

# GENERAL NOTES

## I. GENERAL REQUIREMENTS

- A. Project location
  - A.1. Project name: Brandon Estates.
  - A.2. General location: Waukeez, Iowa.
- B. Codes
  - B.1. Before Final Drawings and Specifications are issued for construction, they shall be submitted to all governing building agencies to insure their compliance with all applicable local and national codes. If code discrepancies in Drawings and/or Specifications appear, the Architect shall be notified of such discrepancies in writing by Builder or building official, and allowed to alter Drawings and Specifications so as to comply with governing codes before construction begins.
  - B.2. Upon written receipt of approval from the governing official, approved Final Drawings and Specifications shall be submitted to the Builder by the Architect.
  - B.3. If code discrepancies are discovered during the construction process, Architect shall be notified and allowed ample time to remedy said discrepancies.
  - B.4. All work performed shall comply with all applicable local, state and national building codes, ordinances and regulations, and all other authorities having jurisdiction.
- C. All contractors, subcontractors, suppliers, and fabricators shall be responsible for the content of Drawings and Specifications and for the supply and design of appropriate materials and work performance.
- D. All manufactured articles, materials and equipment shall be applied, installed, erected, used, cleaned and conditioned in strict accordance with manufacturer's recommendations.
- E. All alterations are at the option of the Builder and shall be at the Builder's request, constructed in addition to or in lieu of the typical construction, as indicated on Drawings.
- F. Design Criteria: See structural drawings (by others) for design loads.

## II. SITEWORK

- A. Builder shall be responsible for grading of site and lots.
- B. Provide site preparation as specified by soils engineer.
- C. Perform excavation according to good common construction practices to the lines, grades and elevations indicated on Drawings.
- D. Provide soil poisoning to control termites as required by governing codes.

## III. CONCRETE

- A. See structural drawings by others.

## IV. MASONRY

- A. See structural drawings by others for load bearing masonry.
- B. Adhered Masonry Veneer (Stone and Brick)
  - B.1. Provide units as specified by Builder.
  - B.2. Adhered Masonry Veneer shall, in addition to complying with governing codes, comply with the standards and recommendations for the following applicable references:
    - B.2.1. Manufacturer's specifications and instructions.
    - B.2.2. National Concrete Masonry Association (NCMA)
    - B.2.3. American Concrete Institute (ACI)
    - B.2.4. Masonry Standards Joint Committee (MSJC)
    - B.2.5. Masonry Veneer Manufacturer's Association (MVMA) Installation Guide for Adhered Concrete Masonry Veneer
  - B.3. Provide minimum clearances as follows:
    - B.3.1. Four inches (4") above earth.
    - B.3.2. Two inches (2") above paved surfaces.
    - B.3.3. One-half inch (1/2") above exterior paved surfaces which are supported by the same foundation that supports the exterior wall.
    - B.3.4. Two inches (2") above roofing surfaces.
  - B.4. Install water resistive barriers, flashing and weep screeds in accordance with manufacturer's instructions and specifications, and in accordance with governing codes.

## V. METALS

- A. See structural drawings by others for structural steel.
- B. All metals including metal connectors, fasteners, anchors, hardware, flashing, etc., shall be non-corrosive and compatible with any and all materials which the metal comes in contact with including dissimilar metals, wood (natural, stained and painted), preservative treated wood, fire-retardant treated wood and concrete.

## VII. WOOD AND PLASTICS

- A. See structural drawings by others for structural wood.
- B. Stair construction shall consist of structural stringers (as specified in the structural drawings by others), 5/4" or 2x thick treads and 3/4" thick risers or shall be fabricated by component manufacturer.
- C. All wood plating bearing on concrete or masonry shall be pressure treated and installed over approved sill sealer.
- D. All exterior framing and decking shall be constructed of decay-resistant lumber.
- E. Interior trim shall be selected by Builder.

## VIII. THERMAL AND MOISTURE PROTECTION

- A. Provide thermal building insulation as specified by Builder.
- B. Moisture vapor retarder:
  - B.1. Exterior wall: Install code approved moisture vapor retarder (as specified by Builder) beneath gypsum panels on warm side of all exterior walls, at conditioned spaces and as shown on Drawings.
  - B.2. Water-resistive barrier: Install code approved water-resistive barrier (as specified by Builder) over exterior wall sheathing of all exterior walls and as shown on Drawings.
  - B.3. Roofing shall be specified by Builder and as shown on Drawings.
  - B.4. Exterior wall covering:
    - B.4.1. Siding shall be specified by Builder and as shown on Drawings.
    - B.4.2. See Section IV, MASONRY for brick and stone veneer and manufactured stone and thin brick.
  - B.5. Flashing:
    - B.5.1. Provide and install appropriate sheet metal and membrane flashing at all locations as required to prevent penetration of water through the exterior shell of the building. Provide and install appropriate flashing as shown on the drawings and at the following specific locations:
      - B.5.1.1. Drip edge at all eaves and rake edges.
      - B.5.1.2. Roof/wall intersections.
      - B.5.1.3. Roof penetrations such as skylights, roof vents, flues, etc.
      - B.5.1.4. Roof crickets and saddles.
      - B.5.1.5. Door and window head trim.
      - B.5.1.6. Horizontal band boards.
      - B.5.1.7. Deck to house connections.
      - B.5.1.8. Masonry sills and caps.
      - B.5.1.9. Provide through-wall flashing and weeps at the base of masonry veneer and above masonry lintels.
    - B.5.2. Materials and installations shall comply with governing codes and with pertinent recommendations contained in the current edition of the "Architectural Sheet Metal Manual" published by SMACNA. All metal flashing shall be hot-dip galvanized iron complying with ASTM A653/A653M or other approved corrosion-resistant metal.
  - B.6. Provide gutters and downspouts as specified by Builder. Downspout and splash locations shall be determined by Contractor (and approved by Builder) so as to provide positive roof and site drainage.
  - B.7. Provide attic and roof ventilation as required by governing codes and as shown on Drawings. Provide appropriate soffit and roof vents as specified/approved by Builder.
  - B.8. Foundation water/moisture control:
    - B.8.1. Provide foundation drainage as specified by soils engineer and Builder.
    - B.8.2. Waterproof foundation walls at excavated basement areas (from footing to finish grade) with waterproofing compound as specified by Builder. Waterproofing shall be in compliance with code requirements.

## VIII. DOORS AND WINDOWS

- A. Doors:
  - A.1. Provide doors as follows and as specified by Builder:
    - A.1.1. Entry doors and sidelights: as specified by Builder.
    - A.1.2. House/Garage doors: Solid wood door not less than 1 3/8" thick; solid or honeycomb core steel door not less than 1 3/8" thick; or 20-minute fire-rated door. Door shall be self-closing.
    - A.1.3. Overhead Garage doors: as specified by Builder.
    - A.1.4. Patio doors (hinged): full glass as specified by Builder.
    - A.1.5. Sliding glass doors: as specified by Builder.
    - A.1.6. Interior doors: as specified by Builder.
  - A.2. Glazing in doors and sidelights shall be double-pane insulating glass.
  - A.3. Glazing in doors and sidelights shall be tempered glass as required by governing codes.

## B. Windows:

- B.1. Provide windows as specified by Builder:
  - B.1.1. Provide units of the size, style and quantity shown on Drawings.
  - B.1.2. Glazing shall be double-pane insulating glass.
  - B.1.3. Provide tempered glass in all windows meeting the requirements of governing codes.
- B.1.4. Provide and install all windows meeting the requirements of governing codes for "Window Fall Protection."
- B.1.5. Provide and install emergency escape and rescue windows meeting the requirements of governing codes.

## IX. FINISHES

- A. Gypsum Panels:
  - A.1. Gypsum panels, unless otherwise noted on the Drawings shall be provided as follows:
    - A.1.1. Exterior walls: 1-layer 1/2" regular panels to interior face.
    - A.1.2. Interior partitions: 1-layer 1/2" regular panels each side.
    - A.1.3. Ceiling:
      - a) Supporting members greater than 16" o.c.: 1-layer 5/8" regular panels or 1-layer 1/2" sag resistant panels.
      - b) Supporting members 16" o.c. or less: 1-layer 1/2" regular panels.
    - A.1.4. Garage: Provide 1-layer 5/8" type "X" panels to entire garage ceiling and to garage face of all walls.
    - A.1.5. Baths: When gypsum board is used as a base for tile in non-wet areas or wall panels behind prefabricated tub and shower surrounds, water-resistant gypsum panels shall be used as a base as required by governing codes. See tile backer board below for tile in wet areas.
    - A.1.6. Common wall and common floor/ceiling between units: See Drawings for construction of assemblies.
  - A.2. Provide and install metal corner bead and trim as recommended by gypsum wallboard manufacturer.
  - A.3. Tape, float and sand joints and fasteners of gypsum wallboard with 3-coats of joint compound as required obtaining a uniformly smooth surface.
- B. Tile backer board: cement board or other approved tile backing material as specified by Builder shall be used as a base for tile in wet areas at tubs and showers.
- C. Finishes shown on Drawings shall be specified by Builder.

## X. SPECIALTIES

- D. Shower, tub and tub/shower enclosures shall be constructed of approved safety glazing as specified by Builder.
- E. Handrails and guards:
  - E.1. Porches, balconies or raised floor surfaces located more than 30 inches above the floor or grade below shall have guards not less than 36 inches in height. Open sides of stairs with a total rise of more than 30 inches above the floor or grade below shall have guards not less than 34 inches in height measured vertically from the nosing of the treads. Required guards on open sides of stairways, raised floor areas, balconies and porches shall have intermediate rails or ornamental closures that do not allow passage of a sphere 4 inches in diameter. The triangular openings formed by the riser, tread and bottom rail of a guard at the open side of a stairway are permitted to be of such a size that a sphere 4 inches cannot pass through.
  - E.2. Handrail assemblies and guards shall be able to resist the following loads:
    - a) 50 pounds per linear foot applied in any direction at the top and to transfer this load through the supports to the structure.
    - b) A single concentrated load of 200 pounds, applied in any direction at any point along the top, and have attachment devices and supporting structure to transfer this loading to appropriate structural elements of the building.
    - c) Intermediate rails (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 not to exceed 1 square foot including openings and space between rails.

## XI. EQUIPMENT

- A. None in this contract.

## XII. FURNISHINGS

- A. None in this contract.

## XIII. SPECIAL CONSTRUCTION

- A. Fire Suppression:
  - A.1. Provide automatic sprinkler system meeting the requirements of applicable codes: NFPA 13R
  - A.2. Provide fire alarm system meeting the requirements of applicable codes.
  - A.3. Note: Fire suppression systems are by others and are not part of these Drawings.

## XIV. CONVEYING SYSTEMS

- A. None in this contract.

## XV. MECHANICAL

- A. Information and layouts shown on Architectural Drawings are only schematic in design, and shall be reviewed by contractors, suppliers and building officials for compliance with governing codes and good common construction practices.
- B. Plumbing: See plumbing drawings by others.
- C. Heating, Ventilating and Air Conditioning: See mechanical drawings by others.
- D. Exhaust ventilation:
  - D.1. Dryer vent shall exhaust to exterior.
  - D.2. Range exhaust fan shall exhaust to exterior.
  - D.3. Mechanical exhaust ventilation where indicated in bathrooms, water closet compartments and laundry rooms shall exhaust to exterior and provide a minimum of 3 air changes per hour.
- E. Radon Mitigation: Install radon mitigation systems as required by applicable codes meeting the requirements of ASTM E1465 and E2121.

## XVI. ELECTRICAL

- A. Information and layouts shown on Architectural Drawings are only schematic in design, and shall be reviewed by contractors, suppliers and building officials for compliance with governing codes and good common construction practices.
- B. Electrical: See electrical drawings by others.
- C. Smoke detectors and carbon monoxide detectors:
  - C.1. Provide and install certified smoke detectors, carbon monoxide detectors and combination smoke / carbon monoxide detectors meeting the requirements of all governing codes.
  - C.2. All detectors shall be interconnected, 110 volt powered, equipped with a battery backup and sound an alarm audible in all sleeping areas.
  - C.3. Smoke detectors shall be installed on each floor level in each bedroom in the immediate vicinity outside of the bedrooms, and as shown on the Drawings.
  - C.4. Carbon monoxide detectors shall be installed in the immediate vicinity outside of the bedrooms and as shown on the Drawings.
  - C.5. Combination smoke / carbon monoxide detectors may be installed in lieu of separate detectors.
- D. Recessed incandescent light fixtures located in insulated areas shall be approved for zero-clearance insulation cover (IC).

