TUALATIN HILLS PARK & RECREATION DISTRICT

NATURAL RESOURCES OFFICE • 15707 S.W. Walker Road • Beaverton, Oregon 97006 • 645-3539 • Fax 614-9514

MEMO

TO:

Lynn Wilson

Restoration and Education Grants Coordinator

Metro

600 Northeast Grand Avenue Portland, Oregon 97232-2736

FROM:

Ralph Cook, Jr., Naturalist

Tualatin Hills Park & Recreation District

DATE:

Thursday 19 December 1996

SUBJECT: Final Report

Beaverton Creek (Tech Ctr) Wetlands Park Restoration

Metro Contract Number: 904239

Project Objectives:

To add snags and basking logs to islands

To plant trees (Oregon ash and willow species) and some clumps of shrubs on the islands of this wetland, plus create cover for waterfowl along the narrow channels with Douglas' spiraea.

The Park District Natural Resources Department considers the net result of this project a success. While high water through the spring of 1996 seriously impacted the areas planted and dislodged one of the basking logs, the project did accomplish its major goals. Some plants survived (a percentage is not available); the basking log was returned and re-anchored; and the snags and basking logs are frequently used. For example, on May 30, 1996 a western painted turtle was spotted on one of the basking logs, and the larger native willows, which were staked, tied and screened for beavers. are doing well.

As stated in the June 18th Status Report, the general appearance of the wetlands is quite good. At the edges of the channels, Reed canarygrass which dominates the entire wetland, was loosened by last winter's and spring's high water and floated downstream to, in part, become lodged near the spillway. As a benefit, reed canarygrass is less dominant in the channels. While some of this movement of reed canarygrass may have occurred before our planting, some may have occurred afterward. As a consequence, it may have carried some of our plantings with it. During this past growing season, only a few of the new plantings were spotted. However, this wetland is studied closely on a continual basis. A survey using a small boat in the spring of 1997 should reveal whether or not our plantings remain.

Also as stated in the June 18th report, the south and west side edges to the upland have developed even more abundantly in small fruited bulrush (Scirpus microcarpus), red-stem dogwood (Cornus stolonifera), soft rush (Juncus effusus) and red alder (Alnus rubra). The hillside leading to the water is dense in native grasses and lupins. Wildlife sightings, in addition to the western painted turtle, include a male belted kingfisher, a pair of cinnamon teal with ducklings, a spotted sandpiper, cedar waxwings, hooded and

common mergansers green-wing teal, American goldfinches, Vaux's swifts, common yellowthroat, and green-backed heron besides the usual waterfowl, great blue heron and red-tailed hawks.

On Earth Day, April 20, 1996, the Park District hosted more than 60 volunteers at this site. They removed blackberries and to compensate for the estimated loss of the initial plantings of this project, they planted native willows southwest and south of the water's edge opposite the islands. These willows were staked, tied and screened against beaver damage. They appear healthy today. Incidentally, these volunteers paid for a park bench, which the Park District Maintenance Department then installed, overlooking the site.

This park is a "high-visibility, high-use" facility, yet it is a natural area. Its appeal, of course, is its open water with waterfowl, great blue heron, beavers, nutria, fish and raptors. It's a popular place for schools to study wetlands, for people to walk their dogs, and for lunchtime and after-work walks. It withstands intense use well because it keeps human activity within viewing areas and on a peripheral asphalt path. Dog signs work moderately well. Light Rail is coming near-by. Considering the large-scale development of high-density residential units and commercial facilities in the Light Rail plan for this area, this park will continue to receive even greater use. We naturalists feel it can play a key role in establishing an appropriate appreciation for natural areas among the local residents and users.

This project has been instrumental in our enhancement of this park to better fulfill its potential.

Photo-documentation of the project, project forms, invoices, the plantingplan and RFP, which the contractor performed, and my evaluation of the the contractor's work follow:

Ralph Cook, Jr. Naturalist

DISK: THPRD-09

FILE: MTRO96FN.RPT

Excerpt from Status Report 18 June 96.



This "panoramic" photo taken in November 1994 shows Beaverton Creek Wetlands Park during high water. The islands are nearly inundated. The channels between the islands of reed canarygrass are well defined. Since this is late fall, the alders along the edge lack leaves and permit this view of the water and islands. When the alders leaf out this view will be limited, as in the current photo on the next page.

