

Exhibit B: Specifications  
Project: Villas of Rivers Ridge  
Date: 9-16-2020

# SPECIFICATIONS:

**PROJECT:**           **Villas of Rivers Ridge**  
**66 Unit**  
**Townhome Apartment Building**  
**Red Wing, MN 55066**

**ARCHITECT:**       **COLE GROUP ARCHITECTS LLC.**  
**216 PARK AVE S, SUITE 102**  
**ST. CLOUD, MN 56301**  
**(320) 654-6570**  
**NORM COLE ARCHITECT NORM@COLEARCH.NET**  
**MARK BEATTIE MARK@COLEARCH.NET**

**STRUCTURAL ENGINEER:**  
**Larson Engineering**  
**3524 Labore Road**  
**White Bear Lake, MN 55110**  
**(651) 481-9120**  
**Catherine Kray**

**OWNER**               **Keller-Baartman Properties V, LLC**  
**P.O. BOX 31**  
**RED WING, MN 55066**  
**(651) 301-5103**  
**ANDY BAARTMAN**  
**andy@kbproperties.org**

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## **DIVISION A - BID REQUIREMENTS, CONTRACT FORMS & CONDITIONS OF CONTRACT**

### **1.0 DESIGN BUILD BIDS:**

The following subcontractors shall submit Design-Build Bids with designs by registered Engineers where applicable:

- A. HVAC System
- B. Plumbing Construction
- C. Electrical Construction
- D. Mechanical Construction
- E. Roof Truss System
- F. Fire Sprinkler System
- G. Underground Sprinkling BY OWNER
- H. Low Voltage BY OWNER
- I. Landscaping BY OWNER

**2.0 BID CONDITIONS**      Refer to General Contractor

**3.0 BID FORM:**              Refer to General Contractor

**4.0 BID DUE DATE:**        Verify with General Contractor.

**5.0 VISITATION OF SITE:**      It shall be each applicable subcontractor's responsibility to visit the site and familiarize himself with the existing conditions before attempting to formulate a bid.

**6.0 SCHEDULE:**      Refer to General Contractor.      66 Unit to commence construction October 2020.

### **7.0 ALTERNATE BIDS:**

## **DIVISION B - CONTRACT FORMS**

**1.0 All contracts to be modified AIA type to be provided by General Contractor.**

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**DIVISION C - CONTRACT CONDITIONS**

**1.0 INTENT:** These Specifications, together with the Drawings and all other documents of the Contract, are intended to provide for all labor and materials required for the complete furnishing and installation of all various trades for the project named on the title sheet and as hereinafter described in the Specifications and/or shown on the Drawings.

**1.1 PERMITS AND INSPECTIONS:** The OWNER shall secure the general building permit. Each Subcontractor shall, as part of his work, secure and pay for any other permits required for his work and shall arrange for all requisite inspections and shall pay all fees and expenses in connection therewith. Upon completion of the work and prior to final payment, each Subcontractor shall furnish to the General Contractor all inspection certificates customarily issued in connection with the classes of work involved.

**1.2 ORDINANCES AND CODES:** All work shall be executed and inspected in accordance with all Federal, State, and local rules and regulations and all established codes and ordinances applicable thereto in effect on the date of final completion and shall conform in all respects to the requirements of all competent authorities having jurisdiction thereover.

Should any change in the Drawings and Specifications be required to comply with local regulations, the Subcontractor shall notify the General Contractor at the time of submitting his bid.

After entering into contract, the Subcontractor shall be held to complete all work necessary to meet the local requirements without extra expense to the General Contractor.

Where the work required by the Drawings and Specifications is above the standard required by code, it shall be done in accordance with the Contract Drawings and/or Specifications.

Any violation of State or Federal Safety Laws by a Contractor, Subcontractor or Material supplier resulting in a fine to the General Contractor or Owner, shall be the responsibility of said Subcontractor, Contractor or Material supplier and such costs will be deducted from their contract sums due. Any such violations will be immediately corrected by the responsible party at their cost. This area has been designated by OSHA as a hard hat area.

**1.3 DRAWINGS AND MEASUREMENTS:** The General Contractor shall furnish sufficient working drawings, within reasonable limits, for each Subcontractor to properly perform his work. The Drawings are not intended to be scaled for roughing-in measurements, nor to serve as shop details. Where detail drawings with field measurements are required for these purposes, they shall

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be prepared by the individual Subcontractor requiring same. Field measurements necessary for the fabrication of materials and fitting the installation to the building construction shall be made by the Subcontractor, and he shall be responsible for the accuracy of all measurements and job conditions.

Each Subcontractor shall review and become familiar with the Drawings and Specifications of all other trades and shall include in his proposal all fees and costs necessary to fit his work into the structure. Extra compensation shall not be allowed for extra materials and labor required due to the lack of familiarity with the Drawings and Specifications for the work of other trades. In addition, it is the responsibility of each Subcontractor to thoroughly examine the Drawings and Specifications governing his work. Any inconsistencies, omissions, errors, or ambiguities shall be brought to the General Contractor's attention for clarification prior to awarding of subcontracts.

