



Oregon Water Resources Department 725
 Summer Street NE, Suite A
 Salem Oregon 97301-1271
 (503) 986-0900
 www.wrd.state.or.us

Application for a Permit to Use Ground Water

Please type or print in dark ink. If your application is found to be incomplete or inaccurate, we will return it to you. If any requested information does not apply to your application, insert "n.a." Please read and refer to the instructions when completing your application. A summary of review criteria and procedures that are generally applicable to these applications is available at www.wrd.state.or.us/OWRD/PUBS/forms.shtml.

I. APPLICANT INFORMATION

A. Individuals

Applicant: _____
First Last

Mailing Address: _____

City State Zip

Phone: _____
Home Work Other

*Fax: _____ *Email Address: _____

B. Organizations

(Corporations, associations, firms, partnerships, joint stock companies, cooperatives, public and municipal corporations)

Name of Organization: McKinstry Company LLC

Name and Title of Person Applying: Pete Felzien

Mailing Address or Organization: 12021 NE Airport Way, Suite G
Portland Oregon 97220
City State Zip

Phone : 503.331.2460 503.331.2460
Day Evening

*Fax: 503.331.6906 *Email Address: petef@mckinstry.com

*Optional

For Department Use

App. No. G17182 Permit No. _____ Date _____

Last Updated: 10/01/2008

Ground Water 1

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 WATER RESOURCES DEPT
 SALEM, OREGON

2. PROPERTY OWNERSHIP

Yes (Please check appropriate box below then skip to section 3 'Ground Water Development')

- There are no encumbrances
This land is encumbered by easements, rights of way, roads or other encumbrances (please provide a copy of the recorded deed(s))

No (Please check the appropriate box below)

- I have a recorded easement or written authorization permitting access.
I do not currently have written authorization or easement permitting access.
Written authorization or an easement is not necessary, because the only affected lands I do not own are state-owned submersible lands, and this application is for irrigated and/or domestic use only (ORS 274.040).

You must provide the legal description of: (1) the property from which the water is to be diverted, (2) any property crossed by the proposed ditch, canal or other work, and (3) any property on which the water is to be used as depicted on the map. No property is crossed other than that owned by McKinstry Co.

(Deed of trust attached)

List the names and mailing addresses of all affected landowners.

McKinstry Co. LLC, 12021 NE Airport Way, Suite G, Portland, Oregon 97220

3. GROUND WATER DEVELOPMENT

A. Well Information

Number of well(s): 2

Name of nearest surface water body: Columbia Slough

Distance from well(s) to nearest stream or lake:

1) W-1 (675') 2) W-2 (850') 3) 4)

If distance from surface water is less than one mile, indicate elevation difference between nearest surface water and well head:

1) W-1 (20') 2) W-2 (20') 3) 4)

B. Well Characteristics

Wells must be constructed according to standards set by the Department for the construction and maintenance of water wells. If the well is already constructed, please enclose a copy of the well constructor's log and the well ID number, if available, for each well with this application. Identify each well with a number corresponding to the wells designated on the map and proceed to section 4 of the form. If the well has not been constructed, or if you do not have a well log, please complete the following:

Well(s) will be constructed by: Well logs for W-1 and W-2 attached.

Tacoma Pump and Drilling Co.

Mailing Address: 30316 Mountain Highway

Graham WA 98338
City State Zip

Ground Water:2

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Completion Date: W-1 (10/19/08), W-2 (10/21/08)

Please provide a description of your well development. *(Attach additional sheets if needed.)*

Well No.	Diameter	Type and size of casing	No. of feet of casing (bgs)	Intervals casing is perforated (in feet)	Seal depth	Est. depth to water	Est. depth to water bearing stratum	Type of access port or measuring device	Total well depth
W-1	12"	12" steel	72.5	72.5' - 107.5'	40'	20	72.5	1" PVC	108.5
W-2	12"	12" steel	80.5	80.5' - 114.5'	40'	20	77.5	1" PVC	119.5

Note: Well numbers in this listing must correspond to well location(s) shown on accompanying map.

If well log is not available, or well is not yet constructed, you must provide: proposed total depth, depth of casing and seal, and the anticipated perforation and open intervals.

C. Artesian Flows

If your water well is flowing artesian, describe your water control and conservation works:

N/A

4. WATER USE

Please read the instruction booklet for more details on "type of use" definitions, how to express how much water you need and how to identify the water source you propose to use. You must fill out a supplemental form for some uses as they require specific information for that type of use.

A. Type(s) of Use(s) Commercial/Industrial (See Form Q)

See list of beneficial uses provided in the instructions.

- If your proposed use is **domestic**, indicate the number of households to be supplied with water: _____
- If your proposed use is **irrigation**, please attach **Form I**
- If your proposed use is **mining**, attach **Form R**
- If your proposed use is **municipal or quasi-municipal**, attach **Form M**
- If your proposed use is **commercial/industrial**, attach **Form Q**

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B. Amount of Water

Provide the production rate in gallons per minute (gpm) and the total annual amount of water you need from each well, from each source or aquifer, for each use. You do not need to provide source information if you are submitting a well log with your application.

Well No.	Source or aquifer	Type of use	Total rate of water requested (in gpm)	Total annual quantity (in gallons)	Production rate of well (in gpm)
W-1	Troutdale Gravel Aquifer (TGA)	heating/cooling building	300	100,000,000	200
W-2	Troutdale Gravel Aquifer (TGA)	heating/cooling building	300	100,000,000	200

C. Maximum Rate of Use Requested

What is the maximum, instantaneous rate of water that will be used? 300gpm (0.668 cfs)
 (The fees for your application will be based on this amount.)

D. Period of Use

Indicate the time of year you propose to use the water: year-round / cooling in summer then heating in winter
 (For seasonal uses like irrigation give dates when water use would begin and end, e.g. March 1-October 31.)

E. Acreage

If you will be applying water to land, indicate the total number of acres where water will be applied or used: N/A
 (This number should be consistent with your application map.)

5. WATER MANAGEMENT

A. Diversion

What method will you use to divert water from the source?

- Pump (give horsepower and pump type): 20 hp submersible;
- other means (describe): _____

B. Transport

How will you transport water to your place of use?

- Ditch or canal (give average width and depth):

Width _____ Depth _____

Is the ditch or canal to be lined? Yes No

- Pipe (give diameter and total length):

Diameter 4" Length 800 Feet

- other, describe: _____

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 SALEM, OREGON

C. Application/Distribution Method

What equipment will you use to apply water to your place of use?

All water pumped will be reinjected (non-consumptive use). System is for low temperature geothermal (LTG) heating and cooling system (see attached narrative or system)

Irrigation or land application method (check all that apply):

- Flood
- High pressure sprinkler
- Low pressure sprinkler
- Drip
- Water Cannons
- Center pivot system
- Hand Lines
- Wheel Lines
- Siphon tubes or gated pipe with furrows

other, describe: Non-consumptive heating/cooling system

Distribution method

- Direct pipe from source
- In-line storage (tank or pond)
- Open Canal

E. Conservation

What methods will you use to conserve water? Why did you choose this distribution or application method? Have you considered other methods to transport, apply, distribute or use water? For example, if you are using sprinkler irrigation rather than drip irrigation, explain. If you need additional space, attach a separate sheet.

All water pumped from one well will be reinjected into the same aquifer through a second well. Seasonal changes in flow direction reverse use of well (from production to injection) at least one time per year.

