



TREES W/STAKES-05/92



WETLAND UPLAND PASTURE
AREA BEING PLOWED-03/92



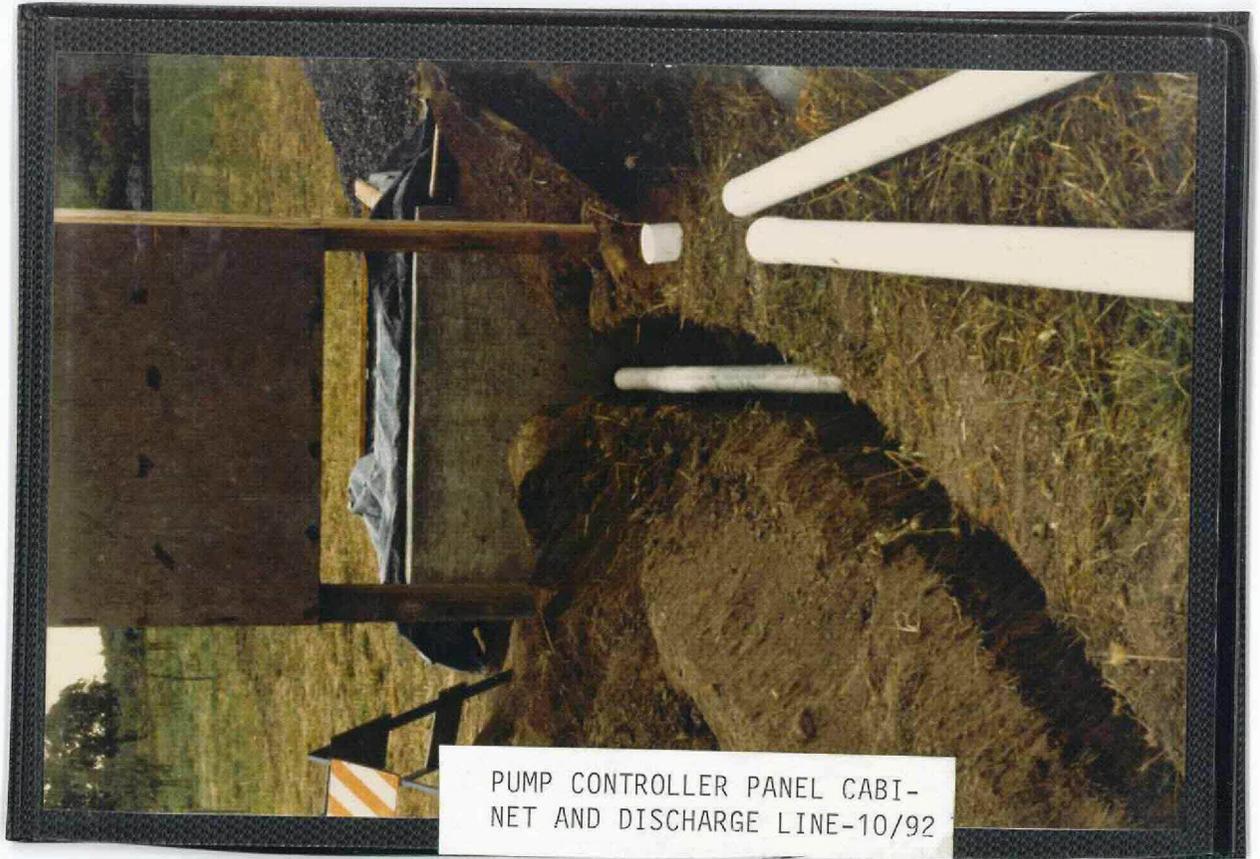
SAUVIE ISLAND CONSERV.
PLANTING PARTY-04/92



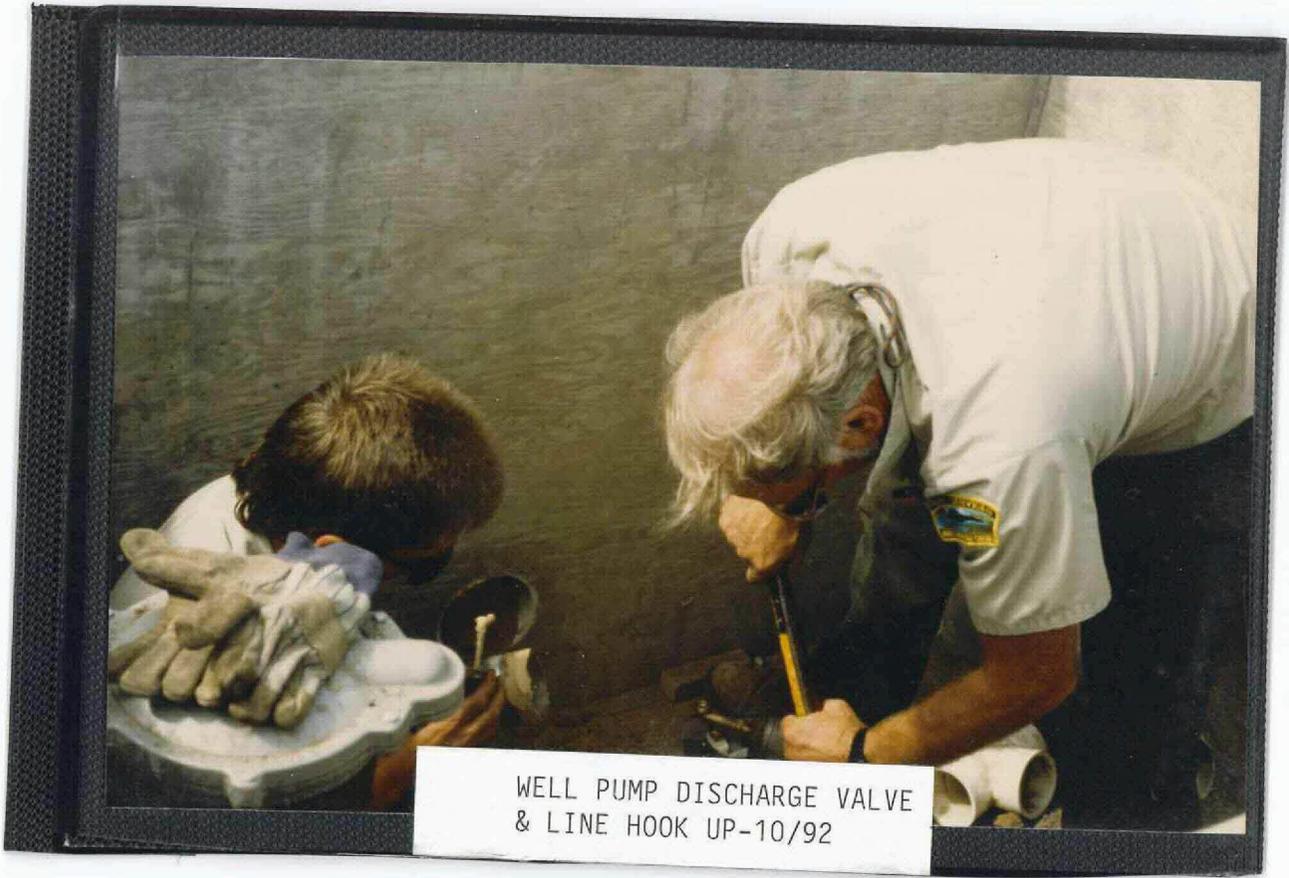
S.I. CONSERV. TREE
PLANTING PROJECT-04/92



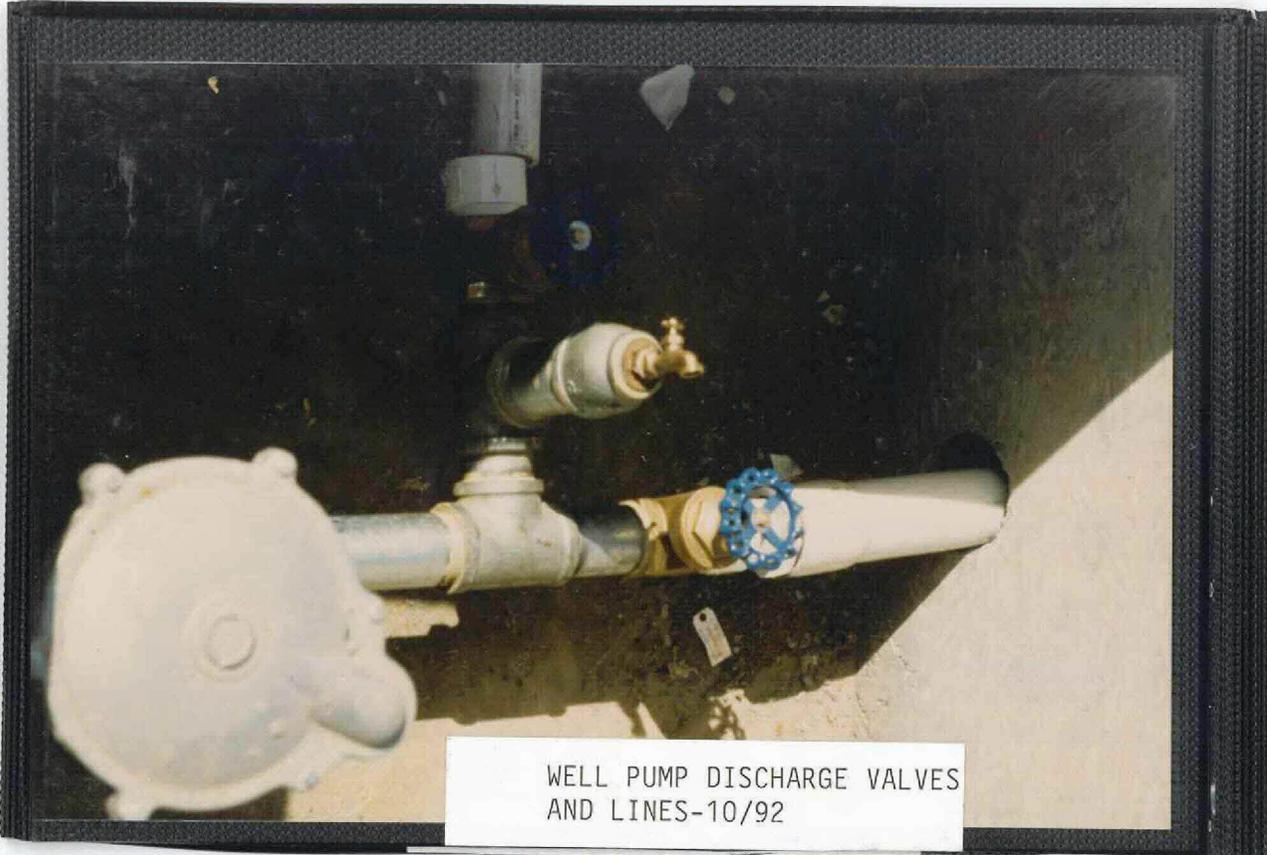
POND WATER MEASURING
STICK-10/92



PUMP CONTROLLER PANEL CABI-
NET AND DISCHARGE LINE-10/92



WELL PUMP DISCHARGE VALVE
& LINE HOOK UP-10/92



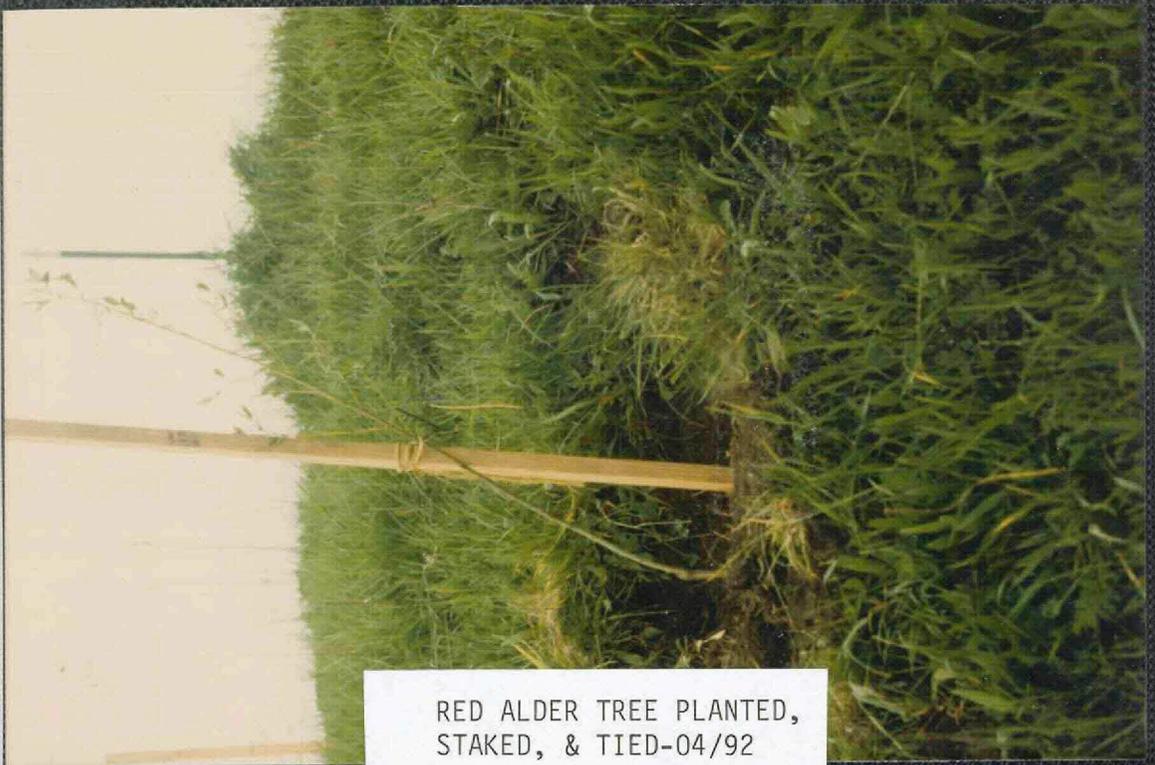
WELL PUMP DISCHARGE VALVES
AND LINES-10/92