**1.4 QUALITY OF MATERIALS AND WORKMANSHIP:** All materials and workmanship shall be consistent with the best practice of the various building trades and shall conform to the standards of good construction for this class of work. When the description of apparatus, materials, equipment, workmanship, etc., is given in these Specifications or the requirements thereof are understood to apply equally to all like systems, apparatus, materials, equipment, workmanship, etc., which are required by the work contemplated by these Specifications. In all cases where the choice of more than one make or type of article or materials is specified, or where the Specifications call for a stipulated item "or accepted equal" or other words to that effect, the acceptance of the "equal" shall rest with the General Contractor. Prices based upon the use of materials other than those specified will be considered but must be submitted as alternates to the base bid. The mention of any particular manufacturer in these Specifications does not necessarily indicate a preference thereof unless specifically stated. Each proposal which includes such alternative equipment must be accompanied by a description of the apparatus the bidder proposes to furnish, together with such drawings, cuts, and/or other pertinent characteristic of the apparatus. All materials and workmanship used in this work shall conform to the latest Standard Specifications of the American Society for Testing and Materials; the American Concrete Institute, the American Institute of Steel Construction; American Welding Society; American Society of Mechanical Engineers; American Society of Heating, Refrigerating, and Air Conditioning Engineers; National Electric Code; N.E.M.A.; American Institute of Electrical Engineers; and the rules and regulations of the National Board of Fire Underwriters.

**1.5 CHARACTER OF WORK:** The installation shall be so made that it functions together with several component parts of the structure as a workable system. It shall be complete with all

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accessories necessary for its operation and shall be left with all equipment properly adjusted and in working order. The work of installation shall be executed in conformity with the best practice so as to contribute to efficiency of operation, minimum maintenance, accessibility, and sightliness. It shall also be so executed that the installation shall conform and accommodate itself to the building structure, its equipment, and its usage.

To accomplish this result, each Subcontractor shall at all times consult the architectural and engineering drawings covering the various other trades, the field layouts of the Subcontractors for these trades and their shop drawings. He shall be governed accordingly in laying out his work. Access to these plans, layouts and drawings can be had in the field by applying to the General Contractor.

**1.6 SUPERVISION:** Each Subcontractor shall have his working forces under the direction of experienced and competent supervision at all times.

**1.7 PAYMENTS TO SUBCONTRACTORS:** Invoices covering work performed during the preceding months shall reach the General Contractor by the first of the month, and payment shall then be made within twenty-five (25) in an amount equal to ninety-five percent (95%) of the value of the work performed. Payment shall be made only upon the presentation of proper waivers of lien and sworn statements. The remaining five percent (5%) shall be paid upon completion and acceptance of the project by the General Contractor and the Owner or his representative and upon presentation of complete waivers required. It is further mutually agreed between the parties thereto that no certificate given or payments made under this contract, either wholly or in part, and that no payment shall be construed to be acceptance of defective work or improper materials.

**1.8 TIME OF COMPLETION:** Before starting any work, each Subcontractor shall obtain from the General Contractor a schedule of operations outlining their proposed order of procedure and giving the dates upon which it is proposed to engage upon the various successive steps of the work and the estimated time required for the completion of each phase. This schedule shall be reviewed by the Subcontractor before commencing the operation. After review of the schedule by the Subcontractor, they shall order their work in accordance therewith, and shall not delay therefrom without written consent from the General Contractor.

Time is the essence of this Contract. The installation of the materials or the work to be performed shall be done when and as required to meet job progress requirements, or as directed by the General Contractor. If the materials herein called for are not delivered promptly, thereby causing or

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threatening to cause, delay in the general progress of the work, the General Contractor shall have the right to investigate the cause of said delay expedite deliveries, and all expenses thus incurred by the General Contractor shall be charged to and paid by the said Subcontractor.

**1.9 GUARANTEE:** Each Subcontractor shall guarantee, in writing, on a form accepted by the General Contractor, all work under this Agreement, against defective workmanship and materials for a period as specified but in no case less than one (1) year from the date of completion and acceptance of the work called for herein. Upon written notice from the General Contractor to the Subcontractor of any such defect, the Subcontractor shall either make the necessary repairs, or in the event of failure to do so promptly, the General Contractor shall make such repairs at the Subcontractor's expense. Any warranty repairs shall warranty additionally.

**1.10 CHANGE ORDERS:** The Owner may, prior to the completion of the work specified herein, order, in writing, changes in the said work or additional work of a similar kind. No payment will be made for extra work unless accepted in writing by the General Contractor. Before any accepted work is performed, the Subcontractor shall submit a cost breakdown for materials and labor for the extra work. Any changes made or extra work done without acceptance of the General Contractor in writing will be done at the Subcontractor's own expense.

