Building Permit Application

Howard County Maryland
Department of Inspections, Licenses and Permits
3430 Court House Drive
Permits: 410-313-2455
www.howardcountymd.gov

Health.

Date Received: _____

Permit No.: B1900727

Building Address: 1945 St. James Rd
City: Marriottsville State: MD Zip Code: 21104
Suite/Apt. #_____ SDP/WP/BA #: _____
Census Tract: _____ Subdivision: 0004
Section: _____ Area: _____ Lot: 44
Tax Map: 0009 Parcel: 0319 Grid: 0024
Zoning: _____ Map Coordinates: _____ Lot Size: 3 Ac.

Existing Use: Residential
Proposed Use: Residential
Estimated Construction Cost: $ 200,000
Description of Work: Add master bedroom and remodel existing 2nd floor
Addition = 717 SF Remodel 575 SF
Occupant/Tenant Name: _____
Was tenant space previously occupied? ☐Yes ☐No
Contact Name: _____
Address: _____
City: _____ State: _____ Zip Code: _____
Phone: _____ Fax: _____
Email: _____

Property Owner's Name: James & Christine Adair
Address: 1945 St. James Rd.
City: Marriottsville State: MD Zip Code: 21104
Phone: 410-419-7764 Fax: _____
Email: hunter.adair@aol.com

Applicant's Name & Mailing Address, (If other than stated herein)
Applicant's Name: Mikes Construction Company
Address: 121 Wye River Dr.
City: Queenstown State: MD Zip Code: 21658
Phone: 410-340-2570 Fax: _____
Email: dricc73@gmail.com

Contractor Company: Mikes Construction Comp, LLC
Contact Person: Doug Rice
Address: 121 Wye River Dr
City: Queenstown State: MD Zip Code: 21658
License No.: MHIC 92,000
Phone: 410-340-2570 Fax: _____
Email: dricc73@gmail.com

Engineer/Architect Company: _____
Responsible Design Prof.: _____
Address: _____
City: _____ State: _____ Zip Code: _____
Phone: _____ Fax: _____
Email: _____

Commercial Building Characteristics	Residential Building Characteristics
Height:	☒ SF Dwelling ☐ SF Townhouse
No. of stories:	Depth / Width
Gross area, sq. ft./floor:	1st floor: 45.5 / 36.5
	2nd floor: 45.5 / 36.5
Area of construction (sq. ft.):	Basement:
	☒ Finished Basement
Use group:	☐ Unfinished Basement
	☐ Crawl Space
Construction type:	☐ Slab on Grade
☐ Reinforced Concrete	No. of Bedrooms:
☐ Structural Steel	**Multi-family Dwelling**
☐ Masonry	No. of efficiency units:
☐ Wood Frame	No. of 1 BR units:
☐ State Certified Modular	No. of 2 BR units:
	No. of 3 BR units:
	Other Structure:
	Dimensions:
➢ **Roadside Tree Project Permit**	Footings:
☐Yes ☑No	Roof:
Roadside Tree Project Permit #	☐ State Certified Modular
	☐ Manufactured Home

Utilities	
Electric: ☑Yes ☐ No	
Gas: ☐ Yes ☑No	
Water Supply	
☐ Public	
☑Private	
Sewage Disposal	
☐ Public	
☑Private	
Heating System	
☑Electric ☐ Oil	
☐ Natural Gas ☐ Propane Gas	
☐ Other:	
Sprinkler System:	
☐ Yes ☑No	
Grading Permit Number:	
Building Shell Permit Number:	

RECEIVED
MAY 28 2019
LICENSES & PERMITS DIVISION

THE UNDERSIGNED HEREBY CERTIFIES AND AGREES AS FOLLOWS: (1) THAT HE/SHE IS AUTHORIZED TO MAKE THIS APPLICATION; (2) THAT THE INFORMATION IS CORRECT; (3) THAT HE/SHE WILL COMPLY WITH ALL REGULATIONS OF HOWARD COUNTY WHICH ARE APPLICABLE THERETO; (4) THAT HE/SHE WILL PERFORM NO WORK ON THE ABOVE REFERENCED PROPERTY NOT SPECIFICALLY DESCRIBED IN THIS APPLICATION; (5) THAT HE/SHE GRANTS COUNTY OFFICIALS THE RIGHT TO ENTER ONTO THIS PROPERTY FOR THE PURPOSE OF INSPECTING THE WORK PERMITTED AND POSTING NOTICES.

Applicant's Signature _____ *Print Name* Doug Rice

Email Address dricc73@gmail.com *Date* 5/28/19

Title/Company _____

Checks Payable to: DIRECTOR OF FINANCE OF HOWARD COUNTY
PLEASE WRITE NEATLY & LEGIBLY

-FOR OFFICE USE ONLY-

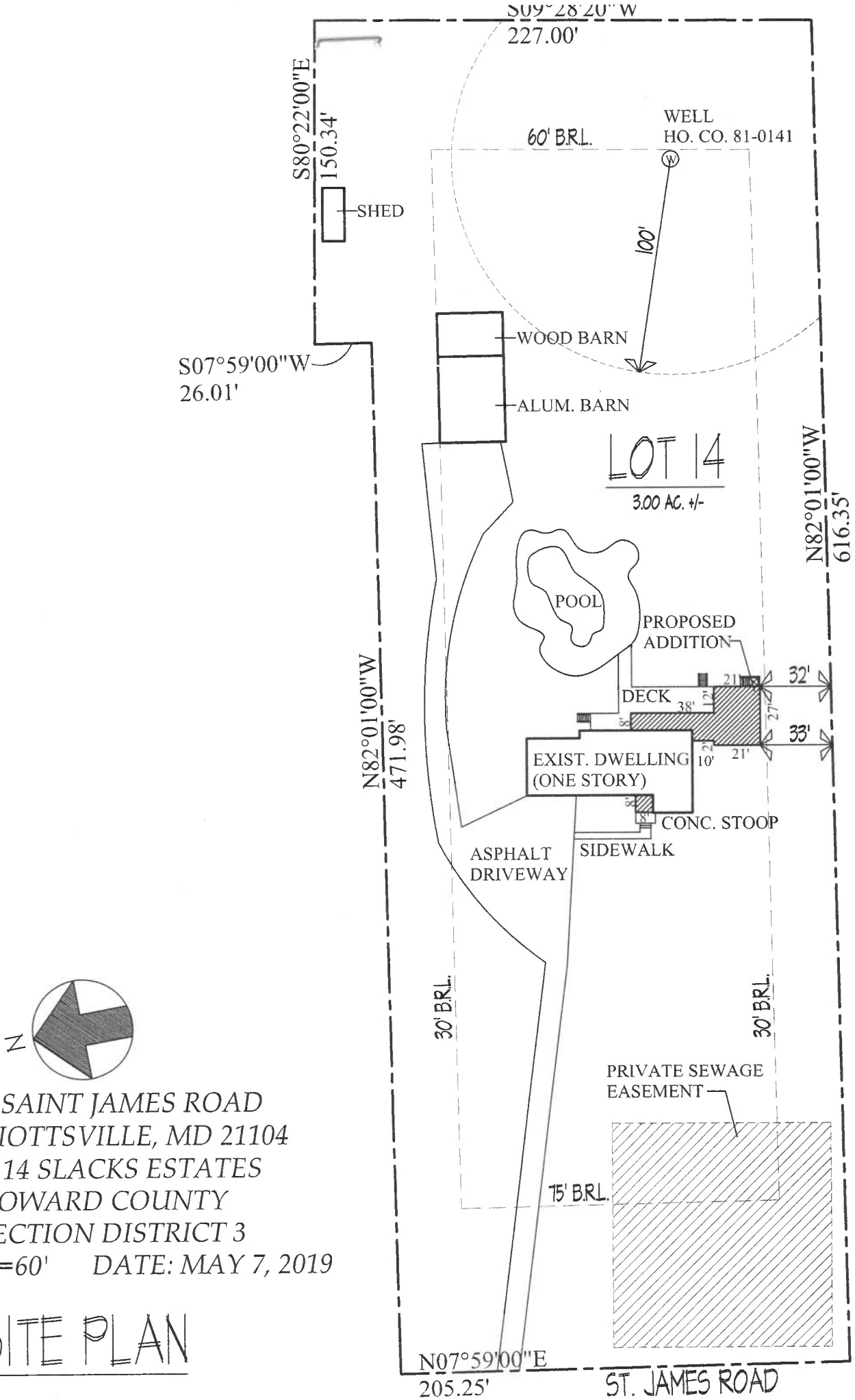
AGENCY	DATE	SIGNATURE OF APPROVAL
State Highways		
Building Officials		
PSZA (Zoning)		
PSZA (Engineering)		
Health	6/12/19	N. Oswald

Is Sediment Control approval required for issuance? ☐ Yes ☐ No
☐ CONTINGENCY CONSTRUCTION START