SHOVELS, STAKES, & PLANT MATERIAL FOR WETLAND-04/92



PLANTING VOLUNTEER
04/92



RED ALDER TREE PLANTED,
STAKED, & TIED-04/92



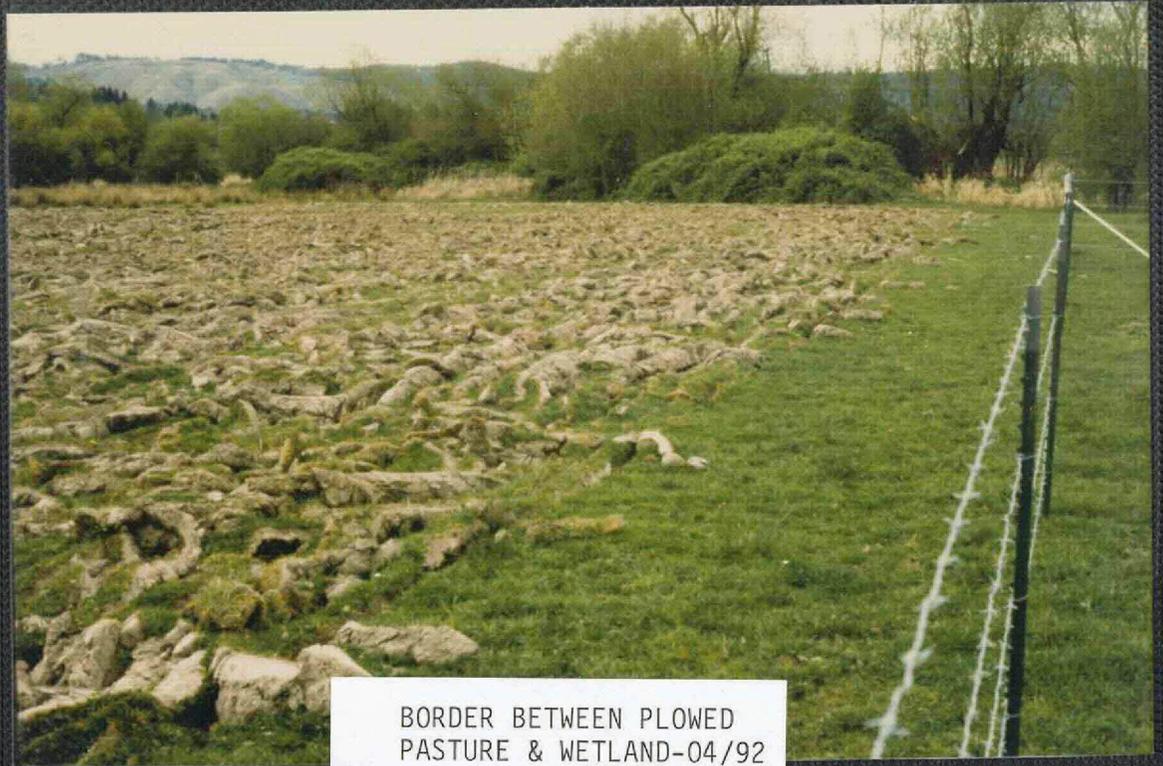
PLANTING VOLUNTEER
04/92



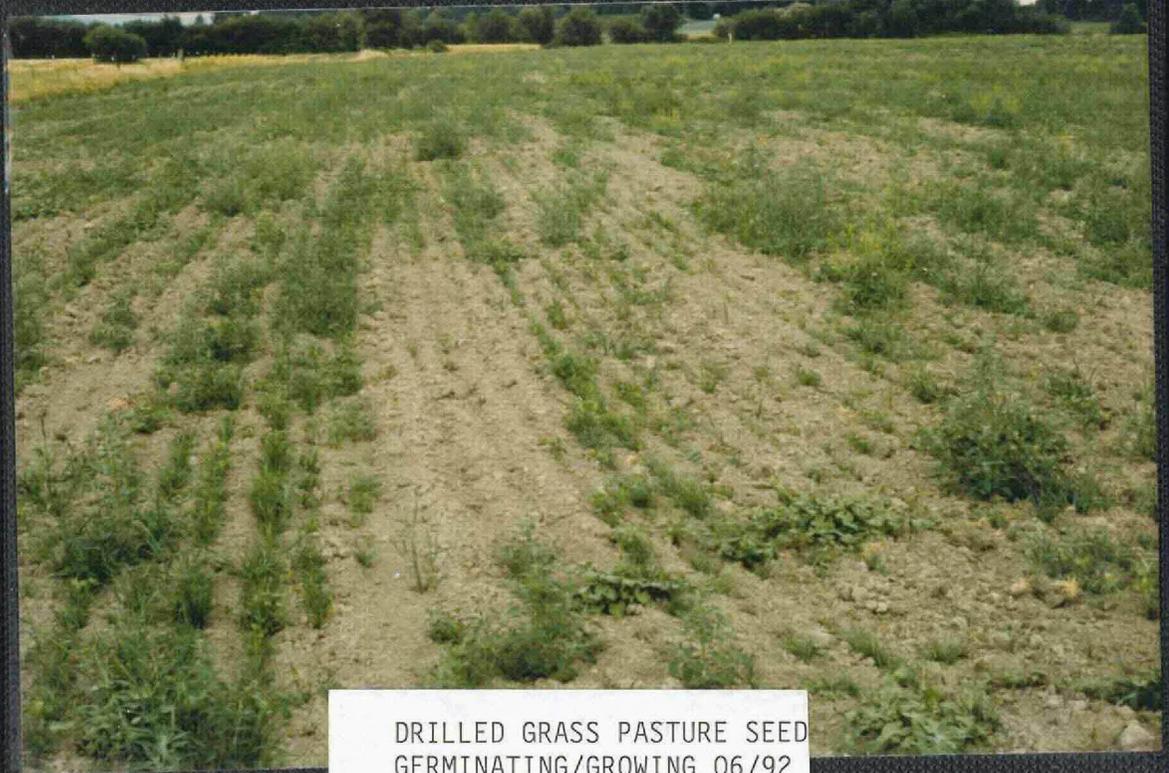
PASTURE PLOWING-03/92



DISKED PASTURE AREA
05/92



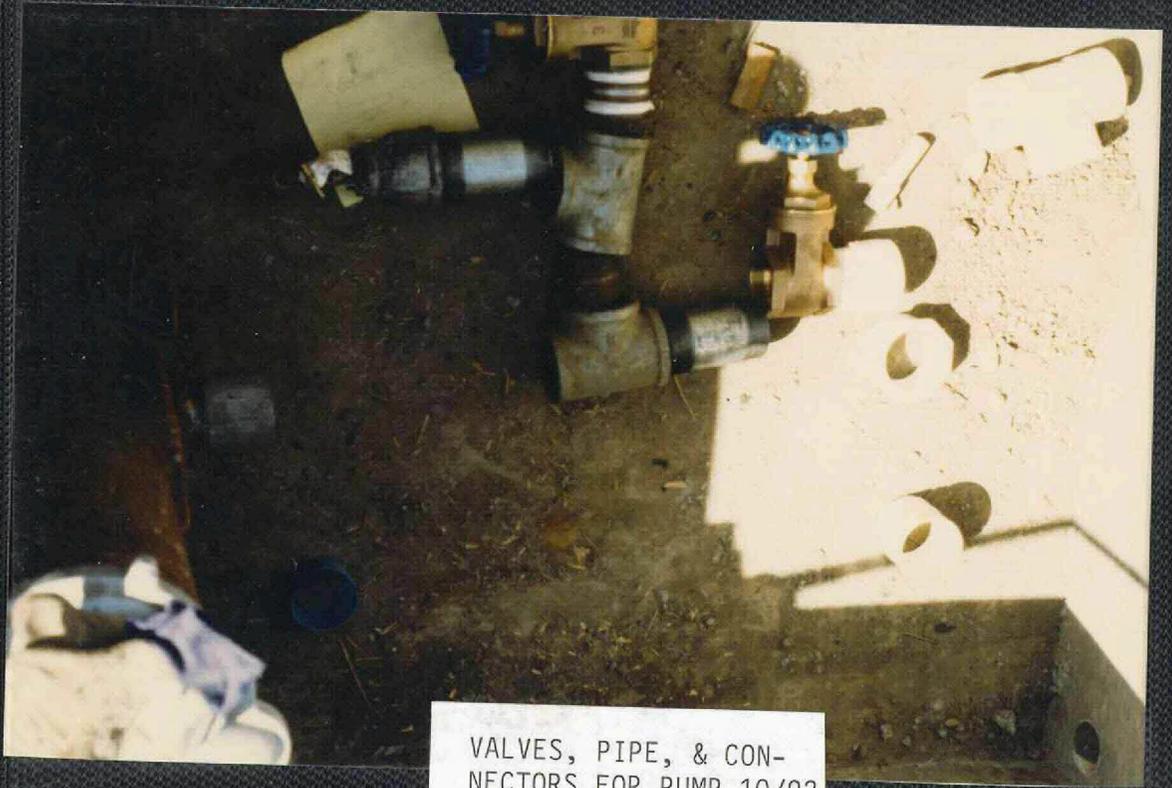
BORDER BETWEEN PLOWED
PASTURE & WETLAND-04/92