**1.11 CLEANING UP:** Each Subcontractor shall at all times keep the premises reasonably free from waste materials or rubbish caused by its employees or work and, upon completion of the work, the Subcontractor shall leave the premises in a clean and workmanlike condition at the end of each workday. If this provision is not complied with promptly, the General Contractor, upon notification to the Subcontractor, shall perform the necessary cleaning at the Subcontractor's expense. **ALL LIFTS, FUEL AND DUMPSTERS TO BE SUPPLIED BY OWNER. EXCEPTION CARPENTRY FRAMER WILL SUPPLY LIFT AND CRANE FOR THEIR SCOPE OF WORK.**

**1.12 SHOP DRAWINGS AND SAMPLES:** It is understood and agreed that the Subcontractor shall submit shop and erection drawings, and cut sheets, in triplicate, for the Owners and General Contractor's acceptance. Furnish sufficient quantity of accepted prints to meet job requirements and furnish samples of materials for the General Contractor's acceptance. The Subcontractor shall submit for acceptance a list of all materials and manufactured items before proceeding with their use or installation.

Neither the receipt nor the review of such drawings by the General Contractor or Architect shall relieve the Subcontractor of errors or omissions which may occur, even though work is done in

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accordance with such drawings. Where such errors or omissions are discovered later, they shall be made good by the Subcontractor irrespective of the receipt and review of the drawings by the General Contractor or Architect.

1.13 TESTS: Where required by the Specifications or in writing by the General Contractor, the Subcontractor shall schedule such tests as may be necessary to show that the requirements of the Specifications have been fulfilled. All tests shall be made under the supervision and direction of the General Contractor. The Subcontractor shall provide all required materials, labor, and apparatus, etc., or shall, if so directed, engage an accepted testing laboratory for making same. Any work found defective shall be removed, replaced, and retested until satisfactory to the General Contractor, all at the Subcontractor's expense. Upon completion of the work, the Subcontractor shall furnish operating and maintenance instruction manuals to the Owner for the various systems installed by the Subcontractor.

#### **DIVISION 0100 - GENERAL REQUIREMENTS**

1.0 Work Schedule: The G.C. shall commence work within the shortest time possible after receipt of executed copy of contract, and complete same within the schedule formulated by the Owner. Substantial completion shall mean when entire project, or designated portions thereof, are ready for occupancy and "Occupancy Permits" have been issued by governing officials. Where words, "Substantial Completion" or "Completed" are used, they shall mean that all areas are finished and ready for full use by the Owner in manner intended without significant inconvenience or discomfort to the Owner and when all work, materials and equipment are installed and in operating condition and spaces have been generally painted throughout or otherwise finished; exterior painting essentially Finished; caulking done, masonry cleaned; heating, ventilating and electrical systems are available and properly controlled; sitework is finished and when other work is generally complete. Installation of minor items, minor sitework, minor interior or exterior painting, corrective work, replacement of defective work or minor adjustment of control apparatus will not delay determination of project as "Substantially Complete".

1.1 Construction Permits: The Owner shall arrange for and pay for the General Construction Permit and all city related fees and charges and all utility company fees and charges.

The Design -Build Contractors shall obtain and pay for any permits required for their work.

1.2 Codes:

- A. 2018 I.R.C. with 2020 Minnesota Amendments, and other related codes.
- B. Section R300 Classification IRC-3 Townhouse (table 300.1)
- C. Section R302 – Fire Resistant Construction
- D. Section R306 – Sanitation
- E. Section R311 – Means of Egress
- F. Section R313 – Automatic Fire Sprinkler Systems NFPA 13D
- G. Section R320 – Accessibility
- H. Section 2020MN Residential Energy Code (Prescriptive Code – Table R402.1) Zone 6
- I. Recycling Space (MN Administrative Rules 1303.1500)

**1.3 SHOP DRAWINGS, CATALOG CUTS, AND BROCHURES:** Unless otherwise specifically directed by the General Contractor, make all Shop Drawings accurately to a scale sufficiently large to show all pertinent features of the item and its method of connection to the work. Make all Shop Drawing prints in blue or black line on white background and sepia reproducible prints. (three (3) blue or black line prints per submittal.) Catalog cuts shall be clear, crisp copies with surfaces suitable for marking and space for review stamp.

**1.4 COLORS AND PATTERNS:** Unless the precise color and pattern is specifically described in the contract documents, whenever a choice of color or pattern is available in a specified product, submit accurate color charts and pattern charts to the General Contractor for his review and selection unless specifically directed otherwise. Indicate any variations in cost of capabilities among various colors or patterns if such variations exist.

#### **DIVISION 0150 - TESTING LABORATORY SERVICES**

**1.1 Work included:** During progress of the Work, The Owner shall perform or have performed the testing required to determine that materials provided for the Work meet the specified requirements; such testing includes, but is not necessarily limited to: (1) soil compaction; (2) cast-in-place concrete; (3) structural or special inspections as required by City.

**1.2 RELATED WORK DESCRIBED ELSEWHERE:** Requirements for testing may be described in various Sections. Where no testing requirements are described but the General Contractor decides that testing is required, the General Contractor may require testing to be performed under current pertinent standards for testing at his own expense.

**1.3 QUALITY ASSURANCE:**

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**Qualifications of testing laboratory:** The testing laboratory will be selected by the Owner and be qualified to the General Contractor's acceptance in accordance with ASTM E-329-70

"Recommended Practice for Inspection and Testing Agencies for Concrete and Steel Used in Construction".

