

SCOPE OF WORK (SCHEDULE – A)
Electrical

Supply all labour, material, equipment, permits, and pay taxes and fees necessary to complete this scope of work, as per Project plans, specifications, in the accordance with the requirements of the National & Ontario Building Codes, Tarion and all other authorities having jurisdiction. Work to be completed as and when required by the Site Manager and include, but not limited to the following:

It is the sole responsibility of the Subcontractor to check with the Contractor’s Site Manager prior to starting any house to verify the Contractor’s exterior colour designations and check instructions regarding structural changes, upgrades and colours. The Subcontractor accepts responsibility for any errors by not doing so.

NOTE: THIS SCOPE OF WORK SHALL NOT BE MARKED UP, MODIFIED, AND/OR CHANGED IN ANY WAY. CROSSING ITEMS OUT OR ADDING ITEMS IN SHALL AUTOMATICALLY DISQUALIFY YOUR PROPOSAL FROM CONSIDERATION.

SECTION A: MOBILIZATION

- 1) All costs associated with mobilization, transportation, machinery floats, etc..., are included in the contract price.
- 2) If long term storage is required onsite the sub-contractor shall work with the site supervisor to ensure materials / items being stored are done in such a manner that does not interfere with the Contractor's activities on site.
- 3) All rented items required to complete the work outlined herein is included in the contract price.
- 4) All ladders, planks, walkways, scaffolding, lifting equipment, as well as all tools, hardware, tackle and materials required to complete the scope of work contained herein is included in the contract price.
- 5) This Sub-Contractor must visit the site prior to commencing work. Any site conditions that could potentially effect, or hinder the progress or quality of this Sub-Contractor's work as per the Drawings, Directions, Site Instructions, or Governing Building Codes and Construction Standards must be reported to the Contractor in writing. If work commences and no such issues are raised by the Sub-Contractor, then it will be mutually agreed that the Subcontractor has accepted the site conditions “As-Is”.
- 6) All work to be completed as per Contractor’s schedules, and as instructed by the Contractor.

SECTION B - MATERIAL / EQUIPMENT & HANDLING

- 1) The Sub-Contractor will provide, care for, and manage all materials and equipment required to perform their scope of work in its entirety. This includes: Ensuring that equipment is in good working order, materials necessary to complete their work as per the Contractor’s schedule is delivered and available on time, safe guarding against theft, vandalism and damages, and that operators/drivers of equipment requiring specific licenses are properly trained and licensed to do so.
- 2) The Sub-Contractor shall be responsible for all material handling including but not limited to: Loading, Unloading, Delivery Coordination, Quality Control Measures, Hoisting, etc...
- 3) All materials are to be used as they are delivered. On-site storage and Stockpiling are not permitted. As such any Issues which may arise as a result of site logistics, weather, theft, or any damage to stored or stockpiled materials shall be the sole responsibility of the Sub-Contractor.
- 4) The Sub-Contractor shall ensure that all material deliveries are carried out without obstructing the flow of traffic through the job site. Roads must remain accessible, and clean to all parties working/visiting the job site at all times. In the event that this is not possible, and the Sub-Contractor is required to obstruct the road to receive any of their deliveries, the Site Superintendent must be notified prior to the delivery taking place. Failure to notify the Site Superintendent of any potential road obstructions could result in the denial of service where the Sub-Contractor may be instructed to cease delivery operations immediately.
- 5) All materials and equipment brought to the job site by this Sub-Contractor shall be insured by the Sub-Contractor.
- 6) All equipment brought to the job site by this Sub-Contractor must have all required documentation with it and available upon request. Including: Ownership, Insurance, maintenance logs, operator information and license, etc...
- 7) All waste, garbage, and debris generated buy this Sub-Contractor's work / activities shall be disposed off by the Subcontractor in the areas designated by the Site Supervisor. This shall be the sole responsibility of the Subcontractor. Any clean up, or debris removal work that must be completed by the Contractor on behalf of the Subcontractor shall be backcharged accordingly.

