Preparing for the Landscape Design Problem on the Colorado Certified Nursery Professional Exam.

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Why Is There A Landscape Design Problem On The CCNP Exam?

- Nursery Professionals advise their customers about landscape design daily – whether it is through a formal "landscape design department" or "on the fly." So, you should be able to draw a landscape to scale and present it appropriately.

- Nursery Professionals must be able to describe the cultural requirements for the plants they suggest, and understand those cultural requirements well enough to suggest the right plant for the right place.

- The best way for the Certification Committee to assess your understanding of these two skills is through a landscape design problem. Keep this in mind as you go through this presentation.

Right plant, Right place, Right way, Right reason.

What Does the Landscape Plan Problem Look Like?

- The problem has two parts

  – A problem statement that gives details of what the customer wants and details about the site .

  – A plan drawing that gives you the layout of the site for which you are designing.

Colorado Certified Nursery Professional Exam.

Landscape Problem No. __

Jim and Betty Cramer are a young couple and have just moved from a townhome. They have been **used to manicured lawns** and are looking forward to their first yard. They **both want to spend their leisure time in their yard**. They want their yard to be the best in the neighborhood. Jim has already built a run for their **two small dogs** and a storage shed. The home already had a vegetable garden, patio and backyard with mulch beds. The Cramers want **you to help them choose at least three trees for their home**, and **fill their mulch beds with an appropriate mix of flowers, grasses and shrubs. Betty insist on roses being a part of the design and Jim wants to frame their western view of the mountains. Both want to attracts birds to their yard.**

Important Notes About The Problem Statement:

- The CCNP Exam allows you to design for the stated client as if they reside in your home town.

- Assume that the lot is "flat" (with only enough slope away from the home to allow for adequate runoff) unless otherwise stated.

- Home color is usually unimportant, though it may be mentioned.

- Assume that all windows are "normal windows" unless otherwise stated. Meaning that unless you are told otherwise, you can assume that the bottom of the window sill is 3-4 ft. above ground level.

- Assume that flower beds will be irrigated separately from turf and from each other.

Important To Note About The Problem:

Pay close attention to the customers needs as stated in the problem statement.

For example

- If "money is no object" assume they want you to use sizeable materials.

- If "they plan to install everything themselves" consider using only smaller plant material.

- The finished plan should not show a tree and grass in the front yard if it states "they want a colorful front yard without turfgrass."
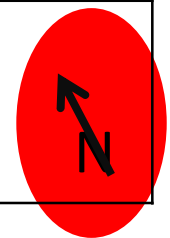
How well you meet the customer's needs is a part of your final score on this part of the CCNP exam.

# The Plan Drawing

— 1/10" = 1 ft

——— ½" = 5 ft.

1"= 10 ft
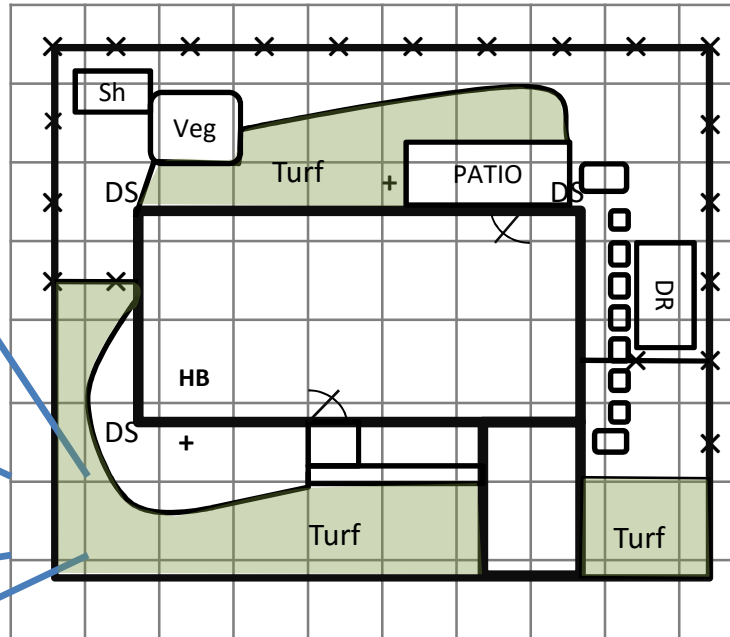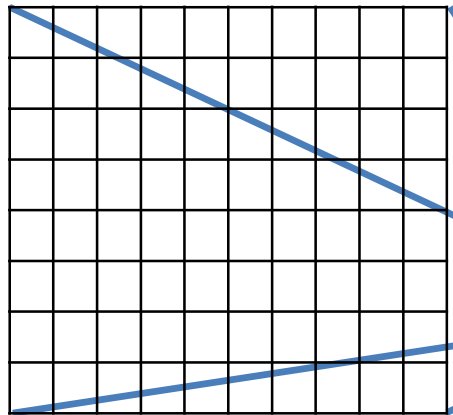
Plant Legend