DRILLED GRASS PASTURE SEED
GERMINATING/GROWING 06/92



WELL WATER DISCHARGE
LINE-10/92



VALVES, PIPE, & CON-
NECTORS FOR PUMP-10/92



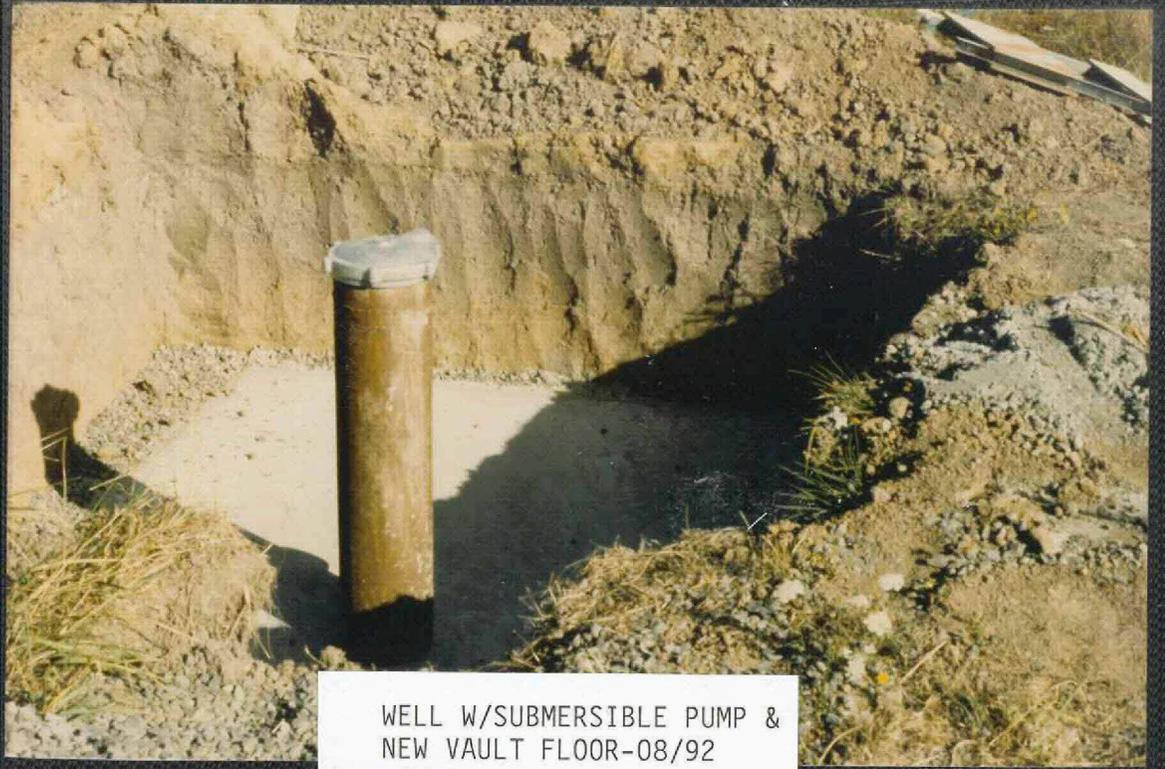
WATER DISCHARGE LINE
INSTALLATION-10/92



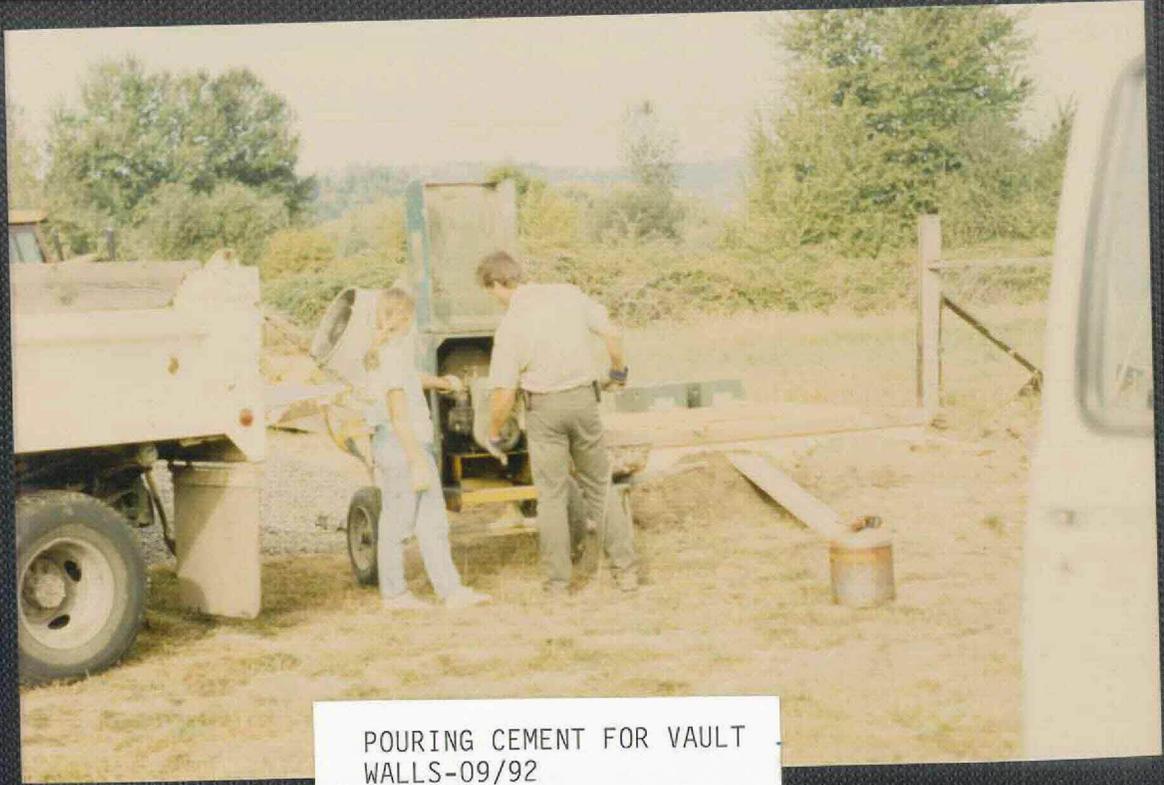
TRENCHER FOR POWER &
DISCHARGE LINE-10/92



WELL PUMP INSTALLED
06/92



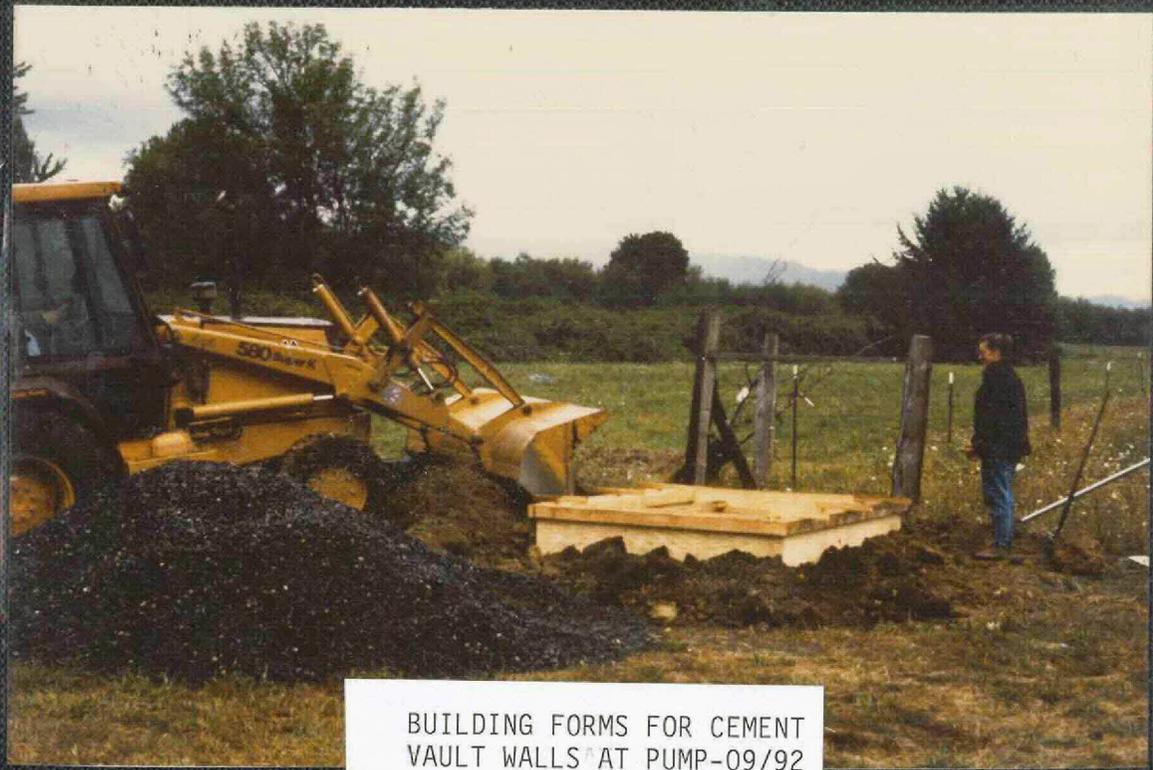
WELL W/SUBMERSIBLE PUMP &
NEW VAULT FLOOR-08/92



POURING CEMENT FOR VAULT
WALLS-09/92



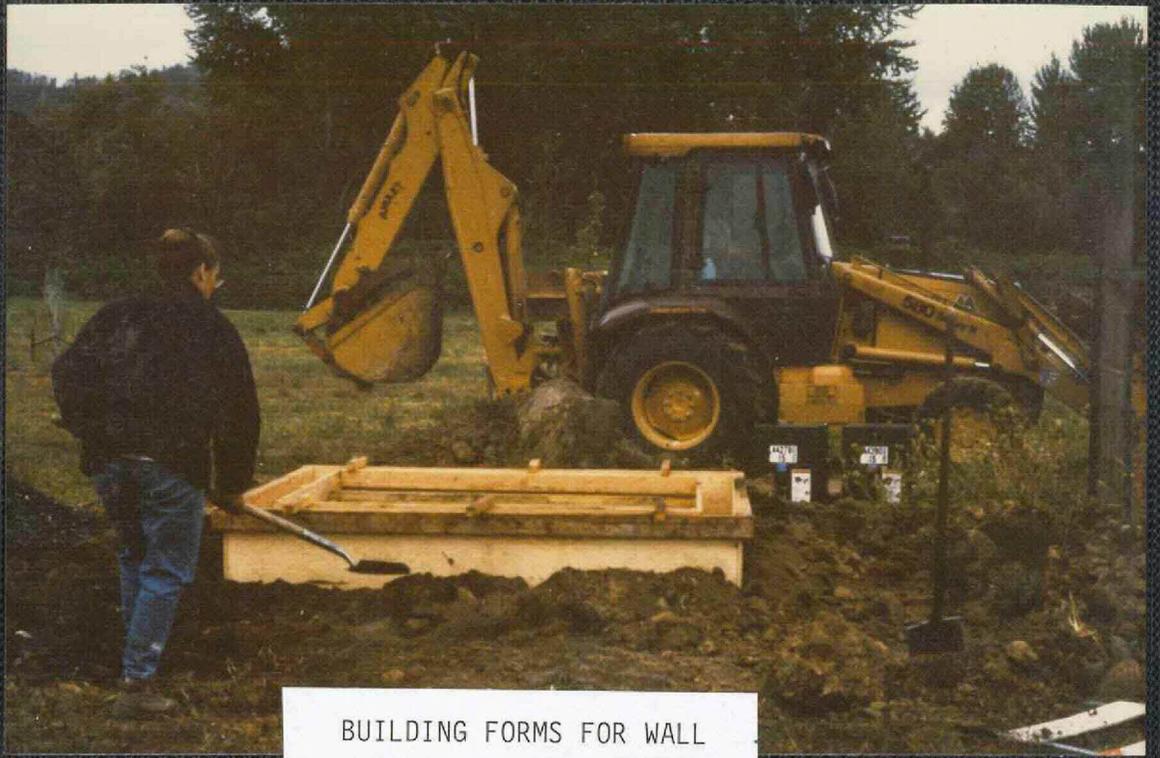
FINISH WORK ON PUMP
VAULT WALLS-09/92



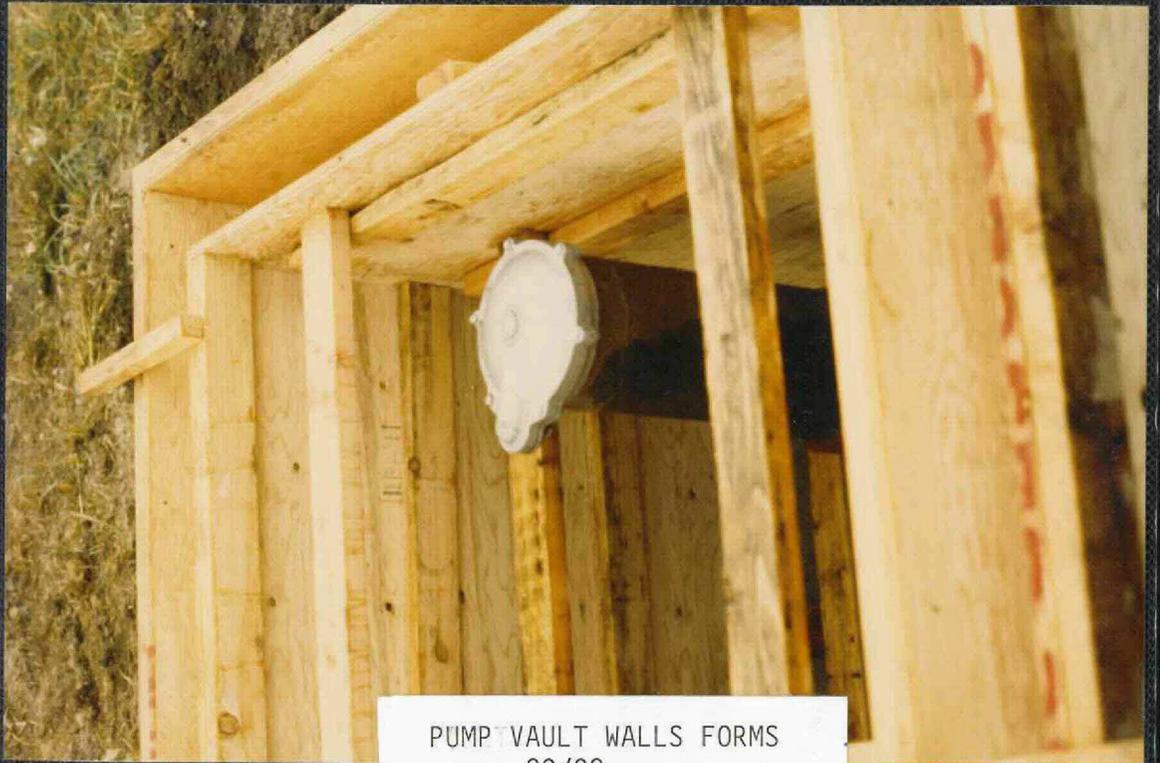
BUILDING FORMS FOR CEMENT
VAULT WALLS AT PUMP-09/92



