

SAMPLE FAMILY NEW HOME
555 TRIPLE CROWN LANE
SAINT JOHNS, FLORIDA 32259

REVISED: 8/15/16

PROJECT SPECIFICATIONS

DIVISION 1. GENERAL REQUIREMENTS

1.1 Scope of Work - All materials shall be installed in strict accordance with the manufacturer's written specifications or Material's Institute Standards. Where the manufacturer's recommended details are used, the manufacturer shall be responsible for the performance of their product. All Items not specifically mentioned that are required to make the work complete and operational shall be included.

1.2 Codes - Construction shall comply with all applicable national, state and local building codes. It is the responsibility of the Contractor to ensure compliance with said codes and modify the specifications as needed to comply with such codes. **Owners will provide approved plans and structural engineering.**

1.3 Measurements - The Contractor shall check and verify all dimensions and conditions before proceeding with construction. Do not scale drawings. Noted dimensions take precedence.

1.4 Workmanship - Workmanship shall conform to the best and highest standards of quality in each trade and shall include all items of fabrication, construction and installation. All work shall be completed by skilled tradesmen and mechanics. Installation of all equipment and materials shall be in strict accordance with manufacturer's recommendations.

1.5 Insurance - *Builders Risk Insurance shall be maintained by the Builder* during the course of construction until final acceptance by the owner, up to one year. All bonding and insurance requirements shall be coordinated with the Owner prior to beginning construction. All sub-contractors shall provide and be solely responsible for necessary barricades and safety precautions, and strictly adhere to all governing codes on safety, including the OSHA Act. Contractor shall carry General Liability insurance as required by law.

1.6 Installation and Storage - All materials, supplies and equipment shall be installed per manufacturer's recommendations and per applicable codes and requirements. Material stored on site shall be protected from damage by moisture, wind, sun, abuse or any other harmful effects, as best as possible. It is the builders responsibility to safeguard all materials provided by others and delivered to the builders representative.

1.7 Square Footage - Finished square footage figures on the plans represent all areas. These dimensions are generally measured from the outside face of the stud.

1.8 Impact Fees – To be paid directly by the Owners.

1.9 Surveys – Surveys, to included FEMA elevation certifications required for construction of the home and to obtain building permits and inspections to be included. A final survey with FEMA certificate is to also be provided. All are by allowance.

1.10 Septic System – Engineering, permitting and installation by allowance.

1.11 Water wells & Equipment – The Builder shall provide all well drilling and equipment by allowance.

1.12 Irrigation Meter – Not Applicable.

01511 – Temporary Electricity – Contractor shall install and maintain a temporary power pole and shall be responsible for all associated costs.

01518 – Temporary Water – The new well shall supply this during construction.

01523 – Sanitary Facilities – The Contractor shall maintain a portable toilet on site as required by county ordinance.

01524 – Construction Dumpsters – The Contractor shall maintain a dumpster on site as required by county ordinance. The Owner acknowledges that the dumpsters are for construction debris disposal during the building of the home and is not authorized to dump any personal items or that of their neighbors without a change order agreeing to the dumpster charges and dump fees that will be charged to the Contractor. Placing old tires in the dumpster is forbidden.

01550 – Vehicular Access and Parking - The Owners acknowledge that access and parking to the site in the cul-de-sac is extremely limited. Every attempt will be made by the Contractor to make all trades sensitive and aware to not block access to other residences.

01600 – Architectural Review Board – To be paid directly by Owner.

01610 – Architectural Plans for Permitting – To be paid directly by Owner

01600 – Structural Engineering – To be paid directly by Owner

01640 – Owner Furnished Products – Any products furnished by the Owner and either installed by the Owner or the Contractor are not warranted in any form or fashion.

01740 – Cleaning – The Contractor shall clean the construction site during construction as best as possible. The final cleaning shall be done after the home is complete and will be done based on standard industry standards prior to the Owner’s moving their personal possessions.

DIVISION 2. SITE WORK:

02220 – Site Demolition – The Contractor is receiving a property with no structures on it.

02230 – Site clearing and Fill – Site clearing and lot fill is by allowance.

02311 – Final Grading – Final Grading is part of the Landscape work provided by Allowance.