6. PROJECT SCHEDULE

Indicate the anticipated dates that the following construction tasks should begin. If construction has already begun, or is completed, please indicate that date.

Proposed date construction will begin: September 1, 2008

Proposed date construction will be completed: February 1, 2009

Proposed date beneficial water use will begin: February 15, 2009

7. REMARKS

If you would like to clarify any information you have provided in the application, please do so here and reference the specific application question you are addressing.

See attached narrative of system and site maps.

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8. MAP REQUIREMENTS

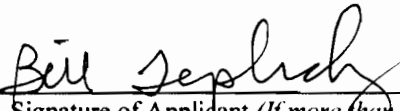
The Department cannot process your application without accurate information showing the source of water and location of water use. You must include a map with this application form that clearly indicates the township, range, section, and quarter/quarter section of the proposed well location and place of use. The map must provide tax lot numbers. See the map guidelines sheet for detailed map specifications.

9. SIGNATURE

By my signature below I confirm that I understand:

- I am asking to use water specifically as described in this application.
- Evaluation of this application will be based on information provided in the application packet.
- I cannot legally use water until the Water Resources Department issues a permit to me.
- If I get a permit, I must not waste water.
- If development of the water use is not according to the terms of the permit, the permit can be canceled.
- The water use must be compatible with local comprehensive land use plans.
- Even if the Department issues a permit, I may have to stop using water to allow senior water right holders to get water to which they are entitled.

I swear that all information provided in this application is true and correct to the best of my knowledge:


 Signature of Applicant (If more than one applicant, all must sign.)

Date

Before you submit your application be sure you have:

- Answered each question completely.
- Attached a legible map which includes township, range, section, quarter/quarter and tax lot number.
- Included a Land Use Information Form or receipt stub signed by a local official.
- Included the legal description of all the property involved with this application. You may supply a copy of the deed, land sales contract, or title insurance policy, to meet this requirement.
- Included a check payable to the Oregon Water Resources Department for the appropriate amount. The Department's fee schedule can be found at www.wrd.state.or.us or call (503) 986-0900.

WRD on the web:
www.wrd.state.or.us

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MAR 10 2009

WATER RESOURCES DEPT
 SALEM, OREGON

Applicant Name: ^{for} MCKINSTRY Co LLC, by ROGER N. SMITH ASSOC. INC.
 Mailing Address: 12021 NE AIRPORT WAY, Suite G
 City: PORTLAND State: OR Zip: 97220 Day Phone: 503-241-5444

This application is related to a Measure 37 claim. Yes No

A. Land and Location

Please include the following information for all tax lots where water will be diverted (taken from its source), conveyed (transported), or used. Applicants for municipal use, or irrigation uses within irrigation districts may substitute existing and proposed service-area boundaries for the tax-lot information requested below.

Township	Range	Section	1/4 1/4	Tax Lot #	Plan Designation (e.g. Rural Residential/RR-5)	Water to be:	Proposed Land Use:
12N	3E	19	NW, SW	311	IG 2 e Columbia SS	<input checked="" type="checkbox"/> Diverted <input checked="" type="checkbox"/> Conveyed <input checked="" type="checkbox"/> Used	New Bldg
12N	3E	19	NW, SW	314	" " " " " " " "	<input type="checkbox"/> Diverted <input checked="" type="checkbox"/> Conveyed <input type="checkbox"/> Used	" "
12N	3E	19	NW, SW	315	" " " " " " " "	<input type="checkbox"/> Diverted <input checked="" type="checkbox"/> Conveyed <input checked="" type="checkbox"/> Used	" "
12N	3E	19	NW, SW	316	" " " " " " " "	<input checked="" type="checkbox"/> Diverted <input checked="" type="checkbox"/> Conveyed <input checked="" type="checkbox"/> Used	" "

(PARTIAL)

List all counties and cities where water is proposed to be diverted, conveyed, or used.

CITY OF PORTLAND, MULTNOMAH COUNTY

B. Description of Proposed Use

Type of application to be filed with the Water Resources Department:

- Permit to Use or Store Water
- Allocation of Conserved Water
- Permit Amendment or Ground Water Registration Modification
- Water-Right Transfer
- Limited Water Use License
- Exchange of Water

Source of water: Reservoir/Pond Ground Water Surface Water (name) _____

Estimated quantity of water needed: 0.56 cubic feet per second gallons per minute acre-feet

Intended use of water: Irrigation Commercial Industrial Domestic for household(s)
 Municipal Quasi-municipal Instream Other

Briefly describe: TWO WATER WELLS WILL BE USED TO SUPPLY GROUNDWATER TO MCKINSTRY'S NEW BUILDINGS FOR HEATING AND COOLING. BOTH WELLS (W-1 AND W-2 ON THE ATTACHED MAP) WILL REQUIRE WATER RIGHTS. WATER WILL BE DRAWN FROM THE UNUSED SHALLOW AQUIFER AND REINJECTED AS A 'NON-CONSUMPTIVE USE' OF THE WATER.

Note to applicant: If the Land Use Information Form cannot be completed while you wait, please have a local government representative sign the receipt below and include it with the application filed with the Water Resources Department.

(SEE ATTACHED DOCUMENTS FOR FURTHER DETAILS OF SYSTEM)

Receipt for Request for Land Use Information



Oregon

Theodore R. Kulongoski, Governor

Water Resources Department

North Mall Office Building

725 Summer Street NE, Suite A

Salem, OR 97301-1266

503-986-0900

FAX 503-986-0904

NOTE TO APPLICANTS

In order for your application to be processed by the Water Resources Department (WRD), this Land Use Information Form must be completed by a local government planning official in the jurisdictions where your water right will be used and developed. The planning official may choose to complete the form while you wait, or return the receipt stub to you. Applications received by WRD without the Land Use Form or the receipt stub will be returned to you.

NOTE TO LOCAL GOVERNMENTS

The person presenting the attached Land Use Information Form is applying for a water right. The Water Resources Department (WRD) requires its applicants to obtain land-use information to be sure the water rights do not result in land uses that are incompatible with your comprehensive plan.

Please complete the form or detach the receipt stub and return it to the applicant for inclusion in their water right application. You will receive notice once the applicant formally submits his or her request to the WRD. The notice will give more information about WRD's water rights process and provide additional comment opportunities. You will have 30 days from the date of the notice to complete the land-use form and return it to the WRD. If no land-use information is received from you within that 30-day period, the WRD may presume the land use associated with the proposed water right is compatible with your comprehensive plan.

Your attention to this request for information is greatly appreciated by the Water Resources Department. If you have any questions concerning this form, please contact the WRD's Customer Service Group at 503-986-0801.

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SALEM, OREGON

Please check the appropriate box below and provide the requested information

Land uses to be served by proposed water uses (including proposed construction) are allowed outright or are not regulated by your comprehensive plan. Cite applicable ordinance section(s):

Land uses to be served by proposed water uses (including proposed construction) involve discretionary land-use approvals as listed in the table below. (Please attach documentation of applicable land-use approvals which have already been obtained. Record of Action/land-use decision and accompanying findings are sufficient.)

If approvals have been obtained but all appeal periods have not ended, check "Being pursued".