**Codes and standards:** Testing, when required, will be in accordance with all pertinent codes and regulations and with selected standards of the American Society for Testing and Materials.

#### **1.4 TESTS REQUIRED: Refer to Structural drawings for design standard**

##### **Soil Compaction:**

**Footings:** One compaction test for every 30 lineal feet of footing. **Floor slabs on grade:** One set of two (2) compaction tests for each pour of floor area.

**Concrete walks and steps:** One set of six (6) compaction tests in areas of new concrete walks and drives as directed or required by the General Contractor.

**Bituminous paving:** none

##### **STANDARD PROCTOR.**

**Concrete:** Make a minimum of three standard 6"x12" cylinders from each 50 cubic yards of concrete.

-Test one cylinder at 7 days and one at 28 days.

-Take a minimum of two sets of samples from each type of concrete.

**Slump test:** For each 50 yards or fraction thereof.

#### **1.5 PAYMENT FOR TESTING SERVICES: BY OWNER**

**Initial services:** The Owner will pay for testing services required by the Contract Documents.

**Retesting:** When initial tests indicate non-compliance with the Contract Documents, all subsequent retesting occasioned by the non-compliance shall be performed by the same testing laboratory and the costs thereof will be deducted by the General Contractor from the Contract Sum or paid by the subcontractor.

**1.6 CODE COMPLIANCE TESTING:** Inspections and tests required by codes or ordinances, by a plan accepted authority, and made by a legally constituted authority, shall be the responsibility of and shall be paid for by each Subcontractor, unless otherwise provided in the Contract Documents.

**1.7 CONTRACTOR'S CONVENIENCE TESTING:** Inspection or testing performed exclusively for the

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Contractor's convenience shall be the sole responsibility of each Contractor.

**1.8 PREPARATION:** Have all required equipment and personnel available to take samples and perform tests as required to conform with these specifications.

**1.9 REPORTS:** The Owner to Forward two copies of the results of each test to the General Contractor and Architect as soon as they are available.

#### **DIVISION 0200 - SITEWORK BY OWNER**

**2.0 Earthwork:** OWNER shall perform erosion control, demolition, clear strip, excavate, backfill, perform subsurface soil correction, and rough and fine grade to the elevations required to develop the facility as shown on the accompanying drawings. Soils investigation reports shall be obtained for the specific site and all grading work shall be based on this information.

**2.1 Erosion Control and SWPPP maintenance from start of project through closing BY OWNER.** Excavating Contractor shall obtain a copy of the Drainage Plan for the project and a copy of the City erosion control ordinance or codes prior to bidding, and shall meet all requirements thereof during construction. Provide this as a separate bid.

**2.2 Backfilling & Compaction:** BY OWNER Suitable materials for fill include: Earth, stone, gravel or other material (free of debris, roots organic matter and frozen matter). Unsuitable materials for fill include: materials containing large stones, extremely wet or frozen materials, and materials unsuitable for stable sub-grade. Compaction in all areas shall be made in lifts not to exceed 12 inches. Reapply 3 to 4 inches minimum of black dirt top soil over areas to receive grass.

**2.3 Site Utilities:** BY OWNER shall coordinate the service entrances with the telephone, gas, electric and internet utility companies. Owner shall pay any service charges from the serving utilities.

Contractor shall interface his work with the gas and electric utility work to provide complete and operable systems. The materials and workmanship for utility work shall conform to the standards of the various utilities.

**2.4 Parking Stripes:** BY OWNER All bituminous pavements shall be striped to indicate parking stalls, median lines, traffic control features, and handicapped parking locations. Striping shall be 4" wide, typical.

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**2.5 Concrete Walks and Drives:** Performed by General Contractor. All exterior concrete work shall be constructed from a 3,500 psi 3 1/2 " max. slump, air entrained 3% to 5% by volume, 3/4" max. aggregate. All work shall be properly jointed for thermal movements in not less than 20 foot intervals and where walks change direction, shall be unreinforced, and shall be placed on properly compacted material. Concrete sidewalks are to be broom finished unless noted otherwise.  
**REMOVAL AND REPLACEMENT OF CURBS IF NEEDED BY OWNER. REMOVAL AND REPLACEMENT OF ANY CITY SIDEWALKS IF NEEDED BY OWNER.**

**2.6 Landscaping & Irrigation: BY OWNER.**

**DIVISION 0300 - CONCRETE**

REFER TO ADDITIONAL SPECS BY STRUCTURAL ENGINEER. STRUCTURAL DRAWING SPECIFICATIONS TAKE PRECEDENCE TO FOLLOWING LISTED SPECIFICATIONS

Perform work in accordance with the standards of the American Concrete Institute.3.1 Concrete materials to conform to Structural Drawings .

**3.2 Foundations - Concrete:** Per Structural Drawings..

**3.3 Reinforcing Steel:** 60 ksi yield grade, deformed billet steel bars Per structural Drawings .

**3.4 Floors - Concrete:** Interior slabs on grade shall have a minimum compressive strength Per Structural Drawings All building floor slabs shall be troweled smooth and level (not more than 1/4" variance over 10 feet).

