



CITY OF

PORTLAND, OREGON

BUREAU OF WATER WORKS

Mike Lindberg, Commissioner
Edward Tenny, Administrator
1120 S.W. 5th Avenue
Portland, OR 97204-1926
Information (503) 796-7404

September 17, 1990

Water Resources Department
State of Oregon
3850 Portland Road N.E.
Salem, OR 97310

The City of Portland, Bureau of Water Works agrees to the findings of the CWRE and does submit this site report as its Claim of Beneficial Use of the water as provided under the terms and conditions of Permit No. G-5658.

James L. Doane, P.E.
Chief Engineer

SUBSCRIBED AND SWORN TO BEFORE ME

THIS 19 DAY OF September 19 90

James Collins
NOTARY PUBLIC

My Commission expires 3/15/94

CLAIM OF BENEFICIAL USE
AND SITE REPORT
FOR WATER RIGHT G-5658
(APPLICATION NO. G-5966)
FOR
BUREAU OF WATER WORKS
CITY OF PORTLAND
PORTLAND, OREGON

INFORMATION

Permittee	Bureau of Water Works City of Portland 1120 SW 5th Avenue Portland, Oregon 97204-1920
Permittee Staff	Mr. Daniel Combs, P.L.S. Engineering Survey Manager Telephone - 796-7404
Individuals Contacted	Mr. Dirk Koopman Hillman Properties N.W. 900 N. Tomahawk Is. Dr. Portland, OR 97217-7999 Telephone - 382-4111

SOURCE

The source is a well located on Hayden Island, referred to as Well No. 1. The well was developed by the Hayden Island Amusement Company in 1941 to serve Hayden Island. The well ceased being used as a primary source of supply to the Hayden Island water system on October 31, 1988 when the system became a part of and began being supplied by the City of Portland's water system. Well No. 1 is now a supplemental supply and is maintained for use as an emergency or backup supply to the Hayden Island water system.

WELL DESCRIPTION

The well, referred to as Well No. 1, is 252 feet deep with an 11-5/8" O.D. steel casing from 0-168', a 10" O.D. steel casing from 168-218', and an 8" O.D. steel casing from 218-250'. The casing is perforated from 220-248'. The well was drilled by A.M. Jansen

in 1941. The ground elevation of the well site is approximately 34 feet. The well has a static water level of 28 feet and a pumping level of 38' 8" with a draw down of 10' 8". The well has an airline for water level measurement. No flow measuring device is installed and no use records are kept.

PUMP AND MOTOR

The following is a description of the well pump and motor.

<u>Motor</u>	<u>Pump</u>
General Electric Vertical Hollow Shaft 30 HP, 1800 RPM	Joshua Hendy Iron Works Pomona Pump Co. Div. Vertical Turbine, 10-inch 6-stage, 525 GPM

The pump has an outlet pipe diameter of 6 inches.

WATER USES

The permit identifies the use of the water as 0.22 CFS for group domestic and 0.89 CFS for commercial use for a total of 1.11 CFS. The water is now a supplemental supply and is used as an emergency or backup supply for the City of Portland's Hayden Island municipal system. The right should be now classified as a municipal use at the proven rate of 1.11 CFS, the same as the permit. The present annual withdrawals are negligible since water normally is only drawn for testing and flushing purposes. The area of use consists of the City of Portland's water system on Hayden Island.

LIFT

Water is pumped from the well's pumping level of 38' 8" below ground level to a 0.5 million gallon reservoir with a water surface approximately 35 feet above ground level. The total lift is approximately 74 feet with the reservoir full.

SURVEY TIE

The well is located as indicated on attached map.

SPECIAL CONDITIONS

Permit No. G-5658 had conditions that the permittee must meet. Each item is in compliance with one exception. The permittee has not installed and maintained a meter and has not kept a complete record of the amount of water withdrawn.