During the following summer the channels became nearly closed as "shelves" of reed canarygrass crept outward. The islands became more fully exposed, but remained separate. A broad mud bar became exposed at the extreme right of this photo.

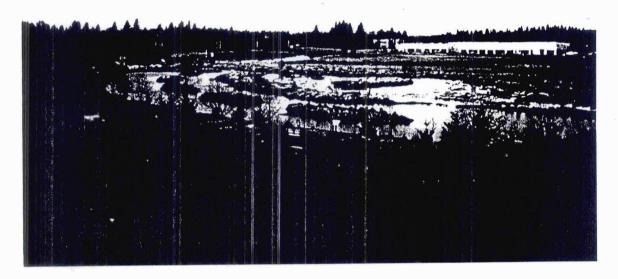
As seen here, except for one deteriorating willow snag just to the right of the center of the shot, the wetland lacked perching sites and cover for waterfowl.

This project added snags and basking logs to the island and (hopefully) Douglas's spiraea as future cover along the edges of the channels.

See the next page for today's appearance.







This photo, taken December 18th 1996 shows Beaverton Creek Wetlands Park from the same angle as the previous photo.

Alder trees edge the water. An interpretive sign has been installed. Snags have been "planted" and basking logs "moored" on the islands.

This shot reveals the snags on Island No. 5. They are seen immediately behind the interpretive sign.

We chose to "plant" cut, live western redcedars. Our reason for this was derived from our first experience "planting" snags at Beacon Hill Park. The dead snags we cut and planted there were too readily broken in the shipping and handling process. Our contractor, David Halstead of Halstead's Arboriculture Consultants (who did both projects with us), rationalized that if we cut live trees they would remain supple and be less damaged in the project. No effort was made to preserve rootballs and keep the trees live, but they stayed green for several months because the holes in which they were planted reached well below the water table of the islands.

The basking logs (one barely visible at the left edge of the island) were moored at the edges of the islands with "duck bill anchors" used by our Park District to secure picnic tables.



These two photographs better reveal the snags and basking logs placed on the islands. Stoplogs in the weir have been removed for the winter, rainy season. Consequently the water level has dropped and mud bars are exposed in the foreground. Red-stemmed dogwood, alder, Oregon white oaks, and small-fruited bulrush line the water's edge. Although winter's high water impacted the Reed canarygrass, it still dominates these wetlands. Notice the high-density housing in the background.





This park bench, paid for by volunteers, "looks out" on the basking log where Park District Naturalist, Elayne Barclay, discovered a Western painted turtle basking. Below, clumps of Reed canarygrass broken loose by last winter's freshets are lodged against the weir structure.





This is one of the native willows planted by volunteers and protected from beavers by 36-inch, heavy-gauge screen. Beavers will reach over lower screen and will crush lighter gauges, such as chicken wire. The yellow plastic tape prevents the wind from chafing the tender bark of the young tree against the edge of the screen. Project basking logs and snags can be seen in the background. Although they are anchored with duckbills, the basking log at the left has been swung down-current. It should be repositioned at the conclusion of the rainy season. In the photo below: Two viewing areas in this park include benches. This area features interpretive sign as well. This park is popular, and its popularity is expected to rise significantly as high-density housing is further developed near-by.



METRO REGIONAL PARKS & GREENSPACES

REQUEST FOR REIMBURSEMENT GREENSPACES RESTORATION GRANT BILLING FORM

Organization:	Tualatin Hills Park & Recreation District.
Address:	15707 S.W. Walker Road
City/State/Zip Code:	Beaverton, Oregon 97006
Project Title:	Beaverton Creek Tech. Center Wetlands Park Restoration
Metro Contract Number:	904239
Local Project Manager:	Kalph K. Cook, Jr., Park District Naturalist
Signature of Project Mana	ger: Kalph Klook, VI.
Date Submitted Billing:	18 December 1996
	OVED

Return Billing Form To:

Lynn Wilson

Metro Regional Parks & Greenspaces

600 NE Grand Ave.

Portland, Oregon 97232-2736

Have a Question? Call:

(503) 797-1781

DOCUMENTATION MUST BE ATTACHED FOR ALL COSTS

	Description of Services or Materials Purchases	Cost or Cash Value (cash, in-kind materials & services; volunteer labor)	Request for Reimbursement from Metro*
PERSONNEL COSTS Volunteer hours are valued at \$4.75 per hour. Attach time sheets or receipts.	RCOOK Park District Naturalist managing project Leperbraing miscellaneous facks Debbie Humphrey Intern. 6 Kolunteers planted Willows on Earth Day 96 (6x2Hrs x 845/1+=\$545)	-182Hrs@181999Hr=\$3621 <u>80</u> 175hb@1627hr=1810500 ==5400	8
MATERIALS & SUPPLIES Striefly describe. Attach receipts.	Besver Scheen." 36" wide ×2"mesh, 16 garage to screen plantings (willows) from beavers,	Holland Hardware (Involce Attached). BJ495	
EQUIPMENT RENTAL Briefly describe. Attach receipts.	Portajohn and Hapd- washing station for EarthDay event in which Approximately 60 volunteers removed blackberries, And at projects ite 6 volunteers planted native willows.	Cascade Phillips. (Invoice Attached) #20000	
PROFESSIONAL or OUTSIDE SERVICE(S) Briefly describe. Attach receipts.	Halstead's Arboriculture Consultants Purchase and placement of snays and basking logs, Purchase and planting of Shrubs and trees.	(See attached copies of contractor's letter and shock list). Per involce attached \$4,500	# 3,215 -
TOTAL REIMBURSEMENT	REQUESTED:		

^{*}Reimbursement cannot exceed more that 50% of total project cost or more than total cash outlay and all must have a 1:1 match.

DATE	ACTIVITY	TALL
26 July 95	Bite Visit, checking mapping & developing on-site plan	6 1/2 H
27 July	Site Visit checking manning & developing another place	5 4.15
28 July	Office the Douglands a work of an Office to the	17.15
	Office sime. Developing a work plan for contractor bidding	5/2
1 Aug	Kolish draft of plan & discuss with supervisor	7/2_
2 Aug	Make revisions. Compare plan to site. Take boat to is lands. Site rate	18
3 Aug	Modery plan according to site observations.	2/2
1450pt	Site visit (dual purpose: water oaks (summer employees gone) & checkplan	11/2 20
1400t.	Site vesit.	21/2
5 Oct	Sitevisit. Investigate beations for standing snags.	12
11 Oct	Site visit & Compile cover message to continuous, List contractors,	31/2
240ct	Experience Design along to Associate The Table Co. C. C.	3/2
1 1/	Gitevist, Explain plan to Green O to Data 1 Debbre Cooper & Steve Engle	2/2
1 Nov	Soliciting contractors via phone Leptone interview R. Cok.	7/2
1 Nov	Saliciting contractor van place I phone intervient Debbre Humphay	17'
2Nov	as Inciting continuous viapione I phone intervient & Good	6
2 Nov	Soliciting contractor viaphoeliphone interview Debbrethimpiner	1 2
3 Nov	Final RFP Completed LFAX'd to Prospective Biddens Total	11
3 Nov	Final RAP Completed & FAX'd to Progrester Brilder Dobble H.	#
6-10Nov	Property Company of the Assessment Bridge Property.	
	Responding to Contractoriquestions via plonel office vuits	32ppm
13-14Nov	Responding & Contractors' questions VIA phone Lattice visits	4 spenx
15 Nov -	Desigline for rapped 5. Keview Proposits 2Bide REP's &	12.1
	PTL Tree Service, Teufel Commercial Landscaping, Halstead	
	Arboniculture, and Dennis' SevenD's.	7
16 Nov	Staff review Lupervisor review of bidding result.	
	1 attack of 1 and 1 bell And 1 and 1 to 1	4
13Dec	Letters & phone call to bidding contractors. Letter to Halderd.	3
	Siteroit	3/2
20Dec	Principles Continued Lougenvisory review	1/2
22Jan 96	Site visit "Walk-through" with continetor (Aaktend Anborn culture)	272
26 Jm	Site voit, Inspect sportus. Wen sproject men. High water wholy,	11/2
31 Jan	Siterist. Inspect status High water status.	11/2
20 Feb	Site visit. Evaluate high water impact	21/2
	Verit confusion Turnet con De a de la del	11/2
26 Mar	Visit contractor, Inspect snage. Discuss project in deteril.	1/2
	site Visit to Evaluate Site for Propert Go Where	1/2
29 mm .	Site Visit to Propride found another trans Lithtus of men for confinction	5/2
3Apr 128Apr.	Contractor's Work	Involce
5Apr	Site visit to monitor & inspect continuator's progress	7/2
17 Apr 1	Site visit to Assess continctor's work. Then columteer project	7
10 Apr	Koview project & develop report for payment.	51/2
19Apr 1	Site visit & contermice for volunteer project. Outline project to lender.	7
20Apr	South Day Charter of Co. Co. Co. Co. Co. Co. Co.	
20Mpr	Earth Day, Yolunteers on Site, 60 volunteers cut blackberries,	
,	Evolunteers plant willows. Portajohn & Homelwashing Station.	9
	6 x 2 trs x 5 400 = 55 to volunteer willow olandone	, , , , , , , , , , , , , , , , , , ,
7 May	Site visitistakes the willows someon for beavers. Washed out low	3/2
24184	or te visit. Inspect willow states & the & beaver screen. Theck	
		31/2
30Mmy	Site inspection. Printed turble on basking log!	3
	Chart william and C + 11.	
"TJune	Check willow on site. Cut blackbonnes on Pite.	6/2
17 June 5	iteVesit Assess. Prince invading Alder bronches Cheek willows.	7/2
22 July S	the Visit. Assess, Pentorm pruning & repairs.	5 54
24July 5	ite voit. Complete assessment & repairs,	FL
CJUNLY -	TO ACIT. COMPLETE CONTROL TO LA CONTROL	