- 8) It is the Subcontractor's responsibility to ensure that all products supplied be installed precisely per the manufacturer's specifications and requirements and suggestions. Any variance from these requirements should be discussed with the Builder before any installation. Any costs which arise due to Subcontractor's negligence of the above aforementioned shall be solely his responsibility. **THE SUBCONTRACTOR MUST ENSURE TOTAL KNOWLEDGE OF THE PRODUCTS BEING USED**

SECTION C - WINTER PROTECTION (SEASONAL ITEMS)

- 1) All winter heat shall be supplied by this Sub-Contractor (if required). Should the Contractor at his own expense agree to Supply winter heat (propane/heaters) to the Sub-Contractor, the Sub-Contractor is required to maintain a log book of all propane bottles used by the Sub-Contractor for submission to the Contractor upon request.
- 2) Tarping, covers, etc.. shall be the responsibility of the Sub-Contractor and included in the contract price, where and when required unless otherwise agreed in writing by the Contractor. Should the Contractor agree to provide tarping, covers, etc to the Sub-Contractor the Sub-Contractor must coordinate all installs and dismantling/removal.
- 3) Weather conditions do not constitute a reason for delays in work. It is expected that in the event of "lost days" due to weather conditions, that the Sub-Contractor will make a valid and verifiable effort to ensure that the Contractor's schedules are not compromised by way of Weekend Work (when permitted), Overtime, and/or introducing additional labour/crews to "catch up" and make up for any lost days.

SECTION D - GENERAL CONDITIONS AND WARRANTY

- 1) **ABSOLUTELY** no additional work is to be performed for potential, homebuyers without express written approval from Contractor's main office. The Subcontractor clearly understands and agrees that none of the Subcontractor's forces, directly employed or contracted, including suppliers, shall deal with the Project's Purchaser's regarding any business activity. Any requests of additional work or modifications made by a purchaser directly to the subcontractor shall be reported immediately to the contractor's head office and dealt with through the Contractor. The Subcontractor further understands and agrees that should the Subcontractor's forces engage directly with a purchaser, the Subcontractor will be terminated and be responsible and reimburse the Contractor for all monies lost by the Contractor as a result of such direct activity, as calculated by the Contractor.
- 2) Work is to proceed in accordance with work schedules as provided by the Contractor.
- 3) It is agreed by both parties of this contract that the terms and conditions of the Tarion New Home Warranty Program shall be included and form part of this contract. As such, this Subcontractor agrees to make themself familiar with the quality standards required of him under this program especially the Tarion Performance Guidelines.
- 4) All work must conform and be carried out in accordance with the Ontario Building Code, Local By-Laws, Tarion, CMHC, and as per all Plans, Drawings, Diagrams, Instructions, and Specifications provided.
- 5) All work is to be carried out in accordance with the Contractor's schedules. No exceptions.
- 6) All workmanship and Materials shall be warranted for a period no less than 2 (Two) years from the date that the home is occupied by the Contractor's client **NOT** date that the work was completed. The Tarion Warranty Corporation shall govern. Any items/deficiencies deemed Warrantable either the Contractor and/or the Tarion Warranty Corporation shall be the responsibility of this Sub-Contractor to correct.
- 7) All shop drawings associated with this Sub-Contractor's work must be submitted to head office prior to commencing work.
- 8) The Contractor reserves the right to inspect all vehicles (at his own discretion) entering or leaving the job site.
- 9) All Sub-Contractors must sign in and out at the Contractor's construction office prior to commencing any work or before vacating the job site.
- 10) Site parking will be controlled by the Site Superintendant. Parking of personal shall only be permitted in designated areas. Any damages caused to personal[y] owned vehicles or equipment shall not be the sole responsibility of the Sub-Contractor.
- 11) It is understood that all Completion Slip numbers will be issued by the site construction office once a week and picked up at the site office on the Contractor's designated day only. Subcontractor must submit to the site office a written request for completion slips one week prior to the Contractors issuance. Written request is to indicate the lots or items completed and declare that the work is 100% complete according to the contract. The request must be signed by the Subcontractor's foreman. Completion slips will not be faxed to the Subcontractor. (For "Supply Only"

contracts, site administrator will issue completion slip numbers to the supplier's office upon verification of the goods delivered.)