Type of Land-Use Approval Needed (e.g. plan amendments, rezones, conditional-use permits, etc.)	Cite Most Significant, Applicable Plan Policies & Ordinance Section References	Land-Use Approval:	
		Obtained <input type="checkbox"/> Denied	Being pursued <input type="checkbox"/> Not being pursued
		<input type="checkbox"/> Obtained <input type="checkbox"/> Denied	<input type="checkbox"/> Being pursued <input type="checkbox"/> Not being pursued
		<input type="checkbox"/> Obtained <input type="checkbox"/> Denied	<input type="checkbox"/> Being pursued <input type="checkbox"/> Not being pursued
		<input type="checkbox"/> Obtained <input type="checkbox"/> Denied	<input type="checkbox"/> Being pursued <input type="checkbox"/> Not being pursued
		<input type="checkbox"/> Obtained <input type="checkbox"/> Denied	<input type="checkbox"/> Being pursued <input type="checkbox"/> Not being pursued
		<input type="checkbox"/> Obtained <input type="checkbox"/> Denied	<input type="checkbox"/> Being pursued <input type="checkbox"/> Not being pursued

Local governments are invited to express special land-use concerns or make recommendations to the Water Resources Department regarding this proposed use of water below, or on a separate sheet.

- Warehousing and freight movement uses allowed by right in the IGD zone and in the Columbia South Shore Plan District (PCC-33.140, 33.515). Development on site approved in permits 07-168042-CO, 07-179332-CO, 07-153179-CO, 07-166681-CO, 07-166972-CO. Located within the City's wellhead protection area. Subject to the requirements of the City, Water Bureau. No new disturbance area or permanent change to land or structures was reviewed or approved with this LUKS. Located outside environmental overlay zones.

Name: Jason Richling Title: City Planner
 Signature: [Signature] Phone: 503-823-0632 Date: 1/26/09
 Government Entity: City of Portland, OR

Note to local government representative: Please complete this form or sign the receipt below and return it to the applicant. If you sign the receipt, you will have 30 days from the Water Resources Department's notice date to return the completed Land Use Information Form or WRD may presume the land use associated with the proposed use of water to be consistent with local comprehensive plans.

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Receipt for Request for Land Use Information

WATER RESOURCES DEPT
SALEM, OREGON

Applicant name: _____

Low Temperature Geothermal System

Description of Project Located at:

**McKinstry Co. Oregon HQ Building,
16790 NE Mason Street, Portland, OR 97230**

Township, Range and Section Location: T1N, R3E, 19cdb

The following narrative describes a low temperature geothermal (LTG) system proposed for the heating and cooling of the new Oregon headquarter building of McKinstry Co. located at 16790 NE Mason Street, Portland (see Figure 1). A IG2s zoning (General Industrial) covers this area near the intersection of NE Airport Way and NE Mason St.

The proposed LTG system will draw groundwater from one of two production wells to be located in the northwest and northeast portions of the project property (see Figure 1 and 2). Water withdrawn from a production well will be circulated through a heat exchanger in the new buildings then re-injected into the same aquifer located in the northeast part of the property. Because all water drawn from the aquifer through the production well is returned to the same aquifer, the system is considered a non-consumptive use of the groundwater.

There will be a seasonal reversal of the production and injection wells. Water will be pulled from one well and injected into the second well in the fall and winter, and then the flow will be reversed in the summer. Both wells (W-1 and W-2 in the site figures) will have a water right through the Oregon Department of Water Resources. Both wells have already been granted an underground injection control permit from the Oregon DEQ for the re-injection of water. The City of Portland Water Bureau has been contacted regarding this system because of the nearby City production wells (Randy Albright, hydrogeologist with the Water Bureau 503-823-3421). A requirement of the City was that the wells needed to be outside the 2-year travel time the City production wells. This was established by plotting the project property on a map supplied by the City (see Figure 3).

The LTG system will withdraw a maximum of 250 gpm (gallons per minute) or 0.557 cfs (cubic feet per second) from the aquifer. A stainless steel plate in the building heating exchanger will separate groundwater from building circulation fluids. Preventing any building circulation fluids from interacting with the groundwater. The entire groundwater piping system will be pressurized to prevent the introduction of oxygen, microbes or changes in water chemistry during circulation.

A 20 hp 220-V, 3-phase variable speed submersible pump will be used to pump groundwater. The flow rate pumped from the production well will vary with heating/cooling demand from the building. Estimated typical flow will be approximately 150 gpm with the maximum 250 gpm occurring only during weather extremes.

The following narrative describes the hydrogeology in the McKinstry project area: Local hydrogeology is fairly well understood because of the drilling, hydrogeologic mapping, aquifer testing and modeling done by the City of Portland before and since the



G-1782

Oregon Water Resources Department

FORM Q FOR COMMERCIAL AND INDUSTRIAL WATER USES

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SALEM, OREGON

1. Describe the goods and services you plan to provide:

Heating and cooling of two office buildings. Circulations in two wells will be periodically reversed to recapture heat and equalize aquifer temperature.

2. How will the water be used?

Heating and cooling of office building, non-consumptive use of groundwater.