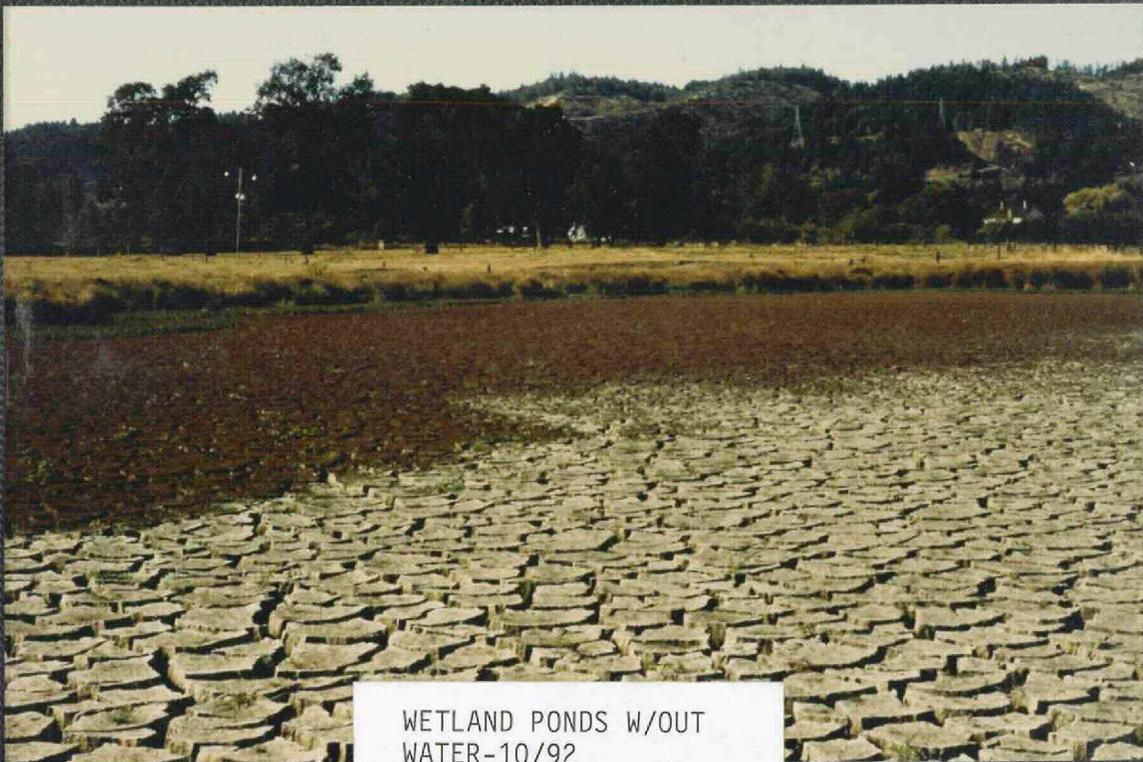
POURING VAULT WALLS-09/92



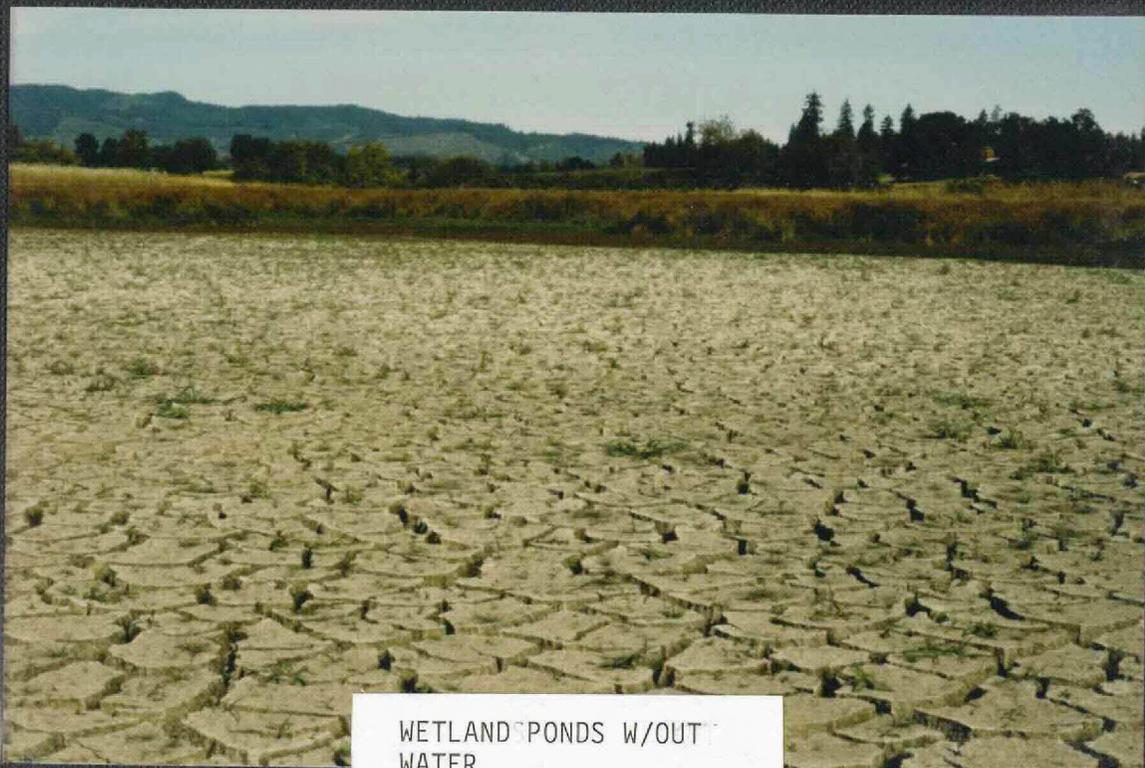
BUILDING FORMS FOR WALL



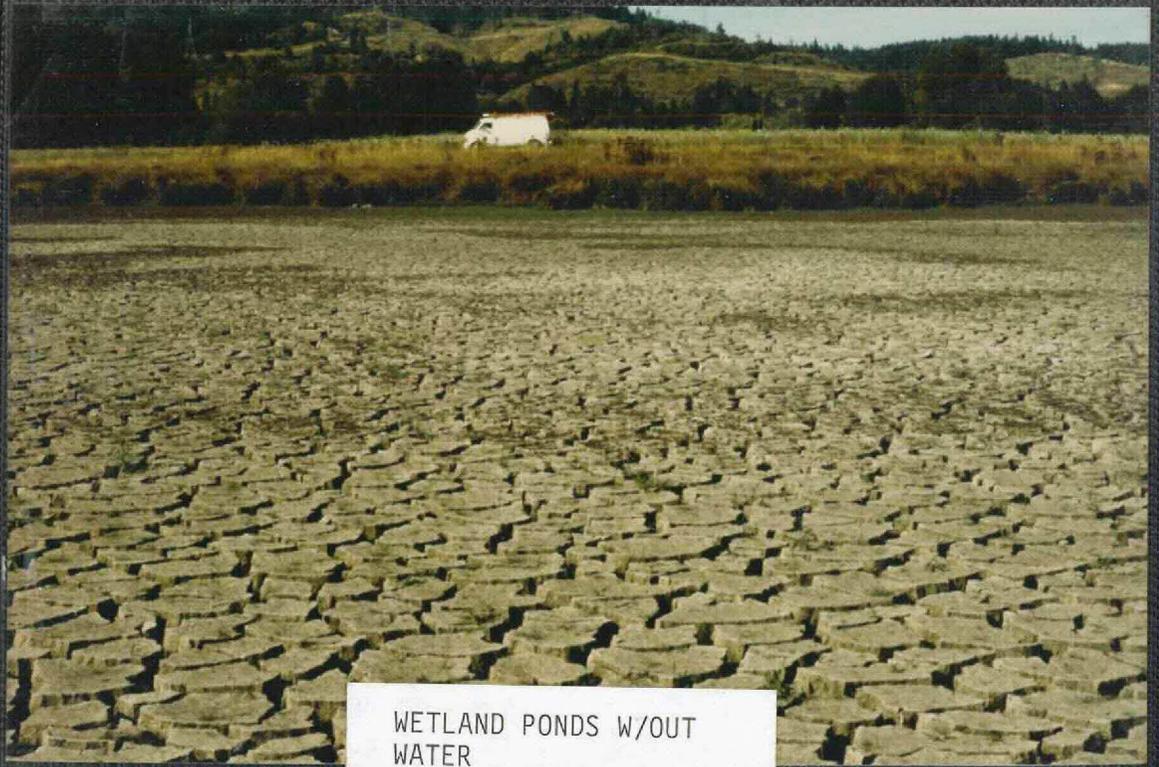
PUMP VAULT WALLS FORMS
09/92



WETLAND PONDS W/OUT
WATER-10/92



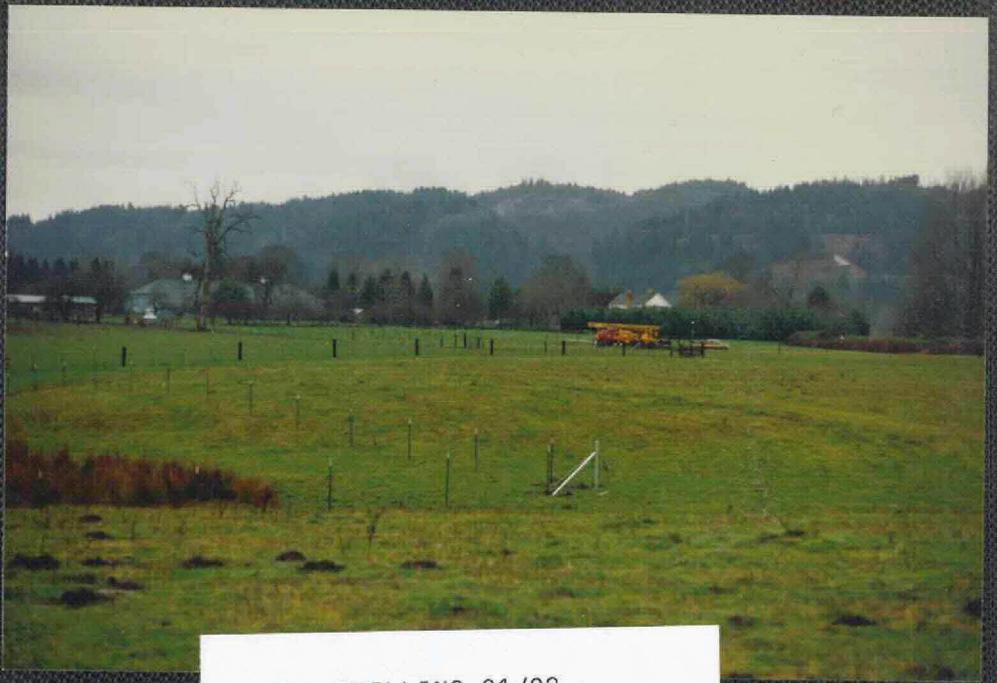
WETLANDS PONDS W/OUT
WATER



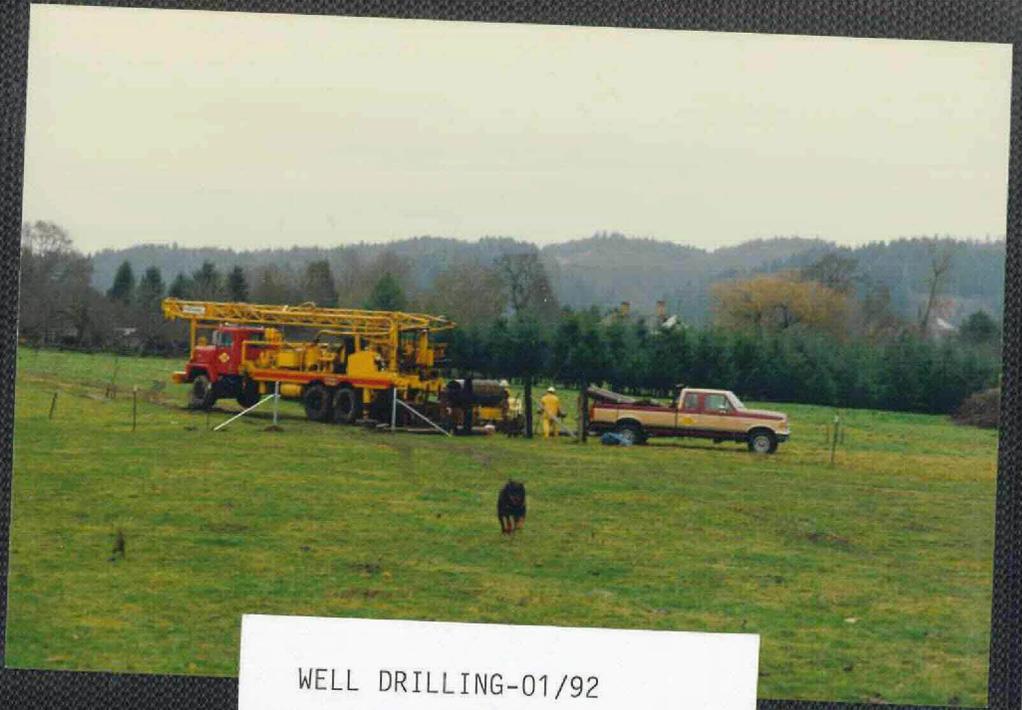
WETLAND PONDS W/OUT WATER



POND WATER MEASURING STICK FROM CORNER POST