**3.5 Floors - Saw Cutting:** Saw cut into areas as shown on drawings or not to exceed 500 s.f. maximum.

**3.6 Welded Wire Fabric:** Per Structural Drawings

**3.7** Follow approved cold and warm weather precautions when applicable.

**3.8 Lightweight Concrete Underlayment:** NONE

**3.9** Provide sleeves in footings for plumbing as required.

**3.10** Vapor barrier shall be 6 mil poly.

**3.11** Precast concrete columns, beams, and hollow core plank: NONE

**DIVISION 0400 - MASONRY**

**4.0 Masonry General:** Reinforcement as shown on Structural Drawings. Provide heating and protection of exterior masonry in cold weather.

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- 4.1 **Concrete Block:** ASTM C-90-70. Grade N, normal weight. Prism strength (fm=1500 psi).
- 4.2 **Mortar:** Type N mortar above grade. Type S for below grade and exterior masonry. Type PL for reinforced masonry.
- 4.3 **Concrete Fill:** Per Structural Drawings Fill all bond beams and block cores indicated on the drawings. Max aggregate shall be 3/8 inch.
- 4.4 Follow approved cold and warm weather precautions when applicable.
- 4.5 Lay masonry in running bond.
- 4.6 **Masonry grade at elevator pit.** NONE
- 4.7 **Steel Lintels:** Provide steel angle lintels at openings.
- 4.8 **Face Brick Veneer:** NONE
  - A.
- 4.9 **Control and Expansion Joints:** Gaskets shall be closed-cell neoprene sponge strip "Weather R" as manufactured by Williams Products Co. and shall be located wherever exterior concrete slabs abut foundations and as designated by General Contractor
- 4.10 **Rigid Insulation:** Cavity wall foundation insulation. Styrofoam SB or Certifoam. Supplied and installed BY OWNER
- 4.11 **Cultured Stone:** BY OWNER all materials, labor, including all accessories, wall drainage assembly, caulking and flashing.

**DIVISION 0500 - METALS**

**REFER TO ADDITIONAL SPECS BY STRUCTURAL ENGINEER**

- 5.0 **Structural and Miscellaneous Steel:** A36 minimum.
- 5.1 No metal hand rails
- 5.2 Fabricated aluminum balconies.
- 5.3 Railing above retaining walls to be 42" high spindle powder coated.
- 5.4 Gazebo NONE

**DIVISION 0600 - WOOD & PLASTICS**

**6.0 Framing Materials, grade stamped in accordance with PS 20-70.**

- A. All lumber 2" and less in thickness to be seasoned to a moisture content of 19% or less with S-DRY on grade stamp.
- B. 2x2 through 4x6 Framing: Standard and better or stud grade, any commercial softwood species. Stud grade 10' maximum length.
- C. 2x7 and wider, 2" to 4" thickness: No. 2 and better, Fb Minimum = 1,000 psi single member stress, E Minimum = 1,400,000 psi.
- D. Framing in contact with concrete floor slab or masonry to be treated.
- E. MICRO=LAM Beams: By Trus Joist Corporation. Fb = 2,500 psi, E = 2,000,000 psi. Glue shall meet wet service conditions. Appearance: industrial grade, surfaces not sealed except ends.
- F. Provide sill sealer, glass fiber blanket, 2 " thick by width of stud plate or other plates where exterior wood framing abuts masonry or concrete.
- G. Vapor Barrier: 4 mil poly.
- H. Wood Base and Trim: Prefinished, shall be Poplar Stained Same as Park Place Apartments  
VERIFY WITH GENERAL CONTRACTOR.
- I. Prefinished sills; Cultured marble with drywall jambs.
- J. Soffit Vents: Aluminum vented soffit panel. All vent panels must be mechanically fastened. All fascia must be fastened per manufactures specifications for high wind locations.
- K. Roof Ventilation: Shingle over continuous ridge vent. Any roof vents must match shingle color.
- L. Provide solid 2x blocking for all items requiring same and to cut off all concealed draft openings both vertical and horizontal between ceiling, floor, and attic areas. At windows provide blocking for drapery tracks.
- M. Fire blocks, when wood, shall be two inches (nominal) in thickness by the full width of the opening being blocked.
- N. Carefully select all members; select individual pieces so that knots and obvious defects will not interfere with placing bolts or proper nailing or making proper connections.
- O. Cut out and discard all defects which will render a piece unable to serve its intended

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function; lumber may be rejected by the Architect, whether or not it has been installed, for excessive warp, twist, bow, crook, mildew, fungus, or mold, as well as for improper cutting and fitting.

P. Do not shim sills, joists, short studs, trimmers, headers, lintels, or other framing components.

6.1 Sheathing: Grade stamped for span & loading. Install w/grain perpendicular to framing members & cross joints staggered.