DPZ SETBACK INFORMATION	
Front:	
Rear:	
Side:	
Side St.:	
All minimum setbacks met?	☐ Yes ☐No
Is Entrance Permit Required?	☐ Yes ☐No
Historic District?	☐ Yes ☐No
Lot Coverage for New Town Zone:	
SDP/Red-line approval date:	

Filing Fee	$	25
Permit Fee	$	
Tech Fee	$	
Excise Tax	$	
PSFS	$	
Guaranty Fund	$	
Add'l per Fee	$	
Total Fees	$	
Sub- Total Paid	$	
Balance Due	$	
Check	#	2199

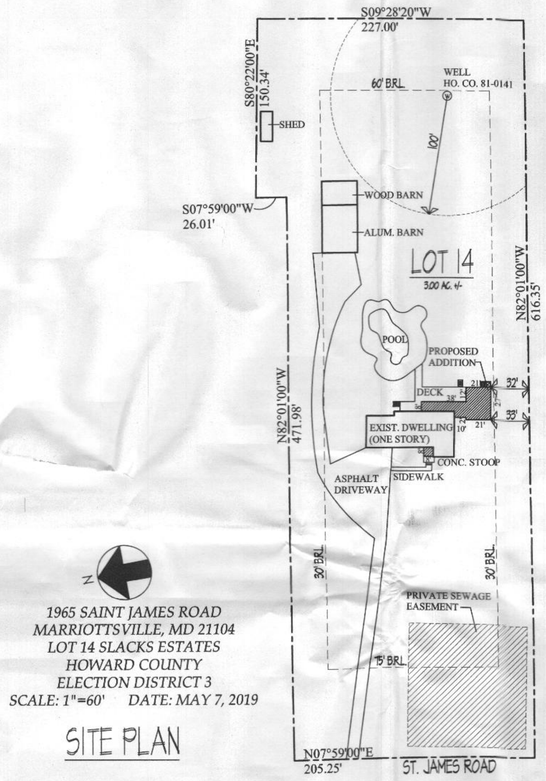
Distribution of Copies: White: Building Officials Green: PSZA,Zoning Yellow: PSZA,Engineering Pink: Health Gold: SHA



1965 SAINT JAMES ROAD
MARRIOTTSVILLE, MD 21104
LOT 14 SLACKS ESTATES
HOWARD COUNTY
ELECTION DISTRICT 3
SCALE: 1"=60' DATE: MAY 7, 2019

SITE PLAN

ADAIR ADDITION



1965 SAINT JAMES ROAD
MARRIOTTSVILLE, MD 21104
LOT 14 SLACKS ESTATES
HOWARD COUNTY
ELECTION DISTRICT 3
SCALE: 1"=60' DATE: MAY 7, 2019

SITE PLAN

I. TABLE R3015 LIVE LOAD MINIMUM UNIFORMLY DISTRIBUTED LIVE LOADS (IN POUNDS PER SQUARE FOOT) SHALL CONFORM TO THE FOLLOWING:

USE	LIVE LOAD	DEAD LOAD	TOTAL
ROOF TRUSSES	30	10 (top &bottom)	50
RAFTERS	30	10	40
ATTICS WITHOUT STORAGE [b]	10	5	15
ATTICS WITH LIMITED STORAGE [b,g]	20	10	30
HABITABLE ATTICS AND ATTICS SERVED WITH FIXED STAIRS	30	10	40
BALCONIES (EXTERIOR) AND DECKS [e]	40	10	50
FIRE ESCAPES	40	10	50
GUARDRAILS AND HANDRAILS [d]	200 [h]		
GUARDRAIL IN-FILL COMPONENTS [f]	50 [h]		
PASSENGER VEHICLE GARAGES [a]	50	50	100
ROOMS OTHER THAN SLEEPING ROOMS	40 [a]	10	50
SLEEPING ROOMS	30	10	40
STAIRS	40 [c]	20	60

ASSUMED SAIL BEARING CAPACITY: 2000 PSF

a. Elevated garage floors shall be capable of supporting a 2,000-pound load applied over a 20-square-inch area.
b. Uninhabitable attics without storage are those where the maximum clear height between joists and rafters is less than 42 inches, or where there are not two or more adjacent trusses with web configurations capable of accommodating an assumed rectangle 42 inches high by 24 inches in width, or greater, within the plane of the trusses. This live load need not be assumed to act concurrently with any other live load requirements.
c. Individual stair treads shall be designed for the uniformly distributed live load or a 300-pound concentrated load acting over an area of 4 square inches, whichever produces the greater stresses.
d. A single concentrated load applied in any direction at any point along the top.
e. See Section R502.2.2 for decks attached to exterior walls.
f. Guard in-fill components (all those except the handrail), balusters and panel fillers shall be designed to withstand a horizontally applied normal load of 50 pounds on an area equal to 1 square foot. This load need not be assumed to act concurrently with any other live load requirement.
g. Uninhabitable attics with limited storage are those where the maximum clear height between joists and rafters is 42 inches or greater, or where
there are two or more adjacent trusses with web configurations capable of accommodating an assumed rectangle 42 inches in height by 24 inches in width, or greater, within the plane of the trusses.
The live load need only be applied to those portions of the joists or truss bottom chords where all of the following conditions are met:
1. The attic area is accessible from an opening not less than 20 inches in width by 30 inches in length that is located where the clear height in the attic is a minimum of 30 inches.
2. The slopes of the joists or truss bottom chords are no greater than 2 inches vertical to 12 units horizontal.
3. Required insulation depth is less than the joist or truss bottom chord member depth.
The remaining portions of the joists or truss bottom chords shall be designed for a uniformly distributed concurrent live load of not less than 10 lb/ft2.
h. Glazing used in handrail assemblies and guards shall be designed with a safety factor of 4. The safety factor shall be applied to each of the concentrated loads applied to the top of the rail, and to the load on the in-fill components. These loads shall be determined independent of one
another, and loads are assumed not to occur with any other live load.

ADOPTED CODES

International Building Code, 2015 Edition
International Residential Code for One and Two Family Dwellings, 2015 Edition
International Mechanical Code, 2015 Edition
International Energy Conservation Code, 2015 Edition
The Life Safety Code, 2015 Edition
2014 National Electrical Code with Local Amendments (NFPA 70)
2009 National Standard Plumbing Code Illustrated
2009 National Fuel Gas Code (NFPA 54)
International Property Maintenance Code 2006

ENERGY COMPLIANCE: PRESCRIPTIVE APPROACH SEE SHEET A-8A

SQ. FOOTAGE

LOWER LEVEL	717
UPPER LEVEL	985
TOTAL	1702
REAR DECK	670

PERMIT/CONSTRUCTION SET
MAY 7, 2019

JB HOME DESIGN, LLC
9416 CONCORD COURT
BALTIMORE, MARYLAND 21234
OFFICE (410) 599-9587
FAX (410) 663-4069
EMAIL: JON@JBHOMEDESIGN.COM
home design

TABLE R301.2(1) CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA

GROUND SNOW LOAD	WIND DESIGN				SEISMIC DESIGN CATEGORY	SUBJECT TO DAMAMGE FROM			WATER DESIGN TEMP	ICE BARRIER UNDERLAYMENT REQUIRED	FLOOD HAZARD	AIR FREEZING INDEX	MEAN ANNUAL TEMP
	Speed (mph)	Topographic effects	Special wind region	Wind-borne debris zone		Weathering	Frost line depth	Termites					
25	115	NO	NO	NO	A	Severe	30"	Moderate Heavy	20 °	Yes	see flood maps	1500	55°

DRAWING INDEX

TITLE	SHEET	TITLE	SHEET
COVER SHEET	CS	APA NARROW WALL DETAILS	A-8A
CONSTRUCTION NOTES	CN	WALL BRACING PLANS AND CHARTS	A-8B
EXISTING ELEVATIONS	EX-1	WALL BRACING UPPER LEVEL PLAN	A-8C
EXISTING LOWER LEVEL PLAN	EX-2		
EXISTING UPPER LEVEL PLAN	EX-3		
EXISTING SCHEMATIC SECTIONS	EX-4		
UPPER LEVEL DEMOLITION PLAN	D-1		
FRONT AND LEFT SIDE ELEVATIONS	A-1A		
REAR AND LEFT SIDE ELEVATIONS	A-1B		
LOWER LEVEL PLAN	A-2		
UPPER LEVEL PLAN	A-3		
ROOF PLAN	A-4		
SECTIONS A-D AND DETAILS	A-5		

GENERAL

G1. ALL NOTES APPLY TO EACH AND EVERY SUBCONTRACTOR. READ AND REVIEW EACH NOTE CAREFULLY FOR ITS APPLICABILITY TO THE WORK.

G2. BUILDING CODE REFERENCES HEREUNDER AND ON THE PLANS REFER TO THE 2015 INTERNATIONAL RESIDENTIAL CODE (IRC) AND OTHER INTERNATIONAL CODES, AS APPLICABLE, UNLESS OTHERWISE NOTED (U.N.O.)