R. Cook time on project from Project approval from Matro to date 18 R. Cook time on project from Project approval from Matro to date 18 R. Cook time on project from Project approval from Matro to date 18 R. Cook time on project Them I agged how only) Debbte Humphrey Lalloble vote 86 7Hm 86 R. Cook time on planted will but 8 8 5 7Hm E. Volunteers who planted will but 8 8 5 7Hm G. Volunteers who planted will but 8 8 5 7Hm Rota john Atlandurs May Station For Levith Day Volunteer project 828 Renventencen Levith Matching Contribution 8 4,05 Not Including Administrative review.		
Debbie Humphrey (Intern legged hours only) Debbie Humphrey bollable nate 86°/Hm B6 Volunteers who planted will bus @ 1545/Hr. 6 volunteers for 2 Hrs. Botajohn Atlandura hay station for Earth Day volunteer project Benons reen Tualitin Hills Matching Contribution **57 **Not including Administrative review.	PC-1 hillship note & Part Doctroit \$ 19.90/40	A IC
Debbie Humphrey (Intern legged hours only) Debbie Humphrey bollable nate 86°/Hm B6 Volunteers who planted will bus @ 1545/Hr. 6 volunteers for 2 Hrs. Botajohn Atlandura hay station for Earth Day volunteer project Benons reen Tualitin Hills Matching Contribution **57 **Not including Administrative review.	PC time of posicit P 7 1 transit D Mat 1	15
Debbie Humphrey Ciritaria lagged hours only) Debbie Humphrey Dellable vaite 86° / Hr. Volunteers who planted will bus @ 1645 / Hr. & volunteers for 2 Hrs. Portagion Atlanduas My Station for Earth Day volunteer project Beaver 6 creen B 77 Tualstin Hills Matching Contribution* **Not including Administrative review.	The cook sime or bioleci shaw trates who was thousand the said	AIR / S
Volunteers who planted will bus @ 1545/Hr. & volunteers for 2 Hrs. Portagion Attendurshing station for Earth Daw volunteer project Beaver screen Tualatin Hills Matching Contribution **Not including Administrative review.	K. Cook	M 36.
Volunteers who planted will bus @ 1545/Hr. & volunteers for 2 Hrs. Portagion Attendurshing station for Earth Daw volunteer project Beaver screen Tualatin Hills Matching Contribution **Not including Administrative review.	Debbre Humphrey (Intern lagged hours only)	17
Volunteers who planted will bus @ 1545/Hr. & volunteers for 2 Hrs. Portagion Attendurshing station for Earth Daw volunteer project Beaver screen Tualatin Hills Matching Contribution **Not including Administrative review.	Debbre Humphrey bollable vate 863/Hrs	\$ 60
Volunteers who planted vuil by S @ 18457 Hr. 6 volunteers for 2 Hr. Portagion Atlantica My station for Earth Day volunteer project Beaver 6 creen Tualsofin Hills Matching Contribution ** 4,05		* /C
Portajohn Atlantura hay station for Earth Dan Volunteer project Beaver & Creen Tualsten Hills Matching Contribution **Not including Administrative review.	V 1 - 2 - 1 - 1 - 2 - 1 - 1 - 2 - 2 - 2 -	
Portajohn Atlantura hay station for Earth Dan Volunteer project Beaver & Creen Tualsten Hills Matching Contribution **Not including Administrative review.	Volumbers who planted will bus @ 1847 fr.	St. P.
Tualsten Hells Matching Contribution* # 4,05. *Not including Administrative review.		₹5,4
Tualsten Hells Matching Contribution* # 4,05. *Not including Administrative review.	Porta John Attendura bour Station For Forth Don	
Tualsten Hells Matching Contribution* # 4,05. *Not including Administrative review.	Walinteer Orfect	本20
Tualson Hills Matching Contribution # 4,05. *Not including Administrative review.	Varanteer Jara 201	
	Benorscreen	1574
	7 1-20 1/01 m + 1/1 C 1 1 1 #	# 1150
	USINDINATIS III STORING CONTRIBUTION	TS 4,055
	That including Administrative review.	
		·
	,	
	:	
	,	