- A. Roof Sheathing: 15/32" OSB.
- B. Exterior Wall Sheathing: 7/16" OSB and fire rated sheathing locations per structural drawings. Fastening per structural drawings.
- C. Attic Draft Stop: per architectural and structural drawings
- D. Floor sheathing: 3/4" OSB.

6.2 Roof Truss System:

- A. Truss supplier shall submit Shop Drawings to the Architect for approval prior to fabrication. These drawings to show all steps for design, calculation, stresses, species of lumber, and methods of connections. All truss engineered drawings shall be certified by a registered engineer licensed in the State of MN.
- B. Shop Drawings shall also include framing plan with maximum spacing of 24" on center exact dimension of trusses, position of all steel connecting plates and location of permanent bracing and bridging.
- C. All trusses shall be secured to wood bearing with Teco-O "Trip-L-Grip" anchors unless noted otherwise.
- D. Erect trusses with proper handling, safety precautions and temporary bracing to prevent toppling or dominoing of the trusses during erection. During entire construction period, provide for adequate distribution of concentrated loads to prevent exceeding the carrying capacity of any one truss. Install proper erection bracing to hold trusses true and plumb and in safe condition until permanent trusses, bracing and bridging is properly installed. Do not install roof sheathing or superimpose any loads until trusses are permanently installed and braced.

6.3 Miscellaneous:

- A. Structural Clips: Simpson, Teco, or equal, see drawings or as required

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- B. Ply Clips: Extruded 6063- T6 aluminum alloy at roof sheathing.
- C. Building Paper: Type C or better. Lap over flashing, wrap window openings, strip seal joints.
- D. Plastic liner: 4 ml poly.
- E. Provide let in metal bracing. Simpson CBW at each corner and each level.

**6.4 Cabinet Work:** Submit complete description with bid. Cabinets shall be Rustic Alder slab MDF Core design with 2" overlay reverse bevel style doors and drawers. Door fronts and drawer fronts must be 3/4" thick. Provide handicap face frame inserts for kitchen cabinets. Building and installing custom modular cabinets with the following specification:

**Cabinet Frames material:** Rustic Alder

**Upper Door Style:** Shaker

**Base Door Style:** Shaker

**Cabinet Material:** 1/2" White Thermofused Melamine

**Finished Ends Material:** Maple Veneer

**Shelving Material:** 3/4" White Thermofused Melamine Edge Taped

**Hinges:** Concealed and Self-closing, Screws MUST be of sufficient length to hold hinges securely. Must be longer than at Rivers Ridge Apartments Red Wing.

**Crown Molding:** Rustic Alder 1 3/4"

**Hardware Allowance:** BY OWNER MATERIALS AND INSTALLATION LABOR. Cabinet subcontractor to drill holes.

**Kitchen Countertop:** Imported Granite 3CM with under-mount sink.

**Vanity Top:** Imported Granite with Under-mount Bowl: White

**Provide ADA cabinet inserts at applicable handicap adaptable units. ?**

All cabinet exteriors will be clear coat finish. Labor and material is included to assemble, deliver and install the cabinets and countertops.

**6.5 Maple Trim:** None

**6.6 Exterior Siding and Trim:** refer to G.C. for style and color.

- A. 8" and 4" Prefinished vinyl siding as shown on drawings. Certainteed Monogram
- B. Cedar Impressions Vinyl Shakes
- C. Exterior Trim: Versatex White

**6.7 Clean up:**

- A. **General:** Keep premises in a neat, safe, and orderly condition at all times during execution of this portion of the work, free from accumulation of sawdust, cut ends, and debris.
- B. **Sweeping:**
  - 1. At the end of each working day, or more often if necessary, thoroughly sweep all surfaces where refuse from this portion of the work has settled.
  - 2. Remove the refuse to the area of the job site set aside for trash.
  - 3. Upon completion of this portion of the work, thoroughly broom clean all surfaces.
- C. Building and apartments to be delivered clean and ready for occupancy.

**DIVISION 0700 - THERMAL / MOISTURE PROTECTION**

**7.0 Foundation Insulation:** Provide 2.0" rigid extruded polystyrene insulation as shown on drawings. **BY OWNER MATERIALS AND LABOR**

**7.1 Insulation: BY OWNER MATERIALS AND LABOR**

- A. **Batts:** Friction fit, R as shown on drawings. Faced where noted. **NOTE ALL INTERIOR WALLS TO HAVE SOUND BATTS INSTALLED.**
- B. **Blown:** Fiberglass or mineral wool (cellulose not permitted), R as shown on drawings.
- C. **Rigid:** Styrofoam SB or Certifoam below grade, Thermax above grade.

