR BETTER
ROOF SHEATHING	PLYWOOD - 7/16" (MIN.) OR OSB: 7/16" THICK	GRADE C-D (EXTERIOR)-APA SPAN RATED FOR 24" O.C. INSTALLED WITH THE LONG DIMENSION PERPENDICULAR TO SUPPORT

NOTE # 1: FOR ALTERNATE SELECTIONS AND ASSEMBLIES, CONSULT ARCHITECT FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

NOTE #2: REFER TO DRAWINGS T-1/11-A AND T-3-A FOR ADDITIONAL NOTES AND INFORMATION.

NOTE #3: COORDINATE STRUCTURAL REQUIREMENTS FOR CERAMIC TILE INSTALLATION WITH THE "TILE COUNCIL OF NORTH AMERICA" (TCNA)

CLIMATIC & GEOGRAPHIC DESIGN CRITERIA							LOCATION: WEST ORANGE, NJ
SNOW LOAD	ULTIMATE WIND SPEED (4) 3 SEC.GUST (MPH)	SUBJECT TO DAMAGE FROM WEATHERING			WINTER DESIGN TEMP	ICE BARRIER UNDERLAYMENT REQUIRED	FLOOD HAZARD LFPA
25	113	SEVERE	3'-0"	MOD TO HVY		YES	
MANUAL J DESIGN CRITERIA							
ELEVATION	LATITUDE	WINTER HEATING	SUMMER COOLING	ALTITUDE CORRECTION FACTOR	INDOOR DESIGN TEMPERATURE	DESIGN TEMPERATURE COOLING	HEATING TEMPERATURE DIFFERENCE
COOLING TEMPERATURE DIFFERENCE	WIND VELOCITY HEATING	WIND VELOCITY COOLING	COINCIDENT NET W/B	DAILY RANGE	WINTER HUMIDITY	SUMMER HUMIDITY	

NOTES:

1. ARCHITECTURAL DRAWINGS ARE BASED UPON BASEMENT FLOOR ELEVATION BEING CONSTRUCTED A MINIMUM OF (1) FOOT ABOVE FEMA FLOOD ELEVATION AND/OR A MINIMUM OF 6" ABOVE SEASONAL HIGH WATER TABLE. SITE ENGINEER TO CONFIRM & NOTIFY THE ARCHITECT.
2. WHERE HOUSE IS LOCATED ON OR ADJACENT TO SLOPES IN EXCESS OF 1:3 (33.3%) NOTIFY ARCHITECT FOR ADDITIONAL REQUIREMENTS.
3. WHERE HOUSE IS LOCATED LESS THAN 5'-0" TO A PROPERTY LINE OR 10'-0" FROM ANOTHER STRUCTURE OR BUILDING, NOTIFY ARCHITECT FOR ADDITIONAL FIRE RATING REQUIREMENTS.
4. ULTIMATE DESIGN WIND SPEEDS = 3 SECOND GUST PER BULLETIN 03-4.
5. CLIMATE ZONE: ENERGY CODE COMPLIANCE SHALL BE IN ACCORDANCE WITH THE 2018 INTERNATIONAL ENERGY CONSERVATION CODE (IECC). SEE ENERGY CODE COMPLIANCE NOTE FOR COMPLIANCE METHOD SELECTED. FOR PRESCRIPTIVE BUILDING ENVELOPE REQUIREMENTS BASED ON NJ CLIMATE ZONE #4 OR #5 SEE INSULATION & PENETRATION CHART.

CONSULT BUILDER'S SPECIFICATIONS AND SELECTION PACKAGE FOR ADDITIONAL INFORMATION. NOTIFY BUILDER AND ARCHITECT OF ANY CONFLICTS AND/OR DISCREPANCIES PRIOR TO PROCEEDING WITH WORK. ARCHITECTURAL DRAWINGS SHOW THE GENERAL INTENT, ARRANGEMENT AND EXTENT OF WORK. BUILDER SHALL OBTAIN ALL SAMPLES AND SPECIFICATIONS FOR FINISH, EQUIPMENT, AND ACCESSORIES AND SHALL SUBMIT TO ARCHITECT FOR REVIEW AND APPROVAL WHERE APPLICABLE. COMPLY WITH MANUFACTURERS REQUIREMENTS FOR INSTALLATION AND PROVIDE ALL NECESSARY ACCESSORIES, FLASHING, ETC. FOR A COMPLETE INSTALLATION. USE IN CONJUNCTION WITH SITE DRAWINGS BY ARCHITECT.

CONSULT/NOTIFY ARCHITECT OF ANY SELECTION OF STONE (FLOOR, STONE FINISHES, COUNTERTOPS, TRIM, HEARTH, ETC.) FOR SPECIAL REQUIREMENTS AND ADDITIONAL STRUCTURAL REINFORCING AS REQUIRED.



APPEL DESIGN GROUP
ARCHITECTS

23 VREELAND ROAD, SUITE 202
FLOHAM PARK, NJ 07852
TEL: (973) 994-1778
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SINGLE FAMILY HOME
FRIEDMAN RESIDENCE
10 RIDGE ROAD
WEST ORANGE, NJ

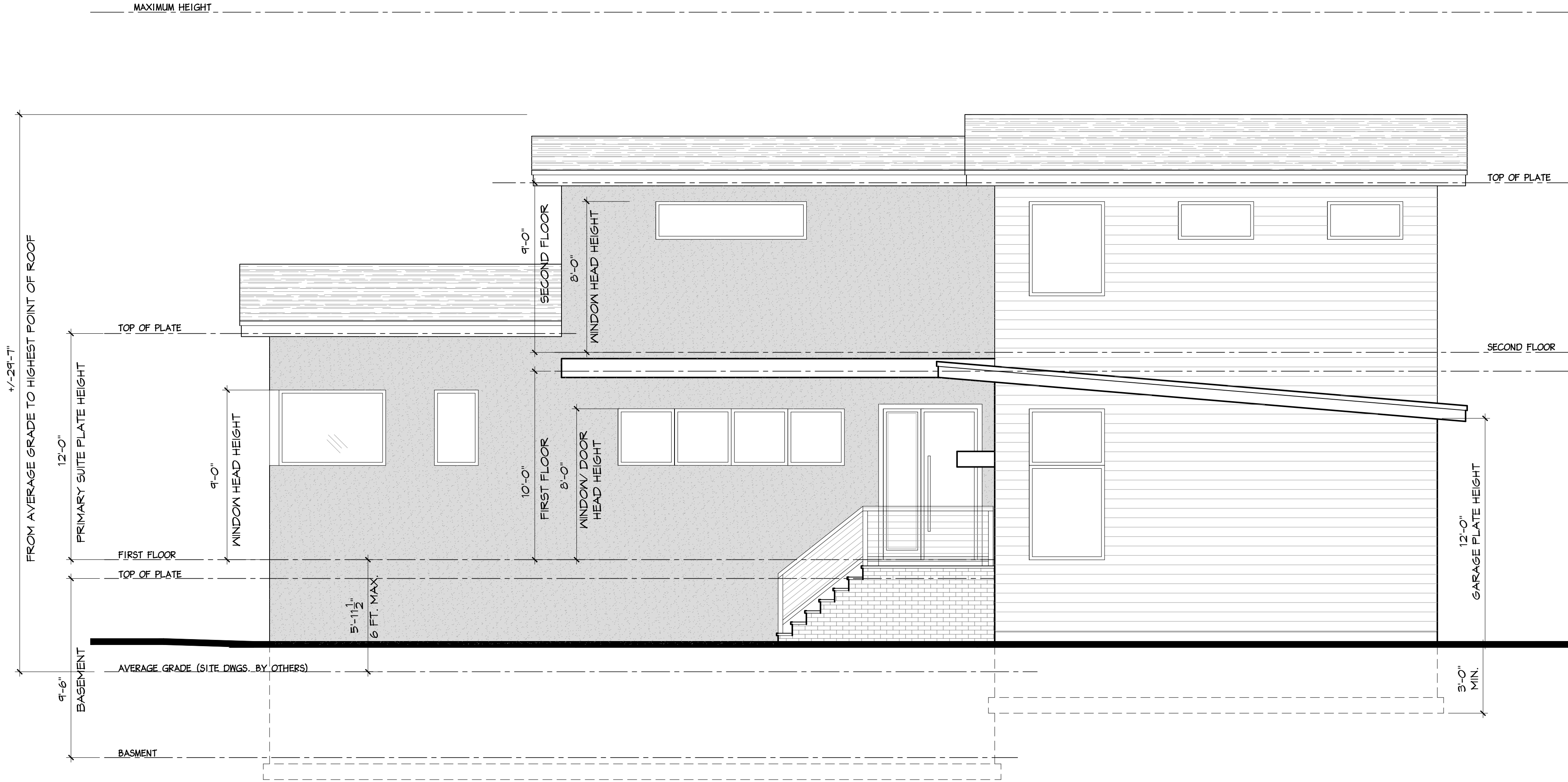
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ISSUE FOR REVIEW KP 3-15-24

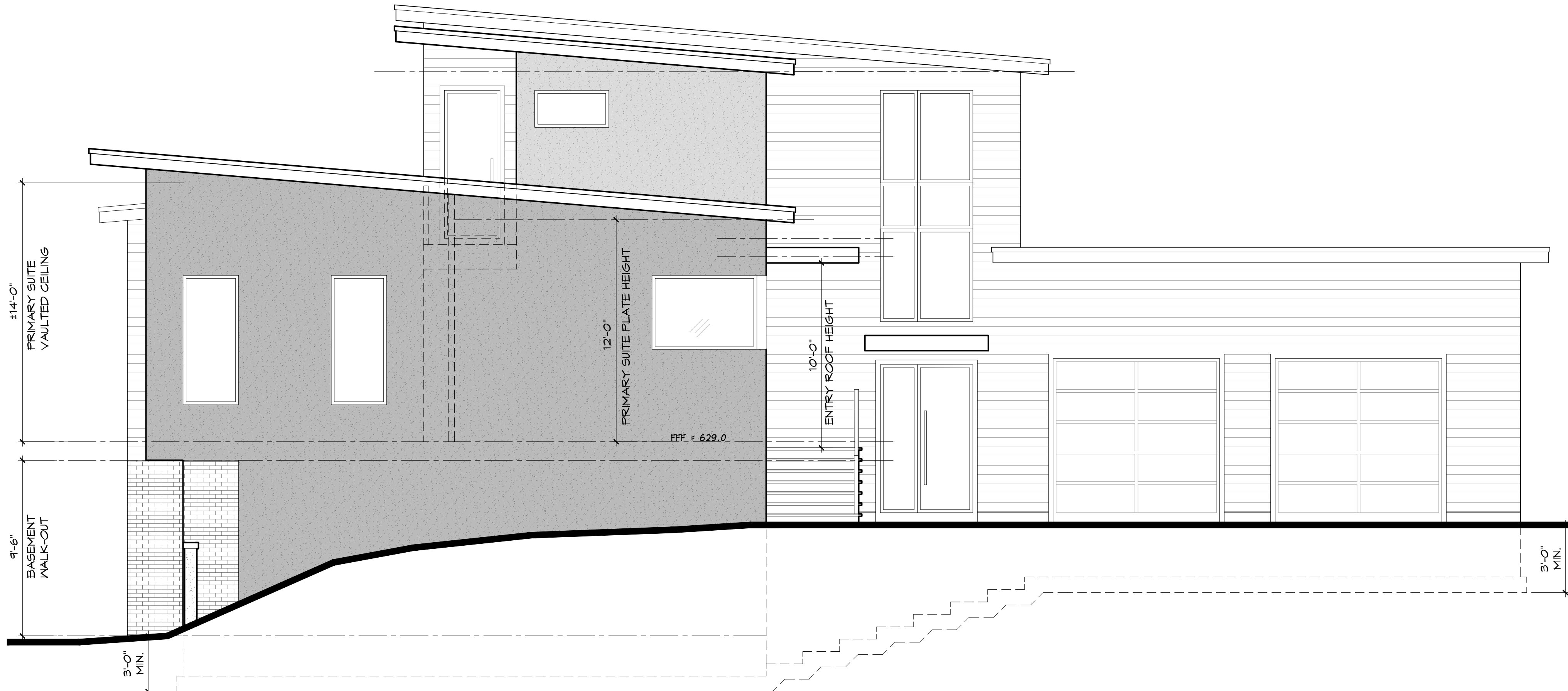
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① FRONT ELEVATION
SCALE -- 1/4"=1'-0"



② LEFT SIDE ELEVATION
SCALE -- 1/4"=1'-0"

ISSUE FOR PERMIT ONLY
NOT FOR CONSTRUCTION

GENERAL NOTES

(REVISED 2-20-2023)

1. ROOF LEADERS ARE NOT SHOWN. LEADERS SHALL BE LOCATED IN THE FIELD, COORDINATED, AND INSTALLED IN AN APPROVED MANNER BY THE CONTRACTOR PER SITE AND ORIENTATION. PROVIDE SPLASH BLOCKS OR UNDERGROUND PIPING AS APPROVED AND/OR REQUIRED BY THE LOCAL AUTHORITIES.

2. CONTRACTOR TO COORDINATE ATTIC VENTILATION AND PROVIDE A MINIMUM NET FREE VENTILATION AREA AS FOLLOWS:
• 1/150 OF THE AREA OF THE VENTED SPACE.
• 1/300 OF THE AREA OF THE VENTED SPACE PROVIDED THE FOLLOWING CONDITION IS MET. NOT LESS THAN 40% AND NOT MORE THAN 50% OF THE REQUIRED VENTILATION IS LOCATED IN THE UPPER PORTION OF THE ROOF (NOT MORE THAN 3' BELOW THE RIDGE)
ALL VENTS SHALL BE PROVIDED WITH INSECT SCREENS.

3. CEILING HEIGHTS: HABITABLE ROOMS (SPACES) SHALL HAVE A CEILING HEIGHT OF NOT LESS THAN 7 FEET.

4. E.I.F.S: UNLESS SPECIFIC APPROVAL IS PROVIDED BY THE OWNER, BUILDER, INSTALLER AND EACH RESPECTIVE INSURANCE CARRIER, E.I.F.S. SHALL NOT BE INSTALLED. SEE OUTLINE SPECIFICATIONS FOR CONVENTIONAL STUCCO REQUIREMENTS.

5. WINDOW NOTES - GENERAL:
5A. WINDOW SIZES SHOWN ON THE PLANS ARE NOMINAL AND MAY VARY BASED ON THE ACTUAL MANUFACTURER SELECTED. AN EGRESS APPROVED WINDOW MEETING CODE REQUIREMENTS SHALL BE PROVIDED AT EACH AND EVERY SLEEPING ROOM. SEE OUTLINE SPECIFICATIONS (DIVISION 5).
5B. CONTRACTOR SHALL COORDINATE ALL WINDOWS DESIGNATIONS WITH ELEVATION VIEWS AND MANUFACTURER'S ROUGH OPENINGS PRIOR TO ORDERING WINDOWS.
5C. UNLESS NOTED OTHERWISE IN ENERGY CODE ANALYSIS (DRAWING C-1) ALL WINDOWS SHALL BE "LOW-E" INSULATED GLASS.
*SEE HVAC NOTES.

5D. CONTRACTOR SHALL COORDINATE ALL WINDOW AND DOOR SPECIFICATIONS WITH SITE SPECIFIC WIND EXPOSURE CATEGORY. SEE CLIMATIC / GEOGRAPHIC DESIGN CRITERIA ON COVER DRAWING. CONTRACTOR TO SUBMIT MANUFACTURERS SPECIFICATION INFORMATION TO THE BUILDING DEPARTMENT.

5E. WINDOWS BY " " (" " SERIES) OR APPROVED EQUAL FORM THE BASIS OF THE CONSTRUCTION DRAWINGS. WINDOW INFORMATION INCLUDED IN THE MODEL ENERGY CODE COMPLIANCE REPORT SUPERCEDES MANUFACTURER, SERIES AND GLAZING VALUE ABOVE.

5F. FOR OPERABLE WINDOWS, WINDOWS WITH SILL HEIGHTS LOWER THAN 24" TO FINISHED FLOOR AND GREATER THAN 72" FROM GRADE-SEE DRAWING #S-2 FOR ADDITIONAL REQUIREMENTS.

6. EXTERIOR WINDOWS / EXTERIOR DOORS, EXTERIOR CLADDING, ACCESSORIES, AND ROOFING SYSTEMS SHALL BE SELECTED AND INSTALLED AS REQUIRED TO ACCOMMODATE ALL SITE AND INSTALLATION CONDITIONS, INCLUDING SITE WIND SPEED, EXPOSURE CATEGORY AND MEAN ROOF HEIGHT. CONTRACTOR TO COORDINATE ALL REQUIREMENTS WITH PRODUCT MANUFACTURER FOR PERFORMANCE AND INSTALLATION REQUIREMENTS. INSTALLING CONTRACTOR TO VERIFY SUITABILITY OF ALL PRODUCTS. SEE OUTLINE SPECIFICATIONS FOR ADDITIONAL INFORMATION. THE CONTRACTOR IS TO PROVIDE SUBMITTALS TO THE ARCHITECT, FOR REVIEW.

7. ALL ROOF COVERINGS INSTALLED ON A PITCHED ROOF WITH A SLOPE LESS THAN 2/12 SHALL BE CONSIDERED A FLAT ROOF APPLICATION. PROVIDE A SINGLE PLY MEMBRANE ROOFING SYSTEM FULLY ADHERED TO DECK OR MODIFIED BITUMEN MEMBRANE WITH MINERAL GRANULAR SURFACE, METAL Drip EDGE AND FLASHING AS REQUIRED. FOLLOW THE MANUFACTURERS INSTALLATION INSTRUCTIONS. PROVIDE 1/2" / 1'-0 (MIN.) PITCH TO DRAIN.

8. ALL ROOF SHINGLES INSTALLED ON A PITCHED ROOF WITH A SLOPE BETWEEN 2/12 AND 4/12 SHALL BE CONSIDERED A LOW SLOPE APPLICATION AND SHALL FOLLOW THE MANUFACTURES INSTALLATION INSTRUCTIONS. SEE DETAIL FOR ADDITIONAL INFORMATION.

9. ALL METAL ROOFS SHALL BE INSTALLED AS PER MANUFACTURERS INSTALLATION INSTRUCTIONS. SEE OUTLINE SPECIFICATIONS FOR ADDITIONAL INFORMATION.

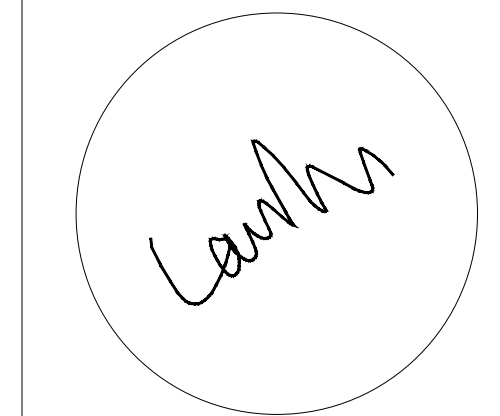


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10 RIDGE ROAD
WEST ORANGE, NJ

NO.	REVISION	BY	DATE
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EXTERIOR
ELEVATIONS

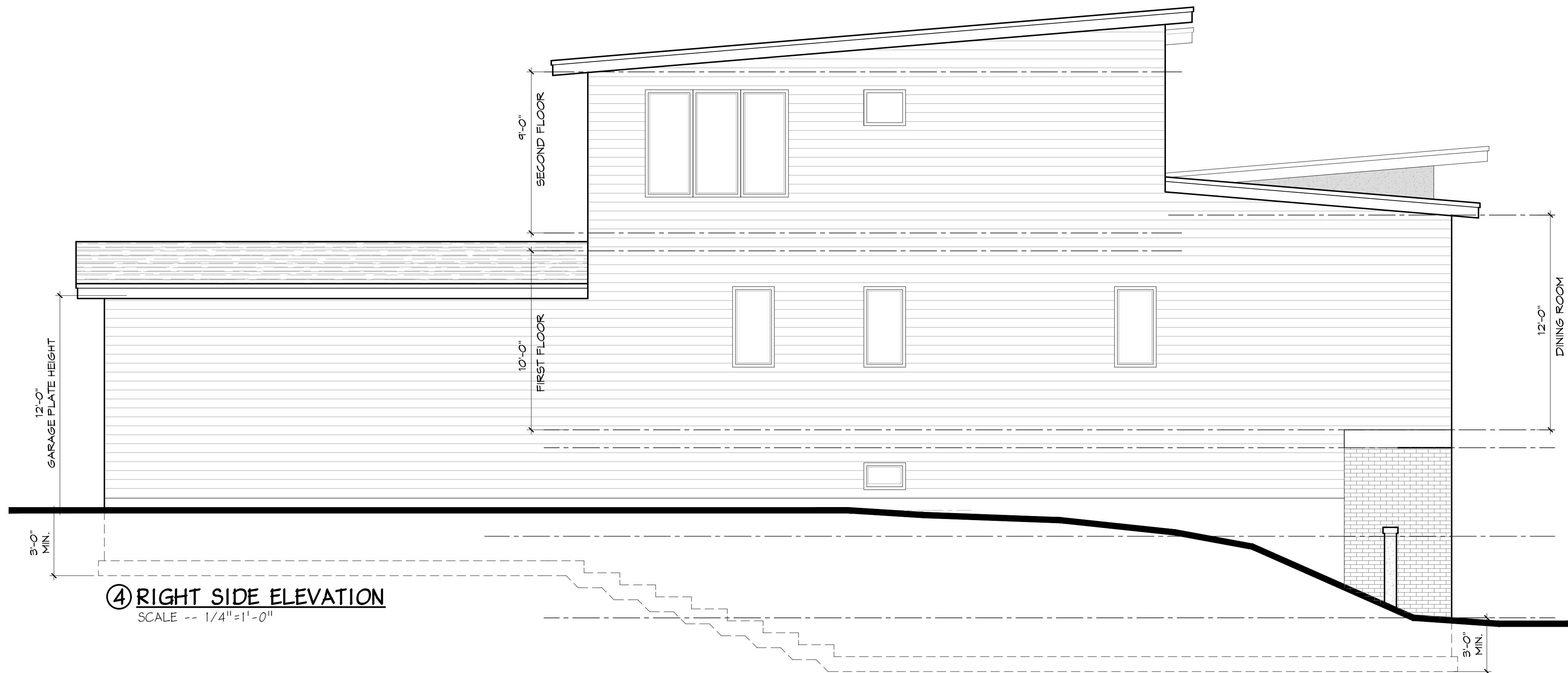
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CHECKED BY: CS
CLIENT: FRIEDMAN, AARON
DATE: 3-8-24

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A-01
COMM. #: 14290

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③ REAR ELEVATION
SCALE -- 1/4"=1'-0"



④ RIGHT SIDE ELEVATION
SCALE -- 1/4"=1'-0"

FLASHING NOTES

(REVISED 2-20-2023)

1. CORROSION RESISTANT FLASHING SHALL BE INSTALLED TO PROVIDE A COMPLETE WEATHER-TIGHT BUILDING ENVELOPE AND ALLOW MOVEMENT OF ADJACENT BUILDING COMPONENTS AS REQUIRED. FOLLOW THE RECOMMENDATIONS OF THE ROOF, SIDING, WINDOW, DOOR, ETC. MANUFACTURER.

AT A MINIMUM PROVIDE:

- RIGID CORROSION RESISTANT FLASHING TO BE INSTALLED AT ALL OF THE FOLLOWING LOCATIONS:
 - AT TOP OF ALL WINDOW AND DOOR OPENINGS
 - AT THE INTERSECTION OF MASONRY CONSTRUCTION WITH FRAME OR STUCCO WALLS.
 - UNDER AND AT THE ENDS OF MASONRY, WOOD OR METAL COPINGS AND SILLS.
 - CONTINUOUSLY ABOVE ALL PROJECTING TRIM.
 - WHERE EXTERIOR PORCHES, DECKS OR STAIRS ATTACH TO A WALL OR FLOOR ASSEMBLY OF WOOD-FRAME CONSTRUCTION.
 - AT ROOF OPENINGS
 - AT CHANGE IN ROOF SLOPE OR DIRECTION.
 - AT WALL AND ROOF INTERSECTIONS (PROVIDE DIVERTER/KICK-OUT FLASHING.)

SELF-ADHERED FLASHING SYSTEM TO BE INSTALLED AT ALL OF THE FOLLOWING LOCATIONS TO PROVIDE A WEATHER-TIGHT (LEAKPROOF) CONDITION.

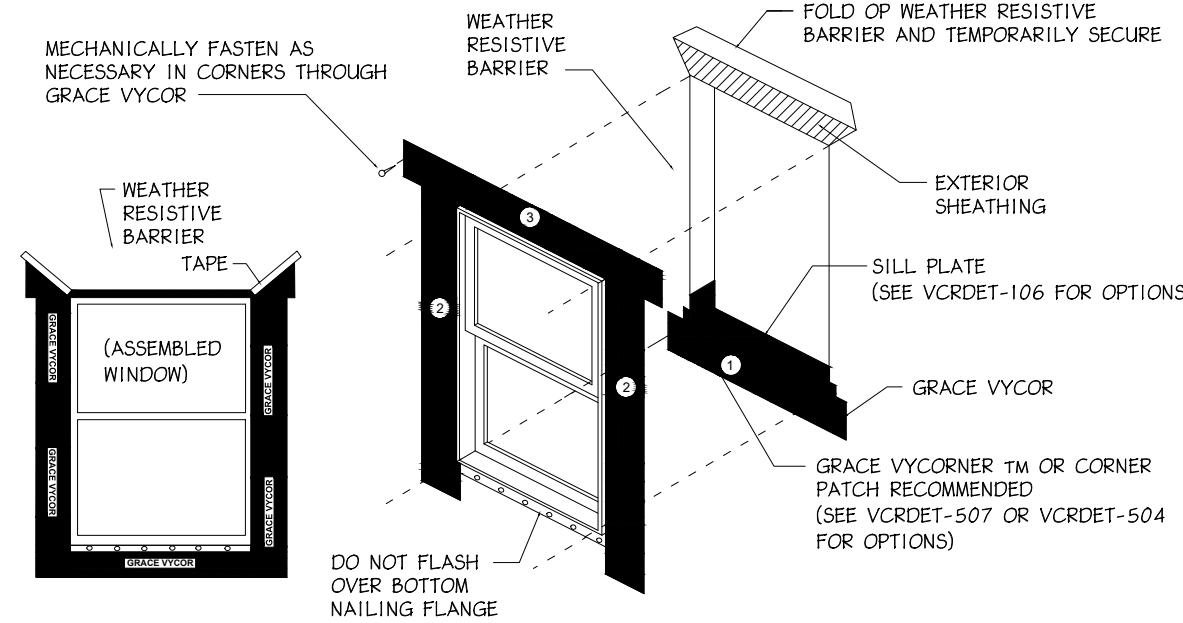
- WINDOW PENETRATIONS
- DOOR PENETRATIONS
- SIMILAR PENETRATIONS
- AT WALL AND ROOF INTERSECTIONS (SEE ROOF NOTES)

2. WHERE VALLEYS INTERSECT VERTICAL WALLS OR OTHER OBSTRUCTIONS, CONSTRUCT CRICKET AS REQUIRED.

3. PROVIDE ICE AND WATER SHIELD, 1'-6" (MINIMUM) UP WALLS AND ON TO ROOF WHERE ROOFS MEET WITH WALLS OR OTHER OBSTRUCTIONS. PROVIDE METAL FLASHING OVER.

4. PROVIDE METAL DRIP EDGES AND ALL OTHER ACCESSORIES REQUIRED BY FLASHING MANUFACTURER TO PROVIDE WATER TIGHT INSTALLATION. CONTRACTOR TO OBTAIN LETTERS OF COMPATIBILITY FOR AIR BARRIER, INSULATION, AND FLASHING PRODUCTS.

5. DETAILS ILLUSTRATED UTILIZE 'GRACE' PRODUCTS (FLASHING AND WATERPROOFING PRODUCTS BY OTHER MANUFACTURERS THAT ARE EQUAL OR BETTER MAY BE SUBSTITUTED.)



HEAD FLASHING TIE-IN INSTRUCTIONS:

1. CUT, FOLD UP & TEMPORARILY SECURE WEATHER RESISTIVE BARRIER ABOVE HEADER TO ALLOW FOR FLASHING INSTALLATION
2. INSTALL GRACE VYCOR HEAD FLASHING UNDER WEATHER RESISTIVE BARRIER ALONG HEADS
3. FOLD WEATHER RESISTIVE BARRIER BACK OVER HEAD FLASHING AND SEAL WITH TAPE AS SHOWN ABOVE

NOTES:

- A. VISIT GRACECONSTRUCTION.COM FOR THE MOST CURRENT DETAILS, INSTALLATION VIDEO AND PRODUCT DATA SHEETS
- B. RUPCORU CAN BE REMOVED FROM GRACE VYCOR FOR EASE OF INSTALLATION
- C. REMOVE WEATHER RESISTIVE BARRIER FROM TOP OF WINDOW SILL PLATE
- D. INSTALL GRACE VYCOR IN ORDER AS SHOWN BY NUMBERS
- E. INSTALL GRACE VYCOR AND WEATHER RESISTIVE BARRIER TO FORM WATER-SHEEDING LAPS
- F. DETAIL ALSO RELEVANT FOR GRACE VYCOR V40 AND VYCOR PRO

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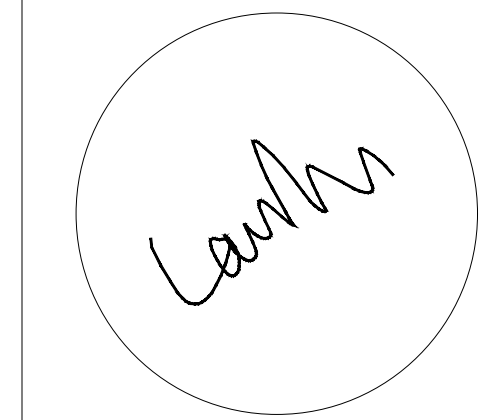


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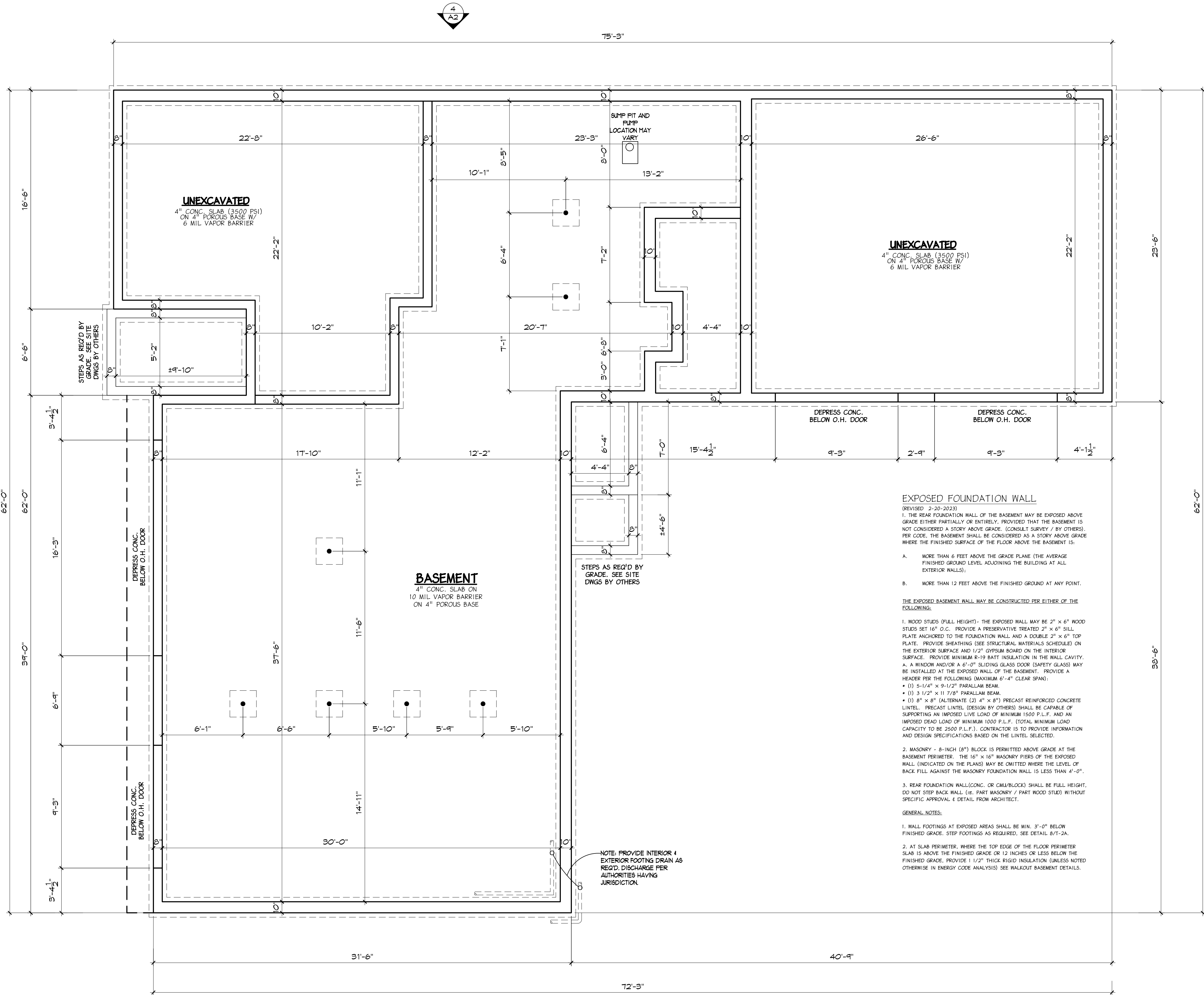
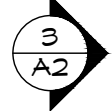
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FOUNDATION PLAN

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

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GENERAL FOUNDATION NOTES

(REVISED 2-20-2023)

FOOTINGS NOTES - GENERAL

1. ALL CONCRETE SHALL BE MINIMUM 3500 P.S.I. MIX.
2. UNLESS NOTED OTHERWISE ON THE PLANS, WALL FOOTINGS SHALL BE MINIMUM 10-INCHES DEEP CONCRETE WITH A MINIMUM 4-INCH PROJECTION AT EACH SIDE OF THE MASONRY FOUNDATION WALLS. PROVIDE DONELS OR KEY WAY PER DRAWING T-2A.
3. FOOTINGS FOR MASONRY CHIMNEYS SHALL BE MINIMUM 12-INCHES DEEP WITH MINIMUM 6-INCH PROJECTIONS (SEE DRAWING R-1 FOR ADDITIONAL INFORMATION REGARDING REQUIREMENTS FOR MASONRY FIREPLACES).
4. STEEL COLUMN FOOTINGS SHALL BE MINIMUM 24-INCHES X 24-INCHES X 12-INCHES DEEP UNLESS NOTED OTHERWISE ON THE PLAN.
5. ALL FOOTINGS TO REST ON FIRM BEARING. MINIMUM TWO-TON (4000#) SOIL BEARING CAPACITY. NOTIFY ARCHITECT IF FOUNDATION OR SLAB IS TO BE PLACED ON EXPANSIVE SOILS.
6. WHERE SOIL CONDITIONS REQUIRE THE INSTALLATION OF 1/2" DIAMETER OR LARGER REINFORCING BARS IN THE SPREAD FOOTINGS, ONE OF THE BARS SHALL BE USED AS A CONDUCTIVE GROUNDING ELECTRODE SYSTEM. GROUNDING REBAR SHALL HAVE A MINIMUM OF 20' CONTINUOUS LENGTH (SEE NJUCC BULLETIN NO. 02-2).
7. SEE CLIMATIC AND GEOGRAPHIC CRITERIA CHART, DRAWING "C-1" FOR FROST LINE DEPTH. ALL FOOTINGS INCLUDING BUILDING, PORCH, PLATFORM AND MASONRY STEPS SHALL BE LOCATED BELOW FROST LINE DEPTH. STEP FOOTINGS AS REQUIRED TO ACCOMMODATE ACTUAL GRADING CONDITIONS (SEE DETAIL 8/T-2A). SEE SITE PLANS FOR ADDITIONAL AND RELATED INFORMATION.
8. CONSULT DRAWING R-1 FOR INFORMATION REGARDING FOUNDATION REQUIREMENTS FOR MASONRY FIREPLACES.

- 1A. ALL PORCH, STAIR, CARPORT AND GARAGE SLABS SHALL BE MIN. 4" THICK POURED CONCRETE (MINIMUM 3500 P.S.I. MIX) OVER 4" POROUS BASE OVER COMPACTED SUB-GRADE.
2. DAMPROOF SLAB WITH WITH CLASS-I RETARDER, 6-MIL VAPOR BARRIER (SEE SHEET S-1 FOR ADDITIONAL INFORMATION). OVERLAP A MINIMUM OF 6" AND EXTEND 6" UP STEM WALL, LAP AND SEAL ALL EDGES TO MANUFACTURER'S SPECIFICATION INSTRUCTIONS.
3. PROVIDE 6 X 6 #10 WELDED WIRE MESH AS REQUIRED BY LOCAL GROUND CONDITIONS.

CONCRETE SLABS - BASEMENT

1. UNLESS NOTED OTHERWISE, ALL INTERIOR SLABS SHALL BE 2" THICK POURED CONCRETE (MINIMUM 3000 P.S.I. MIX) OVER 4" POROUS BASE OVER COMPACTED SUB-GRADE.
2. DAMPROOF SLAB WITH WITH CLASS-I RETARDER, 6-MIL VAPOR BARRIER (SEE SHEET S-1 FOR ADDITIONAL INFORMATION). OVERLAP A MINIMUM OF 6" AND EXTEND 6" UP STEM WALL, LAP AND SEAL ALL EDGES TO MANUFACTURER'S SPECIFICATION INSTRUCTIONS.
3. PROVIDE 6 X 6 #10 WELDED WIRE MESH AS REQUIRED BY LOCAL GROUND CONDITIONS.