3. What is the maximum amount of water that will be used on any given day:

300 cfs gpm

4. Are there periods of the day, week, month, or year that the water will not be used?
(e.g. no use December-March)

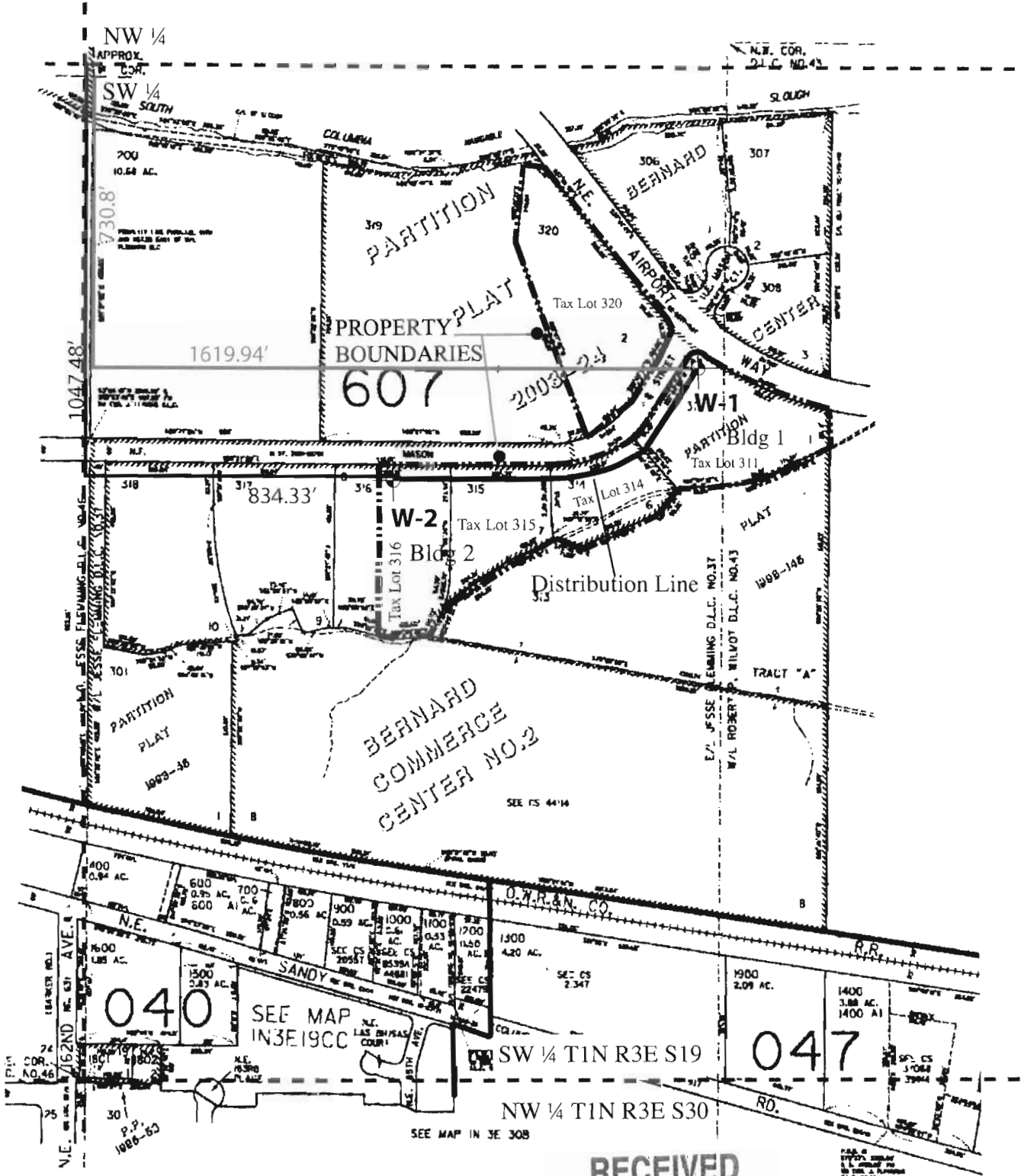
No Yes If so, when? _____

5. Is there a particular time or period of day, week, month, or year when the use of water is absolutely essential for the project to continue? (e.g. vegetable processing, Oct. 15-Nov. 15)

No Yes If so, when? All times when heating or cooling is required.
Evenings and weekends may have reduced demand.

6. Are there periods of the day week, month, or year where the amount of water used will be less than at peak times?

No Yes If so, when? Evening/night and during mild weather



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WATER RESOURCES DEPT
SALEM, OREGON

ROGER N. SMITH ASSOCIATES, INC.
Groundwater and Environmental Consultants

Project Manager
Roger N. Smith
Drawn By
Steven Dopp
Project Number
07-856.2
Date Last Modified
January 15, 2009

McKinstry HQ Low Temperature
Geothermal Well Locations
Relative to Quarter Corner



Map adapted from Multnomah Co. Tax Map
Approximate Scale: 1 inch = 400 feet

Figure 2

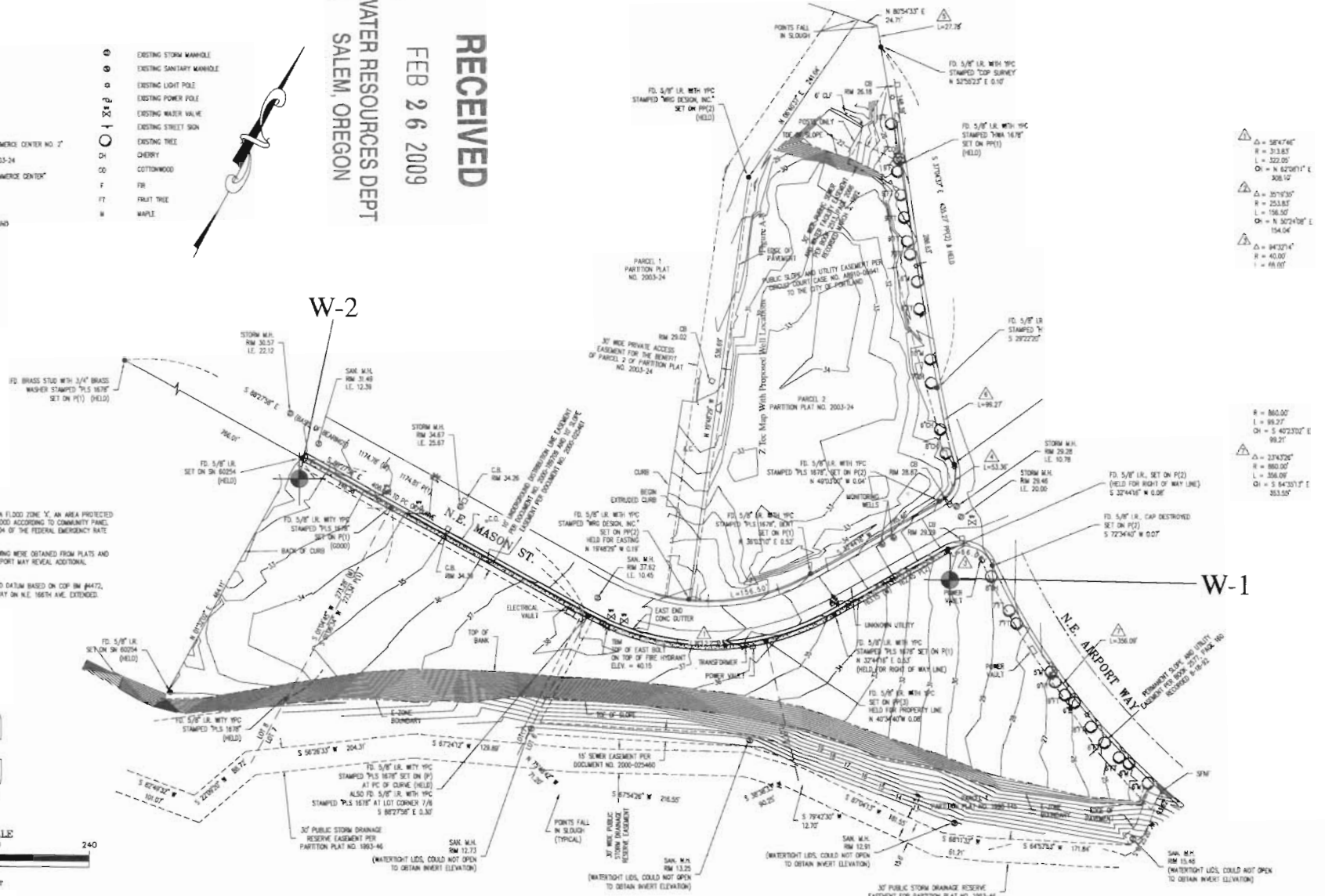
LEGEND:

- MONUMENTS FOUND AS NOTED
- IR IRON ROD
- IP IRON PIPE
- FD FOUND
- M MEASURED
- NYC DENOTES YELLOW PLASTIC CAP
- PP(1) DENOTES PLAT OF "TERRARD COMMERCE CENTER NO. 2"
- PP(2) DENOTES PARTITION PLAT NO. 2003-24
- PP(3) DENOTES PLAT OF "TERRARD COMMERCE CENTER"
- PP(1) PARTITION PLAT NO. 1993-46
- PP(2) PARTITION PLAT NO. 1998-145
- SNF DENOTES SEARCHED FOR NOT FOUND
- SA EXISTING SEWER
- ST EXISTING STORM
- W EXISTING WATER
- EXISTING CONCRETE SIDEWALK
- EXISTING CONTOUR
- EXISTING FIRE HYDRANT
- EXISTING CATCH BASIN
- EXISTING STORM MANHOLE
- EXISTING SANITARY MANHOLE
- EXISTING LIGHT POLE
- EXISTING POWER POLE
- EXISTING WATER VALVE
- EXISTING STREET SIGN
- EXISTING TREE
- CHERRY
- COTTONWOOD
- FR
- FT FRUIT TREE
- MAPLE