MISCELLANEOUS

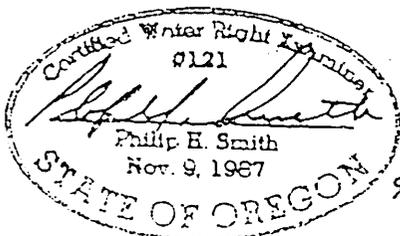
The available records on the well from the Water Resources Department, the City of Portland Bureau of Water Works, and the Jantzen Beach Water Co. were obtained. Field observations of the facilities and records reviews were relied upon to determine the capacity, water levels, lift and details of construction of the well and pump.

SUMMARY

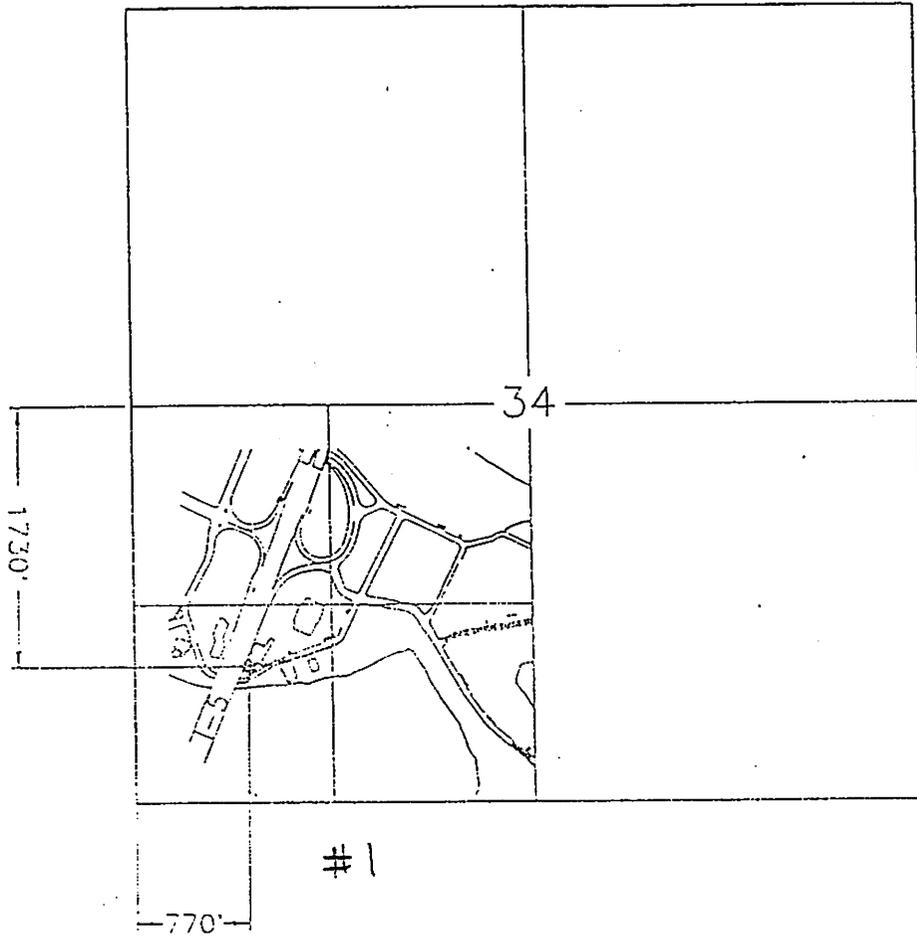
The City of Portland is beneficially using the water for the purpose authorized by Permit No. G-5658. The water is now used for supplemental supply to the City of Portland's municipal water system as an emergency or backup supply to the Hayden Island system. The Bureau is meeting all special conditions of the permit except for metering and recording the amount of ground water withdrawn. The final proof survey and inspection was completed by me on August 14, 1990 and the use was found to be completed under the terms and conditions of Permit No. G-5658, and the facts contained in this report are correct to the best of my knowledge.



Philip H. Smith
Certified Water Right Examiner No. 121



T.2N., R.1E., W.M.