G3. CONTRACTOR WILL PROVIDE THE GENERAL BUILDING PERMIT ONLY. EACH SUBCONTRACTOR SHALL SECURE ALL OTHER REQUIRED PERMITS PRIOR TO COMMENCING ANY WORK AND SHALL BE SOLELY RESPONSIBLE FOR OBTAINING AND PASSING, WITHOUT DELAY TO CONTRACTOR, ALL INSPECTIONS AND APPROVALS REQUIRED BY LAW OR ANY STORM WATER OR DUST CONTROL REQUIREMENTS AND ANY INSPECTIONS AND APPROVALS REQUIRED BY CONTRACTOR OR ANY AGENT OF CONTRACTOR.

G4. PERFORM ALL WORK IN COMPLIANCE WITH APPLICABLE LAWS, FREE FROM NONCONFORMANCE, IN A FIRST-CLASS, GOOD, AND WORKMANLIKE MANNER ACCORDING TO THE HIGHEST STANDARDS OF SUBCONTRACTOR'S TRADE AND IN STRICT CONFORMANCE WITH SUBCONTRACTOR'S OBLIGATIONS UNDER ITS AGREEMENT.

G5. THE CONTRACT DOCUMENTS OUTLINE SALIENT MINIMUM REQUIREMENTS BUT DO NOT SPECIFY ALL LABOR, MATERIAL, TOOLS EQUIPMENT, UTILITIES, SERVICES AND OTHER ITEMS NECESSARY TO PROPERLY AND FULL EXECUTE THE WORK.

G6. WORK NOT SPECIFICALLY COVERED IN THE CONTRACT DOCUMENTS, BUT WHICH IS REASONABLY INFERABLE FROM OR CUSTOMARILY PERFORMED BY ANY SUBCONTRACTOR OF THE SAME OR SIMILAR TRADE PERFORMING WORK OF THE TYPE SHOWN ON OR INCLUDED IN THE CONTRACT DOCUMENTS, INCLUDING DETAILS OR ITEMS OF THE WORK WHICH ARE NOT SPECIFICALLY COVERED ON OR IN THE CONTRACT DOCUMENTS, SHALL BE FURNISHED AND INSTALLED AT NO EXTRA COST.

G7. ALL MATERIAL SUPPLIED SHALL BE NEW, THE BEST OF ITS KIND AND FROM THE SAME MANUFACTURER (AND SAME MANUFACTURING RUN WHERE APPLICABLE). ALL MATERIALS SHALL BE SUITABLE FOR THE USES INTENDED AND CONDITIONS ANTICIPATED. FURNISH, HANDLE AND INSTALL MATERIAL IN ACCORDANCE WITH THE TERMS OF ITS LISTING OR APPROVAL, THE MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS, GUIDELINES AND RECOMMENDATIONS AND APPLICABLE LAWS AND STANDARDS.

G8. SUBCONTRACTOR SHALL PROTECT THE WORK, PROPERTY AND MATERIAL OF OTHER PERSONS BEFORE PROCEEDING WITH ANY WORK AND AT ALL TIMES DURING THE PERFORMANCE OF ITS WORK.

G9. DRAWN DIMENSIONS TAKE PRECEDENCE OVER DRAWN INFORMATION - DO NOT SCALE DIMENSIONS. ALL DIMENSIONS ARE SHOWN TO FACE OF STUDS. ALL EXTERIOR STUD WALLS ARE 5 1/2" WIDE, ALL INTERIOR STUD WALLS ARE 3 1/2" WIDE (U.N.O.).

G10. SUBCONTRACTOR SHALL VERIFY ALL DIMENSIONS BEFORE COMMENCING ANY WORK. BRING ALL ERRORS OR OMISSIONS TO THE IMMEDIATE ATTENTION OF CONTRACTOR BEFORE COMMENCING ANY WORK. SUBCONTRACTOR SHALL BEAR ALL COSTS AND EXPENSES FOR CORRECTING WORK COMMENCED WITHOUT VERIFYING DIMENSIONS OR WITHOUT HAVING A RESOLUTION TO ANY ERROR OR OMISSION.

G11. REMOVE ALL WASTE MATERIAL AND TRASH DAILY. CLEAN THE WORK AREA DAILY. IMMEDIATELY AFTER COMPLETING WORK ON ANY HOME, REMOVE ALL TOOLS, EQUIPMENT AND EXCESS OR NONCONFORMING MATERIAL AND SHALL LEAVE THE HOME IN A BROOM CLEAN, NEAT, SAFE, SECURE AND SANITARY CONDITION.

SAFETY

S1. EVERY SUBCONTRACTOR AND EACH OF ITS AGENTS SHALL COMPLY WITH ALL HEALTH, SAFETY AND ENVIRONMENTAL LAWS, RULES, REGULATIONS AND REQUIREMENTS. EACH SUBCONTRACTOR UNDERSTANDS AND AGREES THAT SUBCONTRACTOR IS SOLELY LIABLE AND SOLELY RESPONSIBLE FOR THE HEALTH AND SAFETY OF ITS AGENTS AND THAT SUBCONTRACTOR POSSESSES THE AUTHORITY, EXPERTISE, CONTROL AND MEANS TO CARRY OUT SUCH RESPONSIBILITY.

S2. CEILING HEIGHTS SHALL COMPLY WITH SECTION R305. WHERE UNFINISHED, CEILING HEIGHTS SHALL ALLOW FOR 1" MINIMUM FOR FINISHES TO COMPLY.

S3. PROVIDE TEMPERED GLASS IN LOCATIONS DESIGNATED AS BEING HAZARDOUS UNDER SECTION R308.4 CONFORMING WITH THE REQUIREMENTS THEREIN.

S4. PROVIDE A SOLID CORE WOOD DOOR NOT LESS THAN 1-3/8" THICKNESS BETWEEN THE GARAGE AND THE RESIDENCE (R302.5.1). PROVIDE AN AUTOMATIC DOOR CLOSER.

S5. PROVIDE 5/8" TYPE "X" GYPSUM WALLBOARD FOR ALL WALLS AND CEILINGS SEPARATING THE GARAGE AND ANY HABITABLE OR USEABLE SPACE, INCLUDING ATTIC SPACE, AND THE STRUCTURE SUPPORTING THE SEPARATION (R302). DUCTWORK IN THE GARAGE OR PENETRATING ANY WALL OR CEILING BETWEEN THE GARAGE AND ANY HABITABLE OR USEABLE SPACE SHALL BE CONSTRUCTED OF NOT LESS THAN 26 GAUGE STEEL.

S6. WINDOW WELLS SHALL BE OF GALVANIZED STEEL OR REINFORCED CONCRETE U.N.O. AND BE OF SUFFICIENT STRENGTH TO RESIST BACKFILL PRESSURES AND SHALL HAVE MINIMUM HORIZONTAL AREA OF 9 S.F. WITH A MINIMUM HORIZONTAL PROJECTION AND WIDTH OF 36" (R310). PROVIDE A PERMANENTLY AFFIXED LADDER WHERE WINDOW DEPTH EXCEEDS 44". TOP OF WELL SHALL EXTEND NOT LESS THAN 3" ABOVE FINISHED GRADE AND BOTTOM OF WELL SHALL EXTEND NOT LESS THAN 9" BELOW WINDOW SILL. PROVIDE DRAINAGE BY CONNECTING TO THE BUILDINGS FOUNDATION DRAINAGE SYSTEM OR APPROVED ALTERNATIVE METHOD.

S7. STAIRWAYS, RAMPS EXTERIOR EXIT BALCONIES, HALLWAYS AND DOORS SHALL COMPLY WITH THE REQUIREMENTS OF SECTION R311. STAIR TREADS AND RISERS SHALL HAVE MAXIMUM RISER HEIGHT OF 7 3/4" AND MINIMUM TREAD DEPTH OF 10". RISER HEIGHTS AND TREAD DEPTH SHALL NOT VARY MORE THAN 3/8". EACH EXTERIOR DOOR SHALL HAVE A FLOOR OR LANDING ON EACH SIDE. THE LANDING AT ANY EXTERIOR DOOR SHALL NOT BE MORE THAN 7 3/4" BELOW THE TOP OF THE DOOR THRESHOLD PROVIDED THE DOOR DOES NOT SWING OVER THE LANDING.

S8. PROVIDE AN INTERCONNECTED SMOKE DETECTOR SYSTEM, HAVING A SMOKE ALARM IN EACH SLEEPING ROOM, OUTSIDE OF EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS AND ON EACH ADDITIONAL STORY INCLUDING EASEMENTS (R314).

S9. PROVIDE AN INTERCONNECTED CARBON MONOXIDE ("CO") DETECTION SYSTEM, HAVING A CO ALARM WITHIN 10' OF THE ENTRANCE OF EVERY ROOM INTENDED TO BE LAWFULLY USED FOR SLEEPING PURPOSES, TYPICALLY IN A CENTRAL LOCATION SUCH AS A HALLWAY, AND ON EACH FLOOR LEVEL INTENDED TO BE LAWFULLY USED FOR PURPOSES, INCLUDING THE BASEMENT, THAT DOES NOT HAVE A ROOM INTENDED TO BE LAWFULLY USED FOR SLEEPING PURPOSES. CO ALARMS SHALL HAVE PERMANENT CO SENSOR OR REPLACEABLE CO SENSOR WITH END OF LIVE INDICATOR (R315).