02312 – Rough Grading – Rough grading to within a tenth of a foot is the Contractor's responsibility as part of the clearing and site fill allowance.

02362 – Termite Control – Termite control as required by code is the responsibility of the Contractor and is a spray applied system called "Boracare" and is applied per the manufacturer's specifications to the first 24" of the first floor structure and the foundation soil is also to be treated with an approved termite treatment product prior to pouring the slab.

02370 – Erosion and Sedimentation Control – This is the responsibility of the Contractor. The Contractor shall install an approved silt fence by allowance on the sides and rear of the property prior to construction and is by allowance.

02500 – Utility Services- Electricity is included in the price of the project.

02540 – Septic System – By Allowance.

02750 – Concrete Pads – Pour 4" concrete pads as required for outdoor equipment as required.

02775 – Sidewalks required by the County – Not Applicable

02782 – Brick Pavers – The Contractor is providing brick pavers by Tremron by allowance.

02784 – Stone Pavers – Not Applicable.

02813 – Lawn Sprinkling and Irrigation – All by allowance

02715 – Fountains – Not Applicable.

02820 – Fences, Entry Columns, and Entry Gates – 48" high pool fencing and gates by allowance.

02830 – Retaining Walls – No retaining walls have been included in the contract.

02900 – Landscaping – All by allowance.

DIVISION 3. CONCRETE: MONOLITHIC FOOTERS AND INTEGRATED SLAB ON DEEP AUGORCAST ENGINEERED PILINGS BY ALLOWANCE.

General - Contractor shall review construction documents and provide labor and materials pertaining to concrete and foundations as required in said documents and as specified herein, while complying with all applicable building codes.

03050 - Concrete Specifications - All concrete work shall be designed on the basis of "Strength Design" in accordance with ACI 318 "Building Code Requirements for reinforced Concrete." Concrete work shall be proportioned in accordance with ACI 301 "Specifications for Structural Concrete" and ACI 211.1 "Recommended Practice for Selecting Proportions for Normal Weight Concrete". Concrete slabs, patios, driveways, walls and foundations shall be constructed of a minimum 2500 psi concrete, 28 day test, with a 4" minimum to 6" maximum slump maximum, air-entrained to 5 - 8%.

03100 - Reinforcing Steel - Reinforcing steel (rebar) shall be minimum ASTM A615, grade 40. All reinforcement splices shall be as follows: #5 bars 25" minimum, #7 bars 35" minimum. All rebar (reinforcing steel) shall be located 3" clear from bottom and side of footing and 2" clear from top. Locate vertical rebar (reinforcing steel) 4'-0" on center (OC). All reinforcement splices shall be in accordance with ACI 318 for "Strength Design." All reinforcement steel shall be accurately placed, rigidly supported, and firmly tied in place with bar supports and spacers in accordance with ACI 301 and ACI 318. Welded wire fabric shall conform to ASTM A105 and be located in the center of the depth.

03300 – Footings and Slab Foundation– Due to the code requirements the foundation is designed and installed per the structural engineering as designed by a State of Florida structural Professional Engineer. The foundation is a monolithic integrated footer and slab.

03700 – Structural Pilings – Not applicable

03800 – Driveways and Walkways – 4” 2500 psi concrete by allowance.

DIVISION 4. MASONRY/STONE

General - Contractor shall review construction documents and provide labor and materials pertaining to the specialties as required in said documents and as specified herein, while complying with all applicable building codes.

04060 – Mortar and Masonry Grout – standard grey mortar

04813 – Masonry Veneers – Per plans @ \$300/1000 material only with total dollar amount by allowance.

04850 – Stone Veneers – By allowance and per plans

04931 – Brick Cleaning – required by the builder

DIVISION 5. METALS

General - Contractor shall review construction documents and provide labor and materials pertaining to the specialties as required in said documents and as specified herein, while complying with all applicable building codes.

05100 – Structural Steel – Not Applicable.

05500 – Architectural Metal Fabrication – Not applicable.

05520 – Hand Railings – Not applicable

05515 – Fabricated Spiral Stairs – Not applicable.

DIVISION 6. CARPENTRY

General - Contractor shall review construction documents and provide labor and materials pertaining to carpentry work as required in said documents and as specified herein, while complying with all applicable building codes.

