







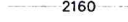
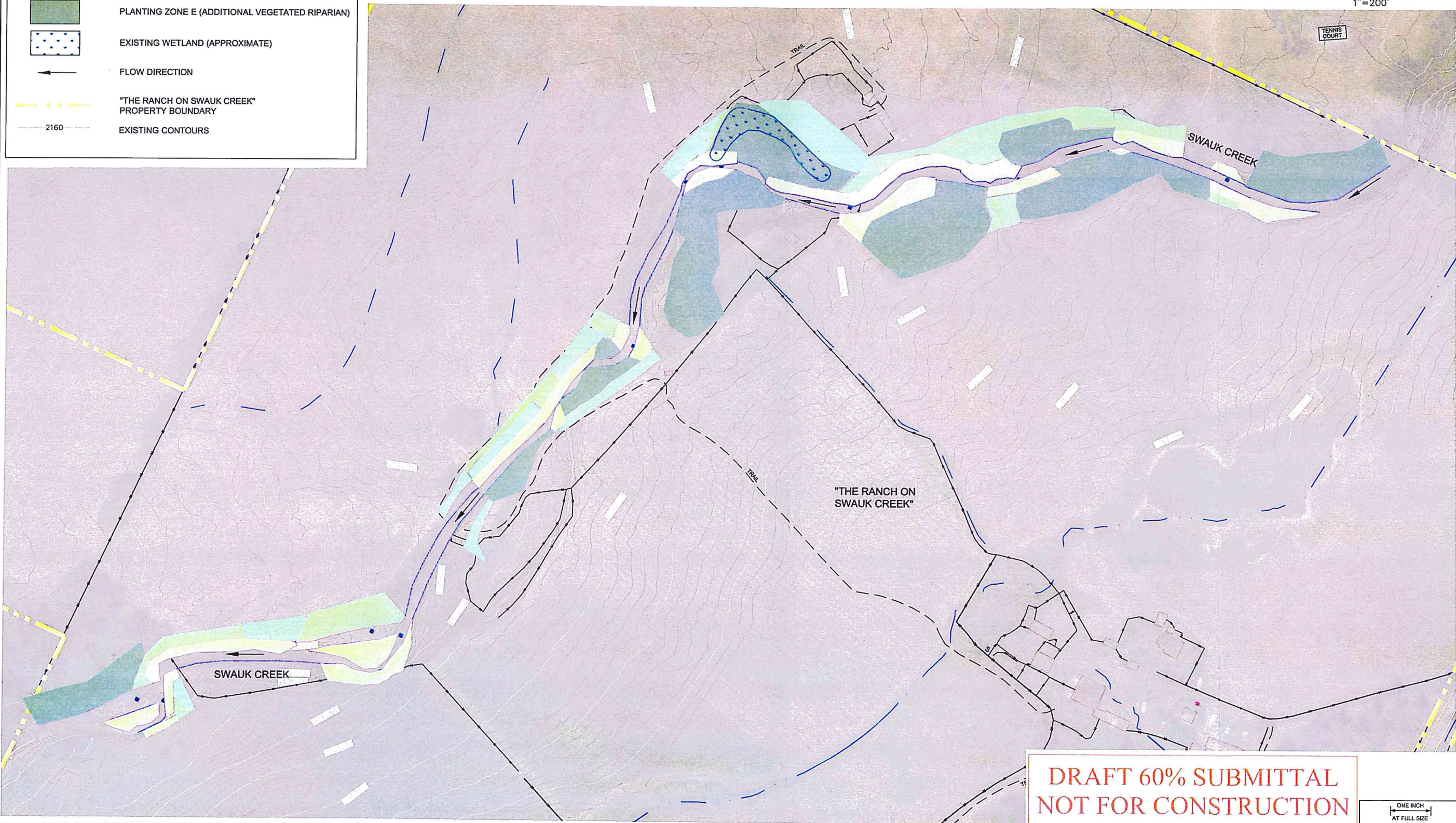
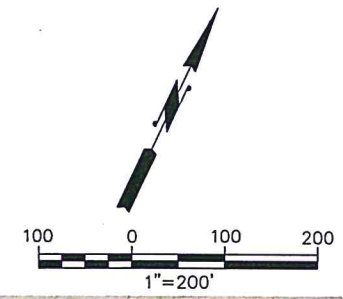