SECTION E - MATERIALS, INSTALLATION AND PERFORMANCE STANDARDS

- 1) This Contractor agrees and acknowledges that all work undertaken on this project shall conform and match with the displays in the Sales Office and/or Model Homes, and/or sales feature sheet/brochures.
- 2) This Subcontractor shall supply all labour, materials and equipment necessary to complete all electrical work as per architectural plans, specifications, Ontario Building Code, Tarion, Canadian Electrical Code (CEC), Electrical Service League of Ontario, Ontario Hydro regulations, local Hydro-Electric Commission and any Municipal By-laws.
- 3) All hydro permits and inspection fees required to complete all work shall be the responsibility of the Sub-Contractor. Applying for any such permits and any fees associated with any permits/inspections shall be included in the contract price.
- 4) Supply and install grounding plate and wiring complete (Pex water piping in homes)
- 5) All necessary service conduit and wiring from exterior to main switch. Install cable and telephone service wire (supplied by others) from exterior meter base to service panel.
- 6) Supply and install 200 amp. service with 32/48 circuit breaker panel and duplex receptacle (beside panel) located in basement. Install 13mm x 900 x 900mm plywood panel for main service. Hydro panel not to be located near rough in bathroom. Install service through joist space.
- 7) Supply and install all required circuit breakers. Clearly label each electrical panel circuit breakers showing exactly what they control. Marking to be in ink felt pen clearly spelled and marked.
- 8) All wiring to be copper, including dryer and stove receptacles. Install 110V receptacles as per architectural plans and Ontario Hydro spacing regulations. Standard dryer and stove receptacles to be 220V. All bathroom/powder room plugs shall be wired on a G. F. I. system. Bathroom G. F. I. circuit to carry all bathrooms, powder room and to be located in main (2nd story) bathroom. Dedicated circuits for refrigerator, clothes washer, kitchen outlets, G. F. I. outlets, wall garage outlet. Draft and vapour proof protection to electrical boxes in exterior walls. Arc protection breakers to bedroom areas. Ensure at least one washroom plug is beside vanity for use by small appliances.
- 9) Tamper resistant receptacles to be installed in all locations in accordance with CEC requirements.
- 10) Supply and install minimum two (2) exterior waterproof G. F. I. duplex plugs. One at front porch and one at rear patio door (locations as per plans). Install all other exterior G. F. I. plugs as per plans.
- 11) Supply and install "Holiday light" electrical receptacle at edge of porch soffit, close to garage, switched separately to front foyer.
- 12) Supply and install plug for power vented H. W. T. in furnace area as required. Direct electrical connection to furnace.
- 13) Receptacles at kitchen counters to be centred between the top of the counter and the bottom of the upper cabinets. Use kitchen layouts prepared by Contractor's kitchen cabinet supplier for locating electrical work in kitchen and bathroom cabinet areas. Also, install two (2) G. F. I. receptacles 20 amp in kitchen by sink.
- 14) Install electrical receptacle at all kitchen islands and peninsulas as per code. Exact location to be predetermined and agreed upon with Builder's site manager and cabinetry supplier prior to commencement.
- 15) Supply and install ceiling exhaust fans in all washrooms and laundry rooms on separate circuit and switch. Housing box for fans to be supplied to Site Manager and will be installed by mechanical trade. All fans to be minimum 50 C. F. M. Follow heating layouts and Site Manager's instructions. Principal fan 90 C. F. M. (sonne /sound rated to meet 1999 Ontario Building Code) in all main bathrooms on 3 way switch at thermostat location.
- 16) Supply and install low voltage control wiring for thermostat from furnace to designated room on main floor as required. Wire to be 5 lead wire to permit future A/C thermostat. Connect to furnace. Temporary thermostat (supplied by others) to be first installed in basement. Later remove temporary thermostat and install permanent thermostat on main floor, as per the site Manager's directions.
- 17) Supply and install dishwasher rough-in. Rough-in for dishwasher consisting of wiring not hooked to separate circuit coiled in joist space at dishwasher location, including supply of circuit breakers
- 18) Supply and install combination smoke detector / carbon monoxide detector units, as per most current Ontario Building Code requirements.