WELL DRILLING-01/92



WELL DRILLING-01/92



NEW FENCE LINE 01/92



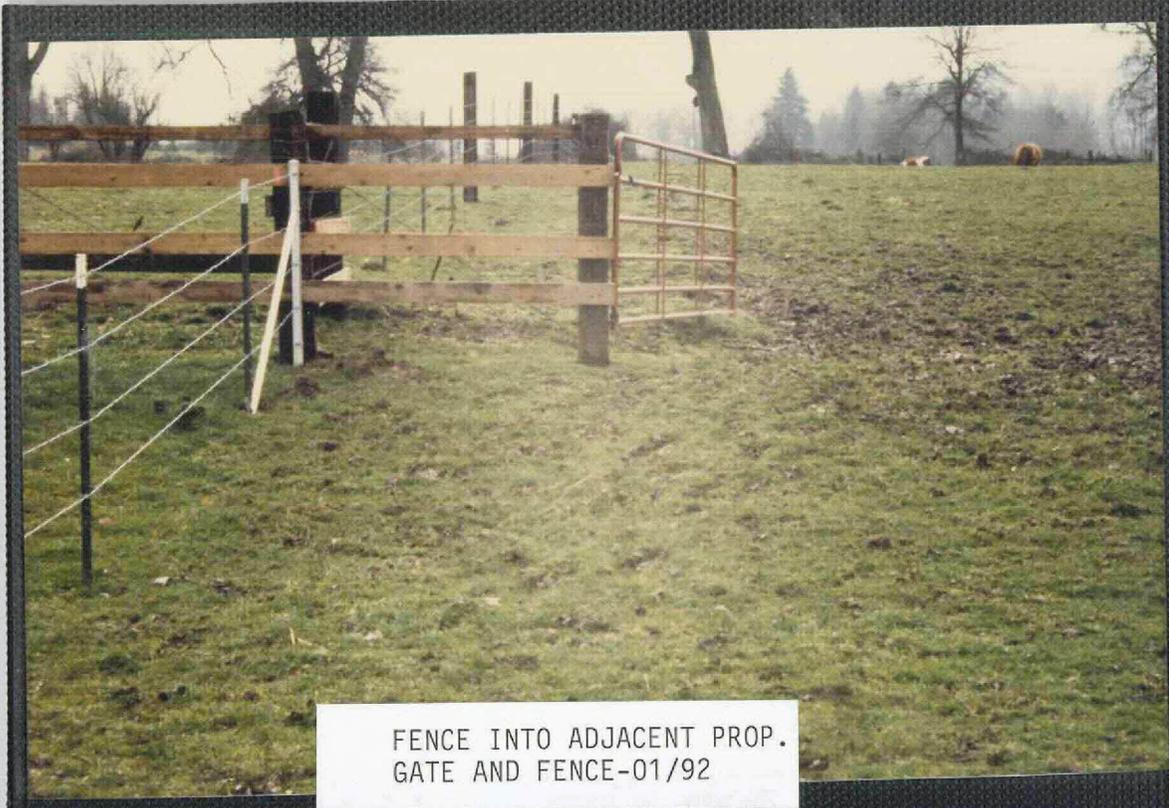
WETLAND & NEW FENCE-02/92



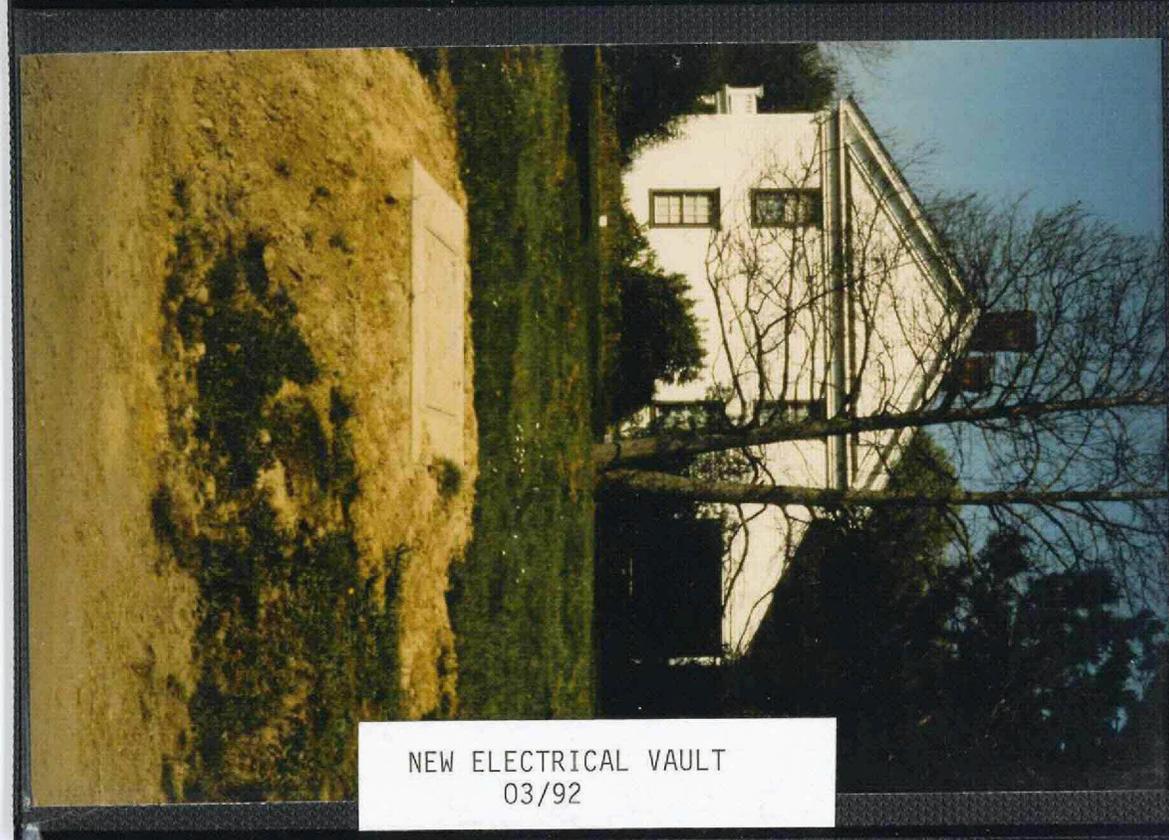
NEW FENCE LINE 01/92



NEW GATES LEADING FROM ONE
SIDE TO OTHER AT N. END



FENCE INTO ADJACENT PROP.
GATE AND FENCE-01/92



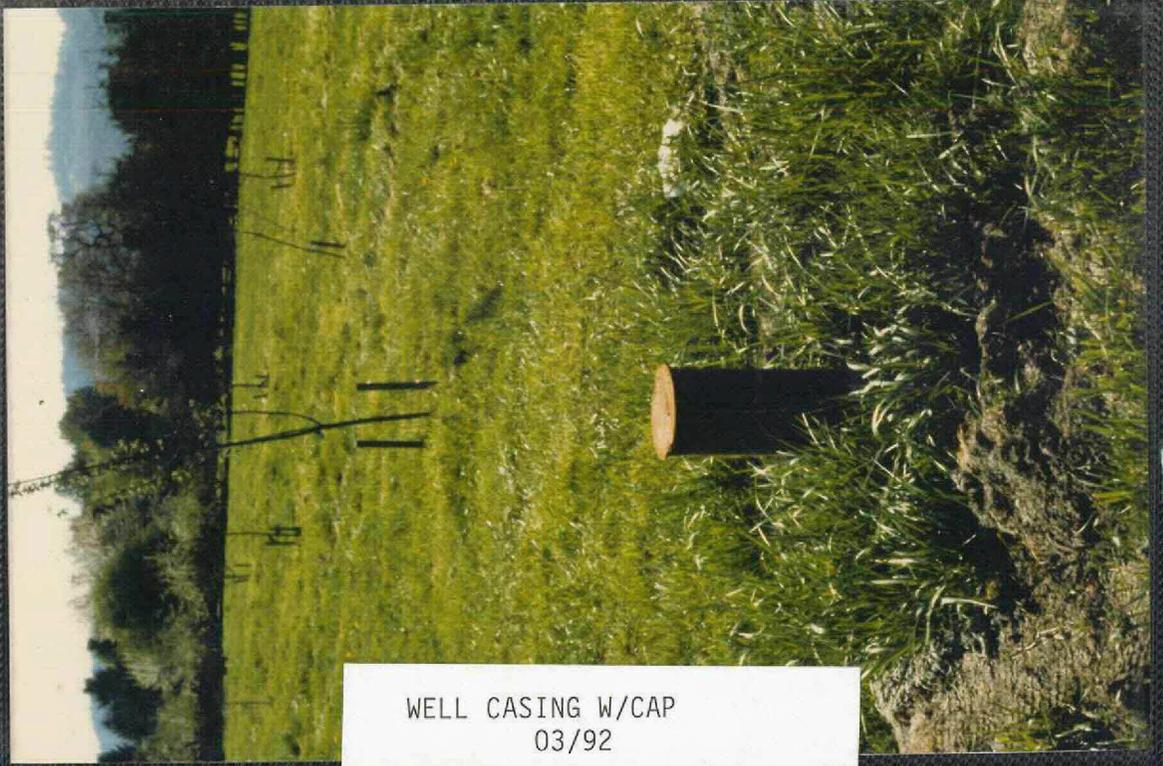
NEW ELECTRICAL VAULT
03/92



85 FT. WELL CASING W/CAP