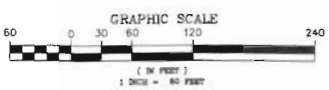
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SALEM, OREGON

NOTES:

- THE SUBJECT PROPERTY HEREIN LIES IN FLOOD ZONE "X", AN AREA PROTECTED BY A LEVEE FROM 18 ANNUAL CHANCE FLOOD ACCORDING TO COMMUNITY FLOOD NO. 410183040E, DATED OCTOBER 18, 2004 BY THE FEDERAL EMERGENCY RATE MANAGEMENT WAF.
- THE EASEMENTS SHOWN ON THIS DRAWING WERE OBTAINED FROM PLATS AND PARTITION PLATS OF RECORD. A TITLE REPORT MAY REVEAL ADDITIONAL EASEMENTS NOT SHOWN ON SAID PLATS.
- ELEVATIONS ARE TO CITY OF PORTLAND DATUM BASED ON COP BM #4472, BRASS DISC ON BRIDGE "A" ON AIRPORT WAY ON N.E. 166TH AVE. EXTENDED; ELEV. = 26.76

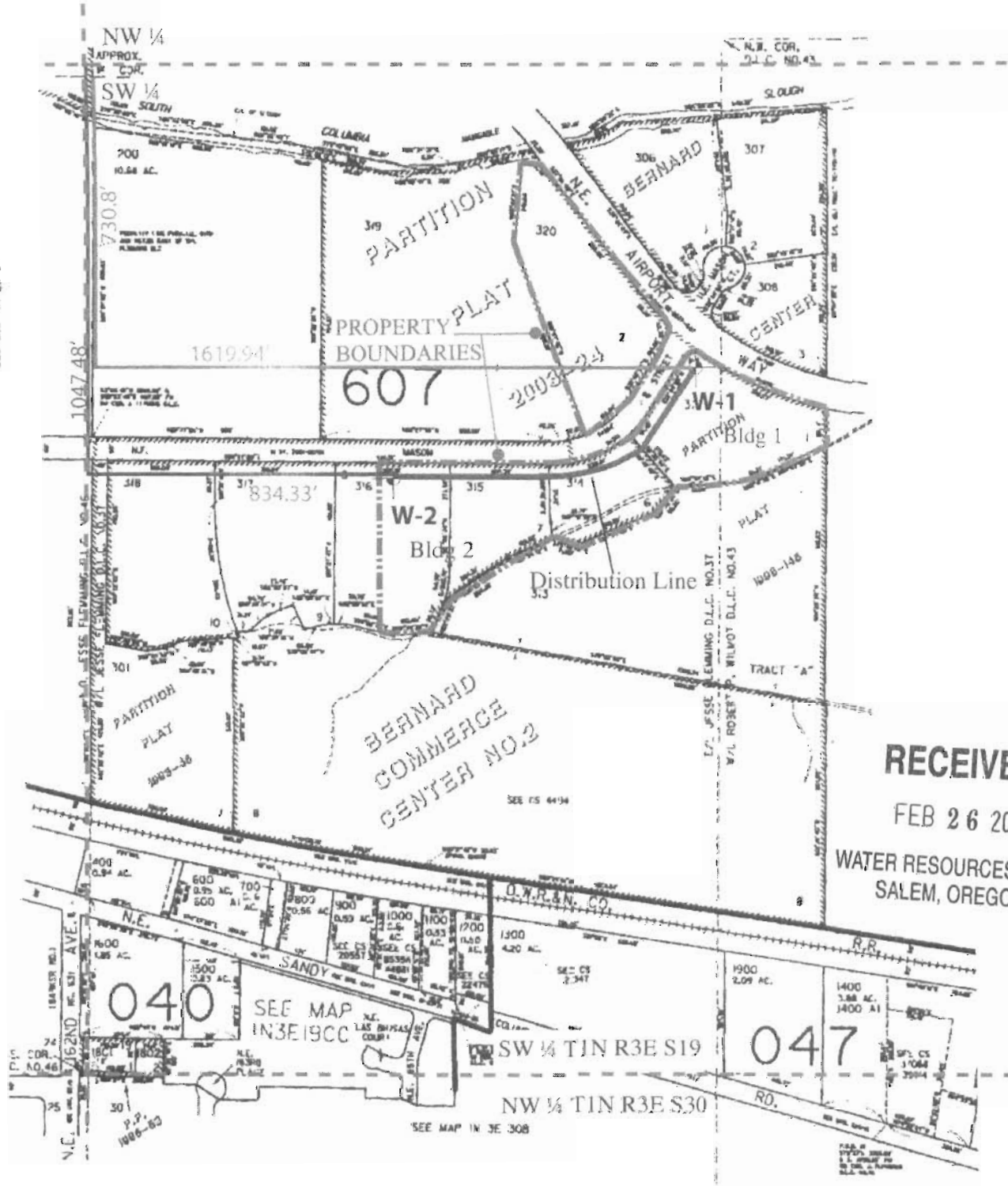


REGISTERED PROFESSIONAL LAND SURVEYOR
 OREGON
 JULY 19, 1988
 CHRIS FISCHER
 1944
 RENEWAL DATE: 1/1/2008



REV	REVISION	BY	APPROVED	DATE	DRAWN BY CHECKED DATE	DATE	<p>ZTEC ENGINEERS n.c. Civil - Structural - Surveying 3737 S.E. 8TH AVE., PORTLAND, OR 97202 Phone: (503) 235-8795 Fax: (503) 233-7889 Email: ztec@ztecengineers.com</p>	<p>PROJECT: TOPOGRAPHY FOR: MCKINSTRY CO. SCALE: 1"=60' SHEET: TP</p>	<p>JOB NO: P3621-1 SHEET NO: P3621-1 DATE: 11-07 PLOT DATE: 9-15-07 ZTEC CAD FILE: P3621-1.DWG</p>
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Figure 3



ROGER N. SMITH ASSOCIATE S, INC.
Groundwater and Environmental Consultants

Project Manager
Roger N. Smith
Drawn By
Steven Dopp
Project Number
07-856.2
Date Last Modified
January 15, 2008