- 19) Supply and install kitchen exhaust fan and wiring (Stainless Steel ducted 300CFM Range Hood Fan over stove Frigidaire FHWC3040MS) (equivalent to be pre-approved by Contractor prior to installation).
- 20) Supply and install doorbell and chime at front door frame (Model KON-6253 with lighted push button). Front doorbell to have white coloured cover. Drill through door hanging style. Location to be on door lock side of jamb at standard height.
- 21) Temporary hydro to all units including inspection fees. Provide temporary duplex receptacle service at meter panels and a permanent outlet on completion. Hook up furnace with temporary power if requested by Contractor.
- 22) Supply and install white Decora switches and plugs including faceplates throughout.
- 23) Switches to be 1060 mm from floor to underside of switch.
- 24) **ALL FIXTURES MODELS AND STYLES TO BE AS PER INSTALLED AS PER "MATERIAL SPECIFICATIONS" BY BUILDER BELOW.**
- 25) Ceiling fixtures provided throughout (except Living room). Living room to receive switch controlled wall outlet.
- 26) **All exterior lights to be Black cast aluminium coach lights wall mount and hanging light fixtures in portico and porches.** All 2nd floor balconies, porches, side elevation and rear elevation exterior doors to receive the same style front elevation coach lamps on separate switches. (GFI protected if less than 2.5m above grade). One coach light per garage door and each door opening. Location at side or above door as per Builder's brochure and Site Manager's instructions. NO "jam jar lamps" allowed this project. **Follow brochures/renderings for locations of coach light and hanging light fixtures in portico and porches.**
- 27) Switched Cold cellar light standard.
- 28) Basement lights to be on switch at base of stair.
- 29) Supply and install all required 60W energy efficient bulbs for each interior and exterior fixture.
- 30) All showers to have a pot light with LED bulbs and an airtight box where installed in an attic space, Liteline RF405. Housing white opal, shower trim 3" aperture HV4-TH4013-WH, connected to a separate switch.
- 31) All bathrooms & powder rooms shall receive one full-length shiny "Hollywood" 2-1/2" wide chrome finish decorative strip lighting with clear bulb installation. Separate switch for exhaust fans and lights in all washrooms. Make-up bar lights to be either 2 feet, 3 feet or 4 feet as may be required. All powder rooms to receive 2 foot light. Size the make up bar lights to full length of vanity mirror. mirror. Separate strip lighting for make-up desk and counter areas as required. Large Ensuite or twin bathrooms to also receive ceiling lights.
- 32) First keyless fixture from any finished area to unfinished area of lower level to be (3) way switched at each basement door. Keyless fixtures per plans or as required in lower level to provide suitable lighting.
- 33) One (1) interior garage ceiling light for 2 car garage and two (2) interior lights for 3 car tandem garage, controlled by three-way switches located near garage man door and garage overhead car door closest to porch. Install (1) ceiling plug for each garage door (i.e. 2 for double car) centred above each car parking area for future garage door opener. Wall receptacles for each car park space on wall beside car, (2) for double car, (3) for tandem car garage.
- 34) When pot lights are selected, remove standard ceiling lights, unless specifically requested in writing by Builder to remain.
- 35) Supply and install one plug beside each RG6 cable outlet, CAT5 outlet and central vacuum inlet locations. In those applicable rooms, start plug spacing measurements from these outlets.
- 36) Rough-in telephone wiring in all bedrooms, study, kitchen, family room and computer loft to be run to home location at electrical panel.
- 37) Rough-in security to all ground floor windows & doors
- 38) All rough-ins outlets are to have cover plates, e.g. vacuum, telephone, TV, CAT5, etc.
- 39) Install switch and wiring for gas fireplace