SILL PLATE - GENERAL

1. SILL PLATE SHALL BE PRESERVATIVE TREATED OR NATURALLY DURABLE LUMBER. PROVIDE (1) 2" X 6" MEMBER AT BASEMENTS AND (1) 2" X 4" MEMBER AT SLAB-ON-GRADE PERIMETERS.
2. SECURE WITH ROUND ANCHOR BOLTS. REFER TO DWG. "C-1" SHEAR WALL CONSTR. AND SOLE/SILL CONNECTION. (MINIMUM 3" BOLTS @ 6'-0" O.C. UNLESS OTHERWISE NOTED). PROVIDE MIN. OF (2) BOLTS PER PLATE SECTION. LOCATE A MIN. OF (3) 1/2") AND A MAXIMUM OF (12") IN FROM ENDS OF PLATES. LOCATE IN THE MIDDLE THIRD OF THE WIDTH OF THE PLATE. PROVIDE MINIMUM 7-INCHES EMBEDMENT INTO FOUNDATION BELOW. PROVIDE A NUT AND WASHER ON EACH BOLT. OPTION - PROVIDE APPROVED METAL STRAP ANCHORS AS REQUIRED TO TO MAINTAIN EQUIVALENT ANCHORAGE OF BOLTS (SIMPSON "MAB2" @ 5'-6" O/C OR "MAB23" @ 2'-9" O/C OR "MASA" @ 6'-0" O/C) INSTALL PER MFR.'S WRITTEN INSTRUCTIONS.
3. CONTRACTOR TO SUBMIT SPECIFICATIONS AND DETAILS BASED ON THE EXACT SYSTEM USED.
4. PROVIDE SILL SEALER.
5. FOR ALL AGO PRESSURE TREATED LUMBER, ALL METAL CONNECTORS, BOLTS, NAILS, ANCHORS, ETC. SHALL BE EITHER HOT DIPPED TRIPLE ZINC COATED OR STAINLESS STEEL. ALL FLASHING SHALL BE COPPER, STAINLESS STEEL OR PROVIDE SLIP SHEET TO PERMANENTLY ISOLATE ALUMINUM FLASHING FROM PRESSURE TREATED LUMBER.

FOUNDATION DRAINAGE NOTES - BASEMENT

1. A DRAIN SHALL BE PLACED AROUND THE PERIMETER OF THE BASEMENT OR CRAWL SPACE FOUNDATIONS AND SHALL CONSIST OF EITHER OF THE FOLLOWING:
(A.) GRAVEL OR CRUSHED STONE CONTAINING NOT MORE THAN TEN PERCENT MATERIAL THAT PASSES A NO. 4 SIEVE OR
(B.) A DRAIN TILE OR PERFORATED PIPE MAY BE USED IF PLACED ON NOT LESS THAN 2" OF GRAVEL OR CRUSHED STONE AND COVERED WITH 6" OF THE SAME MATERIAL. THE INVERT OF THE PIPE OR TILE SHALL NOT BE HIGHER THAN THE FLOOR BASE ELEVATION.
2. THE TOPS OF ANY/ALL DRAINS USED SHALL BE COVERED WITH AN APPROVED FILTER MEMBRANE.
3. PROVIDE A SUMP PIT. PROVIDE A SUMP PUMP AS REQUIRED.
4. THE FLOOR BASE AND PERIMETER DRAIN SHALL DISCHARGE BY GRAVITY OR MECHANICAL MEANS INTO AN APPROVED DRAINAGE SYSTEM THAT COMPLIES WITH STATE AND LOCAL CODES.
5. WHERE HYDROSTATIC PRESSURE DOES NOT OCCUR, PROVIDE DAMPROOFING OF ALL WALLS BELOW GRADE WITH BITUMINOUS MATERIAL OR WATERPROOFING MATERIALS. WHERE FIELD CONDITIONS INDICATE THE POTENTIAL FOR WATER INTRUSION, PROVIDE AN APPROVED WATER PROOFING SYSTEM.

BASEMENT FOUNDATION: CONCRETE.

(REVISED 2-20-23)

1. PERIMETER CRAWLSPACE WALL & FOUNDATION WALL FOR THE GARAGE SHALL BE MINIMUM 8-INCHES THICK POURED-IN-PLACE CONCRETE. SEE WALL THICKNESS CHART FOR MAXIMUM PERMITTED UNBALANCED FILL AND REINFORCEMENT.
2. ALL CONCRETE SHALL BE MINIMUM 3500 P.S.I. MIX. WHERE FOUNDATION WALLS ARE EXPOSED TO WEATHER, PROVIDE AIR ENTRAINED CONCRETE MIX.
3. GIRDER POCKETS SHALL BE CONSTRUCTED PER THE DETAILS AS SOLID REINFORCED CONCRETE MEMBERS (SEE PLANS AND DETAILS).
4. CONSULT SECTIONS AND DETAILS ON DWG. T-2B..
5. PROVIDE AREAWAYS AS REQUIRED AT ALL BASEMENT SASH. PROVIDE PROPER DRAINAGE BY CONNECTING TO FOUNDATION DRAINAGE SYSTEM.
6. PROVIDE AREAWAYS AS REQUIRED AT ALL EMERGENCY ESCAPE AND RESCUE OPENINGS. (REFER TO BASEMENT EGRESS AREAWAY NOTES FOR ADDITIONAL INFORMATION)

FOUNDATION WALLS (SOLID CONCRETE - POURED IN PLACE)

(REVISED 2-20-2023)

CONSTRUCT WALL IN ACCORDANCE WITH MINIMUM STANDARD AS PER SECTION R400 OF THE I.R.C. OF NJ

WALL HEIGHT MEASURED FROM TOP OF SLAB TO TOP OF SILL PLATE	MAXIMUM DEPTH OF UNBALANCED FILL	8" NOMINAL WALL THICKNESS (FOR THE FULL HEIGHT OF WALL) (* SEE NOTE # 2)		
		GW, GP, SW, SP SOIL (SOIL LOAD 30 PSF)	GM, GC, SM, SW-SC, ML SOIL (SOIL LOAD 45 PSF)	SC, MH, ML-CL AND INORGANIC CL SOIL (SOIL LOAD 60 PSF)
7'-8" +/- (8'-0" NOMINAL)	5'-0" OR LESS 6'-0" 7'-0" 8'-0"	UNREINFORCED UNREINFORCED UNREINFORCED # 4 BARS @ 16" O.C.	UNREINFORCED UNREINFORCED UNREINFORCED # 4 BARS @ 16" O.C.	UNREINFORCED # 4 BARS @ 12" O.C. # 4 BARS @ 12" O.C. (2) #4 BARS @ 16" O.C.
8'-8" +/- (9'-0" NOMINAL)	6'-0" OR LESS 7'-0" 8'-0" 9'-0"	UNREINFORCED UNREINFORCED UNREINFORCED # 4 BARS @ 16" O.C.	UNREINFORCED # 4 BARS @ 12" O.C. # 4 BARS @ 12" O.C. (2) #4 BARS @ 16" O.C.	UNREINFORCED # 4 BARS @ 12" O.C. # 4 BARS @ 12" O.C. (2) #4 BARS @ 16" O.C.

WALL HEIGHT MEASURED FROM TOP OF SLAB TO TOP OF SILL PLATE	MAXIMUM DEPTH OF UNBALANCED FILL	10" NOMINAL WALL THICKNESS (FOR THE FULL HEIGHT OF WALL) (* SEE NOTE # 2)		
		GW, GP, SW, SP SOIL (SOIL LOAD 30 PSF)	GM, GC, SM, SW-SC, ML SOIL (SOIL LOAD 45 PSF)	SC, MH, ML-CL AND INORGANIC CL SOIL (SOIL LOAD 60 PSF)
7'-8" +/- (8'-0" NOMINAL)	5'-0" OR LESS 6'-0" 7'-0" 8'-0"	UNREINFORCED UNREINFORCED UNREINFORCED # 4 BARS @ 16" O.C.	UNREINFORCED UNREINFORCED UNREINFORCED # 4 BARS @ 12" O.C.	UNREINFORCED UNREINFORCED UNREINFORCED (2) #4 BARS @ 16" O.C.
8'-8" +/- (9'-0" NOMINAL)	6'-0" OR LESS 7'-0" 8'-0" 9'-0"	UNREINFORCED UNREINFORCED UNREINFORCED # 4 BARS @ 16" O.C.	UNREINFORCED # 4 BARS @ 12" O.C. # 4 BARS @ 12" O.C. (2) #4 BARS @ 16" O.C.	UNREINFORCED # 4 BARS @ 12" O.C. # 4 BARS @ 12" O.C. (2) #4 BARS @ 16" O.C.

HORIZONTAL REINFORCING 8" & 10" NOMINAL WALL THICKNESS (* SEE NOTE # 7)			
MINIMUM REINFORCING	8" WALL	# 4 BARS @ 24" O.C.	# 4 BARS @ 16" O.C.
	10" WALL	# 4 BARS @ 16" O.C.	(2) #4 BARS @ 24" O.C.
RECOMMENDED REINFORCING			
	8" WALL	# 4 BARS @ 16" O.C.	(2) #4 BARS @ 24" O.C.
	10" WALL	# 4 BARS @ 16" O.C.	(2) #4 BARS @ 24" O.C.

1. CONTRACTOR TO SUBMIT SOILS DATA TO ARCHITECT FOR REVIEW.
2. THE DEPTH OF UNBALANCED FILL SHALL BE MEASURED FROM THE TOP OF THE FOOTING TO THE ACTUAL FINISHED GRADE AT FACE THE WALL. MEASURE TO THE TOP OF SLAB WITH THE POURED SLAB TIGHT OPTION.
3. 6" THICK CONCRETE WALL PERMITTED BEHIND BRICK VENEER. GROUT SOLID BETWEEN BRICK AND WALL (CONSULT DWG. T-2B). PROVIDE 10" THICK WALL BELOW BRICK LEDGE.
4. MAXIMUM DEPTH OF UNBALANCED FILL BASED ON USING BACKFILL. AS PER INDICATED SOIL CLASSIFICATIONS.
5. CONSULT ARCHITECT BEFORE PROCEEDING WITH CONSTRUCTION WHEN THE WALL HEIGHTS, DEPTH OF FILL, HYDROSTATIC CONDITIONS OR SOIL TYPES ARE DIFFERENT THAN INDICATED.
6. THE MAXIMUM LENGTH OF POUR SHALL BE 25'-0".
7. UPPER 12" OF WALL SHALL HAVE (2) # 4 BARS HORIZONTAL (MINIMUM)
8. SEE "BASEMENT FOUNDATION: CONCRETE" NOTES FOR ADDITIONAL INFORMATION.
9. NOTIFY ARCHITECT FOR ADDITIONAL INFORMATION AND DETAILS WHEN FINISH GRADE IS CLOSER THAN 8" TO WOOD FRAME CONSTRUCTION.
10. SEE FOUNDATION PLAN & DETAILS FOR REINFORCING TO BE INSTALLED AROUND ALL BASEMENT SASH WINDOWS & OTHER OPENINGS IN FOUNDATION WALLS.



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NY - 0250/B
PA - RA-04580-B

FOUNDATION PLAN

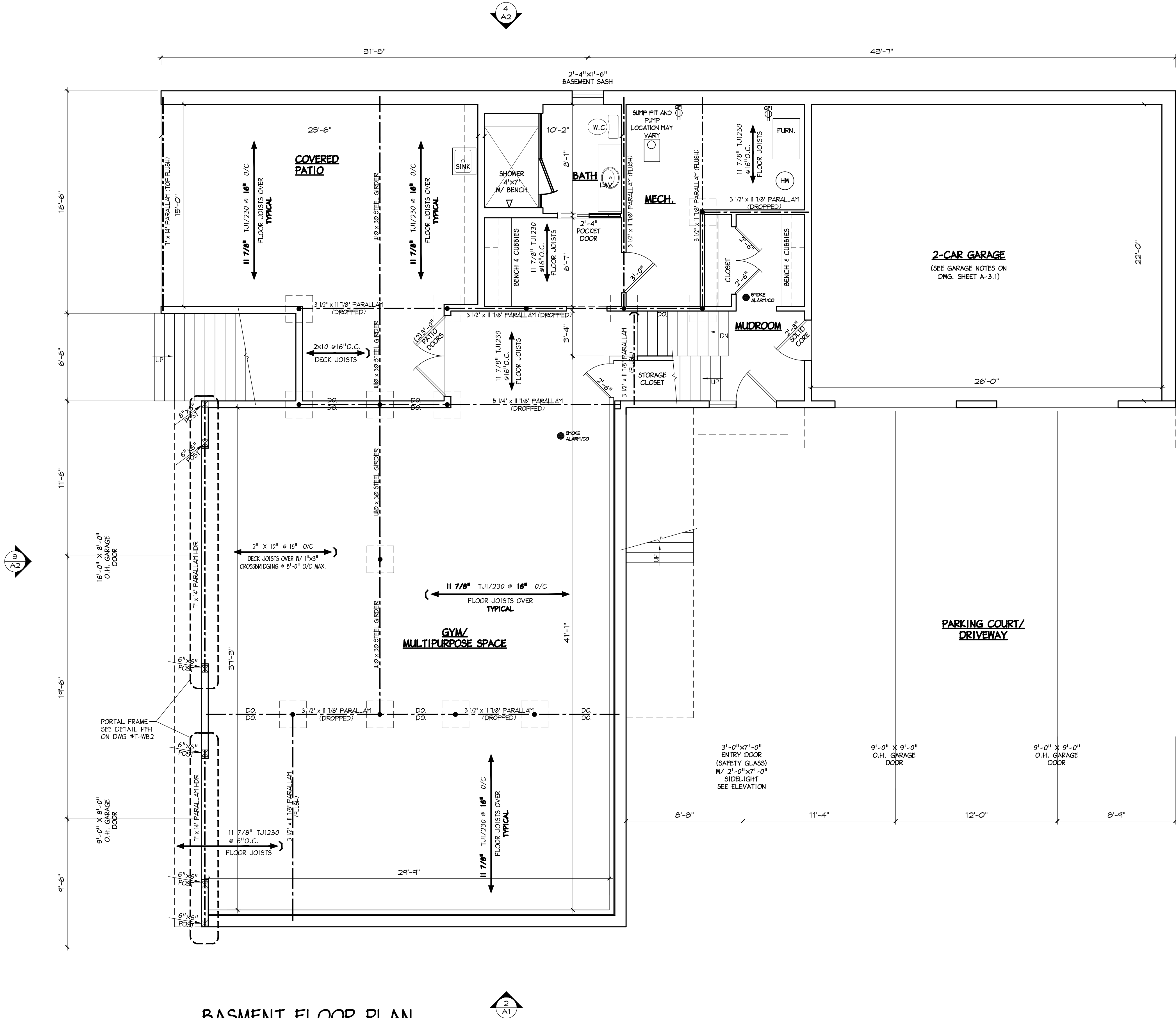
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COMM. #: 14290

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BASMENT FLOOR PLAN

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

GARAGE AREA = 635 SF
MUDROOM AREA = 132 SF
BASEMENT AREA = 1,677 SF
COVERED PATIO = 458 SF

ISSUE FOR PERMIT ONLY
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OPTIONAL FINISHED BASEMENT NOTES: (REVISED 2-20-2023)

PERIMETER WALLS: (SEE DETAIL.)

1. OPTION: THE EXTERIOR WALLS SHALL BE COATED WITH AN APPROVED MASONRY, CEMENT BASED, WATERPROOFING COATING (THOROSEAL OR EQUAL), AS REQUIRED.
2. 2"x4" WOOD STUDS AT 16" O.C. PROVIDE PRESERVATIVE TREATED BASE PLATE AND SILL SEALER ANCHORED TO THE CONCRETE SLAB AND HELD 1/2". MINIMUM FROM BLOCK WALLS. ALTERNATE: 3-5/8" 25 GAUGE STEEL STUDS AT 16" O.C. - OBTAIN APPROVAL FROM OWNER AND / OR ARCHITECT.
3. THE INTERIOR FINISH SHALL BE 1/2" GYPSUM BOARD TAPED, SPACKLED, AND PAINTED.
4. PROVIDE INSULATION WITH VAPOR BARRIER AT ALL EXTERIOR PERIMETER WALLS. SEE SPECIFICATIONS AND CURRENT MODEL ENERGY CODE COMPLIANCE. CONSULT ARCHITECT FOR SPECIFIC REQUIREMENTS BASED ON ACTUAL FIELD CONDITIONS.

INTERIOR PARTITION WALLS: (SEE DETAIL.)

1. ALL WALLS SHALL BE SECURED AT THE TOP AND THE BOTTOM.
2. THE INTERIOR FINISH SHALL BE 1/2" GYPSUM BOARD TAPED, SPACKLED, & PAINTED.
3. WALL CONSTRUCTION SHALL BE PER EITHER OF THE FOLLOWING:
A. 2"x4" WOOD STUDS AT 16" O.C. PROVIDE PRESERVATIVE TREATED BASE PLATE ANCHORED TO THE CONCRETE SLAB, OR
B. 3-5/8" 25 GAUGE METAL STUDS AT 16" O.C.
4. OPTION: PROVIDE SOUND BATTS IN THE WALL CAVITY AROUND BATHROOMS OR OTHER AREAS SUBJECT TO NOISE.

FLOOR:

1. CARPET (NIC) - BY OWNER, THOROUGHLY CLEAN FLOOR SLAB WITH MILDEWICIDE AND PROVIDE SEALER OVER CONCRETE PRIOR TO INSTALLATION OF CARPET.
2. CERAMIC TILE: THIN SET ASSEMBLY PER TCA SPECIFICATIONS. - PROVIDE COORDINATED TILE ACCESSORIES INCLUDING C.T., BASE, BULLNOSE, ETC. AS REQUIRED FOR A COMPLETE INSTALLATION.

CEILING:

1. CEILING HEIGHTS: HOLD CEILING HEIGHT AS CLOSE AS POSSIBLE TO THE EXISTING FRAMING. OBTAIN APPROVAL OF OWNER AND / OR ARCHITECT OF ANY CEILING HEIGHT LOWER THAN 7'-6". PROVIDE CEILING IN ALL HABITABLE ROOMS (SPACES) INCLUDING CLOSETS.
2. PROVIDE 2"x2" SUSPENDED ACOUSTICAL TILE CEILING SYSTEM. (OPT. 2X4) SUSPENDED CEILING SYSTEM: 2"x2"x3/4" ARMSTRONG (STYLE AS SELECTED) LAY-IN TILE IN 9/16" EXPOSED TEE GRID. COLOR = WHITE OR APPROVED EQUAL.
- 2A. PROVIDE DRAFTSTOPPING IN THE CEILING PLENUM TO PROVIDE APPROXIMATELY EQUAL SPACES NOT TO EXCEED 1000 SQ. FT. DRAFTSTOPPING MAY BE 1/2" GYPSUM BOARD OR 1/2" STRUCTURAL PANELS, SECURELY FASTENED.
3. PROVIDE 1/2" GYPSUM BOARD (TAPE AND SPACKLE) ON THE UNDERSIDE OF THE BEAMS AND OBSTRUCTIONS (DUCT OR PIPE ENCLOSURES SHALL BE FIRE STOPPED) TO FORM UNIFORMLY DIMENSIONED SOFFIT AS INDICATED. CONFIGURATION OF DROPPED GYPSUM BOARD SOFFITS SHALL BE COORDINATED IN THE FIELD.
4. TILES SHALL BE CENTERED AND ALIGNED AS CLOSELY AS POSSIBLE IN OPEN AREAS AND TO PERMIT PLACEMENT OF RECESSED LIGHTING FIXTURES. COORDINATE IN FIELD.
5. OPTION: PROVIDE SOUND BATTS IN THE FLOOR CAVITY ABOVE ALL FINISHED BASEMENT SPACES.

OPTIONAL FINISHED BASEMENT NOTES: (CONT.)

(REVISED 2-20-2023)

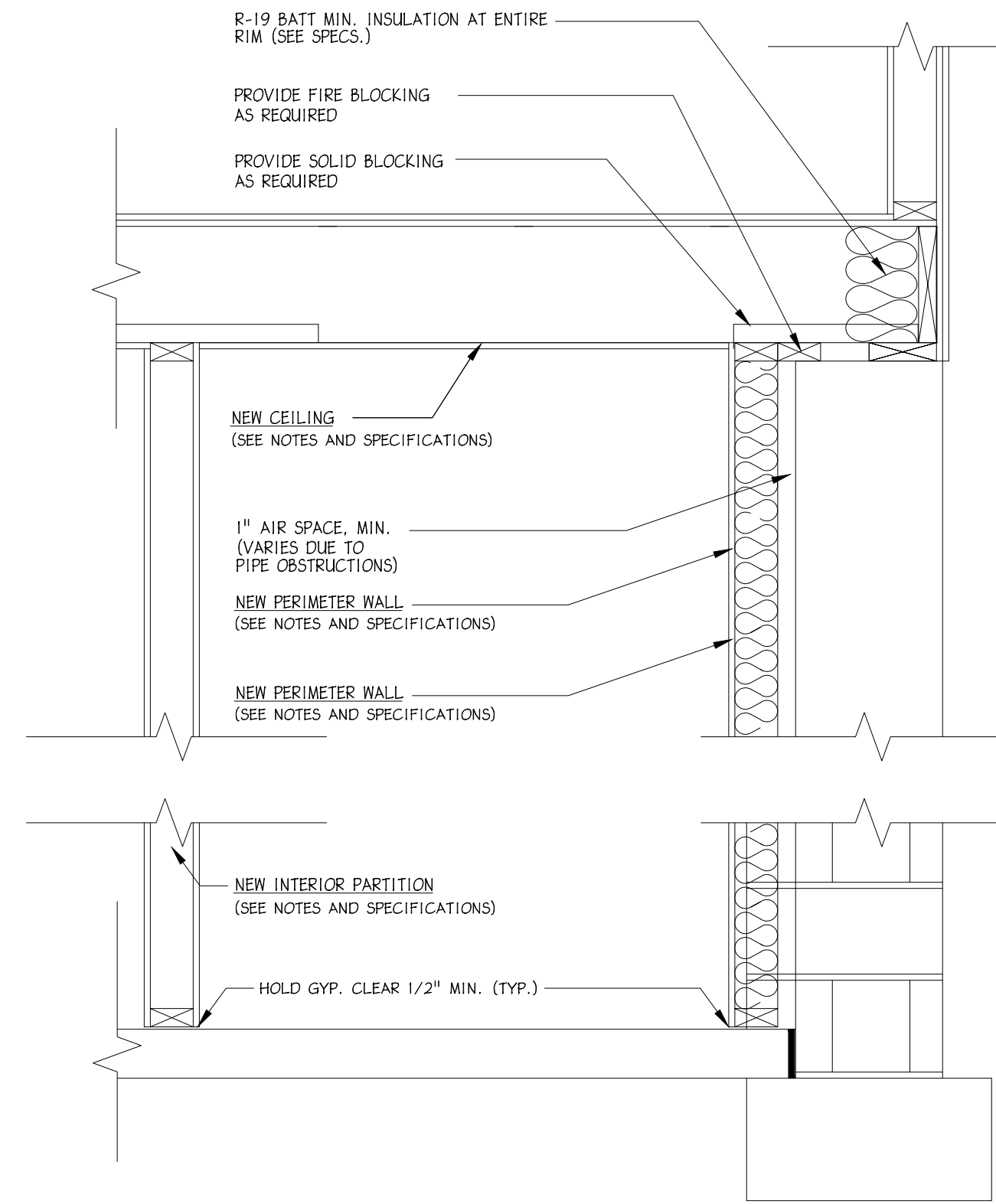
BASEMENT FLOOR PLAN NOTES:

- B1. CONTRACTOR SHALL NOTIFY ARCHITECT OF ANY WATER AND/OR MOISTURE PROBLEMS PRIOR TO STARTING ANY WORK.
- B2. ALL FLOOR PLAN LAYOUTS SHALL BE CONFIRMED IN THE FIELD PRIOR TO ERECTION OF WALLS. MECHANICAL/ELECTRICAL/PLUMBING CONTRACTORS TO CONFIRM REQUIRED CLEARANCE TO ALL MECHANICAL EQUIPMENT, ELECTRICAL PANELS, & PIPING AS REQUIRED.
- B3. ALL FUEL BURNING APPLIANCES SHALL BE PROVIDED W/ MAKE-UP COMBUSTION AIR. PROVIDE A FULL LOVERED DOOR UNLESS OTHER METHODS ARE SPECIFIED OR APPROVED BY ARCHITECT. PROVIDE LOUVER WITH A FREE AREA OF MINIMUM 1 SQ. IN. PER 1000 BTU/S/HR OF ALL ENCLOSED EQUIPMENT.
- B4. IN TIER 1 RADON AREAS, NOTIFY ARCHITECT PRIOR TO PROCEEDING FOR RECOMMENDED RADON REMEDIATION PROCEDURES.
- B5. BUILDER TO PROVIDE DETAILS AND SPECIFICATIONS FOR HVAC SYSTEMS.
- B6. SLEEPING AREAS AS PART OF A FINISHED BASEMENT SHALL BE PROVIDED WITH AN APPROVED EMERGENCY ESCAPE AND RESCUE OPENING WITH A NET CLEAR OPENING OF NOT LESS THAN 5.0 SF. MINIMUM CLEAR HEIGHT OF 24", MINIMUM CLEAR WIDTH OF 20" AND SILL HEIGHT OF NOT MORE THAN 44" ABOVE FLOOR.
- B6A. PROVIDE WINDOW WELL OR BULKHEAD ENCLOSURE AS REQUIRED BY GRADE. WINDOW WELLS REQUIRED FOR EMERGENCY ESCAPE WITH A VERTICAL DEPTH GREATER THAN 44 INCHES BELOW THE ADJACENT GROUND LEVEL SHALL BE PROVIDED WITH A PERMANENT LADDER OR STEPS. WELL MINIMUM DIMENSIONS SHALL BE 9 SQ. FT. WITH A MINIMUM HORIZONTAL PROJECTION AND WIDTH OF 36" (LADDER AND STEPS TO COMPLY WITH IRC R310.3.1).
- B6B. PROVIDE DRAINAGE BY CONNECTING TO FOUNDATION DRAINAGE SYSTEM.
- B6C. MAINTAIN 36" CLEAR HEIGHT BELOW DECK OR PORCH.

GARAGE NOTES -

(ATTACHED / NO LIVING SPACE ABOVE) - NEW JERSEY
(REVISED 02-20-2023)

1. 4" CONCRETE FLOOR SLOPED 4" TO OVERHEAD DOORS.
2. CONCRETE USED FOR FLOOR MINIMUM 3500 P.S.I. AIR-ENTRAINED MIX. PROVIDE 6 x 6 #10 WELDED WIRE MESH AS REQUIRED BY LOCAL GROUND CONDITIONS.
3. PROVIDE A 6 MIL VAPOR BARRIER BELOW THE CONCRETE FLOOR SLAB.
4. THE PERIMETER EXTERIOR WALLS, CEILING, AND DROPPED GIRDER OF THE GARAGE SHALL BE PROTECTED WITH (1) LAYER OF 1/2" GYPSUM BOARD, TAPED AND SPACKLED.
5. THE PARTITION BETWEEN THE GARAGE AND THE ADJACENT LIVING SPACE SHALL BE PROTECTED WITH FIRE-RATED CONSTRUCTION. SEE DETAIL 6/T-1A OR 6/T-1B.
6. ALL HVAC DUCTS SHALL BE SEPARATED FROM THE GARAGE BY FIRE-RATED CONSTRUCTION. SEE DETAIL 9-T-1A OR 9/T-1B.
7. THE STEP UP FROM THE GARAGE TO THE LIVING SPACE SHALL BE 4" MINIMUM.
8. DOOR BETWEEN GARAGE AND HOUSE SHALL BE:
1 3/8" (MIN.) SOLID CORE WOOD OR
1 3/8" (MIN.) HONEYCOMB CORE STEEL OR
20 MINUTE FIRE RATED DOOR
9. GARAGE DOOR: STYLE AS SELECTED. PROVIDE MANUFACTURER'S STANDARD OVERHEAD DOOR CONFORMING WITH ASTM E330 OR ANSI/DASMA 108. ELECTRIC DOOR CLOSERS ARE OPTIONAL AND SHALL BE EQUIPPED WITH APPLICABLE SAFETY & AUTO REVERSING FEATURES.



1 PARTIAL WALL SECTION
SCALE ---- 1" = 1'-0"

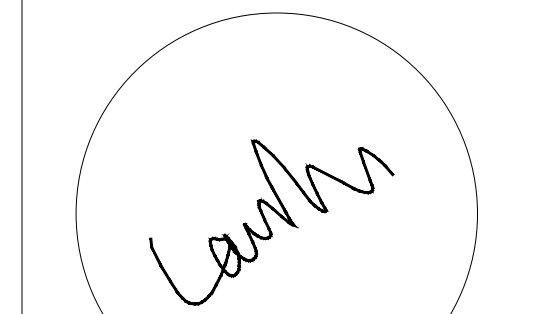


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SINGLE FAMILY HOME
FRIEDMAN RESIDENCE
10 RIDGE ROAD
WEST ORANGE, NJ

NO.	REVISION	BY	DATE
1	ISSUE FOR REVIEW	KP	3-15-24
2	ISSUE FOR PERMIT	KP	3-21-24



LAURANCE D. APPEL, R.A., N.J. # AI-0149
NY - 025008
PA - RA-04580-B

BASEMENT PLAN

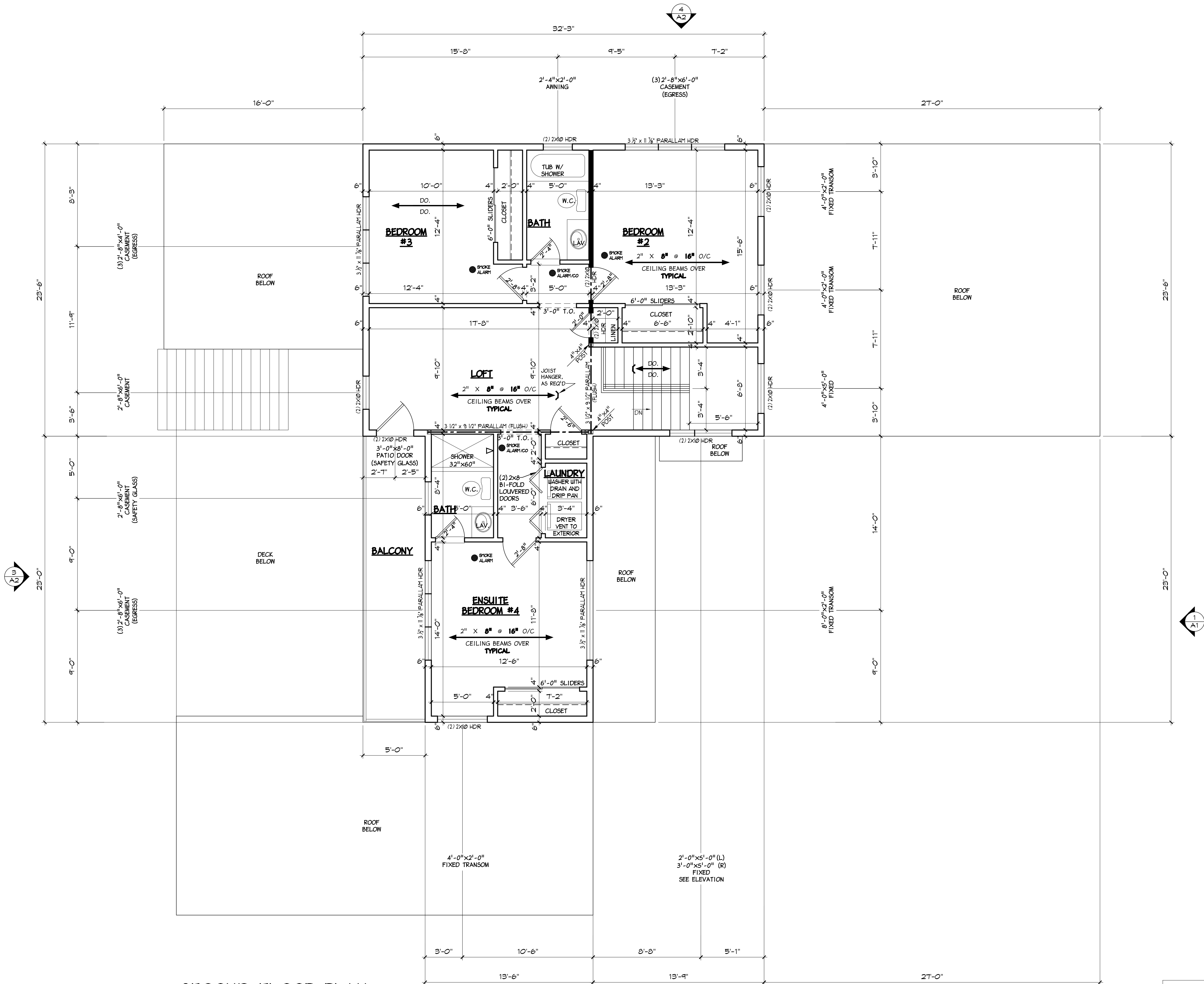
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CLIENT: FRIEDMAN, AARON
DATE: 3-8-24

DRAWING:

A-3.1

COMM. #: 14290

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SECOND FLOOR PLAN

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

LIVING AREA = 986 SF
BALCONY AREA = 115 SF

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SMOKE ALARM & CARBON MONOXIDE ALARM NOTES

(REVISED 02-20-2023)
FOR NEW CONSTRUCTION AND ADDITIONS WHERE THE CUMULATIVE AREA OF ALL FLOORS OF THE ADDITION(S) IS 25 PERCENT OR MORE OF THE FLOOR AREA OF THE LARGEST FLOOR OF THE EXISTING BUILDING

SMOKE ALARM NOTES:

1. SMOKE ALARMS SHALL COMPLY WITH NFPA 72 AND BE LISTED IN ACCORDANCE WITH UL 217. COMBINATION CARBON MONOXIDE AND SMOKE ALARMS SHALL BE LISTED IN ACCORDANCE WITH UL 2034 AND UL 217.
2. A SMOKE ALARM IS TO BE PROVIDED ON EACH AND EVERY FLOOR LEVEL, INCLUDING BASEMENTS AND HABITABLE ATTICS (CONSULT PLANS).
3. A SMOKE ALARM SHALL BE PROVIDED WITHIN EACH AND EVERY SLEEPING ROOM (INCLUDING ANY ENCLOSED ROOM WITH A CLOTHES CLOSET AND EGRESS WINDOW / CONSULT PLANS).
4. A SMOKE ALARM IS TO BE PROVIDED IN THE VICINITY (WITHIN 10 FT FROM DOOR) OF ALL SLEEPING ROOMS (CONSULT PLANS).
5. SMOKE ALARMS SHALL NOT BE INSTALLED IN THE FOLLOWING LOCATIONS UNLESS THIS WOULD PREVENT PLACEMENT REQUIRED BY NOTES ABOVE:
 - 5.1. LESS THAN 3 FT FROM THE DOOR OR OPENING OF A BATHROOM
 - 5.2. LESS THAN 3 FT FROM THE DOOR OR OPENING OF A BATHROOM
 - 5.3. IONIZATION SMOKE ALARMS LESS THAN 20 FT FROM PERMANENTLY INSTALLED COOKING APPLIANCE.
 - 5.4. IONIZATION SMOKE ALARMS WITH ALARM-SILENCING SWITCH LESS THAN 10 FT FROM PERMANENTLY INSTALLED COOKING APPLIANCE.
 - 5.5. PHOTOELECTRIC SMOKE ALARMS LESS THAN 6 FT FROM A PERMANENTLY INSTALLED COOKING APPLIANCE.
6. ALL SMOKE ALARMS SHALL BE INTERCONNECTED WITH PHYSICAL WIRING UNLESS LISTED WIRELESS ALARMS ARE INSTALLED AND ALL ALARMS SOUND UPON ACTIVATION OF ONE ALARM.
7. SMOKE ALARMS SHALL BE POWERED FROM BUILDING WIRING AND SHALL BE PROVIDED WITH A BATTERY BACKUP SYSTEM IN CASE OF POWER INTERRUPTION.
8. FIRE ALARM SYSTEMS SHALL BE PERMITTED TO BE USED IN LIEU OF SMOKE ALARMS AND SHALL COMPLY WITH IRC NJ SECTION R314.7

CARBON MONOXIDE ALARM NOTES:

1. CARBON MONOXIDE ALARMS SHALL BE LISTED IN ACCORDANCE WITH UL 2034. COMBINATION CARBON MONOXIDE AND SMOKE ALARMS SHALL BE LISTED IN ACCORDANCE WITH UL 2034 AND UL 217.
2. CARBON MONOXIDE ALARMS SHALL BE INSTALLED OUTSIDE EACH SLEEPING ROOM (WITHIN 10 FT FROM DOOR), INCLUDING ANY ENCLOSED ROOM WITH A CLOTHES CLOSET AND EGRESS WINDOW (CONSULT PLANS).
3. WHERE A FUEL-BURNING APPLIANCE (EG. FIREPLACE) IS LOCATED WITHIN A BEDROOM OR ITS ATTACHED BATHROOM, A CARBON MONOXIDE ALARM SHALL BE INSTALLED WITHIN THE BEDROOM.
4. CARBON MONOXIDE ALARMS SHALL BE POWERED FROM BUILDING WIRING AND SHALL BE PROVIDED WITH A BATTERY BACKUP SYSTEM IN CASE OF POWER INTERRUPTION.
5. CARBON MONOXIDE DETECTION SYSTEMS SHALL BE PERMITTED TO BE USED IN LIEU OF CARBON MONOXIDE ALARMS AND SHALL COMPLY WITH IRC NJ SECTION R315.6
6. ALL CARBON MONOXIDE ALARMS SHALL BE INTERCONNECTED WITH PHYSICAL WIRING UNLESS LISTED WIRELESS ALARMS ARE INSTALLED AND ALL ALARMS SOUND UPON ACTIVATION OF ONE ALARM.

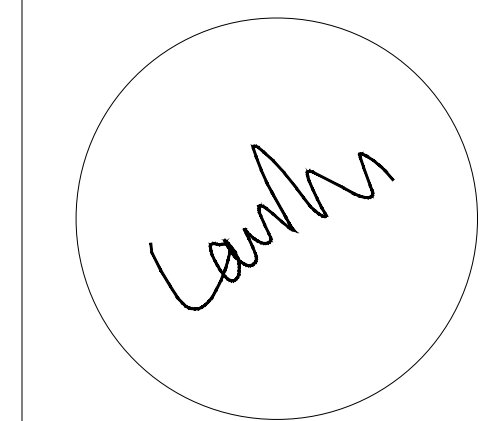


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WEST ORANGE, NJ

NO.	REVISION	BY	DATE
1	ISSUE FOR REVIEW	KP	3-15-24
2	ISSUE FOR PERMIT	KP	3-21-24



LAURANCE D. APPEL, R.A., N.J. # AI-10149
NY - 025018
PA - RA-04580-B

SECOND FLOOR PLAN

DRAWN BY: KP
CHECKED BY: CS
CLIENT: FRIEDMAN, AARON
DATE: 3-8-24

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A-05

COMM. #: 14290



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NO.	REVISION	BY	DATE
	ISSUE FOR REVIEW	KP	3-15-24
1	ISSUE FOR PERMIT	KP	3-21-24

Lauren

LAURANCE D. APPEL, R.A. NJ # A1-12149
NY - 025018
PA - RA-014580-B

ROOF PLAN

DRAWN BY: KP

CHECKED BY: CS

CLIENT: FRIEDMAN-AARON

DATE: 3-8-24

DRAWING

A-06

COMM. #:	14290
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ROOF / CEILING FRAMING NOTES
(CONVENTIONAL)

(REVISED 2-20-2023)

1. REFER TO DETAILS A / T-1A, II / T-1A, 12 / T-1A, AND 13 / T-1A (CONVENTIONAL) FOR ADDITIONAL INFORMATION.

2. RAFTER FRAMING: WHERE SPANS OF (2 x 8) RAFTERS EXCEED 14'-6" (CLEAR HORIZONTAL SPAN) DOUBLE EVERY RAFTER UP TO 17'-8" (CLEAR HORIZONTAL SPAN).