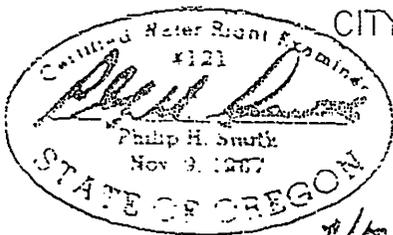
SCALE:
1" = 1320'

FINAL PROOF SURVEY
UNDER

Application No. G-5966 Permit No. G-5658

CITY OF PORTLAND, BUREAU OF WATER WORKS

Surveyed AUGUST 14, 1990



#1/10/1/10



CITY OF
PORTLAND, OREGON
BUREAU OF WATER WORKS

Mike Lindberg, Commissioner
Edward Tenny, Administrator
1120 S.W. 5th Avenue
Portland, OR 97204-1926
Information (503) 796-7404

September 17, 1990

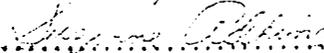
Water Resources Department
State of Oregon
3850 Portland Road N.E.
Salem, OR 97310

The City of Portland, Bureau of Water Works agrees to the findings of the CWRE and does submit this site report as its Claim of Beneficial Use of the water as provided under the terms and conditions of Permit No. G-5659.


James L. Doane, P.E.
Chief Engineer

SUBSCRIBED AND SWORN TO BEFORE ME

THIS 17th DAY OF September, 1990.


.....
NOTARY PUBLIC

My Commission Expires 5/15/94

CLAIM OF BENEFICIAL USE
AND SITE REPORT
FOR WATER RIGHT G-5659
(APPLICATION NO. G-5967)
FOR
BUREAU OF WATER WORKS
CITY OF PORTLAND
PORTLAND, OREGON

INFORMATION

Permittee	Bureau of Water Works City of Portland 1120 SW 5th Avenue Portland, Oregon 97204-1920
Permittee Staff	Mr. Daniel Combs, P.L.S. Engineering Survey Manager Telephone - 796-7404
Individuals Contacted	Mr. Dirk Koopman Hillman Properties N.W. 900 N. Tomahawk Is. Dr. Portland, OR 97217-7999 Telephone - 382-4111

SOURCE

The source is a well located on Hayden Island, referred to as Well No. 2. The well was developed by the Hayden Island Amusement Company in 1943 to serve Hayden Island. The well ceased being used as a primary source of supply to the Hayden Island water system on October 31, 1988 when the system became a part of and began being supplied by the City of Portland's water system. Well No. 2 is now a supplemental supply and is maintained for use as an emergency or backup supply to the Hayden Island water system.

WELL DESCRIPTION

The well, referred to as Well No. 2, is 232 feet deep with a 12" steel casing from 0-190' and a 10" steel casing from 181-232'. The casing is perforated from 200-210.5' and 212-230'. The well was drilled by J.R. Strasser in 1943. The ground elevation at the

well site is approximately 32 feet. The well has a static water level of 30 feet and a pumping level of 58 feet with a draw down of 28 feet. The well has an airline for water level measurement. A propeller meter is installed on the pump discharge line for measuring flow.

PUMP AND MOTOR

The following is a description of the well pump and motor.

<u>Motor</u>	<u>Pump</u>
General Electric Vertical Hollow Shaft 60 HP, 1800 RPM	Joshua Hendy Iron Works Pomona Pump Co. Div. Vertical Turbine, 10-inch 5-stage, 1000 GPM

The pump has an outlet pipe diameter of 8 inches.

WATER USES

The permit identifies the use of the water as 3.56 CFS for commercial use and 0.89 CFS for group domestic use for a total of 4.45 CFS. The water is now a supplemental supply and is used as an emergency or backup supply for the City of Portland's Hayden Island municipal system. The right should now be classified as a municipal use at the proven rate of 2.23 CFS which is less than the permit. The present annual withdrawals are negligible since water normally is only drawn for testing and flushing purposes. The area of use consists of the City of Portland's water system on Hayden Island.

