48th (2015) ANNUAL DESIGN DRAFTING CONTEST

ATTACHMENT A-ARES (ADVANCED)

Your employer has just given you a schematic drawing of a home. He is doing the project for his dentist as a favor for the dentist providing a root canal. This is a "free-be" so your boss has been putting this project off as long as possible. The plan and elevation came from an article in the Sunday paper. Unfortunately, there is now a rush for the drawing, since the house is not built and the dentist expects the Architectural services to be completed. Your employer knows he can count on you to get the job done, and done right.

He needs construction documents that will allow the owner to pull a permit for the structure. The minimal requirements are a plot plan, dimensioned floor plans for both floors, four exterior elevations, typical wall section, an interior elevation detail, and a roof layout plan. These drawings need to be complete with dimensions and annotations.

General Information

- Use good CAD production techniques.
- Utilize drawing layout wisely. **You are allowed a maximum of (FIVE) saved PDF sheets.**
- Dimensioning, general text, and notes shall have a plotted height of 1/8".
- Other text (i.e. titles, room names) may be a height of your choice, but must be legible and appropriately sized using architectural conventions.
- Include a title and scale for each drawing on the sheet. Include a North arrow where appropriate.
- Use the ADDA Architectural Sheet with border and title block provided. Be sure to fill out the title block properly.
- The scale of all required drawings will vary. Utilize wise sheet layout.

Your task is to provide the following drawings for your client's use:

- Plot Plan
- Floor Plan (1st and 2nd Floors)
- Openings Schedule
- Exterior Elevations
- Wall Section
- Elevation of the Kitchen as indicated on the sketch at B
- Roof Layout Plan

Plot Plan

- **Use Lot provided labeled #33 and circled.**
- 1" = 10'-0" Scale
- Location of house and orientation w/ dimensions from property lines
- Lot lines labeled and dimensioned
- All setbacks labeled.
- Label all lengths and direction of the bearings surrounding the property.
- BSL's = 10' LEFT SIDE, 10' RIGHT SIDE, AND 25' FRONT AND REAR
- Provide the driveway & walkway to front door.

Floor Plan

- **Square footage supplied on floor plan sketch is not exact. Your allowance is that provided number +/- 5% per floor.**
- **Any dimensions not provided on sketch need to be estimated.**
- **Max width of structure = 60'-0", Max depth of structure = 60'**
- Single family residence per attached Sketch
- Both Floor plans are to be plotted at a scale of ¼" = 1'-0".
- Exterior walls to be 2 X 6 wood studs @ 16" O.C. w/ R-19 batt insulation between & treated sill plates w/ ½" X 10" anchor bolts @ 48" O.C.
- Exterior walls are to be face brick or stone, as indicated on the sketch, fully sheathed w/ 3/8" plywood for structural shear, Tyvek weather barrier, 2x6 wood studs, 6" batt insulation with vapor barrier, ½" gypsum wallboard, and wood baseboard.
- Interior partitions to be 2 X 4 wood framing @ 16" O.C. with ½" gyp. Bd. on all interior walls minus rear wall of garage. Rear garage to have 5/8" gyp. Bd.
- 5/8" gyp. Bd. on all ceilings
- All ceilings are to be 8'-0" high
- Combination Style Roof to be a 6:12 pitch similar to provided sketch
- Boxed soffit construction w/ 8" RX-90 fascia board, 2 X 4 lookouts w/ 2" cont. eave vents thru ½" plywood soffit boards and 18" overhang.
- Asphalt shingles, over 30# felt, over 5/8" plywood sheathing, over pre-engineered roof trusses @ 24" O.C. w/ R-30 batt insulation between.
- Show casework, appliances and plumbing fixtures. Do not show furniture.
- Provide necessary interior and exterior dimension for construction.
- Dimension all exterior windows and doors to their center.
- Sills of all bedroom windows shall be a maximum of 40 inches above the finished floor.
- Front door to be a 36 wide door. Bedroom doors to be 30" wide. All other doors to be typical width.
- Indicate door and window sizes for each door and window by a door schedule and a window schedule. Make sure each door and window is scheduled with a unique door **number** and windows **letter**. The door schedule shall include the door **number**, quantity of doors and the size of the doors. The window schedule shall include the window **letter**, quantity of windows and the size of the windows.

Exterior Elevations

- The front elevation is drawn at a scale of ¼" = 1'-0".
- The other elevations are to be drawn at a scale of 1/8" = 1'-0".
- Indicate title and scale of each elevation on the sheet.
- Provide proper annotation and dimensioning.
- Use the sketch illustration as included in the packet.

Wall Section

Using the basic list of construction items provided previously stated about the exterior wall construction, and all notes included throughout this packet as applicable, develop an exterior wall section where indicated at (**A**) through an exterior wall at a scale of ¾" = 1'-0". Provide any additional necessary components, as well as notes, dimensions and material designations. Include everything from foundation to the roof.