3. VALLEY NOTE: UNLESS NOTED OTHERWISE, NO STRUCTURAL VALLEYS SHALL BE USED. VALLEYS SHALL BE FORMED BY SETTING ONE ROOF SYSTEM ON TOP OF ANOTHER. THE UPPER ROOF RAFTERS ARE TO BE SET ON AND SECURED TO A 2 x 12 PLATE WHICH IS TO BE SET ON TOP OF THE SHEATHING OF THE LOWER ROOF AND NAILED THROUGH TO THE TOPS OF THE LOWER RAFTERS.

4. RIDGES ARE TO BE INSTALLED CONTINUOUS WITH NO SPLICES OR PROVIDE A GUSSET PLATE ON EACH SIDE OF THE RIDGE AT ANY/ALL SPLICES (MINIMUM 2" x RIDGE DEPTH MEMBER / MINIMUM 24-INCHES LONG).

5. PROVIDE (2) 2" X 6" X 6'-0" MIN. STRONGBACK BELOW HIP OR RIDGE POST LOAD (PERPENDICULAR TO CEILING BEAMS.)

6. PROVIDE (2) 2" X 4" STRONGBACK AT 8'-0" O.C.
(PERPENDICULAR TO CEILING BEAMS).

7. ALL ROOF CONFIGURATIONS CONSTRUCTED WITH UNEQUAL ROOF PITCHES SHALL BE INSTALLED WITH A PLATE HEIGHT ADJUSTED AS REQUIRED TO MAINTAIN EQUAL SOFFIT PROJECTIONS AND HEIGHTS ON EACH FACE OF HIP. SEE UNEQUAL PITCH HIP ROOF DETAIL FOR ADDITIONAL INFORMATION.

8. ALL RAFTERS INSTALLED OVER A LOW KNEE WALL SHALL BE INSTALLED WITH RAFTER BRACES. SEE DETAIL FOR ADDITIONAL INFORMATION.

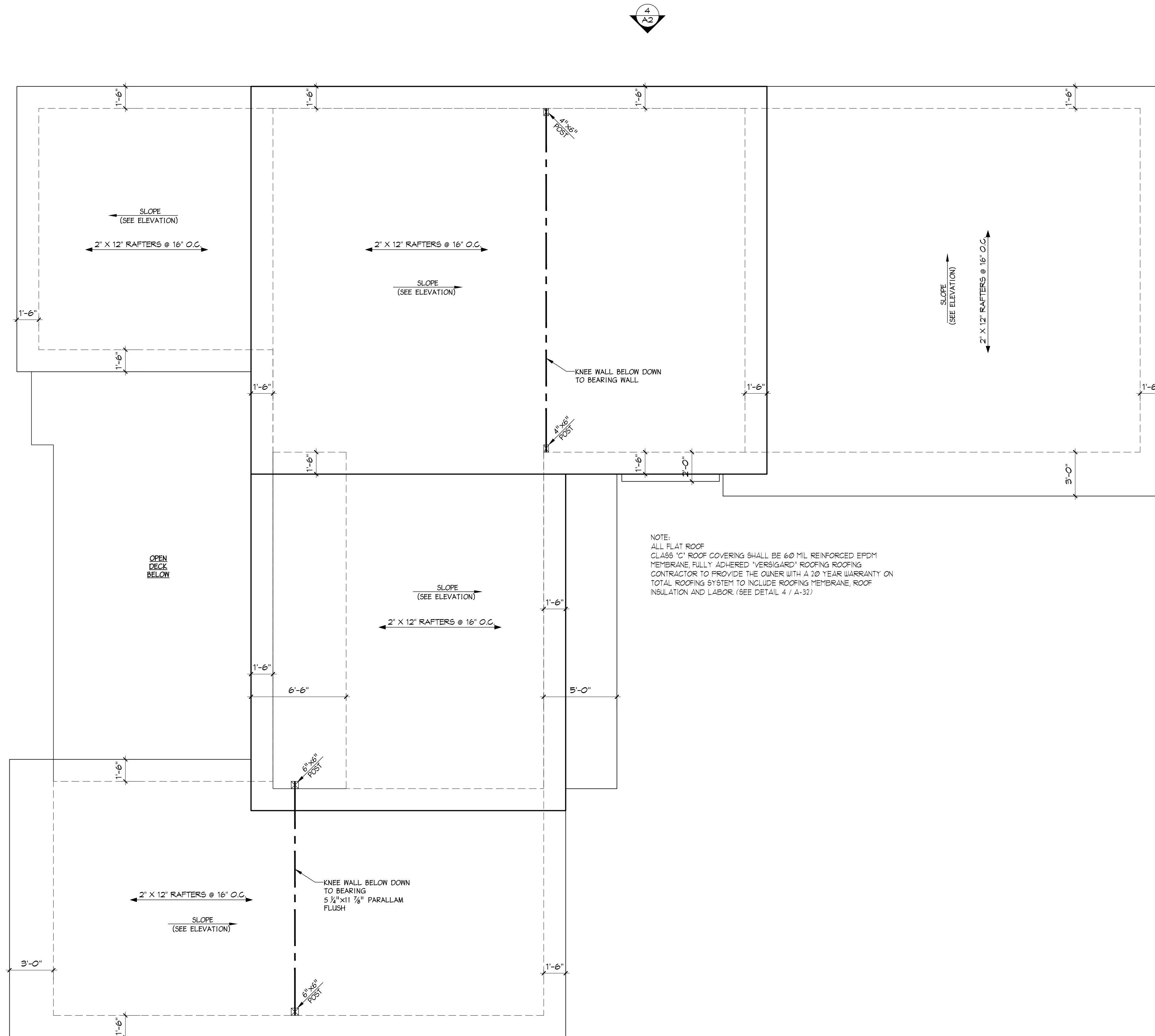
9. PROVIDE MECHANICAL CONNECTION FOR ALL STRUCTURAL FRAMING AS PER THE FASTENER SCHEDULE ON DRAWING T-W-1 UNLESS OTHERWISE NOTED.

IN ADDITION TO THE REQUIREMENTS ABOVE PROVIDE HURRICANE CLIPS AT THE FOLLOWING LOCATIONS:

- WHERE CEILING BEAMS ARE RAISED (VOLUME CEILING).
SEE DETAIL 11 / T-1/A FOR ADDITIONAL INFORMATION.
- WHERE RAFTERS ARE RAISED ABOVE CEILING AND NOT
CONNECTED TO CEILING BEAMS. SEE DETAIL 12 / T-1/A
FOR ADDITIONAL INFORMATION.
- WHERE CEILING BEAMS ARE PERPENDICULAR TO RAFTERS.
SEE DETAIL 13 / T-1/A FOR ADDITIONAL INFORMATION.
- WHERE RAFTERS ARE SUPPORTED ON A TWO STORY TALL
WALL. SEE 2 STORY FRAMING NOTE.
- ABOVE ALL WALL SEGMENTS THAT ARE CONSIDERED AS
PART OF A BRACED WALL SEGMENT. SEE FLOOR PLAN
FOR LOCATION AND DRAWINGS 7-REI FOR ADDITIONAL
INFORMATION.
- AT ALL SITE LOCATIONS WITH A WIND SPEED BETWEEN
115 MPH - 120 MPH, CATEGORY B EXPOSURE, AND ROOF
SPAN MORE THAN 48'. SEE COVER DRAWING FOR WIND
SPEED.
- AT ALL SITE LOCATIONS WITH A WIND SPEED BETWEEN
120 MPH - 130 MPH, CATEGORY B EXPOSURE, AND ROOF
SPAN MORE THAN 36'. SEE COVER DRAWING FOR WIND
SPEED.
- AT ALL SITE LOCATIONS WITH A WIND SPEED BETWEEN
130 MPH - 140 MPH, CATEGORY B EXPOSURE, AND ROOF
SPAN MORE THAN 24'. SEE COVER DRAWING FOR WIND
SPEED.

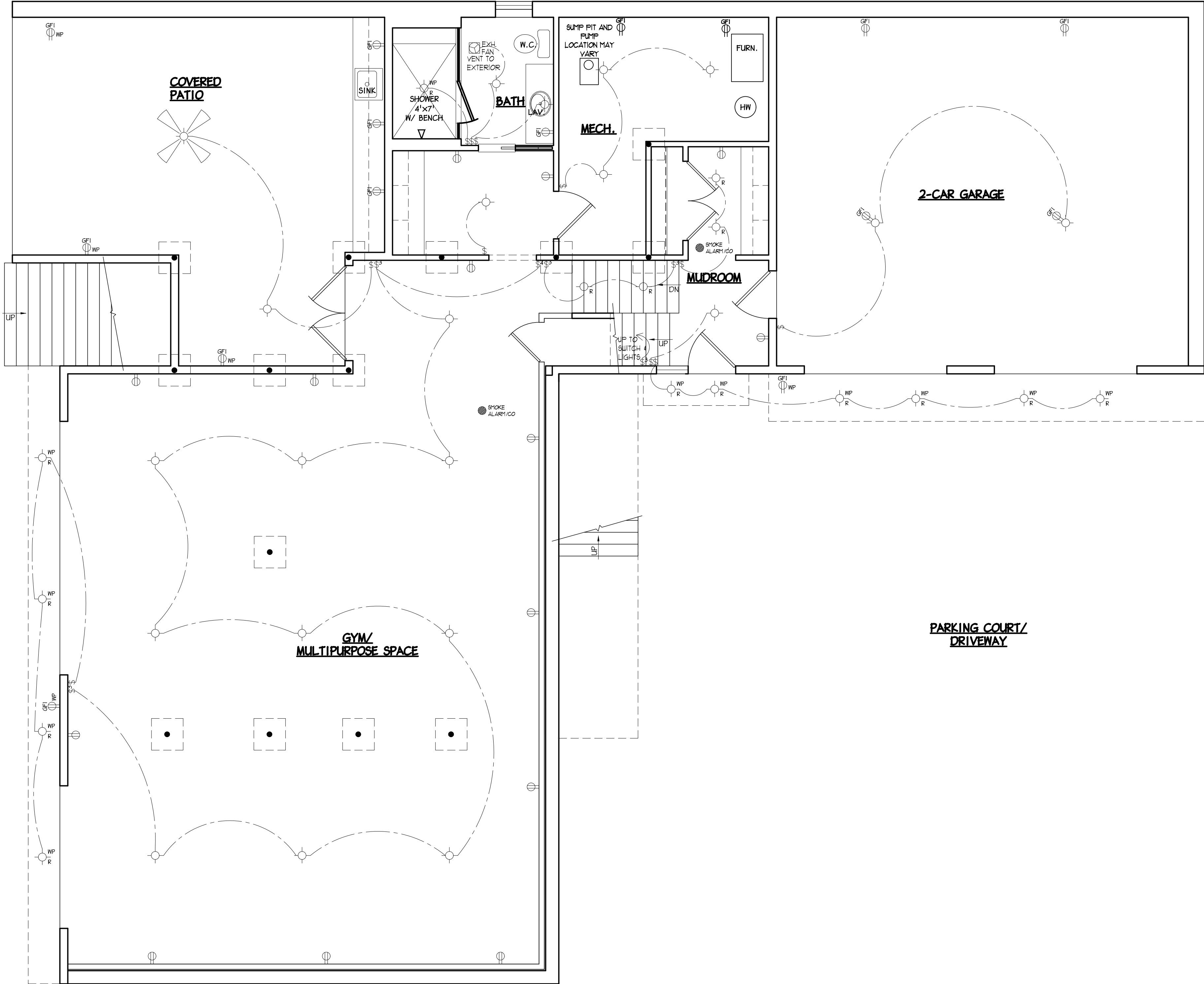
ROOF PLAN

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



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BASEMENT ELECTRICAL LAYOUT
SCALE : 1/4" = 1'-0"

ELECTRICAL SYSTEM LEGEND	
(REVISED 3/20/2024)	
	DUPLEX WALL OUTLET
	G.F.I.
	SURFACE MOUNTED LIGHT FIXTURE
	WEATHER PROOF PULL CORD
	LED RECESSED CEILING LIGHT FIXTURE W/ ADJUSTABLE COLOR TEMPERATURE CONTROL. FOR INTERIOR, MATCH EXISTING BLDG. STD.
	CEILING FAN
	UNDER CABINET LIGHTING
	WALL SCONCE
	WALL MOUNTED FIXTURE
	SWITCH
	EMERGENCY FURNACE SHUT-OFF
	3-WAY SWITCH
	4-WAY SWITCH
	DIMMER CONTROL
	JUNCTION BOX
	TELEPHONE OUTLET
	TELEVISION OUTLET
	EXHAUST FAN - PANASONIC W/ ADJUSTABLE OUTPUT, 50/80/110 CFM AS REQUIRED PER LOCATION - VENT TO THE EXTERIOR
	SMOKE ALARM - 110V A/C - INTERCONNECTED WITH BATTERY BACKUP SYSTEM
	CARBON MONOXIDE DETECTOR - HARDWIRED W/ BATTERY BACKUP OR BATTERY POWERED
	/C.O.

- ELECTRICAL INFORMATION
(REVISED 2-20-2023)
1. FIXTURE AND EQUIPMENT STYLE, TRIM, AND COLORS AS SELECTED. ALL ELECTRICAL WORK SHALL BE COORDINATED BY A WALK-THRU PRIOR TO ROUGH-IN.
2. ALL 125 VOLT, 15 AND 20 AMP RECEPTACLES SHALL BE LISTED TAMPER-RESISTANT RECEPTACLES.
- 2.1 GROUND FAULT CIRCUIT INTERRUPTER (GFI) PROTECTED ELECTRICAL OUTLETS ARE REQUIRED IN THE FOLLOWING LOCATIONS:
- ALL OUTLETS INSTALLED WITHIN 6'-0" OF A WATER SOURCE.
 - ALL OUTLETS WITHIN BATHROOMS, LAUNDRY AREAS, GARAGES, UNFINISHED BASEMENTS, CRAWL SPACES, UNINHABITED ACCESSORY BUILDINGS AND LOCATED OUTDOORS.
 - ALL OUTLETS ALONG KITCHEN COUNTERTOPS. SEE NOTE 4 FOR ADDITIONAL REQUIREMENTS.
- 2.2 ARC FAULT CIRCUIT INTERRUPTER (AFCI) PROTECTED ELECTRICAL OUTLETS ARE REQUIRED ON ALL OUTLETS.
3. QUANTITIES:
- OUTLETS -
 - SWITCHES -
 - FIXTURES -
4. KITCHEN OUTLETS ARE TO BE INSTALLED PER THE FOLLOWING:
- ALL COUNTERTOP OUTLETS ARE TO BE GROUND-FAULT INTERRUPTER TYPE
 - OUTLETS ARE TO BE MAXIMUM 4'-0" ON CENTER.
 - OUTLETS ARE TO BE MAXIMUM 2'-0" FROM EACH CORNER OR EDGE.
 - OUTLETS ARE TO BE MINIMUM 1'-0" TO EACH CORNER OR EDGE.
 - COORDINATE WITH KITCHEN PLANS AND SHOP DRAWINGS.
- 4.1 KITCHEN ISLANDS AND PENINSULAS:
- PROVIDE A MINIMUM OF ONE (1) GFI DUPLEX ELECTRICAL OUTLET.
 - WHERE A SINK OR RANGE IS INSTALLED ON AN ISLAND OR PENINSULA, ONE (1) GFI DUPLEX ELECTRICAL OUTLET SHALL BE INSTALLED ON EACH HALF OF THE ISLAND OR PENINSULA.
5. PROVIDE A MINIMUM OF ONE (1) GFI DUPLEX ELECTRICAL OUTLET WITHIN EACH HALLWAY OR CORRIDOR.
- 5.1 UNLESS NOTED OTHERWISE, DUPLEX ELECTRICAL OUTLETS SHALL BE INSTALLED ALONG A WALL SPACE:
- A MAXIMUM OF 12'-0" ON CENTER.
 - A MAXIMUM OF 6'-0" FROM DOORWAYS, FIREPLACES AND SIMILAR OPENINGS.
 - EACH WALL THAT IS 2'-0" OR LONGER.
6. STAIRWAYS THAT CONTAIN SIX (6) OR MORE RISERS INCLUDING STAIRWAYS TO THE BASEMENT AND PULL-DOWN STAIRS TO THE ATTIC, SHALL BE DIRECTLY LIGHTED. PROVIDE CONTROLLING SWITCH AT THE TOP AND BOTTOM OF EACH STAIRWAY.
7. PROVIDE G.F.I. DUPLEX ELECTRICAL OUTLET AND LIGHT FIXTURE ADJACENT TO ALL HVAC EQUIPMENT.
8. PROVIDE A G.F.I. DUPLEX ELECTRICAL OUTLET AT THE EXTERIOR (WEATHERPROOF) FRONT AND REAR ENTRANCES TO THE HOUSE.
- 8.1 PROVIDE A G.F.I. DUPLEX ELECTRICAL OUTLET (WEATHERPROOF) AT ALL EXTERIOR DECKS, BALCONIES AND PORCHES.
9. PROVIDE A G.F.I. DUPLEX ELECTRICAL OUTLET FOR EACH CAR SPACE IN THE GARAGE.
10. CONTRACTOR SHALL COORDINATE THE REQUIRED ELECTRICAL CONNECTIONS WITH ALL PARTIES PROVIDING EQUIPMENT IN ORDER TO VERIFY THE PROPER ELECTRICAL CHARACTERISTICS FOR VOLTAGE, PHASE AND LOAD REQUIREMENTS.
11. PROVIDE MINIMUM 200 AMP ELECTRICAL SERVICE.
12. ELECTRICAL SYSTEMS SHALL BE DESIGNED, COORDINATED AND INSTALLED AS A TURNKEY OPERATION BY APPROPRIATELY LICENSED PROFESSIONAL (DESIGN / BUILD OR BY OTHERS) AND SHALL NOT BE THE RESPONSIBILITY OF THE ARCHITECT.
13. ANY / ALL ELECTRICAL SYSTEMS SHOWN ARE DIAGRAMMATIC AND SHALL BE MODIFIED TO COORDINATE WITH STRUCTURAL AND ARCHITECTURAL SPECIFICATIONS. INSTALLING CONTRACTOR SHALL NOT ALTER THE LOAD CARRYING CAPACITY OF ANY STRUCTURAL MEMBERS WITHOUT THE WRITTEN APPROVAL OF THE ARCHITECT. INSTALLING CONTRACTOR SHALL FURNISH INFORMATION BASED ON THE ACTUAL EQUIPMENT AND SYSTEMS INSTALLED.
14. ALL ELECTRICAL SYSTEMS SHALL CONFORM TO THE CURRENT ELECTRICAL AND/OR BUILDING CODE INCLUDING ANY / ALL AMENDMENTS ADOPTED BY N.J.U.C.C.

NOTE:
ELECTRICAL DRAWINGS ARE SCHEMATIC AND SHOW GENERAL SCOPE OF WORK ONLY. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH ARCHITECTURAL DRAWINGS FOR ACTUAL LAYOUT, DIMENSIONS, AND CONDITIONS. ARCHITECTURAL FLOOR PLANS SHALL GOVERN WITH RESPECT TO LAYOUT.

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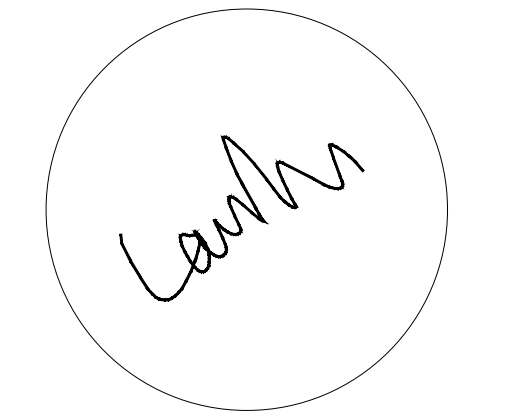


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FRIEDMAN RESIDENCE**
10 RIDGE ROAD
WEST ORANGE, NJ

NO.	REVISION	BY	DATE
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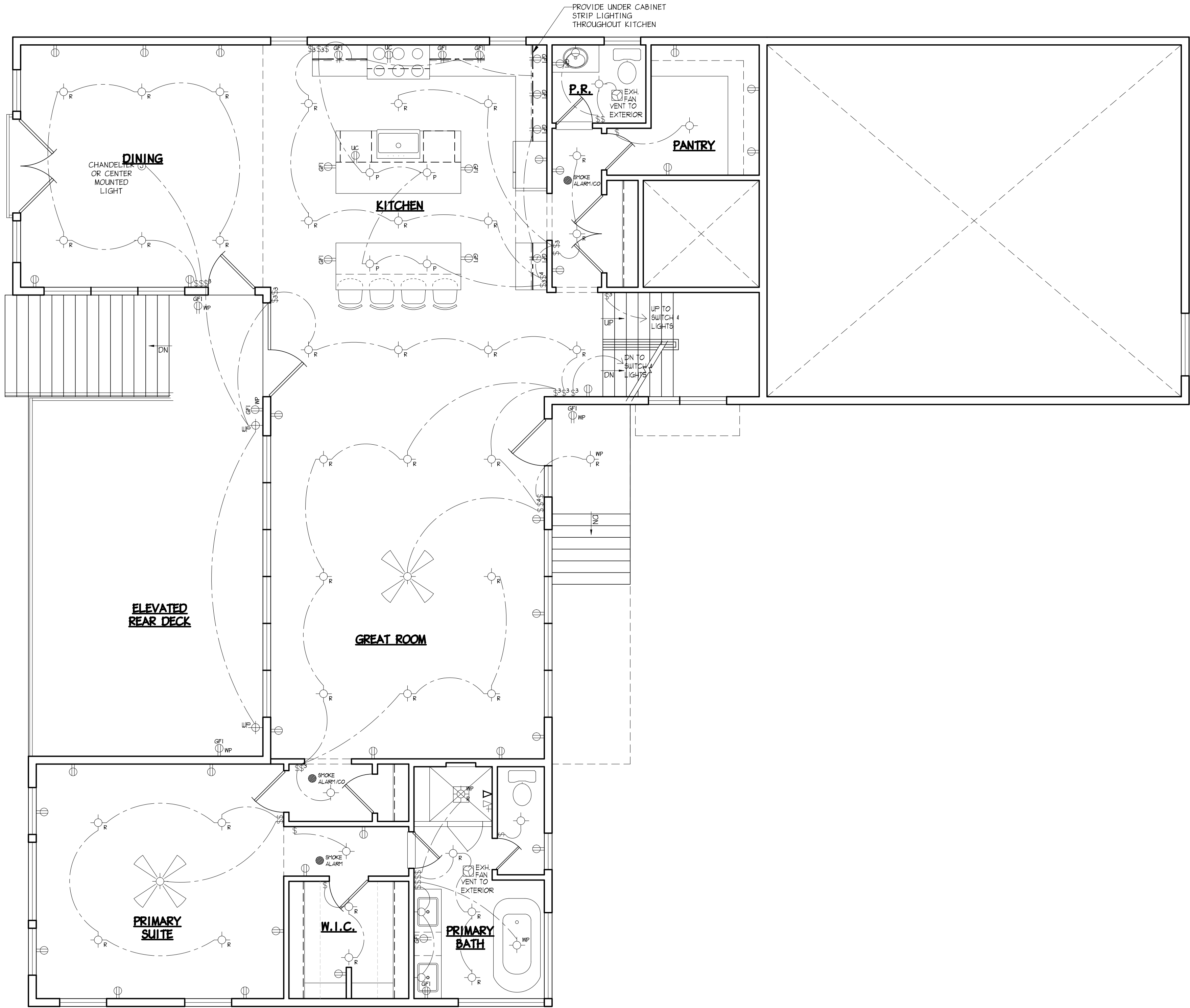
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NY - 025018
PA - RA-04580-B

**BASEMENT
ELECTRICAL**

DRAWN BY: KP
CHECKED BY: CS
CLIENT: FRIEDMAN, AARON
DATE: 3-8-24

DRAWING:
E-01
COMM. #: 14290

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FIRST FLOOR ELECTRICAL LAYOUT
SCALE : 1/4" = 1'-0"

ELECTRICAL SYSTEM LEGEND (REVISED 3/20/2024)	
	G.F.I.
	SURFACE MOUNTED LIGHT FIXTURE
	WEATHER PROOF PULL CORD
	LED RECESSED CEILING LIGHT FIXTURE W/ ADJUSTABLE COLOR TEMPERATURE CONTROL. FOR INTERIOR, MATCH EXISTING BLDG. STD.
	CEILING FAN
	UNDER CABINET LIGHTING
	WALL SCONCE
	WALL MOUNTED FIXTURE
	SWITCH
	EMERGENCY FURNACE SHUT-OFF
	3-WAY SWITCH
	4-WAY SWITCH
	DIMMER CONTROL
	JUNCTION BOX
	TELEPHONE OUTLET
	TELEVISION OUTLET
	EXHAUST FAN - PANASONIC W/ ADJUSTABLE OUTPUT. 50/80/110 CFM AS REQUIRED PER LOCATION - VENT TO THE EXTERIOR
	SMOKE ALARM - 110V A/C - INTERCONNECTED WITH BATTERY BACKUP SYSTEM
	CARBON MONOXIDE DETECTOR - HARDWIRED W/ BATTERY BACKUP OR BATTERY POWERED

- ELECTRICAL INFORMATION**
(REVISED 2-20-2023)
1. FIXTURE AND EQUIPMENT STYLE, TRIM, AND COLORS AS SELECTED. ALL ELECTRICAL WORK SHALL BE COORDINATED BY A WALK-THRU PRIOR TO ROUGH-IN.
2. ALL 125 VOLT, 15 AND 20 AMP RECEPTACLES SHALL BE LISTED TAMPER-RESISTANT RECEPTACLES.
- 2.1 GROUND FAULT CIRCUIT INTERRUPTER (GFI) PROTECTED ELECTRICAL OUTLETS ARE REQUIRED IN THE FOLLOWING LOCATIONS:
- ALL OUTLETS INSTALLED WITHIN 6'-0" OF A WATER SOURCE.
 - ALL OUTLETS WITHIN BATHROOMS, LAUNDRY AREAS, GARAGES, UNFINISHED BASEMENTS, CRAWL SPACES, UNINHABITED ACCESSORY BUILDINGS AND LOCATED OUTDOORS.
 - ALL OUTLETS ALONG KITCHEN COUNTERTOPS. SEE NOTE 4 FOR ADDITIONAL REQUIREMENTS.
- 2.2 ARC FAULT CIRCUIT INTERRUPTER (AFCI) PROTECTED ELECTRICAL OUTLETS ARE REQUIRED ON ALL OUTLETS.
3. QUANTITIES:
- OUTLETS -
 - SWITCHES -
 - FIXTURES -
4. KITCHEN OUTLETS ARE TO BE INSTALLED PER THE FOLLOWING:
- ALL COUNTERTOP OUTLETS ARE TO BE GROUND-FAULT INTERRUPTER TYPE
 - OUTLETS ARE TO BE MAXIMUM 4'-0" ON CENTER.
 - OUTLETS ARE TO BE MAXIMUM 2'-0" FROM EACH CORNER OR EDGE.
 - OUTLETS ARE TO BE MINIMUM 1'-0" TO EACH CORNER OR EDGE.
 - COORDINATE WITH KITCHEN PLANS AND SHOP DRAWINGS.
- 4.1 KITCHEN ISLANDS AND PENINSULAS:
- PROVIDE A MINIMUM OF ONE (1) GFI DUPLEX ELECTRICAL OUTLET.
 - WHERE A SINK OR RANGE IS INSTALLED ON AN ISLAND OR PENINSULA, ONE (1) GFI DUPLEX ELECTRICAL OUTLET SHALL BE INSTALLED ON EACH HALF OF THE ISLAND OR PENINSULA.
5. PROVIDE A MINIMUM OF ONE (1) DUPLEX ELECTRICAL OUTLET WITHIN EACH HALLWAY OR CORRIDOR.
- 5.1 UNLESS NOTED OTHERWISE, DUPLEX ELECTRICAL OUTLETS SHALL BE INSTALLED ALONG A WALL SPACE:
- A MAXIMUM OF 12'-0" ON CENTER.
 - A MAXIMUM OF 6'-0" FROM DOORWAYS, FIREPLACES AND SIMILAR OPENINGS.
 - EACH WALL THAT IS 2'-0" OR LONGER.
6. STAIRWAYS THAT CONTAIN SIX (6) OR MORE RISERS INCLUDING STAIRWAYS TO THE BASEMENT AND PULL-DOWN STAIRS TO THE ATTIC, SHALL BE DIRECTLY LIGHTED. PROVIDE CONTROLLING SWITCH AT THE TOP AND BOTTOM OF EACH STAIRWAY.
7. PROVIDE G.F.I. DUPLEX ELECTRICAL OUTLET AND LIGHT FIXTURE ADJACENT TO ALL HVAC EQUIPMENT.
8. PROVIDE A G.F.I. DUPLEX ELECTRICAL OUTLET AT THE EXTERIOR (WEATHERPROOF) FRONT AND REAR ENTRANCES TO THE HOUSE.
- 8.1 PROVIDE A G.F.I. DUPLEX ELECTRICAL OUTLET (WEATHERPROOF) AT ALL EXTERIOR DECKS, BALCONIES AND PORCHES.
9. PROVIDE A G.F.I. DUPLEX ELECTRICAL OUTLET FOR EACH CAR SPACE IN THE GARAGE.
10. CONTRACTOR SHALL COORDINATE THE REQUIRED ELECTRICAL CONNECTIONS WITH ALL PARTIES PROVIDING EQUIPMENT IN ORDER TO VERIFY THE PROPER ELECTRICAL CHARACTERISTICS FOR VOLTAGE, PHASE AND LOAD REQUIREMENTS.
11. PROVIDE MINIMUM 200 AMP ELECTRICAL SERVICE.
12. ELECTRICAL SYSTEMS SHALL BE DESIGNED, COORDINATED AND INSTALLED AS A TURNKEY OPERATION BY APPROPRIATELY LICENSED PROFESSIONAL DESIGN / BUILD OR BY OTHERS) AND SHALL NOT BE THE RESPONSIBILITY OF THE ARCHITECT.
13. ANY / ALL ELECTRICAL SYSTEMS SHOWN ARE DIAGRAMMATIC AND SHALL BE MODIFIED TO COORDINATE WITH STRUCTURAL AND ARCHITECTURAL SPECIFICATIONS. INSTALLING CONTRACTOR SHALL NOT ALTER THE LOAD CARRYING CAPACITY OF ANY STRUCTURAL MEMBERS WITHOUT THE WRITTEN APPROVAL OF THE ARCHITECT. INSTALLING CONTRACTOR SHALL FURNISH INFORMATION BASED ON THE ACTUAL EQUIPMENT AND SYSTEMS INSTALLED.
14. ALL ELECTRICAL SYSTEMS SHALL CONFORM TO THE CURRENT ELECTRICAL AND/OR BUILDING CODE INCLUDING ANY / ALL AMENDMENTS ADOPTED BY N.J.U.C.C.

NOTE:
ELECTRICAL DRAWINGS ARE SCHEMATIC AND SHOW GENERAL SCOPE OF WORK ONLY. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH ARCHITECTURAL DRAWINGS FOR ACTUAL LAYOUT, DIMENSIONS, AND CONDITIONS. ARCHITECTURAL FLOOR PLANS SHALL GOVERN WITH RESPECT TO LAYOUT.

ISSUE FOR PERMIT ONLY
NOT FOR CONSTRUCTION

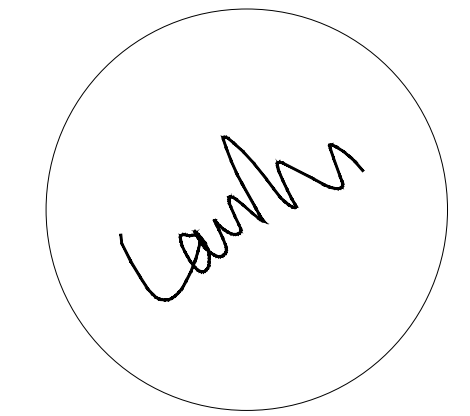


APPEL DESIGN GROUP
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SINGLE FAMILY HOME
FRIEDMAN RESIDENCE
10 RIDGE ROAD
WEST ORANGE, NJ

NO.	REVISION	BY	DATE
	ISSUE FOR REVIEW	KP	3-15-24
	ISSUE FOR PERMIT	KP	3-21-24



LAURANCE D. APPEL, R.A., NJ # AI-0149
NY - 025018
PA - RA-04580-B

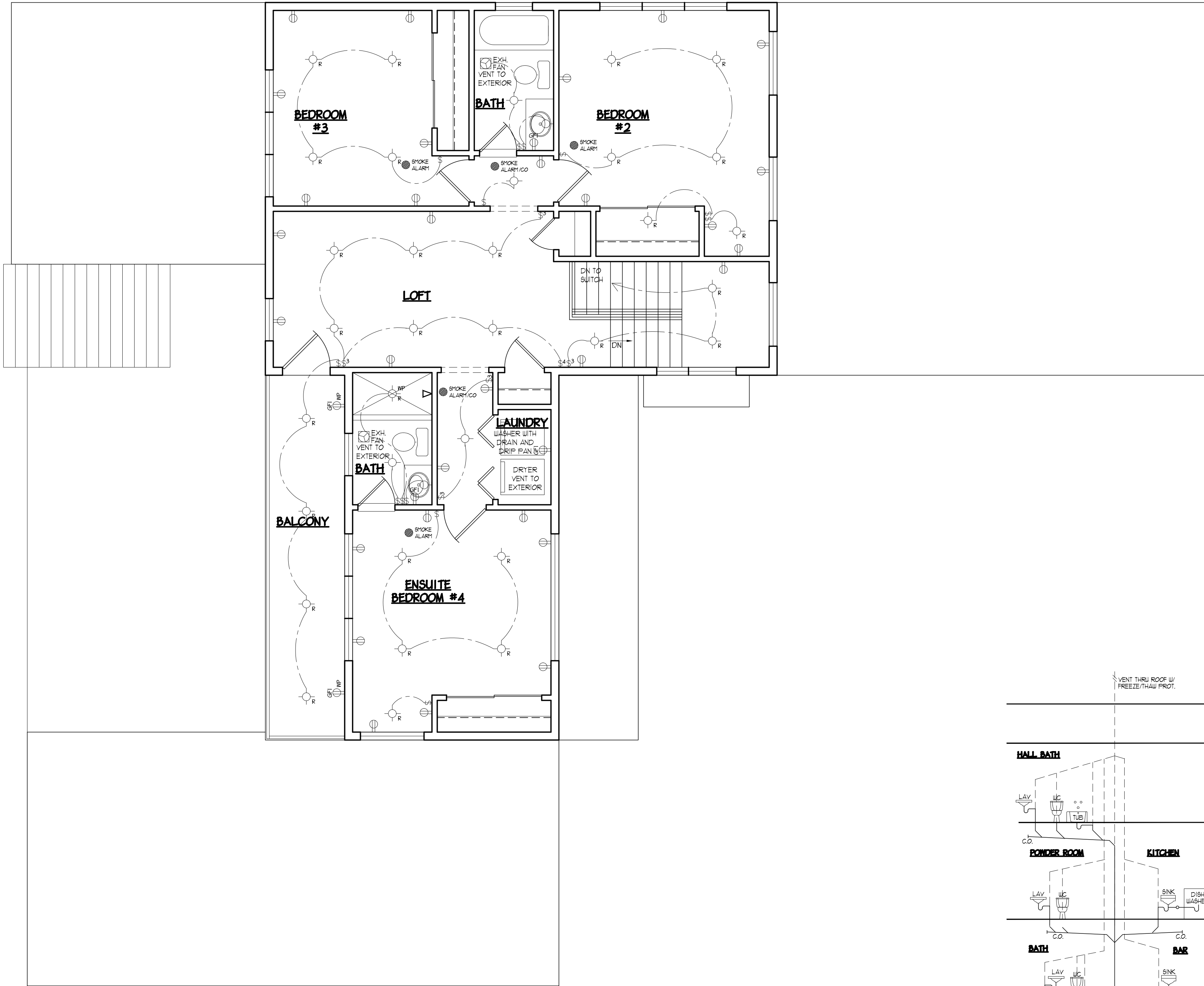
1ST FLOOR
ELECTRICAL

DRAWN BY: KP
CHECKED BY: CS
CLIENT: FRIEDMAN, AARON
DATE: 3-8-24

DRAWING:
E-02

COMM. #: 14290

APPEL DESIGN GROUP - FILENAME: P:\COMMON NUMBERS\14290\DWG\14290 - FRIEDMAN.DWG PLOT DATE: 03/21/2024 5:25 PM BY: KP



SECOND FLOOR ELECTRICAL LAYOUT
SCALE : 1/4" = 1'-0"

ISSUE FOR PERMIT ONLY
NOT FOR CONSTRUCTION

H.V.A.C. INFORMATION

- (REVISED 02-20-2023)
- HEATING, VENTILATION AND AIR CONDITIONING SYSTEMS (HVAC) SHALL BE DESIGNED, COORDINATED, AND INSTALLED AS A TURNKEY OPERATION BY THE HVAC SUBCONTRACTOR (DESIGN / BUILD) AND SHALL NOT BE THE RESPONSIBILITY OF THE ARCHITECT.
 - HVAC SUBCONTRACTOR SHALL PROVIDE DRAWINGS FOR REVIEW BY OWNER AND/OR ARCHITECT. INSTALLING CONTRACTOR SHALL FURNISH INFORMATION BASED ON THE ACTUAL EQUIPMENT AND SYSTEMS INSTALLED.
 - HVAC SYSTEM SHALL BE MODIFIED TO COORDINATE WITH STRUCTURAL AND ARCHITECTURAL SPECIFICATIONS.
 - INSTALLING CONTRACTORS SHALL NOT ALTER THE LOAD CARRYING CAPACITY OF ANY STRUCTURAL MEMBERS WITHOUT WRITTEN APPROVAL OF THE ARCHITECT.
 - RANGE HOODS SHALL DISCHARGE TO THE OUTSIDE THROUGH A DUCT. THE DUCT SHALL HAVE A SMOOTH INTERIOR FINISH, BE AIR TIGHT AND HAVE A BACK DRAFT DAMPER. EXCEPTION - A LISTED AND LABELED DUCTLESS RANGE HOOD SHALL NOT BE REQUIRED TO DISCHARGE TO THE OUTDOORS. WHERE DOMESTIC KITCHEN APPLIANCES ARE EQUIPPED WITH A DUCTED RANGE HOOD OR DOWN DRAFT EXHAUST SYSTEM, THE FAN SHALL HAVE A MINIMUM EXHAUST AIR FLOW RATE OF 100 CFM (INTERMITTENT) OR 25 CFM (CONTINUOUS). WHERE EXHAUST HOOD SYSTEMS CAPABLE OF EXHAUSTING IN EXCESS OF 400 CFM ARE PROVIDED, THEY SHALL BE MECHANICALLY OR PASSIVELY PROVIDED WITH MAKE UP AIR, AT A RATE OF APPROXIMATELY EQUAL TO THE EXHAUST AIR RATE. PROVIDE A GRAVITY OR ELECTRICALLY OPERATED DAMPER THAT AUTOMATICALLY OPENS WHEN THE SYSTEM OPERATES.
 - CLOTHES DRYER SHALL DISCHARGE TO THE OUTSIDE THROUGH A DUCT. THE DUCT SHALL HAVE A SMOOTH INTERIOR FINISH AND BE CONSTRUCTED OF METAL HAVING A MINIMUM THICKNESS OF .0157 INCHES (NO. 28 GAGE) AND SHALL BE 4" NOMINAL DIAMETER. DUCTS SHALL BE SUPPORTED AT MAXIMUM 12' INTERVALS. THE INSERT END OF DUCT SHALL BE IN THE DIRECTION OF AIRFLOW. SEALED AND MECHANICALLY FASTENED WITH SCREWS THAT DO NOT PROTRUDE MORE THAN 1/8" INTO INSIDE OF DUCT. THE TERMINATION SHALL BE NOT LESS THAN 3" FROM ANY BUILDING OPENING. PROVIDE A BACKDRAFT DAMPER. EXHAUST TERMINATION SHALL NOT DIMINISH THIS SIZE OF DUCT AND NOT BE LESS THAN 12.5 SQ. IN. MAXIMUM ALLOWABLE DUCT LENGTH SHALL BE AS PER THE IRC SECTION M1502.4.5 OR THE MANUFACTURERS INSTRUCTIONS WHERE DRYER EXHAUST ARE ENCLOSED IN WALL OR CEILING CAVITY. CAVITY SHALL ALLOW INSTALLATION WITHOUT DUCT DEFORMATION.
 - WHERE BATHROOM, POWDER ROOM OR TOILET COMPARTMENT IS NOT PROVIDED WITH NATURAL VENTILATION OPENINGS, PROVIDE A BATHROOM EXHAUST FAN. EXHAUST SHALL DISCHARGE TO THE OUTSIDE THROUGH A DUCT. THE TERMINATION SHALL BE NOT LESS THAN 3" FROM ANY BUILDING OPENING. PROVIDE A BACKDRAFT DAMPER. UNLESS OTHERWISE SPECIFIED, ON DRAWINGS, MECHANICAL EXHAUST CAPACITY OF THE FAN SHALL HAVE A MINIMUM EXHAUST AIR FLOW RATE OF 50 CFM (INTERMITTENT) OR 20 CFM (CONTINUOUS). UNLESS OTHERWISE NOTED ON HVAC DESIGN DRAWINGS.
 - HABITABLE ROOMS SHALL HAVE AN AGGREGATE GLAZING AREA OF NOT LESS THAN 8% OF THE FLOOR AREA, OPERABLE AREA TO THE OUTDOOR. EXCEPTION: HABITABLE ROOMS OTHER THAN KITCHENS OPERABLE AREA IS NOT REQUIRED WHERE A MECHANICAL VENTILATION SYSTEM IS PROVIDED CAPABLE OF PRODUCING .35 AIR CHANGES PER HOUR.