LIFT

Water is pumped from the well's pumping level of 58 feet below ground level to a 0.5 million gallon reservoir with a water surface approximately 35 feet above ground level. The total lift is approximately 93 feet with the reservoir full.

SURVEY TIE

The well is located as indicated on attached map. This location differs slightly from the permit location description.

SPECIAL CONDITIONS

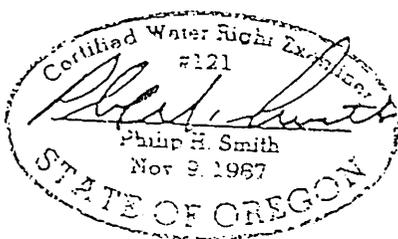
Permit No. G-5659 had conditions that the permittee must meet. Each item is in compliance with no exception.

MISCELLANEOUS

The available records on the well from the Water Resources Department, the City of Portland Bureau of Water Works, and the Jantzen Beach Water Co. were obtained. Field observations of the facilities and records reviews were relied upon to determine the capacity, water levels, lift and details of construction of the well and pump.

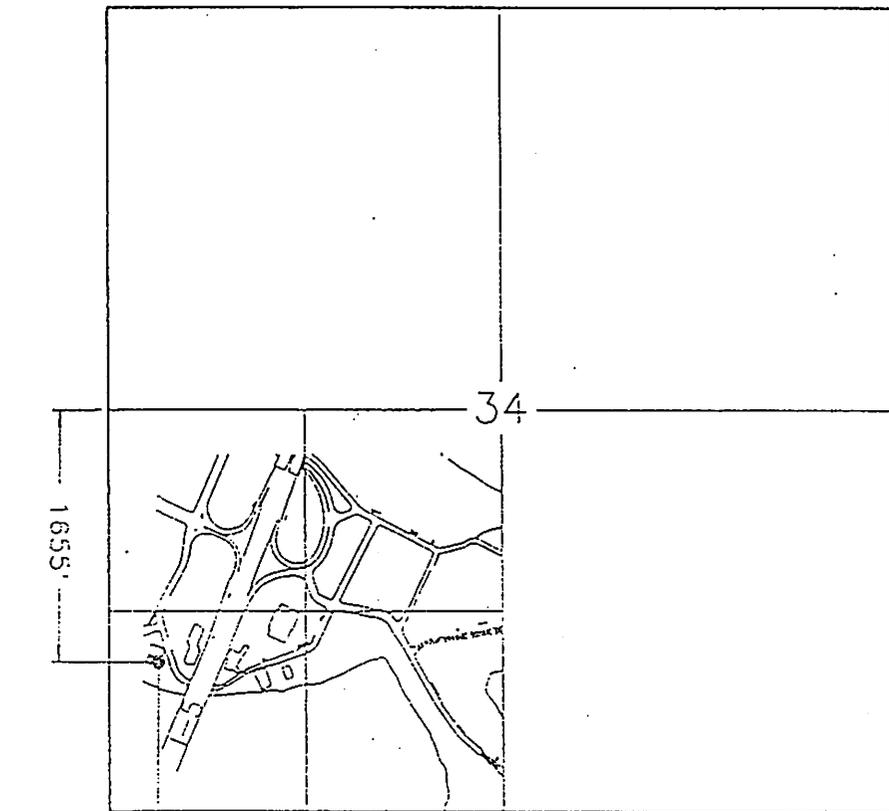
SUMMARY

The City of Portland is beneficially using the water but only to the extent of 2.23 CFS for the purpose authorized by Permit No. G-5659. The water is now used for supplemental supply to the City of Portland's municipal water system as an emergency or backup supply to the Hayden Island system. The Bureau is meeting all special conditions of the permit. The final proof survey and inspection was completed by me on August 14, 1990 and the use was found to be completed but only to the extent of 2.23 CFS under the terms and conditions of Permit No. G-5659, and the facts contained in this report are correct to the best of my knowledge.