PROJECT INFORMATION		
PROJECT NAME	BRANDON ESTATES	
PROJECT LOCATION	NW SUNRISE DRIVE, WAUKEE, IOWA	
PROJECT JURISDICTION	CITY OF WAUKEE, IOWA	
APPLICABLE CODES	2018 ICC INTERNATIONAL BUILDING CODE 2018 ICC INTERNATIONAL MECHANICAL CODE 2018 IAPMO UNIFORM PLUMBING CODE 2020 NFPA 70 NATIONAL ELECTRICAL CODE 2012 ICC INTERNATIONAL ENERGY CONSERVATION CODE	
ACCESSIBILITY SAFE HARBOR	2018 ICC INTERNATIONAL BUILDING CODE ICC A117.1-2009	
PROJECT DESCRIPTION	TWO-STORY FLATS AND TOWNHOMES	
OCCUPANCY CLASSIFICATION	RESIDENTIAL GROUP R2 (R10.3)	
CONSTRUCTION TYPE	TYPE VA (602.5)	
AUTOMATIC FIRE SPRINKLER SYSTEM	NFPA 13R (903.3.1.2)	
BUILDING HEIGHTS AND AREAS		
	ALLOWED	ACTUAL (WORST CASE)
HEIGHT ABOVE GRADE (TABLE 504.3)	60.0 FEET	32.5 FEET
NUMBER OF STORIES (TABLE 504.4)	3 STORIES	2 STORIES
BUILDING AREA: [ ALLOWABLE (TABLE 506.2) + 75% FRONTAGE INCREASE (506.3.3) ]	21,000 SQUARE FEET [ 12,000 + 9,000 ]	12,042 SQUARE FEET
FIRE RESISTANCE RATINGS (TABLE 601)		
PRIMARY STRUCTURAL FRAME INCLUDING COLUMNS, GIRDERS & TRUSSES		1 HOUR
BEARING WALLS		
EXTERIOR BEARING WALLS (705.5)		1 HOUR (INSIDE ONLY)
INTERIOR BEARING WALLS		1 HOUR
NONBEARING WALLS AND PARTITIONS		
EXTERIOR NONBEARING WALLS (TABLE 602)		
LESS THAN 5 FEET		1 HOUR (BOTH SIDES)
5 FEET TO LESS THAN 10 FEET		1 HOUR (BOTH SIDES)
10 FEET TO LESS THAN 30 FEET (705.5)		1 HOUR (INSIDE ONLY)
30 FEET OR GREATER		0 HOUR
INTERIOR NONBEARING WALLS		0 HOUR
FLOOR CONSTRUCTION INCLUDING SUPPORTING BEAMS & JOISTS		1 HOUR
ROOF CONSTRUCTION INCLUDING SUPPORTING BEAMS & JOISTS		1 HOUR
EXTERIOR WALL OPENINGS (TABLE 705.8)		
FIRE SEPARATION DISTANCE	UNPROTECTED OPENINGS	PROTECTED OPENINGS
LESS THAN 3 FEET	NOT PERMITTED	NOT PERMITTED
3 FEET TO LESS THAN 5 FEET	NOT PERMITTED	15%
5 FEET TO LESS THAN 10 FEET	10%	25%
10 FEET TO LESS THAN 15 FEET	15%	45%
15 FEET TO LESS THAN 20 FEET	25%	75%
20 FEET TO LESS THAN 25 FEET	45%	NO LIMIT
25 FEET TO LESS THAN 30 FEET	70%	NO LIMIT
30 FEET OR GREATER	NO LIMIT	NO LIMIT
DRAFT STOPPING IN ATTICS (718.4)		
*PROVIDE DRAFT STOPPING TO SUBDIVIDE ATTIC SUCH THAT THE HORIZONTAL AREA DOES NOT EXCEED 3,000 SQUARE FEET*		

## ABBREVIATIONS

PLAN	
1R/1S	1 ROD AND 1 SHELF
2R/1S	2 RODS AND 1 SHELF
CL	CENTERLINE
CLG	CEILING
CONC	CONCRETE
DN 17R	DOWN 17 RISERS
DW	DISHWASHER
F.F.	FINISHED FLOOR
LIN	LINEN
O.C.	ON CENTER
OHC	OVERHEAD CABINET
PED	PEDISTAL
SH	SHELVES
SHWR	SHOWER
STRUCT	STRUCTURAL
TEMP GL	TEMPERED GLASS
TUB/SHWR	TUB SHOWER COMBO
UP 17R	UP 17 RISERS
PLAN - WINDOWS	
AWN	AWNING
CSMT	CASEMENT
DH	DOUBLE HUNG
FXD	FIXED
HDR	HEADER
HH	HEAD HEIGHT
SH	SINGLE HUNG

## SHEETS

CS	Coversheet
A.B0.1	Building Slab Plan (left half of building)
A.B0.2	Building Slab Plan (right half of building)
A.B1.1	Building Main Floor Plan (left half of building)
A.B1.2	Building Main Floor Plan (right half of building)
A.B2.1	Building Upper Floor Plan (left half of building)
A.B2.2	Building Upper Floor Plan (right half of building)
A.E1.1	Building Elevations and Roof Plan (left half of building)
A.E1.2	Building Elevations and Roof Plan (right half of building)
A.E1.3	Building Elevations (right half of building)
A.E1.4	Building Elevations (left half of building)
A.U1	Unit Plans
A.U2	Unit Plans (mirror)
A.D1	Building Details
S.X	Structural Sheets

SQUARE FOOT CALCULATIONS						
END UNIT A	FINISHED	UNFINISHED	GARAGE	FRONT COVERED	REAR COVERED	TOTAL SPRINKLER
UPPER FLOOR	886	24	--	--	--	910
MAIN FLOOR	761	--	438	50	80	1,329
TOTAL	1,647	24	438	50	80	2,239
FLAT A						
MAIN FLOOR	1,167	17	--	90	--	1,274
TOTAL	1,167	17	--	90	--	1,274
BUILDING						
(3) END UNIT A UNITS						6,716
(12) FLAT A UNITS						15,288
COMMON AREA						60,000
TOTAL						82,004

**Bid Set 3-8-23 -- NOT FOR CONSTRUCTION**

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- D. Shower, tub and tub/shower enclosures shall be constructed of approved safety glazing as specified by Builder.
- E. Handrails and guards:
  - E.1. Porches, balconies or raised floor surfaces located more than 30 inches above the floor or grade below shall have guards not less than 36 inches in height. Open sides of stairs with a total rise of more than 30 inches above the floor or grade below shall have guards not less than 34 inches in height measured vertically from the nosing of the treads. Required guards on open sides of stairways, raised floor areas, balconies and porches shall have intermediate rails or ornamental closures that do not allow passage of a sphere 4 inches in diameter. The triangular openings formed by the riser, tread and bottom rail of a guard at the open side of a stairway are permitted to be of such a size that a sphere 4 inches cannot pass through.
  - E.2. Handrail assemblies and guards shall be able to resist the following loads:
    - a) 50 pounds per linear foot applied in any direction at the top and to transfer this load through the supports to the structure.
    - b) A single concentrated load of 200 pounds, applied in any direction at any point along the top, and have attachment devices and supporting structure to transfer this loading to appropriate structural elements of the building.
    - c) Intermediate rails (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 not to exceed 1 square foot including openings and space between rails.

## XI. EQUIPMENT

- A. None in this contract.

## XII. FURNISHINGS

- A. None in this contract.

## XIII. SPECIAL CONSTRUCTION

- A. Fire Suppression:
  - A.1. Provide automatic sprinkler system meeting the requirements of applicable codes: NFPA 13R.
  - A.2. Provide fire alarm system meeting the requirements of applicable codes.
  - A.3. Note: Fire suppression systems are by others and are not part of these Drawings.

## XIV. CONVEYING SYSTEMS

- A. None in this contract.

## XV. MECHANICAL

- A. Information and layouts shown on Architectural Drawings are only schematic in design, and shall be reviewed by contractors, suppliers and building officials for compliance with governing codes and good common construction practices.
- B. Plumbing: See plumbing drawings by others.
- C. Heating, Ventilating and Air Conditioning: See mechanical drawings by others.
- D. Exhaust ventilation:
  - D.1. Dryer vent shall exhaust to exterior.
  - D.2. Range exhaust fan shall exhaust to exterior.
  - D.3. Mechanical exhaust ventilation where indicated in bathrooms, water closet compartments and laundry rooms shall exhaust to exterior and provide a minimum of 3 air changes per hour.
- E. Radon Mitigation: Install radon mitigation systems as required by applicable codes meeting the requirements of ASTM E1465 and E2121.

## XVI. ELECTRICAL

- A. Information and layouts shown on Architectural Drawings are only schematic in design, and shall be reviewed by contractors, suppliers and building officials for compliance with governing codes and good common construction practices.
- B. Electrical: See electrical drawings by others.
- C. Smoke detectors and carbon monoxide detectors:
  - C.1. Provide and install certified smoke detectors, carbon monoxide detectors and combination smoke / carbon monoxide detectors meeting the requirements of all governing codes.
  - C.2. All detectors shall be interconnected, 110 volt powered, equipped with a battery backup and sound an alarm audible in all sleeping areas.
  - C.3. Smoke detectors shall be installed on each floor level in each bedroom in the immediate vicinity outside of the bedrooms, and as shown on the Drawings.
  - C.4. Carbon monoxide detectors shall be installed in the immediate vicinity outside of the bedrooms and as shown on the Drawings.
  - C.5. Combination smoke / carbon monoxide detectors may be installed in lieu of separate detectors.
- D. Recessed incandescent light fixtures located in insulated areas shall be approved for zero-clearance insulation cover (IC).

PROJECT INFORMATION		
PROJECT NAME	BRANDON ESTATES	
PROJECT LOCATION	NW SUNRISE DRIVE, WAUKEE, IOWA	
PROJECT JURISDICTION	CITY OF WAUKEE, IOWA	
APPLICABLE CODES	2018 ICC INTERNATIONAL BUILDING CODE 2018 ICC INTERNATIONAL MECHANICAL CODE 2018 IAPMO UNIFORM PLUMBING CODE 2000 NFPA 70 NATIONAL ELECTRICAL CODE 2012 ICC INTERNATIONAL ENERGY CONSERVATION CODE	
ACCESSIBILITY SAFE HARBOR	2018 ICC INTERNATIONAL BUILDING CODE ICC A117.1-2009	
PROJECT DESCRIPTION	TWO-STORY FLATS AND TOWNHOMES	
OCCUPANCY CLASSIFICATION	RESIDENTIAL GROUP R2 (R10.3)	
CONSTRUCTION TYPE	TYPE VA (602.5)	
AUTOMATIC FIRE SPRINKLER SYSTEM	NFPA 13R (903.3.1.2)	
BUILDING HEIGHTS AND AREAS		
	ALLOWED	ACTUAL (WORST CASE)
HEIGHT ABOVE GRADE (TABLE 504.3)	60.0 FEET	32.5 FEET
NUMBER OF STORIES (TABLE 504.4)	3 STORIES	2 STORIES
BUILDING AREA: [ ALLOWABLE (TABLE 506.2) + 75% FRONTAGE INCREASE (506.3.3) ]	21,000 SQUARE FEET [ 12,000 + 9,000 ]	12,042 SQUARE FEET
FIRE RESISTANCE RATINGS (TABLE 601)		
PRIMARY STRUCTURAL FRAME INCLUDING COLUMNS, GIRDERS & TRUSSES		1 HOUR
BEARING WALLS		
EXTERIOR BEARING WALLS (705.5)		1 HOUR (INSIDE ONLY)
INTERIOR BEARING WALLS		1 HOUR
NONBEARING WALLS AND PARTITIONS		
EXTERIOR NONBEARING WALLS (TABLE 602)		
LESS THAN 5 FEET		1 HOUR (BOTH SIDES)
5 FEET TO LESS THAN 10 FEET		1 HOUR (BOTH SIDES)
10 FEET TO LESS THAN 30 FEET (705.5)		1 HOUR (INSIDE ONLY)
30 FEET OR GREATER		0 HOUR
INTERIOR NONBEARING WALLS		0 HOUR
FLOOR CONSTRUCTION INCLUDING SUPPORTING BEAMS & JOISTS		1 HOUR
ROOF CONSTRUCTION INCLUDING SUPPORTING BEAMS & JOISTS		1 HOUR
EXTERIOR WALL OPENINGS (TABLE 705.8)		
FIRE SEPARATION DISTANCE	UNPROTECTED OPENINGS	PROTECTED OPENINGS
LESS THAN 3 FEET	NOT PERMITTED	NOT PERMITTED
3 FEET TO LESS THAN 5 FEET	NOT PERMITTED	15%
5 FEET TO LESS THAN 10 FEET	10%	25%
10 FEET TO LESS THAN 15 FEET	15%	45%
15 FEET TO LESS THAN 20 FEET	25%	75%
20 FEET TO LESS THAN 25 FEET	45%	NO LIMIT
25 FEET TO LESS THAN 30 FEET	70%	NO LIMIT
30 FEET OR GREATER	NO LIMIT	NO LIMIT
DRAFT STOPPING IN ATTICS (718.4)		
*PROVIDE DRAFT STOPPING TO SUBDIVIDE ATTIC SUCH THAT THE HORIZONTAL AREA DOES NOT EXCEED 3,000 SQUARE FEET*		