SANI - POT P.O. Box 47 Oregon City, OR 97045 1-800-452-8379 656-9415 345-9009

CUSTOMER NAME / ADDRESS / NUMBER

SITE LOCATION

T FOR THIS CONTRACT:

F. 1 14 0 .11 20

INV.# 11171

INV. DATE 04/16/96

TERMS:

111-120

P.O. #

JOB#

CONT.# 1817.77

03/26/96 TO 04/27/96

BILL	ING PERIOD 03/26/96 TO	04/77/70		AMOUNT
	DESCRIPTION	PRICE	INVOICE PERIOD	50.00
QTY.	2 STATION SINK-RENT	60.00	04/15/96 TO 04/15/96 TO	50.00 50.00 50.00
	DELIVERY CHARGE DELIVERY CHARGE		E COPY	
	PORTABLE RESTROOM REN DELIVERY CHARGE DELIVERY CHARGE Day Event Value Vasous REN Cook J.	TANG	803-630	
				vні д н
	A FINANCE CHARGE COMPUTE	DATAPERIOD RATE OF 18%	DICRATE OF 1-1/2% PER MONTH V	L 100.01

A FINANCE CHARGE COMPUTED AT A PERIODIC RATE OF 1-1/2% PER MONTH WHICH IS AN ANNUAL PERCENTAGE RATE OF 18% IS APPLIED TO PAST DUE BALANCES

		SALES	
90 · DAYS	TOTAL DUE	DUE THIS INVO	ICE
THE PARTY OF	200.00		
A sudd		1	

U.D 2(11) D

HOLLAND FEED INC.

12250 SW Broadway
BEAVERTON, OR 97005

(503) 644-3400

NUOR NO. 10200

N 67629

NAME

ADDRESSEALANA HALLS ALL

ADDRESSEALANA H

DESCRIPTION AMOUNT
150 802 037000 Repair & Maintenan 71.31
130 300 060000 Operating Supplies 74.95

1.46.26

n District

. NATIONAL BANK OF OREGON ...LAYERION ! HANCH BEAVERTON, OR 97005

> 24-22 051 1230

Nº 67629

DATE

06/11/96

TO THE

WWW-NEGOTIABLE

NON-NEGOTIABLE

Hand Ined. Inc로 L 1224년 SP Broadway Beaverton, OR 97005

ned goods MUST be accompanied by this bill.