06100 - Rough Carpentry - Lumber shall be of live, sound stock and properly dried. Pressure treated lumber shall be used where any lumber shall come into contact with concrete, masonry block or soil and when using as support members for decks, porches or balconies. Provide adequate bracing and shoring during the construction process. Studs and joists cut to install plumbing and/or wiring shall be reinforced by adding metal or wood structural reinforcing to strengthen member back to original capacity and maintain structural integrity. Holes bored shall not be larger than 1/3 the depth and not closer than 2" to the top or bottom of the joist.

Wood Species: #2 Southern Yellow Pine or Spruce, pine, fir as specified by the engineer.

Interior Walls - All interior walls shall be wood studs, with single bottom plates and double top plates throughout.

2"x 4" studs placed 16" on center (OC) - typical

Finish Woodwork - All architectural trim and woodwork shall be of a material suitable for a painted finishes. Wood that will be stained shall be clear of knots with concealed joints.

06400 - Interior Trim - Moisture content for interior woodwork shall be 8-10 percent to reduce excess shrinking. Provide and install interior wood trim as shown in construction documents. Install painted shoe molding between hardwood floor, ceramic tile or other hard surface material and baseboard trim, as required. Styling is in a pure craftsman styling- simple yet elegant.

Base Molding: 7&1/4" poplar flat per client list

Crown Molding: 2-step 5&1/4 cove and base cap base per client list in all formal areas

Door Casing: 3&1/4" poplar flat per client list

06410 – Interior Cabinetry – All cabinetry is by allowance

06411 – Cabinet Hardware – All cabinet hardware is by allowance

06415 – Countertops – All tops are 3 cm granite by Allowance. See Allowance Schedule.

06430 – Stairs – Interior stairs are by allowance.

DIVISION 7. THERMAL AND MOISTURE PROTECTION

General - Contractor shall review construction documents and provide labor and materials pertaining to thermal and moisture protection work as required in said documents and as specified herein, while complying with all applicable building codes.

07100 - Waterproofing & Damp proofing - All joints and penetrations in walls, floors, and roofs shall be made watertight using approved methods and materials.

Slab Foundations - Install a minimum (6 mil) polyethylene vapor barrier in all slabs, directly underneath concrete. Lap joints not less than 12 inches and tape and seal in accordance with manufacturer's guidelines.

07130 – Roof Underlayment – synthetic felt GAF Tiger Paw or equal

07200 – Insulation – Wall insulation is R-22 sprayed cellulose in the 2x6 walls, R-15 in the 2x4 walls. Attic insulation is 5.5" open cell foam sprayed against the rafters with an ignition barrier. First floor insulation is not applicable. Fiberglass sound batts at all baths and laundry.

07250 – Stucco Exterior – Home is stuccoed with synthetic “wormy” finish per plans

07311 – Composite/Asphalt Shingles – Lifetime architectural shingles

07320 – Tile Roofing – Not applicable.

07360 – Siding Exterior– Not applicable

07410 – Metal Roofing – Install standing seam painted galvalume roofing per plan and by allowance.

07600 – Flashing and Sheet Metal – All metal flashings are standard aluminum

07714 – Gutters and Downspouts – All by Allowance

07715 – Underground Drainage – Not Applicable.

07718 – Exterior Shutters – All by Allowance.

07920 - Caulking and Sealants - Use 50 year warranty silicon based caulk at high expansion/compression areas, such as around chimneys, tile, ceramic, and around enamel and pre-fabricated tubs and showers. For exterior windows, door frames, interior trim, woodwork and other paintable surfaces use a clear, colored Latex based caulk. Color shall match wood stain or paint.

DIVISION 8. DOORS, WINDOWS AND GLAZING

General - Contractor shall review construction documents and provide labor and materials pertaining to the doors and windows as required in said documents and as specified herein, while complying with all applicable building codes. In all sleeping areas provide an operable egress standard window or door directly to exterior.

08210 - Interior Doors - Interior doors shall be pre-hung full units, including casing on both sides of the door. Casing shall be as specified in the trim schedule. See Attachments.

Type: *Solid Core*

Style: T.B.D.

Type: craftsman style

Material: Masonite or equal

Specify: Size according to plans.