Key	Qty	Size	Botanical Name/Common Name
Trees			
Shrubs			
Groundcovers/Perennials			

Title Block

Client:
City:
Drawn By: #
Date:

Scale: 1"=10'0"

- The plan is drawn at a 1 inch = 10 feet scale.

- North Arrow – North is not always the top of the drawing.

- Property lines are shown as thin dashed lines, while fences are usually shown as a thicker solid line with "×"s.

- Thick lines segments of the house outline indicate walls, thinner line segments indicate windows. Doors are marked with an arc and angled line.

Miscellaneous Symbols That Might Appear On The Plan Drawing

- "DS" indicates a down spout on the home rain gutter system.

- "+ HB" indicates the hose bib / faucet location

- Turf areas will be stippled and labeled.

- "A", "B", "C", etc = will refer you to information in the Problem Statement. Such as "point A is higher than point B...."

+ HB

DS

A

B
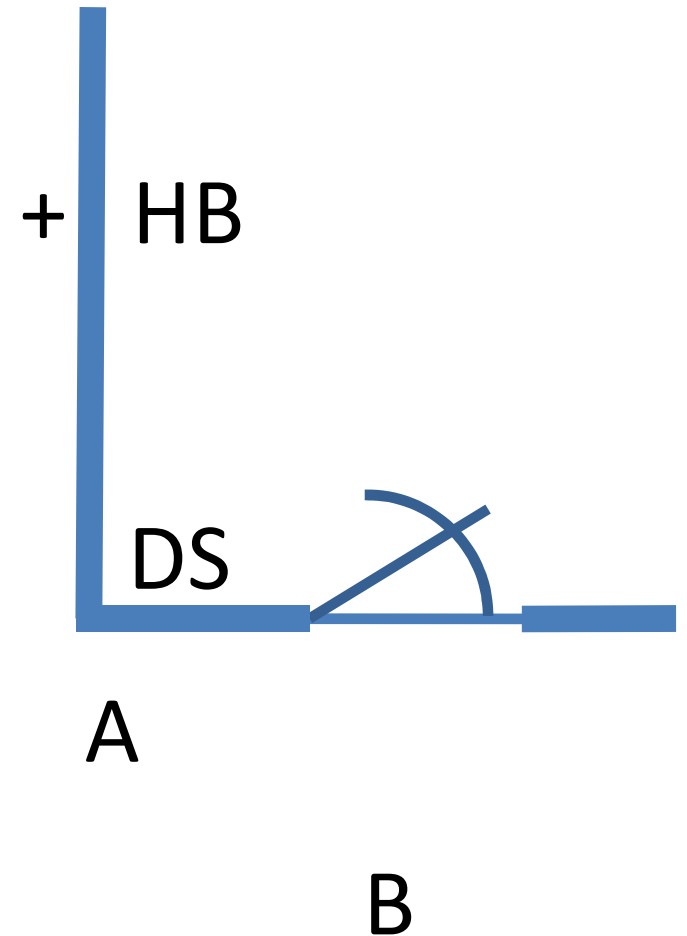
What is my Task?

- On the CCNP exam you will be creating a planting plan for the site.

- All hardscape and turf areas will be shown.

- Your task is to:
  - select the plants
  - draw the plantings onto the plan
  - label them
  - Complete the plant Legend.