**7.2 Sealants: BY OWNER** Interior and exterior exposure beads to be WEATHER MASTER at all dissimilar materials. Any interior caulking to be paint ready. Caulking exterior of buildings. **BY OWNER MATERIALS AND LABOR**

**7.3 Roofing: BY CONTRACTOR**

- A. **Asphalt Shingles,** Tamko HD shingles, 30-year warranty. Installed per manufacturer's specifications for high wind 6 nails per shingle.
- B. **Underlayment:** Synthetic felt or GAF underlayment felt.
- C. One layer of No. 40 coated glass base sheet or commercial membrane product such as "Weather Watch" by GAF shall be applied from the eaves to a line 5 row up from roof edge.
- D. **Prefinished metal drip edge.**
- E. **Provide flashing as required.**
- F. **Weather Watch all valleys 48" each way.**

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**7.4 Damp proofing: BY OWNER MATERIALS AND LABOR**

- A. Waterproof elevator pit. None
- B. Remove projections from surfaces to be damp proofed and fill cracks, holes and joints with a stiff Portland cement mortar as necessary.
- C. Foundation waterproofing:

**7.5 Fascia & Soffit: BY CONTRACTOR Prefinished metal panels vented, complete with all trim. All fastened for high wind conditions.**

**DIVISION 0800 - DOORS AND WINDOWS**

**8.0 REFER To Door Schedule**

**8.1 Windows: Thermo-Tech, Single hung, size as shown on drawings, with screens. Patio doors to be Slim Line Series.**

**8.2 Hardware**

A. Apartment Unit Entry Doors (Hardware Set 02) Each assembly to have:

- 2 EA Spring hinge 1256 4.5x4.5, 26D, HAG
- 1 EA Hinge BB1279 4.5x4.5, 26D, HAG
- 1 EA B60N deadbolt
- 1 EA Passage set F10CF ELA 10-001, 626, SCH
- 1 EA Wall stop 236W, 32D, HAG
- 1 Set Smoke gasket F798B 1/36" 17', BLK, REE
- 1 EA Door sweep 377C 36", AL, REE
- 1 EA Threshold S424A 36" 10-24 MSA, AL, REE
- 1 EA Viewer 698, 626, IVE

B. Service Equipment Doors (Hardware Set 03) Each assembly to have:

- 3 EA Hinge BB1279, 4.5 x 4.5, 26D, HAG
- 1 EA AL8OPD
- 1 EA Surface closer 1371, 689, LCN
- 1 EA Wall stop 236W, 32D, HAG
- 1 Set Smoke gasket F798B 1/36" 2/84", BLK, REE

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- C. Unit Storage Closet/Laundry Room (Hardware Set 07.1) Each assembly to have:
  - 1 EA Passage set F10 ELA, 626, SCH
  - 1 EA Door stop O60, 645, IVE
  - Hinges by prehung door supplier.
- D. Unit Bedroom & Bathroom (Hardware Set 08) Each assembly to have:
  - 1 EA Privacy set F40 ELA, 626, SCH
  - 1 EA Door stop O60, 645, IVE
  - Hinges by prehung door supplier.

**DIVISION 0900 - FINISHES BY OWNER**

- 9.0 Gypsum Board: Material - United States Gypsum Co. (USG) or approved equal.
  - A. 5/8" Gypsum Board: 5/8" Fire Code Type "X" panels, tapered edges, except provide water resistant sheetrock at all tubs, vanities, and shower enclosures.
  - B. Adhesive: Dura Bond 200 or 400.
  - C. Joint Compound: USG Joint Compound (taping, topping, multi-purpose).
  - D. Fasteners: As required and per USG.
  - E. Plastic Trim: L bead with pull tab at junction with all dissimilar materials.
  - F. Corner Bead: Durabead.
  - G. Sealant: USG acoustical sealant.
  - H. Drywall jambs at all windows with cultured marble sills.
  - I. Installation Standards: GA 216, and ASTM C754.
  - J. Ceiling texture: Knock down.
  - K. Wall texture: Orange Peel.
  - L. All public areas ceiling texture on First Floor: Knock down.
  - M. Install window jamb acceptor or install shims for drywall jambs materials and labor.

**9.1 Laminate Vinyl (S.V.): BY OWNER**

**9.2 Common Area Tile: NONE**

**9.3 Common Area Carpet: NONE**

**9.3 Carpet: BY OWNER**

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**9.4 Painting: BY OWNER**

- A. Products: Benjamin Moore, or approved equal; unless noted.
- B. Interior Unfinished Millwork and Doors: One (1) coat Benwood Architectural Penetrating stain, two (2) coats VaquaKleer Satin finish.
- C. Gypsum Board Ceilings: Spray Texture. Knock down or lite orange peel Two coats
- D. Gypsum Board Walls: Two coats CHB.
- E. 50% of units to be stained trim and stained cabinets.
- F. 50% of units to be painted trim and painted cabinets.

**9.5 Acoustic Ceiling Tile: NONE**

**9.6 Accustamat: NONE**

**DIVISION 1000 - SPECIALTIES**

**10.0 Fire Extinguisher: Provide 5 lb. multi-purpose dry chemical units wall hung**

**10.1 Mail Boxes: BY OWNER**

**10.2 Toilet Accessories: Per code requirements.**

**A. Handicapped Restroom:**

Grab bars, provide at toilet and tub per code, see handicap details.

Mirror, minimum 24" x 36" - verify size with G.C.

Handicapped accessible tub unit see details on drawings

Shower rod – straight.

Toilet paper holder.

2 - 24" Towel rods.