Seal Winters

DIRECTOR OF BUSINESS SERVICES

MCG 76 29M 43 23000 2204 053 0003 0 23M



TUALATIN HILLS PARK & RECREATION DISTRICT

NATURAL RESOURCES OFFICE • 15707 S.W. Walker Road • Beaverton, Oregon 97006 • 645-3539 • Fax 614-9514

MEMO

TO:

Jim McElhinny, Director of Planning & Development

FROM:

Ralph Cook, Jr., Naturalist

DATE:

Wednesday 10 April 1996

SUBJECT: Invoice from Halstead Arboriculture Consultants

Restoration Project (snags, basking logs, plantings)

at

Beaverton Creek Wetlands Park

This work was done under a Metro Grant program.	BUDGETED	ACTUAL
Budgeted for Vendor\$	4,515.00	4,500.00
Halstead Invoice\$		
Metro Funds (in approved project plan) and pending application for reimbursement\$	3,215.00	3,215.00
Park District Cash Contribution (LOCAL MATCH)\$	1,300.00	1,285.00
CASH FLOW REMAINING IN THIS PROJECT		
Screening plantings for protection from beavers Original budget\$	1,500.00	•
Revised estimate: 5 rolls 36" fence @ 74.95 ea\$	374.75	

NOTE: Most of the LOCAL MATCH of \$6540.00 from the Park District for this . project was through the time of the District Naturalist for planning and supervising and beaver screening.

The work performed by Halstead Arboriculture Consultants exceeds my original specifications for this project. I recommend this invoice be paid.

Ralph Cook, Jr. Naturalist

DISK: THPRD-08

FILE: HALSTEAD.003



HALSTEAD'S ARBORICULTURE CONSULTANTS

P.O. Box 1182 Tualatin, OR 97062 (503) 245-1383

"Specialists in the care and preservation of trees"



INVOICE 4/5/96

DATE

ATTN.: Mr. Ralph Cook
Tualatin Hills Park & Recreation
15707 SW Walker Road
Beaverton, OR 97006

Per work order dated 7/31/95.
Location: Beaverton Tex wet land
Placement of snags, basking logs
and plantings.

.Cost: \$ 4,500.00

Thank You!

TERMS: Net - due upon receipt

A charge of 11/2% per month will be made on all accounts
not paid in 5 days of Invoice Date.

Tualatin Hills Park & Recreation District

15707 S.W. Walker Road Beaverton, Oregon 97006 645-6433 Nº 022526 PURCHASE ORDER

			4 47 -				
ɔ : _	Halsta	<u>ud's 1</u>	<u>Arborica Hure Consu</u>	eltants.			
	P. O. \$	BOX	1182		— I M P	ORTAR	N T —
_	Tuala	tin,	OR 97062	Purcha	se Order Valid	Only When D	ated And Signed
				IF YO	U ACCEPT	THIS ORD	ER YOU MUST
			16		h a separate invo		
HIP TO: _				3. Ship p	se a packing list v repaid.	With an deliver	63.
-				4. Includ shippi this or	ng notices and a	r number on al ill other corres	I packages, invoices. pondence relating to
ate: 12/	20/95	_	Shipping Date:		THIS IS A T	AX EXEMPT D	ISTRICT.
Quantity	Catalog		Description		Unit Price	Total	Code
		Beau	erton Grk. Tech. Center:	Planting Proposal	/	\$4,575	700
9.							
			i i				-
	E.						
		1					
2					TOTAL	\$4,515.	00
	Division		Program	Sub-pro	gram		Acct.#
Business	Servições	*	Capital Ostlan	Beaverton GK	et Center	1-160-3	300-103-000
			1	Bruskhaven 1	~ L		Г
De	, D W	س.	Ame.	-		2	No per
-	Director of Bu	usiness S	ervices	Divisio	n Head		P.O.#

Canary — ACCOUNTING DEPT.

White - VENDOR COPY

Pink - DIVISION

HALSTEAD'S

ne care and of trees"

1	ARBORICULTURE CONSULTANTS
	Pio 85x 1182, Tualatin OR 97 060 Phone (503) 245-1383
	fax # 848-7627
And to	(((((((((FACSIMILE TRANSMISSION COVER SHEET))))))))
	Please deliver the following pages to:
4	NAME: Mr. Ralph Cook
	FIRM: Toralation Hills Parks
	FAX#: 614-9514
· Su	Total number of pages including cover sheet: Three
ie	COMMENTS: De-you rejuest.
	DATE:4/V.9[SIGNED:
	,



WETLAND AREAS E & F.

If soils are found in these sites that appear either above or at the elevation of average seasonal high water they should be planted with Pacific Willow.

POND WATER LEVEL.

The pond level is currently (Oct-Nov '95) lowered for this project and to accommodate seasonal heavy rains. Planting must be performed in recognition of the average seasonal high water, which is readily discernible on the mud banks and plant stalks.