Interior Door Frames - Install finger joint full-jamb units suitable for painting.

08360 – Overhead Garage Door – Garage doors & openers by allowance.

08400 – Sliding Glass Doors – Per plan

08500 – Windows – Provide and install vinyl, low-e windows. Note: All windows are non-impact and white vinyl on the inside and painted brown by Eagle View Windows

08582 – Screens – All operable windows shall have screens provided by the manufacturer.

08600 – Skylights – Not applicable

08370 - Thresholds - Provide and install composite thresholds.

08710 - Door Hardware and Hinges - Finish hardware shall include keyed deadbolt locksets at all exterior doors. Interior doors shall be a combination of privacy and passage locks. Hinges finish shall coordinate with the door hardware. All exterior locksets shall be keyed the same. All hinges and hardware to be dunnage for painting and replaced with new clean ones after flooring. See Allowance Schedule.

Type: T.B.D.

Finish: T.B.D.

Door Hardware: T.B.D.

Specify: T.B.D

DIVISION 9. FINISHES

General - Contractor shall review construction documents and provide labor and materials pertaining to the finishes as required in said documents and as specified herein, while complying with all applicable building codes.

09250 - Gypsum Wallboard - Gypsum board must be held firmly against the framing while fastening to avoid later movement of gypsum board on the shank of the nails or screws.

Nails or Screws: Nails or screws shall be a minimum 3/8" and a maximum of 1/2" from edges and ends of wallboard and the heads shall be seated slightly below the surface without breaking the paper. Nails shall be spaced not to exceed 7" on ceilings or 8" on sidewalls. Head diameter shall be a nominal 1/4" with the length 1 1/2" to penetrate a minimum of 7/8" into nailing member. Nails shall meet the minimum requirements of ASTM C514 and may include coated, etched treated or annular ring shanks to improve withdrawal resistance. Drywall screws shall meet the minimum requirements of ASTM C1002. Bugle-shaped heads shall be 0.315" in nominal diameter and contain a No. 2 Phillips driving recess. Type "W" screws are designed for easier fastening in wood.

Joints: At gypsum wallboard joints install a 2" strong, cross threaded tape with a cross tensile strength of 45 lbs. per lineal inch. Press a strong, good quality tape firmly onto sheathing joints and around openings, imbedded in joint cement. At corners and angles, install metal corner beads as specified by manufacturer. If corners are rounded, install corner reinforcement as required.

Spread gypsum wallboard mud at all tape joints, corner beads, nails and screw penetrations and where a smooth surface is needed. Apply second coat of wallboard mud after a minimum 24 hours. After drying (minimum 48 hours); sand all joints and other areas to a smooth consistent surface.

Interior Walls: Sheath walls and ceilings with 1/2" gypsum wallboard, either vertically with long edges parallel to framing, or horizontally with long edges at right angles to framing members. Apply one layer of 1/2" x 4' x, 8', 9', 10' or 12' foot lengths to all wall surfaces. Offset joints between layers at least 10".

Ceilings: Apply a single layer of 1/2" gypsum wallboard across the supports and fasten with nails or screws. Offset joints between layers at least 10". Nails are spaced 6" on center (OC) with 1 1/4" heads. Screws are spaced 12" on center (OC). Ceiling finish shall be knockdown, painted one color in the home. See 09545.

Water Resistant Gypsum Wallboard: On shower ceilings that receive tile.

1/2" **Durock:** Around shower walls, tubs, whirlpools, or as required by applicable building codes.

09300 - 09400 - Tile, Marble, Stone - Tile, Marble, Stone shall be appropriate grade and finish in accordance with applicable building codes and owner requirements. Contractor shall properly clean all surfaces to be covered and install appropriate underlayment per manufacturer's recommendations. Installation should be carried out with a slow setting cement adhesive, well mixed per manufacturer recommendations. Grouting of control joints can be executed either with cement based grout or with resin based organic materials.

Floors: Contractor shall properly clean all surfaces to be covered and install appropriate underlayment per manufacturer's recommendations. Mapelastic CL premixed, liquid-rubber, quick-drying crack-isolation membrane for installation under ceramic tile or stone in residential is to be used under all flooring at the Owners Request.

