Rainwater Harvesting Calculations

Directions:

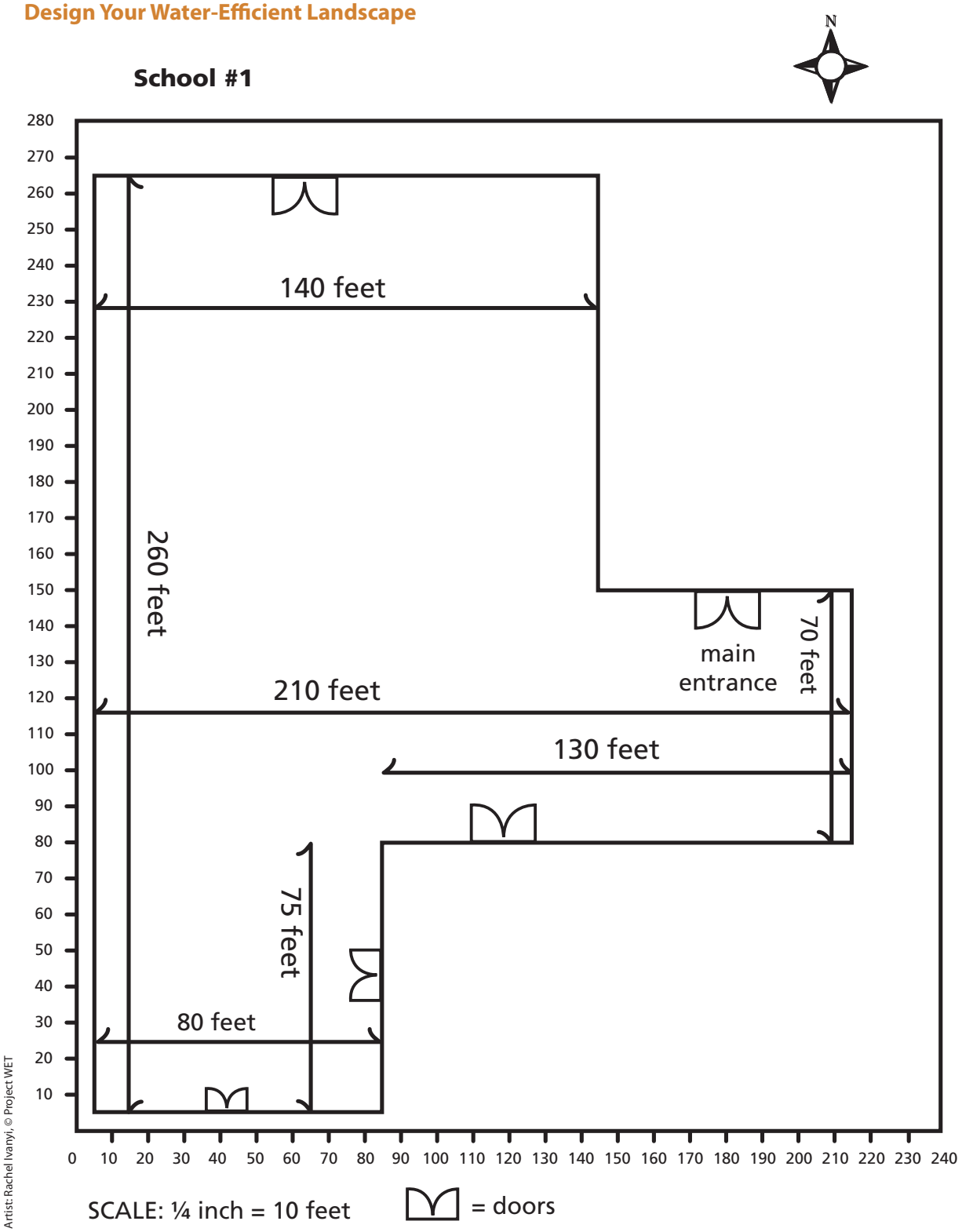
1. Choose a school aerial view from the three shown on pages 136, 137, and 138. Trace the outline you've chosen onto two additional sheets of white paper so you have three views to draw on.

2. Use the measurements for length and width to calculate the amount of square footage for the roof (LENGTH x WIDTH of a rectangle = square feet).

3. Use the chart below to calculate how much water can be harvested from the roof. You will need to refer to the table for average monthly rainfall for your community (provided by your teacher) to fill in column A. If your community is not included in the table, use the numbers for the city in the table that is nearest to you.