PLUMBING INFORMATION

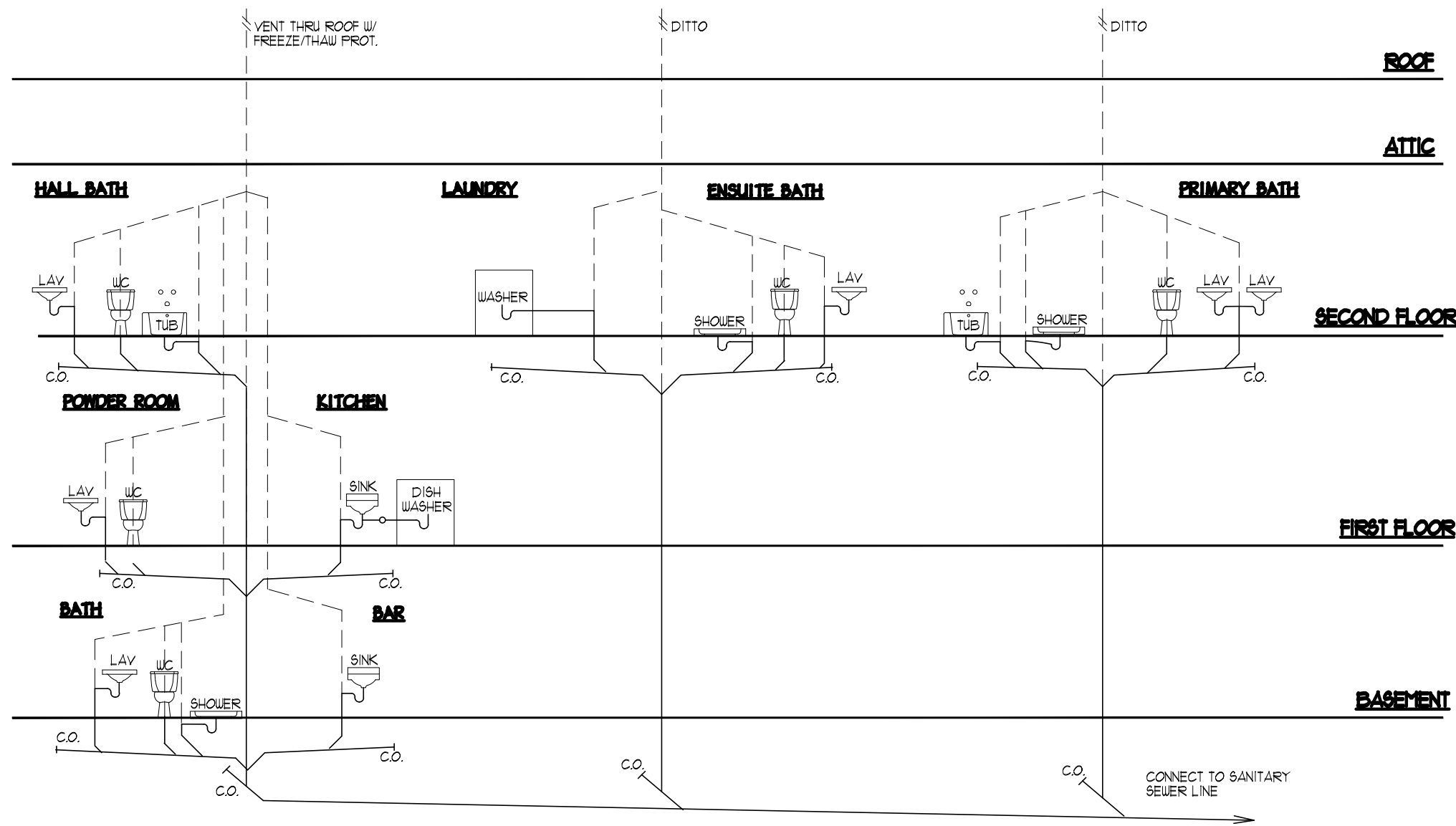
- (REVISED 02-20-2023)
- PLUMBING SYSTEMS ARE TO BE INSTALL TO CONFORM WITH THE INFORMATION AND REQUIREMENTS SET FORTH IN THE CURRENT EDITION OF THE NATIONAL STANDARD PLUMBING CODE AND/OR BUILDING CODE INCLUDING ANY / ALL AMENDMENTS ADOPTED BY N.J.U.C.C.
 - THE MINIMUM PITCH TO DRAIN SHALL BE 1/4" DROP PER 1'-0" OF RUN.
 - INSULATE ALL PIPES AS REQUIRED AND AS INDICATED ON THE PLANS. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS PER MODEL ENERGY CODE.
 - FIXTURE AND EQUIPMENT STYLES, TRIM, COLOR, FITTINGS, AND ACCESSORIES AS SELECTED.
 - QUANTITIES:
 - LAVATORIES : 6
 - TOILETS : 2
 - TUBS : 2
 - SHOWERS : 3
 - SINKS : 2
 - LAUNDRY TUBS : 1
 - BIDETS : N/A
 - WORK SINKS : N/ATOTAL FIXTURES: 15
 - PLUMBING SYSTEMS SHALL BE DESIGNED, COORDINATED AND INSTALLED AS A TURNKEY OPERATION BY APPROPRIATELY LICENSED PLUMBING SUB-CONTRACTOR (DESIGN / BUILD OR BY OTHERS) AND SHALL NOT BE THE RESPONSIBILITY OF THE ARCHITECT.
 - DESIGN OF SANITARY AND SEPTIC SYSTEMS SHALL BE PROVIDED BY THE APPROPRIATELY LICENSED PROFESSIONALS AND SHALL NOT BE THE RESPONSIBILITY OF THE ARCHITECT.
 - ANY / ALL PLUMBING SYSTEMS SHOWN ARE DIAGRAMMATIC AND SHALL BE MODIFIED TO COORDINATE WITH STRUCTURAL AND ARCHITECTURAL SPECIFICATIONS. INSTALLING CONTRACTOR SHALL NOT ALTER THE LOAD CARRYING CAPACITY OF ANY STRUCTURAL MEMBERS WITHOUT THE WRITTEN APPROVAL OF THE ARCHITECT. INSTALLING CONTRACTOR SHALL FURNISH INFORMATION BASED ON THE ACTUAL EQUIPMENT AND SYSTEMS INSTALLED.

PLUMBING FIXTURE CHART			
FIXTURE	UNIT VALUE	TRAP	VENT *
LAVATORY/ BAR SINK/ BIDET	1	1 1/4"	1 1/4"
TOILET (1.6 GPF)	3	3"	1 1/2"
KITCHEN SINK/ LAUNDRY TUB	2	1 1/2"	1 1/2"
KITCHEN SINK/W DISHWASHER	3	2"	1 1/2"
DISHWASHER	2	1 1/2"	1 1/2"
TUB/ TUB-SHOWER/ CLOTHES WASHER	3	2"	2"
SHOWER	2	2"	2"
FLOOR DRAIN	1	2"	1 1/4"
FULL BATHROOM	5		1 1/2"
1/2 BATHROOM GROUP	3		1 1/2"
KITCHEN GROUP	3		1 1/2"
LAUNDRY GROUP	3		1 1/2"

THE AGGREGATE CROSS SECTIONAL AREA OF ALL VENT TERMINALS SHALL NOT BE LESS THAN THE CROSS SECTIONAL AREA OF THE REQUIRED DRAIN.

PLUMBING CONTRACTOR MAY SUBMIT ALTERNATE PIPING METHODS FOR REVIEW AND APPROVAL BY THE LOCAL PLUMBING OFFICIAL.

PLUMBING FIXTURE CHART		
PIPE DIAMETER	HORIZONTAL RUN	VERTICAL RUN
1 1/2"	3 UNITS	4 UNITS
2"	6 UNITS	10 UNITS
3"	20 UNITS (MAX. 3 TOILETS)	48 UNITS (MAX. 6 TOILETS)
4"	160 UNITS	240 UNITS



PLUMBING RISER DIAGRAM
SCALE: SCHEMATIC NO SCALE

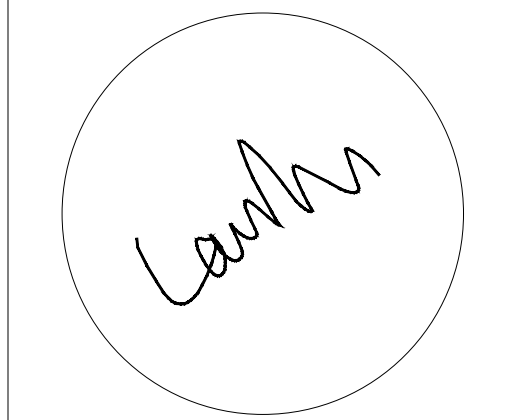


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SINGLE FAMILY HOME
FRIEDMAN RESIDENCE
10 RIDGE ROAD
WEST ORANGE, NJ

NO.	REVISION	BY	DATE
	ISSUE FOR REVIEW	KP	3-15-24
	ISSUE FOR PERMIT	KP	3-21-24



LAURANCE D. APPEL, R.A., NJ # AI-0149
NY - 025018
PA - RA-04580-B

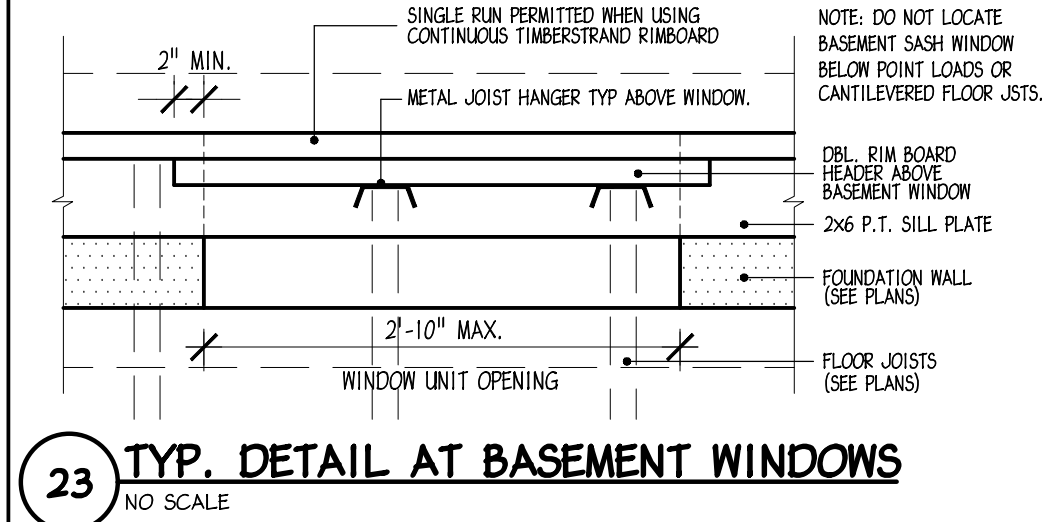
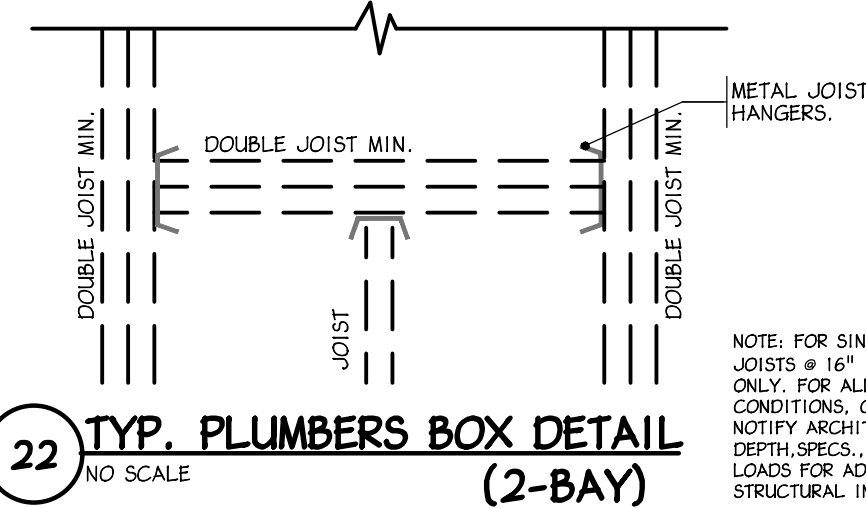
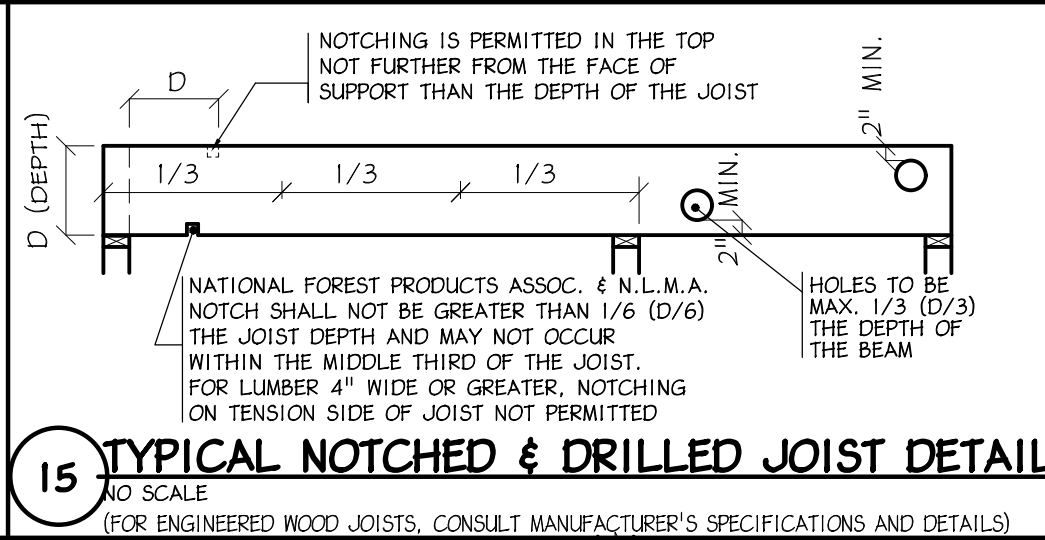
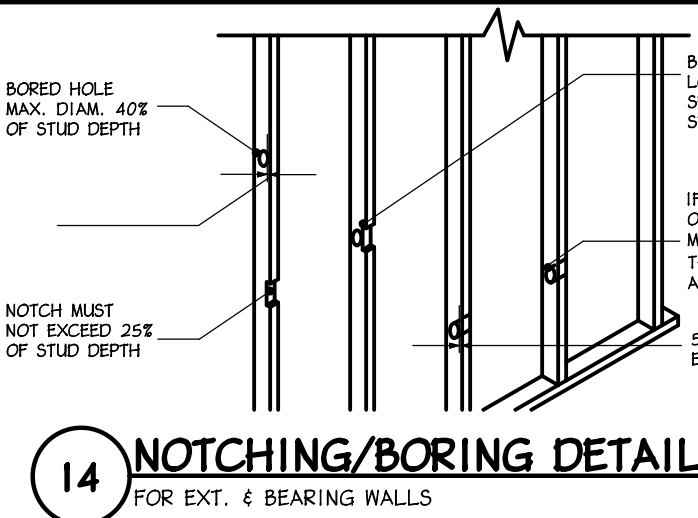
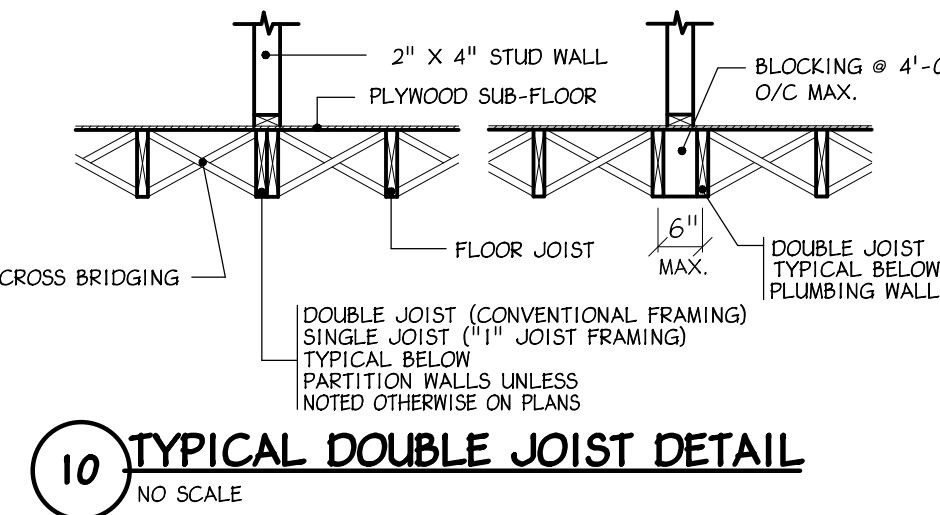
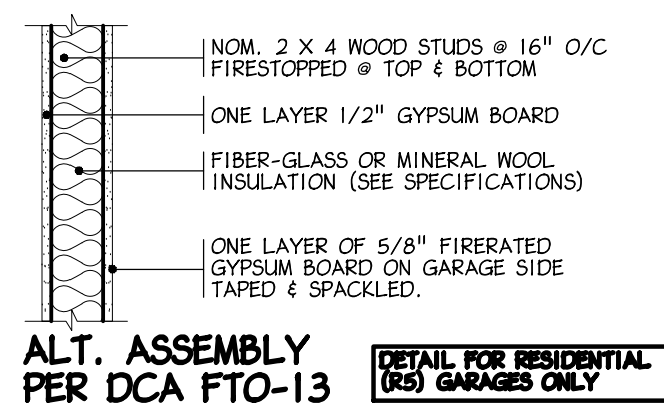
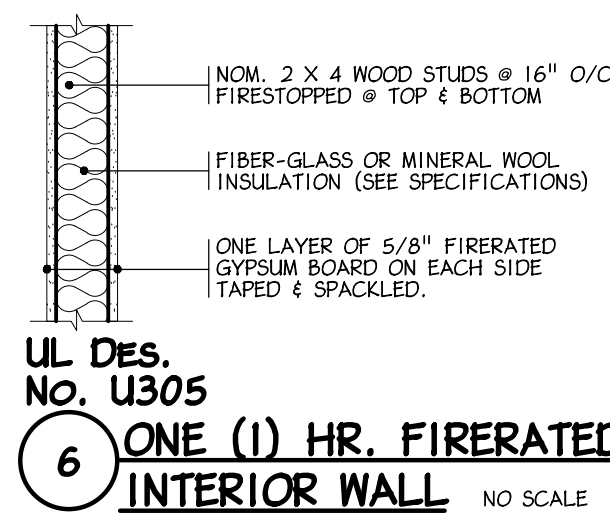
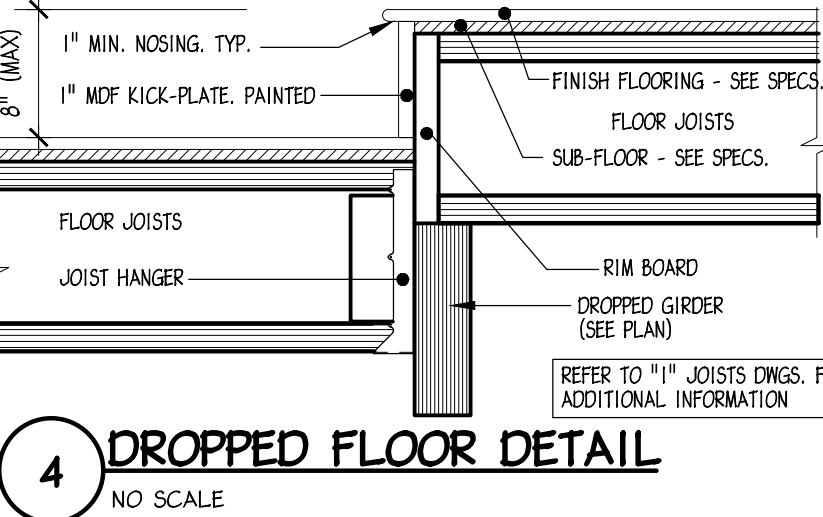
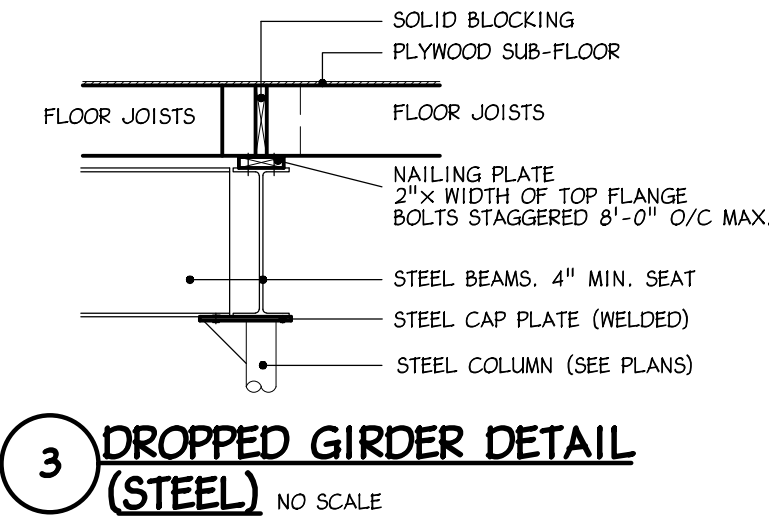
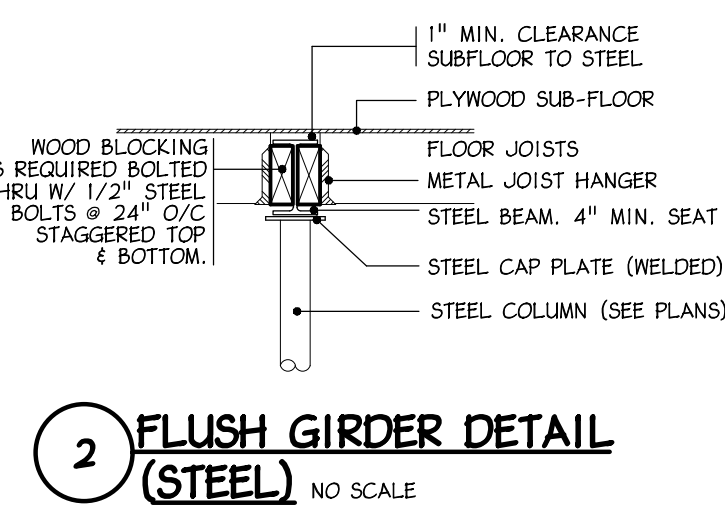
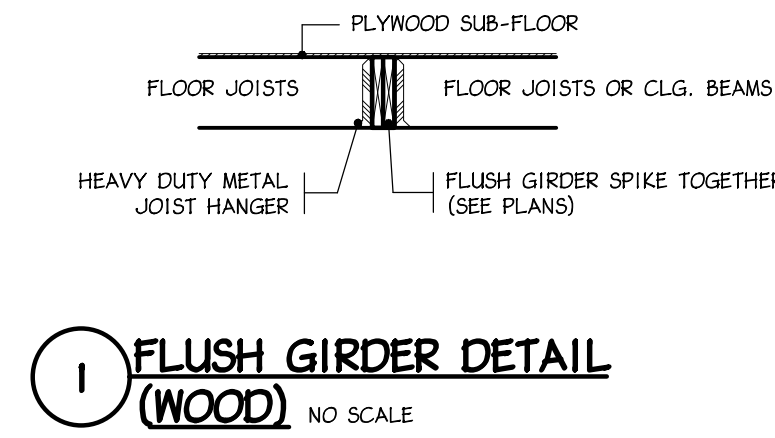
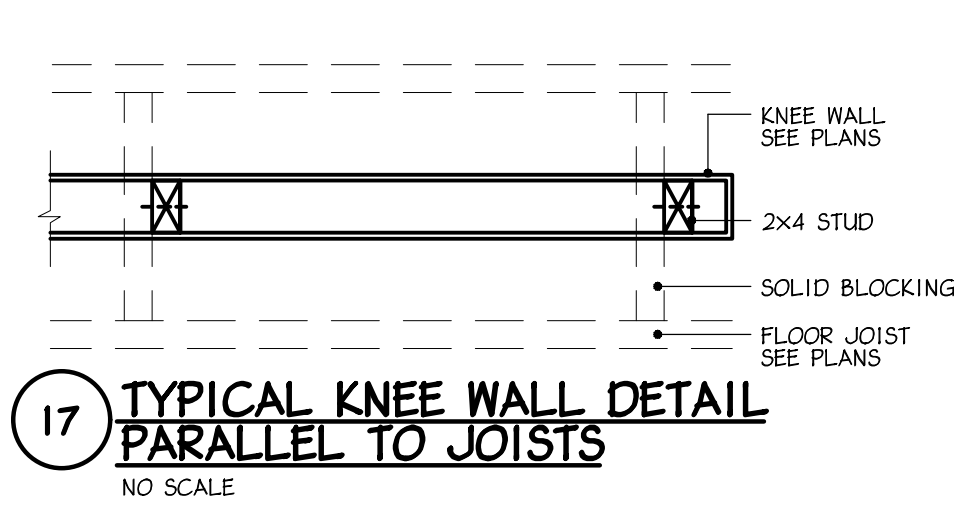
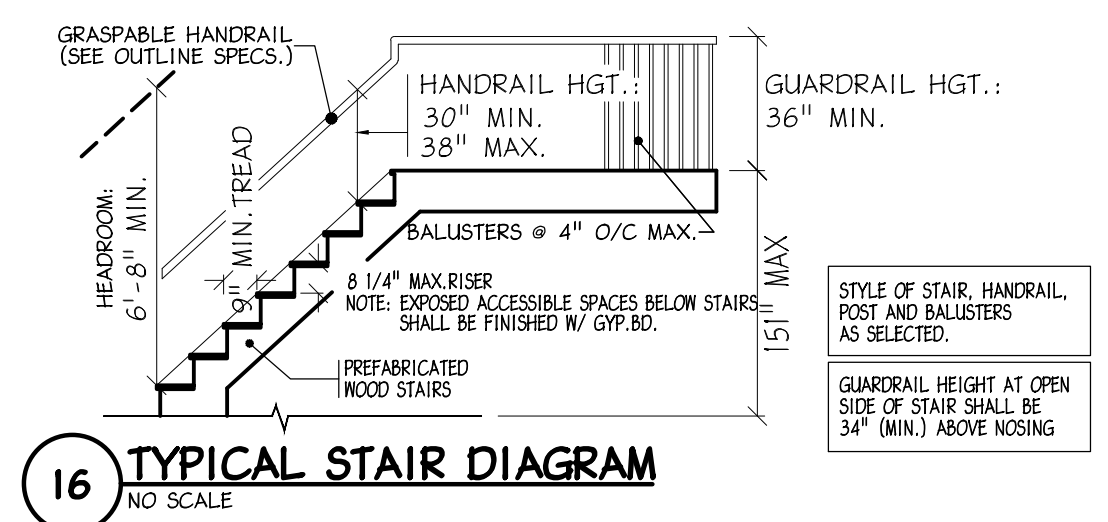
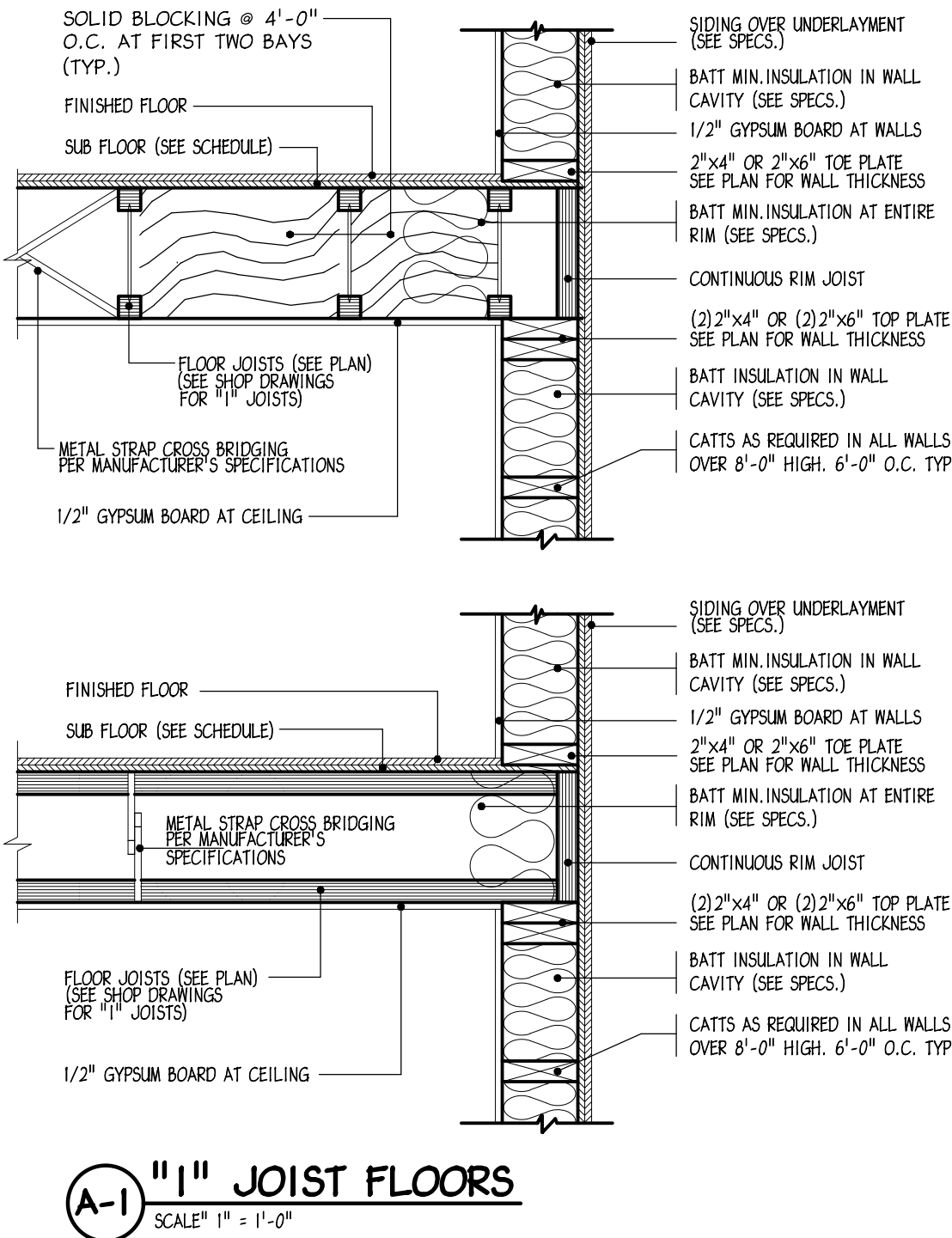
2ND FLOOR
ELECTRICAL

DRAWN BY: KP
CHECKED BY: CS
CLIENT: FRIEDMAN, AARON
DATE: 3-8-24

DRAWING:
E-03

COMM. #: 14290

APPEL DESIGN GROUP - FILENAME: E:\DETAILS\TYPING\TYPICALS.DWG PLOT DATE: 03/21/2024 4:24 PM BY: KP



NOTE:
DETAILS AND INFORMATION SHOWN ON ELEVATION PLAN, FOUNDATION PLAN, FIRST FLOOR PLAN, SECOND FLOOR PLAN & FRAMING PLAN DRAWINGS SUPERCEDE THE TYPICAL DETAILS SHOWN HEREON.
WHERE INFORMATION ON THIS DRAWING CONFLICTS WITH INFORMATION SHOWN ELSEWHERE, CONTACT THE ARCHITECT FOR CLARIFICATION.
SECTIONS AND DETAILS SHOWN ON THIS DRAWING ARE DIAGRAMATIC AND ILLUSTRATE MINIMUM CONSTRUCTION STANDARDS. TRIM, ROOF OVERHANGS, FINISH DETAILS, ETC. ARE NOT INDICATED.