- Plants must be drawn at their "mature size"; using appropriate symbols

You are expected to use at least:

✓ 3 genera of trees

✓ 4 genera of shrubs or vines

✓ 4 genera of groundcovers, perennials or grasses

Example: 3 genera of trees

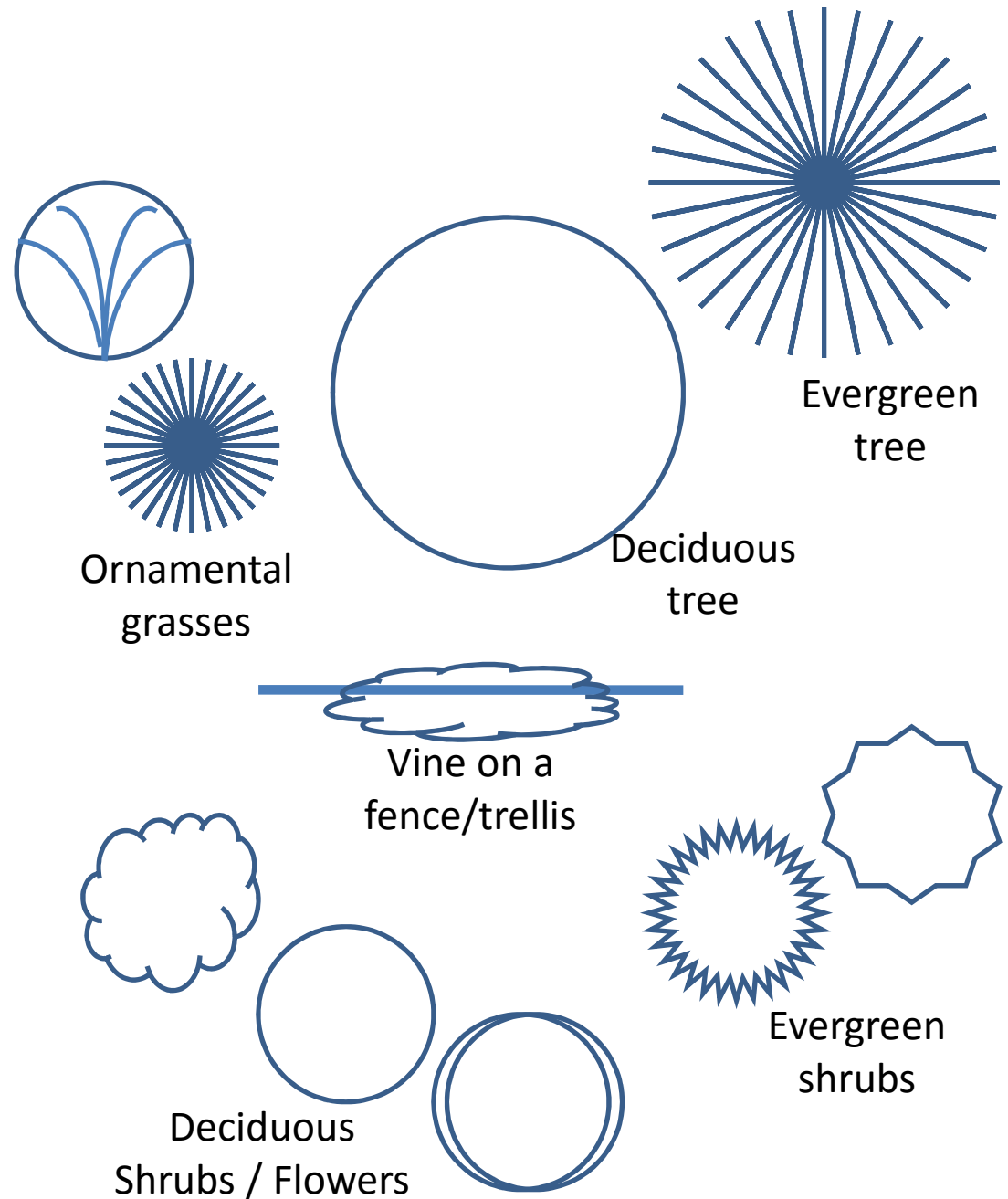| YES	NO
• *Acer glabrum*	• Picea abies
• *Abies concolor*	• Picea pungens
• *Malus* hybrid	• Picea omorika

Making a scaled Plan-view Drawing

- Mature size means that the circle representing each plant should be drawn at least two thirds of the plant's likely mature spread.