01/92



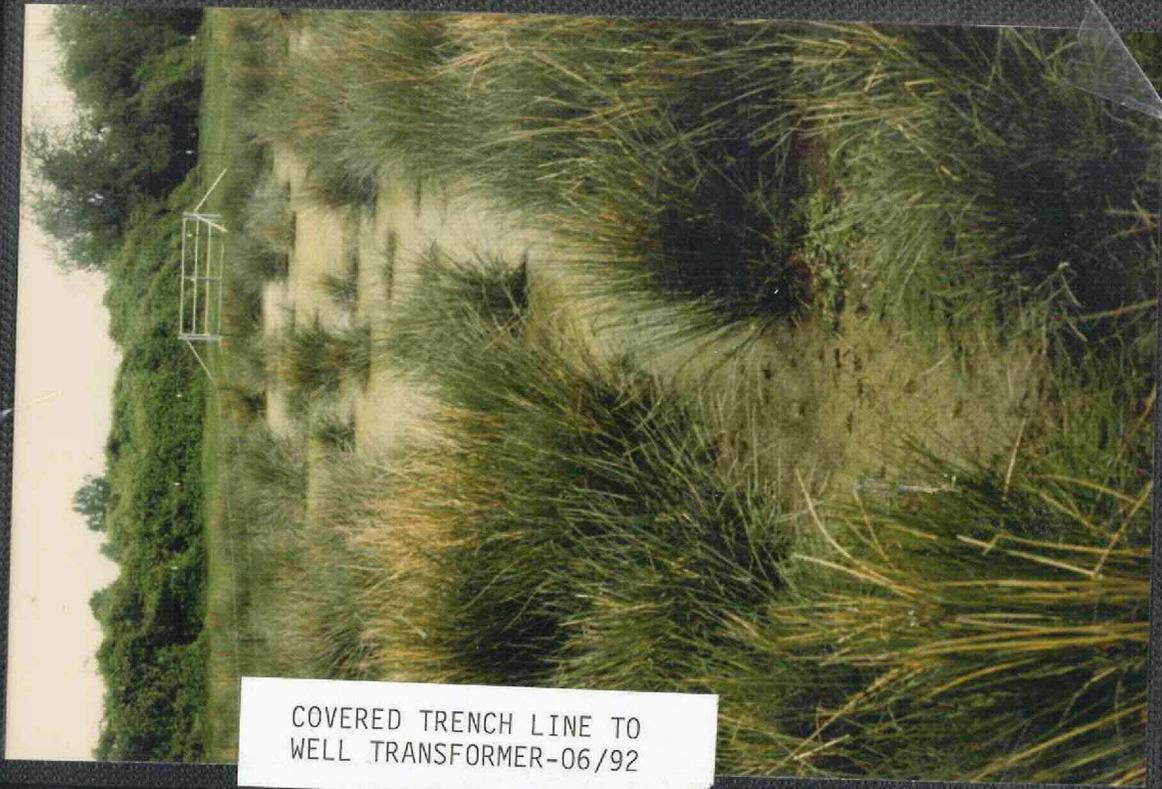
NEW GATE & FENCING, N. END
OF WETLAND FOR CATTLE-01/92



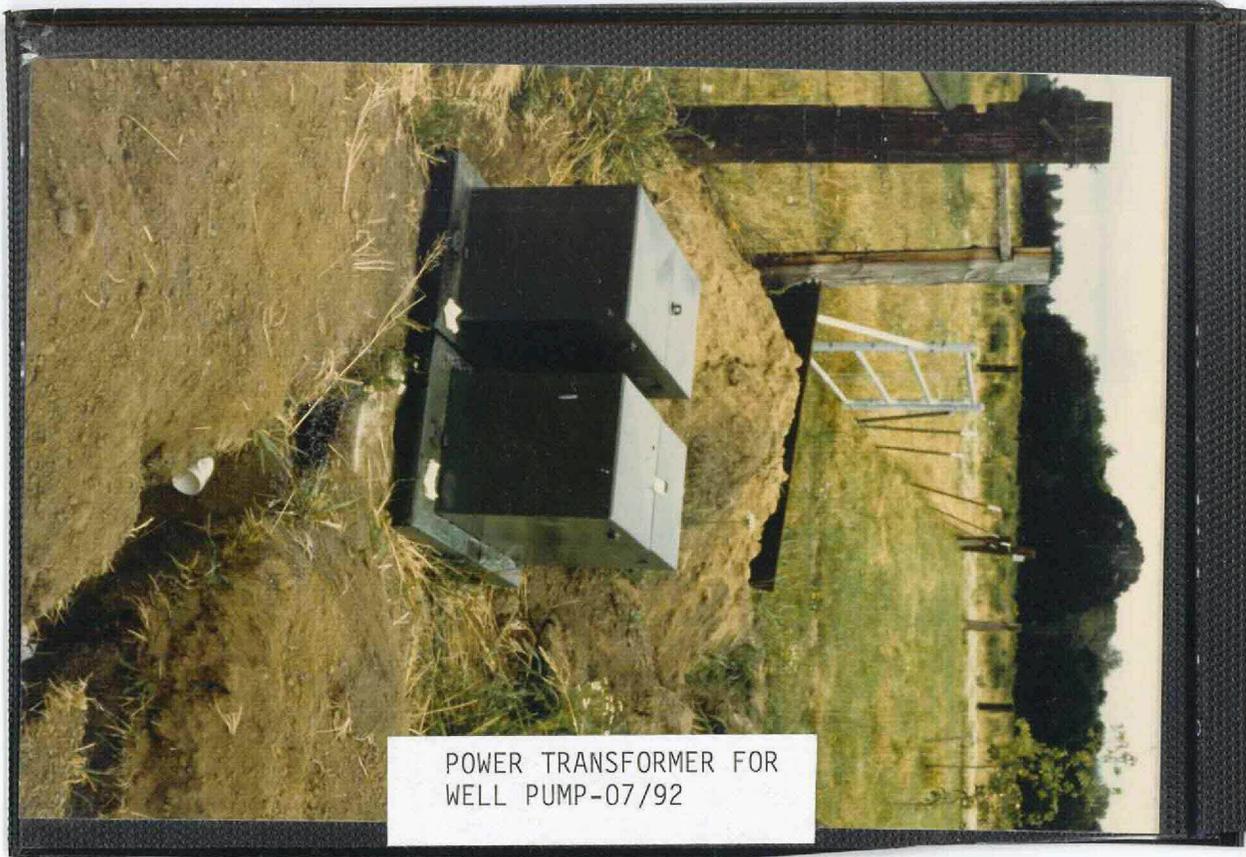
WELL CASING W/CAP
03/92



MALLARD IN WETLAND-02/92



COVERED TRENCH LINE TO
WELL TRANSFORMER-06/92



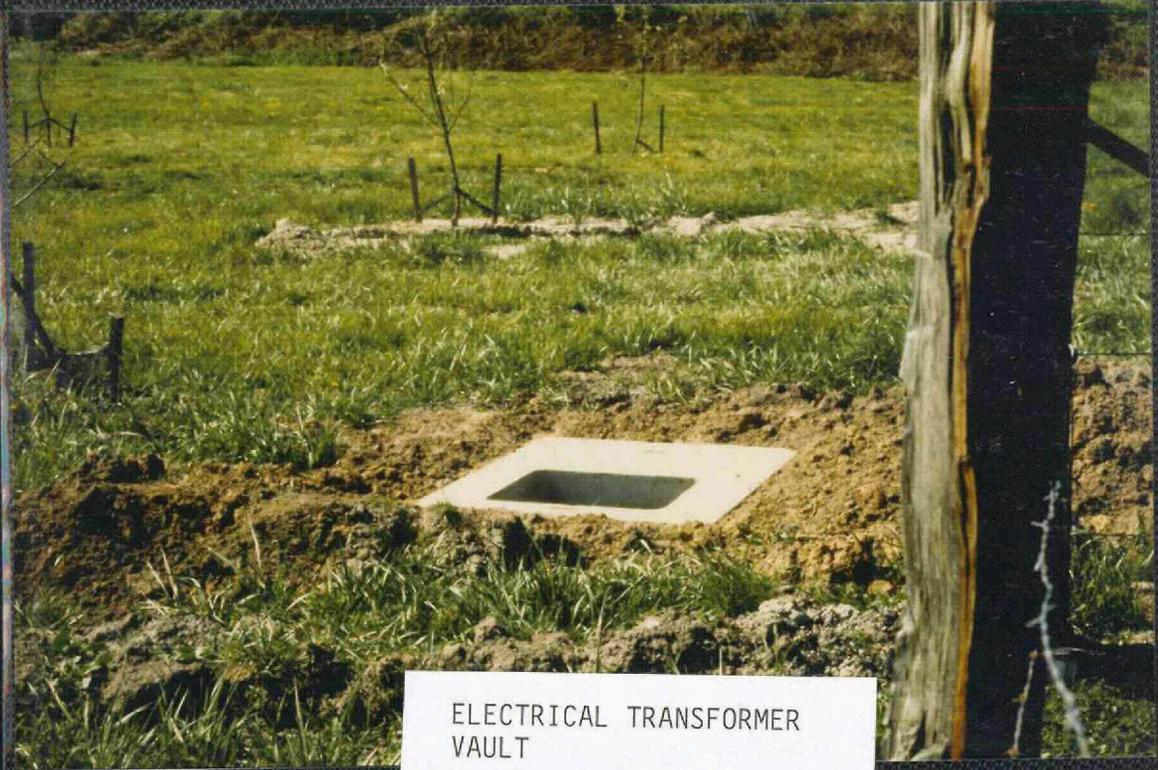
POWER TRANSFORMER FOR
WELL PUMP-07/92



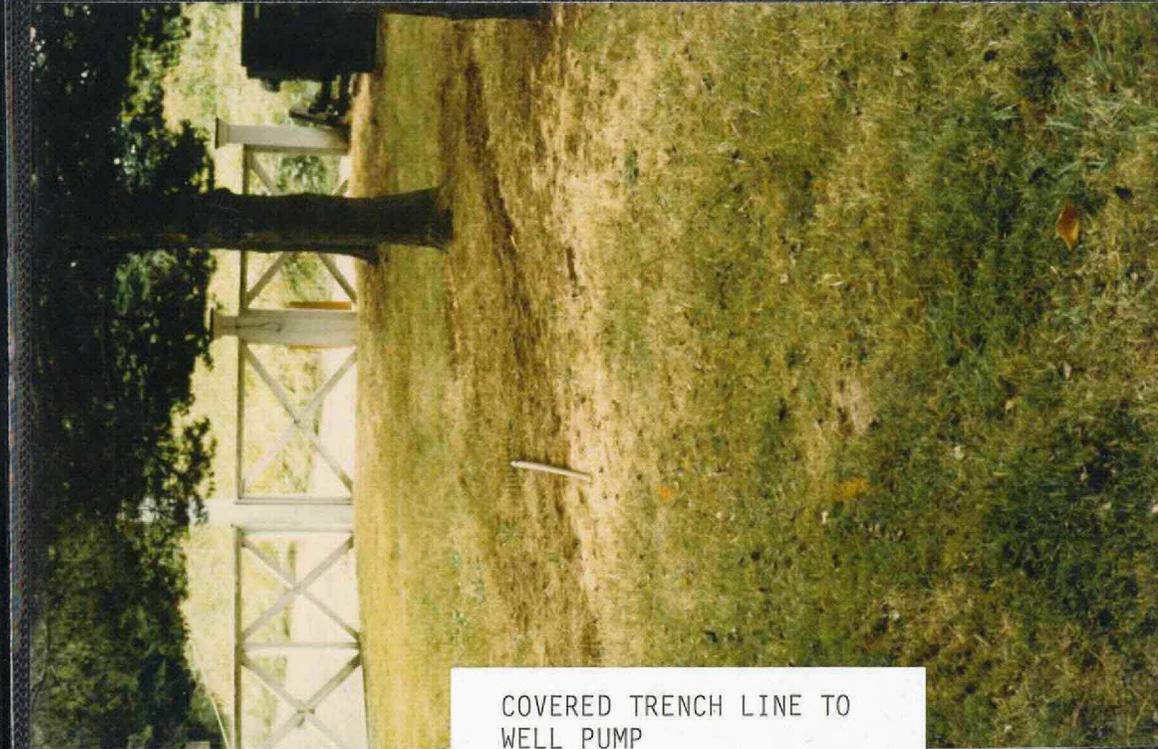
NEW VAULT FOR 3-PHASE
POWER TO WELL PUMP-03/92