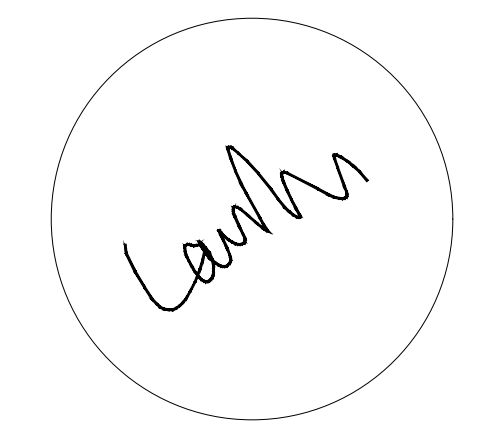


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**SINGLE FAMILY HOME
FRIEDMAN RESIDENCE**
10 RIDGE ROAD
WEST ORANGE, NJ

NO. REVISION BY DATE
1 ISSUE FOR PERMIT 03-21-24



LAURANCE D. APPEL, R.A., N.J. # A1-12149
N.Y. # 025018
PA # RA-04580-B

**TYPICAL
DETAILS**

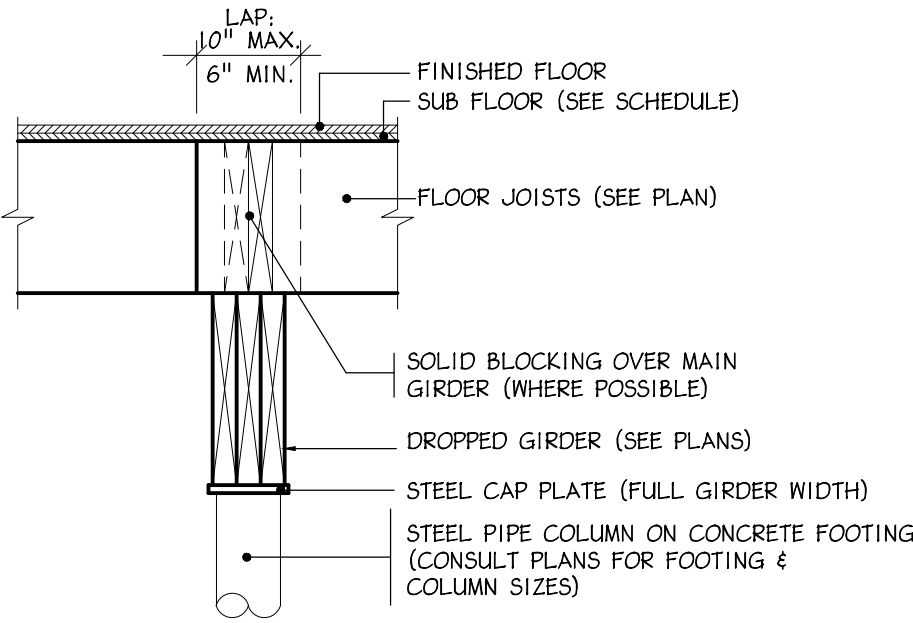
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DATE: 02-20-23

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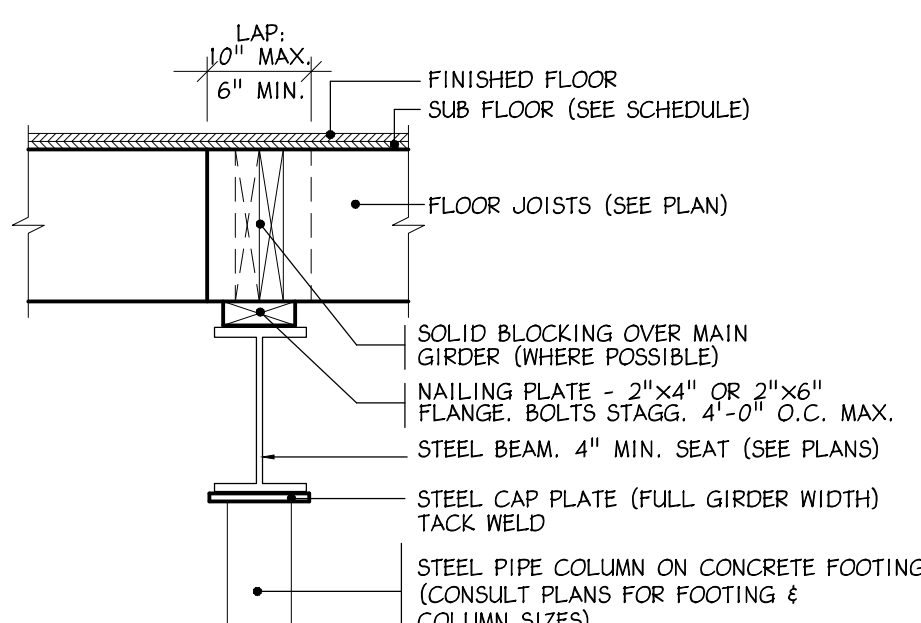
T-1A

COMM. # N/A

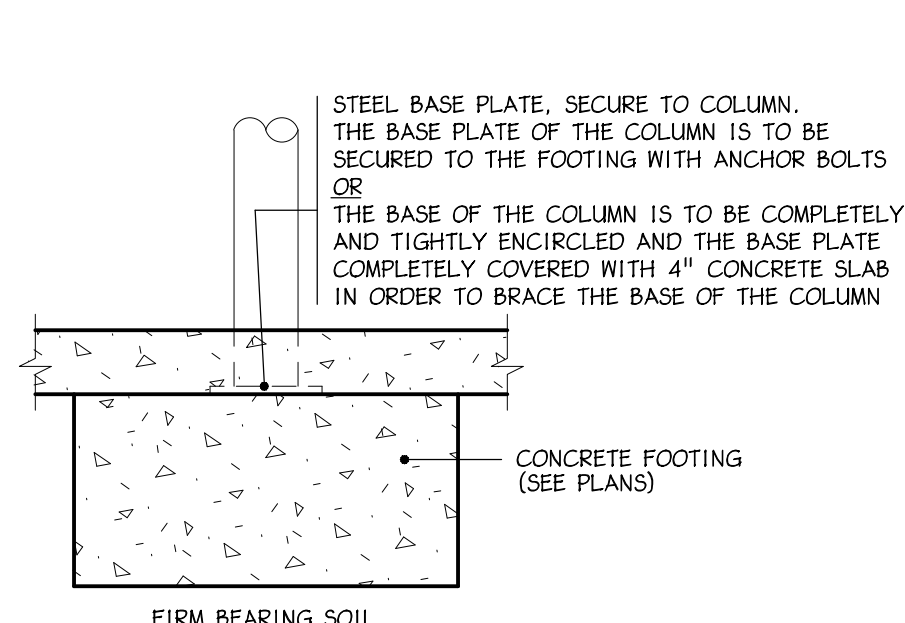
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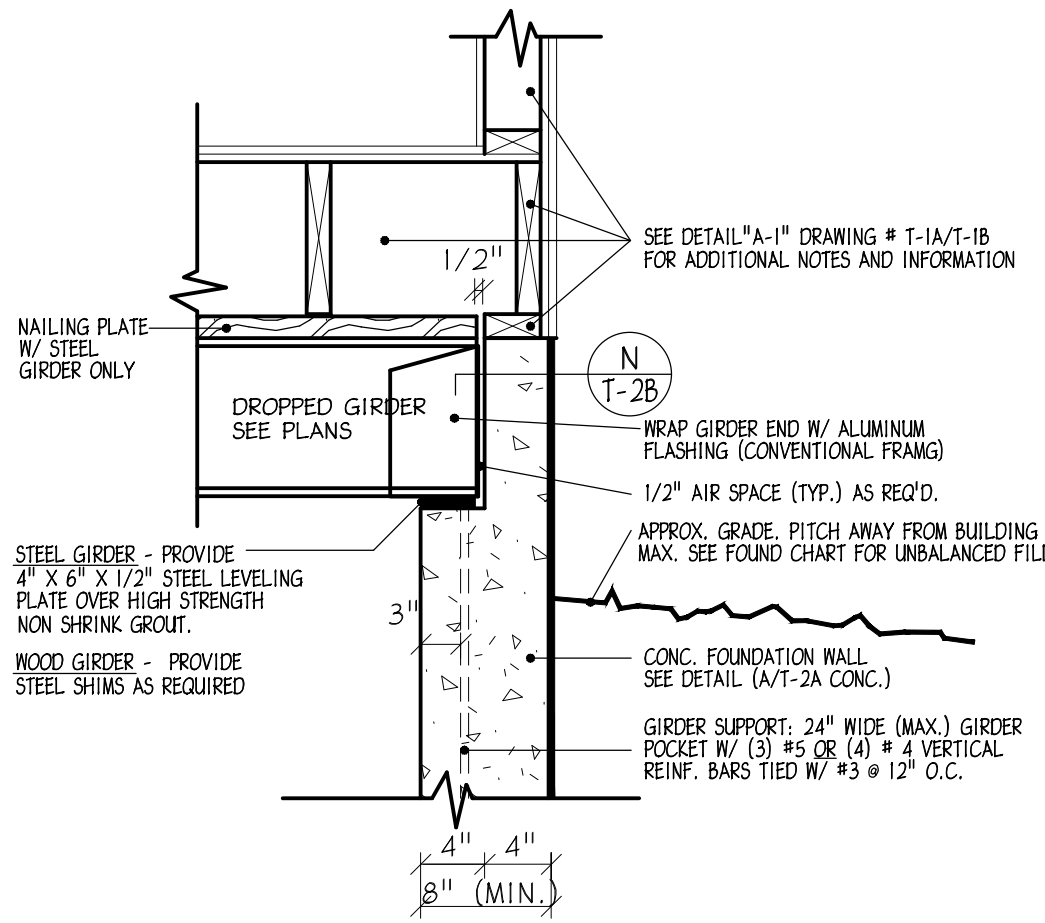
D COLUMN CAP (CONV. GIRDER)
SCALE: 1" = 1'-0"



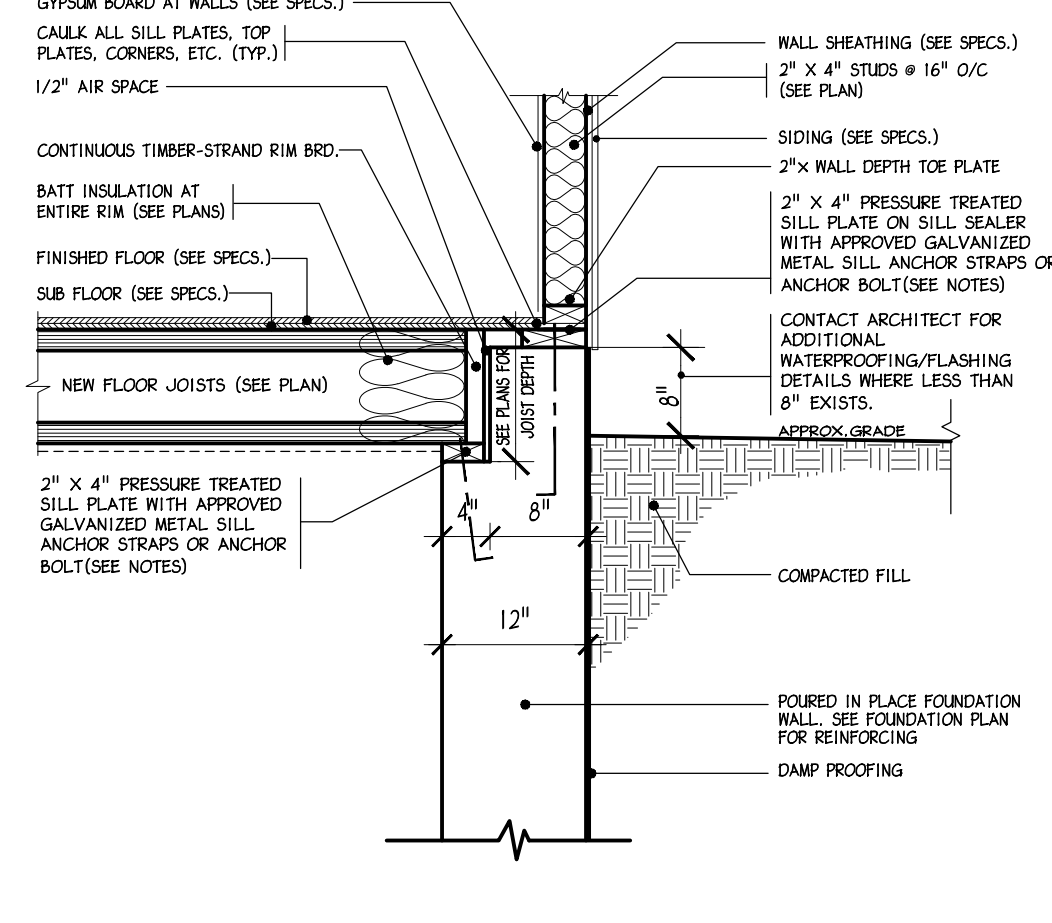
E COLUMN CAP (STEEL GIRDER)
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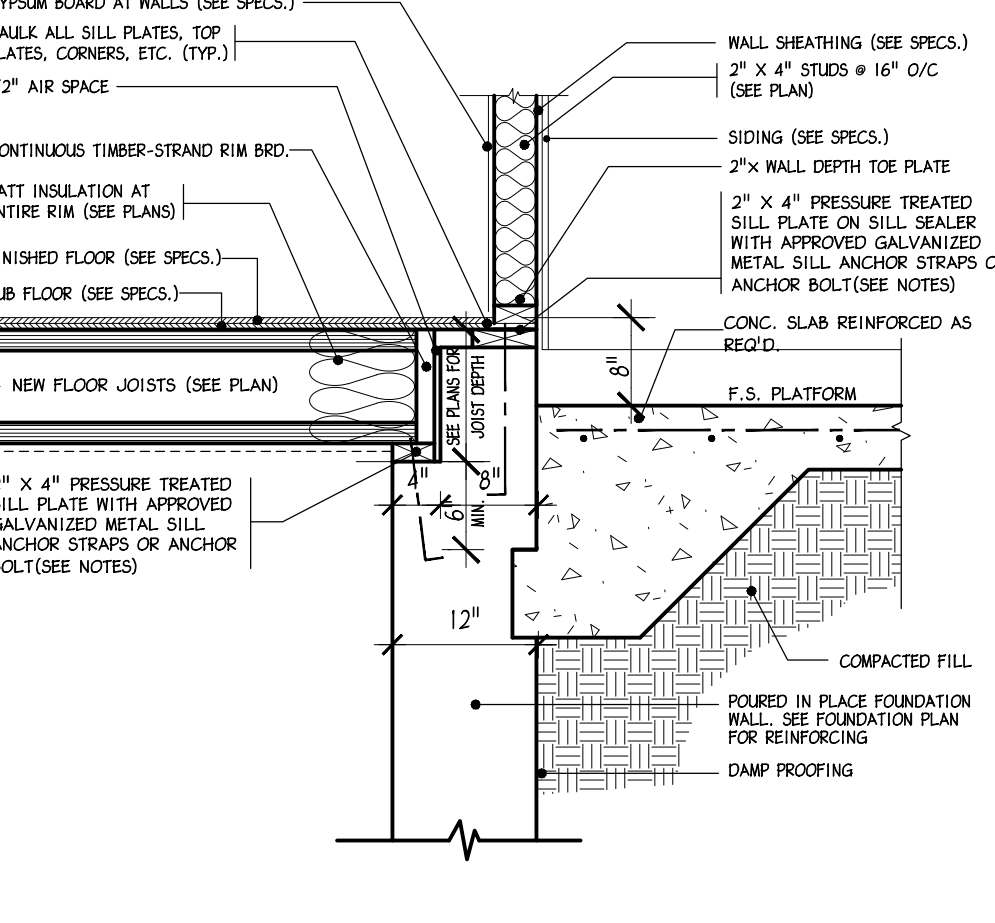
F COLUMN FOOTING
SCALE: 1" = 1'-0"



A-1 TYPICAL DETAIL @ CONCRETE FOUNDATION WALL GIRDER SUPPORT
SCALE: 1" = 1'-0"

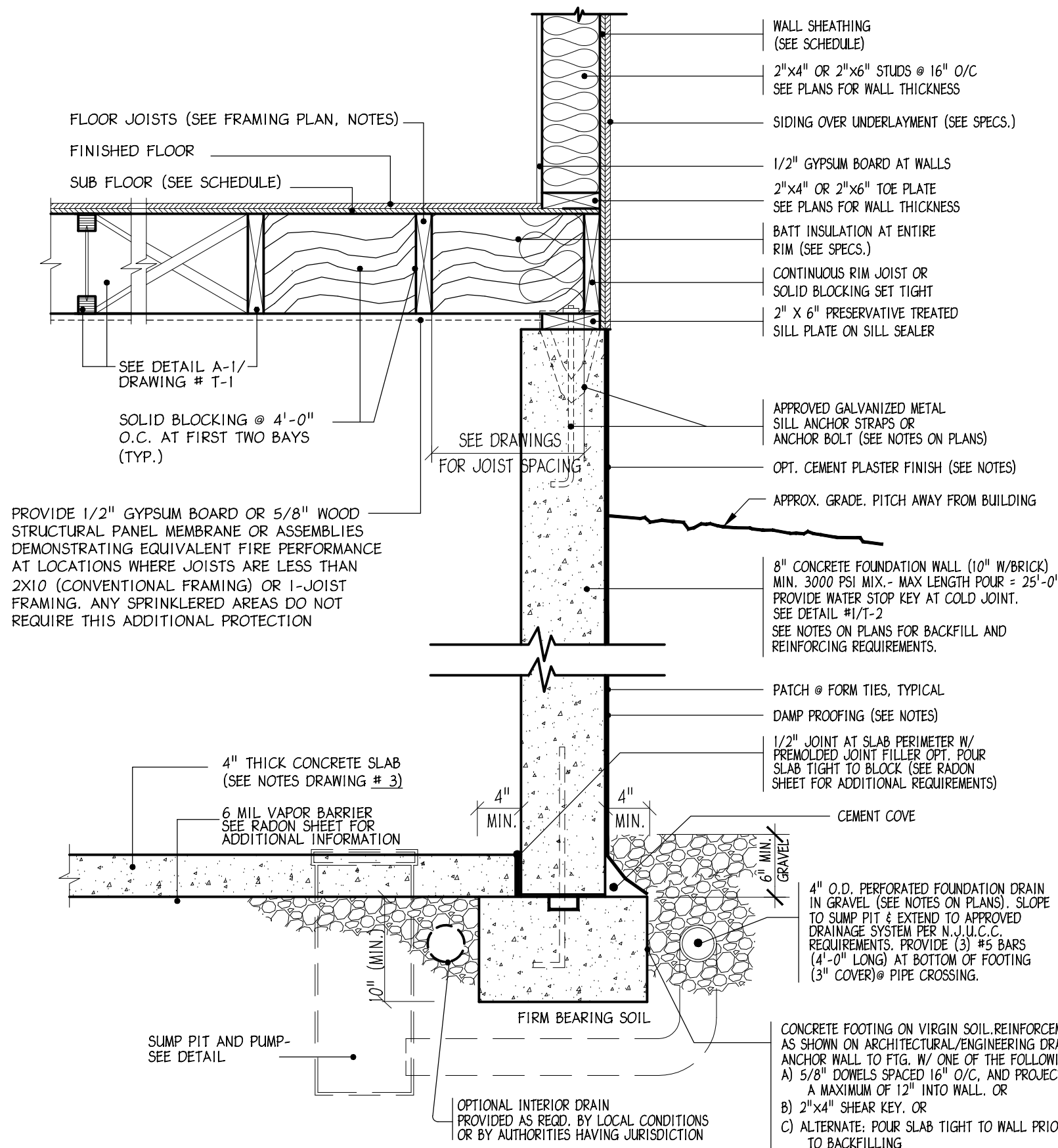


H HIGH GRADE DETAIL
SCALE: 1" = 1'-0"

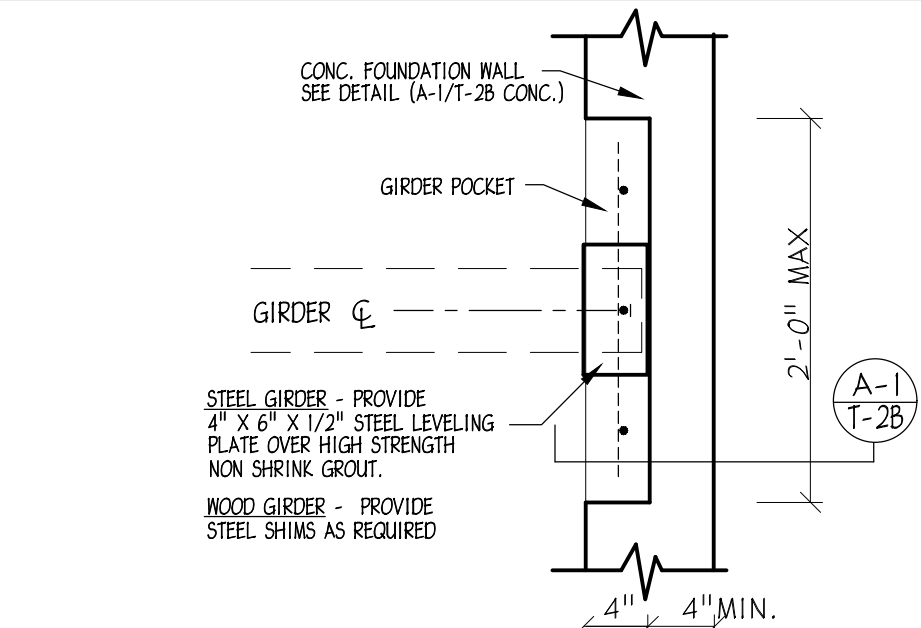


I FOUND. WALL @ ENTRY PLATFORM
SCALE: 1" = 1'-0"

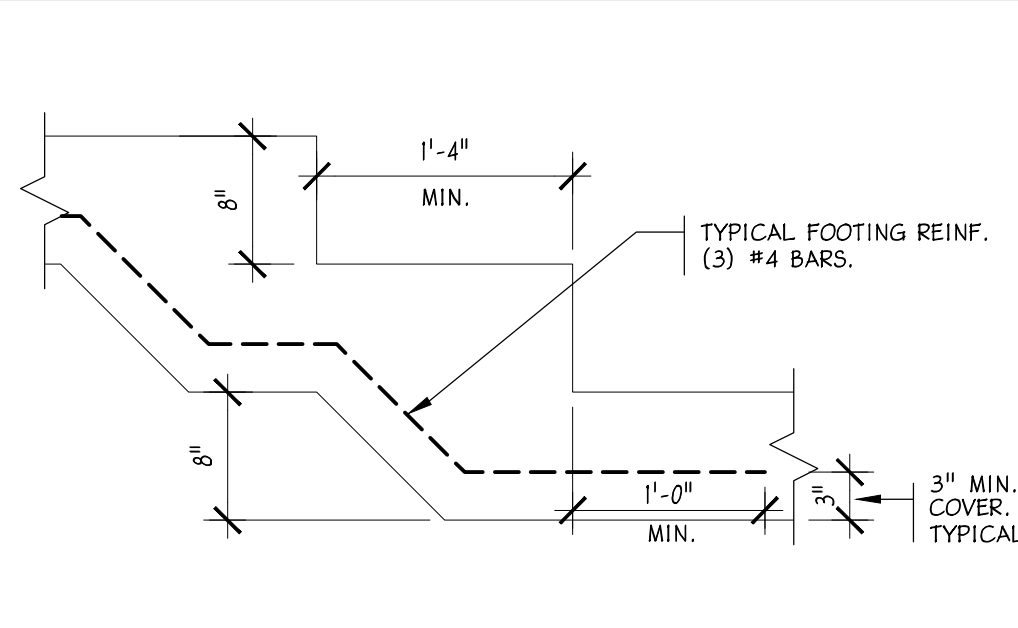
NOTE: POURED IN PLACE (P.I.P.) CONCRETE FOUNDATION WALLS
1. THIS SECTION OF DRAWING TO BE USED WHERE SPECIFIED ON "SCHEDULE OF STRUCTURAL MATERIALS" ON DRAWING # C-1 AS "P.I.P. CONCRETE" - SEE FOUNDATION PLAN FOR ADDITIONAL INFORMATION. NOTIFY ARCHITECT FOR ALTERNATE FOUNDATION DETAILS AND CONDITIONS.



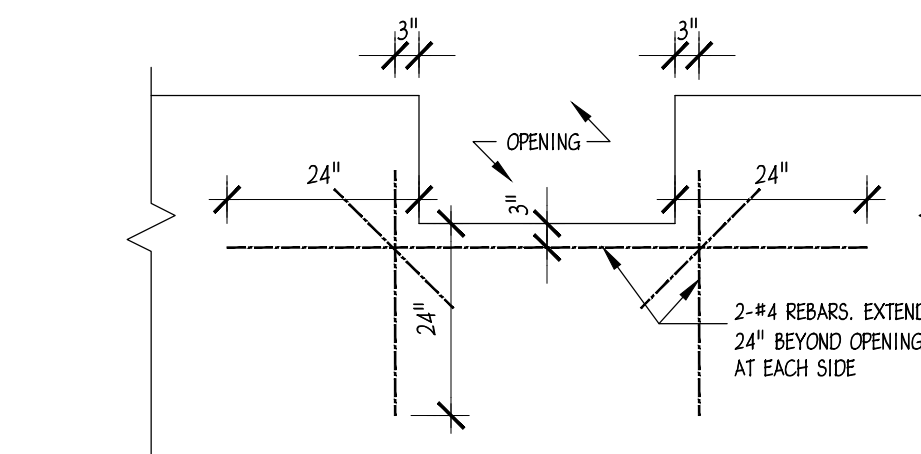
A PARTIAL WALL SECTION (CONC.)
SCALE: 1" = 1'-0" -- SEE DETAILS "A" & "A-1" DRWG #T-1" FOR ADDITIONAL NOTES & INFORMATION



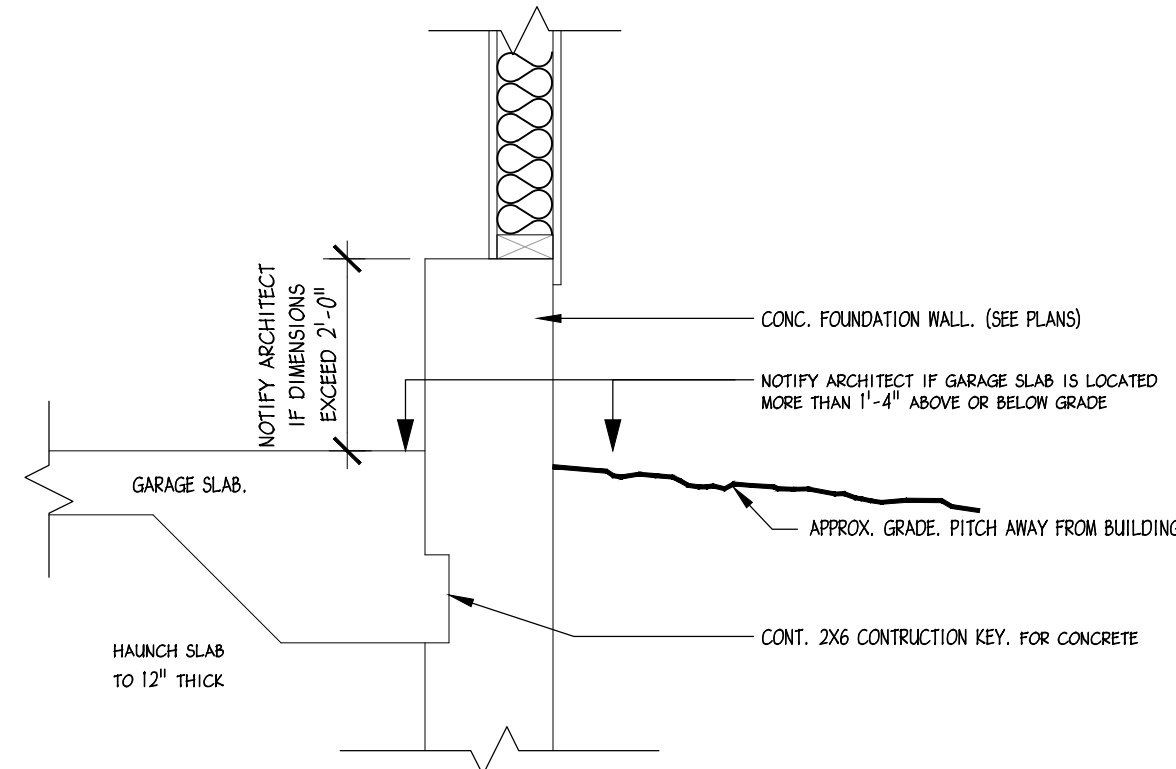
N TYP. DETAIL PLAN VIEW @ GIRDER SUPPORT
SCALE: 1" = 1'-0"



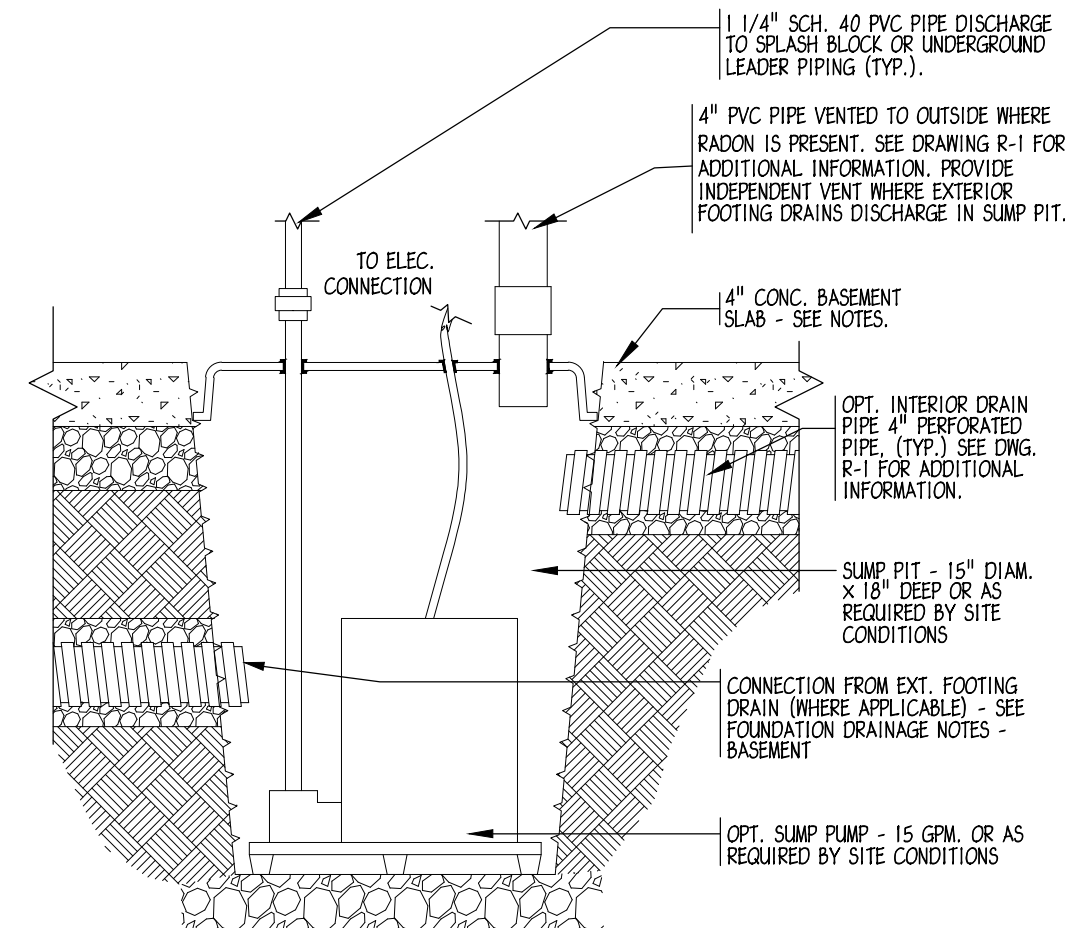
O TYPICAL STEPPED FOOTING
NO SCALE (SEE FOOTING NOTES)



Q REINFORCING @ FOUNDATION WALL OPENING
NO SCALE



M SLAB DETAIL @ GARAGE FLOOR
NO SCALE



P TYPICAL SUMP PIT DETAIL
SCALE: 1" = 1'-0"

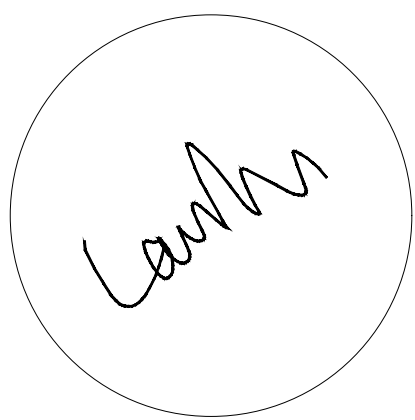


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**SINGLE FAMILY HOME
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WEST ORANGE, NJ

NO. REVISION BY DATE
1. ISSUE FOR PERMIT 03-21-24



LAURANCE D. APPEL, R.A., N.J. #A-10149
NY - 025018
PA - RA-045820-B

**TYPICAL
DETAILS**

DRAWN BY: KP
CHECKED BY: CS
CLIENT: TYPICAL
DATE: 02-20-23

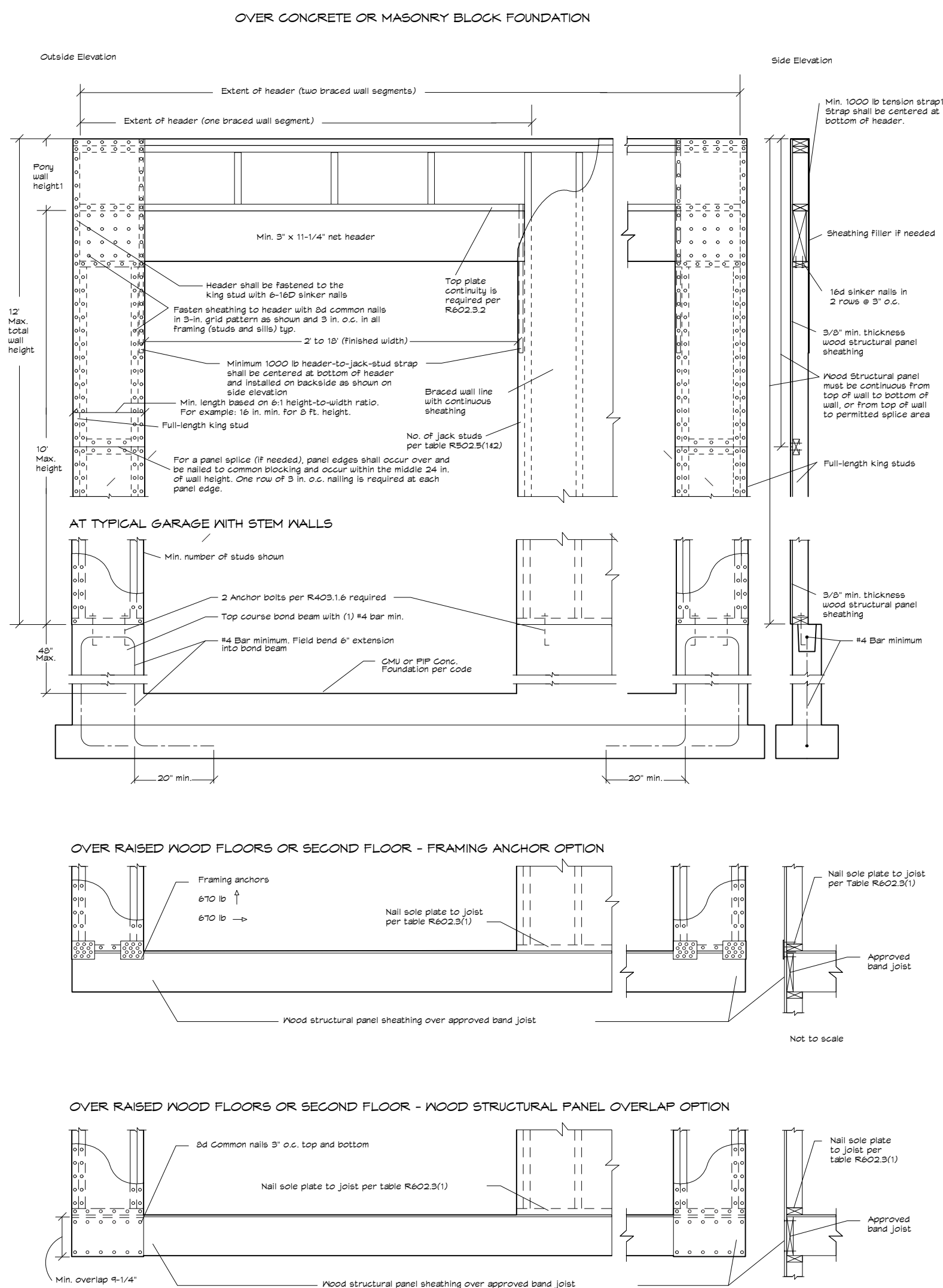
DRAWING:

T-2B

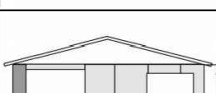
COMM. #: N/A

DESIGN ASSUMPTIONS:
EXTERIOR BRACING METHOD: CS-WSP
(CS-WSP TO BE USED ON ALL EXTERIOR WALLS UNLESS OTHERWISE NOTED ON THE DRAWINGS)

TYPICAL WALL BRACING INFORMATION

[illegible]

CS-PF CONTINUOUS PORTAL FRAME DETAIL
NO SCALE

METHODS, MATERIAL	MINIMUM THICKNESS	FIGURE	CONNECTION CRITERIA*	
			Fasteners	Spacing
CS-WSP Continuously sheathed wood structural panel	$\frac{1}{8}"$		Exterior sheathing per Table R602.3(3)	6" edges 12" field
			Interior sheathing per Table R602.3(1) or R602.3(2)	Varies by fastener
CS-PF Continuously sheathed portal frame	$\frac{7}{16}"$		See Section R602.10.6.4	See Section R602.10.6.4
WSP Wood structural panel (See Section R604)	$\frac{3}{8}"$		Exterior sheathing per Table R602.3(3)	6" edges 12" field
			Interior sheathing per Table R602.3(1) or R602.3(2)	Varies by fastener
GB Gypsum board	$\frac{1}{2}"$		Nails or screws per Table R602.3(1) for exterior locations	For all braced wall panel locations: 7" edges (including top and bottom plates) 7" field
			Nails or screws per Table R702.3.5 for interior locations	

Notes: S1: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 mile per hour = 0.447 m/s; 1 ksi = 6.895 MPa.

a. Nails are smooth-corner, box or deformed shanks except where otherwise stated. Nails used for framing and sheathing connections are carbon steel and shall have minimum average bending yield strengths as shown: 80 ksi for shank diameter of 0.192 inch (20 common nail), 90 ksi for shank diameters larger than 0.192 inch and not larger than 0.275 inch (30 common nail), and 100 ksi for shank diameters larger than 0.275 inch. Connections using nails and staples of other materials, such as stainless steel, shall be designed by engineering practice or approved under Section R102.114.

b. RRSR#1 is a Roof Sheathing Ring Shank nail meeting the specifications in ASTM F11607.

c. Nails shall be spaced at not more than 6 inches on center at all supports where spans are 48 inches or greater.

d. Floor joist for 8-foot or 4-foot by 9-foot panels shall be applied vertically.

e. Wood structural members not included in this table shall be based on Table R602.3(2).

f. For wood structural panel roof sheathing attached to gable end framing and to intermediate supports within 48 inches of roof eaves and ridges, nails shall be spaced at 48 inches on center or closer at the eaves and ridges and at 24 inches on center or closer at intermediate supports. For roof sheathing applied to rafters, nails shall be spaced at 24 inches on center or closer at the eaves and ridges and at 24 inches on center or closer at intermediate supports. For roof sheathing applied to rafters, nails shall be spaced at 24 inches on center or closer at the eaves and ridges and at 24 inches on center or closer at intermediate supports. For roof sheathing applied to rafters, nails shall be spaced at 24 inches on center or closer at the eaves and ridges and at 24 inches on center or closer at intermediate supports. For roof sheathing applied to rafters, nails shall be spaced at 24 inches on center or closer at the eaves and ridges and at 24 inches on center or closer at intermediate supports.

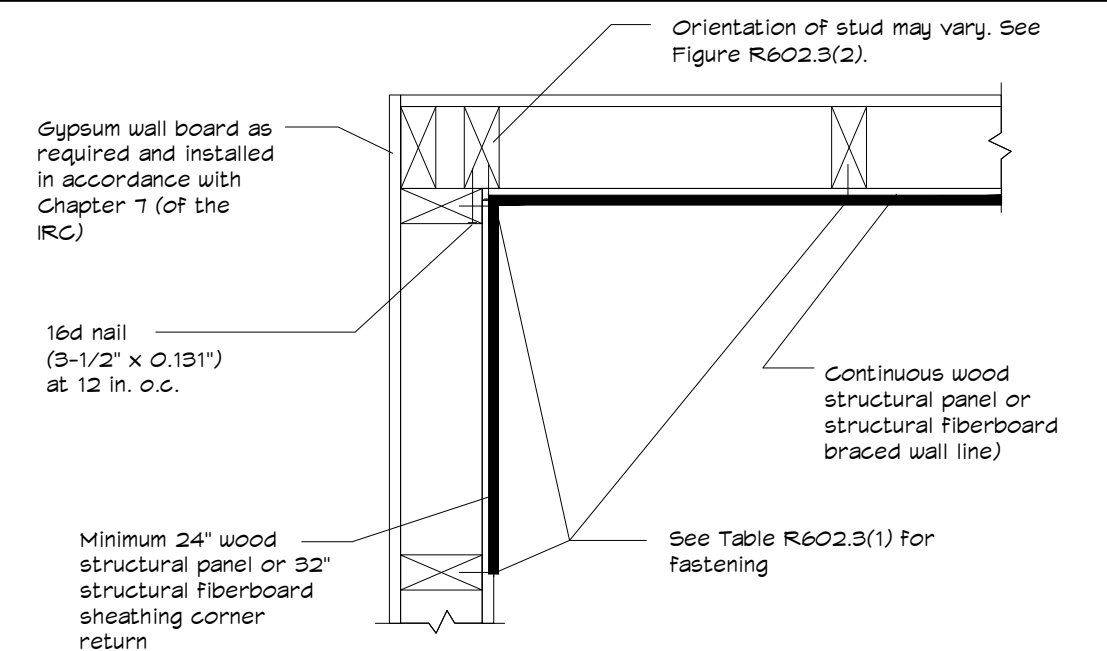
g. Gypsum sheathing shall conform to ASTM C1396 and shall be installed in accordance with ASTM C1280 or G-253. Fiberglass sheathing shall conform to ASTM C208.

h. Spacing of fasteners on roof sheathing panel edges applies to panel edges supported by framing members and required blocking and at floor perimeter only.