## ABBREVIATIONS

PLAN	
1R/1S	1 ROD AND 1 SHELF
2R/1S	2 RODS AND 1 SHELF
CL	CENTERLINE
CLG	CEILING
CONC	CONCRETE
DN 17R	DOWN 17 RISERS
DW	DISHWASHER
F.F.	FINISHED FLOOR
LIN	LINEN
O.C.	ON CENTER
OHC	OVERHEAD CABINET
PED	PEDISTAL
SH	SHELVES
SHWR	SHOWER
STRUCT	STRUCTURAL
TEMP GL	TEMPERED GLASS
TUB/SHWR	TUB SHOWER COMBO
UP 17R	UP 17 RISERS
PLAN - WINDOWS	
AWN	AWNING
CSMT	CASEMENT
DH	DOUBLE HUNG
FXD	FIXED
HDR	HEADER
HH	HEAD HEIGHT
SH	SINGLE HUNG

## SHEETS

CS	Coversheet
A.B0.1	Building Slab Plan (left half of building)
A.B0.2	Building Slab Plan (right half of building)
A.B1.1	Building Main Floor Plan (left half of building)
A.B1.2	Building Main Floor Plan (right half of building)
A.B2.1	Building Upper Floor Plan (left half of building)
A.B2.2	Building Upper Floor Plan (right half of building)
A.E1.1	Building Elevations and Roof Plan (left half of building)
A.E1.2	Building Elevations and Roof Plan (right half of building)
A.E1.3	Building Elevations (right half of building)
A.E1.4	Building Elevations (left half of building)
A.U1	Unit Plans
A.U2	Unit Plans (mirror)
A.D1	Building Details
S.X	Structural Sheets

SQUARE FOOT CALCULATIONS						
END UNIT A	FINISHED	UNFINISHED	GARAGE	FRONT COVERED	REAR COVERED	TOTAL SPRINKLER
UPPER FLOOR	886	24	--	--	--	910
MAIN FLOOR	761	--	438	50	80	1,329
TOTAL	1,647	24	438	50	80	2,239
FLAT A						
MAIN FLOOR	1,167	17	--	90	--	1,274
TOTAL	1,167	17	--	90	--	1,274
BUILDING						
(3) END UNIT A UNITS						6,717
(12) FLAT A UNITS						15,288
COMMON AREA						5,275
TOTAL						27,280

**Bid Set 3-8-23 -- NOT FOR CONSTRUCTION**

# GENERAL NOTES

## I. GENERAL REQUIREMENTS

- A. Project location
  - A.1. Project name: Brandon Estates.
  - A.2. General location: Waukeez, Iowa.
- B. Codes
  - B.1. Before Final Drawings and Specifications are issued for construction, they shall be submitted to all governing building agencies to insure their compliance with all applicable local and national codes. If code discrepancies in Drawings and/or Specifications appear, the Architect shall be notified of such discrepancies in writing by Builder or building official, and allowed to alter Drawings and Specifications so as to comply with governing codes before construction begins.
  - B.2. Upon written receipt of approval from the governing official, approved Final Drawings and Specifications shall be submitted to the Builder by the Architect.
  - B.3. If code discrepancies are discovered during the construction process, Architect shall be notified and allowed ample time to remedy said discrepancies.
  - B.4. All work performed shall comply with all applicable local, state and national building codes, ordinances and regulations, and all other authorities having jurisdiction.
- C. All contractors, subcontractors, suppliers, and fabricators shall be responsible for the content of Drawings and Specifications and for the supply and design of appropriate materials and work performance.
- D. All manufactured articles, materials and equipment shall be applied, installed, erected, used, cleaned and conditioned in strict accordance with manufacturer's recommendations.
- E. All alterations are at the option of the Builder and shall be at the Builder's request, constructed in addition to or in lieu of the typical construction, as indicated on Drawings.
- F. Design Criteria: See structural drawings (by others) for design loads.

## II. SITEWORK

- A. Builder shall be responsible for grading of site and lots.
- B. Provide site preparation as specified by soils engineer.
- C. Perform excavation according to good common construction practices to the lines, grades and elevations indicated on Drawings.
- D. Provide soil poisoning to control termites as required by governing codes.

## III. CONCRETE

- A. See structural drawings by others.

## IV. MASONRY

- A. See structural drawings by others for load bearing masonry.
- B. Adhered Masonry Veneer (Stone and Brick)
  - B.1. Provide units as specified by Builder.
  - B.2. Adhered Masonry Veneer shall, in addition to complying with governing codes, comply with the standards and recommendations for the following applicable references:
    - B.2.1. Manufacturer's specifications and instructions.
    - B.2.2. National Concrete Masonry Association (NCMA)
    - B.2.3. American Concrete Institute (ACI)
    - B.2.4. Masonry Standards Joint Committee (MSJC)
    - B.2.5. Masonry Veneer Manufacturers' Association (MVMA) Installation Guide for Adhered Concrete Masonry Veneer
  - B.3. Provide minimum clearances as follows:
    - B.3.1. Four inches (4") above earth.
    - B.3.2. Two inches (2") above paved surfaces.
    - B.3.3. One-half inch (1/2") above exterior paved surfaces which are supported by the same foundation that supports the exterior wall.
    - B.3.4. Two inches (2") above roofing surfaces.
- B.4. Install water resistive barriers, flashing and weep screeds in accordance with manufacturer's instructions and specifications, and in accordance with governing codes.

## V. METALS

- A. See structural drawings by others for structural steel.
- B. All metals including metal connectors, fasteners, anchors, hardware, flashing, etc., shall be non-corrosive and compatible with any and all materials which the metal comes in contact with including dissimilar metals, wood (natural, stained and painted), preservative treated wood, fire-retardant treated wood and concrete.

## VI. WOOD AND PLASTICS

- A. See structural drawings by others for structural wood.
- B. Stair construction shall consist of structural stringers (as specified in the structural drawings by others), 5/4" or 2x thick treads and 3/4" thick risers or shall be fabricated by component manufacturer.
- C. All wood plating bearing on concrete or masonry shall be pressure treated and installed over approved sill sealer.
- D. All exterior framing and decking shall be constructed of decay-resistant lumber.
- E. Interior trim shall be selected by Builder.

## VII. THERMAL AND MOISTURE PROTECTION

- A. Provide thermal building insulation as specified by Builder.
- B. Moisture vapor retarder:
  - B.1. Exterior wall: Install code approved moisture vapor retarder (as specified by Builder) beneath gypsum panels on warm side of all exterior walls, at conditioned spaces and as shown on Drawings.
  - B.2. Water-resistive barrier: Install code approved water-resistive barrier (as specified by Builder) over exterior wall sheathing of all exterior walls and as shown on Drawings.
  - B.3. Roofing shall be specified by Builder and as shown on Drawings.
  - B.4. Exterior wall covering:
    - B.4.1. Siding shall be specified by Builder and as shown on Drawings.
    - B.4.2. See Section IV, MASONRY for brick and stone veneer and manufactured stone and thin brick.
  - B.5. Flashing:
    - B.5.1. Provide and install appropriate sheet metal and membrane flashing at all locations as required to prevent penetration of water through the exterior shell of the building. Provide and install appropriate flashing as shown on the drawings and at the following specific locations:
      - F.1.1. Drip edge at all eaves and rake edges.
      - F.1.2. Roof/wall intersections.
      - F.1.3. Roof penetrations such as skylights, roof vents, flues, etc.
      - F.1.4. Roof crickets and saddles.
      - F.1.5. Door and window head trim.
      - F.1.6. Horizontal band boards.
      - F.1.7. Deck to house connections.
      - F.1.8. Masonry sills and caps.
      - F.1.9. Provide through-wall flashing and weeps at the base of masonry veneer and above masonry lintels.
    - B.5.2. Materials and installations shall comply with governing codes and with pertinent recommendations contained in the current edition of the "Architectural Sheet Metal Manual" published by SMACNA. All metal flashing shall be hot-dip galvanized iron complying with ASTM A653/A653M or other approved corrosion-resistant metal.
  - B.6. Provide gutters and downspouts as specified by Builder. Downspout and splash locations shall be determined by Contractor (and approved by Builder) so as to provide positive roof and site drainage.
  - B.7. Provide attic and roof ventilation as required by governing codes and as shown on Drawings. Provide appropriate soffit and roof vents as specified/approved by Builder.
  - B.8. Foundation water/moisture control:
    - B.8.1. Provide foundation drainage as specified by soils engineer and Builder.
    - B.8.2. Waterproof foundation walls at excavated basement areas (from footing to finish grade) with waterproofing compound as specified by Builder. Waterproofing shall be in compliance with code requirements.

## VIII. DOORS AND WINDOWS

- A. Doors:
  - A.1. Provide doors as follows and as specified by Builder:
    - A.1.1. Entry doors and sidelights: as specified by Builder.
    - A.1.2. House/Garage doors: Solid wood door not less than 1 3/8" thick; solid or honeycomb core steel door not less than 1 3/8" thick; or 20-minute fire-rated door. Door shall be self-closing.
    - A.1.3. Overhead Garage doors: as specified by Builder.
    - A.1.4. Patio doors (hinged): full glass as specified by Builder.
    - A.1.5. Sliding glass doors: as specified by Builder.
    - A.1.6. Interior doors: as specified by Builder.
  - A.2. Glazing in doors and sidelights shall be double-pane insulating glass.
  - A.3. Glazing in doors and sidelights shall be tempered glass as required by governing codes.
- B. Windows:
  - B.1. Provide windows as specified by Builder:
    - B.1.1. Provide units of the size, style and quantity shown on Drawings.
    - B.1.2. Glazing shall be double-pane insulating glass.
    - B.1.3. Provide tempered glass in all windows meeting the requirements of governing codes.
  - B.1.4. Provide and install all windows meeting the requirements of governing codes for "Window Fall Protection."
  - B.1.5. Provide and install emergency escape and rescue windows meeting the requirements of governing codes.
- C. Finish hardware shall be specified by Builder. Install all hardware required by governing codes.

## IX. FINISHES

- A. Gypsum Panels:
  - A.1. Gypsum panels, unless otherwise noted on the Drawings shall be provided as follows:
    - A.1.1. Exterior walls: 1-layer 1/2" regular panels to interior face.
    - A.1.2. Interior partitions: 1-layer 1/2" regular panels each side.
    - A.1.3. Ceiling:
      - a) Supporting members greater than 16" o.c.: 1-layer 5/8" regular panels or 1-layer 1/2" sag resistant panels.
      - b) Supporting members 16" o.c. or less: 1-layer 1/2" regular panels.
    - A.1.4. Garage: Provide 1-layer 5/8" type "X" panels to entire garage ceiling and to garage face of all walls.
    - A.1.5. Baths: When gypsum board is used as a base for tile in non-wet areas or wall panels behind prefabricated tub and shower surrounds, water-resistant gypsum panels shall be used as a base as required by governing codes. See tile backer board below for tile in wet areas.
    - A.1.6. Common wall and common floor/ceiling between units: See Drawings for construction of assemblies.
  - A.2. Provide and install metal corner bead and trim as recommended by gypsum wallboard manufacturer.
  - A.3. Tape, float and sand joints and fasteners of gypsum wallboard with 3-coats of joint compound as required obtaining a uniformly smooth surface.
- B. Tile backer board: cement board or other approved tile backing material as specified by Builder shall be used as a base for tile in wet areas at tubs and showers.
- C. Finishes shown on Drawings shall be specified by Builder.