- The drawing is at a 1:10 scale meaning that 1 inch on the drawing = 10 feet.
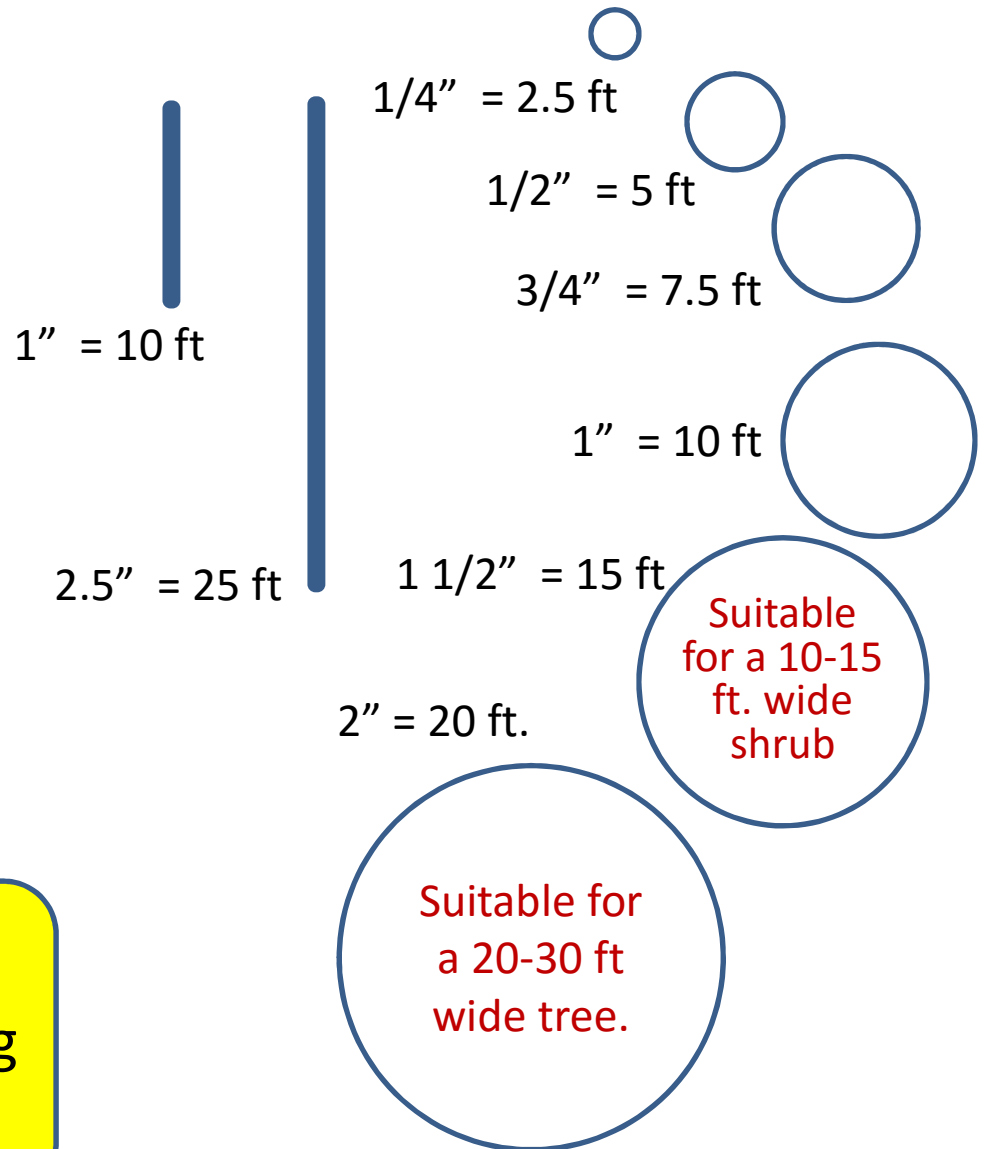
A shrub with a mature spread of 3-5 ft. could be drawn using a ___ -- ___ inch circle.

1/4" = 2.5 ft

1/2" = 5 ft

3/4" = 7.5 ft

1" = 10 ft

1" = 10 ft

1 1/2" = 15 ft

2.5" = 25 ft

2" = 20 ft.