Philip H. Smith
Certified Water Right Examiner No. 121

T.2N., R, 1E., W.M.



SCALE:
1" = 1320'

340'

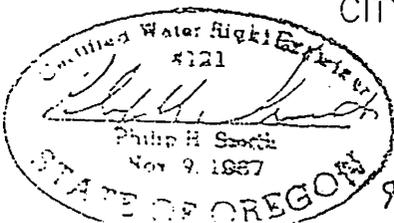
#2

FINAL PROOF SURVEY
UNDER

Application No. G-5967 Permit No. G-5659

CITY OF PORTLAND, BUREAU OF WATER WORKS

Surveyed AUGUST 14, 1990



9/10/90



CITY OF

PORTLAND, OREGON

BUREAU OF WATER WORKS

Mike Lindberg, Commissioner
Edward Tenny, Administrator
1120 S.W. 5th Avenue
Portland, OR 97204-1926
Information (503) 796-7404

September 17, 1990

Water Resources Department
State of Oregon
3850 Portland Road N.E.
Salem, OR 97310

The City of Portland, Bureau of Water Works agrees to the findings of the CWRE and does submit this site report as its Claim of Beneficial Use of the water as provided under the terms and conditions of Permit No. G-5498.

James L. Doane, P.E.
Chief Engineer

SUBSCRIBED AND SWORN TO BEFORE ME

THIS 19 DAY OF September 1990.

Suzanne Adkins
.....
NOTARY PUBLIC

My Commission expires 5/15/94

CLAIM OF BENEFICIAL USE
AND SITE REPORT
FOR WATER RIGHT G-5498
(APPLICATION NO. G-5678)
FOR
BUREAU OF WATER WORKS
CITY OF PORTLAND
PORTLAND, OREGON

INFORMATION

Permittee	Bureau of Water Works City of Portland 1120 SW 5th Avenue Portland, Oregon 97204-1920
Permittee Staff	Mr. Daniel Combs, P.L.S. Engineering Survey Manager Telephone - 796-7404
Individuals Contacted	Mr. Dirk Koopman Hillman Properties N.W. 900 N. Tomahawk Is. Dr. Portland, OR 97217-7999 Telephone - 382-4111

SOURCE

The source is a well located on Hayden Island, referred to as Well No. 3. The well was developed by the Hayden Island Corporation in 1978 to serve Hayden Island. The well ceased being used as a primary source of supply to the Hayden Island water system on October 31, 1988 when the system became a part of and began being supplied by the City of Portland's water system. Well No. 3 is now a supplemental supply and is maintained for use as an emergency or backup supply to the Hayden Island water system.

WELL DESCRIPTION

The well, referred to as Well No. 3, is 269 feet deep with a stainless steel (slat size - 18) screen set from 235'-265'. There is both a 20" and 12" casing but the lengths and stations are undetermined. It appears that Well No. 3 was drilled in 1978 by an

unknown individual. The ground elevation at the well site is approximately 32 feet. The well has a static water level of 34 feet and a pumping level of 120 feet with a draw down of 86 feet. The well has an airline for water level measurement. No flow measuring device is installed.

PUMP AND MOTOR

The following is a description of the pump and motor at the well head.

<u>Motor</u>	<u>Pump</u>
US Motor Vertical Hollow Shaft 75 HP, 1800 RPM	Layne & Bowler Pump Co. Vertiline Turbine 2000 GPM

The pump has an outlet pipe diameter of 8 inches.

WATER USES

The permit identifies the use of the water as 3.56 CFS for commercial use and 0.89 CFS for group domestic use for a total of 4.45 CFS. The water is now a supplemental supply and is used as an emergency or backup supply for the City of Portland's Hayden Island municipal system. The right should be now classified as a municipal use at the proven rate of 4.45 CFS, the same as the permit. The present annual withdrawals are negligible since water is normally only drawn for testing and flushing purposes. The area of use consists of the City of Portland's water system on Hayden Island.