S10. PROVIDE A CRAWL SPACE ACCESS OPENING AND PANEL NOT LESS THAN 18"X24" (R408). SEE SECTION M1305.1.4 FOR ACCESS REQUIREMENTS WHERE MECHANICAL EQUIPMENT IS LOCATED UNDER FLOORS.

S11. PROVIDE A MINIMUM OF 3" BETWEEN ANY RECESSED LIGHT, FAN OR ANY OTHER HEAT PRODUCING OR EMANATING DEVICE AND COMBUSTIBLE INSULATION, UNLESS APPROPRIATELY LISTED FOR LESS CLEARANCE.

S12. PROVIDE DRAFTSTOPPING AND FIREBLOCKING PER THE MOST STRINGENT APPLICABLE REQUIREMENTS THEREUNDER THE IRC, THE INTERNATIONAL MECHANICAL CODE (IMC), THE INTERNATIONAL PLUMBING CODE (IPC), THE NATIONAL ELECTRICAL CODE (NEC) AND THE INTERNATIONAL ENERGY CONSERVATION CODE (IECC). FIREBLOCKING SHALL BE PROVIDED TO CUT OFF ALL CONCEALED DRAFT OPENINGS (BOTH VERTICAL AND HORIZONTAL) AND TO FORM AN EFFECTIVE FIRE BARRIER BETWEEN STORIES, AND BETWEEN A TOP STORY AND THE ROOF SPACE. FIREBLOCKING SHALL BE SPECIFICALLY PROVIDED AT THE LOCATIONS DESIGNATED IN SECTION R302.11.

S13. PROVIDE AN ATTIC ACCESS OPENING AND PANEL NOT LESS THAN 22" X 30" IN A READILY ACCESSIBLE LOCATION, PREFERABLY A SECONDARY BEDROOM (R807). PROVIDE NOT LESS THAN 30" OF UNOBSTRUCTED HEADROOM ABOVE THE OPENING. PROVIDE GASKET FOR ACCESS PANEL (IECC 402.2.4). REFER TO SECTIONS M1305 AND M1306 FOR MECHANICAL ACCESS AND CLEARANCE REQUIREMENTS.

CONCRETE AND MASONRY

C1. COMPLY WITH APPLICABLE REQUIREMENTS SET FORTH IN THE IRC AND THE IBC.

C2. REFER TO THE STRUCTURAL PLANS FOR STRUCTURAL CONCRETE AND MASONRY REQUIREMENTS.

C3. U.N.O. ON THE STRUCTURAL PLANS OR NOTES, THE MINIMUM SPECIFIED 28 DAY COMPRESSIVE STRENGTH FOR CONCRETE COMPONENTS EXPOSED TO MODERATE OR SEVERE WEATHERING POTENTIAL SHALL BE:

PORCHES, PATIOS, DRIVEWAYS, GARAGE FLOOR SLABS AND WALKWAYS EXPOSED TO THE WEATHER - 3,500 PSI.
BASEMENT WALLS, FOUNDATION WALLS AND OTHER WALLS EXPOSED TO THE WEATHER - 3,000 PSI, AIR ENTRAINED 5 TO 7 PERCENT.
BASEMENT SLABS AND INTERIOR SLABS ON GRADE, EXCEPT GARAGE FLOOR SLABS - 3,000 PSI.
REFER TO STRUCTURAL PLANS AND NOTES FOR STRUCTURAL CONCRETE REQUIREMENTS. (R402)

C4. SLOPE ALL EXTERIOR CONCRETE SURFACES NOT LESS THAN 1/8" AND NOT MORE THAN 1/4" PER FOOT AWAY FROM HOUSE. SLOPE GARAGE FLOORS APPROXIMATELY 4" REAR TO FRONT TO FACILITATE THE MOVEMENT OF LIQUIDS TOWARD THE MAIN VEHICLE ENTRY DOORWAY (R309.1).

C5. FOUNDATION WALLS SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION R404 AND ACI 318 AND SHALL EXTEND A MINIMUM OF 6" ABOVE GRADE AT ALL POINTS, 4" WHERE MASONRY VENEER IS USED.

C6. BASEMENT CONCRETE FLOORS SHALL BE PLACED OVER A MINIMUM 6-MIL POLYETHYLENE VAPOR RETARDER COMPLYING WITH ASTM E 1745, WITH JOINTS LAPPED NOT LESS THAN 12" OVER PREPARED 4" THICK BASE COURSE PER SECTION R506.2

C7. CONCRETE FLOORS AND FOUNDATIONS SHALL BE MADE LEVEL WITHIN 1/2" IN 20' BUT NO MORE THAN 1" ACROSS THE FULL WIDTH OR LENGTH U.N.O. OR SPECIFICALLY DESIGNED FOR DRAINAGE.

C8. MASONRY AND STONE VENEER (INCLUDING MANUFACTURED) MATERIAL AND INSTALLATION SHALL COMPLY WITH SECTION 703.7, THE MASONRY OR STONE MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS AND RECOMMENDATIONS, THE MASONRY OR STONE MANUFACTURER'S WRITTEN CODE EVALUATION/APPROVAL DOCUMENTS AND THE REQUIREMENTS SET FORTH BY THE BRICK INDUSTRY ASSOCIATION FOR BRICK.

C9. PROVIDE A MINIMUM 6" BY 4" BY 5/16" GALVANIZED STEEL ANGLE TO SUPPORT EXTERIOR MASONRY VENEERS U.N.O. ON THE STRUCTURAL PLANS (R703).

C10. ATTACH EXTERIOR MASONRY VENEER WITH GALVANIZED TIES, SPACED NOT MORE THAN 24" ON CENTER HORIZONTALLY AND VERTICALLY AND SHALL SUPPORT NO MORE THAN 2.67 S.F. OF WALL AREA (R703.7), PROVIDE FLASHING AND WEEPHOLES AS SHOWN IN FIGURE R703.7.

C11. MINIMUM SOIL CAPACITY IS ASSUMED TO BE 2000 PSF AT ALL WALL AND PIER FOOTINGS. IT IS THE OWNER'S RESPONSIBILITY TO VERIFY BEARING CAPACITY AND TO NOTIFY THE DESIGNER IF THE CAPACITY IS LESS THAN 2000 PSF.

WOOD, METAL AND PLASTIC

W1. COMPLY W/ APPLICABLE REQUIREMENTS SET FORTH IN THE IRC AND THE IBC.

W2. WOOD MEMBERS AND PRODUCTS SHALL BE IDENTIFIED BY GRADE MARK OR CERTIFICATE OF INSPECTION ISSUED BY AN APPROVED AGENCY.

W3. REFER TO THE STRUCTURAL PLANS FOR STRUCTURAL FRAMING AND SHEATHING REQUIREMENTS.

W4. FASTENERS AND CONNECTORS IN CONTACT WITH PRESERVATIVE-TREATED OR FIRE-RETARDANT TREATED WOOD SHALL BE OF HOT DIPPED ZINC-COATED GALVANIZED STEEL UNLESS OTHERWISE PERMITTED UNDER SECTION R317.3.

W5. DO NOT CUT, SPLICE, NOTCH, OR OTHERWISE ALTER ANY SAWN LUMBER IN EXCESS OF THE LIMITATIONS SET FORTH IN SECTIONS R502, R602 AND R802 WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER OF RECORD.

W6. DO NOT CUT, SPLICE, NOTCH, OR OTHERWISE ALTER ANY ENGINEERED WOOD PRODUCT OR TRUSS WITHOUT THE WRITTEN APPROVAL OF THE MANUFACTURER OR ENGINEER OF RECORD, UNLESS THE EFFECTS OF ANY SUCH PENETRATION IS CONSIDERED IN ITS DESIGN BY THE MANUFACTURER OR ENGINEER OF RECORD (R502 AND R802).

W7. ENDS OF EACH JOIST, SEAM, OR GIRDER SHALL BEAR NOT LESS THAN 1 1/2" ON WOOD OR METAL AND 3" ON CONCRETE (R502 AND R802).

W8. TRUSS SHOP DRAWINGS SHALL COMPLY WITH SECTIONS 502 AND 802 AND SHALL BE PROVIDED TO THE BUILDING OFFICIAL AND ENGINEER OF RECORD AND APPROVED BY BOTH PRIOR TO INSTALLATION. BRACE TRUSSES IN ACCORDANCE WITH TPI/HIB U.N.O. ON THE SHOP DRAWINGS. TRUSS TO WALL AND TRUSS TIE DOWN CONNECTIONS SHALL COMPLY WITH R802. ALL PERMANENT AND TEMPORARY BRACING LOCATIONS SHALL BE PREMARKED BY THE TRUSS MANUFACTURER.

W9. WHERE FOUNDATION CRIPPLE WALLS EXCEED 4' IN HEIGHT, FRAME SUCH WALLS WITH STUDS HAVING THE SIZE REQUIRED FOR AN ADDITIONAL STORY (R602).