Suitable for a 10-15 ft. wide shrub

Suitable for a 20-30 ft wide tree.

Plant Symbols

- On your plan, different plant species should be indicated using different symbols.

- Symbols should usually be circular and neatly drawn – use a circle template as a guide.

- Slight overlapping of symbols is acceptable.

- Symbols can be simple or complex depending on your ability.

Evergreen tree

Ornamental grasses

Deciduous tree

Vine on a fence/trellis

Deciduous Shrubs / Flowers

Evergreen shrubs

Drawing and Labeling Plantings

- Single plants are circles with an x at their center.

- Mass plantings should be outlines.

- Plantings under trees should be shown.

- The center of each plant within a mass planting is indicated by an "x" and is connected by lines or shaded in a way that distinguishes plantings of different species.

- Label plantings with legend keys.
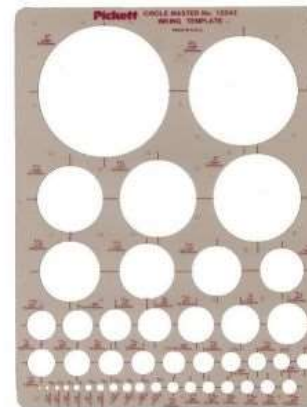
9 - COAP

1 - RO

X
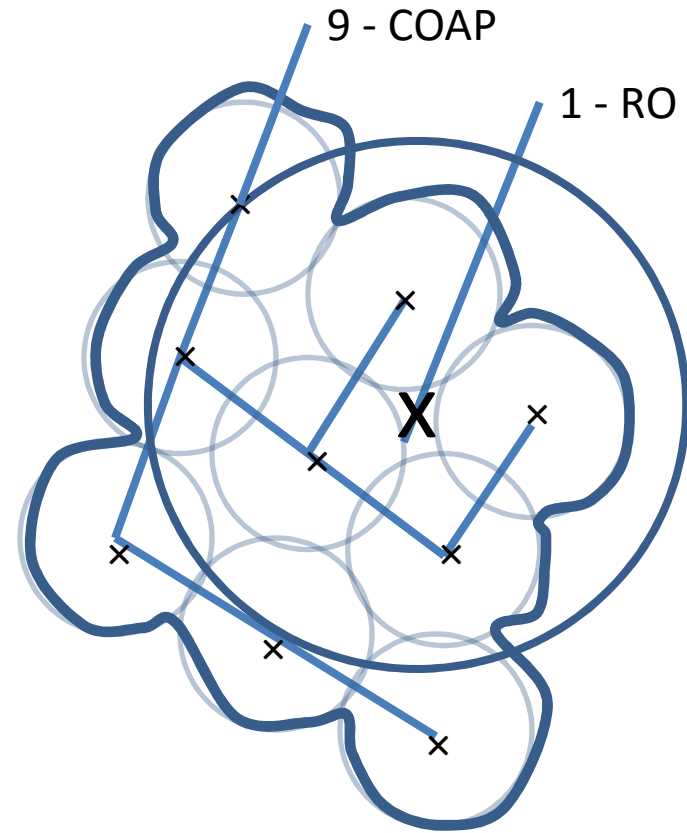
Avoid crossing lines as much as possible!

Drawing Tools

Helpful tools to have include:

- A mechanical pencil
- An art gum / smudge free eraser
- A ¼" to 2 ½" circle template

Problems With Grade Changes

- The illustration to the right should help you if a problem has a significant grade change

  - LP = low point

  - HP = high point

  - TOS = top of slope

  - BOS = bottom of slope

  - Isolines indicate grade of equal elevation.

  - The closer they are, the steeper the grade change.

    - Dotted = existing

    - Solid = proposed

    - If solid lines cross dotted lines cut or fill is indicated/called for.