## X. SPECIALTIES

- D. Shower, tub and tub/shower enclosures shall be constructed of approved safety glazing as specified by Builder.
- E. Handrails and guards:
  - E.1. Porches, balconies or raised floor surfaces located more than 30 inches above the floor or grade below shall have guards not less than 36 inches in height. Open sides of stairs with a total rise of more than 30 inches above the floor or grade below shall have guards not less than 34 inches in height measured vertically from the nosing of the treads. Required guards on open sides of stairways, raised floor areas, balconies and porches shall have intermediate rails or ornamental closures that do not allow passage of a sphere 4 inches in diameter. The triangular openings formed by the riser, tread and bottom rail of a guard at the open side of a stairway are permitted to be of such a size that a sphere 4 inches cannot pass through.
  - E.2. Handrail assemblies and guards shall be able to resist the following loads:
    - a) 50 pounds per linear foot applied in any direction at the top and to transfer this load through the supports to the structure.
    - b) A single concentrated load of 200 pounds, applied in any direction at any point along the top, and have attachment devices and supporting structure to transfer this loading to appropriate structural elements of the building.
    - c) Intermediate rails (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 not to exceed 1 square foot including openings and space between rails.

## XI. EQUIPMENT

- A. None in this contract.

## XII. FURNISHINGS

- A. None in this contract.

## XIII. SPECIAL CONSTRUCTION

- A. Fire Suppression:
  - A.1. Provide automatic sprinkler system meeting the requirements of applicable codes: NFPA 13R.
  - A.2. Provide fire alarm system meeting the requirements of applicable codes.
  - A.3. Note: Fire suppression systems are by others and are not part of these Drawings.

## XIV. CONVEYING SYSTEMS

- A. None in this contract.

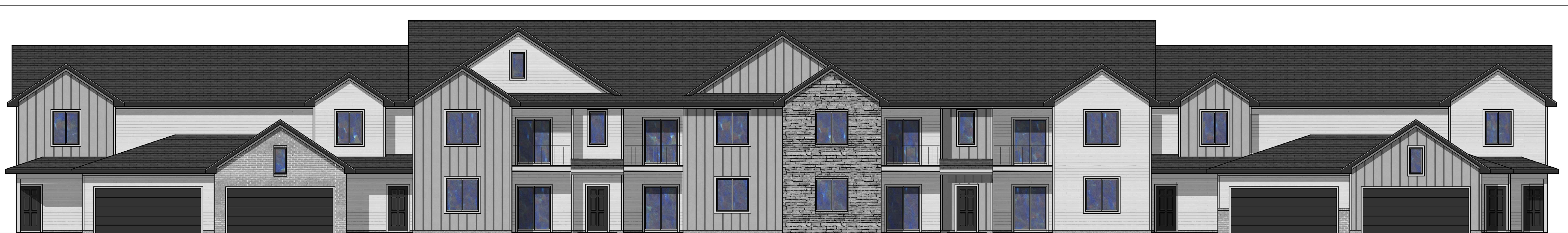
## XV. MECHANICAL

- A. Information and layouts shown on Architectural Drawings are only schematic in design, and shall be reviewed by contractors, suppliers and building officials for compliance with governing codes and good common construction practices.
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- C. Heating, Ventilating and Air Conditioning: See mechanical drawings by others.
- D. Exhaust ventilation:
  - D.1. Dryer vent shall exhaust to exterior.
  - D.2. Range exhaust fan shall exhaust to exterior.
  - D.3. Mechanical exhaust ventilation where indicated in bathrooms, water closet compartments and laundry rooms shall exhaust to exterior and provide a minimum of 3 air changes per hour.
- E. Radon Mitigation: Install radon mitigation systems as required by applicable codes meeting the requirements of ASTM E1465 and E2121.

## XVI. ELECTRICAL

- A. Information and layouts shown on Architectural Drawings are only schematic in design, and shall be reviewed by contractors, suppliers and building officials for compliance with governing codes and good common construction practices.
- B. Electrical: See electrical drawings by others.
- C. Smoke detectors and carbon monoxide detectors:
  - C.1. Provide and install certified smoke detectors, carbon monoxide detectors and combination smoke / carbon monoxide detectors meeting the requirements of all governing codes.
  - C.2. All detectors shall be interconnected, 110 volt powered, equipped with a battery backup and sound an alarm audible in all sleeping areas.
  - C.3. Smoke detectors shall be installed on each floor level, in each bedroom, in the immediate vicinity outside of the bedrooms, and as shown on the Drawings.
  - C.4. Carbon monoxide detectors shall be installed in the immediate vicinity outside of the bedrooms and as shown on the Drawings.
  - C.5. Combination smoke / carbon monoxide detectors may be installed in lieu of separate detectors.
- D. Recessed incandescent light fixtures located in insulated areas shall be approved for zero-clearance insulation cover (IC).

PROJECT INFORMATION		
PROJECT NAME	BRANDON ESTATES	
PROJECT LOCATION	NW SUNRISE DRIVE, WAUKEE, IOWA	
PROJECT JURISDICTION	CITY OF WAUKEE, IOWA	
APPLICABLE CODES	2018 ICC INTERNATIONAL BUILDING CODE 2018 ICC INTERNATIONAL MECHANICAL CODE 2018 IAPMO UNIFORM PLUMBING CODE 2020 NFPA 70 NATIONAL ELECTRICAL CODE 2012 ICC INTERNATIONAL ENERGY CONSERVATION CODE	
ACCESSIBILITY SAFE HARBOR	2018 ICC INTERNATIONAL BUILDING CODE ICC A117.1-2009	
PROJECT DESCRIPTION	TWO-STORY FLATS AND TOWNHOMES	
OCCUPANCY CLASSIFICATION	RESIDENTIAL GROUP R2 (R10.3)	
CONSTRUCTION TYPE	TYPE VA (602.5)	
AUTOMATIC FIRE SPRINKLER SYSTEM	NFPA 13R (903.3.1.2)	
BUILDING HEIGHTS AND AREAS		
	ALLOWED	ACTUAL (WORST CASE)
HEIGHT ABOVE GRADE (TABLE 504.3)	60.0 FEET	32.5 FEET
NUMBER OF STORIES (TABLE 504.4)	3 STORIES	2 STORIES
BUILDING AREA: [ ALLOWABLE (TABLE 506.2) + 75% FRONTAGE INCREASE (506.3.3) ]	21,000 SQUARE FEET [ 12,000 + 9,000 ]	10,674 SQUARE FEET
FIRE RESISTANCE RATINGS (TABLE 601)		
PRIMARY STRUCTURAL FRAME INCLUDING COLUMNS, GIRDERS & TRUSSES		1 HOUR
BEARING WALLS		
EXTERIOR BEARING WALLS (705.5)		1 HOUR (INSIDE ONLY)
INTERIOR BEARING WALLS		1 HOUR
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5 FEET TO LESS THAN 10 FEET		1 HOUR (BOTH SIDES)
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5 FEET TO LESS THAN 10 FEET	10%	25%
10 FEET TO LESS THAN 15 FEET	15%	45%
15 FEET TO LESS THAN 20 FEET	25%	75%
20 FEET TO LESS THAN 25 FEET	45%	NO LIMIT
25 FEET TO LESS THAN 30 FEET	70%	NO LIMIT
30 FEET OR GREATER	NO LIMIT	NO LIMIT
DRAFT STOPPING IN ATTICS (718.4)		
*PROVIDE DRAFT STOPPING TO SUBDIVIDE ATTIC SUCH THAT THE HORIZONTAL AREA DOES NOT EXCEED 3,000 SQUARE FEET*		



Front Elevation



Rear Elevation



Left Elevation



Right Elevation

## ABBREVIATIONS

PLAN	
1R/1S	1 ROD AND 1 SHELF
2R/1S	2 RODS AND 1 SHELF
CL	CENTERLINE
CLG	CEILING
CONC	CONCRETE
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A.D1	Building Details
S.X	Structural Sheets

## SQUARE FOOT CALCULATIONS

END UNIT A	FINISHED	UNFINISHED	GARAGE	FRONT COVERED	REAR COVERED	TOTAL SPRINKLER
UPPER FLOOR	886	24	--	--	--	910
MAIN FLOOR	761	--	438	50	80	1,329
TOTAL	1,647	24	438	50	80	2,239
FLAT A	FINISHED	UNFINISHED	GARAGE	FRONT COVERED	REAR COVERED	TOTAL SPRINKLER
MAIN FLOOR	1,134	25	--	98	--	1,257
TOTAL	1,134	25	--	98	--	1,257
BUILDING	FINISHED	UNFINISHED	GARAGE	FRONT COVERED	REAR COVERED	TOTAL SPRINKLER
(4) END UNIT A UNITS						8,956
(8) FLAT A UNITS						10,056
TOTAL						19,012

Bid Set 3-8-23 -- NOT FOR CONSTRUCTION

# GENERAL NOTES

## I. GENERAL REQUIREMENTS

- A. Project location: Brandon Estates.
- A.1. Project name: Brandon Estates.
- A.2. General location: Waukeez, Iowa.
- B. Codes
  - B.1. Before Final Drawings and Specifications are issued for construction, they shall be submitted to all governing building agencies to insure their compliance with all applicable local and national codes. If code discrepancies in Drawings and/or Specifications appear, the Architect shall be notified of such discrepancies in writing by Builder or building official, and allowed to alter Drawings and Specifications so as to comply with governing codes before construction begins.
  - B.2. Upon written receipt of approval from the governing official, approved Final Drawings and Specifications shall be submitted to the Builder by the Architect.
  - B.3. If code discrepancies are discovered during the construction process, Architect shall be notified and allowed ample time to remedy said discrepancies.
  - B.4. All work performed shall comply with all applicable local, state and national building codes, ordinances and regulations, and all other authorities having jurisdiction.
- C. All contractors, subcontractors, suppliers, and fabricators shall be responsible for the content of Drawings and Specifications and for the supply and design of appropriate materials and work performance.
- D. All manufactured articles, materials and equipment shall be applied, installed, erected, used, cleaned and conditioned in strict accordance with manufacturer's recommendations.
- E. All alterations are at the option of the Builder and shall be at the Builder's request, constructed in addition to or in lieu of the typical construction, as indicated on Drawings.
- F. Design Criteria: See structural drawings (by others) for design loads.

## II. SITEWORK

- A. Builder shall be responsible for grading of site and lots.
- B. Provide site preparation as specified by soils engineer.
- C. Perform excavation according to good common construction practices to the lines, grades and elevations indicated on Drawings.
- D. Provide soil poisoning to control termites as required by governing codes.

## III. CONCRETE

- A. See structural drawings by others.

## IV. MASONRY

- A. See structural drawings by others for load bearing masonry.
- B. Adhered Masonry Veneer (Stone and Brick)
  - B.1. Provide units as specified by Builder.
  - B.2. Adhered Masonry Veneer shall, in addition to complying with governing codes, comply with the standards and recommendations for the following applicable references:
    - B.2.1. Manufacturer's specifications and instructions.
    - B.2.2. National Concrete Masonry Association (NCMA)
    - B.2.3. American Concrete Institute (ACI)
    - B.2.4. Masonry Standards Joint Committee (MSJC)
    - B.2.5. Masonry Veneer Manufacturers' Association (MVMA) Installation Guide for Adhered Concrete Masonry Veneer
  - B.3. Provide minimum clearances as follows:
    - B.3.1. Four inches (4") above earth.
    - B.3.2. Two inches (2") above paved surfaces.
    - B.3.3. One-half inch (1/2") above exterior paved surfaces which are supported by the same foundation that supports the exterior wall.
    - B.3.4. Two inches (2") above roofing surfaces.
  - B.4. Install water resistive barriers, flashing and weep screeds in accordance with manufacturer's instructions and specifications, and in accordance with governing codes.

## V. METALS

- A. See structural drawings by others for structural steel.
- B. All metals including metal connectors, fasteners, anchors, hardware, flashing, etc., shall be non-corrosive and compatible with any and all materials which the metal comes in contact with including dissimilar metals, wood (natural, stained and painted), preservative treated wood, fire-retardant treated wood and concrete.

## VII. WOOD AND PLASTICS

- A. See structural drawings by others for structural wood.
- B. Stair construction shall consist of structural stringers (as specified in the structural drawings by others), 5/4" or 2x thick treads and 3/4" thick risers or shall be fabricated by component manufacturer.
- C. All wood plating bearing on concrete or masonry shall be pressure treated and installed over approved sill sealer.
- D. All exterior framing and decking shall be constructed of decay-resistant lumber.
- E. Interior trim shall be selected by Builder.