LIFT

Water is pumped from the well's pumping level of 120 feet below ground level to a 0.5 million gallon below ground reservoir with a water surface at approximately ground level. The total lift is approximately 120 feet with the reservoir full.

SURVEY TIE

The well is located as indicated on attached map.

SPECIAL CONDITIONS

Permit No. G-5498 had conditions that the permittee must meet. Each item is in compliance with one exception. The permittee has not installed and maintained a meter and has not kept a complete record of the amount of water withdrawn.

MISCELLANEOUS

The available records on the well from the Water Resources Department, the City of Portland Bureau of Water Works, and the Jantzen Beach Water Co. were obtained. Field observations of the facilities and records reviews were relied upon to determine the capacity, water levels, lift and details of construction of the well and pump.

SUMMARY

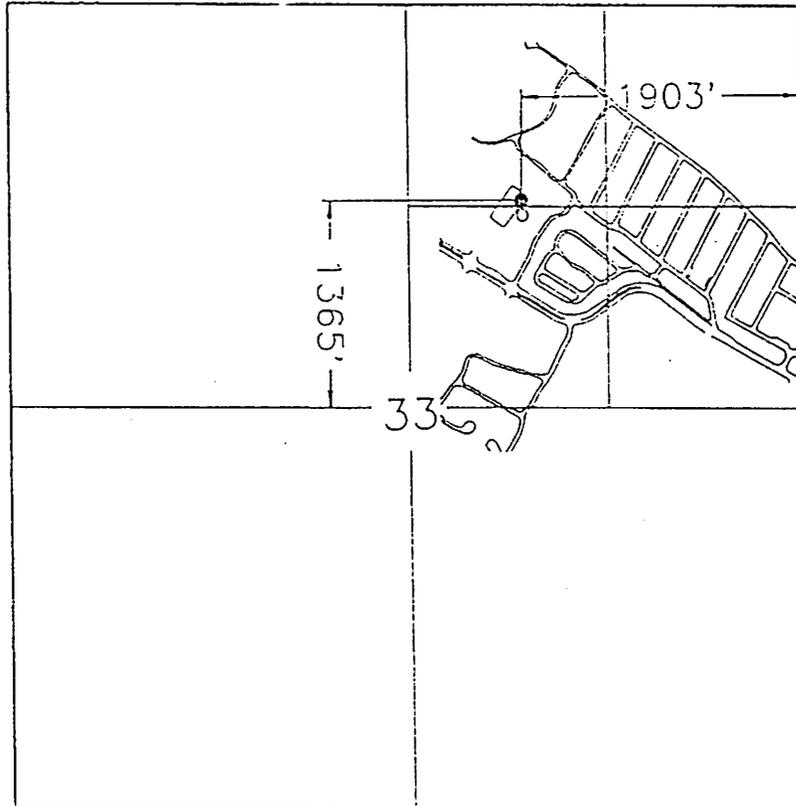
The City of Portland is beneficially using the water for the purpose authorized by Permit No. G-5498. The water is now used for supplemental supply to the City of Portland's municipal water system as an emergency or backup supply to the Hayden Island system. The Bureau is meeting all special conditions of the permit except for metering and recording the amount of water withdrawn. The final proof survey and inspection was completed by me on August 14, 1990 and the use was found to be completed under the terms and conditions of Permit No. G-5498, and the facts contained in this report are correct to the best of my knowledge.



Philip H. Smith
Certified Water Right Examiner No. 121



T.2N.,R,1E.,W.M.