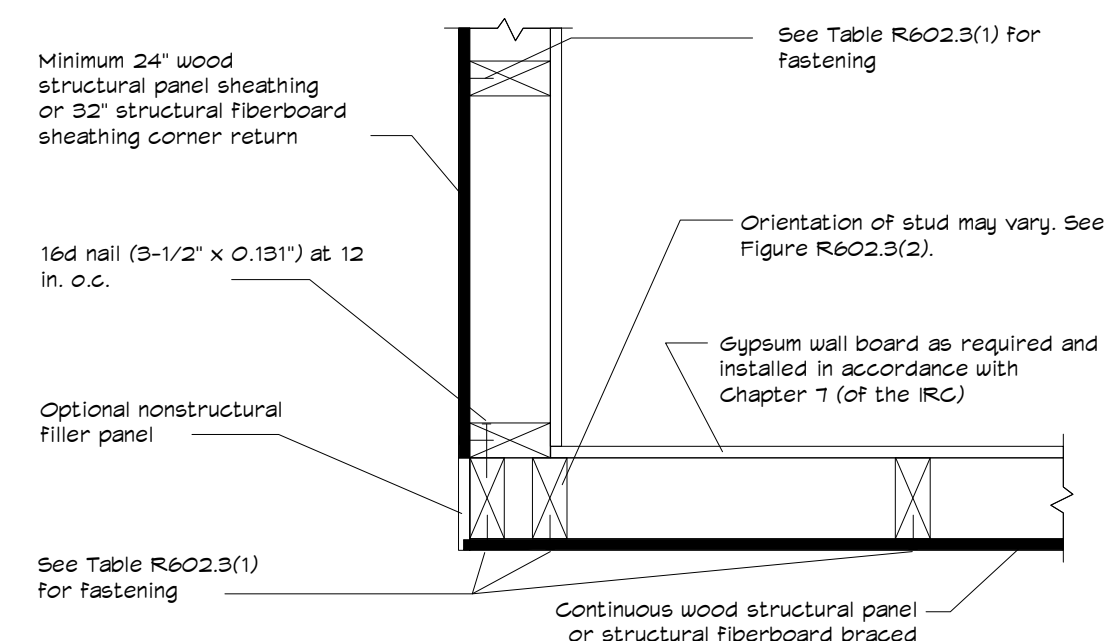
i. Spacing of fasteners on roof sheathing panel ends applies to panel ends supported by framing members and required blocking and at floor perimeter only.

j. Sheathing panel edges perpendicular to the framing members need not be provided except as required by other provisions of this code. Floor perimeter shall be supported by framing members and solid blocking.

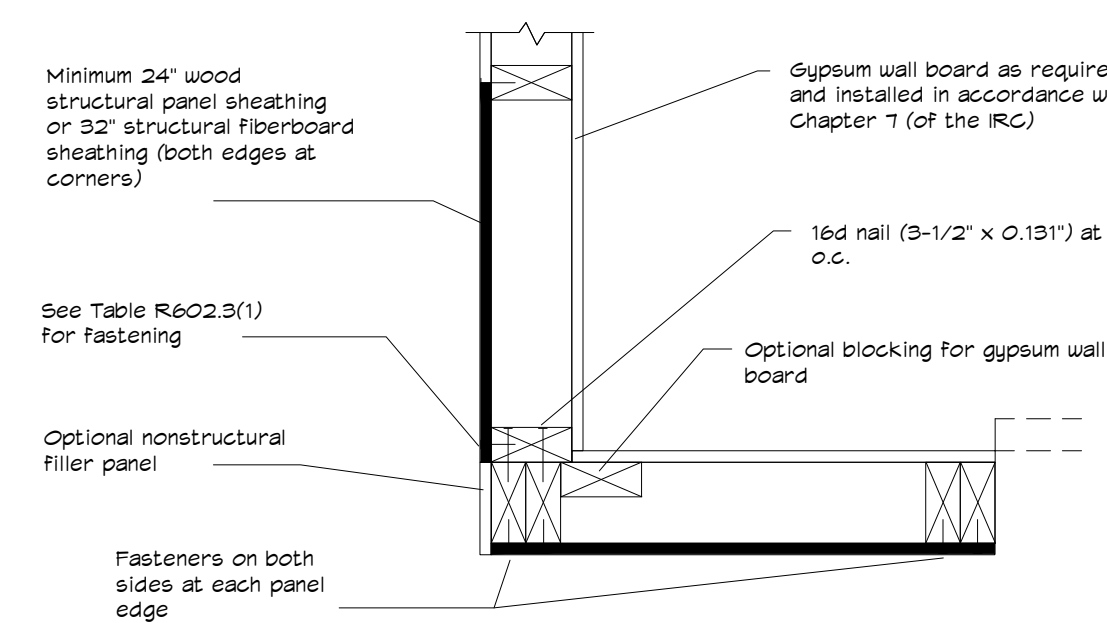
k. The ceiling joist is required to be installed in accordance with this schedule. Provide two toe nails on one side of the rafter and two toe nails on the ceiling joist to toe plate in accordance with this schedule. The toe nail on the opposite side of the rafter shall not be required.



TYPICAL INSIDE CORNER DETAIL
NO SCALE



TYPICAL OUTSIDE CORNER DETAIL
NO SCALE



TYPICAL GARAGE CORNER DETAIL
NO SCALE

TYPICAL AT ALL EXTERIOR WALLS

SINGLE FAMILY HOME
FRIEDMAN RESIDENCE
10 RIDGE ROAD
WEST ORANGE, NJ

NO.	REVISION	BY	DATE
1	ISSUE FOR PERMIT		03-21-24

Carlin

LAURANCE D. APPEL, R.A. NJ # AI-12149
NY - 025018
PA - RA-014580-B

TYPICAL WALL BRACING

DRAWN BY: DK

CHECKED BY: CS

CLIENT: TYPICAL

DATE: 02-20-2

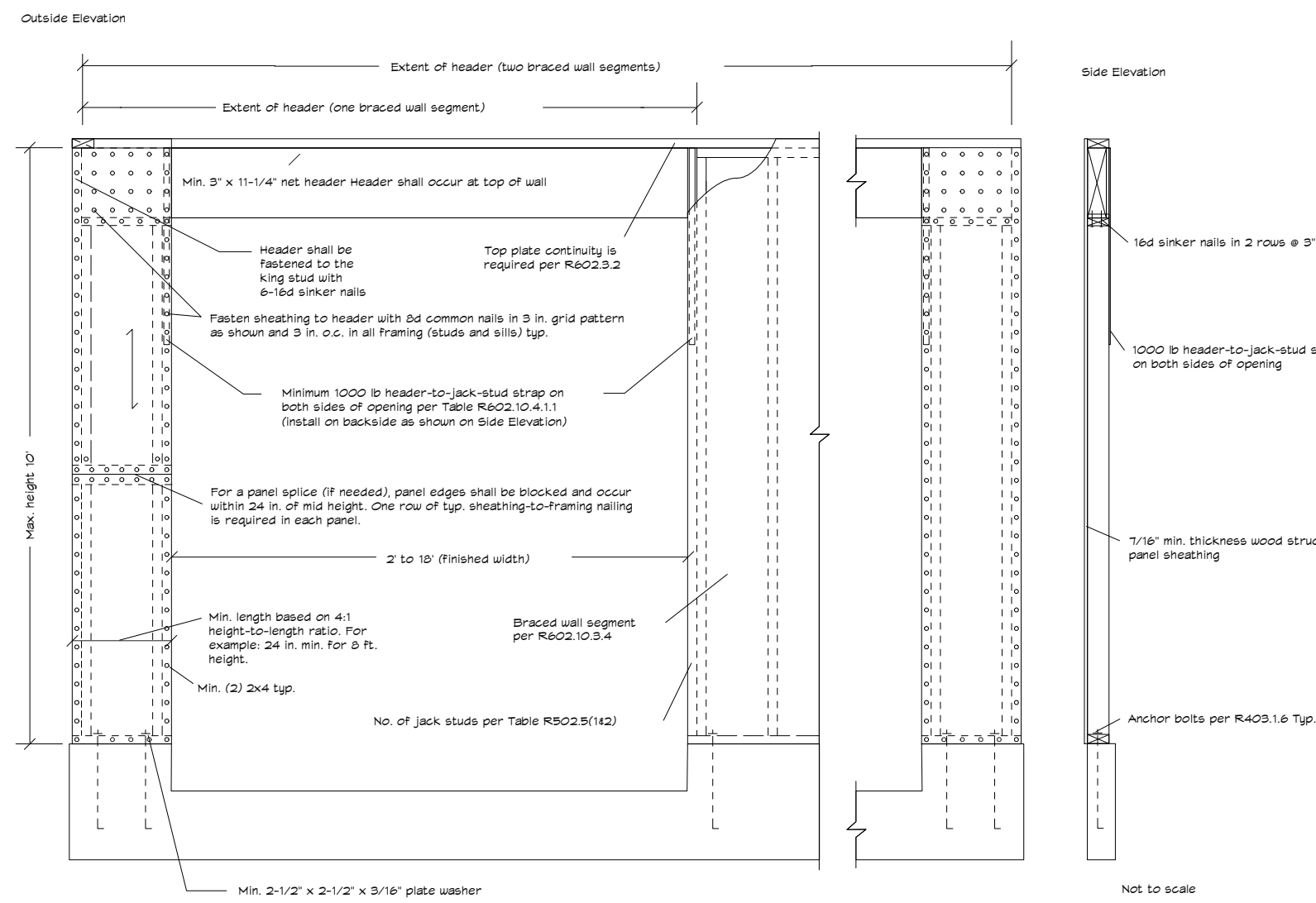
DRAWING

T-WB1

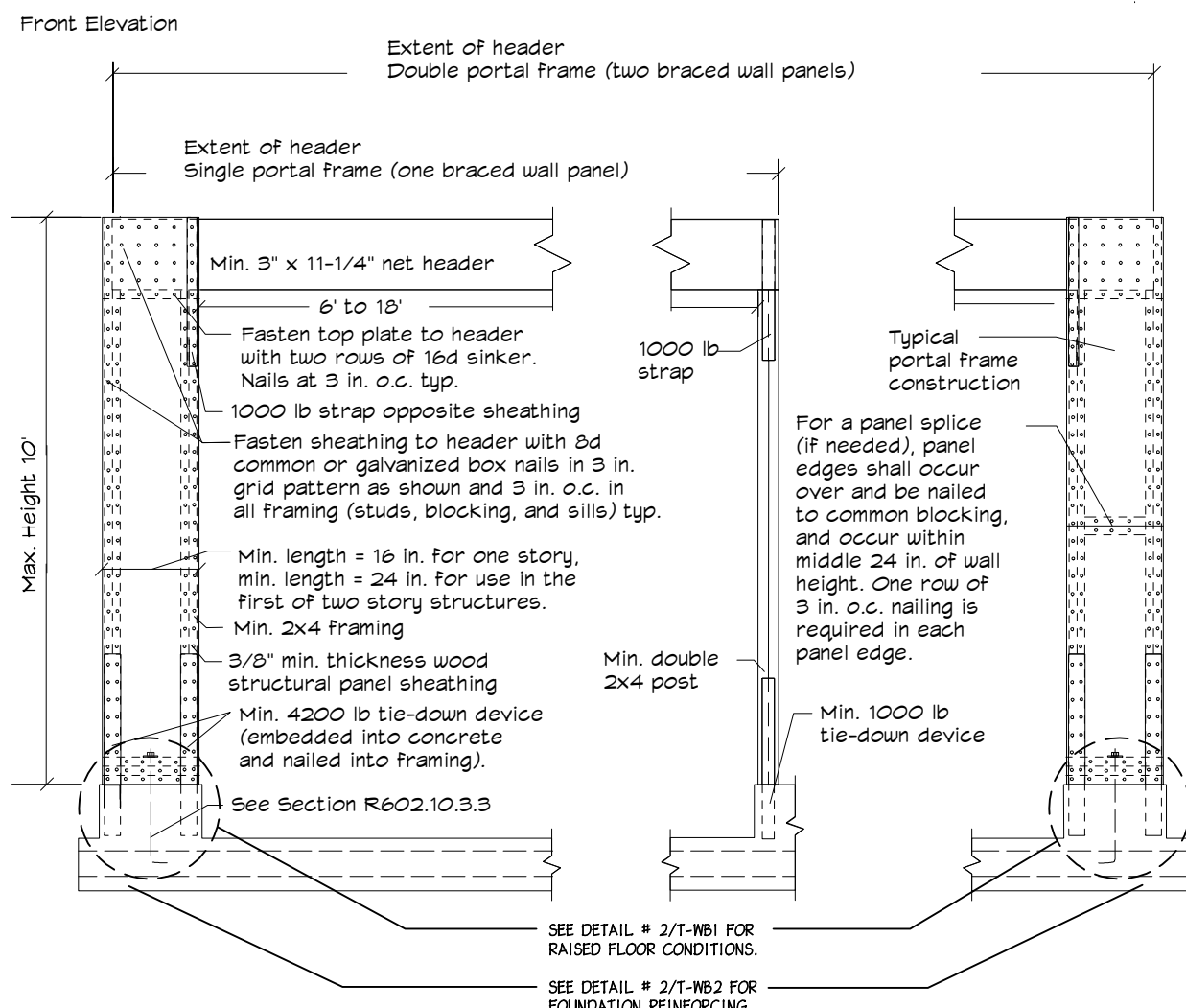
COMM. #: N/A

TYPICAL WALL BRACING INFORMATION

INTERMITTENT BRACING METHOD



PFG PORTAL FRAME AT GARAGE DOOR
NO SCALE



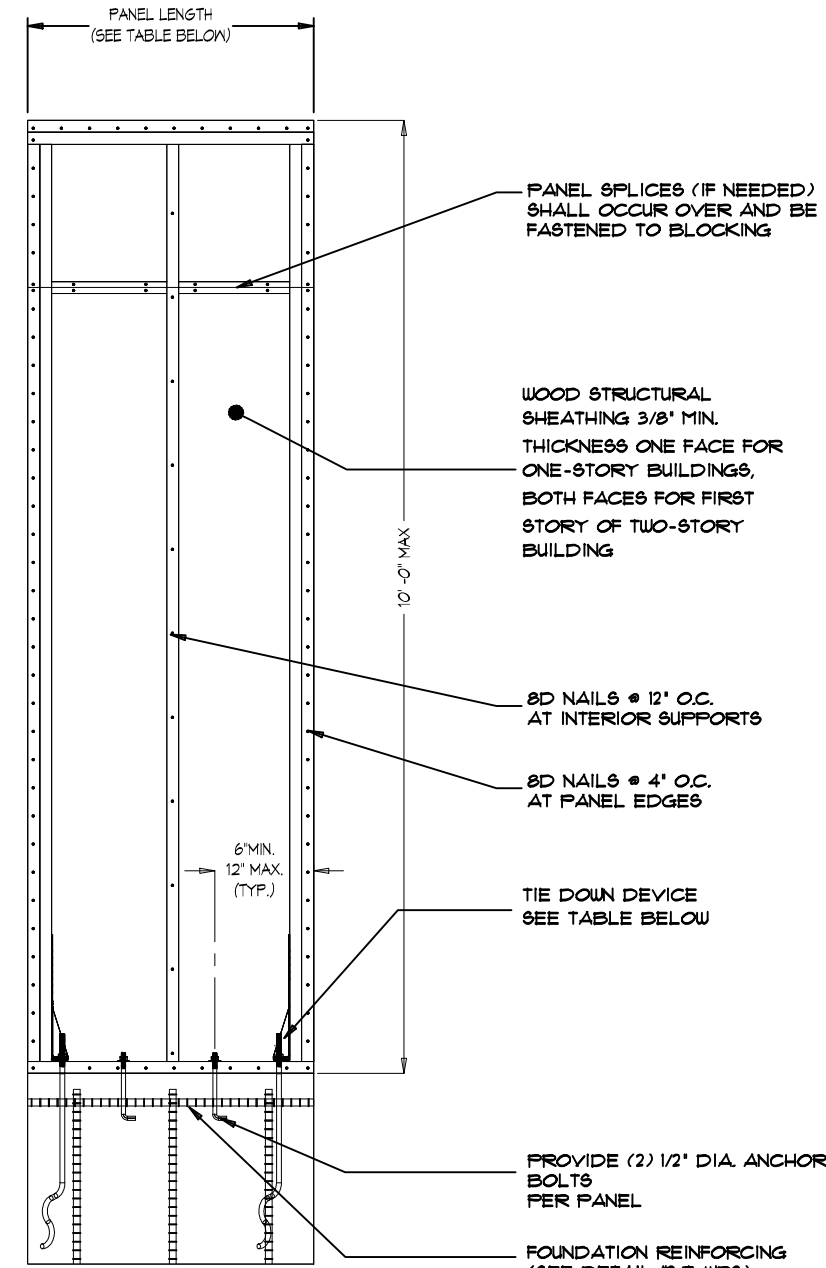
PFH PORTAL FRAME (WITH HOLD DOWNS)
NO SCALE

HOLD DOWN CAPACITY	1,000 LBS.	4,200 LBS.
EQUIVALENT HOLD DOWN DEVICE (SIMPSON STRONG-TIE)	5THD8 / L5THD8RJ	5THD14 / 5THD14RJ

NOTE: SEE SECTION FOR FOUNDATION REQUIREMENTS

INTERMITTENT BRACING METHODS

WSP	GB	Exterior sheathing per Table R602.3(3)	6" edges 12" field
Wood structural panel (See Section R604)		Interior sheathing per Table R602.3(1) or R602.3(2)	Varies by fastener
GB Gypsum board		Nails or screws per Table R702.3.5 for interior locations	For all braced wall panel locations: 7" edges (including top and bottom plates) 7" field

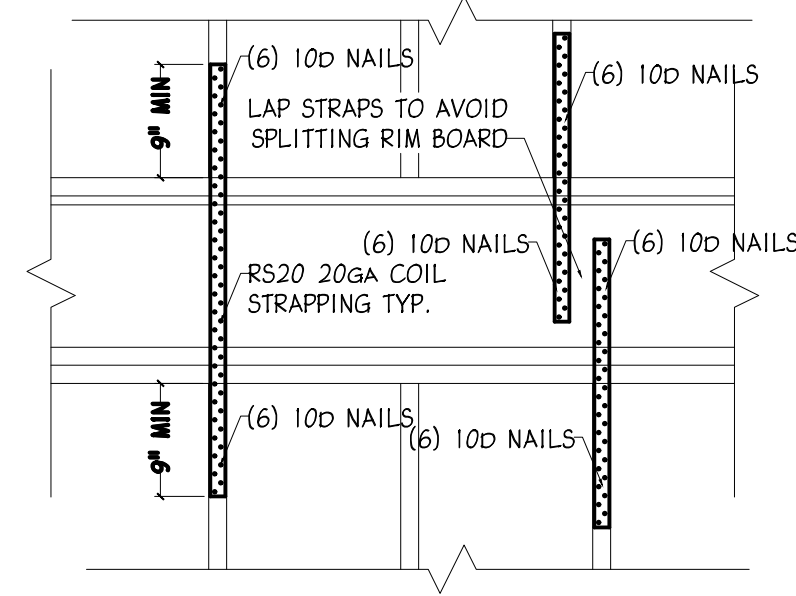


HEIGHT OF PANEL	8'-0"	9'-0"	10'-0"
MIN. PANEL LENGTH	2'-4"	2'-8"	2'-10"
MIN. HOLD DOWN CAPACITY			
ONE STORY BUILDING	1,800 LBS.	1,800 LBS.	1,800 LBS.
1ST STORY OF 2 STORY BLDG.	3,000 LBS.	3,000 LBS.	3,000 LBS.

HOLD DOWN CAPACITY	1,800 LBS.	3,000 LBS.
EQUIVALENT HOLD DOWN DEVICE (SIMPSON STRONG-TIE)	HDU2 HD2A STD8	HDU4 HTT16 STD10

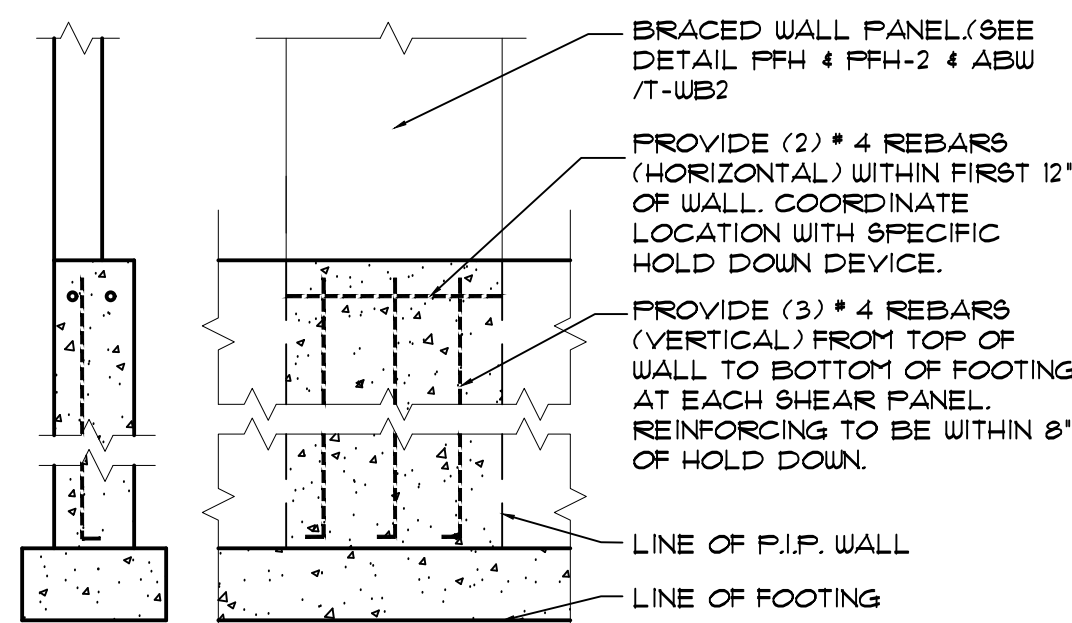
NOTE: SEE SECTION FOR FOUNDATION REQUIREMENTS

ABW ALTERNATE BRACED WALL PANEL
NO SCALE

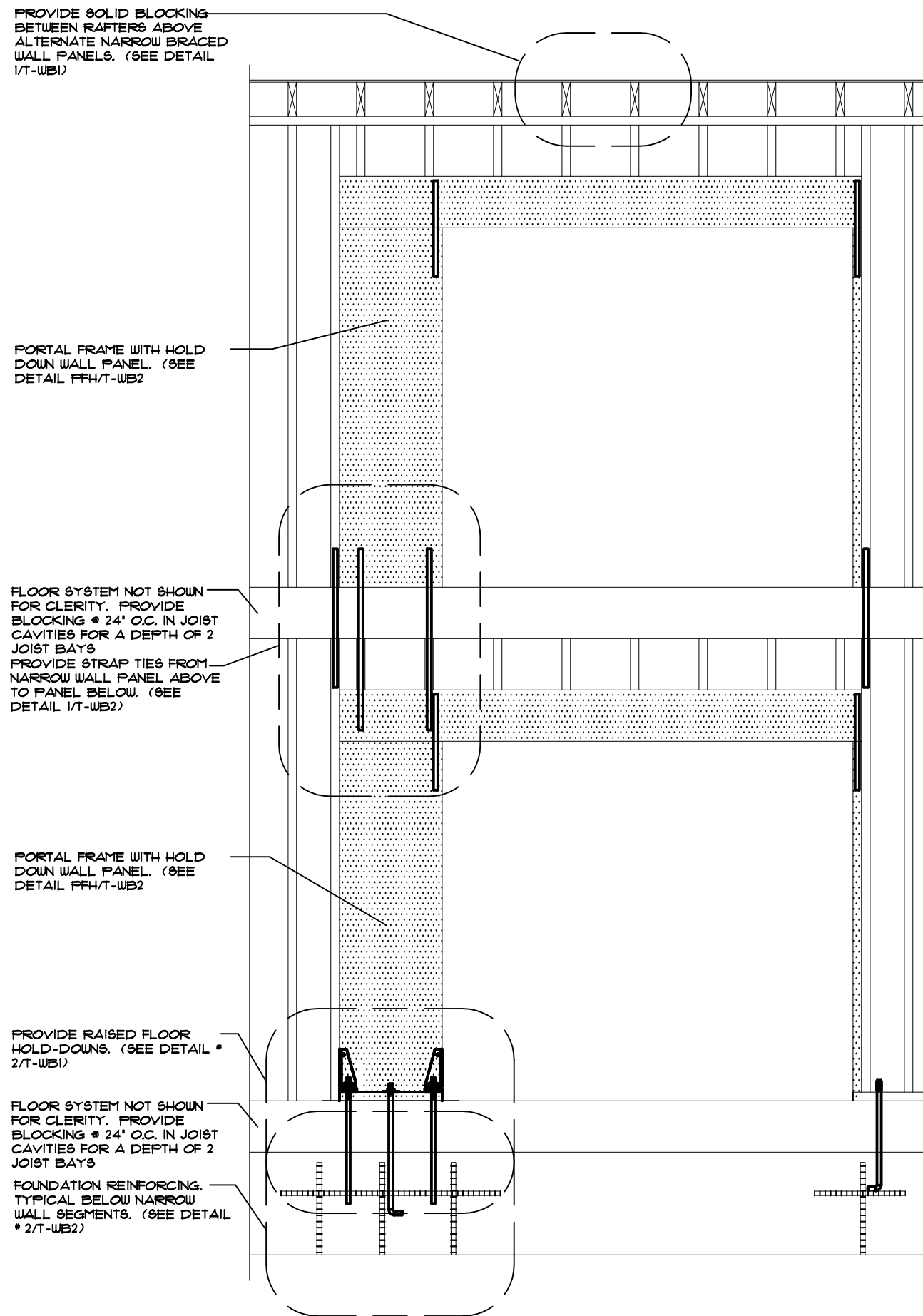


- NOTES:
1. NUMBER OF NAILS SHOWN IS A MINIMUM.
 2. SPACE NAILS OUT. SKIP EVERY OTHER SET OF NAIL HOLES IF POSSIBLE.
 3. STRAPS MAY BE INSTALLED ON OUTSIDE OF WALL SHEATHING IF 12D NAILS ARE USED.
 4. DETAIL APPLIES TO ALL "STACKED ALTERNATE BRACED WALL PANELS" OR "PORTAL FRAME WITH HOLD DOWNS" LOCATIONS ONLY.

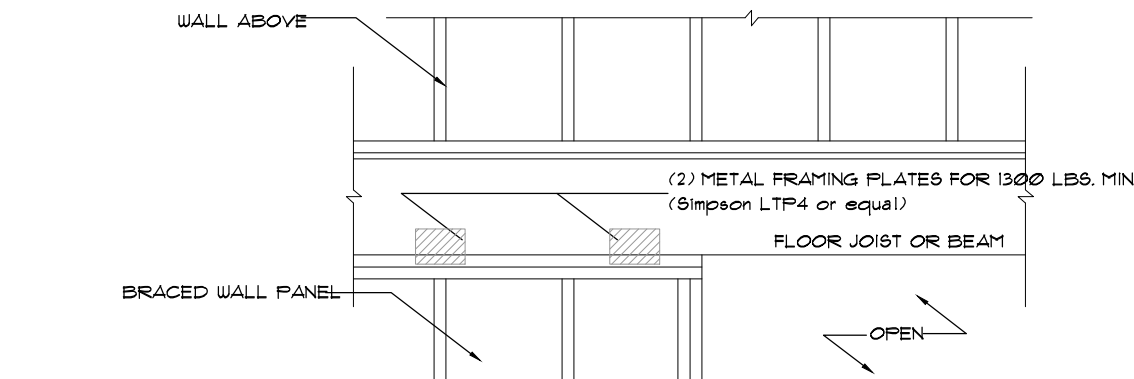
1 WALL STRAPPING DETAIL
SCALE: 3/4"=1'-0"



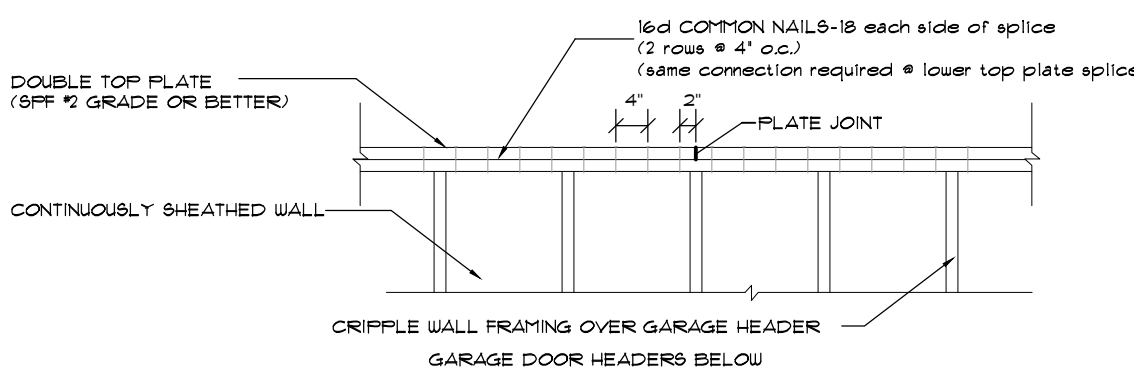
2 TYP. FOUND. REINFORCING
SCALE: NTS



PFH-2 STACKED PORTAL FRAME NARROW WALL PANELS
NO SCALE



3 STANDARD COLLECTOR DETAILS
SCALE: NTS



4 STANDARD COLLECTOR DETAILS
SCALE: NTS

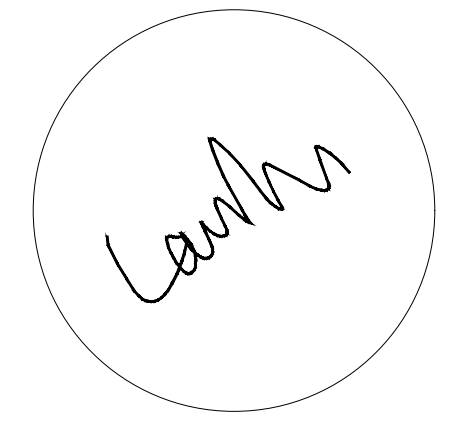


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SINGLE FAMILY HOME
FRIEDMAN RESIDENCE
10 RIDGE ROAD
WEST ORANGE, NJ

NO. REVISION BY DATE
1 ISSUE FOR PERMIT 03-21-24



LAURANCE D. APPEL, R.A. NJ # A1-12143
NY - 0034028
PA - RA-0145820-B

TYPICAL
WALL BRACING

DRAWN BY: DK
CHECKED BY: CS
CLIENT: TYPICAL
DATE: 02-20-23

DRAWING:

T-WB2

COMM. #:

N/A

GENERAL DESCRIPTION OF WORK:

1. INSTALLATION REQUIREMENTS:
- A. PASSIVE SYSTEM: UNLESS NOTED OTHERWISE, FOLLOW THE REQUIREMENTS FOR THE PASSIVE SYSTEM (SECTION A).
- DETAIL: WHERE INTERIOR FOOTING DRAINS ARE PROVIDED PER THE ATTACHED, THE VENT PIPE MAY BE CONNECTED TO THE INTERIOR FOOTING DRAIN (5:23-10.4(b)3) OR MAY BE CONNECTED TO THE SUMP PIT (5:23-10.4(b)8).
- OPTION: PROVIDE ONE VENT PIPE FOR EVERY 1500 SF OF SUB-SLAB AREA PER (5:23-10.4(b)4). NOTE: WHERE EXTERIOR FOOTING DRAINS CONNECT TO BASEMENT SUMP PIT, OR FOR SLAB ON GRADE DESIGN, OPTION # 2 SHALL BE PROVIDED.
- B. ACTIVE SYSTEM: WHERE POST CONSTRUCTION TESTING SHOWS RADON LEVELS IN EXCESS OF ACTION LEVELS FOLLOWING INSTALLATION OF A PASSIVE SYSTEM, INSTALL AN ACTIVE SYSTEM (SECTION B).
2. SYSTEM SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH N.J.U.C.C. SUBCHAPTER 10 - RADON HAZARD SUBCODE.
3. INSTALLING CONTRACTOR IS RESPONSIBLE FOR FURNISHING ALL INVESTIGATION, ENGINEERING DESIGN, COORDINATION, LABOR, MATERIALS, AND EQUIPMENT FOR A COMPLETE "TURNKEY" INSTALLATION OF A RADON REMEDIATION SYSTEM IN ACCORDANCE WITH THE SPECIFIED REQUIREMENTS.
4. THE SPECIFIED REQUIREMENTS AND RESULTING SCOPE OF WORK DELINEATED ON THIS DRAWINGS ARE IN ADDITION TO AND COMPLEMENTARY TO THE REMAINDER OF THE CONSTRUCTION DRAWINGS. INSTALLING CONTRACTOR SHALL COORDINATE WITH THE WORK OF OTHER TRADES AND FIELD CONDITIONS. WHERE A CONFLICT EXISTS BETWEEN ANY REQUIREMENTS, FOLLOW THE MORE STRINGENT.
5. THE INSTALLATION OF WORK UNDER THIS CONTRACT SHALL BE DONE IN FULL ACCORDANCE WITH THE REQUIREMENTS OF ALL AGENCIES AND AUTHORITIES HAVING JURISDICTION. ALL APPLICABLE CODES INCLUDING BUT NOT LIMITED TO: NJ UNIFORM CONSTRUCTION CODE, NATIONAL ELECTRIC CODE, INTERNATIONAL MECHANICAL CODE, INTERNATIONAL RESIDENTIAL CODE, CABO MODEL ENERGY CODE, AND THE NATIONAL STANDARD PLUMBING CODE.
6. INSTALLING CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMISSION OF ALL NECESSARY DESIGN DOCUMENTATION REQUIRED BY THE AUTHORITIES HAVING JURISDICTION. ALL SUBMISSIONS SHALL BE PREPARED AND CERTIFIED BY APPROPRIATELY LICENSED PROFESSIONALS.
7. REFERENCES, EXCEPT WHERE MORE STRINGENT STANDARDS ARE SPECIFIED, COMPLY WITH THE REQUIREMENTS OF THE MODEL STANDARDS AND TECHNIQUES FOR CONTROL OF RADON IN NEW RESIDENTIAL BUILDINGS; USEPA: EPA 402-R-94-009, MARCH 1994.

APPENDIX 10-A NEW JERSEY MUNICIPALITIES IN TIER 1			
BURLINGTON COUNTY: CHESTERFIELD WASHINGTON		MORRIS COUNTY: CHESTER BORO DOVER JEFFERSON MENDHAM TWP. MORRISTOWN MOUNT OLIVE RANDOLPH VICTORY GARDENS WHARTON RIVERDALE	
CAMDEN COUNTY: MAGNOLIA SOMERDALE		GLoucester County: DEPTFORD GREENWICH SWEDESBORO WOOLWICH	
CUMBERLAND COUNTY: BRIDGETON UPPER DEERFIELD TWP.		Passaic County: FOMPTON LAKES	
GLoucester County: DEPTFORD GREENWICH SWEDESBORO WOOLWICH		Salem County: PILEGROVE MANNINGTON TWP.	
HUNTERDON COUNTY: ALL MUNICIPALITIES EXCEPT UNION		SOMERSET COUNTY: BERNARDS BRANCHBURG FAR HILLS HILLSBOROUGH MONTGOMERY ROCKY HILL WARREN	
MERCER COUNTY: EWING HOPEWELL TWP. LAWRENCE PRINCETON TWP.		SUSSEX COUNTY: ALL MUNICIPALITIES	
MIDDLESEX COUNTY: HIGHLAND PARK PISCATAWAY		WARREN COUNTY: ALL MUNICIPALITIES	
MONMOUTH COUNTY: ALLEN TOWN COLTS NECK FREEHOLD TWP. LITTLE SILVER ROOSEVELT SHREWSBURY TWP.		Public Notice SEE: NJ A.S.A. 17:40(a) REVISED TIER 1 LIST 2020 ADMINISTRATIVE CHANGE SEE: NJ A.S.A. 17:40(a) ADMINISTRATIVE CHANGE SEE: NJ A.S.A. 17:40(a) ADMINISTRATIVE CHANGE SEE: NJ A.S.A. 17:40(a) ADMINISTRATIVE CHANGE SEE: NJ A.S.A. 17:40(a)	
		West Milford WOODSTOWN	
		Bernardsville BRIDGEWATER TWP FRANKLIN MILLSTONE PEAPACK GLADSTONE SOMERVILLE WATCHUNG	

PASSIVE SUB-SLAB DEPRESSURIZATION RADON CONTROL SYSTEM FOR NEW CONSTRUCTION

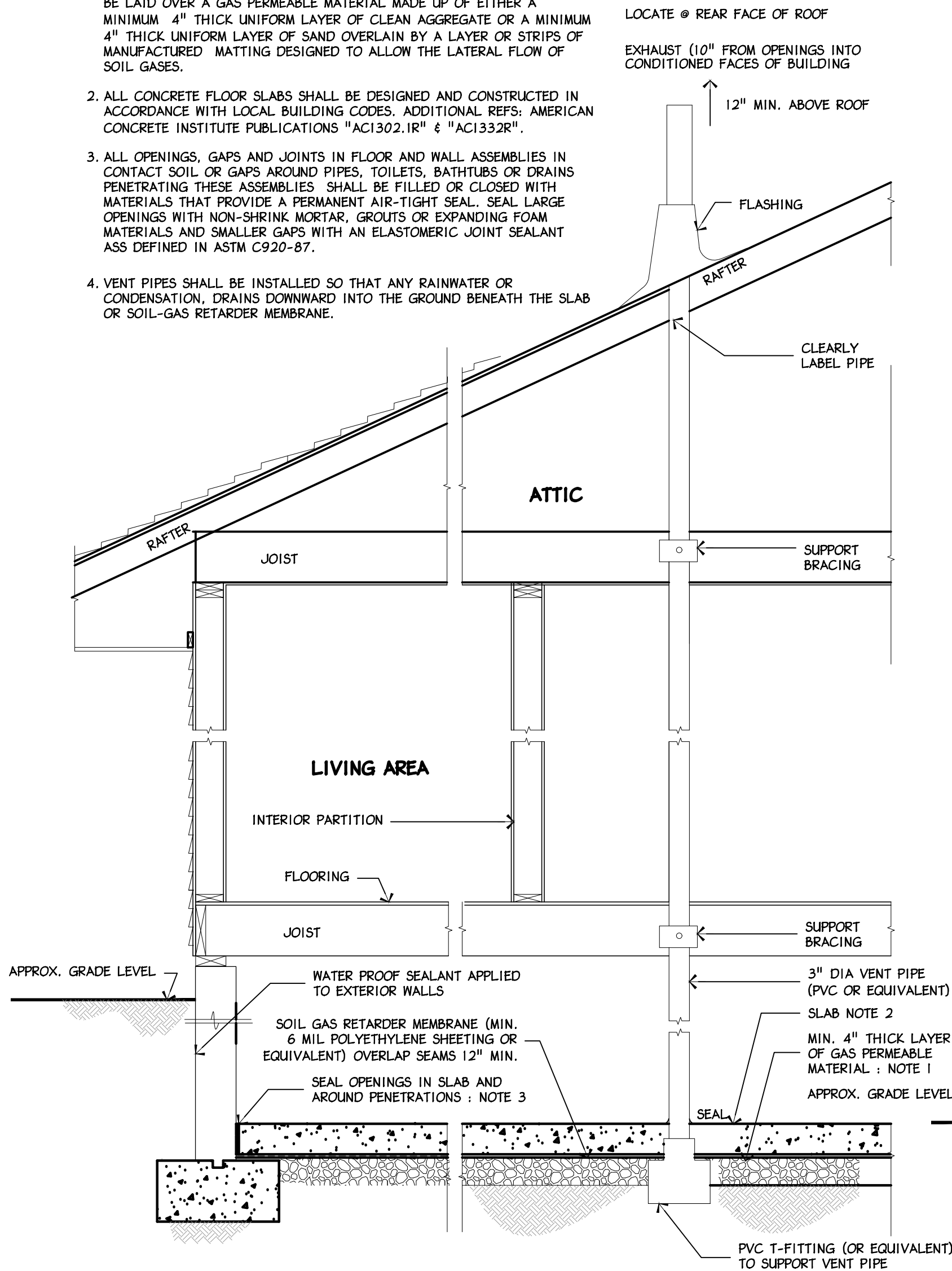
NOTES:

- ALL CONCRETE SLABS THAT COME IN CONTACT WITH THE GROUND SHALL BE LAID OVER A GAS PERMEABLE MATERIAL MADE UP OF EITHER A MINIMUM 4" THICK UNIFORM LAYER OF CLEAN AGGREGATE OR A MINIMUM 4" THICK UNIFORM LAYER OF SAND OVERLAIN BY A LAYER OR STRIPS OF MANUFACTURED MATTING DESIGNED TO ALLOW THE LATERAL FLOW OF SOIL GASES.
- ALL CONCRETE FLOOR SLABS SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH LOCAL BUILDING CODES. ADDITIONAL REFS: AMERICAN CONCRETE INSTITUTE PUBLICATIONS "ACI302.1R" & "ACI332R".
- ALL OPENINGS, GAPS AND JOINTS IN FLOOR AND WALL ASSEMBLIES IN CONTACT SOIL OR GAPS AROUND PIPES, TOILETS, BATHTUBS OR DRAINS PENETRATING THESE ASSEMBLIES SHALL BE FILLED OR CLOSED WITH MATERIALS THAT PROVIDE A PERMANENT AIR-TIGHT SEAL. SEAL LARGE OPENINGS WITH NON-SHRINK MORTAR, GROUTS OR EXPANDING FOAM MATERIALS AND SMALLER GAPS WITH AN ELASTOMERIC JOINT SEALANT ASS DEFINED IN ASTM C920-87.
- VENT PIPES SHALL BE INSTALLED SO THAT ANY RAINWATER OR CONDENSATION DRAINS DOWNWARD INTO THE GROUND BENEATH THE SLAB OR SOIL-GAS RETARDER MEMBRANE.