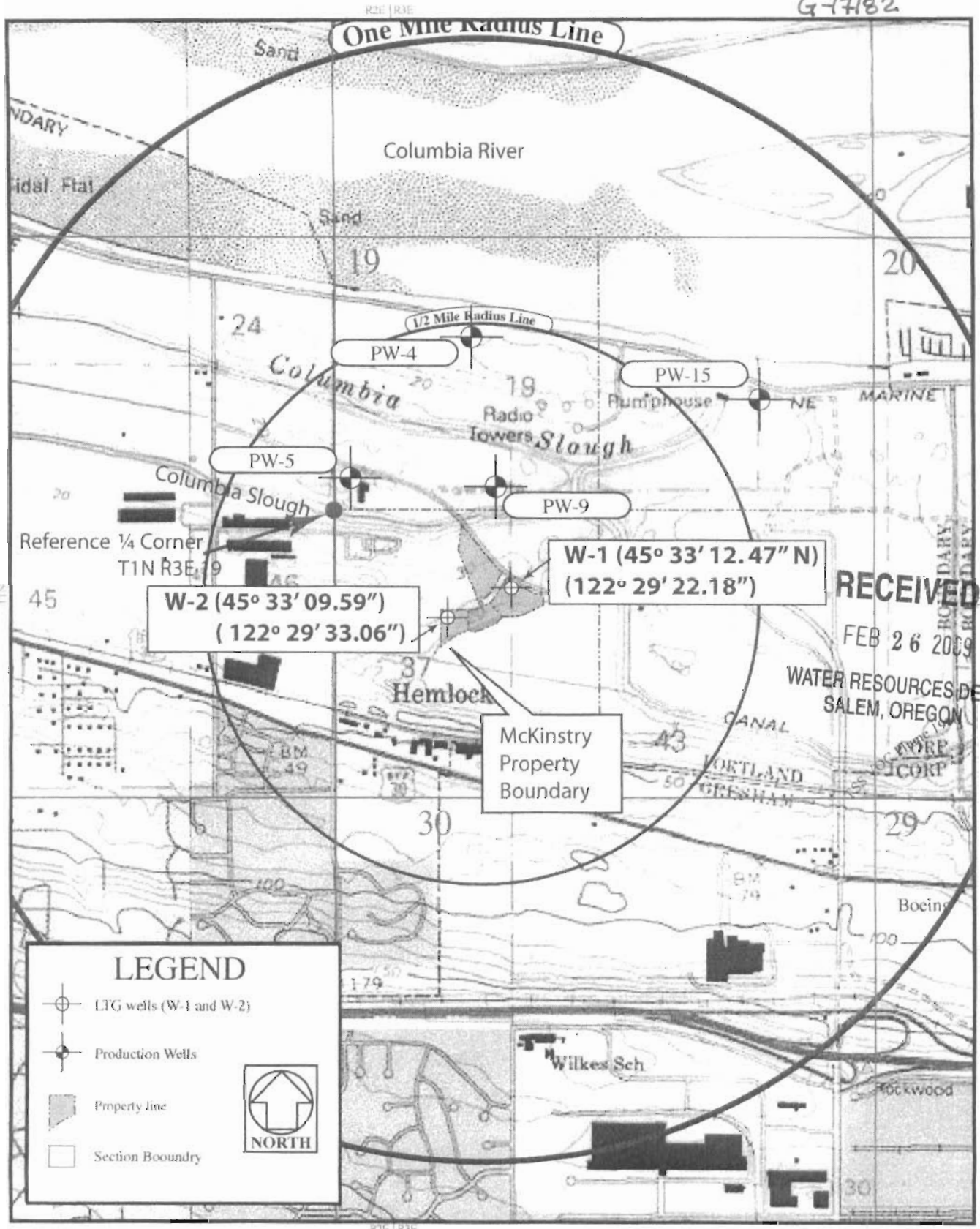
McKinstry HQ Low Temperature
Geothermal Well Locations
Relative to Quarter Corner



Map adapted from Multnomah Co., Tax Map
Approximate Scale: 1 inch = 400 feet

Figure 2

G-17182



LEGEND

- LTG wells (W-1 and W-2)
- Production Wells
- Property line
- Section Boundary

NORTH

ROGER N. SMITH ASSOCIATES, INC.
Groundwater and Environmental Consulting

Project Manager
Roger N. Smith
Drawn By
Steven Dopp
Project Number
07-856
Date Last Modified
January 15, 2009

**McKinstry HQ Property Showing
LTG Wells and
Nearby Production Wells**

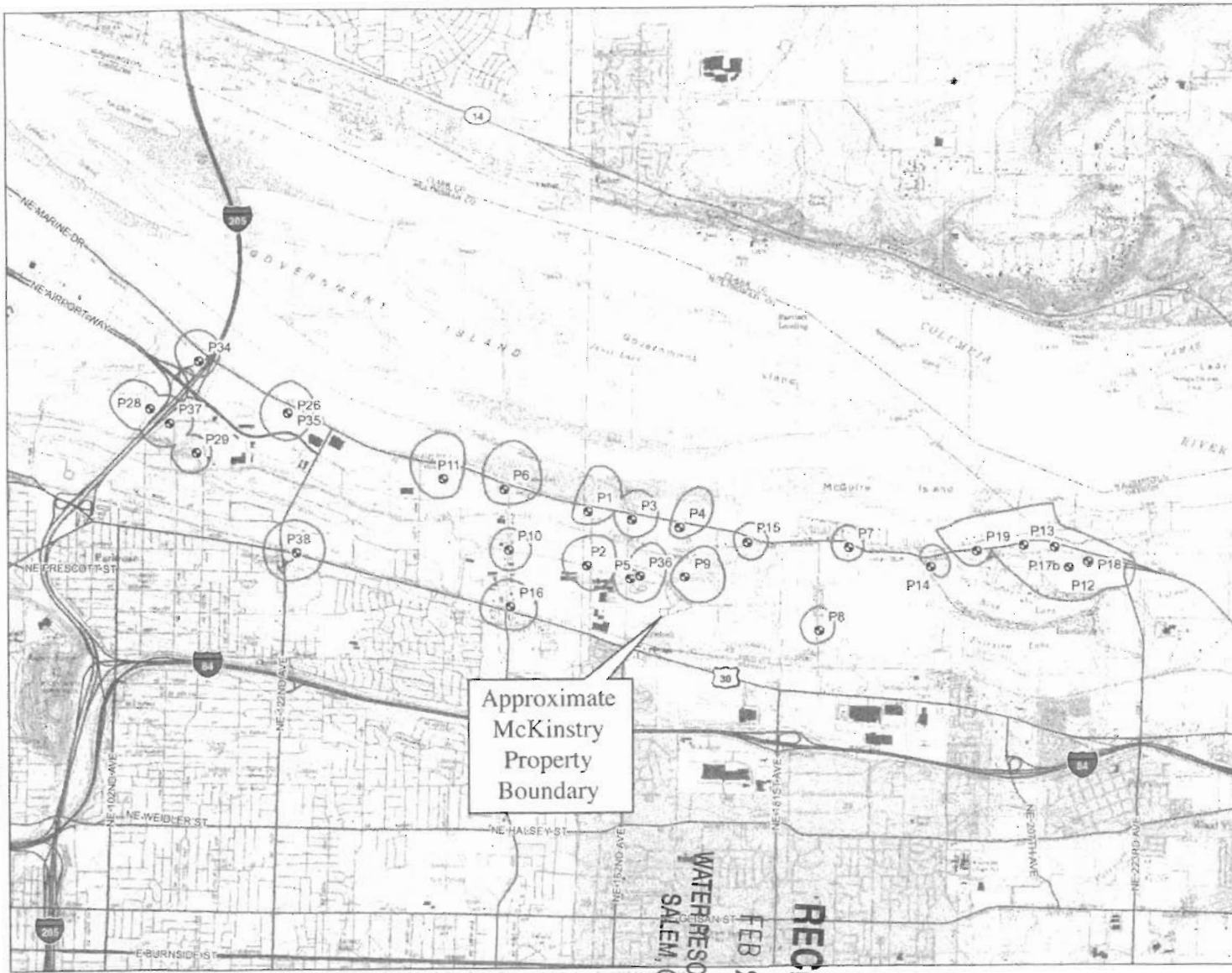
Map adapted from TOPO!® ©2006 National Geographic Map
Approximate Scale: 1:15,840 (4" = 1 mile)