SCALE:
1" = 1320'

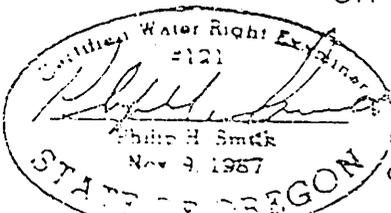
#3

FINAL PROOF SURVEY
UNDER

Application No. G-5678 Permit No. G-5498

CITY OF PORTLAND, BUREAU OF WATER WORKS

Surveyed AUGUST 14, 1990



9/14/90



CITY OF
PORTLAND, OREGON
BUREAU OF WATER WORKS

Mike Lindberg, Commissioner
Edward Tenny, Administrator
1120 S.W. 5th Avenue
Portland, OR 97204-1926
Information (503) 796-7404

September 17, 1990

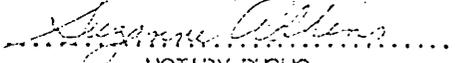
Water Resources Department
State of Oregon
3850 Portland Road N.E.
Salem, OR 97310

The City of Portland, Bureau of Water Works agrees to the findings of the CWRE and does submit this site report as its Claim of Beneficial Use of the water as provided under the terms and conditions of Permit No. G-7954.


James L. Doane, P.E.
Chief Engineer

SUBSCRIBED AND SWORN TO BEFORE ME

THIS 17. DAY OF September 19. 90.


.....
NOTARY PUBLIC

My Commission expires 5/15/97

CLAIM OF BENEFICIAL USE
AND SITE REPORT
FOR WATER RIGHT G-7954
(APPLICATION NO. G-8595)
FOR
BUREAU OF WATER WORKS
CITY OF PORTLAND
PORTLAND, OREGON

INFORMATION

Permittee	Bureau of Water Works City of Portland 1120 SW 5th Avenue Portland, Oregon 97204-1920
Permittee Staff	Mr. Daniel Combs, P.L.S. Engineering Survey Manager Telephone - 796-7404
Individuals Contacted	Mr. Dirk Koopman Hillman Properties N.W. 900 N. Tomahawk Is. Dr. Portland, OR 97217-7999 Telephone - 382-4111

SOURCE

The source is a well located on Hayden Island, referred to as Well No. 4. The well ceased being used as a primary source of supply to the Hayden Island water system on October 31, 1988 when the system became a part of and began being supplied by the City of Portland's water system. Well No. 4 is now a supplemental supply and is maintained for use as an emergency or backup supply to the Hayden Island System.

WELL DESCRIPTION

The well, referred to as Well No. 4, is estimated to be 180 feet deep with a casing size of 10 inches constructed of steel. The well was drilled by an unknown party in 1930. The ground elevation of the well site is approximately 30 feet. The well has a static water

level of 32 feet and a pumping level of 42 feet with a draw down of 10 feet. The well has an airline for water level measurement. A propeller meter is installed on the pump discharge line.

PUMP AND MOTOR

The following is a description of the well pump and motor.

<u>Motor</u>	<u>Pump</u>
General Electric Vertical Hollow Shaft 75 HP, 1800 RPM	Aurora Pump Vertiline Turbine 600 GPM

The pump has an outlet pipe diameter of 6 inches.

WATER USES

The permit identifies the use of the water as 1.19 CFS for quasi-municipal use. The water is now a supplemental supply and is used as an emergency or backup supply for the City of Portland's Hayden Island municipal system. The right should now be classified as a municipal use at the proven rate of 1.19 CFS, the same as the permit.

The present annual withdrawals are negligible since water is normally only drawn for testing and flushing purposes. The area of use consists of the City of Portland's water system on Hayden Island.

LIFT

Water is pumped from the well's pumping level of 42 feet below ground level into the water distribution system with a head pressure of approximately 55 psi. The total lift is approximately 169 feet.

SURVEY TIE

The well is located as indicated on attached map.

SPECIAL CONDITIONS

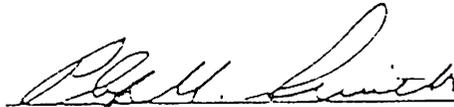
Permit No. G-7954 had conditions that the permittee must meet. Each item is in compliance with one exception. The permittee has installed and maintained a meter but has not kept a complete record of the amount of water withdrawn.