**LEGEND:**

	PLANTING ZONE A (CHANNEL BANK)
	PLANTING ZONE B (RIPARIAN)
	PLANTING ZONE C (DISTURBED OUTER RIPARIAN)
	PLANTING ZONE D (ADDITIONAL OUTER RIPARIAN)
	PLANTING ZONE E (ADDITIONAL VEGETATED RIPARIAN)
	EXISTING WETLAND (APPROXIMATE)
	FLOW DIRECTION
	"THE RANCH ON SWAUK CREEK" PROPERTY BOUNDARY
	EXISTING CONTOURS

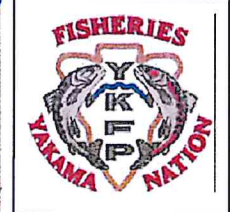


REVISIONS	DATE

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200 First Avenue West, Suite 500  
Seattle, WA 98116  
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**PLANTING PLAN**  
SWAUK CREEK RIVER RESTORATION PROJECT  
RIVER MILE 6.5 TO 7.3  
YAKAMA NATION  
KITTITAS COUNTY, WASHINGTON

DATE:	12/2010
DESIGNED BY:	E.GHITIS
DRAWN BY:	T. NAGLE
CHECKED BY:	T. ABBE
SCALE:	AS NOTED
ENTRIX JOB NO.	42294003
FIGURE NO.	

**DRAFT 60% SUBMITTAL  
NOT FOR CONSTRUCTION**

ONE INCH  
AT FULL SIZE  
OTHERWISE SCALE ACCORDINGLY



**PLANTING GENERAL NOTES:**

- Zones A, B, and C are the highest priority planting areas for 2011. Zones D and E can be planted if funding becomes available and/or at a later date.
- Plants shall be placed in irregular groupings, clustered in small groups throughout each zone. A regular grid of plants shall be avoided. A naturalistic appearance is desired.
- Oregon white oak should be planted in groves of 50 individuals, not interspersed with other trees. A 3 ft square weed barrier will improve survival of oak seedlings.
- Any equipment moving through vegetated areas shall be restricted to a single pathway to preserve existing native vegetation.
- Protect trees from browsing by deer and elk with rigid seedling protectors (4 in. diameter, 3 ft high mesh tubes staked to the ground) or periodic application of browse repellents (such as Plant Skydd).
- Container Plants
  - The planting hole should be 2-3 times wider than the plant and slightly less deep than the root ball. Top of crown shall be at ground surface level.
  - Before planting, rough up the outer inch of root ball to stimulate growth.

Backfill hole with native soil, making sure no air pockets remain

**INVASIVE VEGETATION MANAGEMENT NOTES:**

- Non-native invasive vegetation, especially pasture grasses, shall be controlled using mowing and weed barrier fabric.
- If the entire planting area cannot be cleared, a circle with a radius of 2 to 4 feet around each plant should be cleared of all invasives.
  - Manual pulling must remove the entire root, and so is most effective when ground is moist.
  - Replace any divots created when removing the plants to lessen the amount of disturbed soil.
  - Pulling must be done consistently. Monitor site throughout growing season and remove any new plants. Continue to monitor the area for several years.
  - Ideally, hand pull during bloom and before setting seed.
  - Bag and dispose of material properly so root fragments and seeds are not dispersed. Keep invasive plants from spreading by cleaning tools, boots and vehicles.
  - For white sweet clover (*Melilotus alba*), if pulling is not possible, cut the stems close to the ground with a hand-held scythe after the leaves on the lower stems have died and before flowering occurs. At this point in the life-cycle, it will not re-sprout when cut close to the ground.
  - For knapweed (*Cirsium* spp.), mowing will not be effective; they will re-sprout and flower in the same season. While mowing can be used to prevent flowering until pulling can occur, do not mow plants that have set seeds and clean mower after cutting. Plants in flower may still form seeds after being dug up. Carefully bag and dispose of all plants already in flower.
- Mulch around plants with medium-sized wood chips (approx 3 in. in size, also known as hog fuel) to help suppress weed growth. Apply wood chips 4 to 5 inches deep in a ring 3 to 4 feet diameter. Pull the chips away from the plant so that no part of the bark is covered.