- 40) Supply and install one plug beside each standard vacuum outlets (3). Dedicated plug at vacuum rough in termination point in basement or garage if optional vacuum rough-in to garage is selected.
- 41) This Subcontractor agrees to provide a 24 Hour Emergency Service.
- 42) Include testing of all circuits prior to occupancy.
- 43) All meter bases shall be installed as per the Ontario Hydro By-laws and the Municipal Hydro-Electric Commission regulations having jurisdiction. (Finish grade elevations to be given by the Site Manager. The Subcontractor is responsible for proper meter base heights). Failure to comply with these regulations will render this subcontractor fully responsible for all costs related to rectification of any hydro meters. Install conduit from meter base to basement sub-panel. Install “Z” brackets for meters if requested as required by Builder.
- 44) Two-year warranty on electrical work.
- 45) Holes in sub-floor or sheathing shall be minimal in size and cut clean with a drill or saw.
- 46) Service is not to run under/through garage slab wherever possible.
- 47) Subcontractor shall respect other trades work. Replace others work to proper order if temporarily moved. (vapour barrier, insulation, bridging, kitchen waste receptacles etc.).
- 48) All required shop drawings for fixtures, materials and assemblies used on site shall be submitted to the Builder in book format prior to commencement (two copies).
- 49) All operating manuals, service instructions and warranties for fixtures to be packaged, labelled by lot number and submitted to Site office.
- 50) Standard and upgrade fixtures shall not be substituted without written approval of the Builder. Approved substitutions shall be of higher quality at no extra cost.
- 51) Corner Conditions and walk-out/look-out basement conditions standard to contract price.

MATERIAL SPECIFICATIONS

- a) All wiring is to be copper and is to comply with all codes.
- b) All switches, outlets and covers are to be white.
- c) All panels are to be a minimum of 40 circuit, breaker type.
- d) All switches, outlets, fans, light fixtures, etc, are to be C.S.A. approved.
- e) Television cable is to be RG6.
- f) Telephone cable to be 3 pair 24-gauge.
- g) Security cable to be 4-conductor 22-gauge.
- h) Range hood fan to be 2-speed with a light and 300 CFM’s. Stainless Steel Frigidaire (FHCW3040MS)
- i) Laundry and bathroom fans to be 50 CFM.
- j) Door chimes Model KON-6253 with lighted push button.
- k) Standard Electrical Package:

<u>Product Number</u>	<u>Locations/Rooms</u>
San-Remo A3012-11	Bedrooms, Bathrooms and Hallways
San-Remo A14012-11	Vanities and Powder Rooms
San-Remo A3016CH-11	Dining and Breakfast Area
San-Remo A1010-6	Exterior
San-Remo PEK001	Basement

SECTION F – SITE RULES AND REGULATIONS:

This Subcontractor agrees with, and shall comply with the following “Project Rules”. Non-compliance shall result in remedies allowed by the Contractor under this contract. “Rules” included but not limited to, are as follows:

- 1) Cross concrete at designated ramps only.
- 2) Access Roads to the Project site shall not be obstructed in any way, and, at all times roads shall be clear to allow fire trucks to enter the site and access all fire hydrants.
- 3) No storage of building materials on the access roads.
- 4) No parking on driveways or graded yards.
- 5) No pets are allowed on the project at any time.
- 6) The consumption of illegal substances or alcohol will not be tolerated and is cause for immediate termination.
- 7) All trash must be placed in bins provided.

- 8) Do not set tools, materials, trash etc. on countertops, vinyl or ceramic areas.
- 9) Portable toilet facilities are provided for your convenience, use of facilities in house is prohibited.
- 10) Absolutely No Smoking permitted in houses.
- 11) No eating or drinking in homes after drywall.
- 12) Once floor surfaces have been finished with carpet, linoleum, vinyl or hardwood, outdoor footwear shall not be worn in the home.
- 13) Overnight camping out at the Home and adjacent lands is prohibited.
- 14) Loud or excessive noise from a radio or any other electronic device and profanity are prohibited.