MISCELLANEOUS

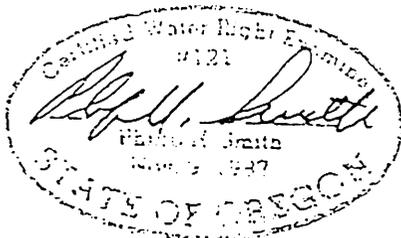
The available records on the well from the Water Resources Department, the City of Portland Bureau of Water Works, and the Jantzen Beach Water Co. were obtained. Field observations of the facilities and records reviews were relied upon to determine the capacity, water levels, lift and details of construction of the well and pump.

SUMMARY

The City of Portland is beneficially using the water for the purpose authorized by Permit No. G-7954. The water is now used for supplemental supply to the City of Portland's municipal water system as an emergency or backup supply to the Hayden Island system. The Bureau is meeting all special conditions of the permit except keeping a complete record of water withdrawn. The final proof survey and inspection was completed by me on August 14, 1990 and the use was found to be completed under the terms and conditions of Permit No. G-7954, and the facts contained in this report are correct to the best of my knowledge.

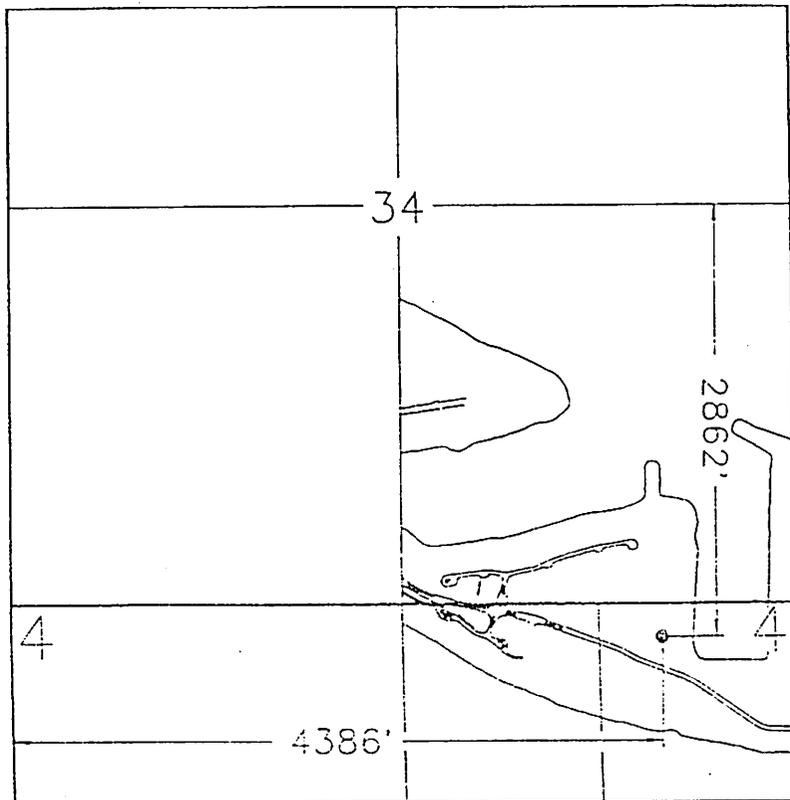


Philip H. Smith
Certified Water Right Examiner No. 121



9/10/90

T.1N.,R.1E.,W.M.



SCALE:
1" = 1320'

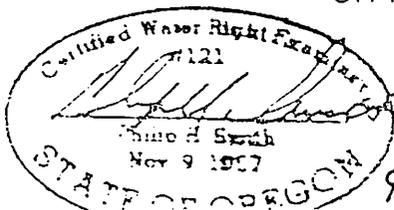
#4

FINAL PROOF SURVEY
UNDER

Application No. G-8595 Permit No. G-7954

CITY OF PORTLAND, BUREAU OF WATER WORKS

Surveyed AUGUST 14, 1990



9/10/90