ADDITIONAL COMPONENTS REQUIRED FOR ACTIVATION OF PASSIVE SUB-SLAB DEPRESSURIZATION OR CRAWL SPACE RADON CONTROL SYSTEM

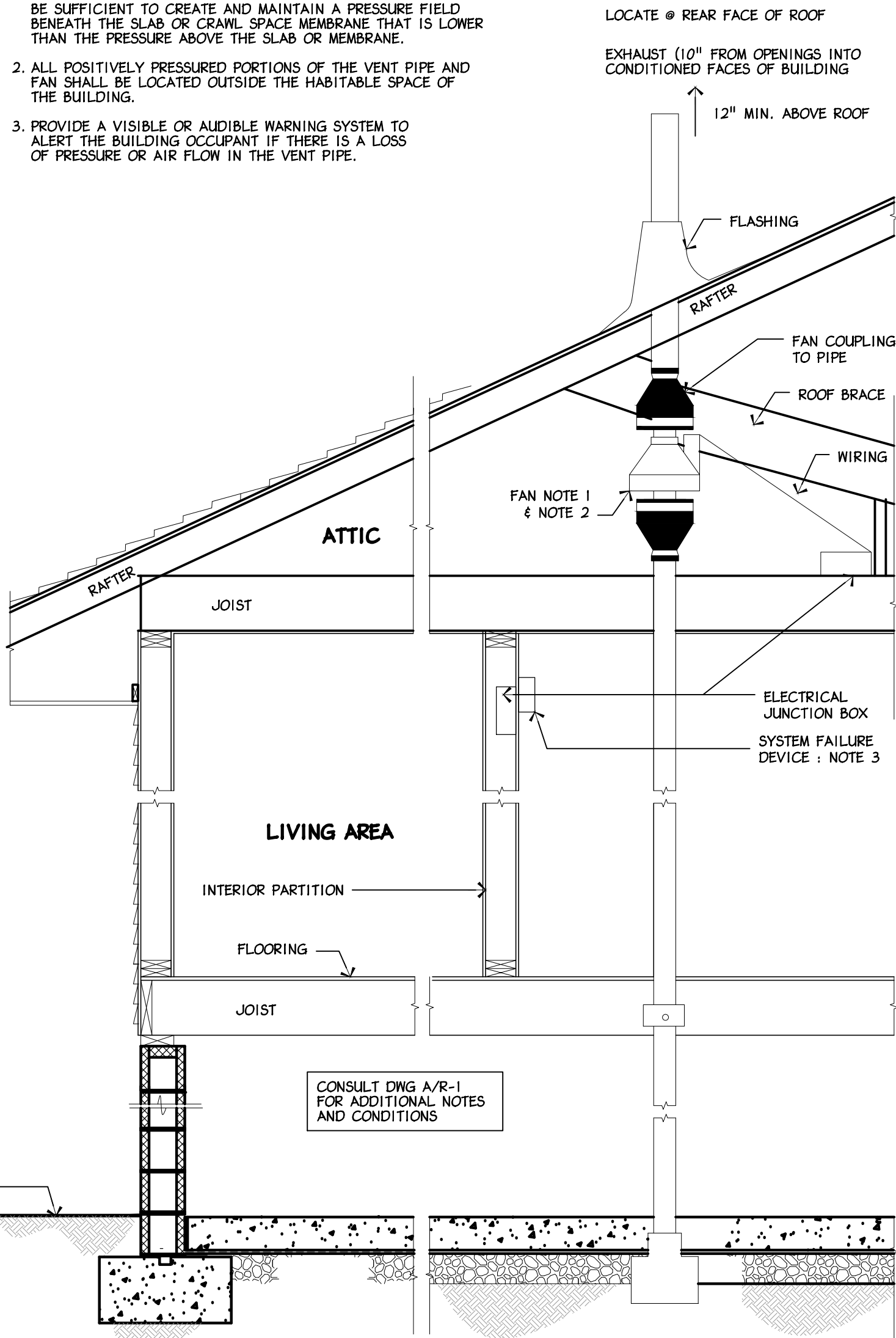
NOTES:

- INSTALL THE VENT FAN IN THE VERTICAL RUN OF THE VENT PIPE. THE SIZE AND AIR MOVEMENT CAPACITY OF THE VENT SHALL BE SUFFICIENT TO CREATE AND MAINTAIN A PRESSURE FIELD BENEATH THE SLAB OR CRAWL SPACE MEMBRANE THAT IS LOWER THAN THE PRESSURE ABOVE THE SLAB OR MEMBRANE.
- ALL POSITIVELY PRESSURED PORTIONS OF THE VENT PIPE AND FAN SHALL BE LOCATED OUTSIDE THE HABITABLE SPACE OF THE BUILDING.
- PROVIDE A VISIBLE OR AUDIBLE WARNING SYSTEM TO ALERT THE BUILDING OCCUPANT IF THERE IS A LOSS OF PRESSURE OR AIR FLOW IN THE VENT PIPE.



A TYPICAL SECTION
DIAGRAMMATIC - NO SCALE

OPTION: CONNECT TO OPTIONAL INTERIOR FOUNDATION DRAIN AS REQUIRED BY FIELD CONDITIONS OR AS REQUIRED BY THE AUTHORITIES HAVING JURISDICTION.



B TYPICAL SECTION
DIAGRAMMATIC - NO SCALE

OPTION: CONNECT TO OPTIONAL INTERIOR FOUNDATION DRAIN AS REQUIRED BY FIELD CONDITIONS OR AS REQUIRED BY THE AUTHORITIES HAVING JURISDICTION.

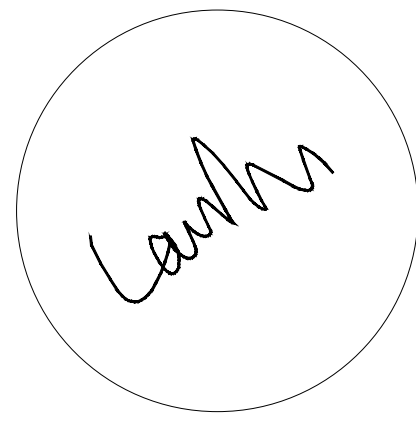


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SINGLE FAMILY HOME
FRIEDMAN RESIDENCE
10 RIDGE ROAD
WEST ORANGE, NJ

NO. REVISION BY DATE
1 ISSUE FOR PERMIT 03-21-24



LAURANCE D. APPEL, R.A., N.J. # A1-17149
N.Y. - 025018
P.A. - RA-014360-B

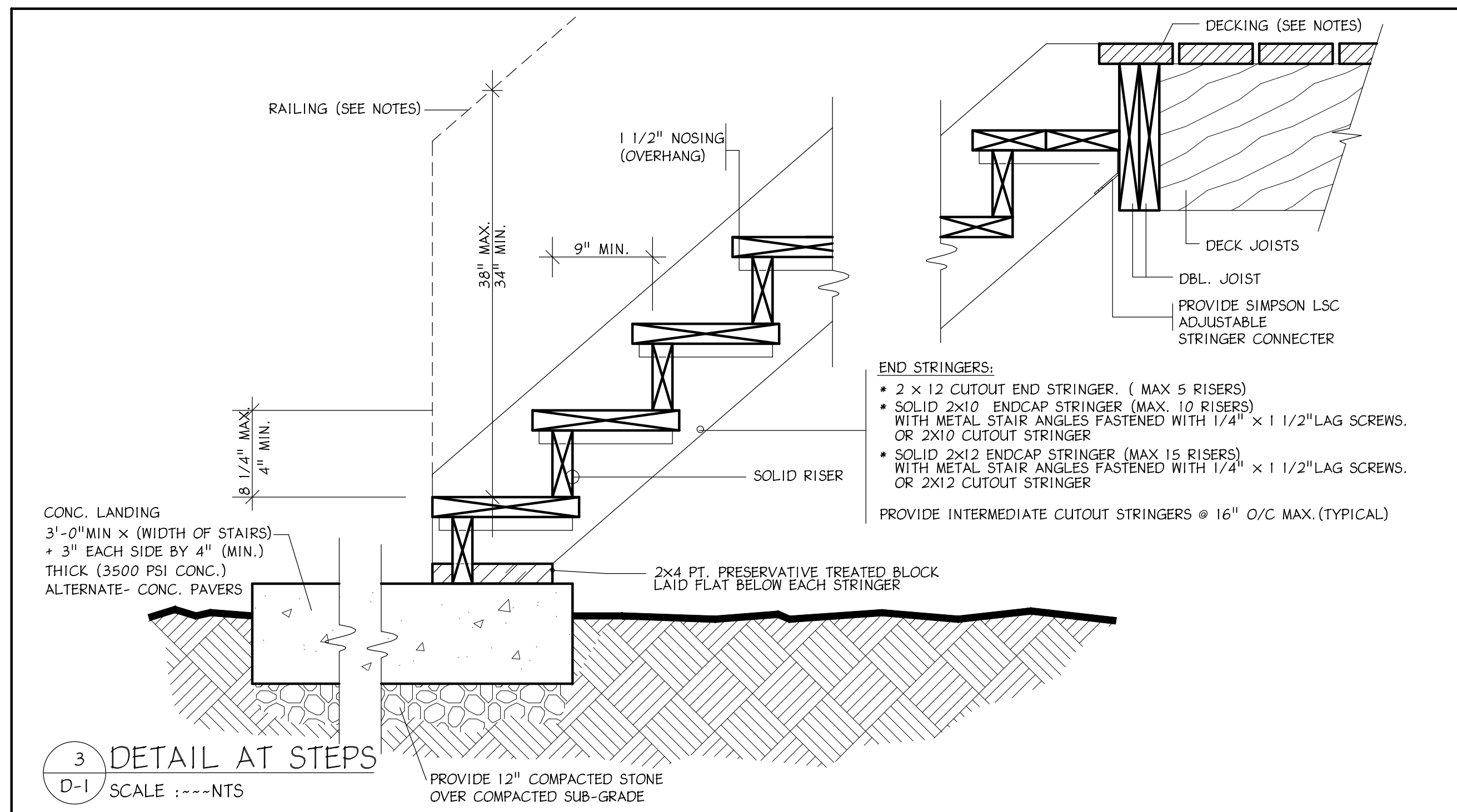
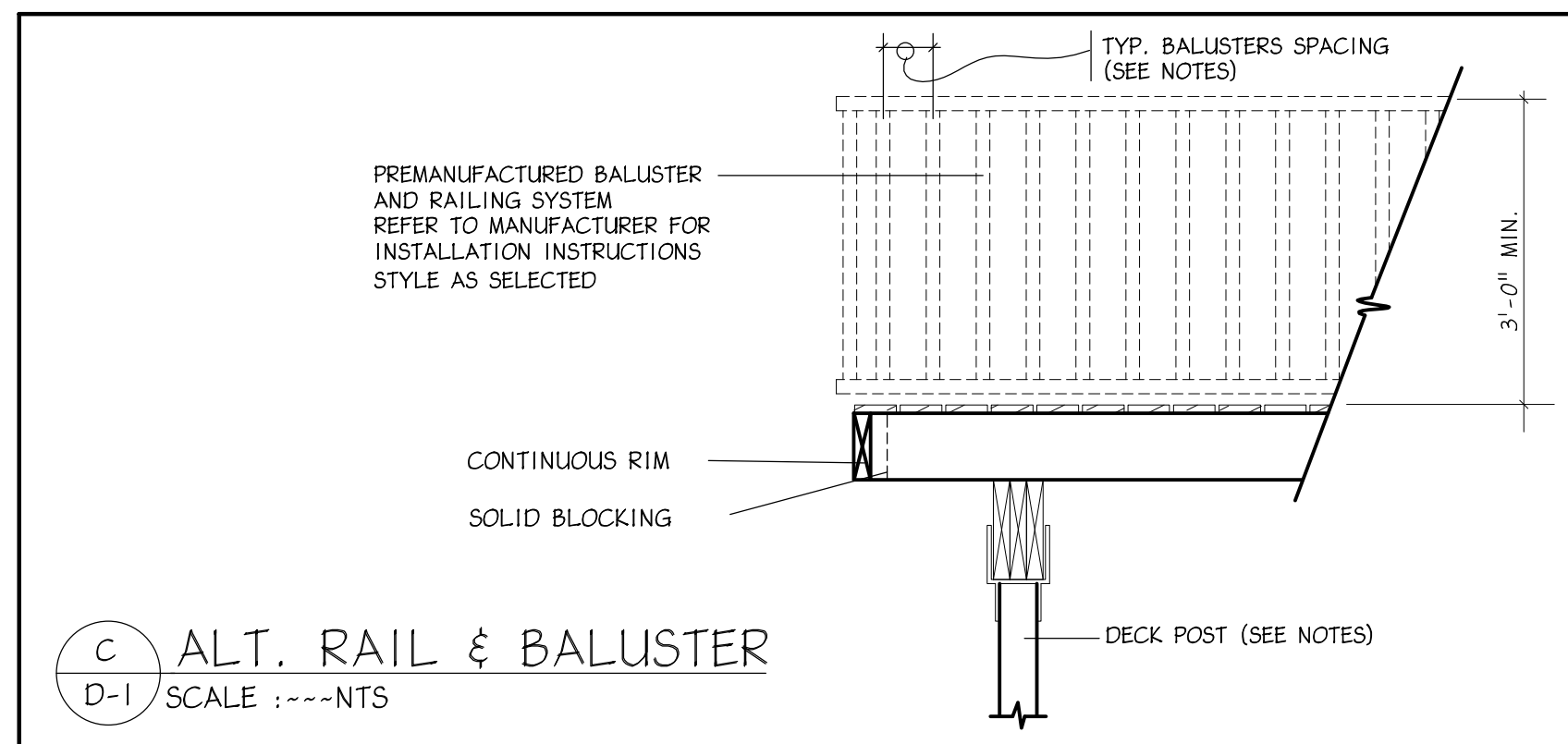
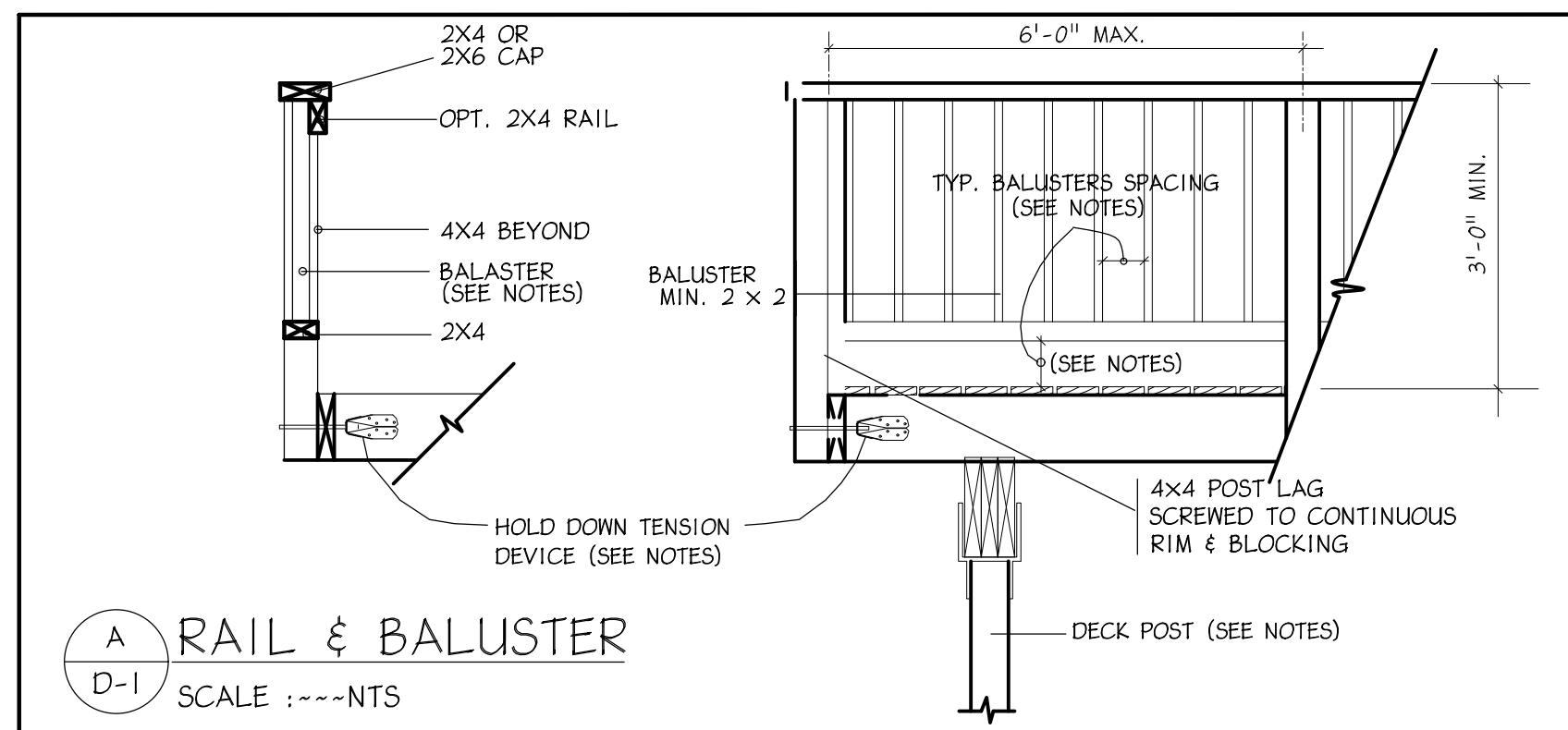
TYPICAL
DETAILS

DRAWN BY: KP
CHECKED BY: CS
CLIENT: TYPICAL
DATE: 02-20-23

DRAWING:

R-1

COMM. #: N/A



N.J.U.C.C. REQUIREMENTS

- USE GROUP
- CONSTRUCTION TYPE

R5
58

DECK NOTES:

1. ALL WORK SHALL CONFORM TO ALL APPLICABLE STATE AND LOCAL CODES. CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO STARTING WORK.
2. ALL LINER USED SHALL BE PRESERVATIVE TREATED, SOUTHERN YELLOW PINE OR EQUIV. (NATURALLY DIMENSIONED) WITH A MINIMUM FIBER STRESS PER CHART. (SEE OUTLINE SPECS.) (NUMBER 2 GRADE OR BETTER)
3. DECK POST FOUNDATIONS SHALL BE ONE OF THE FOLLOWING:
 - A. 16" x 16" SOLID CONCRETE - OR
 - B. 16" x 16" MASONRY FILLED SOLID WITH CONCRETE - OR
 - C. 14" DIAMETER SCHEDULE FILLED SOLID WITH CONCRETE - OR
 - D. 16" x 16" CHIMNEY BLOCK FILLED SOLID WITH CONCRETE.
4. ALL HOLLOW CONCRETE MASONRY UNITS SHALL BE CONCRETE BLOCK (ASTM C90, TYPE N) PER IRC CODE. THE USE OF LINER BLOCK IS NOT PERMITTED.
5. ALL CONCRETE SHALL BE MIN. 3500 P.S.I.; MIX.
6. ALL FOOTINGS TO REST ON FIRM BEARING TWO TON (4000#) SOIL.
7. ALL FOOTINGS SHALL BE 3'-0" MINIMUM BELOW FINISHED GRADE. OR AS DICTATED BY THE LOCAL JURISDICTION.
8. SEE THE TABLE FOR SIZES OF DECK JOISTS & GIRDERS
9. DECKING ALTERNATES (WOOD)
 - (A) 5/4" x 6"
 - (B) 2" x 6"
 - (C) 2" x 4"

DECKING ALTERNATES (PREMANUFACTURED DECKING) ALL
PREMANUFACTURED DECKING MATERIAL SHALL BE APPROVED FOR
EXTERIOR EXPOSURE, DECAY RESISTANT, AND SPAN RATED FOR 16"
O.C. (MIN.) SHALL COMPLY WITH ASTM D7032

12. DECK SLAG SHALL BE POSITIVELY ANCHORED TO THE PRIMARY STRUCTURE. LEADER STRIP SHALL BE MIN. 2" X 10" MEMBER AND SHALL NOT BE LESS IN DEPTH THAN THE MAXIMUM OF THE DECK JOISTS. PROVIDE EITHER 1/2" LAG SCREWS OR WASHERS (1" X 1/2" BARBENTIME INTO JOIST RIBS) (MAX. 12" O.C.) 1/8" X 1/2" THICK LAG OR WASHERS (MAX. 16" O.C.). NOTIFY ARCHITECT FOR SPACING IF DECK JOISTS ARE OVER 1" APART. STAGGER BOLTS 2" FROM TOP & BOTTOM AND PROVIDE WASHERS FOR AIR SPACE BETWEEN STAGGER AND LEADER. DO NOT HANG FROM A CANTILEVER. PROVIDE MINIMUM 1" MINIMUM APPROVAL AND DETAILS FROM THE ARCHITECT WITH DROPPED DECK CONDITIONS. -ANCHOR LEADER TO MASONRY FOUNDATION WALL. WITH 1/2" EXPOSITION BOLTS MAX. 16" O.C. STAGGERED TOP AND BOTTOM. DECK LEADERS SHALL NOT BE SUPPORTED ON STONE OR MASONRY WORK.
13. PROVIDE APPROVED JOIST HANGERS, POST CLIPS, ANCHORS, AND OTHER ACCESSORIES AS REQUIRED TO MEET ALL LOCAL BUILDING CODES AND DETAILS. ALL SUCH FASTENERS SHALL BE ENGINEERED BY INSTALLER AND INSTALLED TO DEVELOP FULL STRENGTH OF THE MEMBER SUPPORTED. INSTALL IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS AND DETAILS FOR THE USE INTENDED.
14. ALL METAL CONNECTORS, BOLTS, NAILS, ANCHORS, SHALL BE TRIPLE ZINC COATED OR STAINLESS STEEL. (CLASS D - MINIMUM)
15. ALL CONSTRUCTION SHALL CONFORM TO APPLICABLE BUILDINGS CODES INCLUDING ANY ALL AMENDMENTS AND ANY APPLICABLE REQUIREMENTS OF THE LOCAL AUTHORITY HAVING JURISDICTION.
16. MAXIMUM CLEAR HEIGHT FOR A 4" X 4" UNBRACED TREATED WOOD POST SHALL BE 10'-0" (FIVE FEET). SEE DETAIL 4/0-1 FOR BRACING REQUIREMENTS OVER 10'-0".
17. MAXIMUM CLEAR HEIGHT FOR A 6" X 6" UNBRACED TREATED WOOD POST SHALL BE 12'-0" (SEVEN FEET). SEE DETAIL 4/0-1 FOR BRACING REQUIREMENTS OVER 12'-0".
18. PROVIDE A HOLD DOWN TENSION DEVICE AND CONNECTING THREADED ROD, BETWEEN THE DECK JOIST AND FLOOR JOIST. PROVIDE A MINIMUM OF 2 LOCATIONS (ENDS OF DECK). HOLD DOWN SHALL HAVE AN ALLOWABLE STRESS DESIGN CAPACITY OF 1500 LBS (MIN) - SIMPSON MODEL # DTT12 OR APPROVED EQL. PROVIDE A MINIMUM OF 4 (4) LOCATIONS - HOLD DOWN SHALL HAVE AN ALLOWABLE STRESS DESIGN CAPACITY OF 750 LBS (MIN) - SIMPSON MODEL # DTT12 OR APPROVED EQL.

RESIDENTIAL STAIR NOTES

1. WIDTH
MIN. PERMITTED 36"
2. HEADROOM
MIN. PERMITTED 6'-8"
3. TREADS AND RISERS
MAX. PERMITTED RISER HGT. 8 1/4"
MIN. PERMITTED RISER HGT. 4"
MIN. PERMITTED TREAD DEPTH 9"
4. EXTERIOR LANDINGS (REQUIRED WITH 2 OR MORE RISERS.)
MIN. DEPTH 36" IN DIRECTION OF TRAVEL
MIN. WIDTH EQUAL OR GREATER THAN THE DOOR SERVED.

RAILINGS AND GUARDS

- MIN. PERMITTED RAILING HGT. 30"
MAX. PERMITTED RAILING HGT. 38"
MIN. PERMITTED GUARD HGT. 36"
MAX. PERMITTED GUARD HGT. 42" (NOTE # 3)
1. OPEN GUARDS SHALL HAVE BALUSTERS OR OTHER CONSTRUCTION SUCH THAT A SPHERE WITH A DIAMETER OF 4 INCHES CANNOT PASS THROUGH ANY OPENING. 6 INCHES AT STAIR RISER / TREAD / GUARD OPENING TRIANGLE.
- ALL EDGES SHALL BE FITTED WITH A GUARDRAIL PER IRC REQUIREMENTS.
- GUARD HEIGHT SHALL BE MEASURED FROM TOP OF WALKING SURFACE OR FIXED SEAT TO TOP OF GUARD.
- GUARD INFILL COMPONENTS SHALL RESIST A UNIFORM LOAD OF 50 PSF.
- GUARD RAIL SHALL RESIST A CONCENTRATED LOAD OF 200 LB. PROVIDE HOLD DOWN TENSION DEVICE AT GUARD TYPIC / R/W BOARD CONNECTION, SIMPSON DTTT2 OR APPROVED EQUAL.
- WHERE THE TOP OF A GUARD SERVES AS A HANDRAIL ON THE OPEN SIDES OF STAIRS, THE TOP OF TREAD SHALL BE NOT LESS THAN 34 INCHES AND NOT MORE THAN 38 INCHES AS MEASURED VERTICALLY FROM A LINE CONNECTING THE LEADING EDGES OF THE TREADS.
- PLASTIC COMPOSITE MATERIALS SHALL EXHIBIT A FLAME SPREAD INDEX NOT EXCEEDING 200 WHERE TESTED IN ACCORDANCE WITH ASTM E84 OR UL 723

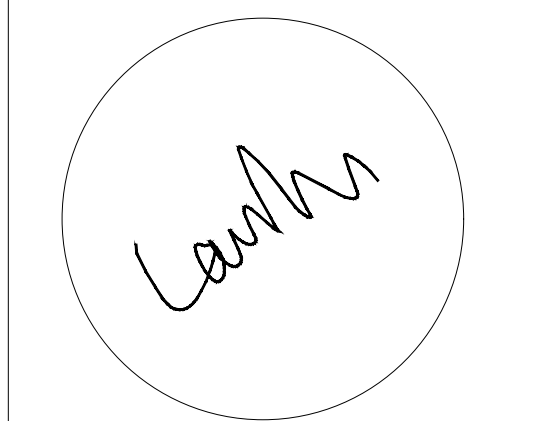


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10 RIDGE ROAD
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NO.	REVISION	BY	DATE
1	ISSUE FOR PERMIT		03-21-24



LAURANCE D. APPEL, R.A. NJ # AI-12149
NY - 025018
PA - RA-014580-B

TYPICAL DECK

DRAWN BY: DK

CHECKED BY: CS

CLIENT: TYPICAL

DATE: 02-23-23

DRAWING:

TD-1

COMM. #:	N/A
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GENERAL NOTES:

1.1 THE DESIGN, DRAWINGS AND SPECIFICATIONS AS INSTRUMENTS OF SERVICE ARE AND SHALL REMAIN THE PROPERTY OF THE ARCHITECT. THE ARCHITECT SHALL BE DEEMED THE AUTHOR OF THE DESIGN, DRAWINGS, AND SPECIFICATIONS AND WILL RETAIN ALL COMMON LAW, STATUTORY AND OTHER RESERVED RIGHTS, IN ADDITION TO A COPYRIGHT. THEY ARE NOT TO BE USED BY THE OWNER/CLIENT OR OTHERS ON DIFFERENT PROJECTS OF EXTENSIONS OF THIS PROJECT EXCEPT BY AGREEMENT IN WRITING AND WITH AGREED COMPENSATION TO THE ARCHITECT. IF REUSED WITHOUT PERMISSION, THE ARCHITECT SHALL BE INDIVIDUALLY AND HELD HARMLESS FROM ALL LIABILITY, LEGAL EXPOSURE, CLAIMS, DAMAGES, LOSSES, AND EXPENSES RELATED TO SAID USE.

1.2 DRAWINGS SHALL NOT BE USED FOR ISSUANCE OF A BUILDING PERMIT UNLESS SIGNED AND SEALED BY THE ARCHITECT. DRAWINGS SHALL NOT BE USED FOR ANY OTHER NON-TYPOTYPE DEVELOPMENT WITHOUT WRITTEN AUTHORIZATION FROM THE ARCHITECT BOTH SIGNED AND SEALED FOR EACH AND EVERY BUILDING LOT/HOUSE.

1.3 ARCHITECT'S ADMINISTRATION OF THE CONSTRUCTION WORK, BY MUTUAL CONSENT, IS NOT PART OF THIS AGREEMENT. THE OWNER AND/OR GENERAL CONTRACTOR SHALL APPOINT A PERSON TO BE IN CHARGE OF THE WORK PER N.J.A.C. 17:23-2.21 CONSTRUCTION CONTROL EXECUTION.

1.4 THE ARCHITECT SHALL NOT BE RESPONSIBLE WHERE CONSTRUCTION DEVIATES FROM THESE DRAWINGS OR FROM WRITTEN RECOMMENDATIONS. CHANGES TO THE PLANS BY THE OWNER AND/OR CONTRACTOR SHALL BE THE RESPONSIBILITY OF THE PERSONS MAKING SUCH CHANGES.

1.5 THE OWNER AND CONTRACTOR SHALL HOLD HARMLESS THE ARCHITECT FROM AND AGAINST ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES INCLUDING, BUT NOT LIMITED TO, ATTORNEY'S FEES ARISING OUT OF OR RESULTING FROM THE PERFORMANCE OF THE WORK BY THE CONTRACTOR. THE ARCHITECT SHALL NOT HAVE CONTROL OR CHARGE OF AND SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK, OR FOR THE ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTORS, OR ANY OTHER PERSONS PERFORMING ANY OF THE WORK, OR FOR THE FAILURE OF ANY OF THEM TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

1.6 EXAMINATION OF SITE, DRAWINGS, AND SPECIFICATIONS: THE CONTRACTOR SHALL CAREFULLY EXAMINE THE SITE, DRAWINGS, AND SPECIFICATIONS, FULLY ACQUAINT AND FAMILIARIZE HIMSELF WITH THE CONDITIONS AS THEY EXIST AND MAKE SUCH INVESTIGATIONS AS HE MAY SEE FIT SO THAT HE SHALL FULLY UNDERSTAND THE FACILITIES, DIFFICULTIES, AND RESTRICTIONS PERTAINING TO THE WORK.

1.7 PERMITS: THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND PAYING FOR ALL REQUIRED PERMITS, INSPECTIONS, ETC.

1.8 ALL WORK, MATERIALS, AND EQUIPMENT SHALL MEET THE LATEST REQUIREMENTS OF ALL APPLICABLE STATE & LOCAL BUILDING CODES, REGULATIONS, THE REQUIREMENTS OF THE AUTHORITIES HAVING JURISDICTION AND THE SPECIFICATIONS OF THE NATIONAL BOARD OF UNDERWRITERS. WHERE APPLICABLE, COMPLY WITH ALL REQUIREMENTS OF THE N.J.U.C.C. BARRIER FREE SUBCODE AND/OR THE AMERICANS WITH DISABILITIES ACT (ADA).

1.9 EXCEPT WHERE SPECIFIED REQUIREMENTS ARE MORE STRINGENT, INSTALL ALL PRODUCTS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS, RECOMMENDATIONS AND THE STANDARDS OF RECOGNIZED AGENCIES AND ASSOCIATIONS. PROVIDE ALL ANCHORS, FASTENERS, AND ACCESSORIES REQUIRED FOR COMPLETE INSTALLATION. ALLOW FOR TEMPORAL SWELLING/CONTRACTION AND ALLOWING MOVEMENT. SEPARATE INCOMPATIBLE MATERIALS WITH SUITABLE MATERIALS OR SPACING. PREVENT CATHODIC CORROSION. PROTECT ALUMINUM SURFACES FROM CONTACT WITH MASONRY OR OTHER METALS. PROVIDE CONTROL JOINTS AT MATERIALS AND ISOLATION JOINTS BETWEEN MATERIALS/STRUCTURE AS INDICATED AND AS REQUIRED BY MANUFACTURER OR RECOGNIZED INDUSTRY STANDARDS.

1.10 INSTALL PRODUCTS UNDER APPROPRIATE ENVIRONMENTAL CONDITIONS (AIR TEMPERATURE, SURFACE TEMPERATURE, RELATIVE HUMIDITY, ETC.) TO INSURE QUALITY AND DURABILITY. MAINTAIN PROPER PROTECTION DURING DRYING/CURING.

1.11 THE CONTRACTOR SHALL, WITHOUT DELAY AND PRIOR TO FABRICATION OR INSTALLATION, BRING TO THE ATTENTION OF THE ARCHITECT ANY DISCREPANCIES BETWEEN THE MANUFACTURER'S SPECIFIED REQUIREMENTS OR RECOMMENDATIONS, APPLICABLE CODE PROVISIONS, AND THE CONTRACT DOCUMENTS. UNAUTHORIZED CHANGES TO THE PLANS BY THE OWNER AND CONTRACTOR SHALL BE THE RESPONSIBILITY OF THE PERSONS MAKING SUCH CHANGES.

1.12 PRODUCT OPTIONS: IT IS THE CONTRACTOR'S RESPONSIBILITY TO SELECT PRODUCTS WHICH COMPLY WITH THE CONTRACT DOCUMENTS AND WITH ARE COMPATIBLE WITH ONE ANOTHER, WITH EXISTING WORK, AND THE PRODUCTS SELECTED BY OTHER CONTRACTORS. PROVIDE MANUFACTURER'S INFORMATION, SAMPLES, ETC. WHEN REQUESTED.

1.13 SUBSTITUTIONS: SUBMISSION OF A SUBSTITUTION REQUEST BY THE CONTRACTOR (WHERE PERMITTED IN THE CONTRACT DOCUMENTS) SHALL CONSTITUTE A REPRESENTATION BY THE CONTRACTOR THAT HE HAS INVESTIGATED THE PROPOSED PRODUCT OR CONDITION AND DETERMINED THAT IT IS EQUAL TO OR BETTER THAN THE SPECIFIED PRODUCT OR CONDITION (INCLUDING WARRANTY COVERAGE) AND THAT HE WILL COORDINATE THE INSTALLATION AND MAKE OTHER CHANGES (INCLUDING MODIFICATION AND COORDINATION OF OTHER WORK AFFECTED BY THE CHANGES) WHICH MAY BE REQUIRED FOR THEIR WORK TO BE COMPLETE IN ALL ASPECTS.

1.14 THIS IS A "BUILDER'S PLAN". THE ARCHITECTURAL SERVICE PROVIDED IN THESE DRAWINGS IS LIMITED TO ROOM ARRANGMENT, DIMENSIONS, STRUCTURAL DESIGN, AND CONSTRUCTION DETAILS AS INDICATED. WHERE COMPLETE SIZES OR DIMENSIONS OF MEMBERS, CONNECTIONS, OR FASTENERS OF ANY ITEM ARE NOT INDICATED, DESIGN THE WORK TO PROVIDE STRENGTH APPROPRIATE TO THE USE INTENDED.