Section view

HP

BOS

A Berm

Section view

isolines

LP

TOS

A Depression

DS
DS
DS
BOS
HP
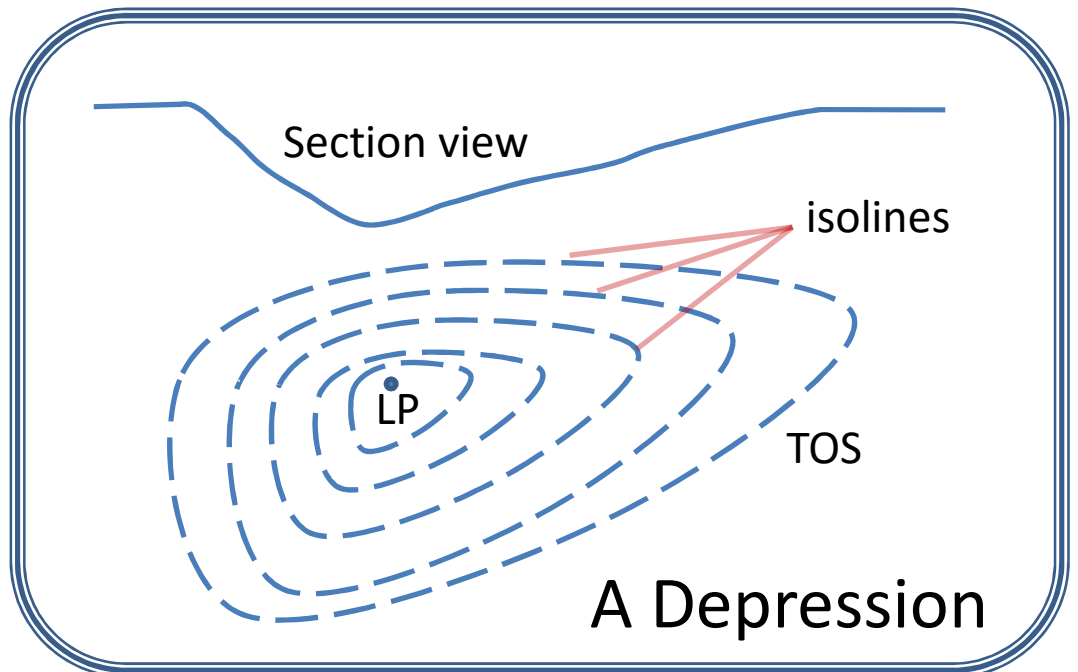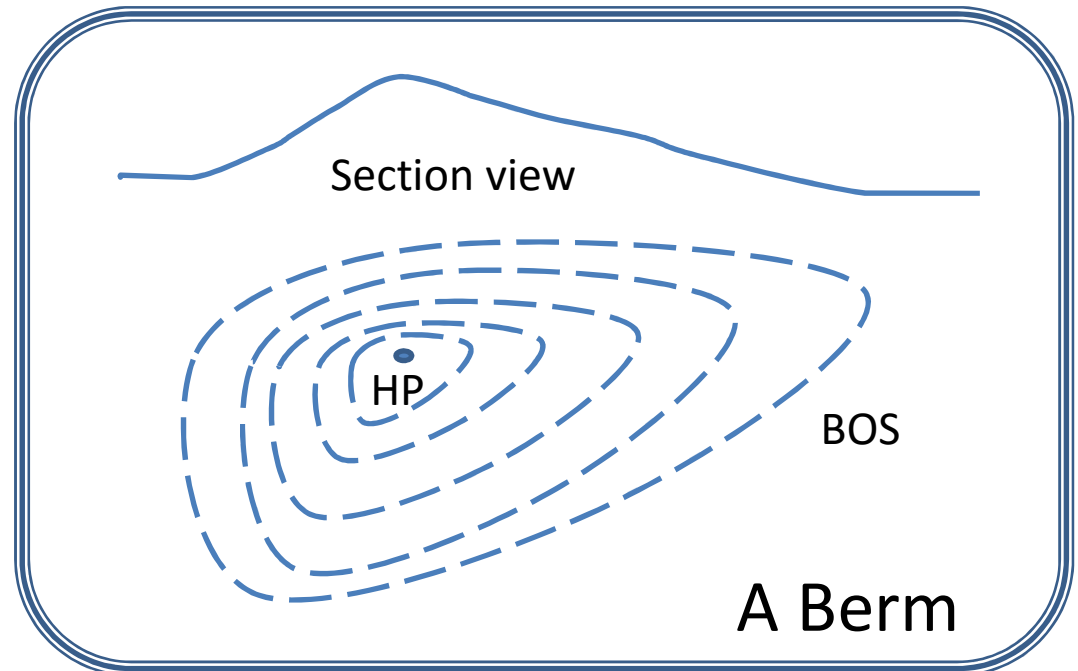
Drawing outside the lines