- 2 story, 8' plate height
- 6:12 roof pitch
- Frost line 16"
- 26" x 12" Continuous Footings with 4" Brick Ledge
- #5 Rebar (Continuous)
- 24" Crawl Space (from crawl space grade to bottom of floor joists)
- 2 X 8 P.T. Sill Plate
- 2 X 12 Floor Joists at 16" o.c.
- ¾" Hardwood Finished Floor

Interior Kitchen Elevation

Draft an elevation of the kitchen casework as indicated on the attached sketch at (**B**).
Scale of the elevation to be ½" = 1'-0"

- Show lower and upper cabinets, range, and any other appliances that should be shown.
- Show all other elements that would be visible in the elevation.
- Dimension and annotate appropriately, including material designations.

Roof Plan

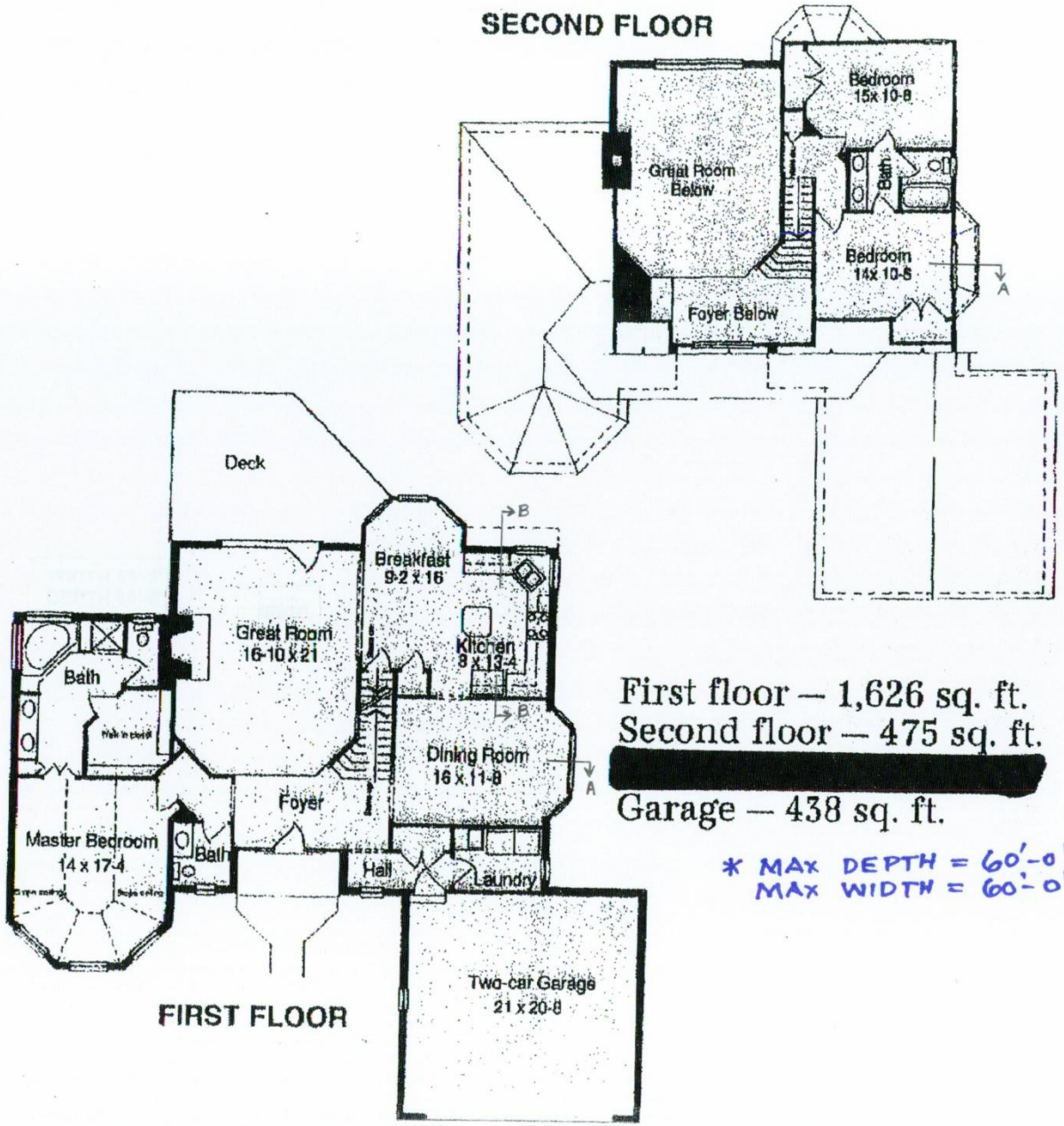
Provide a roof layout plan that details where all hip, ridge, valleys, and overhang would be located according to the floor plan and sketch provided.