W10. PROVIDE BACKING AND BLOCKING FOR RAILINGS AT STAIR OPENINGS AND ALONG WALLS WHERE RAILS MAY ATTACH, INCLUDING EXTERIOR RAILINGS, FOR BATHROOM ACCESSORIES, SHOWER DOORS, CLOSET ITEMS, SHELVING, HARDWARE AND OTHER ACCESSORIES, AT OR ALONG COVERED PORCH AND PATIO SOFFITS AND CANTILEVERED FLOORS AND ELSEWHERE AS REQUIRED OR DIRECTED. PROVIDE 3" MINIMUM OF BACKING AROUND DOOR AND WINDOW OPENINGS. PROVIDE DRYWALL BACKING ALONG ALL TUBS AND TUB DECKS, SHOWER PANS, AND SHOWER SEATS AND ELSEWHERE AS REQUIRED OR DIRECTED.

W11. SHEATH AND SEAL THE UNDERSIDE OF ALL CANTILEVERED FLOOR AREAS WITH EXTERIOR EXPOSURE RATED SHEATHING. WHERE WOOD SIDING, SHEATHING OR FRAMING IS WITHIN 6" OF GRADE, EACH SHALL BE PROTECTED AGAINST DECAY (R317). INSULATE CANTILEVERED FLOOR AREAS BEFORE CLOSING IN OR PROVIDE OPENING SUFFICIENT TO INSULATE AFTER THE FACT.

W12. FLOORS SHALL BE MADE LEVEL WITHIN 1/4" IN 20' BUT NO MORE THAN 1/2" ACROSS THE FULL WIDTH OR LENGTH.

W13. WOOD, HARDBOARD, FIBER CEMENT AND VINYL SIDING MATERIAL AND INSTALLATION SHALL COMPLY WITH SECTION 703.3 OR 703.10 AS APPLICABLE, THE SIDING MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS AND RECOMMENDATIONS, THE SIDING MANUFACTURER'S WRITTEN CODE EVALUATION/APPROVAL DOCUMENTS AND APPLICABLE RECOMMENDATIONS SET FORTH THE REQUIREMENTS SET FORTH BY THE AMERICAN HARDBOARD ASSOCIATION OR THE VINYL SIDING INSTITUTE FOR HARDBOARD. PAINT AND/OR SEAL ALL WOOD AND HARDBOARD EDGES.

W14. FINISH CARPENTRY, MILLWORK AND CABINETRY INSTALLATION SHALL COMPLY WITH THE MILLWORK MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS AND RECOMMENDATIONS AND APPLICABLE ARCHITECTURAL.

THERMAL AND MOISTURE PROTECTION

T1. COMPLY WITH APPLICABLE REQUIREMENTS SET FORTH IN THE IRC, THE IECC, AND THE IMC.

T2. DURABLY SEAL THE BUILDING THERMAL ENVELOPE TO LIMIT INFILTRATION. SEAL ALL JOINTS, SEAMS, AND PENETRATIONS WITH DURABLE CAULKS, SEALANTS OR GASKETS, WEATHERSTRIPS, AIR BARRIERS, FILMS AND/ OR SELF-ADHESIVE FLASHING, EACH AS APPROPRIATE TO THE APPLICABLE CONDITION. THESE INCLUDE JOINTS, SEAMS AND PENETRATIONS THROUGH, BETWEEN, AROUND OR ALONG CONDITIONED AND UNCONDITIONED SPACES WITHIN THE HOUSE, INCLUDING, AT A MINIMUM, GARAGE AND CONDITIONED SPACE, TUBS AND SHOWERS, ATTIC AND CRAWL SPACE ACCESSES, WINDOW AND POOR ASSEMBLIES, AND THEIR RESPECTIVE JAMBS AND FRAMING, RECESSED LIGHTS, PLUMBING, HVAC AND ELECTRICAL PENETRATIONS, CHASES, DROPPED CEILINGS, KNEE WALLS, RIMBOARD, SILL PLATES, BLOCKINGS AND OTHER SOURCES OF INFILTRATION. (N1102.4 AND IECC 402). REFER TO THERMAL BY-PASS PLANS. VERIFY AIR SEALING THROUGH POST ROUGH-IN TEST OR THROUGH VISUAL INSPECTION (N1102.4 AND IECC 402.4).

T3. A PERMANENT CERTIFICATE SHALL BE COMPLETED AND POSTED ON OR IN THE ELECTRICAL DISTRIBUTION PANEL. THIS CERTIFICATE SHOULD NOT COVER OR OBSTRUCT CIRCUIT DIRECTORY AND SHALL LIST THE PREDOMINANT INSULATION R-VALUES OF THE VARIOUS COMPONENTS INSTALLED IN THE HOME. THIS CERTIFICATE SHOULD ALSO LIST THE U-FACTORS AND SOLAR HEAT GAIN COEFFICIENT OF FENESTRATION (IECC 401).

T4. FURNISH AND INSTALL THE FOLLOWING MINIMUM INSULATION THERMAL RESISTANCE AS SET FORTH BELOW. INSTALL IN ACCORDANCE WITH THE INSULATION MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS AND RECOMMENDATIONS AND THE RECOMMENDATIONS SET FORTH BY THE NORTH AMERICAN INSULATION MANUFACTURER'S ASSOCIATION.

A. R-20	2X6 EXTERIOR WALLS AND RIM BOARDS
B. R-49	ROOF AREAS
C. R-49	CATHEDRAL ROOF AND BAY WINDOW CEILINGS
D. R-19	CANTILEVERS AND FLOORS OF LIVING AREAS OVER UNHEATED SPACES
E. R-10/13	BASEMENT AND CRAWL SPACE WALLS
F. R-10	FROST WALL AND WALKOUT (A MIN. OF 24" XPS)
G. 0.35	MAXIMUM U-FACTOR. LOW-E WINDOWS

T5. FOR BASEMENT WALLS, WHEN OF CAST-IN-PLACE CONCRETE, THE APPLICATION OF ANY VAPOR RETARDER WITH OR OVER INSULATION SHALL BE DELAYED UNTIL THE WALL HAS CURED AND DRIED. VAPOR RETARDERS USED WITH INSULATION IN SUCH WALLS SHALL BE A CLASS III.

T6. INSULATE ALL SUPPLY DUCTS IN UNCONDITIONED SPACES WITH A MINIMUM R-8. INSULATE ALL OTHER DUCTS WITH A MINIMUM R-6. INSULATING DUCTS COMPLETELY INSIDE THE BUILDING THERMAL ENVELOPE IS NOT REQUIRED (IECC 403).

T7. ANY WATER OR WASTE PIPE INSTALLED IN AN EXTERIOR WALL, ATTIC, OR CRAWL SPACE SHALL BE PROTECTED FROM FREEZING BY INSULATION OR HEAT OR BOTH (P2603). PIPE INSULATION IN ANY ATTIC OR CRAWL SPACE SHALL BE PIPE INSULATION.

T8. BATHROOMS, WATER CLOSET COMPARTMENTS, LAUNDRY ROOMS AND OTHER SIMILAR ROOMS NOT HAVING OPERABLE WINDOWS SHALL BE PROVIDED WITH A MECHANICAL FAN HAVING A VENTILATION RATE IN ACCORDANCE WITH M1507. EXHAUST DIRECTLY TO THE OUTSIDE. RECIRCULATING FANS ARE PROHIBITED. (R303)

T9. DAMP PROOF FOUNDATION WALLS THAT RETAIN EARTH AND ENCLOSE HABITABLE SPACE AND CRAWL SPACE WALLS. IN AREAS WHERE A HIGH WATER TABLE OR OTHER SEVERE SOIL-WATER CONDITIONS EXIST, ALL SUCH WALLS SHALL BE WATERPROOFED (R406). DAMPPROOF ALL FOUNDATION WALLS THAT ENCLOSE ANY CRAWL SPACES. REFER TO THE PROJECT SOILS REPORT FOR ADDITIONAL REQUIREMENTS.

T10. FULLY COVER THE GROUND SURFACE OF CRAWL SPACES AND UNDER FLOOR SPACES WITH A 10-MIL MINIMUM, CLASS I VAPOR RETARDER COMPLYING WITH ASTM E 1745, WITH JOINTS LAPPED NOT LESS THAN 12" AND SEALED (SHEATHING TAPE OR EQUAL) (R408). SEAL AROUND SUMP PITS, COLUMNS, PLUMBING AND OTHER PENETRATIONS. EXTEND UP THE WALL NOT LESS THAN 12" AND ATTACH CONTINUOUSLY.

T11. CRAWL SPACES AND UNDER FLOOR AREAS SHALL BE SUPPLIED WITH A CONDITIONED AIR AND/ OR CONTINUOUS MECHANICAL VENTILATION AS SHOWN ON THE PLANS (R408.3). THE GROUND SURFACE SHALL BE COVERED AS NOTED UNDER T10 AND THE WALLS INSULATED AS NOTED UNDER T4.

