



## 2020 PROVINCIAL SKILLS COMPETITION – COMPETITORS' PACKAGE

### ARCHITECTURAL CAD SECONDARY LEVEL

#### INSTRUCTIONS

**DURATION: 3 HOURS**

In this exercise you will create drawings for a Vancouver laneway-style house based on plans provided. **Be sure to read all instructions prior to commencing.**

#### Items Provided:

- Main floor plan with dimensions, including stairs. Revise the plan to provide an entry closet against the bathroom north wall for storage of coats.
- Upper floor plan with dimensions – the client would like high windows in the bedroom and bathroom for natural light
- Vancouver zoning design guidelines for laneway houses

#### PROCEDURE

1. Create a drawing name Ground Floor\_###, where ### is your Competitor number.
2. Create a drawing name Upper Floor\_###, where ### is your Competitor number.
3. Create drawings for the elevations (e.g. South / East / North / West Elevation\_###, where ### is your Competitor number).
4. Create a section through the building from east to west, looking north called Section A-A\_###, where ### is your Competitor number.
5. Refer to the included plans that follow and use as a reference for laying out each drawing.
6. Endeavour to use all of the information provided.

#### REQUIREMENTS

- The drawings must fit well on ledger (11x17) paper using a defined scale.
- You may insert or quickly construct a border and title block with relevant information. **It must not include your name or school name.**

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Please ensure that your final submission is saved under your competitor number only. Do not identify your drawings by your name or your school name. Identification by any other means than your competitor number will disqualify your submission.

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## **OTHER INFORMATION**

Laneway houses in Vancouver are a popular way to increase density and affordability of ground-based living in Vancouver. Garages are replaced with laneway houses under the following restrictions. Draw the laneway house ensuring it meets these zoning requirements. Dimension or note the drawing to demonstrate that it meets these criteria.

Maximum building height for Vancouver laneway houses:

- (a) 6.1 m to the ridge of a gable or hip roof, with a minimum pitch of 7:12;
- (b) 5.5 m to the highest point of a roof with a pitch less than 3:12; or
- (c) 5.8 m to the highest point of a shed, arced, butterfly roof, or any sloping roof with a minimum pitch of 3:12

Maximum building area:

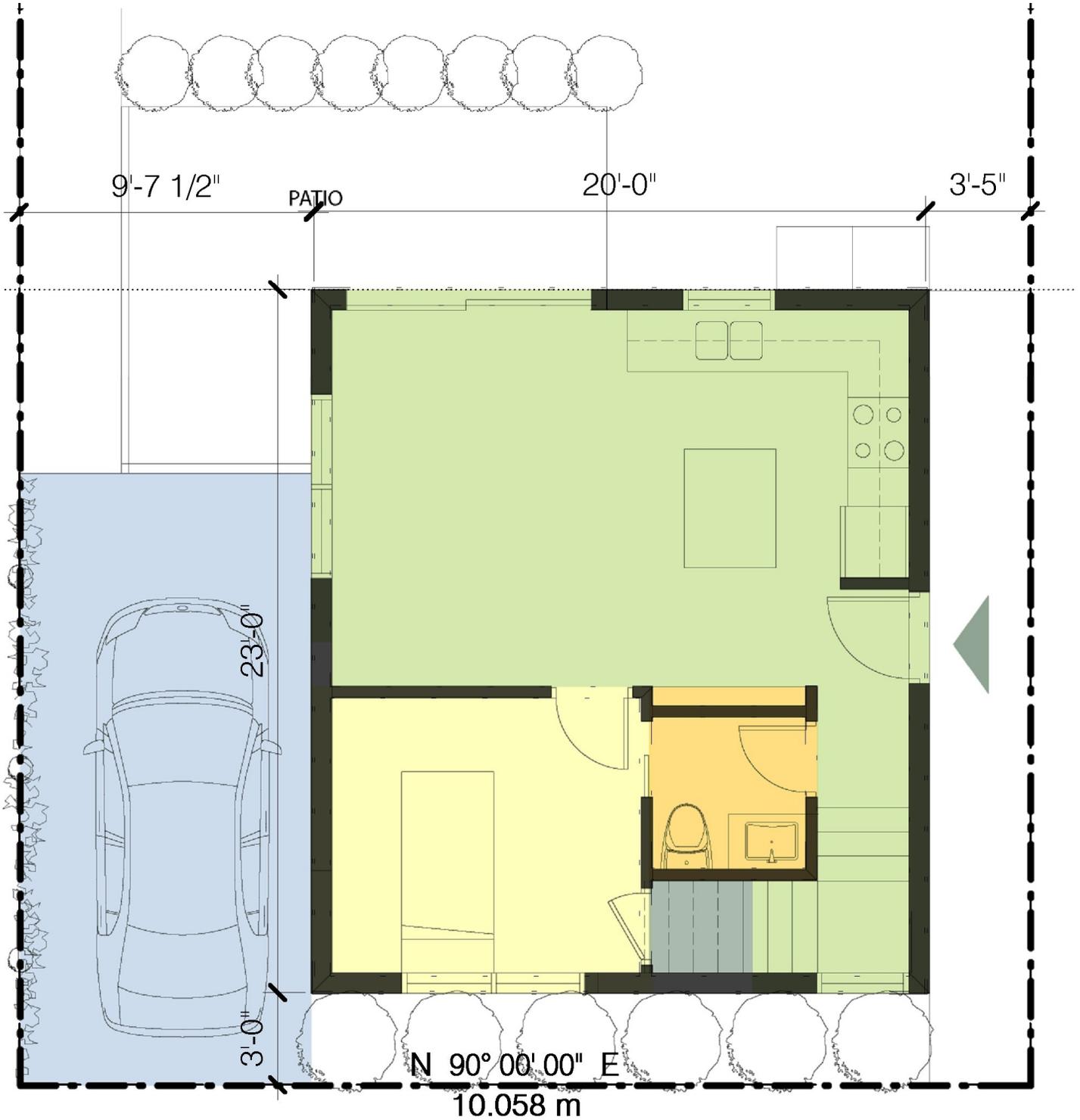
- 83.6 m<sup>2</sup> in area, measured to outside of walls
- Upper storey can be no more than 60% of the area of the ground floor
- Storage areas up to 3.7 m<sup>2</sup> total for the building may be excluded from the floor area calculations

Construction:

- Floor joists are 2x10
  - Floor sheathing 3/4" plywood, 1/2 inch drywall to ceiling.
  - Footings or slab-on-grade to building code (either construction is acceptable).
  - Eaves are to be 18 inches.
  - Fascia and trim stock is to be 6 inch wide.
  - Roof system is 2x8 rafter-based to provide maximum headroom to the upper storey. The joists will be strapped for ventilation. Maximize ceiling height in upper floor while staying under the zoning bylaw maximum height.
  - Upper floors can make use of dormer roofs as required.
  - Windows are to be as tall as possible where shown
  - Vancouver's building bylaw still allows 200/210mm rise/run with a 25mm nosing
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# MAIN FLOOR PLAN

Show walls and roof over.  
Draw all millwork and plumbing shown.



## SECOND FLOOR PLAN

Show patio and railing at edge. Client wants windows above bed and bathroom mirror for natural light.