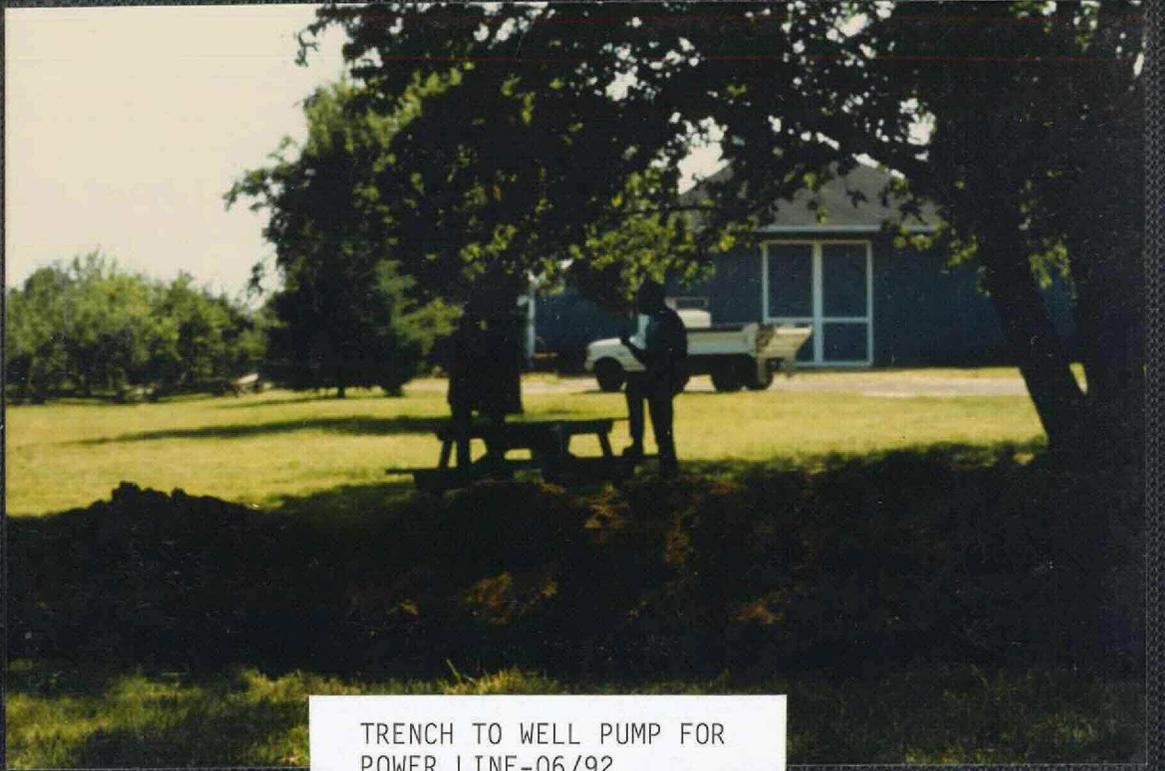
ELECTRICAL TRANSFORMER
VAULT NEXT TO WELL CASING



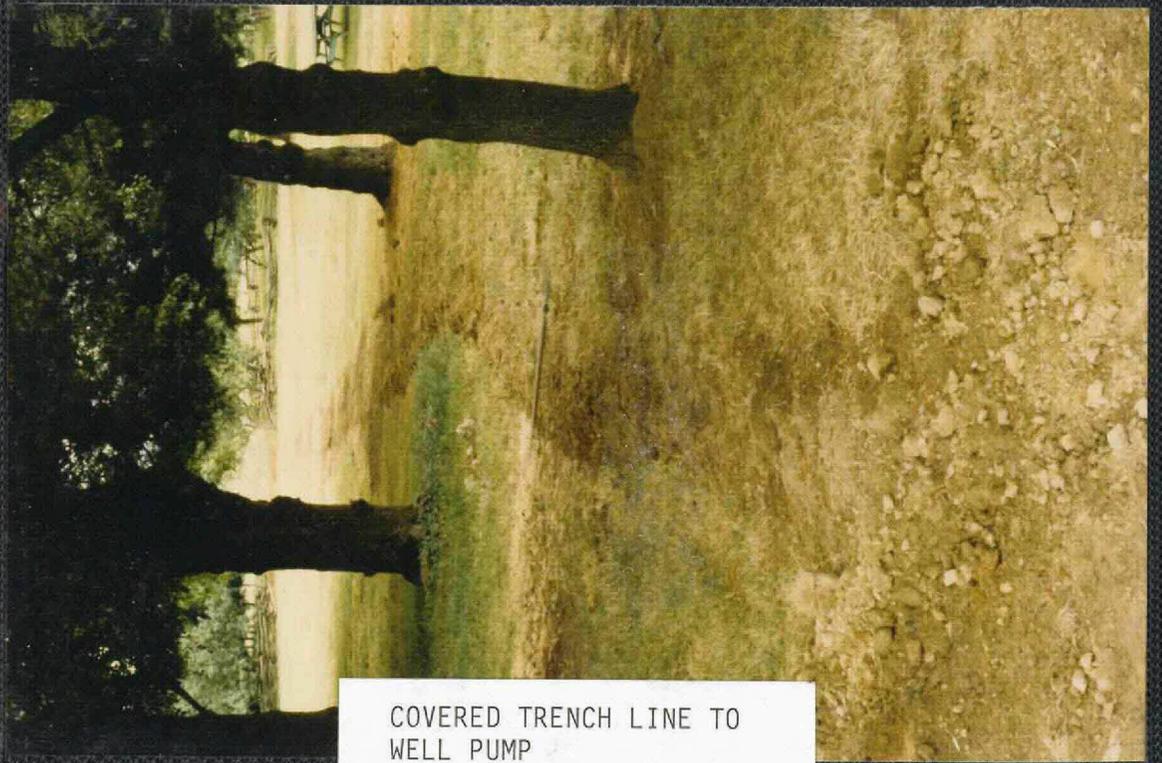
ELECTRICAL TRANSFORMER
VAULT



COVERED TRENCH LINE TO
WELL PUMP



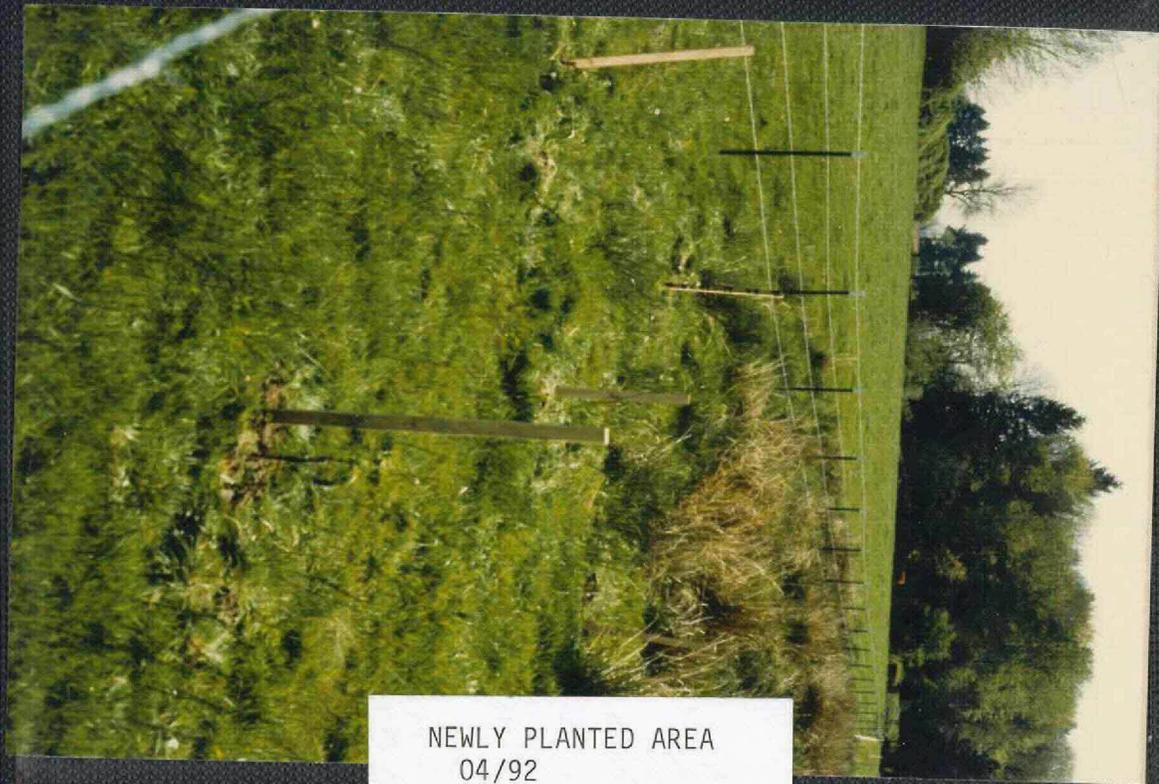
TRENCH TO WELL PUMP FOR
POWER LINE-06/92



COVERED TRENCH LINE TO
WELL PUMP



TREE/SHRUB PLANTING
BY PARK STAFF-04/92



NEWLY PLANTED AREA
04/92



PLANTING BY PARK
STAFF-04/92



TREES W/STAKES-04/92

GREENSPACES RESTORATION PROJECT 1991-92
BYBEE-HOWELL TERRITORIAL PARK
WETLAND ENHANCEMENT PROJECT
MULTNOMAH COUNTY PARK SERVICES DIVISION

Final Report

PROJECT DESCRIPTION:

The project entailed enhancement of approximately nine (9) acres of natural wetlands and 25 acres of surrounding uplands at Bybee-Howell Territorial Park located on Sauvie Island. The components of the project include:

- 1) Installation of 7,600 feet of four-strand barb wire fencing with posts and bracing to exclude cattle from the nine (9) acre wetland and upland area.
- 2) Installation of an 87 foot well, installation of a 7.5 HP submersible well pump, trenching and installation of 700 feet of three phase electrical line, installation of two electrical transformers and two electrical concrete vaults, installation of a control panel and electrical meter box cabinet, and installation of gate valves and 620 feet of four inch discharge line to provide supplemental water to the wetland during dry summer months.
- 3) The planting of big leaf maple, red willow, Oregon ash, red alder, redtwig dogwood, thimbleberry, salmonberry, douglas spirea, red elderberry, serviceberry, tomato rose, yellow iris, watercress, and skunk cabbage to improve riparian habitat.

- 4) Plowing and tilling 25 acres of upland pasture area and drilling in 1,100 lbs. of upland pasture seed mixture to remove undesirable weed species and renovate pasture to benefit waterfowl forage.

WORK TASKS AND TIME LINES:

The project preconstruction phase took about a month of Park staff time to complete. This phase was done in the fall of 1991 and entailed putting together detailed project specifications, then soliciting bids and awarding contracts.

Contractors were used on the following project components: fence installation, well drilling, pump installation, electrical power line and transformer installation, plant and pasture seed procurement, pasture renovation, utility vaults, and discharge line and valve purchases. Parks staff were involved in electrical and discharge line trenching, valve and discharge line hook-up, planting and watering of wetland plant materials, valve vault construction/installation, grading, and control panel box cabinet installation.

Construction on the project commenced in January of 1992 with the fence installation and ended with the final electrical hook-up to the control panel box in October. Individual tasks time lines are as following:

- Fence installation 01-06-92 to 01-24-92
- Well drilled 01-15-92 to 01-20-92
- Utility vaults (2) installation 03-05-92 to 03-06-92
- Well pump installation 03-13-92

- Plant material delivered 01/31/92 and 04-11-92
- Pasture renovation 03-23-92 to 05-14-92
- Plant material planted 04-01-92 to 05-04-92
- Trench power line 06-16-92 to 06-19-92
- Power line and transformer installation 06-23-92 to 06-24-92
- Control panel box cabinet construction 07-13-92 to 08-14-92
- Discharge line and valves delivered 08-05-92
- Valve vault construction/installation 09-01-92 to 09-07-92
- Trench discharge line 09-08-92 to 09-09-92
- Control panel box cabinet installation 09-09-92
- Gate valves installation 09-10-92
- Discharge line installation 09-10-92 to 09-11-92
- Pasture seed redrilled 10-07-92
- Final electrical hook-up to control panel box 10-15-92
- Well pump start-up and system check 10-16-92
- Wetland project completion ceremony/dedication 10-23-92

PROJECT BUDGET:

The project budget costs consisted of:

1) Fence installation -	\$8,613.00
2) Well installation -	\$5,662.50
3) Well pump and installation -	\$3,727.00
4) Utility Vaults -	\$1,053.00
5) Electrical line and transformer installation -	\$4,707.00
6) Wetland plant material -	\$1,497.25
7) Upland pasture seed -	\$1,068.00
8) Valves and discharge line -	\$771.89
9) Pasture renovation -	\$1,085.00
10) Multnomah County equipment rental/usage (up to 09-18-92) -	\$4,244.98
11) Parks and County staff (up to 09-18-92) -	\$19,418.85
12) Volunteers (Sauvie Island Conservancy) -	\$95.00
	\$51,943.47
TOTAL PROJECT COST UP TO 09-18-92	\$51,943.47

The Metro Grant was for \$10,000.00. This funding was used to pay for part of the costs associated with the well and well pump installation and plant material purchases. Multnomah County Park Services Division paid for the remainder of the project costs. Estimated (05-30-91) project cost was \$49,302.00.