Bath: Floors tile ceramic or porcelain tile as be selected by owner. Tile material is a contract allowance item. (See Contract) All tile shall be installed as shown on construction documents.

Specify Tile: To be selected by owners.

Specify Grout: To be selected by owners. Epoxy grout is not included.

Note: Inlays, mosaics, borders or other decorative patterns are by allowance

Walls: Contractor shall properly clean all surfaces to be covered and install appropriate underlayment per manufacturer's recommendations. Wall and tub surround tile is part of a contract allowance item. (See Contract for allowance)

Bath shower walls: Unless otherwise noted walls shall be tiled as selected by owners to 8 feet above finished floor

All showers are tiled to the ceilings. No ceilings are tiled.

Specify Tile: To be selected by owners.

Specify Grout: To be selected by owners. Epoxy grout is not included.

Note: Inlays, mosaics, borders or other decorative patterns are by allowance.

09500 – Ceiling Finishes -

Main Home: The main home interior ceilings are to be smooth and painted white.

Garage Ceiling: The garage ceiling is to be smoothed and painted.

Porch Ceilings: The exterior porch ceilings are 1x6 clear V-grooved stained clear pine with 3&5/8" painted crown molding trims.

09640 – Wood Flooring – Wood flooring is a pre-engineered type and is installed per plans by the Owners by allowance.

09650 – Vinyl Flooring - Not applicable

09660 – Floor Preparation – Floor preparation is provided as part of the flooring allowance

09680 - Carpet – Not Applicable.

09690 – Garage Flooring – The garage floor is to be the natural concrete with an epoxy type coating with the speckled paint chips by allowance. Floor must be acid washed during the preparation.

09720 - Wallpaper and Wall coverings - Not applicable.

09900 - Paints and Coating: Prepare each surface to receive scheduled work as set forth below.

Interior Walls: All nail heads shall be set below the surface and finished smooth. Joints should be taped and covered with a suitable drywall joint compound. Sand the spackled nail heads and joint compound smooth and dust well before priming. Interior walls shall receive two coats of flat Super Spec Benjamin Moore or equal flat wall paint.

NOTE: *The selection of dark or deep colors that require the application of more than two finish coats will be charged \$100 per coat per room extra.*

VERY, VERY, IMPORTANT: Eggshell & satin finish paints are an extra cost due to the extra steps required to apply it to the walls properly and the added steps required for warranty due to nail pops, should they occur, and must be initiated by a signed change order prior to using the product.

Allowed 3 different wall colors; each additional wall color is \$195 extra for each color. All colors are selected by owners. Only a white ceiling color is part of this agreement. Any color change to ceilings will be \$195 extra for each color.

Specify Wall Paint: Ben-Moore Aura Matte Paint.

Interior Wood: Wood surfaces shall be sanded smooth before finish is applied. Putty areas with a wood based filler where nails or other defects appear in the surface.

Paint: Prime wood surfaces including faces, edges. After installation, apply at least one coat of wood primer and two coats of finish paint.

Specify Trim Paint: Ben-Moore Satin-Impervo or equal
Stain and Varnish: Any use of T&G v-joint clear pine
Specify Trim Stain: Not Applicable.

09910 – Soffits and Fascia’s – Soffits to be non-vented hardi-products with a 1x2 drip and 2x6 sub fascia with a 1x6 hardi product finish fascia. All to be painted with Benjamin Moore Aura semi-gloss

09911 – Exterior Walls – The exterior wall finish is per plan and is a combination of brick veneer, wormy finish synthetic stucco, and real stone by allowance.

09912 – Foundation Walls – The exposed *monolithic* foundation walls shall be stuccoed as part of the real stone allowance to provide a more pleasing surface than the concrete block and left natural. A weep screed is required by code at the sole plate and the county will not allow stucco or stone below the weep screed for reasons of termite inspections.

09913 – Exterior Frieze – The exterior frieze will be on the entire home comprised of painted stucco with the size varying from 8” to 12” on the front accents per plan

09914 – Exterior Window & Door Headpiece Trims – The sides and rear trims to be standard 6” stucco bands. The front trims will be cast & Real stone by allowance and per plan.

09950 – Garage Wall Finish: The garage is fully sheet rocked, trimmed and painted.