Figure 1

development of the Columbia South Shore Well field (CSSWF), which occupies the surrounding area. Two monitoring wells (TG-5 and TS-1) were installed by the City of Portland in Mason Street near the project. Logs from these wells have been used to describe the geology expected beneath the project site. Three geologic units relevant to the McKinstry LTG project are: 1.) the Overbank Deposits, 2.) the Troutdale Gravels and 3.) the underlying Troutdale silts and siltstones. The Overbank Deposits are near-surface silts and sands originating from floods of the modern (since the end of the Pleistocene Era) Columbia River. This unit is approximately 10 feet thick at the property (see Figure 4). Below the Overbank Deposit is a unit of unconsolidated and semi-consolidated silty-sandy-cobbly gravel called the Troutdale Gravels. This unit is approximately 100 feet thick in the project area. An unconsolidated upper sub-unit of these gravels is approximately 70 feet thick underlain by a consolidated to semi-consolidated subunit that is 30 to 40 feet thick. Beneath the Troutdale Gravel unit is a thick (approximately 134 feet) sequence of predominantly silts and siltstones. The top of this confining unit at 114 feet below ground surface forms the bottom of the Troutdale Gravel and isolates these gravels from underlying aquifers.

All nearby City production wells are isolated from the shallow aquifer by two confining units and another aquifer. No interference of the new LTG system is expected. The Oregon Department of Water Resources will confirm this before water rights are issued on these new wells.

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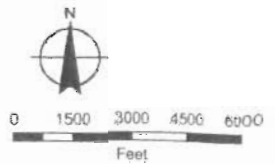


Two-Year Capture Zones for the Columbia South Shore Wellfield
Portland Water Bureau



LEGEND

- Two-Year Capture Zones
- Portland Water Bureau Wells



MAP NOTES:
Projection: Oregon State Plane North Zone
Datum: North American Datum of 1983
Date: June 25, 2007



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Figure 3

G-17102

G-17182



MCKINSTRY WAREHOUSE BLDG 1 (CO)

Attachment
Folder Property (2) People (5) Info (111) Fee/Charge (19) Process (81) Process Select (4) Document (26) File (5) Inspection Req. (41) Comment (1)

- Folder # F
- 2007 168042 000 00 CO
- 2007 168042 DFS 01 CO
- 2007 168042 GRD 01 CO
- 2007 168042 REV 01 CO
- 2007 168042 REV 02 CO
- 2007 168042 DFS 02 CO
- 2007 168042 DFS 03 CO
- 2007 168042 REV 03 CO
- 2007 168042 REV 04 CO
- 2007 168042 DFS 04 CO
- 2007 168042 REV 05 CO
- 2007 168042 DFS 05 CO
- 2007 168042 DFS 06 CO
- 2007 168042 REV 06 CO
- 2007 168042 REV 07 CO
- 2007 179322 000 00 CO
- 2007 179322 DFS 01 CO
- 2007 179322 SDC 01 TS
- 2007 179322 GRD 01 CO
- 2007 179322 REV 01 CO
- 2007 179322 DFS 02 CO
- 2007 179322 REV 02 CO
- 2007 179322 REV 03 CO

Folder 20 07 168042 000 00 CO Commercial Building Permit Under Inspection

Property

House #	Prefix	Street	Type	Direction	Unit Type	Unit
16790	NE	MASON	ST			
City		Zip	State ID		PropertyRSN	
PORTLAND			OR3E19C 00311		2,135,095	
Location					Property Unit #	
16790 NE MASON						
PARTITION PLAT 1998-145; LOT 1; NEW PLAT-1999 (9/98)						

Indicators

- Violations
- Properties
- Parent
- Child
- Due \$0.00

In Date Oct 8, 2007 Issue Date Jun 2, 2008 Expires Nov 29, 2008

Reference File # By Bailey, Laure Final Date

Sub Type Business Work Proposed New Construction

Folder Name MCKINSTRY WAREHOUSE BLDG 1 Priority

Description @58,000 2 STORY OFFICE AND WAREHOUSE SHELL ONLY *****NO OCCUPANCY UNDER THIS PERMIT***** TENANT IMPROVEMENTS UNDER SEPARATE PERMIT.

Conditions

Group Construction ParentRSN 2692129 IPR# 2709090

List View Related View Copy Create Child Revise Issue/Approve Print Re-Default Email GIS Summary

Show no. of rows on tabs

81 Rows Returned

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Folder Folder Comment Exclude Print Comment

0 comment(s) returned

MCKINSTRY WAREHOUSE BLDG 2 (CO)

Attachment Folder Property (6) People (5) Info (105) Fee/Charge (27) Process (68) Process Select (2) Document (17) File (5) Inspection Rec (24) Comment

Folder #	Can	Yr	Sequence	Sec	Rev	Folder Type	Status
2007 168042 000 00 CO	Folder	20	07	179322	000	00 CO Commercial Building Permit	Under Inspection

Property							Indicators	
House #	Prefix	Street	Type	Direction	Unit Type	Unit	Violations	Properties
16670	NE	MASON	ST				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
City		Zip	State ID		PropertyRSN		Parent	Child
PORTLAND			IN3E19C 00314		2,136,205		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Location						Property Unit #	Due	\$0.00
16670 NE MASON ST								
BERNARD COMMERCE CENTER NO 2, LOT 6								

In Date	Jan 8, 2008	Issue Date	May 19, 2008	Expires	Nov 15, 2008
Reference File #		By	Snyder, Kevan	Final Date	
Sub Type	Business	Work Proposed	New Construction		
Folder Name	MCKINSTRY WAREHOUSE BLDG 2		Priority		
Description	@20,000 SF WAREHOUSE *****NO OCCUPANCY UNDER THIS PERMIT***** TENANT IMPROVEMENTS UNDER SEPARATE PERMIT.				
Conditions					
Group	Construction	ParentRSN	2692129	IVR#	2720537

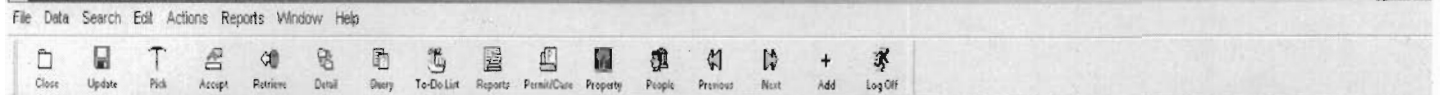
List View Related View Copy Create Child Revise Issue/Approve Print ReDetail Encl GIS Summary

Show no. of rows on tabs 81 Rows Returned

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Folder Folder Comment Exclude Print Comment 0 comment(s) returned

G-17182



MCKINSTRY PORTLAND BLDG 1 TI [CO]

Attachment | Folder Property (3) People (6) Info (96) Fee/Charge (12) Process (51) Process Select (1) Document (9) File (7) Inspection Req. (7) Comment (1)

Folder #	F
2007 179322 REV 02 CO	
2007 179322 REV 03 CO	
2007 182548 000 00 ET	
2008 117036 000 00 SD	
2008 120409 000 00 MT	
2008 120551 000 00 UB	07-16
2008 120917 000 00 PT	
2008 124972 000 00 PT	
2008 125160 000 00 PT	
2008 127523 000 00 ET	
2008 135234 000 00 PT	
2008 135253 000 00 PT	
2008 138990 000 00 ET	
2008 152607 000 00 PR	
2008 153178 000 00 CO	NON
2008 153178 SDC 01 TS	MBG
2008 157815 000 00 US	08-15
2008 162419 000 00 FS	
2008 162420 000 00 FS	
2008 163999 000 00 FS	
2008 164027 000 00 FS	
2008 164613 000 00 MT	NON
2008 166159 000 00 PT	