- Can trees cross the plane of the property line?
  - Generally, yes.
  - Avoid placing the tree too close to the property line where:
    - The trunk may interfere with easements or property line surveys
    - A large portion of the canopy will overhang neighboring properties
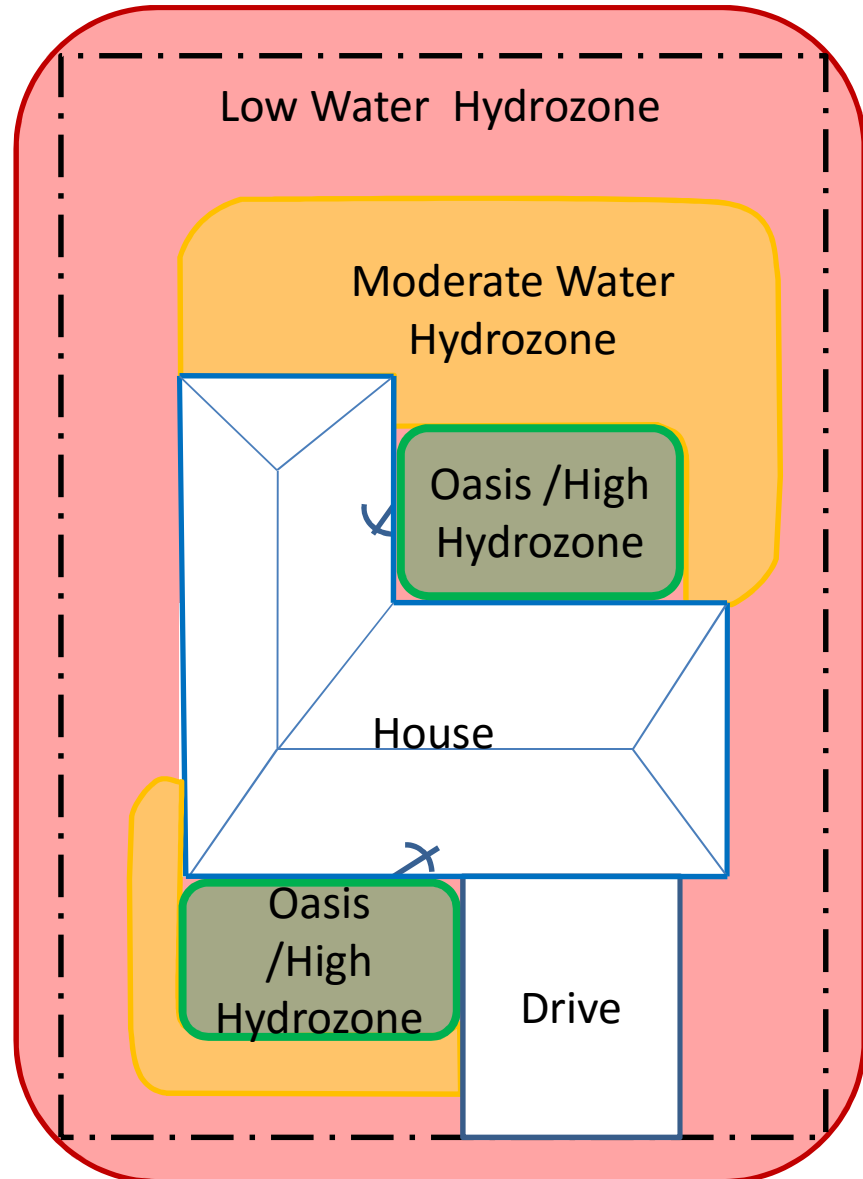
Completing the Title Block and Plant Legend

- The "key" code is the alphanumeric key for each plant that appears on your plan.

- The quantity is the total number of each plant (or flats of a plant) that appears on your plan.

- The size is the grade of plant material that is to be installed.

- You must supply the plants' botanical names. Adding the common name is optional.

- Complete the Title Block with the stated client name, the date of the test, the home town of your choice, and your testing ID number.