09955 – Interior Wall Finishes: Walls shall be clean and free of defects such as cracks or unfinished joints prior to installation of wall finishes. If mildew is evident, mildew must be removed and surface properly treated to inhibit further mildew growth.

NOTE: Walls & ceilings to be smooth finish and painted.

DIVISION 10. SPECIALTIES

General - Contractor shall review construction documents and provide labor and materials pertaining to the specialties as required in said documents and as specified herein, while complying with all applicable building codes.

10230 – Screen Enclosure – Not Applicable.

10240 – Summer Kitchen – Not Applicable

10250 – Equipment Service Walls – Not Applicable.

10300 – Prefabricated Fireplace – Isokern per plans and by allowance

10310 – Prefabricated Chimney – Not Applicable.

10550 - Mailbox – Mailbox is to be provided and installed by the Owner’s.

10800 - Bathroom Accessories – Due to the enormous number of choices available for bathroom accessories the Contractor does not provide but will install *Owner Provided* toilet paper holders, towel bars, hooks, soap dispensers, etc. in all baths for \$15.00 each.

10820 - Tub and Shower Doors - Shower doors shall be constructed of tempered safety glass with all exposed edges polished and rounded. Swinging doors shall have vinyl seal at both the latch jamb and hinge jamb side of door and are all by Allowance.

Location(s): per plan.

Glass: Clear tempered glass by Allowance

Frame: Semi-Frameless or frameless by Allowance

Door: Hinged

Specify Finish: T.B.D.

10916 - Closet Specialties – All shelving is by allowance. See allowance schedule.

DIVISION 11. EQUIPMENT

General - Contractor shall review construction documents and provide labor and materials pertaining to the equipment as required in said documents and as specified herein, while complying with all applicable building codes.

11455 - Interior Cabinetry – All by allowance

Counter-Tops: Plastic laminate, Stone, Ceramic Tile counter tops shall be provided and installed per construction documents and finish schedules. Counter surfaces shall be glued onto 3/4” substrate as recommended by manufacturer. Edges shall be installed per construction documents and finish schedules. Provide minimum 4" backsplash between counter and wall. See tile section for further specifications pertaining to ceramic or stone counter-tops. Countertops are by an Allowance of \$18,000.00 which includes all lavatory sinks.

Location	Material	Allowance
All Cabinets	3CM Granite	Counter Top allowance

11451 - Appliances – All by allowance

11453 – Attic Access Stairs – Oversized pull down stairs in the garage. Light storage trusses are to be decked with ¾” T&G decking and there will also be a switched light in the storage area.

11550 – Central Vacuum System – Not Applicable.

DIVISION 12. FURNISHINGS

General - Contractor shall review construction documents and provide labor and materials pertaining to the equipment as required in said documents and as specified herein, while complying with all applicable building codes.

12940 – Window Treatments – Not Applicable.

12941 – Blinds – Not Applicable.

12943 – Interior Shutters – Not Applicable.

12944 – Shades – Not Applicable.

DIVISION 13. SPECIAL CONSTRUCTION

General - Contractor shall review construction documents and provide labor and materials pertaining to the equipment as required in said documents and as specified herein, while complying with all applicable building codes.

13150 – In Ground Swimming Pool – Installed by Allowance (Pool deck pavers are not part of this; however pool coping and any other design features such as planters, etc. are part of the total allowance as in a “baby fence”). Allowance includes all planters, etc.

13600 – Solar & Wind Energy Equipment – Not Applicable.

13854 – Smoke Alarms – Contractor shall install hard wired smoke detectors per code.

13900 – Fire Suppression – Not Applicable.

DIVISION 14. CONVEYING SYSTEMS

General - Contractor shall review construction documents and provide labor and materials pertaining to the equipment as required in said documents and as specified herein, while complying with all applicable building codes.

14200 – Elevator – Not applicable

14420 – Wheelchair Lift – Not Applicable.

14560 – Laundry Chute – Not Applicable.

14600 – L.P. Gas tank and Piping – Contractor is providing a 500 gallon buried liquid propane gas tank with drops as follows: two tankless water heaters, grill stub, cooktop, dryer by allowance

DIVISION 15. MECHANICAL

General – All baths & kitchen to vent outside the home

15100 - Plumbing - Plumbing shall be a fully operational system of hot and cold water. Provide and install all piping, soil, vents, drains, sewage removal and water supply systems to connect with appropriate water and sewage systems. Provide and install appropriate insulation around piping. All permits and inspections are to be obtained by contractor as required by local building codes and the Uniform Plumbing Code.