**B. Standard Restrooms**

Shower rod – straight.

Toilet paper holder.

2 - 24" Towel rods.

Frameless mirror, minimum 24" x 36", verify size with G.C. Should be standard width approximately as wide as vanity (24", 36" or 48")

**10.3 Closet Shelving: White wire shelf in each bedroom and entry closet. Provide 2 shelves in**

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master bedrooms. Provide 5 shelves in linen closets and large laundry closets.

**10.4 Fire Sprinkler System:** To be installed per code requirements and NFPA 13D standards.  
Design-build.

**10.5 Identification Devices.** Provide identifiers for corridor units, mechanical room, office and 12" exterior building numbers. Provide exterior handicap signage.

**10.6 Mini Blinds.** Provide aluminum mini and vertical vinyl blinds in all units and office.

**10.7 Lobby Fireplace.** NONE

**DIVISION 1100 - EQUIPMENT BY OWNER**

**11.0 Appliances:**

**11.1 Ice Makers:** CONTRACTOR WILL HOOK UP ICE MAKERS

**DIVISION 1200 - FURNISHINGS**

NO WORK THIS DIVISION

**DIVISION 1300 - SPECIAL CONSTRUCTION**

NO WORK THIS DIVISION

**DIVISION 1400 - CONVEYING SYSTEMS NONE**

**14.0 Elevators:**

**DIVISION 1500 - MECHANICAL SEE ATTACHED EXHIBIT PLUMBING AND HVAC**

REFER TO DRAWINGS AND SPECS BY DESIGN-BUILD SUBCONTRACTOR DRAWINGS TO BE SIGNED BY A MN REGISTERED ENGINEER AND APPROVED BY THE CITY OF RED WING, MN.

**15.0**

**15.1 Mechanical and Plumbing Contractors** to provide complete specifications with design-build services to meet all state and local building and health code requirements. Include:

- washer and dryer hook-ups and small floor drains centered under each washer.
- Showerhead – rain shower type.
- Antisiphon sillcocks and lawn sprinkler connection.

**15.2 Provide and pay for all permits associated with this work.**

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- 15.3 Plastic pipe penetrations in fire rated walls and floors to be fire stopped with 3M Fire Tape, installed in strict accordance with manufacturer's instructions.
- 15.5 Bath, dryer, and ceiling venting to outside walls (with matching wall vents).
- 15.6 All faucet screens need to be cleaned of all debris.
- 15.7 Stools to match Rivers Ridge Gerber elongated and taller base.
- 15.8 All unit thermostats to be electronic digital.
- 15.9 Fire pumps and generators NONE
- 15.10 Exterior softener salt filling tube. NONE
- 15.11 Ice maker hook up

**DIVISION 1600 - ELECTRICAL SEE ATTACHED EXHIBIT REFER TO DRAWINGS AND SPECS BY DESIGN-BUILD SUBCONTRACTOR DRAWINGS TO BE SIGNED BY A MN REGISTERED ENGINEER AND APPROVED BY THE CITY OF RED WING, MN.**

- 16.0 All work to conform to applicable codes as interpreted by the local building officials. The electrical contractor shall pay and maintain all temporary wiring for service, job office, lighting, and sufficient number of outlets for trades. Temporary power on site – confirm size and sufficiency.
- 16.1 Provide complete description of all items in proposal.
- 16.2 Light fixtures supplied and stocked: **BY OWNER**
- 16.3 Verify and coordinate positioning of equipment in mechanical room.
- 16.4 Provide hook-up of all mechanical items requiring same.
- 16.5 Coordinate placement of outlets, switches, and light with G.C./Owner
- 16.6 Provide and pay for all permits associated with this work.
- 16.7 **Fire and Carbon Monoxide Alarm System:** Provide fire and carbon monoxide alarm system as required by local fire marshal.
- 16.8 **Each Unit shall include:**
  - Wire range, microwave hood, dishwasher, washer/dryer, fans, smoke detectors, thermostat, transformer, hot water heat/window ac wiring.
  - Switched outlet for living room and switched light above sink.
- 16.9 Exterior lighting per code (verify fixture type with Owner). Provide electric eye timer for lights and signs.
- 16.10 **Sign Wiring.** Run conduit and wire to entrance sign/provide exterior lighting fixtures

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**16.11 Provide conduit from curb to low voltage closet for phone and cable**

- Supply outlet to Low Voltage Unit Distribution Panel
- Provide wiring to above fan(s) in low voltage closets
- Provide wiring low voltage closet and 2 outlets in mechanical closet for lawn irrigation system

**16.12 Conduits for utilities into building per Owner's requirements.**

**16.13 Balcony light fixtures must be higher quality than Rivers Ridge. Submit specification with proposal. BY OWNER**

**16.14 Provide Panasonic Whisper Quiet or equivalent. Bath fans not to be energized until all painting has cured.**

**16.15 NO wiring for FOB system for entrances and unit doors.**

**DIVISION 1700 - LOW VOLTAGE BY OWNER**

**17.03 Standard Schlage master key lock system included. NO FOB locks in contract.**