SECTION G – SAFETY:

- 1) The Subcontractor shall at all times ensure that the health and safety of their staff and crews are paramount. As such the Subcontractor must ensure that any necessary safety training (i.e. Fall Protection, Propane Safety, etc...) required by their staff is up to date and any documentation associated with any such training is on site while their workers are present.
- 2) Prior to commencing work the Subcontractor must provide to the Contractor a copy of their Health and Safety Book which must be kept on site at all times in the Contractors construction office. If the Subcontractor does not provide a copy of their Health and Safety Book to the Contractor as required under this contract, the Contractor may chose to terminate or suspend the Subcontractor and/or withhold payment until such time as the Subcontractor furnishes the Contractor with their Health and Safety Book.
- 3) The Subcontractor shall be required regular safety meetings (at the Contractors discretion) on site, as requested by the Contractor.
- 4) All Subcontractors working with **“Hot Work Operations”** shall ensure that;
 - i) **Combustible Material:** All portable combustible material must be removed a minimum of 20 feet away from the working area and adjoining areas.
 - ii) **Flammable Liquids or Vapors:** Drums, tanks or other containers or explosive liquids or vapors must be cleaned and cleared of flammable or explosive liquids or vapors before work is done on them.
 - iii) **Pre-Operation Precautions:** When feasible, work area should be wetted down.
 - iv) **Spark Control:** Sheet metal guards, asbestos blankets and similar protection must be provided to prevent hot metal and sparks from falling on combustible material which cannot be moved.
 - v) **Fire Protection:** If the areas in which hot work operations are being performed are presently under operative sprinkler protection, the sprinklers in that area must be operative during welding or cutting operations. Suitable fire extinguishers or hand hose must be maintained near the operations, an extra person must be provided in the welding or cutting team whose sole responsibility is to watch for sparks and promptly use the extinguishing equipment.
 - vi) **Post-Operation Precautions:** After work, a thorough check must be made for smoldering fire in out-of-the-way places, and guard patrol protection must be maintained for a minimum of four hours.
 - vii) **Other:** During the course of construction, where a propane gas heater or other open flame heating device is used; the device will be positioned on fire resistive dry wall board, tied off to a wall or floor with not less than three (3) feet of clear space surrounding it.
- 5) **“Hot Work Operations”** shall be defined as follows:
 - i) The process whereby one or more of the parts to be joined is heated near or above its melting point and the heated surfaces are caused to flow together.
 - ii) The process of applying heat to red heat the spot to be severed, gouged or pieced, and the metal is burned in a jet of oxygen.
 - iii) Grinding operations that generates sparks.
 - iv) Torch-on roofing operations.
 - v) Roof tarring operations.

SECTION H – SERVICE REQUIREMENTS:

The Subcontractor agrees to comply fully with the Contractor’s pre-delivery inspection notification process as follows:

- 1) The pre-delivery inspection by the homeowner will be conducted approximately two (2) weeks prior to occupancy of the unit.
- 2) The Contractor will provide written notification to the Subcontractor of any deficiencies noted in the pre-delivery inspection, which are the Subcontractor’s responsibility to repair. Such notification shall be provided by the Contractor in accordance with Article Seven of the Agreement; and.

- 3) The Subcontractor agrees to respond to the Contractor within 24 hours of receipt of such notice and agrees to rectify any and all deficiencies forthwith and in any event prior to occupancy of the unit, failing which the Contractor may, at the Subcontractor's expense, attend to such rectification (either itself or through another Subcontractor). All expenses of such rectification together with an administrative charge of \$150.00 shall be deducted from any monies owing to the Subcontractor.
- 4) Should approval be granted by the Contractor allowing the Subcontractor to rectify such deficiencies after occupancy by the Contractor's Purchaser, it is the Subcontractors' sole responsibility to contact the purchaser and schedule appointments to rectify such deficiencies. Further, the Subcontractor shall be responsible to have the Contractor's service completion forms signed by the purchaser indicating the purchaser's acceptance of the work. Should the Subcontractor fail to honor or attend appointments made with the purchaser, the Contractor shall immediately remedy the matter and proceed as described in paragraph (c).