## VIII. THERMAL AND MOISTURE PROTECTION

- A. Provide thermal building insulation as specified by Builder.
- B. Moisture vapor retarder:
  - B.1. Exterior wall: Install code approved moisture vapor retarder (as specified by Builder) beneath gypsum panels on warm side of all exterior walls, at conditioned spaces and as shown on Drawings.
  - B.2. Water-resistive barrier: Install code approved water-resistive barrier (as specified by Builder) over exterior wall sheathing of all exterior walls and as shown on Drawings.
  - B.3. Roofing shall be specified by Builder and as shown on Drawings.
  - B.4. Exterior wall covering:
    - B.4.1. Siding shall be specified by Builder and as shown on Drawings.
    - B.4.2. See Section IV, MASONRY for brick and stone veneer and manufactured stone and tile trim.
  - B.5. Flashing:
    - B.5.1. Provide and install appropriate sheet metal and membrane flashing at all locations as required to prevent penetration of water through the exterior shell of the building. Provide and install appropriate flashing as shown on the drawings and at the following specific locations:
      - F.1.1. Drip edge at all eaves and rake edges.
      - F.1.2. Roof/wall intersections.
      - F.1.3. Roof penetrations such as skylights, roof vents, flues, etc.
      - F.1.4. Roof crickets and saddles.
      - F.1.5. Door and window head trim.
      - F.1.6. Horizontal band boards.
      - F.1.7. Deck to house connections.
      - F.1.8. Masonry sills and caps.
      - F.1.9. Provide through-wall flashing and weeps at the base of masonry veneer and above masonry lintels.
    - B.5.2. Materials and installations shall comply with governing codes and with pertinent recommendations contained in the current edition of the "Architectural Sheet Metal Manual" published by SMACNA. All metal flashing shall be hot-dip galvanized iron complying with ASTM A653/A653M or other approved corrosion-resistant metal.
  - B.6. Provide gutters and downspouts as specified by Builder. Downspout and splash locations shall be determined by Contractor (and approved by Builder) so as to provide positive roof and site drainage.
  - B.7. Provide attic and roof ventilation as required by governing codes and as shown on Drawings. Provide appropriate soffit and roof vents as specified/approved by Builder.
  - B.8. Foundation water/moisture control:
    - B.8.1. Provide foundation drainage as specified by soils engineer and Builder.
    - B.8.2. Waterproof foundation walls at excavated basement areas (from footing to finish grade) with waterproofing compound as specified by Builder. Waterproofing shall be in compliance with code requirements.

## VIII. DOORS AND WINDOWS

- A. Doors:
  - A.1. Provide doors as follows and as specified by Builder:
    - A.1.1. Entry doors and sidelights: as specified by Builder.
    - A.1.2. House/Garage doors: Solid wood door not less than 1 3/8" thick; solid or honeycomb core steel door not less than 1 3/8" thick; or 20-minute fire-rated door. Door shall be self-closing.
    - A.1.3. Overhead Garage doors: as specified by Builder.
    - A.1.4. Patio doors (hinged): full glass as specified by Builder.
    - A.1.5. Sliding glass doors: as specified by Builder.
    - A.1.6. Interior doors: as specified by Builder.
  - A.2. Glazing in doors and sidelights shall be double-pane insulating glass.
  - A.3. Glazing in doors and sidelights shall be tempered glass as required by governing codes.

## B. Windows:

- B.1. Provide windows as specified by Builder:
  - B.1.1. Provide units of the size, style and quantity shown on Drawings.
  - B.1.2. Glazing shall be double-pane insulating glass.
  - B.1.3. Provide tempered glass in all windows meeting the requirements of governing codes.
- B.1.4. Provide and install all windows meeting the requirements of governing codes for "Window Fall Protection."
- B.1.5. Provide and install emergency escape and rescue windows meeting the requirements of governing codes.

## IX. FINISHES

- A. Gypsum Panels:
  - A.1. Gypsum panels, unless otherwise noted on the Drawings shall be provided as follows:
    - A.1.1. Exterior walls: 1-layer 1/2" regular panels to interior face.
    - A.1.2. Interior partitions: 1-layer 1/2" regular panels each side.
    - A.1.3. Ceiling:
      - a) Supporting members greater than 16" o.c.: 1-layer 5/8" regular panels or 1-layer 1/2" sag resistant panels.
      - b) Supporting members 16" o.c. or less: 1-layer 1/2" regular panels.
    - A.1.4. Garage: Provide 1-layer 5/8" type "X" panels to entire garage ceiling and to garage face of all walls.
    - A.1.5. Baths: When gypsum board is used as a base for tile in non-wet areas or wall panels behind prefabricated tub and shower surrounds, water-resistant gypsum panels shall be used as a base as required by governing codes. See tile backer board below for tile in wet areas.
    - A.1.6. Common wall and common floor/ceiling between units: See Drawings for construction of assemblies.
  - A.2. Provide and install metal corner bead and trim as recommended by gypsum wallboard manufacturer.
  - A.3. Tape, float and sand joints and fasteners of gypsum wallboard with 3-coats of joint compound as required obtaining a uniformly smooth surface.
- B. Tile backer board: cement board or other approved tile backing material as specified by Builder shall be used as a base for tile in wet areas at tubs and showers.
- C. Finishes shown on Drawings shall be specified by Builder.

## X. SPECIALTIES

- D. Shower, tub and tub/shower enclosures shall be constructed of approved safety glazing as specified by Builder.
- E. Handrails and guards:
  - E.1. Porches, balconies or raised floor surfaces located more than 30 inches above the floor or grade below shall have guards not less than 36 inches in height. Open sides of stairs with a total rise of more than 30 inches above the floor or grade below shall have guards not less than 34 inches in height measured vertically from the nosing of the treads. Required guards on open sides of stairways, raised floor areas, balconies and porches shall have intermediate rails or ornamental closures that do not allow passage of a sphere 4 inches in diameter. The triangular openings formed by the riser, tread and bottom rail of a guard at the open side of a stairway are permitted to be of such a size that a sphere 4 inches cannot pass through.
  - E.2. Handrail assemblies and guards shall be able to resist the following loads:
    - a) 50 pounds per linear foot applied in any direction at the top and to transfer this load through the supports to the structure.
    - b) A single concentrated load of 200 pounds, applied in any direction at any point along the top, and have attachment devices and supporting structure to transfer this loading to appropriate structural elements of the building.
    - c) Intermediate rails (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 not to exceed 1 square foot including openings and space between rails.

## XI. EQUIPMENT

- A. None in this contract.

## XII. FURNISHINGS

- A. None in this contract.

## XIII. SPECIAL CONSTRUCTION

- A. Fire Suppression:
  - A.1. Provide automatic sprinkler system meeting the requirements of applicable codes: NFPA 13R.
  - A.2. Provide fire alarm system meeting the requirements of applicable codes.
  - A.3. Note: Fire suppression systems are by others and are not part of these Drawings.

## XIV. CONVEYING SYSTEMS

- A. None in this contract.

## XV. MECHANICAL

- A. Information and layouts shown on Architectural Drawings are only schematic in design, and shall be reviewed by contractors, suppliers and building officials for compliance with governing codes and good common construction practices.
- B. Plumbing: See plumbing drawings by others.
- C. Heating, Ventilating and Air Conditioning: See mechanical drawings by others.
- D. Exhaust ventilation:
  - D.1. Dryer vent shall exhaust to exterior.
  - D.2. Range exhaust fan shall exhaust to exterior.
  - D.3. Mechanical exhaust ventilation where indicated in bathrooms, water closet compartments and laundry rooms shall exhaust to exterior and provide a minimum of 5 air changes per hour.
- E. Radon Mitigation: Install radon mitigation systems as required by applicable codes meeting the requirements of ASTM E1465 and E2121.

## XVI. ELECTRICAL

- A. Information and layouts shown on Architectural Drawings are only schematic in design, and shall be reviewed by contractors, suppliers and building officials for compliance with governing codes and good common construction practices:
  - B. Electrical: See electrical drawings by others.
  - C. Smoke detectors and carbon monoxide detectors.
    - C.1. Provide and install certified smoke detectors, carbon monoxide detectors and combination smoke / carbon monoxide detectors meeting the requirements of all governing codes.
    - C.2. All detectors shall be interconnected, 110 volt powered, equipped with a battery backup and sound an alarm audible in all sleeping areas.
    - C.3. Smoke detectors shall be installed on each floor level in each bedroom in the immediate vicinity outside of the bedrooms, and as shown on the Drawings.
    - C.4. Carbon monoxide detectors shall be installed in the immediate vicinity outside of the bedrooms and as shown on the Drawings.
    - C.5. Combination smoke / carbon monoxide detectors may be installed in lieu of separate detectors.
  - D. Recessed incandescent light fixtures located in insulated areas shall be approved for zero-clearance insulation cover (IC).

PROJECT INFORMATION		
PROJECT NAME	BRANDON ESTATES	
PROJECT LOCATION	NW SUNRISE DRIVE, WAUKEE, IOWA	
PROJECT JURISDICTION	CITY OF WAUKEE, IOWA	
APPLICABLE CODES	2018 ICC INTERNATIONAL BUILDING CODE 2018 ICC INTERNATIONAL MECHANICAL CODE 2018 IAPMO UNIFORM PLUMBING CODE 2000 NFPA NATIONAL ELECTRICAL CODE 2012 ICC INTERNATIONAL ENERGY CONSERVATION CODE	
ACCESSIBILITY SAFE HARBOR	2018 ICC INTERNATIONAL BUILDING CODE ICC A117.1-2009	
PROJECT DESCRIPTION	TWO-STORY FLATS AND TOWNHOMES	
OCCUPANCY CLASSIFICATION	RESIDENTIAL GROUP R2 (R10.3)	
CONSTRUCTION TYPE	TYPE VA (602.5)	
AUTOMATIC FIRE SPRINKLER SYSTEM	NFPA 13R (903.3.1.2)	
BUILDING HEIGHTS AND AREAS		
	ALLOWED	ACTUAL (WORST CASE)
HEIGHT ABOVE GRADE (TABLE 504.3)	60.0 FEET	32.5 FEET
NUMBER OF STORIES (TABLE 504.4)	3 STORIES	2 STORIES
BUILDING AREA: [ ALLOWABLE (TABLE 506.2) + 75% FRONTAGE INCREASE (506.3.3) ]	21,000 SQUARE FEET [ 12,000 + 9,000 ]	12,042 SQUARE FEET
FIRE RESISTANCE RATINGS (TABLE 601)		
PRIMARY STRUCTURAL FRAME INCLUDING COLUMNS, GIRDERS & TRUSSES		1 HOUR
BEARING WALLS		
EXTERIOR BEARING WALLS (705.5)		1 HOUR (INSIDE ONLY)
INTERIOR BEARING WALLS		1 HOUR
NONBEARING WALLS AND PARTITIONS		
EXTERIOR NONBEARING WALLS (TABLE 602)		
LESS THAN 5 FEET		1 HOUR (BOTH SIDES)
5 FEET TO LESS THAN 10 FEET		1 HOUR (BOTH SIDES)
10 FEET TO LESS THAN 30 FEET (705.5)		1 HOUR (INSIDE ONLY)
30 FEET OR GREATER		0 HOUR
INTERIOR NONBEARING WALLS		0 HOUR
FLOOR CONSTRUCTION INCLUDING SUPPORTING BEAMS & JOISTS		1 HOUR
ROOF CONSTRUCTION INCLUDING SUPPORTING BEAMS & JOISTS		1 HOUR
EXTERIOR WALL OPENINGS (TABLE 705.8)		
FIRE SEPARATION DISTANCE	UNPROTECTED OPENINGS	PROTECTED OPENINGS
LESS THAN 3 FEET	NOT PERMITTED	NOT PERMITTED
3 FEET TO LESS THAN 5 FEET	NOT PERMITTED	15%
5 FEET TO LESS THAN 10 FEET	10%	25%
10 FEET TO LESS THAN 15 FEET	15%	45%
15 FEET TO LESS THAN 20 FEET	25%	75%
20 FEET TO LESS THAN 25 FEET	45%	NO LIMIT
25 FEET TO LESS THAN 30 FEET	70%	NO LIMIT
30 FEET OR GREATER	NO LIMIT	NO LIMIT
DRAFT STOPPING IN ATTICS (718.4)		
*PROVIDE DRAFT STOPPING TO SUBDIVIDE ATTIC SUCH THAT THE HORIZONTAL AREA DOES NOT EXCEED 3,000 SQUARE FEET*		