Sewer and Waste Piping - Drainage system shall be Schedule 40 PVC pipe. All connections shall have PVC cement or appropriate joint compound and assembled tight for no leakage. Condensate drains shall be constructed of Schedule 40 PVC. Valves shall be Milwaukee Brand or equal. Building sewer shall be approved Schedule 40 PVC pipe. Pitch shall be a minimum 1/8" per foot for soil lines larger than 3" diameter and a minimum of 1/4" per foot for soil lines 3" diameter or less.

Water Pipes - Use appropriate CPVC pipe. Test to 100 PSI. or per code.

Waste Drainage - Install sewage clean-out at the end of each horizontal drainage run and per building code requirements. Vents shall be installed throughout plumbing connections and connected with the vertical stacks and vented through the roof. Check with local building code officials for specific venting requirements. Roof vents to be lead.

Water Softener Loop without drain (Due to septic) – Rough for Future use by owner

Water Heaters – Two Rinnai RUR98i L.P. Gas water heaters or equal per plan & by allowance.

L.P. Gas Tank – buried 500 gallon tank with stubs for the fireplace, cooktop, grill stub, water heaters and pool spa heater by allowance.

15440 - Plumbing Fixtures - Provide necessary piping, water and drains for plumbing fixtures as shown on the construction documents and are allowance items.

Fixtures and Fittings - Provide and install plumbing fixtures provided by others.

Special Note- Additional fixtures such as instant hot water dispensers, etc will result in higher costs since the labor to install such items have not been included.

15500 - Heating, Venting and Air Conditioning – 15 SEER Minimum, variable speed air handlers, two speed compressors, 5 month filter system, Honeywell 8000 T-stat. Fully adjustable HVAC return air vents and registers.

DIVISION 16. ELECTRICAL

General - Contractor shall review construction documents and provide labor and materials pertaining to the electrical system as required in construction documents and as specified herein, while complying with all applicable building codes, local utility requirements and building restrictions.

16100 - Electrical Labor- Wiring shall meet code.

Circuits - Provide and install necessary circuits and breakers for appliances as stated in manufacturer's recommendations and per applicable building code requirements.

Switches, Receptacles, etc. – Install standard receptacles, Decora switches and cover plates as per construction documents and finish schedules. For exterior receptacles install have gray cover plates. When two or more switches or receptacles are located together gang with one common faceplate. If they cannot be ganged, install with a minimum distance between units. Locate light switch cover plates 6" from frame of door or corner of wall. Switches shall be: *Decora* except where dimmers are specified on plans. Where dimmers are called for they shall be slide type 600 watt. *Some dimmers have been factored I and are located on the plans. NOTE: colors to be determined, but white has been factored in. Any other color may run more.*

Electrical Panel – 300 Amp service (Panel sizes & location to be determined)

16230 – Generator – Not Applicable.

16300 – Security Systems – All by allowance which includes an integrated pool alarm.

16400 – Structured Wiring – All by allowance.

16500 - Light Fixtures - Provide necessary circuits and wiring for light fixtures, per plan. All lighting shall be switched as noted on construction documents. For exact locations of fixtures, see construction documents and finish schedules. Fixture allowances are provided by others but the installation is by the builder.

Special Items - Provide necessary receptacle requirements and wiring for additional items as listed below. Locate as shown on construction documents.

Bath Vent Fans - install Air King or equal quiet exhaust fan per plan provided by allowance

Fixtures – LED Recessed can trims, floodlights, interior fluorescents, and bath fans are all being provided by Owners as part of the allowance

16600 – Outdoor Landscape Lighting – Not Applicable.

16800 – Sound and Video (Structured Wiring) – All by Owner.

16900 – Dock and Boathouse Wiring – Not applicable.

16950 – Front Gate, fencing and Remote Entry Lights – All by Allowance.

REMINDER: All bids are due along with this document completely filled out N.L.T. 4 PM, Wednesday, August 31, 2016. NO EXCEPTIONS!