Trees			
Key	Qty	Size	Botanical Name/Common Name
PP	1	5 ft. B&B	Picea pungens/ Blue Spruce
Shrubs			
JB	6	#5	Juniperus horizontalis 'Blue Chip' / Blue Chip Juniper
Groundcovers/Perennials			
AC	1	F15 flat	Aquilegia caerulea/ Colorado Columbine

Title Block

Client: Mr. & Mrs. Jones
City: Anytown, CO
Drawn By: # 23
Date: 1/5/2009   Scale: 1"=10'0"

Xeriscape Design Principles in Action.

1. Hydrozone the landscape
   a. this means creating plant communities based on water need.
   b. Put high water plants in high use areas and xeric plants in harder to care for, less visible, or harsher parts of the site.

2. Do turf areas right
   a. Choose the right species
   b. Limit turf use to what is really needed
   c. Specify good soil preparation.
   d. Create turf zones that work with their irrigation.

3. Do other plants right
   a. Don't create high maintenance plantings.
   b. Give plants appropriate space and maintenance
   c. Mulch planting to reduce water use.

Low Water Hydrozone

Moderate Water Hydrozone

Oasis /High Hydrozone

House

Oasis /High Hydrozone

Drive

Scoring

- Your design is graded against the problem statement and a scoring rubric.

- For consistency and fairness, each aspect of the design is compared to a standard and assigned a point score based on your achievement.

- Tests scoring over 75% are considered passing.

Passing

CCNP Exam Landscape Design Grading Rubric (Rev. 6/09)

Date_____ Test No._____ Score_____

Competency Component		% of score	Evaluation for this Competency Component				
			Outstanding	Above Average	Competent	Below Average	Failing
Mechanics (31 %)	Title Block is completed correctly.	2	2.0	1.7	1.5	1.3	1.0
	Symbols & labeling are neat & legible.	4	4.0	3.4	3.0	2.6	2.0
	Plants correctly spaced & shown at proper scale.	7	7.0	6.0	5.3	4.6	3.5
	All plants on the plan are labeled.	4	4.0	3.4	3.0	2.6	2.0
	Plant names presented correctly.	4	4.0	3.4	3.0	2.6	2.0
	All plants on the plan are included in the plant legend.	3	3.0	2.6	2.3	2.0	1.5
	The plan is designed to customer's specifications.	7	7.0	6.0	5.3	4.6	3.5
Plant Knowledge (48 %)	Ornamental traits of plant materials meet customer's requests.	6	6.0	5.1	4.5	3.9	3.0
	Plants are sited in their appropriate microclimate (sun, shade, etc) .	6	6.0	5.1	4.5	3.9	3.0
	Plants used are adapted to the climate & soil of the region/site. etc.	6	6.0	5.1	4.5	3.9	3.0
	Growth rates compatible between adjacent plants.	6	6.0	5.1	4.5	3.9	3.0
	Plants grouped by water needs (hydrozoned).	6	6.0	5.1	4.5	3.9	3.0
	Plants placed so they will not overgrow walks, windows or hose bibs.	6	6.0	5.1	4.5	3.9	3.0
	Plant height progression is appropriate; focal/key plants sited correctly.	6	6.0	5.1	4.5	3.9	3.0
	Plant combinations/placements are compatible for maintenance.	6	6.0	5.1	4.5	3.9	3.0
BMP/Xeriscape adherence (16 %)	The use of high water plants is limited to the extent possible for this situation.	7	7.0	6.0	5.3	4.6	3.5
	High, moderate and low water hydrozones placed appropriately.	7	7.0	6.0	5.3	4.6	3.5
	Mulched areas and mulch types specified on drawing/plan.	2	2.0	1.7	1.5	1.3	1.0
Design (5 %)	Design is easily understood and aesthetically pleasing.	5	5.0	4.4	3.8	3.0	
Scoring Summary :	Point Total for each column:	100	36	30.5	9.6	3.9	3.5
	Subtotal						83.5
	Deduct 5 points if minimum number of genera were not used (3 genera of trees, 4 genera of shrubs, vines, 4 genera of perennials/grasses)						5
	Final Score Graders Initials:_____ Reviewers Initials:_____						78.5