1.15 THE FOLLOWING, UNLESS PROVIDED FOR IN THESE DRAWINGS, SHALL BE FURNISHED BY THE CONTRACTOR:
A. BUILDING LOCATION, SITE GRADING, SOIL INVESTIGATIONS, SITE DRAINAGE, LANDSCAPING, RETAINING WALLS, UTILITIES, AND OTHER IMPROVEMENTS OUTSIDE OF THE BUILDING ENVELOPE.
B. SELECTION OF APPROVED INTERIOR FINISH MATERIALS, CABBINETS, HARDWARE, FURNISHINGS, AND OTHER SIMILAR EQUIPMENT.
C. STANDARDS OF QUALITY AND ACCEPTABLE MANUFACTURING FOR FABRICATED ITEMS.
D. DESIGN OF HEATING, PLUMBING, AND ELECTRICAL SYSTEMS INCLUDING PREPARATION OF REQUIRED DRAWINGS AND COORDINATION WITH ARCHITECTURAL DRAWINGS.

1.16 THE DRAWINGS SHOW THE GENERAL ARRANGEMENT AND EXTENT OF THE WORK. AS THE WORK PROGRESSES, THE OWNER AND CONTRACTOR AT NO EXTRA COSTS SHALL MAKE MODIFICATIONS TO MAKE THE PARTS ALIVE.

1.17 DO NOT SCALE DRAWINGS. REVIEW DIMENSIONS SHALL GOVERN.

1.18 CONTRACTOR SHALL CHECK, VERIFY, AND MAINTAIN ALL DIMENSIONS, GRADES, LEVELS AND OTHER CONDITIONS BEFORE PROCEEDING WITH FABRICATION AND CONSTRUCTION. COORDINATE EXACT LOCATIONS OF EQUIPMENT, FIXTURES AND OUTLETS WITH FINISHED ELEVATIONS. WHERE NECESSARY OR SPECIFICALLY INDICATED, THE CONTRACTOR SHALL PROVIDE SHOP DRAWINGS AND DETAILED COMPONENT DESIGN AS REQUIRED FOR PROPER FABRICATION, INSTALLATION, AND COORDINATION WITH OTHER TRADES.

1.19 SHOP DRAWINGS: CONTRACTOR SHALL FURNISH SHOP DRAWINGS FOR ALL SHOP FABRICATED ITEMS AND WHERE CUSTOMARILY REQUIRED AND SUBMIT FOUR SETS OF SHOP DRAWINGS FOR REVIEW. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING THE SHOP DRAWINGS FOR ACCURACY, COORDINATION WITH OTHER TRADES, AND COMPLIANCE WITH THE CONTRACT DOCUMENTS BEFORE BEING SUBMITTED FOR APPROVAL. ARCHITECTS OR ENGINEERS' APPROVAL OF SHOP DRAWINGS SHALL CONSTITUTE REVIEW AND APPROVAL OF THE GENERAL ARRANGEMENT OF COMPONENTS FOR COMPLIANCE WITH THE GENERAL INTENT OF THE CONSTRUCTION DOCUMENTS AND IN NO WAY RELIEVES THE CONTRACTOR FROM HIS RESPONSIBILITY FOR COMPLIANCE WITH THE CONTRACT DOCUMENTS, EVEN IF SUCH ITEMS ARE NOT SHOWN ON THE SHOP DRAWINGS. THE CONTRACTOR SHALL CHECK ALL DIMENSIONS AND CONDITIONS TO ENSURE A PROPER FIT UNDER FIELD CONDITIONS AND SHALL MAKE ADJUSTMENTS AS REQUIRED TO MAKE PARTS ALIVE. ALL REVISIONS TO SHOP DRAWINGS AFTER THE FIRST SUBMISSION MUST BE PROPERLY IDENTIFIED ON SUBSEQUENT SUBMISSIONS.

1.20 PRIOR TO PERFORMING ANY WORK, THE CONTRACTOR SHALL EXAMINE THE APPLICABLE CONDITIONS AND SUBSTRATES AND CORRECT ANY UNSATISFACTORY CONDITIONS BEFORE PROCEEDING WITH THE WORK. VERIFY THAT SUBSTRATE AND BASE PLIES/COATS ARE COMPATIBLE WITH NEW WORK. NOTIFY THE ARCHITECT PROMPTLY OF ANY MODIFICATIONS REQUIRED. WORK PERFORMED ABOVE THAT SURFACE CONSTITUTES ACCEPTANCE OF THAT SURFACE FOR THE SPECIFIED QUALITY OF THE WORK BEING PERFORMED THEREON. ANY CHANGES TO THE PLANS BY THE OWNER OR CONTRACTOR SHALL BE THE RESPONSIBILITY OF THE PERSONS MAKING SUCH CHANGES.

1.21 OUTTING & PATCHING: INCLUDE ALL CUTTING AND PATCHING FOR PENETRATIONS THROUGH FLOORS, WALLS, CEILINGS AND ROOFS. DO NOT CUT OR NOTCH ANY STRUCTURAL MEMBER TO REDUCE ITS LOAD CARRYING CAPACITY.

1.22 UNFORESEEN CONDITIONS: SHOULD UNFORESEEN CONDITIONS BE ENCOUNTERED THAT AFFECT DESIGN OR FUNCTION OF THE PROJECT, CONTRACTOR SHALL INVESTIGATE FULLY AND SUBMIT A DETAILED REPORT TO THE ARCHITECT WITHOUT DELAY. WHILE AWAITING A RESPONSE, CONTRACTOR SHALL REEVALUATE OPERATIONS AS REQUIRED TO AVOID DELAY OF THE OVERALL PROJECT.

1.23 PROVIDE TEMPORARY FACILITIES, SERVICES UTILITIES, AND PROTECTION AS REQUIRED TO SAFELY EXECUTE ALL WORK, PROTECT ADJACENT CONSTRUCTION, AND INHABITANTS. COMPLY WITH ALL APPLICABLE REQUIREMENTS OF GOVERNING AUTHORITIES INCLUDING, BUT NOT LIMITED TO, PUBLIC UTILITIES. PROVIDE 24 HOUR NOTIFICATION OF ANY DISCONTINUITY IN UTILITY SERVICES WITH THE OWNER. CONTRACTOR SHALL BE RESPONSIBLE TO REMOVE AND LEGALLY DISPOSE OF ALL MATERIAL FROM THE JOB SITE.

1.24 RECORD DRAWINGS: THE CONTRACTOR SHALL PREPARE AND MAINTAIN A COMPLETE SET OF RECORD CONSTRUCTION DRAWINGS INDICATING ALL ACTUAL WORK, MODIFICATIONS AND REVISIONS TO THE WORK DELINEATED ON THE CONSTRUCTIONS DRAWINGS AS WELL AS ANY CONCEALED CONSTRUCTION WORK. INCLUDE ANY OTHER INFORMATION WHICH WOULD BE HELPFUL TO THE OWNER.

1.25 INSURANCE: ALL CONTRACTORS SHALL TAKE OUT AND MAINTAIN WORKMAN'S COMPENSATION INSURANCE, AND PUBLIC LIABILITY & PROPERTY DAMAGE INSURANCE ACCEPTABLE TO THE OWNER AND THE AUTHORITIES HAVING JURISDICTION.

1.26 SUBSTANTIAL COMPLETION: AT PROJECT CLOSEOUT, CONTRACTOR SHALL PROVIDE FINAL CERTIFICATE OF OCCUPANCY UPON COMPLETION OF THE PROJECT AND FORWARD SAME TO OWNER. CONTRACTOR SHALL CLEAN PREMISES, TEST APPLICABLE SYSTEMS, AND LEAVE READY FOR OCCUPANCY.

1.27 WARRANTIES: UNLESS OTHERWISE INDICATED, PROVIDE CONTRACTOR'S WRITTEN WARRANTY FOR A PERIOD OF ONE YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION. THE WARRANTY SHALL STATE THAT ALL WORK HAS BEEN COMPLETED IN CONFORMANCE WITH THE CONTRACT DOCUMENTS, APPLICABLE CODES, AND ENFORCING AUTHORITIES AND THAT ALL WORK IS FREE FROM DEFECTS OF MATERIAL AND WORKMANSHIP. THIS IS IN ADDITION TO A NOT A LIMITATION TO ANY PRODUCT MANUFACTURER'S PRODUCT WARRANTIES.

A. ROOFING: 2 YEAR WARRANTY BY INSTALLER.
B. ROOFING: 25 YEAR STANDARD LIMITED WARRANTY BY MANUFACTURER.
C. EXTERIOR INSULATION & FINISH SYSTEM: 5 YEARS STANDARD WARRANTY BY MANUFACTURER.

1.28 MIN. CEILING HEIGHTS: HABITABLE SPACE, HALLWAYS AND PORTIONS OF BASEMENTS CONTAINING THESE SPACES SHALL HAVE A CEILING HEIGHT OF NOT LESS THAN 7 FEET. BATHROOMS, TOILET ROOMS AND LAUNDRY ROOMS SHALL HAVE A CEILING HEIGHT OF NOT LESS THAN 6 FEET 8 INCHES. EXCEPTIONS:
FOR ROOMS WITH SLOPED CEILINGS, THE REQUIRED FLOOR AREA OF THE ROOM SHALL HAVE A CEILING HEIGHT OF NOT LESS THAN 5 FEET AND NOT LESS THAN 50 PERCENT OF THE REQUIRED FLOOR AREA SHALL HAVE A CEILING HEIGHT OF NOT LESS THAN 7 FEET.

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DIVISION 2 - SITEWORK

2.1 NOT BY APPEL DESIGN GROUP, P.A. - SITE DESIGN AND ENGINEERING SHALL BE PROVIDED BY OTHERS AND SHALL NOT BE PART OF THE ARCHITECT'S RESPONSIBILITY. CONSULT SURVEY AND SITE DRAWINGS PREPARED BY OTHERS.

2.2 SITE CLEARING:
A. REMOVE TREES, SHRUBS, GRASS AND OTHER VEGETATION, TOP SOIL, IMPROVEMENTS, OR OBSTRUCTIONS INTERFERING WITH INSTALLATION OF NEW CONSTRUCTION.
B. FILL DEPRESSIONS CAUSED BY CLEARING AND GRUBBING OPERATIONS WITH SATISFACTORY SOIL MATERIAL, UNLESS FURTHER EXCAVATION OR EARTHWORK IS INDICATED. PLACE FILL MATERIAL IN HORIZONTAL LAYERS AND THOROUGHLY COMPACT TO A DENSITY EQUAL TO ADJACENT ORIGINAL GROUND.
C. REMOVE ALL WASTE MATERIALS, TRUNKS, STUMPS, AND OTHER DEBRIS FROM THE PROPERTY AND DISPOSE OF LEGALLY. BURNING OF MATERIAL IS NOT PERMITTED.

2.3 EARTHWORK:
A. PERFORM EXCAVATION WORK IN COMPLIANCE WITH APPLICABLE REQUIREMENTS OF THE GOVERNING AUTHORITIES HAVING JURISDICTION. PROVIDE PROTECTION OF PERSONS AND PROPERTY.
B. EXISTING EARTH SHALL BE STRIPPED TO DEPTH REQUIRED TO REACH FIRM SOIL PRIOR TO FILLING.
C. PROVIDE ACCEPTABLE SOIL MATERIALS FOR BACKFILL AND FILL, FREE OF CLAY, ROCK OR GRAVEL LARGER THAN 4", DEBRIS, WASTE, FROZEN MATERIAL, VEGETATION, AND OTHER DELICIOUS MATTER.
D. POROUS BASE (UNDER SLABS & FOUNDATION DRAINS): SHALL BE 3/4" STANDARD GRADATION QUARRY CRUSHED STONE OR GRAVEL (NOT MORE THAN 10% PASSING THROUGH A #4 sieve), FREE FROM DELICIOUS MATERIALS.
E. PROVIDE ALL SHORING, BRACING, AND SHEETING AS REQUIRED FOR THE PROTECTION OF THE WORK, ADJACENT STRUCTURES, AND PAVING.
F. SEAMTERING: PREVENT SURFACE, SUBSURFACE, AND GROUND WATER FROM FLOWING INTO EXCAVATIONS AND FROM FLOODING PROJECT SITE AND SURROUNDING AREA. REMOVE WATER TO PREVENT SOFTENING OF FOUNDATION BOTTOMS, UNDERCUTTING OF FOOTINGS, AND SOIL CHANGES DETRIMENTAL TO STABILITY OF SUBURBASES AND FOUNDATIONS.
G. AT BUILDING, FOUNDATION, FOOTING, AND SLABS, COMPACT TOP 12" OF SUBGRADE AND EACH LAYER OF BACKFILL OR FILL MATERIAL AT 95% MAX. DRY DENSITY (MODIFIED PROCTOR).
H. AT UNPAVED AREAS, COMPACT TOP 6" OF SUBGRADE AND EACH LAYER OF BACKFILL OR FILL MATERIAL AT 90% MAX. DRY DENSITY (MODIFIED PROCTOR).
I. DO NOT BACKFILL AGAINST FOUNDATION WALL OR PIER UNLESS CONCRETE/MORTAR HAS ATTAINED MAXIMUM STRENGTH. PROVIDE TEMPORARY BRACING AS REQUIRED AND WHEN FLOOR SLABS ARE NOT IN PLACE. PROTECT DAMP PROOFING AND/OR WATERPROOFING SYSTEMS.
J. ALL FOOTINGS SHALL BEAR ON FIRM UNDISTURBED SOIL OF A MINIMUM COMPRESSIVE STRENGTH OF 4000 P.S.F. AT A MINIMUM DEPTH OF 3'-4" BELOW GRADE. SOIL TESTS HAVE NOT BEEN SUPPLIED TO THE ARCHITECT. CONTRACTOR SHALL VERIFY SOIL BEARING CAPACITY AND SOIL CLASSIFICATION FOR BACKFILL IF SUITABLE BEARING IS NOT ENCOUNTERED, IMMEDIATELY NOTIFY THE ARCHITECT OR ENGINEER.
K. STEP FOOTINGS: WHERE STEPPED FOOTINGS ARE REQUIRED, STEP A MAXIMUM OF ONE FOOT VERTICALLY FOR EACH TWO FEET HORIZONTALLY.
L. VERIFY, LOCATE, & MARK ALL UTILITIES ON SITE BEFORE PROCEEDING WITH EXCAVATION WORK. CALL "DIG SAFE" 1-800-272-1000 AND NOTIFY ALL UTILITY COMPANIES 72 HOURS PRIOR TO DIGGING.
M. SITE GRADING: UNLESS NOTED OTHERWISE, THE SUB-GRADE SHALL BE EVENLY SLOPED TO PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDING WALLS IN ALL DIRECTIONS. MAINTAIN DITCHES, SWALES, AND GUTTERS TO DRAIN READILY. IN THE EVENT THAT A SLOPE OF NOT LESS THAN 1:12 (MINIMUM 6" HIGH FALL WITHIN THE FIRST 10 FEET FROM THE FOUNDATION WALL) CAN BE MAINTAINED, PROVIDE AREA DRAINS OR AN APPROVED METHOD OF DIVERTING WATER.
N. EROSION PROTECTION: WHERE WATER IMPACTS THE GROUND FROM THE ROOF, DOWNSPOUT, ETC., PROTECT FROM SOIL EROSION AND DIVERT WATER AWAY FROM FOUNDATIONS.

2.4 SOIL EROSION AND SEDIMENT CONTROL: AS REQUIRED BY THE AUTHORITIES HAVING JURISDICTION, SUPPLY AND INSTALL PROTECTION MEASURES IN ACCORDANCE WITH THE "STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NJ" (NJ DEPT. OF AGRICULTURE) AND THE LOCAL SOIL CONSERVATION DISTRICT TO PREVENT SITE EROSION AND TRANSPORT OF SOILS FROM THE WORK SITE.

2.5 ASPHALT CONCRETE PAVEMENT:
A. FINISHED PAVEMENT SHALL CONFORM TO THE REQUIRED FINISH CONTOURS AND BE GRADED TO INSURE PROPER DRAINAGE AWAY FROM THE BUILDING AND TO STORM DRAINAGE FACILITIES.
B. SAW CUT EXISTING PAVEMENT EDGE TO CREATE A SMOOTH JOINT BETWEEN THE EXISTING PAVEMENT AND THE NEW PAVEMENT. FEATHERING OF TRANSITION IS NOT ACCEPTABLE.
C. BASE COURSE: MINIMUM 4" THICK COMPACTED LAYER OF BANK RUN GRAVEL, ROLLED SMOOTH.
D. TACK COAT: APPLY TO CLEAN SURFACES. SPREAD BITUMINOUS MATERIAL IMMEDIATELY AFTER TACK COAT IS APPLIED.
E. SURFACE WEARING COURSE: 2" THICK (MIN. AFTER COMPACTION) HOT MIX FCR (5-SY COMPACT WITH MIN. 10 TON ROLLER).

2.6 THERMITE CONTROL: WHERE REQUIRED:
A. ALL WORK SHALL BE PERFORMED BY A PROFESSIONAL PEST CONTROL OPERATOR, LICENSED IN ACCORDANCE WITH THE REGULATIONS OF THE GOVERNING AUTHORITIES.
B. USE ONLY THERMITIDES WHICH BEAR A FEDERAL REGISTRATION NUMBER.
C. FURNISH WARRANTY FOR A PERIOD OF 3 YEARS FROM DATE OF TREATMENT THAT IF SUBTERRANEAN THERMITE ACTIVITY IS DISCOVERED DURING THE WARRANTY PERIOD, THE CONTRACTOR SHALL RE-TREAT SOIL AND REPAIR OR REPLACE DAMAGES CAUSED BY THERMITE INFESTATION.
D. POST SIGN IN AREAS OF APPLICATION TO WARN WORKERS OF THE THERMITE TREATMENT.

2.7 SUB-SOIL DRAINS:
A. THE FOLLOWING CODE RECOMMENDATIONS PROVIDE FOR MINIMUM DESIGN REQUIREMENTS FOR WELL DRAINED SOIL TYPES. THE OWNER OR APPLICANT SHALL PERFORM SUBSURFACE SOIL INVESTIGATION WHERE REQUIRED BY THE AUTHORITIES HAVING JURISDICTION OR WHERE SPECIAL SOIL CONDITIONS ARE ENCOUNTERED.
B. SUBSOIL DRAINS SHALL BE PIPED TO A STORM DRAIN, OR TO AN APPROVED WATER COURSE, OR THE FRONT STREET CURB (WHERE PERMITTED BY LOCAL REGULATIONS). WHERE A CONTINUOUS FLOWING SPRING OR GROUND WATER IS ENCOUNTERED, SUBSOIL DRAINS SHALL BE PIPED TO A STORM DRAIN OR AN APPROVED WATER COURSE.
C. WHERE IT IS NOT POSSIBLE TO CONVEY THE DRAINAGE BY GRAVITY, SUBSOIL DRAINS SHALL DISCHARGE TO AN ACCESSIBLE SAND PIT (MIN. DIMENSIONS: 14" DIA. MINIMUM, 18" IN DEPTH) PROVIDED WITH A FITTED COVER AND AN APPROVED AUTOMATIC ELECTRIC PUMP (SIZED TO ACCOMMODATE ALL WATER AND IN NO CASE LESS THAN 1/4 GPM/LIN. CAPACITY WITH A DISCHARGE PIPE OF 1-1/4" MIN.).
D. PROVIDE A BACKWATER VALVE WHICH IS ACCESSIBLE FOR INSPECTION AND MAINTENANCE IN ANY SUBSOIL DRAINS SUBJECT TO BACKFLOW WHEN DISCHARGING INTO A STORM DRAIN.
E. WHERE PERMITTED BY LOCAL REGULATIONS AND WHERE IT IS IMPRACTICABLE TO DISCHARGE THE DRAINS TO THE STREET CURB, STORM DRAIN, OR APPROVED WATER COURSE, DRAIN SERVING SUBSOIL DRAINS OR AREWAYS WHICH DO NOT SERVE CONTINUOUS FLOWING SPRINGS OR GROUNDWATER, MAY DISCHARGE TO A PROPERLY SLOPED OPEN AREA WHEN THE POINT OF DISCHARGE IS AT LEAST 10 FEET FROM ANY PROPERTY LINES AND AT LEAST 10 FEET FROM THE NEAREST POINT BONG DRAIN.
F. FOR SEPARATE DWELLINGS NOT SERVING CONTINUOUS FLOWING SPRINGS OR GROUNDWATER, THE PUMP PUMP MAY DISCHARGE ONTO A 24" LONG CONCRETE SPLASH BLOCK, WHERE PERMITTED BY LOCAL REGULATIONS.

2.8 AREA DRAINS: (FOR PLUMBING CODE)
A. PROVIDE AREWAY DRAINS AT ALL OPEN SUBSURFACE SPACES (ENTRANCES TO BASEMENTS, ETC.) WHICH DISCHARGE IN A SIMILAR MANNER TO SUB-SOIL DRAINS (SEE ABOVE).
B. AREWAY DRAIN SHALL DISCHARGE INTO A SUBSOIL DRAIN. SIZE ALL DRAINS TO ACCOMMODATE ACTUAL CAPACITY AND CODE REQUIREMENTS. FOR ANY AREWAY LESS THAN 100 SQUARE FEET, PROVIDE 2" MIN. DRAIN.
C. STORM DRAINAGE SYSTEMS: COMPLY WITH REQUIREMENTS OF THE AUTHORITIES HAVING JURISDICTION.

2.10 EXTERIOR WATER DISTRIBUTION SYSTEM: COMPLY WITH REQUIREMENTS OF THE AUTHORITIES HAVING JURISDICTION.

2.11 EXTERIOR SANITARY SEWER SYSTEM: SU COMPLY WITH REQUIREMENTS OF THE AUTHORITIES HAVING JURISDICTION.

2.12 LANDSCAPING: AS SELECTED AND AS REQUIRED BY THE AUTHORITIES HAVING JURISDICTION.

2.13 GROUND WATER TABLE INVESTIGATION: WHERE SATISFACTORY DATA FROM ADJACENT AREAS ARE NOT AVAILABLE OR WHERE SPECIAL SOIL CONDITIONS ARE ENCOUNTERED, THE OWNER OR APPLICANT SHALL PERFORM SUBSURFACE SOIL INVESTIGATION AS REQUIRED BY THE AUTHORITIES HAVING JURISDICTION TO DETERMINE THE POSSIBILITY OF THE GROUND WATER TABLE RISING ABOVE THE FLOORS BELOW GRADE OR PROVIDE WATERPROOFING.

2.14 DAMP PROOFING: AT FOUNDATION WALLS BELOW GRADE
A. PROVIDE DAMP PROOFING FOR FLOORS AND WALLS BELOW GRADE WHERE HYDROSTATIC WATER PRESSURE DOES NOT OCCUR.
B. DAMP PROOFING SHALL EXTEND FROM THE TOP OF THE FOOTING TO ABOVE GRADE LEVEL.
C. UNLESS DAMP PROOFING IS PROVIDED FOR DIRECT APPLICATION TO MASONRY, UNIT MASONRY WALLS SHALL BE PARGED WITH PORTLAND CEMENT MORTAR AND MADE READY FOR APPLICATION OF DAMPROOFING.
D. DAMP PROOFING SHALL CONSIST OF TWO (2) LAYERS OF BITUMINOUS MATERIAL OR APPROVED PROPRIETARY SYSTEM, OR APPROVED WATERPROOFING.
E. PROTECT DAMP PROOFING DURING BACKFILL. PROVIDE PROTECTION BOARDS AS REQUIRED.

2.15 WATERPROOFING: AT FOUNDATION WALLS BELOW GRADE
A. PROVIDE WATERPROOFING FOR FLOORS AND WALLS BELOW GRADE WHERE HYDROSTATIC PRESSURE DOES OCCUR.
B. PROVIDE PROPRIETARY WATERPROOFING SYSTEM & MANUFACTURER'S RECOMMENDED PROTECTION / DRAIN BOARDS.
C. NOTIFY ARCHITECT FOR SPECIAL FLOOR, WALL, AND WATERPROOFING REQUIREMENTS WHERE HYDROSTATIC PRESSURES EXIST.
D. NOTE: PROVIDE FLOOR PROOFING / FLOOR RESISTANT CONSTRUCTION PER CODE WHERE BASE FLOOR ELEVATION IS BELOW 100 YEAR FLOOD LEVEL.

DIVISION 3 - CONCRETE

3.1 EXCEPT WHERE MORE STRINGENT CONDITIONS ARE SHOWN OR REQUIRED BY CODE, ALL CONCRETE METHODS, MATERIALS, AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE AMERICAN CONCRETE INSTITUTE (ACI) 308, AND THE CONCRETE REINFORCING STEEL INSTITUTE "MANUAL OF STANDARD PRACTICE", LATEST EDITIONS.

3.2 SET TOPS OF ALL SLABS TO ACCOMMODATE ARCHITECTURAL FINISHES. CONTRACTOR SHALL COORDINATE WITH ALL OTHER TRADES AND OBTAIN NECESSARY DATA AND INFORMATION INCLUDING SETTING DIAGRAM AND INSTRUCTION FROM THE SUPPLIERS FOR IMBEDDED ITEMS, ANCHORS, ETC.

3.3 PROTECT CONCRETE WORK FROM DAMAGE DURING HOT AND COLD WEATHER PLACING.

3.4 CONCRETE MIX:
A. ALL NORMAL WEIGHT CONCRETE SHALL HAVE 28 DAY DESIGN STRENGTH OF 3,000 PSI EXCEPT WHERE OTHERWISE INDICATED. GARAGE SLABS SHALL BE 3,500 PSI MIX.
B. MIX DESIGN ADJUSTMENTS MAY BE REQUESTED BY THE CONTRACTOR WHEN CHARACTERISTICS OF MATERIALS, JOB CONDITIONS, WEATHER, TEST RESULTS, ETC. WARRANT.
C. WATER-REDUCING AGENT, ACCELERATING ADJUSTIVES, ETC. SHALL CONFORM TO ASTM C494.
D. DISCONTINUE MIX DESIGN FOR EXTERIOR EXPOSED CONCRETE INCLUDING STRUCTURES & SLABS EXPOSED TO FREEZE/THAW, HYPOHALIC PNEUMIA, DICER CHEMICALS, OR INTERIOR SLABS SUBJECT TO VEHICULAR ABUSE. USE AIR-ENTRAPPED AGENT (ASTM C686). FOLLOW MANUFACTURER'S PRESCRIBED RATE.
E. SLUMP LIMITS: RAMPS & SLOPING SURFACES, NOT MORE THAN 3". REINFORCED FOUNDATIONS, NOT LESS THAN 1" NOR MORE THAN 3". ALL OTHER CONCRETE, NOT LESS THAN 1" NOR MORE THAN 4".

3.5 REINFORCING MATERIALS & INSTALLATION:
A. REINFORCING BARS: AISI/ASTM A615, GRADE 60, DEFORMED.
B. WELDED WIRE FABRIC (WWF): AISI/ASTM A615, WELDED STEEL WIRE FABRIC.
C. PROVIDE SUPPORTS, CHAIRS, SPACERS, ETC. FOR PLACING, SUPPORTING, AND FASTENING REINFORCING BARS & WWF IN PLACE IN ACCORDANCE WITH OHS RECOMMENDATIONS. PROVIDE MIN. COVER AS REQUIRED PER CODE AND A.C.I.
D. CLEAN REINFORCEMENT TO ENSURE PROPER BOND WITH CONCRETE.
E. SEE DRAWINGS FOR BONDING REQUIREMENTS FOR REBAR.

3.6 UNDER-SLAB VAPOR BARRIER:
A. FLOOR FINISH SURFACES TO A UNIFORM, SMOOTH, GRANULAR TEXTURE. CUT DOWN HIGH SPOTS, FILL LOW SPOTS, AND REFLAT AS REQUIRED.
B. TROWEL FINISH ALL SURFACES EXPOSED TO VIEW AND SLAB SURFACES TO BE COVERED WITH FINISH FLOORING MATERIALS.
C. PROPEL NON-SLIP BROOM FINISH PERPENDICULAR TO THE DIRECTION OF TRAFFIC TO ALL EXTERIOR CONCRETE PLATFORMS, STEPS, RAMPS, ETC.

3.7 JOINTS:
A. CONSTRUCTION JOINTS: LOCATE & INSTALL CONSTRUCTION JOINTS (NOT SHOWN ON DWGS) SO AS NOT TO IMPAIR THE STRENGTH AND APPEARANCE OF THE STRUCTURE. CONTINUE REINFORCEMENT ACROSS CONSTRUCTION JOINTS. EXCEPT WHERE INDICATED OTHERWISE, PROVIDE 1-1/2" DEEP CONSTRUCTION JOINTS IN BETWEEN SLABS, GRADE BEAMS, AND FOOTINGS.
B. WATERSTOPS: PROVIDE WATERSTOPS IN CONSTRUCTION JOINTS AS INDICATED TO FORM A CONTINUOUS, WATER-TIGHT DIAPHRAGM IN EACH JOINT.
C. ISOLATION JOINTS IN SLABS-ON-GROUND: CONSTRUCT ISOLATION JOINTS IN SLABS WHERE CONTACTING VERTICAL SURFACES INCLUDING COLUMNS, FOUNDATIONS, CREASTELS, ETC.

3.8 CONSTRUCTION JOINTS IN SLABS-ON-GROUND: UNLESS INDICATED ON DRAWINGS, CONSTRUCT JOINTS IN SLABS IN OVERLAP BOARD FASHION SUCH THAT THERE IS A MAXIMUM AREA OF 1200 SQ. FT. AND A MAXIMUM LENGTH OF 40'-0". USE 1/4" x 1/4" OF A SLAB DEPTH PRE-MOLDED JOINT FILLER SET FLUSH WITH TOP OF SLAB.

3.9 MONOLITHIC SLAB FINISHING:
A. FLOOR FINISH SURFACES TO A UNIFORM, SMOOTH, GRANULAR TEXTURE. CUT DOWN HIGH SPOTS, FILL LOW SPOTS, AND REFLAT AS REQUIRED.
B. TROWEL FINISH ALL SURFACES EXPOSED TO VIEW AND SLAB SURFACES TO BE COVERED WITH FINISH FLOORING MATERIALS.
C. PROPEL NON-SLIP BROOM FINISH PERPENDICULAR TO THE DIRECTION OF TRAFFIC TO ALL EXTERIOR CONCRETE PLATFORMS, STEPS, RAMPS, ETC.

DIVISION 4 - MASONRY

4.1 MASONRY CONSTRUCTION - GENERAL:
A. USE THE PLANS FOR SIZES OF FLOOR JOISTS, CEILING BEAMS, RAFTERS, COLLAR TIES, ETC.
B. UNLESS NOTES OTHERWISE, ALL 4 INCH WALLS INDICATED ON DRAWINGS ARE 4 INCH NOMINAL WOOD STUDS AT 16" O.C. ALL 6 INCH WALLS INDICATED ON DRAWINGS ARE 6 INCH NOMINAL WOOD STUDS AT 16" O.C. PROVIDE 2" x CATS AT 5'-0" O.C. VERTICAL, AT BEARING WALLS WHICH ARE 9'-0" OR GREATER IN HEIGHT.
C. DOUBLE THE JOISTS OR PROVIDE SOLID BLOCKING BELOW ALL PARTITION WALLS, BELOW ALL BATHUBS/BH/WH/POOLS AND AS INDICATED ON THE DRAWINGS. PROVIDE DOUBLE JOISTS AT ENDS OF KITCHEN CABINETS AND ISLANDS.
D. PROVIDE 5/4" x 3" CROSS BRIDGING OR SOLID BLOCKING AT ALL CONTINUOUS FLOOR JOISTS (MAX. 8'-0" O/C).
E. ALL FRAMING LUMBER THAT IS EXPOSED TO WEATHER OR MOISTURE-PERMEABLE FLOORS OR ROOFS SHALL BE PRESSURE TREATED OR AN APPROVED NATURALLY DURABLE SPECIES.
F. WOOD STRUCTURAL MEMBERS THAT SUPPORT MOISTURE-PERMEABLE FLOORS OR ROOFS WHICH ARE EXPOSED TO THE WEATHER SHALL BE PRESSURE TREATED OR APPROVED NATURALLY DURABLE SPECIES UNLESS SEPARATED FROM SUCH FLOORS OR ROOFS BY AN IMPERVIOUS MOISTURE BARRIER.
G. THE ENDS OF WOOD JOISTS ENTERING MASONRY OR CONCRETE WALLS SHALL BE PROVIDED WITH A 3/4-INCH AIR SPACE ON TOP, SIDES AND END UNLESS APPROVED OTHERWISE.
H. INTRINSICLY DURABLE OR PRESERVE-TREATED LUMBER SHALL BE USED FOR ALL METAL FLASHING TO ISOLATE NON-TREATED LUMBER.
I. IN STUDS OF BEARING WALLS OR PARTITIONS, NOTCHES OR HOLES SHALL NOT BE CUT OR BORED MORE THAN 25% DEPTH OF THE STUD (40% MAXIMUM FOR NON-BEARING PARTITIONS) FOR BORED HOLES WITH A MAX OF 40% OF STUD WIDTH WITH THE EDGE OF THE HOLE MUST MAINTAIN MIN. 5/8" TO 2" EDGE OF STUD FOR STUDS DRILLED OVER JOIS AND UP TO JOIS. ABOVE ALL STUDS, STOP, OR PROVIDE APPROVED CONSTRUCTION REPAIR SHEET. DO NOT CUT, NOTCH, OR BORE MULTIPLE HOLES IN SAME AREA OF STUD.
J. ALL MEMBERS FRAMING INTO STUDS SHALL BEAR NOT LESS THAN 4" OR SHALL BE SUPPORTED IN APPROVED METAL STRUTS, HANGERS OR ON WOOD GLIPS OR RIBBON STRIPS. BEAMS FRAMING FROM OPPOSITE SIDES SHALL EITHER LAP AT LEAST 4" AND BE BOLTED OR SPICED TOGETHER OR, WHEN FRAMING END-TO-END, THE BEAMS SHALL BE SECURED TOGETHER BY APPROVED TIES, STRAPS, LOSS, PLATES OR SHEATHING. DO NOT SPICE STRUCTURAL MEMBERS BETWEEN SUPPORTS.
K. ALL RIDGES, HPIS, AND VALLEYS SHALL BE FRAMED WITH MEMBERS 2" DEEPER THAN ADJOINING RAFTERS. CONSULT DRAWINGS FOR ADDITIONAL INFORMATION.
L. ALL 4" DIAMETER "ALLY COLUMNS" (CONCRETE FILL STEEL PIPE COLUMNS) USED TO HAVE A STEEL OUTER CASING WITH A MINIMUM WALL THICKNESS OF 16GA UNLESS MANUFACTURER'S WRITTEN SPECIFICATIONS INDICATE THAT THE COLUMNS ARE ABLE TO SUPPORT THE IMPOSED LOADS FOR THE GIVEN LENGTH LOAD CAPACITY = 23 KIPS AT A COLUMN HEIGHT OF 8'-0"). PROVIDE MANUFACTURER'S STANDARD BASE AND CAP PLATES; CAP SHALL BE ANCHORED TO SUPPORTED FRAMING AND BASE SHALL BE EMBEDDED IN CONCRETE.
M. WIND BRACING: PROVIDE WOOD STRUCTURAL PLATE SHEATHING AT ALL CORNERS (4" x 8" SHEETS) OR PROVIDE APPROVED DIAGONAL WIND BRACING. SEE DRAWING #1-4W FOR ADDITIONAL INFORMATION.
N. BOLTING/SPRING OF MULTIPLE MEMBERS: UNLESS NOTED OTHERWISE, BUILT UP ORDERS SHALL BE SPICED TOGETHER WITH MINIMUM 2 ROWS OF 16D COMMON WIRE @ 12" O.C. FOR PREFABRICATED WOOD GIERS. CONSULT MANUFACTURER'S WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

4.2 CONCRETE MASONRY UNITS (CMU):
A. UNLESS NOTED OTHERWISE, ALL UNITS SHALL HAVE STANDARD NOMINAL DIMENSIONS OF 16" LONG AND 8" HIGH. THICKNESS AS INDICATED ON DRAWINGS.
B. PROVIDE SPECIAL BLOCK TYPES WHERE REQUIRED FOR CORNERS, CONTROL JOINTS, HEADERS, UNITS, AND OTHER SPECIAL CONDITIONS, WHENEVER OR NOT SPECIFICALLY INDICATED ON THE DRAWINGS AS SPECIAL.
C. HOLLOW LOAD BEARING UNITS: ASTM C90, GRADE-N-L, MORTAR COATED. UNLESS NOTED OTHERWISE, MASONRY UNITS SHALL BE NORMAL-WEIGHT OR LIGHTWEIGHT (105 LBS PER CU. FT.) CONFORMING TO ASTM C-331 (SOLITE, ROTARY KILN PROCESSED SHALE OR SLATE).
D. COLOR & TEXTURE ON ALL EXPOSED UNITS AS SELECTED.

4.3 FACING BRICK:
A. COLOR AND TEXTURE AS SELECTED.
B. ASTM C216, GRADE SW, TYPE FBS OR FBX, MIN. COMPRESSIVE STRENGTH = 2500 PSI.
C. DIMENSIONS: 3-5/8" THICK x 7-5/8" HIGH x 7-5/8" LONG.
D. SHAPES: 3-5/8" THICK x 7-5/8" HIGH x 7-5/8" LONG.
E. INSTALL BRICK IN ACCORDANCE WITH THE APPLICABLE STANDARDS OF THE BRICK INSTITUTE OF AMERICA (BIA).
F. ALL BRICK VENEER SHALL BE SUPPORTED DIRECTLY ON A 4" (MINIMUM) MASONRY LEDE AT THE FOUNDATION WALL OR STEEL UNITS AS INDICATED. FILL FIRST BLOCK COURSE SOLID DIRECTLY UNDER THE BRICK VENEER.
G. SHEATHING SHALL BE MINIMUM 1/2" EXTERIOR GRADE PLYWOOD PANELS AT ALL AREAS WITH BRICK VENEER. PROVIDE 1/8" BUILDING PAPER OR "HYKID" INFILTRATION BARRIER WITH EDGES LAPPED 4" MIN. VERTICALLY AND 6" MIN. HORIZONTALLY & AT FLASHING. PROVIDE MINIMUM 1" NOMINAL AIR SPACE BETWEEN BRICK AND SHEATHING.
H. ALL CONSTRUCTION LOADS (BUILDING LIVE & DEAD LOADS) SHALL BE SUPPORTED ON STRUCTURAL CONCRETE MASONRY UNITS (CMU) OR STRUCTURAL WOOD FRAMING. DO NOT IMPOSE CONSTRUCTION LOADS ON BRICK VENEER.
I. THE MAX. HOT. OF BRICK VENEER SHALL NOT EXCEED 25'-0".
J. PROVIDE VERTICAL CONTROL JOINTS IN ACCORDANCE WITH THE BRICK INSTITUTE OF AMERICA (BIA).