**PLANTING SCHEDULE**

COMMON NAME	LATIN NAME	SPACING (FEET ON CENTER)	Quantity 2011
<b>ZONE A (CHANNEL BANK) 7,300 SQ FT</b>			
Peachleaf willow	<i>Salix amygdaloides</i>	3 FT OC	800
Coyote willow	<i>Salix exigua</i>	3 FT OC	1600
		<b>Total Stakes</b>	<b>2400</b>

<b>ZONE B (RIPARIAN) 80,000 SQ FT</b>			
Ponderosa pine	<i>Pinus ponderosa</i>	10 FT OC	200
Black cottonwood	<i>Populus balsamifera</i>	10 FT OC	200
Quaking aspen	<i>Populus tremuloides</i>	10 FT OC	0
Water birch	<i>Betula occidentalis</i>	10 FT OC	0
Mountain alder	<i>Alnus incana</i>	10 FT OC	175
Douglas maple	<i>Acer glabrum</i>	10 FT OC	175
		<b>Total Trees</b>	<b>750</b>

Serviceberry	<i>Amelanchier alnifolia</i>	4 FT OC	200
Red osier dogwood	<i>Cornus sericea</i>	4 FT OC	300
Mock orange	<i>Philadelphus lewisii</i>	4 FT OC	400
Blue elderberry	<i>Sambus cerulea</i>	4 FT OC	800
Snowberry	<i>Symphoricarpos albus</i>	4 FT OC	300
Buckthorn	<i>Rhamnus alnifolia</i>	4 FT OC	800
		<b>Total Shrubs</b>	<b>2800</b>

<b>ZONE C (DISTURBED OUTER RIPARIAN) 76,000 SQ FT</b>			
Ponderosa pine	<i>Pinus ponderosa</i>	10 FT OC	600
Oregon white oak	<i>Quercus garryana</i>	10 FT OC	150
Choke cherry	<i>Prunus virginiana</i>	10 FT OC	0
Douglas hawthorne	<i>Crataegus douglasii</i>	10 FT OC	200
		<b>Total Trees</b>	<b>750</b>
Golden currant	<i>Ribes aureum</i>	4 FT OC	700
Woods' rose	<i>Rosa woodsii</i>	4 FT OC	700
Snowberry	<i>Symphoricarpos albus</i>	4 FT OC	600
		<b>Total Shrubs</b>	<b>2000</b>

<b>ELJ (WITHIN STRUCTURES) 30 FT X 30 FT</b>			
Coyote willow	<i>Salix exigua</i>	2 FT OC	240
		<b>Total Stakes</b>	<b>240</b>
		<b>Totals</b>	<b>8940</b>

**SEED MIX FOR ACCESS AND STAGING AREAS**

COMMON NAME	LATIN NAME	Pounds Pure Live Seed (PLS) per Acre
Thickspike Wheatgr	<i>Agropyron trachycaulum</i>	11.22
	<i>Agropyron spicatum (aka</i>	
Crested Wheatgrass	<i>Pseudoroegneria spicata)</i>	2.56
	<i>Agropyron spicatum (aka</i>	
Bluebunch Wheatgr	<i>Pseudoroegneria spicata)</i>	17.38
Sandberg Bluegrass	<i>Poa sandbergii</i>	3.38
Sand Dropseed "Imr	<i>Sporobolus cryptandrus</i>	0.41
Common Yarrow (Fr	<i>Achillea millefolium</i>	0.04
	<b>Pounds per acre</b>	<b>35</b>
	<b>Total acres</b>	<b>5</b>
	<b>Pounds Seed Mix</b>	<b>175</b>

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