PROJECT STAFF/WORKERS/VOLUNTEERS

Project staff and volunteers were comprised of the following individuals and companies:

Park Services Division Staff

- Charles Ciecko, Director
- Guy Swartz, Maintenance Supervisor
- Pete Scheideman, Arborist
- Dan Kromer, Marine Facilities Ranger
- Bill Glenn, Park Ranger
- Dale Vasnik, Senior Gardener
- several seasonal staff members

County Staff

- Tony Sepich, Electrician

Volunteer Staff (one day planting project)

- Sauvie Island Conservancy

Contractors

- Pacific Fence and Wire Company
- A.M. Janssen Well Drilling Company, Inc.
- Steve's Pump Service, Inc.
- Utility Vault Company, Inc.
- Portland General Electric Company
- Balance Restoration Nursery
- Teufel Nursery, Inc.
- Vern Hulit Seed, Inc.
- United Pipe and Supply Company, Inc.
- Les Douglas Farms

BENEFITS OF THE PROJECT:

There are several benefits of this wetland enhancement project. First, the well will enhance wildlife utilization of the wetland during the dry summer months by maintaining some open water area for waterfowl nesting and foraging. Secondly, the plant material will increase the biological diversity of the wetland ecosystem by expanding the number of different botanic species within the riparian zones surrounding the wetland. Another benefit of this project is to limit the amount of bank erosion and riparian damage done by cattle pasturing on adjacent land by fencing off the wetland. Finally, pasture renovation will achieve the benefit of improving waterfowl foraging areas.

HOW PROJECT RELATES TO THE GREENSPACES PROGRAM

This project is consistent with the objectives of the Greenspace demonstration/restoration grant program by: allowing a desirable wetland enhancement and restoration project to be carried out that due to insufficient funds would otherwise not have been attempted; increasing public awareness of the significance of wetlands; using the assistance of other agencies and volunteer groups to help in the design, planting and maintenance of native plant material; and by offering an unique opportunity to learn about the historical significance of our natural heritage by providing a site to view a diverse range of native wildlife, wetlands, and upland plant material.

HELPFUL HINTS AND ADVICE

The project for the most part went according to plans. There were three problems that did occur that should be mentioned. The first deals with the time of year that planting is done. If at all possible wait until the fall to do any installation of plant material. Due to the time frame of construction on this project, planting was done in early April and May. The problem with this is that it doesn't allow the plants enough time to get established before the hot dry summer months come about. Survival rate of plants installed in April is around 70-75%. Also, we had to re-drill the pasture seed again in early October due to the fact that only about 50% of the seed germinated because of late planting.

Another concern regards the amount of unplanned staff time that was needed to complete the project. Even though our staff had experience doing similar projects in the past, it took us longer to do certain components of the project than we anticipated. Allow yourself plenty of extra leeway if projects are done in-house.

The final problem dealt with the involvement of park staff on this project during the high visitor use summer season. Since staff responsibilities in other park operations took priority, minimal time was spent on the enhancement project during the summer months. The project was scheduled to be completed by June but due to other more critical concerns elsewhere it dropped on the priority list.

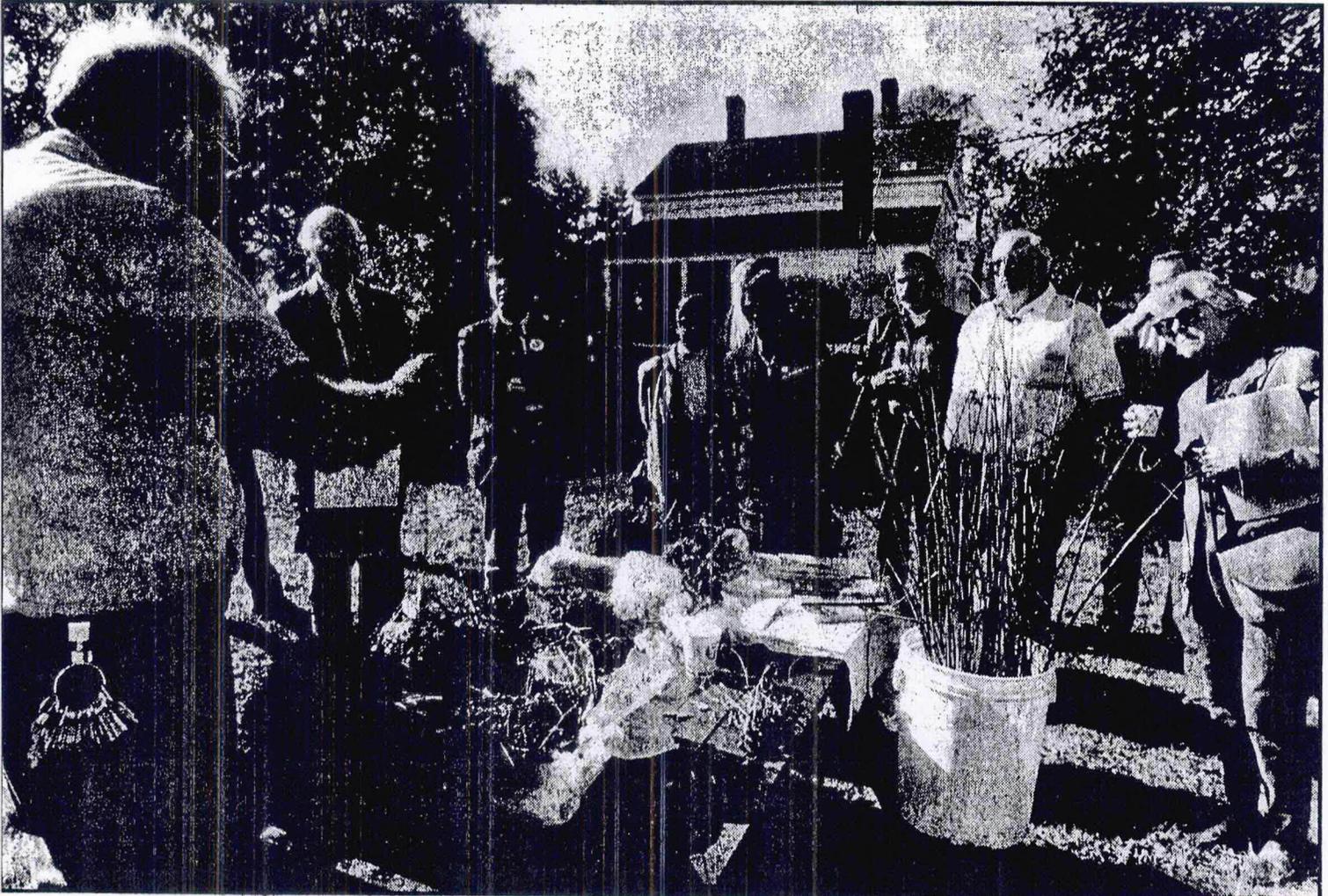
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NOT TO SCALE

AERIAL TOPO
WITH BOUNDARY OVERLAY
HISTORIC HOWELL ESTATE, SAUVÉ ISLAND
MULTNOMAH COUNTY OREGON

10-3-88



The Oregonian/KELLY JOHNSON

Wetlands dedication: Peter Scheideman of the Multnomah County Parks Services Division shows native plant species to county officials Friday during the dedication of a new wetlands area at Bybee-Howell Territorial Park on Sauvie Island. The county officials took a walking tour of the wetlands.

result of Greenspace start-up grant

New arena a good deal

User fees will pay for city's modest investment in the \$205 million sports-entertainment complex

Months of negotiating have concluded with a 750-page document designed to ensure that users, not Portland property taxpayers, will pay for street, coliseum and parking improvements to support a new Blazer sports-entertainment campus.

Some might object even to that, but they shouldn't. The return from the city's \$34.5 million user-fee investment will be measurable in jobs, tourism dollars and development around an improved and expanded Memorial Coliseum site.

Also, unlike many other cities where new facilities have been built, Portland will not be stuck with

attempting to market an old coliseum in competition with a brand new, larger arena. Oregon Arena Corp., an entity created by the Blazers to build and operate the arena, will assume responsibility for the coliseum for the next 20 years.

Critics might grumble that the Blazers will make a lot of money on the deal. That's probable. But property-tax payers aren't likely to build a new arena, from which the Blazers also would make money.

Unless somebody finds an unexploded mine in the fine print, the City Council should approve the agreement and get the project moving toward summer 1995 completion.

Home center schedules free composting workshop

The Fulton Park Home Composting Demonstration Center will be offering a free workshop on home composting Saturday.

The workshop will take place from 9 to 11 a.m. at the center, 68 S.W. Miles.

To register, or for more information, people may call Metro Recycling, 224-5555.

Aug. 10-28-92

Aug. 10-28-92

MULT Co,

Captions/description of slide images for Howell Territorial Park wetlands project

- 1 85 foot well casing with cap next to a new gate.
- 2 Gate and fencing across end of wetland for cattle crossing control
- 3 New gate leading from one side of wetland to the other. Used as cattle barrier and crossing
- 4 New 5'x 5'x 6' electrical vault for 3-phase power to well pump.
- 5 Transformer vault next to well casing
- 6 Covered trench for power line leading to well
- 7 Power transformers for well pump
- 8 Sauvie Island Conservancy tree planting project volunteers
- 9 Shovels, stakes and plant material used for planting project
- 10 Red Alder tree planted, staked and tied
- 11 Wetland upland pasture area being plowed
- 12 Drilled grass seed germinating/growing
- 13 Well with submersible pump and new cement floor
- 14 Building forms for cement vault walls
- 15 Finish work on pump vault walls
- 16 Wetland ponds without water (Sept 92)



MULTNOMAH COUNTY OREGON

NEWS

CONTACT: Julie Weatherby, 248-5050

PHOTO, VIDEO, AUDIO OPPORTUNITY: YES

RELEASE: October 23, 1992

HOWELL TERRITORIAL PARK WETLANDS DEDICATION

The enhancements to Howell Territorial Park wetlands, on Sauvie Island, were dedicated today to mark the culmination of a twelve-month joint venture between Multnomah County Park Services Division and Metropolitan Greenspaces program. The \$40,000 improvements include new water pumping system, fencing, pasture rehabilitation, and native species plantings.

The Metropolitan Greenspaces program, coordinated by Metropolitan Service District, is a cooperative regional system of natural areas, open space, trails and greenways for wildlife and people. The Greenspaces program received start-up funding grants from U.S. Fish & Wildlife Service for the master plan and restoration grants. The federal funds last until March 1994.

Howell Territorial Park was chosen for its habitat and wetland values for migrating waterfowl and other wildlife species. "The Howell Territorial Park wetlands enhancement is a good example of restoring a natural area that has cultural as well as ecological significance to the region," said Metro Councilor Richard Devlin. "We are pleased to assist with the restoration of this site."

The project focused on enhancing biological diversity and restoring the ecological integrity of the nine-acre wetland and the 32-acre surrounding uplands. Plantings of native species such as Pacific red willow, Oregon ash, Salmonberry, and Yellow iris, and pasture rehabilitation will improve the biological diversity of the area. New fencing prevents cattle grazing and allows native plant species to reestablish. The water pumping system enables water to remain in the wetlands year around, enhancing wildlife and plant habitat.

- M O R E -

Gladys McCoy,
County Chair

The Portland Building
1120 S.W. 5th, Rm. 1410
Portland, Oregon 97204

Commissioners McCoy, Anderson, and Hansen were presented with a check for \$10,000 from Councilor Devlin to mark the project's completion. Chair McCoy and Councilor Devlin jointly activated the water pump system which began filling the wetlands. Sauvie Island Conservancy and Marge Taber were acknowledged for their commitment to the restoration and preservation of habitat on the island.

The enhancement project is co-sponsored by Oregon Department of Fish & Wildlife, Wetlands Conservancy, and Sauvie Island Conservancy.

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