## ABBREVIATIONS

PLAN	
1R/1S	1 ROD AND 1 SHELF
2R/1S	2 RODS AND 1 SHELF
CL	CENTERLINE
CLG	CEILING
CONC	CONCRETE
DN 17R	DOWN 17 RISERS
DW	DISHWASHER
F.F.	FINISHED FLOOR
LIN	LINEN
O.C.	ON CENTER
OHC	OVERHEAD CABINET
PED	PEDISTAL
SH	SHELVES
SHWR	SHOWER
STRUCT	STRUCTURAL
TEMP GL	TEMPERED GLASS
TUB/SHWR	TUB SHOWER COMBO
UP 17R	UP 17 RISERS
PLAN - WINDOWS	
AWN	AWNING
CSMT	CASEMENT
DH	DOUBLE HUNG
FXD	FIXED
HDR	HEADER
HH	HEAD HEIGHT
SH	SINGLE HUNG

## SHEETS

CS	Coversheet
A.B0.1	Building Slab Plan (left half of building)
A.B0.2	Building Slab Plan (right half of building)
A.B1.1	Building Main Floor Plan (left half of building)
A.B1.2	Building Main Floor Plan (right half of building)
A.B2.1	Building Upper Floor Plan (left half of building)
A.B2.2	Building Upper Floor Plan (right half of building)
A.E1.1	Building Elevations and Roof Plan (left half of building)
A.E1.2	Building Elevations and Roof Plan (right half of building)
A.E1.3	Building Elevations (right half of building)
A.E1.4	Building Elevations (left half of building)
A.U1	Unit Plans
A.U2	Unit Plans (mirror)
A.D1	Building Details
S.X	Structural Sheets

## SQUARE FOOT CALCULATIONS

END UNIT A	FINISHED	UNFINISHED	GARAGE	FRONT COVERED	REAR COVERED	TOTAL SPRINKLER
UPPER FLOOR	886	24	--	--	--	910
MAIN FLOOR	761	--	438	50	80	1,329
TOTAL	1,647	24	438	50	80	2,239
FLAT A						
MAIN FLOOR	1,167	17	--	90	--	1,274
TOTAL	1,167	17	--	90	--	1,274
BUILDING						
(3) END UNIT A UNITS						6,717
(12) FLAT A UNITS						15,288
COMMON AREA						6,235
TOTAL						28,240

**Bid Set 3-8-23 -- NOT FOR CONSTRUCTION**

119  
ELEMENT  
HOMES BY STANBROUGH

BRANDON  
ESTATES

BSB  
BUILDING SERVICES  
CORPORATION

Brandon Estates - Building 4  
15-Plex Building

ISSUED: \_\_\_\_\_  
REVISED: \_\_\_\_\_  
REVISED: \_\_\_\_\_  
REVISED: \_\_\_\_\_  
REVISED: \_\_\_\_\_

SHEET  
CS

# GENERAL NOTES

## I. GENERAL REQUIREMENTS

- A. Project location: Brandon Estates.
- A1. Project name: Brandon Estates.
- A2. General location: Waukeez, Iowa.
- B. Codes
  - B1. Before Final Drawings and Specifications are issued for construction, they shall be submitted to all governing building agencies to insure their compliance with all applicable local and national codes. If code discrepancies in Drawings and/or Specifications appear, the Architect shall be notified of such discrepancies in writing by Builder or building official, and allowed to alter Drawings and Specifications so as to comply with governing codes before construction begins.
  - B2. Upon written receipt of approval from the governing official, approved Final Drawings and Specifications shall be submitted to the Builder by the Architect.
  - B3. If code discrepancies are discovered during the construction process, Architect shall be notified and allowed ample time to remedy said discrepancies.
  - B4. All work performed shall comply with all applicable local, state and national building codes, ordinances and regulations, and all other authorities having jurisdiction.
- C. All contractors, subcontractors, suppliers, and fabricators shall be responsible for the content of Drawings and Specifications and for the supply and design of appropriate materials and work performance.
- D. All manufactured articles, materials and equipment shall be applied, installed, erected, used, cleaned and conditioned in strict accordance with manufacturer's recommendations.
- E. All alterations are at the option of the Builder and shall be at the Builder's request, constructed in addition to or in lieu of the typical construction, as indicated on Drawings.
- F. Design Criteria: See structural drawings (by others) for design loads.

## II. SITEWORK

- A. Builder shall be responsible for grading of site and lots.
- B. Provide site preparation as specified by soils engineer.
- C. Perform excavation according to good common construction practices to the lines, grades and elevations indicated on Drawings.
- D. Provide soil poisoning to control termites as required by governing codes.

## III. CONCRETE

- A. See structural drawings by others.

## IV. MASONRY

- A. See structural drawings by others for load bearing masonry.
- B. Adhered Masonry Veneer (Stone and Brick)
  - B1. Provide units as specified by Builder.
  - B2. Adhered Masonry Veneer shall, in addition to complying with governing codes, comply with the standards and recommendations for the following applicable references:
    - B2.1. Manufacturer's specifications and instructions.
    - B2.2. National Concrete Masonry Association (NCMA)
    - B2.3. American Concrete Institute (ACI)
    - B2.4. Masonry Standards Joint Committee (MSJC)
    - B2.5. Masonry Veneer Manufacturers' Association (MVMA) Installation Guide for Adhered Concrete Masonry Veneer
  - B3. Provide minimum clearances as follows:
    - B3.1. Four inches (4") above earth.
    - B3.2. Two inches (2") above paved surfaces.
    - B3.3. One-half inch (1/2") above exterior paved surfaces which are supported by the same foundation that supports the exterior wall.
    - B3.4. Two inches (2") above roofing surfaces.
  - B4. Install water resistive barriers, flashing and weep screeds in accordance with manufacturer's instructions and specifications, and in accordance with governing codes.

## V. METALS

- A. See structural drawings by others for structural steel.
- B. All metals including metal connectors, fasteners, anchors, hardware, flashing, etc., shall be non-corrosive and compatible with any and all materials which the metal comes in contact with including dissimilar metals, wood (natural, stained and painted), preservative treated wood, fire-retardant treated wood and concrete.

## VII. WOOD AND PLASTICS

- A. See structural drawings by others for structural wood.
- B. Stair construction shall consist of structural stringers (as specified in the structural drawings by others), 5/4" or 2x thick treads and 3/4" thick risers or shall be fabricated by component manufacturer.
- C. All wood plating bearing on concrete or masonry shall be pressure treated and installed over approved sill sealer.
- D. All exterior framing and decking shall be constructed of decay-resistant lumber.
- E. Interior trim shall be selected by Builder.

## VIII. THERMAL AND MOISTURE PROTECTION

- A. Provide thermal building insulation as specified by Builder.
- B. Moisture vapor retarder:
  - B1. Exterior wall: Install code approved moisture vapor retarder (as specified by Builder) beneath gypsum panels on warm side of all exterior walls, at conditioned spaces and as shown on Drawings.
  - B2. Water-resistive barrier: Install code approved water-resistive barrier (as specified by Builder) over exterior wall sheathing of all exterior walls and as shown on Drawings.
  - B3. Roofing shall be specified by Builder and as shown on Drawings.
  - B4. Exterior wall covering:
    - B4.1. Siding shall be specified by Builder and as shown on Drawings.
    - B4.2. See Section IV, MASONRY for brick and stone veneer and manufactured stone and thin brick.
  - B5. Flashing:
    - B5.1. Provide and install appropriate sheet metal and membrane flashing at all locations as required to prevent penetration of water through the exterior shell of the building. Provide and install appropriate flashing as shown on the drawings and at the following specific locations:
      - F1.1. Drip edge at all eaves and rake edges.
      - F1.2. Roof/wall intersections.
      - F1.3. Roof penetrations such as skylights, roof vents, flues, etc.
      - F1.4. Roof crickets and saddles.
      - F1.5. Door and window head trim.
      - F1.6. Horizontal bond boards.
      - F1.7. Deck to house connections.
      - F1.8. Masonry sills and caps.
      - F1.9. Provide through-wall flashing and weeps at the base of masonry veneer and above masonry lintels.
    - B5.2. Materials and installations shall comply with governing codes and with pertinent recommendations contained in the current edition of the "Architectural Sheet Metal Manual" published by SMACNA. All metal flashing shall be hot-dip galvanized iron complying with ASTM A653/A653M or other approved corrosion-resistant metal.
  - B6. Provide gutters and downspouts as specified by Builder. Downspout and splash locations shall be determined by Contractor (and approved by Builder) so as to provide positive roof and site drainage.
  - B7. Provide attic and roof ventilation as required by governing codes and as shown on Drawings. Provide appropriate soffit and roof vents as specified/approved by Builder.
  - B8. Foundation water/moisture control:
    - B8.1. Provide foundation drainage as specified by soils engineer and Builder.
    - B8.2. Waterproof foundation walls at excavated basement areas (from footing to finish grade) with waterproofing compound as specified by Builder. Waterproofing shall be in compliance with code requirements.

## VIII. DOORS AND WINDOWS

- A. Doors:
  - A1. Provide doors as follows and as specified by Builder:
    - A1.1. Entry doors and sidelights: as specified by Builder.
    - A1.2. House/Garage doors: Solid wood door not less than 1 3/8" thick; solid or honeycomb core steel door not less than 1 3/8" thick; or 20-minute fire-rated door. Door shall be self-closing.
    - A1.3. Overhead Garage doors: as specified by Builder.
    - A1.4. Patio doors (hinged): full glass as specified by Builder.
    - A1.5. Sliding glass doors: as specified by Builder.
    - A1.6. Interior doors: as specified by Builder.
  - A2. Glazing in doors and sidelights shall be double-pane insulating glass.
  - A3. Glazing in doors and sidelights shall be tempered glass as required by governing codes.

## B. Windows:

- B1. Provide windows as specified by Builder:
  - B1.1. Provide units of the size, style and quantity shown on Drawings.
  - B1.2. Glazing shall be double-pane insulating glass.
  - B1.3. Provide tempered glass in all windows meeting the requirements of governing codes.
  - B1.4. Provide and install all windows meeting the requirements of governing codes for "Window Fall Protection."
  - B1.5. Provide and install emergency escape and rescue windows meeting the requirements of governing codes.
- C. Finish hardware shall be specified by Builder. Install all hardware required by governing codes.

## IX. FINISHES

- A. Gypsum Panels:
  - A1. Gypsum panels, unless otherwise noted on the Drawings shall be provided as follows:
    - A1.1. Exterior walls: 1-layer 1/2" regular panels to interior face.
    - A1.2. Interior partitions: 1-layer 1/2" regular panels each side.
    - A1.3. Ceiling:
      - a) Supporting members greater than 16" o.c.; 1-layer 5/8" regular panels or 1-layer 1/2" sag resistant panels.
      - b) Supporting members 16" o.c. or less: 1-layer 1/2" regular panels.
    - A1.4. Garage: Provide 1-layer 5/8" type "X" panels to entire garage ceiling and to garage face of all walls.
    - A1.5. Bath: When gypsum board is used as a base for tile in non-wet areas or wall panels behind prefabricated tub and shower surrounds, water-resistant gypsum panels shall be used as a base as required by governing codes. See tile backer board below for tile in wet areas.
    - A1.6. Common wall and common floor/ceiling between units: See Drawings for construction of assemblies.
  - A2. Provide and install metal corner bead and trim as recommended by gypsum wallboard manufacturer.
  - A3. Tape, float and sand joints and fasteners of gypsum wallboard with 3-coats of joint compound as required obtaining a uniformly smooth surface.
- B. Tile backer board: cement board or other approved tile backing material as specified by Builder shall be used as a base for tile in wet areas at tubs and showers.
- C. Finishes shown on Drawings shall be specified by Builder.