How Much Water Can Be Harvested From Your School's Roof?						
	A	**B**	**C**	**D**	**E**	**F**
For each month of the year, follow the instructions to fill in its row.	Enter the amount of rainfall for each month for your city.	Multiply the number in column A by .623 to convert inches to gallons per square foot.	Enter the square feet for the roof you chose.	Multiply column B by column C. This is the maximum gallons of rainfall per month.	Multiply column D by the given "runoff coefficient." This represents how much of the rain that falls on the roof will run off (95%). Enter your answer in column F.	This is the total gallons of water that can be harvested each month (the remainder may be lost to evaporation).
January					.95	
February					.95	
March					.95	
April					.95	
May					.95	
June					.95	
July					.95	
August					.95	
September					.95	
October					.95	
November					.95	
December					.95	
TOTALS					.95	

Design Your Water-Efficient Landscape



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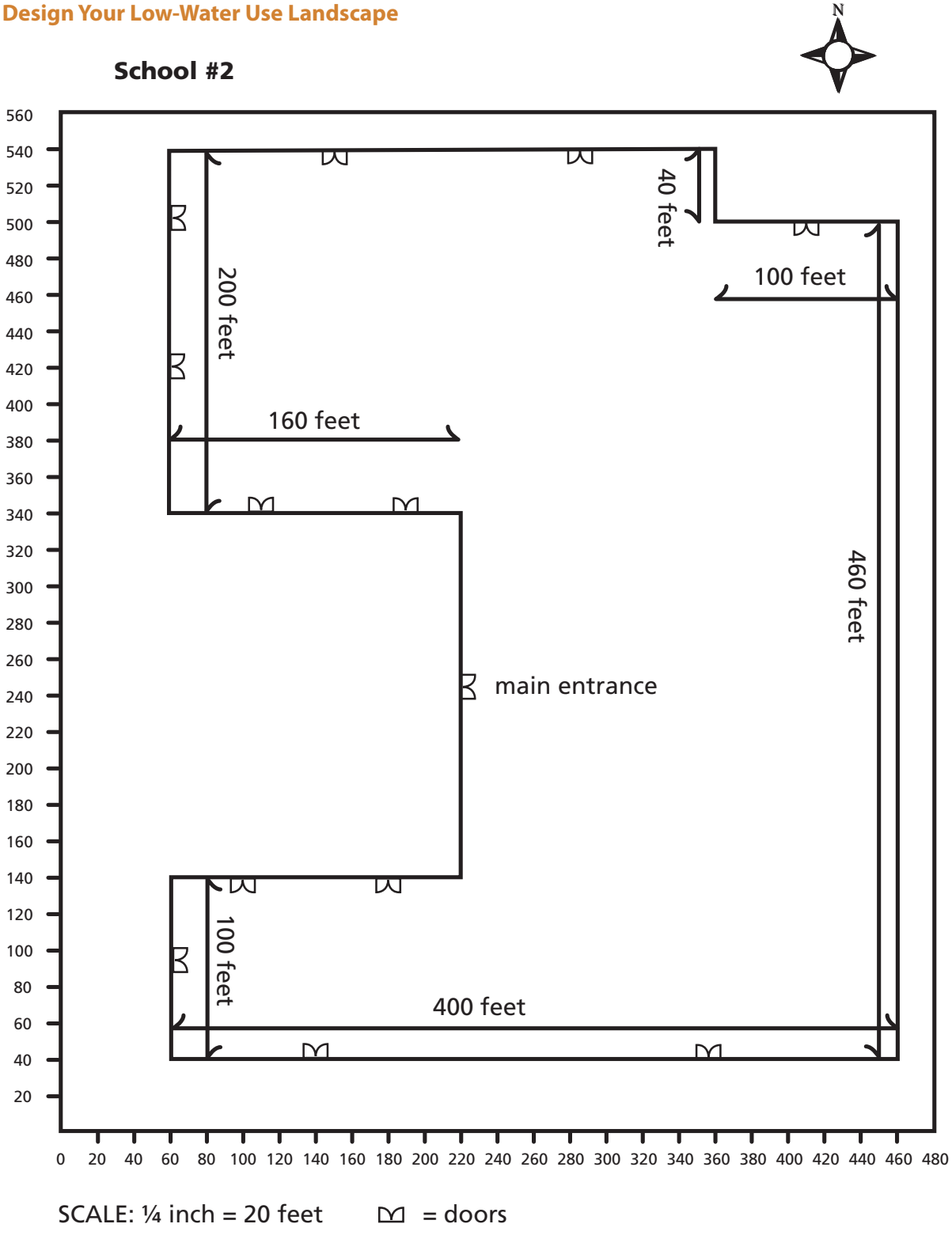
Design Your Low-Water Use Landscape