QUANTITY (suggested guidelines)	PLANT SPECIES	SIZE (guideline)
60 - 73	Spiraea douglasii (Douglas's spiraea)	5 gal
45 — 45	Salix lasiandra (Pacific willow)	2-3 ft min.
45 — 10	Salix sitchenis (Sitka willow)	2-3 ft
9-9+8=1	Fraxinus latifolia (Oregon ash)	4-6 ft
10 - 10	Symphoricarpos albus (Common snowberry)	2-3 gal - 55N
10 - Wave	Holodiscus discolor (Ocean spray)	2-3 gaī
10 - 10	Physocarpus capitus (Pacific ninebark)	2-3 gal
7 (minimum) 🖇	Basking logs (Western red cedar)	15-20 ft.
12 (minimum) /	Standing snags (Western red cedar)	15-20 ft (above ground)

Prominently flag all tree plantings and shrub willows so that Park District staff may erect screening as protection from beavers.

Each basking log to be anchored with a duck bill and to be positioned and sufficiently buoyant to provide a basking site at the water's surface for waterfowl and amphibians.

Snags to be of Western red codar and may offer a diversity of appearance similar to standing snags frequently found in natural ponded wetlands.

"Specialists in the care and preservation of trees"



HALSTEAD'S ARBORICULTURE CONSULTANTS

David Halstead Consultant 5 5

P.O. Box 1182, Tustatin, OR 97062

Phone (503) 245-1333

April 10, 1996

Attn.: Mr. Ralph Cook Tualatin Hills Park & Rec. District 15707 S.W. Walker Road Beaverton, OR 97008

Reference: Beaverton Creek Tech Center Park Subject: Job Specification Completion Report

All original job specifications were adhered to unless otherwise noted in this report. Please refer to my enclosure of page 3 of your proposal dated 11/3/95 regarding quantity, Species, and size guidelines. I have made hand written notes where necessary to show has actually been completed.

I felt the need to exceed guidelines specifications in the amount of other plant species to adhere to the intent of the proposal and make up for the lack of the 10 Ocean Spray.

Not noted on the enclosed page 3 is the 30 large 5-7 ft. tall Salix scoulerians we planted on the islands to substitute for the lack of Salix sitchenis we planted. I had a hard time finding the Sitka Willows.

However in all our travels and excursions we have now at our disposal a vast array of wetland material.

We did plant some willows in area "F" near the large willow snag.

I was delighted to to see during our work many small fish 1-2 inches in length schooling in all channels and several larger fish exceeding 7 inches where observed but not identified.

We are very proud to be a part of this project and we can't help but feel a special bond to this area. In working here we saw not only our own contribution to the project impact immediately and positively on the indigenous life but the past work as well.

If you have any questions or need further information please call.

Sincerely,

Phillip Whitcomb Certified Arborist

TUALATIN HILLS PARK & RECREATION DISTRICT

Memo

Date:

Wednesday 2 August '95 (Om page)

To:

Jim Mc Elkinny

From:

Kalph Cook, Jr.

Subject:

Field Notes: Reed canarygrass (Phalaris

erundinacea).

AN OBSERVATION.

This morning I closely assessed the five Islands and surrounding channels of Beaverton Creek Tech Ctr Park for habitat improvement under our current Metro Grant - supported

I made an unexpected discovery.

In the necent past "experts" advised me that Reed canarygrass could be controlled (eliminated) by raising the water level of adjacent ponds and channels. This may be

generally valid, however

This morning I found what appeared to be floating islands and shelves of Reed cananygrass.

The water depth was 21/2 ft to 31/2 ft approximately. The grass is new growth (of this year) and in some cases the banicles (tops of the grass) haven't fully opened yet. The water has been 1/2 to 1/2 ft higher since last fall.

I would have to presume that the floating Reed canany-quass has been flourishing for a year or longer (as long as I have been studying the area). I'm not sure what holds it in place. Of course, since it's floating, it "rides" on any change in water level and will not be inundated.

The biomass of rhizomes, dead grass stems and leaves that nowldes the buoyancy may be several years old.

Reed connygrass

Water Suntace

Atlasting shelt of rhizomatous biomass. supporting Reed commygnass.

To shelp on the land of the second of the se A floating island of rhizomes, etc, supporting Reed canary grass.

ADMINISTRATION OFFICE 15707