## X. SPECIALTIES

- D. Shower, tub and tub/shower enclosures shall be constructed of approved safety glazing as specified by Builder.
- E. Handrails and guards:
  - E1. Porches, balconies or raised floor surfaces located more than 30 inches above the floor or grade below shall have guards not less than 36 inches in height. Open sides of stairs with a total rise of more than 30 inches above the floor or grade below shall have guards not less than 34 inches in height measured vertically from the nosing of the treads. Required guards on open sides of stairways, raised floor areas, balconies and porches shall have intermediate rails or ornamental closures that do not allow passage of a sphere 4 inches in diameter. The triangular openings formed by the riser, tread and bottom rail of a guard at the open side of a stairway are permitted to be of such a size that a sphere 4 inches cannot pass through.
  - E2. Handrail assemblies and guards shall be able to resist the following loads:
    - a) 50 pounds per linear foot applied in any direction at the top and to transfer this load through the supports to the structure.
    - b) A single concentrated load of 200 pounds, applied in any direction at any point along the top, and have attachment devices and supporting structure to transfer this loading to appropriate structural elements of the building.
    - c) Intermediate rails (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 not to exceed 1 square foot including openings and space between rails.

## XI. EQUIPMENT

- A. None in this contract.

## XII. FURNISHINGS

- A. None in this contract.

## XIII. SPECIAL CONSTRUCTION

- A. Fire Suppression:
  - A1. Provide automatic sprinkler system meeting the requirements of applicable codes: NFPA 13R.
  - A2. Provide fire alarm system meeting the requirements of applicable codes.
  - A3. Note: Fire suppression systems are by others and are not part of these Drawings.

## XIV. CONVEYING SYSTEMS

- A. None in this contract.

## XV. MECHANICAL

- A. Information and layouts shown on Architectural Drawings are only schematic in design, and shall be reviewed by contractors, suppliers and building officials for compliance with governing codes and good common construction practices.
- B. Plumbing: See plumbing drawings by others.
- C. Heating, Ventilating and Air Conditioning: See mechanical drawings by others.
- D. Exhaust ventilation:
  - D1. Dryer vent shall exhaust to exterior.
  - D2. Range exhaust fan shall exhaust to exterior.
  - D3. Mechanical exhaust ventilation where indicated in bathrooms, water closet compartments and laundry rooms shall exhaust to exterior and provide a minimum of 3 air changes per hour.
- E. Radon Mitigation: Install radon mitigation systems as required by applicable codes meeting the requirements of ASTM E1465 and E2121.

## XVI. ELECTRICAL

- A. Information and layouts shown on Architectural Drawings are only schematic in design, and shall be reviewed by contractors, suppliers and building officials for compliance with governing codes and good common construction practices.
- B. Electrical: See electrical drawings by others.
- C. Smoke detectors and carbon monoxide detectors:
  - C1. Provide and install certified smoke detectors, carbon monoxide detectors and combination smoke / carbon monoxide detectors meeting the requirements of all governing codes.
  - C2. All detectors shall be interconnected, 110 volt powered, equipped with a battery backup and sound an alarm audible in all sleeping areas.
  - C3. Smoke detectors shall be installed on each floor level, in each bedroom in the immediate vicinity outside of the bedrooms, and as shown on the Drawings.
  - C4. Carbon monoxide detectors shall be installed in the immediate vicinity outside of the bedrooms and as shown on the Drawings.
  - C5. Combination smoke / carbon monoxide detectors may be installed in lieu of separate detectors.
- D. Recessed incandescent light fixtures located in insulated areas shall be approved for zero-clearance insulation cover (IC).

PROJECT INFORMATION		
PROJECT NAME	BRANDON ESTATES	
PROJECT LOCATION	NW SUNRISE DRIVE, WAUKEE, IOWA	
PROJECT JURISDICTION	CITY OF WAUKEE, IOWA	
APPLICABLE CODES	2018 ICC INTERNATIONAL BUILDING CODE 2018 ICC INTERNATIONAL MECHANICAL CODE 2018 IAPMO UNIFORM PLUMBING CODE 2000 NFPA NATIONAL ELECTRICAL CODE 2012 ICC INTERNATIONAL ENERGY CONSERVATION CODE	
ACCESSIBILITY SAFE HARBOR	2018 ICC INTERNATIONAL BUILDING CODE ICC A117.1-2009	
PROJECT DESCRIPTION	TWO-STORY FLATS AND TOWNHOMES	
OCCUPANCY CLASSIFICATION	RESIDENTIAL GROUP R2 (R10.3)	
CONSTRUCTION TYPE	TYPE VA (602.5)	
AUTOMATIC FIRE SPRINKLER SYSTEM	NFPA 13R (903.3.1.2)	
BUILDING HEIGHTS AND AREAS		
	ALLOWED	ACTUAL (WORST CASE)
HEIGHT ABOVE GRADE (TABLE 504.3)	60.0 FEET	32.5 FEET
NUMBER OF STORIES (TABLE 504.4)	3 STORIES	2 STORIES
BUILDING AREA: [ ALLOWABLE (TABLE 506.2) + 75% FRONTAGE INCREASE (506.3.3) ]	21,000 SQUARE FEET [ 12,000 + 9,000 ]	12,042 SQUARE FEET
FIRE RESISTANCE RATINGS (TABLE 601)		
PRIMARY STRUCTURAL FRAME INCLUDING COLUMNS, GIRDERS & TRUSSES		1 HOUR
BEARING WALLS		
EXTERIOR BEARING WALLS (705.5)		1 HOUR (INSIDE ONLY)
INTERIOR BEARING WALLS		1 HOUR
NONBEARING WALLS AND PARTITIONS		
EXTERIOR NONBEARING WALLS (TABLE 602)		
LESS THAN 5 FEET		1 HOUR (BOTH SIDES)
5 FEET TO LESS THAN 10 FEET		1 HOUR (BOTH SIDES)
10 FEET TO LESS THAN 30 FEET (705.5)		1 HOUR (INSIDE ONLY)
30 FEET OR GREATER		0 HOUR
INTERIOR NONBEARING WALLS		0 HOUR
FLOOR CONSTRUCTION INCLUDING SUPPORTING BEAMS & JOISTS		1 HOUR
ROOF CONSTRUCTION INCLUDING SUPPORTING BEAMS & JOISTS		1 HOUR
EXTERIOR WALL OPENINGS (TABLE 705.8)		
FIRE SEPARATION DISTANCE	UNPROTECTED OPENINGS	PROTECTED OPENINGS
LESS THAN 3 FEET	NOT PERMITTED	NOT PERMITTED
3 FEET TO LESS THAN 5 FEET	NOT PERMITTED	15%
5 FEET TO LESS THAN 10 FEET	10%	25%
10 FEET TO LESS THAN 15 FEET	15%	45%
15 FEET TO LESS THAN 20 FEET	25%	75%
20 FEET TO LESS THAN 25 FEET	45%	NO LIMIT
25 FEET TO LESS THAN 30 FEET	70%	NO LIMIT
30 FEET OR GREATER	NO LIMIT	NO LIMIT
DRAFT STOPPING IN ATTICS (718.4)		
*PROVIDE DRAFT STOPPING TO SUBDIVIDE ATTIC SUCH THAT THE HORIZONTAL AREA DOES NOT EXCEED 3,000 SQUARE FEET*		



## ABBREVIATIONS

PLAN	
1R/1S	1 ROD AND 1 SHELF
2R/1S	2 RODS AND 1 SHELF
CL	CENTERLINE
CLG	CEILING
CONC	CONCRETE
DN 17R	DOWN 17 RISERS
DW	DISHWASHER
F.F.	FINISHED FLOOR
LIN	LINEN
O.C.	ON CENTER
OHC	OVERHEAD CABINET
PED	PEDISTAL
SH	SHELVES
SHWR	SHOWER
STRUCT	STRUCTURAL
TEMP GL	TEMPERED GLASS
TUB/SHWR	TUB SHOWER COMBO
UP 17R	UP 17 RISERS
PLAN - WINDOWS	
AWN	AWNING
CSMT	CASEMENT
DH	DOUBLE HUNG
FXD	FIXED
HDR	HEADER
HH	HEAD HEIGHT
SH	SINGLE HUNG

## SHEETS

CS	Coversheet
A.B0.1	Building Slab Plan (left half of building)
A.B0.2	Building Slab Plan (right half of building)
A.B1.1	Building Main Floor Plan (left half of building)
A.B1.2	Building Main Floor Plan (right half of building)
A.B2.1	Building Upper Floor Plan (left half of building)
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A.E1.1	Building Elevations and Roof Plan (left half of building)
A.E1.2	Building Elevations and Roof Plan (right half of building)
A.E1.3	Building Elevations (right half of building)
A.E1.4	Building Elevations (left half of building)
A.U1	Unit Plans
A.U2	Unit Plans (mirror)
A.D1	Building Details
S.X	Structural Sheets

## SQUARE FOOT CALCULATIONS

END UNIT A	FINISHED	UNFINISHED	GARAGE	FRONT COVERED	REAR COVERED	TOTAL SPRINKLER
UPPER FLOOR	886	24	--	--	--	910
MAIN FLOOR	761	--	438	50	80	1,329
TOTAL	1,647	24	438	50	80	2,239
FLAT A						
MAIN FLOOR	1,167	17	--	90	--	1,274
TOTAL	1,167	17	--	90	--	1,274
BUILDING						
(3) END UNIT A UNITS						6,717
(12) FLAT A UNITS						15,288
COMMON AREA						6,235
TOTAL						28,240

**Bid Set 3-8-23 -- NOT FOR CONSTRUCTION**

**119 ELEMENT HOMES BY STANBROUGH**  
**BRANDON ESTATES**  
**BSB**  
**BRANDON ESTATES - Building 5**  
**15-Plex Building**  
 SHEET  
**CS**

# GENERAL NOTES

## I. GENERAL REQUIREMENTS

- A. Project location
  - A.1. Project name: Brandon Estates.
  - A.2. General location: Waukeez, Iowa.
- B. Codes
  - B.1. Before Final Drawings and Specifications are issued for construction, they shall be submitted to all governing building agencies to insure their compliance with all applicable local and national codes. If code discrepancies in Drawings and/or Specifications appear, the Architect shall be notified of such discrepancies in writing by Builder or building official, and allowed to alter Drawings and Specifications so as to comply with governing codes before construction begins.
  - B.2. Upon written receipt of approval from the governing official, approved Final Drawings and Specifications shall be submitted to the Builder by the Architect.
  - B.3. If code discrepancies are discovered during the construction process, Architect shall be notified and allowed ample time to remedy said discrepancies.
  - B.4. All work performed shall comply with all applicable local, state and national building codes, ordinances and regulations, and all other authorities having jurisdiction.
- C. All contractors, subcontractors, suppliers, and fabricators shall be responsible for the content of Drawings and Specifications and for the supply and design of appropriate materials and work performance.
- D. All manufactured articles, materials and equipment shall be applied, installed, erected, used, cleaned and conditioned in strict accordance with manufacturer's recommendations.
- E. All alterations are at the option of the Builder and shall be at the Builder's request, constructed in addition to or in lieu of the typical construction as indicated on Drawings.
- F. Design Criteria: See structural drawings (by others) for design loads.

## II. SITEWORK

- A. Builder shall be responsible for grading of site and lots.
- B. Provide site preparation as specified by soils engineer.
- C. Perform excavation according to good common construction practices to the lines, grades and elevations indicated on Drawings.
- D. Provide soil poisoning to control termites as required by governing codes.

## III. CONCRETE

- A. See structural drawings by others.

## IV. MASONRY

- A. See structural drawings by others for load bearing masonry.
- B. Adhered Masonry Veneer (Stone and Brick)
  - B.1. Provide units as specified by Builder.
  - B.2. Adhered Masonry Veneer shall, in addition to complying with governing codes, comply with the standards and recommendations for the following applicable references:
    - B.2.1. Manufacturer's specifications and instructions.
    - B.2.2. National Concrete Masonry Association (NCMA)
    - B.2.3. American Concrete Institute (ACI)
    - B.2.4. Masonry Standards Joint Committee (MSJC)
    - B.2.5. Masonry Veneer Manufacturers' Association (MVMA) Installation Guide for Adhered Concrete Masonry Veneer
  - B.3. Provide minimum clearances as follows:
    - B.3.1. Four inches (4") above earth.
    - B.3.2. Two inches (2") above paved surfaces.
    - B.3.3. One-half inch (1/2") above exterior paved surfaces which are supported by the same foundation that supports the exterior wall.
    - B.3.4. Two inches (2") above roofing surfaces.
- B.4. Install water resistive barriers, flashing and weep screeds in accordance with manufacturer's instructions and specifications, and in accordance with governing codes.

## V. METALS

- A. See structural drawings by others for structural steel.
- B. All metals including metal connectors, fasteners, anchors, hardware, flashing, etc., shall be non-corrosive and compatible with any and all materials which the metal comes in contact with including dissimilar metals, wood (natural, stained and painted), preservative treated wood, fire-retardant treated wood and concrete.