T12. FULLY REMOVE AND/OR CLEAN ALL DEBRIS, WASTE, VEGETATION AND OTHER MATERIAL FROM BENEATH ANY AT GRADE BELOW GRADE FLOOR AREA OR CRAWL SPACE (R408).

T13. PROVIDE WEATHER-RESISTANT SHEATHING PAPER BENEATH STUCCO, CULTURED STONE, SIDING AND MASONRY AS SET FORTH IN TABLE R703.4. SHEATHING PAPER SHALL BE SINGLE PLY ASPHALT-SATURATED KRAFT GRADE D BREATHER TYPE PAPER, HAVING A 60 MINUTE WATER RESISTANCE RATING UNDER ASTM D 779. PROVIDE 2 LAYERS BEHIND STUCCO AND CULTURED STONE AND 1 LAYER BEHIND SIDING AND MASONRY. APPROVED HOUSEWRAP MAY BE SUBSTITUTED FOR 1 LAYER ONLY AND SHALL HAVE SHEATHING PAPER PLACED OVER IT WHEN UNDER STUCCO OR MANUFACTURED STONE.

T14. INSTALL EXTERIOR WINDOWS AND DOORS IN STRICT ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS, GUIDELINES AND RECOMMENDATIONS AND ASTM E 2112. PROVIDE PAN FLASHING FOR ALL EXTERIOR DOORS.

T15. PROVIDE DURABLE WEATHER STRIPPING FOR ALL EXTERIOR DOORS AND WINDOWS.

T16. PROVIDE FLASHING IN SUCH MANNER AS TO PREVENT ENTRY OF WATER INTO THE WALL ASSEMBLY, WALL CAVITY OR ROOF ASSEMBLY, AND PENETRATION OF WATER TO THE BUILDING STRUCTURAL FRAMING COMPONENTS. FLASH AND SEAL ALL EXTERIOR WINDOWS, DOORS, OPENINGS, PENETRATIONS AND JOINTS SO AS TO PREVENT MOISTURE FROM PASSING THROUGH, BEYOND OR AROUND AND TO MAKE SUCH LEAKPROOF. PROVIDE MANUFACTURED FLASHINGS AT ALL PENETRATIONS. ALL MEMBRANES, BARRIERS, PAPERS, FELTS AND FLASHINGS SHALL BE LAPPED IN A SHEDDING MANNER. PROVIDE FLASHING AS SPECIFICALLY DENOTED IN SECTIONS R703, R903 AND R905.

T17. ROOF ASSEMBLIES SHALL COMPLY WITH THE REQUIREMENTS SET FORTH IN CHAPTER 9. ROOF COVERING MATERIALS AND INSTALLATION SHALL COMPLY WITH THE ROOFING MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS, THE ROOF COVERING MANUFACTURER'S WRITTEN CODE EVALUATION/APPROVAL DOCUMENTS AND RECOMMENDATIONS AND THE REQUIREMENTS SET FORTH BY THE NATIONAL ROOFING CONTRACTORS ASSOCIATION, THE ASPHALT ROOFING MANUFACTURER'S ASSOCIATION, AND THE ROOF TILE INSTITUTE FOR EACH APPLICABLE COVERING. UNDERLAYMENT SHALL COMPLY WITH SECTION 905 AND WHEN OF ASPHALT SATURATED OR SBS MODIFIED FELT SHALL BE REINFORCED POLYESTER OR FIBERGLASS.

T18. PROVIDE ROOF FLASHING PER SECTION R905 PER TYPE OF COVERING. FOR TILE ROOFS, ROOF VALLEY AND SIDEWALL FLASHINGS SHALL BE DOUBLE RAISED RIBBED. PROVIDE DRIP EDGES AT ROOF EAVES AND RAKES FOR ALL COMPOSITION ROOF COVERINGS AND WHERE REQUIRED OR RECOMMENDED FOR TILE ROOFS BY THE ROOF COVERING MANUFACTURER. PROVIDE KICK-OUT DIVERTER FLASHING AT ALL EAVE TO SIDE WALL JUNCTURES. FLASHING TO DIVERT WATER OFF THE FACE OF ANY SIDE WALL 4" MINIMUM.

T19. PROVIDE ATTIC VENTILATION PER SECTION R806 (CONFIRM MANUFACTURER'S NET FREE AREA). SOFFIT, EAVE, AND CORNICE VENTS SHALL BE PROVIDED WITH A MANUFACTURED WEATHERPROOF INSULATION BARRIER (NONORGANIC) DESIGNED TO PROVIDE A MINIMUM OF 1" FREE SPACE BETWEEN INSULATION BARRIER AND UNDERSIDE OF SHEATHING.

T20. PROVIDE GUTTERS AND DOWN SPOUTS AT ALL LOCATIONS NECESSARY TO PREVENT PREMATURE POINT OR LOCAL WEARING OF ROOFING AND TO EVENLY DISTRIBUTE AND DISCHARGE WATER AWAY FROM THE FOUNDATION. PROVIDE 5' DOWNSPOUT EXTENSIONS AT ALL DISCHARGE POINTS UNLESS LIMITED BY PROPERTY BOUNDARIES, IN WHICH CASE NOT LESS THAN 4'.

T21. SEE TABLE R401.1 (SHEET A-8B) FOR INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT.

FINISHES

F1. COMPLY WITH APPLICABLE REQUIREMENTS SET FORTH IN THE IRC.

F2. REFER TO THE STRUCTURAL PLANS FOR LOCATIONS WHERE GYPSUM BOARD MAY BE USED AS A STRUCTURAL COMPONENT OF ANY LATERAL FORCE RESISTING SYSTEM.

F3. GYPSUM BOARD MATERIAL AND INSTALLATION SHALL COMPLY WITH SECTION R702.3.1 ASTM C 630 AND THE GYPSUM ASSOCIATIONS GA-216 RECOMMENDED SPECIFICATION FOR THE APPLICATION AND FINISHING OF GYPSUM BOARD, EACH AS APPLICABLE. FINISH GYPSUM WALLBOARD TO LEVEL 3 FOR AREAS TO RECEIVE HEAVY OR KNOCK DOWN TEXTURES AND LEVEL 4 FOR ALL OTHER AREAS PER GA-214, LEVELS OF GYPSUM BOARD FINISH, IN ALL HABITABLE AREAS U.N.O.

F4. ALL TUE AND SHOWER AREAS ARE TO RECEIVE MOISTURE-AND MOLD-RESISTANT GYPSUM BACKER INTENDED FOR MOISTURE PRONE AREAS COMPLYING WITH ASTM C 630 AND D 3273. GYPSUM BOARD UTILIZED AS A BASE BACKER FOR ADHESIVE APPLICATION OF TILE OR OTHER NONABSORBENT FINISH MATERIAL SHALL ALSO CONFORM TO ATM C1178 (R702.4.2). THOROUGHLY SEAL ALL PENETRATIONS.

F5. EXTERIOR SEALANTS SHALL COMPLY WITH ASTM C 920, TYPE S, GRADE NS, CLASS 25: SINGLE-COMPONENT, GOOD UV LIGHT RESISTANCE AND LONG-LIFE EXPECTANCY, NON-SHRINK, AND PAINTABLE.
F6. PAINT MATERIAL AND APPLICATION SHALL COMPLY WITH THE PAINT MANUFACTURER'S WRITTEN APPLICATION INSTRUCTIONS AND RECOMMENDATIONS AND THE RECOMMENDATIONS SET FORTH BY THE AMERICAN HARDBOARD ASSOCIATION, THE GYPSUM ASSOCIATION AND THE PAINTING AND DECORATING CONTRACTORS OF AMERICA.
F7. CARPET MATERIAL AND INSTALLATION SHALL COMPLY WITH THE CARPET MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS AND RECOMMENDATIONS AND THE RECOMMENDATIONS SET FORTH BY THE CARPET AND RUG INSTITUTE, APPLICABLE.

F8. RESILIENT FLOOR MATERIAL AND INSTALLATION SHALL COMPLY WITH THE RESILIENT FLOOR COVERING MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS AND RECOMMENDATIONS AND THE REQUIREMENTS SET FORTH BY THE RESILIENT FLOOR COVERING INSTITUTE.

F9. TILE MATERIAL AND INSTALLATION SHALL COMPLY WITH SECTION 702.4, THE TILE MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS AND RECOMMENDATIONS AND THE RECOMMENDATIONS SET FORTH BY THE CERAMIC TILE INSTITUTE OF AMERICA, THE TILE COUNCIL OF NORTH AMERICA, AND/OR THE MARBLE INSTITUTE OF AMERICA, FOR EACH APPLICABLE MATERIAL.

F10. STUCCO AND/OR PLASTER SYSTEMS MATERIAL AND INSTALLATION SHALL COMPLY WITH SECTION 703.6 THE STUCCO MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS AND RECOMMENDATIONS, THE STUCCO MANUFACTURER'S WRITTEN CODE EVALUATION/APPROVAL DOCUMENTS AND THE RECOMMENDATIONS SET FORTH BY THE PORTLAND CEMENT ASSOCIATION, THE STUCCO MANUFACTURERS ASSOCIATION AND THE NORTHWEST WALL AND CEILING BUREAU.