- Layout can be located over an exterior wall only floor plan of first floor.
- Provide location of chimney for fireplace.

REMEMBER

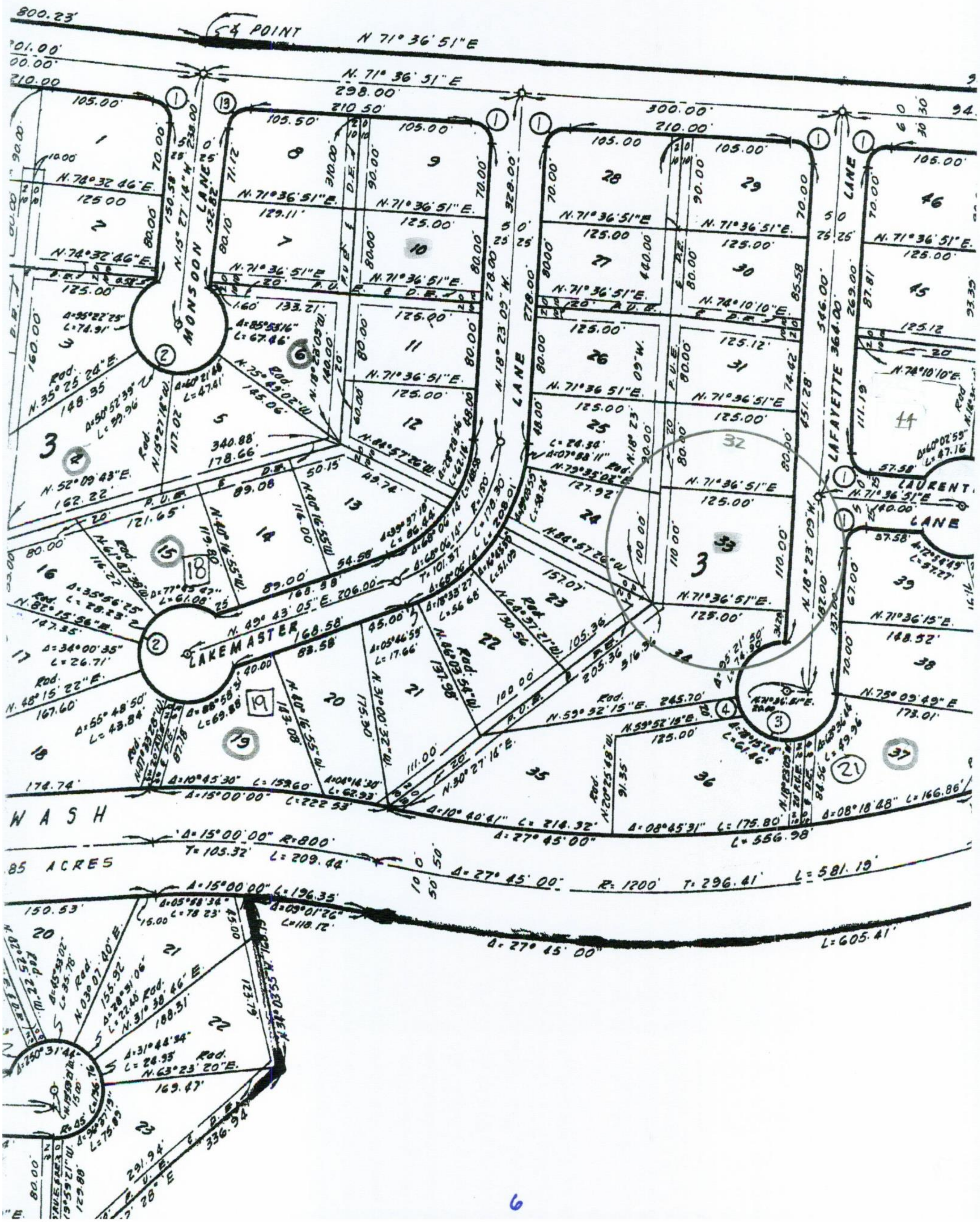
- Your job is to bedazzle your boss with a clean, comprehensive set of construction documents.
- Read the contest problem thoroughly before starting, then read it again and highlight all important and necessary information and requirements.

■ Total living area 2,101 sq. ft ■ Price Code C ■



First floor — 1,626 sq. ft.
Second floor — 475 sq. ft.
[redacted]
Garage — 438 sq. ft.

* MAX DEPTH = 60'-0"
MAX WIDTH = 60'-0"



800.23'
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N 71° 36' 51" E
MONSOON LANE
LAKEMASTER
LANE
LAFAYETTE
LAURENT.
LANE
WASH
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Δ=15°00'00" R=800
T=105.32' L=209.44'
Δ=27° 45' 00" R=1200' T=296.41' L=581.19'
Δ=27° 45' 00"
L=605.41'
L=556.98'