## VII. WOOD AND PLASTICS

- A. See structural drawings by others for structural wood.
- B. Stair construction shall consist of structural stringers (as specified in the structural drawings by others), 5/4" or 2x thick treads and 3/4" thick risers or shall be fabricated by component manufacturer.
- C. All wood plating bearing on concrete or masonry shall be pressure treated and installed over approved sill sealer.
- D. All exterior framing and decking shall be constructed of decay-resistant lumber.
- E. Interior trim shall be selected by Builder.

## VIII. THERMAL AND MOISTURE PROTECTION

- A. Provide thermal building insulation as specified by Builder.
- B. Moisture vapor retarder:
  - B.1. Exterior wall: Install code approved moisture vapor retarder (as specified by Builder) beneath gypsum panels on warm side of all exterior walls, at conditioned spaces and as shown on Drawings.
  - C. Water-resistive barrier: Install code approved water-resistive barrier (as specified by Builder) over exterior wall sheathing of all exterior walls and as shown on Drawings.
  - D. Roofing shall be specified by Builder and as shown on Drawings.
  - E. Exterior wall covering:
    - E.1. Siding shall be specified by Builder and as shown on Drawings.
    - E.2. See Section IV, MASONRY for brick and stone veneer and manufactured stone and thin brick.
  - F. Flashing:
    - F.1. Provide and install appropriate sheet metal and membrane flashing at all locations as required to prevent penetration of water through the exterior shell of the building. Provide and install appropriate flashing as shown on the drawings and at the following specific locations:
      - F.1.1. Drip edge at all eaves and rake edges.
      - F.1.2. Roof/wall intersections.
      - F.1.3. Roof penetrations such as skylights, roof vents, flues, etc.
      - F.1.4. Roof crickets and saddles.
      - F.1.5. Door and window head trim.
      - F.1.6. Horizontal band boards.
      - F.1.7. Deck to house connections.
      - F.1.8. Masonry sills and caps.
      - F.1.9. Provide through-wall flashing and weeps at the base of masonry veneer and above masonry lintels.
    - F.2. Materials and installations shall comply with governing codes and with pertinent recommendations contained in the current edition of the "Architectural Sheet Metal Manual" published by SMACNA. All metal flashing shall be hot-dip galvanized iron complying with ASTM A653/A653M or other approved corrosion-resistant metal.
  - G. Provide gutters and downspouts as specified by Builder. Downspout and splash locations shall be determined by Contractor (and approved by Builder) so as to provide positive roof and site drainage.
  - H. Provide attic and roof ventilation as required by governing codes and as shown on Drawings. Provide appropriate soffit and roof vents as specified/approved by Builder.
  - I. Foundation water/moisture control:
    - I.1. Provide foundation drainage as specified by soils engineer and Builder.
    - I.2. Waterproof foundation walls at excavated basement areas (from footing to finish grade) with waterproofing compound as specified by Builder. Waterproofing shall be in compliance with code requirements.

## VIII. DOORS AND WINDOWS

- A. Doors:
  - A.1. Provide doors as follows and as specified by Builder:
    - A.1.1. Entry doors and sidelights: as specified by Builder.
    - A.1.2. House/Garage doors: Solid wood door not less than 1 3/8" thick; solid or honeycomb core steel door not less than 1 3/8" thick; or 20-minute fire-rated door. Door shall be self-closing.
    - A.1.3. Overhead Garage doors: as specified by Builder.
    - A.1.4. Patio doors (hinged): full glass as specified by Builder.
    - A.1.5. Sliding glass doors: as specified by Builder.
    - A.1.6. Interior doors: as specified by Builder.
  - A.2. Glazing in doors and sidelights shall be double-pane insulating glass.
  - A.3. Glazing in doors and sidelights shall be tempered glass as required by governing codes.

## B. Windows:

- B.1. Provide windows as specified by Builder:
  - B.1.1. Provide units of the size, style and quantity shown on Drawings.
  - B.1.2. Glazing shall be double-pane insulating glass.
  - B.1.3. Provide tempered glass in all windows meeting the requirements of governing codes.
- B.1.4. Provide and install all windows meeting the requirements of governing codes for "Window Fall Protection."
- B.1.5. Provide and install emergency escape and rescue windows meeting the requirements of governing codes.

## IX. FINISHES

- A. Gypsum Panels:
  - A.1. Gypsum panels, unless otherwise noted on the Drawings shall be provided as follows:
    - A.1.1. Exterior walls: 1-layer 1/2" regular panels to exterior face.
    - A.1.2. Interior partitions: 1-layer 1/2" regular panels each side.
    - A.1.3. Ceiling:
      - a) Supporting members greater than 16" o.c.: 1-layer 5/8" regular panels or 1-layer 1/2" "sag resistant" panels.
      - b) Supporting members 16" o.c. or less: 1-layer 1/2" regular panels.
    - A.1.4. Garage: Provide 1-layer 5/8" type "X" panels to entire garage ceiling and to garage face of all walls.
    - A.1.5. Baths: When gypsum board is used as a base for tile in non-wet areas or wall panels behind prefabricated tub and shower surrounds, water-resistant gypsum panels shall be used as a base as required by governing codes. See tile backer board below for tile in wet areas.
    - A.1.6. Common wall and common floor/ceiling between units: See Drawings for construction of assemblies.
  - A.2. Provide and install metal corner bead and trim as recommended by gypsum wallboard manufacturer.
  - A.3. Tape, float and sand joints and fasteners of gypsum wallboard with 3-coats of joint compound as required obtaining a uniformly smooth surface.
- B. Tile backer board: cement board or other approved tile backing material as specified by Builder shall be used as a base for tile in wet areas at tubs and showers.
- C. Finishes shown on Drawings shall be specified by Builder.

## X. SPECIALTIES

- D. Shower, tub and tub/shower enclosures shall be constructed of approved safety glazing as specified by Builder.
- E. Handrails and guards:
  - E.1. Porches, balconies or raised floor surfaces located more than 30 inches above the floor or grade below shall have guards not less than 36 inches in height. Open sides of stairs with a total rise of more than 30 inches above the floor or grade below shall have guards not less than 34 inches in height measured vertically from the nosing of the treads. Required guards on open sides of stairways, raised floor areas, balconies and porches shall have intermediate rails or ornamental closures that do not allow passage of a sphere 4 inches in diameter. The triangular openings formed by the riser, tread and bottom rail of a guard at the open side of a stairway are permitted to be of such a size that a sphere 4 inches cannot pass through.
  - E.2. Handrail assemblies and guards shall be able to resist the following loads:
    - a) 50 pounds per linear foot applied in any direction at the top and to transfer this load through the supports to the structure.
    - b) A single concentrated load of 200 pounds, applied in any direction at any point along the top, and have attachment devices and supporting structure to transfer this loading to appropriate structural elements of the building.
    - c) Intermediate rails (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 not to exceed 1 square foot including openings and space between rails.

## XI. EQUIPMENT

- A. None in this contract.

## XII. FURNISHINGS

- A. None in this contract.

## XIII. SPECIAL CONSTRUCTION

- A. Fire Suppression:
  - A.1. Provide automatic sprinkler system meeting the requirements of applicable codes: NFPA 13R.
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- D. Exhaust ventilation:
  - D.1. Dryer vent shall exhaust to exterior.
  - D.2. Range exhaust fan shall exhaust to exterior.
  - D.3. Mechanical exhaust ventilation where indicated in bathrooms, water closet compartments and laundry rooms shall exhaust to exterior and provide a minimum of 3 air changes per hour.
- E. Radon Mitigation: Install radon mitigation systems as required by applicable codes meeting the requirements of ASTM E1465 and E2121.

## XVI. ELECTRICAL

- A. Information and layouts shown on Architectural Drawings are only schematic in design, and shall be reviewed by contractors, suppliers and building officials for compliance with governing codes and good common construction practices:
  - B. Electrical: See electrical drawings by others.
  - C. Smoke detectors and carbon monoxide detectors.
    - C.1. Provide and install certified smoke detectors, carbon monoxide detectors and combination smoke / carbon monoxide detectors meeting the requirements of all governing codes.
    - C.2. All detectors shall be interconnected, 110 volt powered, equipped with a battery backup and sound an alarm audible in all sleeping areas.
    - C.3. Smoke detectors shall be installed on each floor level in each bedroom in the immediate vicinity outside of the bedrooms; and as shown on the Drawings.
    - C.4. Carbon monoxide detectors shall be installed in the immediate vicinity outside of the bedrooms and as shown on the Drawings.
    - C.5. Combination smoke / carbon monoxide detectors may be installed in lieu of separate detectors.
  - D. Recessed incandescent light fixtures located in insulated areas shall be approved for zero-clearance insulation cover (IC).

PROJECT INFORMATION		
PROJECT NAME	BRANDON ESTATES	
PROJECT LOCATION	NW SUNRISE DRIVE, WAUKEE, IOWA	
PROJECT JURISDICTION	CITY OF WAUKEE, IOWA	
APPLICABLE CODES	2018 ICC INTERNATIONAL BUILDING CODE 2018 ICC INTERNATIONAL MECHANICAL CODE 2018 IAPMO UNIFORM PLUMBING CODE 2020 NFPA NATIONAL ELECTRICAL CODE 2012 ICC INTERNATIONAL ENERGY CONSERVATION CODE	
ACCESSIBILITY SAFE HARBOR	2018 ICC INTERNATIONAL BUILDING CODE ICC A117.1-2009	
PROJECT DESCRIPTION	TWO-STORY FLATS AND TOWNHOMES	
OCCUPANCY CLASSIFICATION	RESIDENTIAL GROUP R2 (R10.3)	
CONSTRUCTION TYPE	TYPE VA (602.5)	
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	ALLOWED	ACTUAL (WORST CASE)
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NUMBER OF STORIES (TABLE 504.4)	3 STORIES	2 STORIES
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PRIMARY STRUCTURAL FRAME INCLUDING COLUMNS, GIRDERS & TRUSSES		1 HOUR
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EXTERIOR BEARING WALLS (705.5)		1 HOUR (INSIDE ONLY)
INTERIOR BEARING WALLS		1 HOUR
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EXTERIOR NONBEARING WALLS (TABLE 602)		
LESS THAN 5 FEET		1 HOUR (BOTH SIDES)
5 FEET TO LESS THAN 10 FEET		1 HOUR (BOTH SIDES)
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LESS THAN 3 FEET	NOT PERMITTED	NOT PERMITTED
3 FEET TO LESS THAN 5 FEET	NOT PERMITTED	15%
5 FEET TO LESS THAN 10 FEET	10%	25%
10 FEET TO LESS THAN 15 FEET	15%	45%
15 FEET TO LESS THAN 20 FEET	25%	75%
20 FEET TO LESS THAN 25 FEET	45%	NO LIMIT
25 FEET TO LESS THAN 30 FEET	70%	NO LIMIT
30 FEET OR GREATER	NO LIMIT	NO LIMIT
DRAFT STOPPING IN ATTICS (718.4)		
*PROVIDE DRAFT STOPPING TO SUBDIVIDE ATTIC SUCH THAT THE HORIZONTAL AREA DOES NOT EXCEED 3,000 SQUARE FEET*		



Front Elevation & Rear Elevation



Left & Right Elevation

## ABBREVIATIONS

PLAN	
1R/1S	1 ROD AND 1 SHELF
2R/1S	2 RODS AND 1 SHELF
C	CENTERLINE
CLG	CEILING
CONC	CONCRETE
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A.E1.3	Building Elevations
A.U1	Unit Plans
A.U2	Unit Plans (mirror)
A.D1	Building Details
S.X	Structural Sheets

SQUARE FOOT CALCULATIONS						
END UNIT B	FINISHED	UNFINISHED	GARAGE	FRONT COVERED	REAR COVERED	TOTAL SPRINKLER
UPPER FLOOR	895	39	--	--	--	934
MAIN FLOOR	704	--	395	24	103	1,226
TOTAL	1,599	39	395	24	103	2,160
FLAT B						
MAIN FLOOR	1,219	28	--	96	--	1,247
TOTAL	1,219	28	--	96	--	1,247
BUILDING						
(4) END UNIT B UNITS						8,640
(16) FLAT B UNITS						19,952
COMMON AREA						1,168
TOTAL						30,760

Bid Set 3-8-23 -- NOT FOR CONSTRUCTION