MECHANICAL

M1. COMPLY WITH APPLICABLE REQUIREMENTS SET FORTH IN THE IRC, THE IMC, AND THE IFGC.

M2. ALL MATERIAL SHALL BE PROPERLY LISTED AND LABELED (M1303). MANUFACTURER'S INSTALLATIONS INSTRUCTIONS SHALL BE AVAILABLE ON THE JOB SITE AT ALL TIMES. PROVIDE MAINTENANCE INSTRUCTIONS TO ALL MATERIAL AND SYSTEMS THAT REQUIRE PREVENTATIVE MAINTENANCE AND PLACE IN A CLEAR PLASTIC SLEEVE AFFIX TO THE APPLICABLE ITEM.

M3. PROVIDE LEVEL WORKING SPACE IN FRONT OF THE CONTROL SIDE OF ANY APPLIANCE OF NOT LESS THAN 30" IN WIDTH OR DEPTH. MAINTAIN MINIMUM WORKING SPACE OF 3" ON ALL SIDES, BACK AND TOP OF ANY APPLIANCE. APPLIANCES IN ATTICS AND IN CRAWL SPACES OR UNDER FLOOR AREAS MUST MEET ADDITIONAL PASSAGEWAY AND CLEARANCE REQUIREMENTS (M1305).

M4. APPLIANCES LOCATED IN ATTICS AND IN CRAWL SPACES OR UNDER FLOOR AREAS SHALL BE PROVIDED WITH AN OPENING AND A CLEAR AND UNOBSTRUCTED PASSAGEWAY LARGE ENOUGH TO ALLOW REMOVAL OF THE LARGEST APPLIANCE BUT NOT LESS THAN 30" HIGH AND 22" WIDE WITH 24" WIDE CONTINUOUS SOLID FLOORING RAISED SUCH THAT PREVENTS DAMAGING OR COMPRESSING INSULATION AND/OR LEVEL GRADE FOR NOT MORE THAN 20' IN LENGTH. PROVIDE RAISED SOLID FLOORING AND/OR LEVEL SERVICE SPACE OF NOT LESS THAN 30" IN WIDTH OR DEPTH ALONG ALL SIDES WHERE ACCESS IS REQUIRED (M1305, N11023.2.3 AND IECC 402.2.3).

M5. EQUIPMENT AND APPLIANCES HAVING AN IGNITION SOURCE SHALL BE ELEVATED SUCH THAT THE SOURCE OF IGNITION IS NOT LESS THAN 18" ABOVE THE FLOOR IN HAZARDOUS LOCATIONS AND GARAGES. (M1307, G2404 AND G2408). ELEVATION OF THE IGNITION SOURCE IS NOT REQUIRED FOR APPLIANCES LISTED AS FLAMMABLE VAPOR RESISTANT AND FOR INSTALLATION WITHOUT ELEVATION.

M6. UNLESS OTHERWISE PREDETERMINED ON ANY MECHANICAL PLAN, SUBCONTRACTOR SHALL SIZE ALL HEATING AND COOLING EQUIPMENT IN ACCORDANCE WITH ACCA MANUAL S BASED ON BUILDING LOADS CALCULATED IN ACCORDANCE WITH ACCA MANUAL J OR THE ASHRAE HANDBOOK OF FUNDAMENTALS (M1401 AND IECC 403).

M7. UNLESS OTHERWISE PREDETERMINED ON ANY MECHANICAL PLAN, SUBCONTRACTOR SHALL SIZE, FABRICATE, AND LAYOUT DUCT SYSTEMS IN ACCORDANCE WITH ACCA MANUAL D AND FABRICATE IN ACCORDANCE WITH CHAPTER 16 AND THE INTERNATIONAL MECHANICAL CODE. UNDER NO CIRCUMSTANCE SHALL STUD WALL CAVITIES OR SPACES AND JOIST SPACE PLENUMS BE USED FOR SUPPLY OR RETURN AIR.

M8. SEAL ALL FIELD-MADE DUCT JOINTS, SEAMS, FLANGES, CONNECTIONS, AND THE LIKE WITH WELDS, GASKETS, OR MASTICS ONLY. SEAL ALL FACTORY-MADE DUCT IN ACCORDANCE WITH DUCT MANUFACTURER'S RECOMMENDATIONS. VERIFY DUCT TIGHTNESS THROUGH POST-CONSTRUCTION OR ROUGH-IN TEST. (M1601, N1103.2, AND IECC 403.2).

M9. PROVIDE ROOF FLASHING PER SECTION R905 PER TYPE OF COVERING. FOR TILE ROOFS, ROOF VALLEY AND SIDEWALL FLASHING SHALL BE DOUBLE RAISED RIBBED. PROVIDE DRIP EDGES AT ROOF EAVES AND RAKES FOR ALL COMPOSITION ROOF COVERINGS AND WHERE REQUIRED OR RECOMMENDED FOR TILE ROOFS BY THE ROOF COVERING MANUFACTURER. PROVIDE KICK-OUT DIVERTER FLASHING AT ALL EAVE TO SIDE WALL JUNCTURES. FLASHING TO DIVERT WATER OFF THE FACE OF ANY SIDE WALL 4" MINIMUM.

M10. GAS-FIRED APPLIANCES SHALL RECEIVE COMBUSTION AIR AND SHALL BE VENTED IN ACCORDANCE WITH CHAPTER 24. COMBUSTION AIR OPENINGS SHALL BE UNOBSTRUCTED FOR NOT LESS THAN 6" (M1402), OR IN ACCORDANCE WITH CITY AMENDMENTS.

M11. CLOTHES DRYER EXHAUST DUCTS SHALL NOT EXCEED 25' IN LENGTH, WITH REDUCTIONS IN LENGTH AS SET FORTH IN SECTIONS M1502 AND G2435, AND SHALL TERMINATE ON THE OUTSIDE WITH BACKDRAFT DAMPER. DO NOT VENT VERTICALLY THROUGH THE ATTIC SPACE OR ROOF. DO NOT CONNECT EXHAUST DUCTS WITH SCREWS OR OTHER FASTENERS WHICH EXTEND INTO THE DUCT.

M12. PROVIDE COMBUSTION, VENTILATION, AND DILUTION AIR IN ACCORDANCE WITH SECTION G2407.

M13. FUEL GAS PIPING IS PROHIBITED FROM BEING INSTALLED BENEATH ANY HOME OR THROUGH OR BENEATH ANY FOUNDATION UNLESS ENCASED IN A PROTECTIVE SLEEVE DESIGNED TO WITHSTAND THE LOADS (G2415).

M14. WHERE VENTS PASS THROUGH INSULATED ASSEMBLIES, PROVIDE AN INSULATION SHIELD OF NOT LESS THAN 20 GAUGE SHEET METAL FOR CLEARANCE AS SPECIFIED BY VENT MANUFACTURER. TERMINATE SHIELD AT LEAST 2" ABOVE INSULATION AND SECURE (G2426).

M15. UNINSULATED SINGLE-WALL METAL PIPE SHALL NOT BE USED FOR VENTING GAS APPLIANCES (G2421).

PLUMBING

P1. COMPLY WITH APPLICABLE REQUIREMENTS SET FORTH IN THE IRC, THE IPC, AND THE IFGC.

P2. TEST PIPING AND PLUMBING FOR POTENTIAL LEAKAGE IN ACCORDANCE WITH SECTIONS G2417 AND P2503, AND IN ACCORDANCE WITH CITY AMENDMENTS.

P3. PROTECT PIPING WITH SHIELD PLATES WHERE PIPING IS LESS THAN 1.5" FROM THE NEAREST EDGE OF ANY WOOD MEMBER (P2603).

P4. PIPING PASSING THROUGH OR UNDER FOOTINGS OR FOUNDATION WALLS SHALL BE PROVIDED WITH A RELIEVING ARCH, OR PROVIDE A PIPE SLEEVE BUILT IN THE FOUNDATION WALL 2 PIPE SIZES GREATER THAN THE PIPE PASSING THROUGH THE WALL (P2603). FULLY AND PERMANENTLY SEAL ANY PENETRATIONS THROUGH THE FOUNDATION WALL.

P5. PROVIDE ADEQUATE VALVES AND DEVICES, TO INCLUDE SERVICE, RELIEF, CHECK, PRESSURE-REDUCING, BACKFLOW PREVENTION, THERMAL AND FLOW CONTROL, TRAPPING, ETC., AS REQUIRED OR OTHERWISE NECESSARY OR RECOMMENDED.

P6. THE WATER SERVICE AND WATER DISTRIBUTION SYSTEMS SHALL BE DESIGNED AND PIPE SIZES SHALL BE SELECTED SUCH THAT UNDER CONDITIONS OF PEAK DEMAND, THE CAPACITIES AT THE POINT OF OUTLET DISCHARGE SHALL NOT BE LESS THAN SHOWN IN TABLE P2903.1.