School #2



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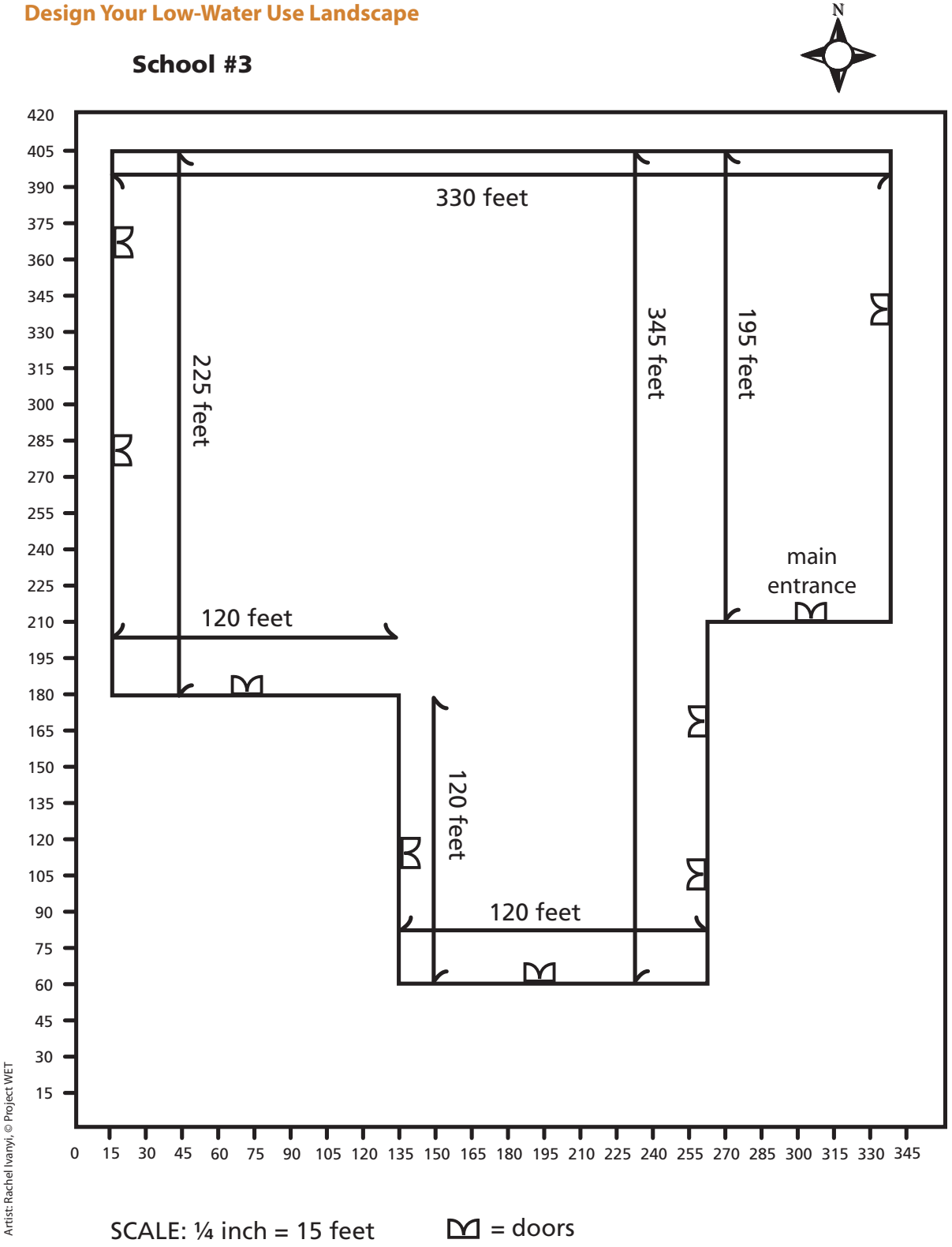
Design Your Low-Water Use Landscape

School #3



SCALE: ¼ inch = 15 feet = doors

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