P7. WATER SERVICE MAINS, BRANCH MAINS AND RISERS SHALL BE DETERMINED ACCORDING TO WATER SUPPLY DEMAND, AVAILABLE WATER PRESSURE AND FRICTION LOSS DUE TO THE WATER METER AND DEVELOPED LENGTH OF PIPE, INCLUDING EQUIVALENT LENGTH OF FITTINGS (P2503).

P8. THE MAXIMUM LENGTH OF INDIVIDUAL DISTRIBUTION LINES SHALL BE 60' (P2503).

P9. WATER SERVICE PIPING IS PROHIBITED IN CONTAMINATED OR CORROSIVE SOILS WITHOUT USE OF APPROVED ALTERNATE MATERIALS OR METHODS (P2905). SUBCONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SECURING WRITTEN APPROVAL FROM THE BUILDING OFFICIAL AS TO ACCEPTABILITY OF MATERIALS OR METHODS PRIOR TO COMMENCING ANY WORK. REFER TO THE PROJECT SOILS REPORT FOR ADDITIONAL REQUIREMENTS.

P10. EXTEND UNDERGROUND DRAINAGE CLEAN OUTS VERTICALLY PLUMB TO OR WITHIN 3" ABOVE FINISHED GRADE. PROVIDE ADEQUATE ACCESSIBILITY PER SECTION P3005.

ELECTRICAL

E1. COMPLY WITH APPLICABLE REQUIREMENTS SET FORTH IN THE IRC, AND THE NEC.

E2. THE GROUNDING ELECTRODE SYSTEM SHALL BE COMPRISED OF CONCRETE-ENCASED ELECTRODES OR GROUNDING RINGS ONLY (E3608). FOR POST-TENSIONED SLABS ON GRADE, A BARE COPPER CONDUCTOR NOT SMALLER THAN NO. 4 OF AT LEAST 20' IN LENGTH SHALL BE PLACED NEAR THE BOTTOM OF THE SLAB BUT ENCASED BY AT LEAST 2" OF CONCRETE. GAS PIPING SHALL NOT BE USED AS A GROUNDING ELECTRODE (G2410). THE WATER DISTRIBUTION SYSTEM SHALL NOT BE USED AS A GROUNDING ELECTRODE.

E3. DETERMINE THE MINIMUM NUMBER OF BRANCH CIRCUITS FROM THE TOTAL COMPUTED LOAD AND THE SIZE OR RATING OF THE CIRCUITS USED (E3703). PROVIDE NOT LESS THAN 4 ADDITIONAL OR SPARE BRANCH CIRCUITS TO ALLOW FOR FUTURE EXPANSION BY OTHERS.

E4. CLEARLY, LEGIBLY, AND PERMANENTLY MARK AND FULLY IDENTIFY ALL PANEL BOARD CIRCUITS ON A CIRCUIT DIRECTORY. SEE ALSO NOTE T1. AVOID ABBREVIATIONS NOT COMMONLY KNOWN OR NOT SPECIFIC TO PURPOSE OR USE. PROVIDE ADEQUATE OVERCURRENT PROTECTION (E3706).

E5. PROVIDE ROOM CONVENIENCE RECEPTACLES AS SHOWN ON THE PLANS SO THAT NO POINT ALONG THE FLOOR LINE IN ANY WALL SPACE IS MORE THAN 6', MEASURE HORIZONTALLY, FROM AN OUTLET IN THAT SPACE (E3901).

E6. PROVIDE COUNTERTOP RECEPTACLES AS SHOWN ON THE PLANS AND SO THAT NO POINT ALONG THE FLOOR LINE IN ANY WALL SPACE IS MORE THAN 2', MEASURE HORIZONTALLY, FROM AN OUTLET IN THAT SPACE (E3901).

E7. PROVIDE ARC FAULT INTERRUPTERS (AFCI) WHERE REQUIRED (E3902 AND NEC210).

E8. PROVIDE AT LEAST ONE LIGHTING OUTLET IN ANY ATTIC, CRAWL SPACE, UNDER-FLOOR SPACE, UTILITY ROOM, AND BASEMENT AT OR NEAR ANY EQUIPMENT POTENTIALLY REQUIRING SERVICING OR OTHERWISE NEAR THE CENTER OF THE SPACE, WITH AT LEAST ONE POINT OF CONTROL AT THE USUAL POINT OF ENTRY TO THESE SPACES (E3903 AND M1305).

E9. IN DAMP OR WET LOCATIONS, PLACE OR EQUIP BOXES, CONDUIT BODIES, AND FITTINGS SO AS TO PREVENT MOISTURE FROM ENTERING OR ACCUMULATING WITHIN. DAMP LOCATIONS INCLUDE PARTIALLY PROTECTED LOCATIONS UNDER OPEN ROOF, CANOPY, OR SIMILAR LOCATIONS AND INTERIOR LOCATIONS SUBJECT TO MODERATE DEGREES OF MOISTURE. FOR PURPOSES OF ALL ELECTRICAL REQUIREMENTS ONLY, ANY AT GRADE OR BELOW- GRADE CRAWL SPACE SHALL BE DEEMED A DAMP LOCATION. BOXES, CONDUIT BODIES, AND FITTINGS INSTALLED IN WET LOCATIONS SHALL BE LISTED FOR USE IN WET LOCATIONS. WET LOCATIONS INCLUDE LOCATIONS EXPOSED TO THE WEATHER AND UNPROTECTED BY ROOF, CANOPY, OR SIMILAR COVERING (E3905).

E10. SET OUTLET BOXES FLUSH WITH THE GYPSUM WALLBOARD SURFACE AND LEAVE NO SPACE GREATER THAN 1/8" AROUND THE EDGE OF ANY BOX (E3906). SEAL ALL GAPS AROUND ANY BOX.

E11. IN DAMP OR WET LOCATIONS, PLACE OR EQUIP SURFACE TYPE CABINETS AND PANELBOARDS SO AS TO PREVENT MOISTURE FROM ENTERING OR ACCUMULATING WITHIN AND PROVIDE AN AIRSPACE NOT LESS THAN 1/4" BETWEEN THE ENCLOSURE AND THE WALL OR SUPPORTING SURFACE. CABINETS INSTALLED IN WET LOCATIONS SHALL BE WEATHERPROOF (E3907).

E12. ENCLOSE ALL SWITCHES AND CIRCUIT BREAKERS LOCATED IN A WET LOCATION OR OUTSIDE A BUILDING IN A WEATHERPROOF ENCLOSURE OR CABINET (E4001).

E13. ANY RECEPTACLE INSTALLED OUTDOORS IN A LOCATION PROTECTED FROM WEATHER OR IN OTHER DAMP LOCATIONS SHALL HAVE AN ENCLOSURE FOR THE RECEPTACLE THAT IS WEATHERPROOF WHEN THE RECEPTACLE COVER IS CLOSED. WHERE INSTALLED IN A WET LOCATION AND WHERE MAY BE IN UNATTENDED USE, THE RECEPTACLE SHALL HAVE AN ENCLOSURE THAT IS WEATHERPROOF WHILE IN USE (E4002).

E14. FIXTURES INSTALLED IN WET OR DAMP LOCATIONS SHALL BE INSTALLED SO THAT WATER CANNOT ENTER OR ACCUMULATE AND SHALL BE SO MARKED AS SUITABLE FOR WET OR DAMP LOCATIONS, AS APPLICABLE (E4002).

E15. RECESSED LIGHTING FIXTURES INSTALLED IN THE BUILDING ENVELOPE SHALL COMPLY WITH SECTION N1102.

E16. PROVIDE HIGH EFFICACY LAMPS FOR A MINIMUM OF 50% OF PERMANENTLY INSTALLED LIGHT FIXTURES (IECC SECTION 404).

JB HOME DESIGN, LLC
jb home design
9416 CONCORD COURT
BALTIMORE, MARYLAND 21234
OFFICE (410) 599-4587
FAX (410) 663-4069
EMAIL: JON@JBHOMEDESIGN.COM

CONTENTS: CONSTRUCTION NOTES
SCALE: 1/4" = 1'-0" DATE: DRWN. PRJT.NO.
PROJECT TITLE: ADAIR ADDITION

ISSUE
04/05/16 CONSTRUCTION SET

SHEET NO.
CN

FRONT ELEVATION

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

LEFT SIDE ELEVATION

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

JB HOME DESIGN, LLC
446 CONCORD COURT
BALTIMORE, MARYLAND 21224
OFFICE (410) 594-4581
FAX (410) 663-4064
EMAIL: JOHN.BHOMEDESIGN.COM

GormanDesign
5524 Eaglebeak Row
Columbia, MD 21045
bob.gormandesign@gmail.com

FRONT AND LEFT SIDE ELEVATIONS

CONTENTS

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

DRWN.

DATE:

PR.JT.NO.

ADAIR ADDITION

PROJECT TITLE:

ISSUE
08/07/14 PERMIT/WORKING SET

SHEET NO.

A-1A