Folder	Seq	Yr	Sequence	Sec	Rev	Folder Type	Status
20	08	153178	000	00	CO	Commercial Building Permit	Under Inspection

House #	Prefix	Street	Type	Direction	Unit Type	Unit
16790	NE	MASON	ST			

Address: 16790 NE MASON ST
 City: PORTLAND Zip: State ID: 1N3E19C 00311 PropertyRSN: 2,135,095
 Location: Property Unit #

In Date	Issue Date	Expires
Aug 7, 2008	Nov 3, 2008	May 2, 2009

Reference File # NON MBG By Bailey, Laure Final Date
 Sub Type Business Work Proposed Alteration
 Folder Name MCKINSTRY PORTLAND BLDG 1 TI Priority
 Description 1ST TENANT - REAR 2/3 OF BUILDING FOR TWO-STORY OFFICES & WAREHOUSE
 Conditions
 Group Construction ParentRSN IPR# 2783274

List View Related View Copy Create Child Revise Issue/Approve Print Re-Default Email GIS Summary

Show no. of rows on tabs

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Folder Folder Comment Exclude Print Comment Comment(s) returned

Folder #	F
2008 135234 000 00 PT	
2008 135253 000 00 PT	
2008 138990 000 00 ET	
2008 152601 000 00 PR	
2008 153178 000 00 CO	NON
2008 153178 SDC 01 TS	MBG
2008 157815 000 00 US	08-15
2008 162419 000 00 FS	
2008 162420 000 00 FS	
2008 163999 000 00 FS	
2008 164027 000 00 FS	
2008 164613 000 00 MT	NON
2008 166159 000 00 PT	
2008 166163 000 00 PT	
2008 166621 000 00 CO	
2008 166648 000 00 US	08-16
2008 166972 000 00 CO	NON
2008 172691 000 00 PT	
2008 176201 000 00 MT	
2008 176506 000 00 FS	
2008 177825 000 00 FS	
2008 177829 000 00 FS	
2008 178056 000 00 ET	

Folder	Seq	Yr	Sequence	Sec	Rev	Folder Type	Status
20	08	166621	000	00	CO	Commercial Building Permit	Under Inspection

House #	Prefix	Street	Type	Direction	Unit Type	Unit
16670	NE	MASON	ST			

City: PORTLAND Zip: State ID: 1N3E19C 00314 PropertyRSN: 2,136,205

In Date	Issue Date	Expires
Sep 30, 2008	Oct 2, 2008	Mar 31, 2009

Reference File # By: Litrell, Cris Final Date

Sub Type: Storage Work Proposed: Alteration

Folder Name: MCKINSTRY WAREHOUSE BLDG 2 Priority

Description: TI-WEST 1/2 OF BUILDING, OFFICE & WAREHOUSE

Conditions

Group: Construction ParentRSN: 2720537 I/R#: 2797020

Reference File #	Proc
BG	DK as submitted BUT may ne
ACC RHINE ST	Please route neighborhood cc
12-10-08 SCB - JR	added you
ACC RHINE ST	Please route neighborhood cc
229C	R20, R20C, LUR 94-00252 M
BG	New #2 set not routed to Acc
ACC RHINE ST	Phase 2 (4 units for this permit
R5a-Bills 2/7/09	No LU hist
CSbd, E Corridor, 122nd, Cor	
B3	R5, PR 06-105253 PLA LS: c
SCB - HENDER	09/05/08 - Can you view with
BG	IG2, 97-00999AD to overall I
IG2s, Columbia So. Shore, So	
Second check sheet sent via	
SCB ALBERTA	SEE COMMENTS Applicant
SCB ALBERTA	SEE COMMENTS Applicant
SCB ALBERTA	SEE COMMENTS Applicant

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Folder #	F
2008 157815 000 00 US	08-15
2008 162419 000 00 FS	
2008 162420 000 00 FS	
2008 163999 000 00 FS	
2008 164027 000 00 FS	
2008 164613 000 00 MT	NON
2008 166159 000 00 PT	
2008 166163 000 00 PT	
2008 166621 000 00 CO	
2008 166648 000 00 US	08-16
2008 166972 000 00 CO	NON
2008 172691 000 00 PT	
2008 176201 000 00 MT	
2008 176506 000 00 FS	
2008 177825 000 00 FS	
2008 177829 000 00 FS	
2008 178056 000 00 ET	
2008 180788 000 00 MT	
2008 181046 000 00 GC	ADD
2008 181151 000 00 PT	
2009 102223 000 00 SG	
2009 102227 000 00 ET	
2009 104391 000 00 PR	

Can	Yr	Sequence	Sec	Rev	Folder Type	Status
Folder	20	08	166972	000	00	CO Commercial Building Permit

House #	Prefix	Street	Type	Direction	Unit Type	Unit
Address	16790	NE	MASON	ST		
City	Zip	State ID	PropertyRSN			
PORTLAND		OR	2135095			
Location	Property Unit #					

In Date	Issue Date	Expires
Oct 1, 2008	Nov 3, 2008	May 2, 2009

Reference File #	By	Final Date
NON MBG	Bailey, Laure	

Sub Type	Work Proposed
Business	Alteration

Folder Name	Priority
MCKINSTRY WAREHOUSE BLDG 1 TI	

Description
ADD 2ND FLOOR, AREA 1144 SQFT, ALL INTERIOR WORK

Conditions

Group	ParentRSN	IVR#
Construction	2709090	2797372

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Folder Folder Comment Exclude Print Comment 0 comment(s) returned



STATE OF OREGON

WATER SUPPLY WELL REPORT

(as required by ORS 537.765 & OAR 690-205-0210)

WELL LABEL # L 91673

START CARD # 1004851

(1) LAND OWNER Owner Well I.D. 1

First Name _____ Last Name _____
Company MCKINSTRY COLLC
Address PO BOX 24567
City SEATTLE State WA Zip 98124

(2) TYPE OF WORK New Well Deepening Conversion
 Alteration (repair/recondition) Abandonment

(3) DRILL METHOD
 Rotary Air Rotary Mud Cable Auger Cable Mud
 Reverse Rotary Other

(4) PROPOSED USE Domestic Irrigation Community
 Industrial/ Commercial Livestock Dewatering
 Thermal Injection Other

(5) BORE HOLE CONSTRUCTION Special Standard Attach copy
Depth of Completed Well 113 ft

BORE HOLE			SEAL			Amt	sacks/ lbs
Dia	From	To	Material	From	To		
16	0	113	Bentonite Chips	0	40	85	S

How was seal placed: Method A B C D E
 Other

Backfill placed from 0 ft to 40 ft. Material BENTONITE CHIPS
Filter pack from 40 ft. to 108 ft. Material SILICA Size 10-20
Explosives used: Yes Type _____ Amount _____

(6) CASING/LINER

Casing	Liner	Dia	From	To	Gauge	Stl	Plstc	Wld	Thrd
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	12	2	73	.365	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	12	108	113	.365	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Shoe Inside Outside Other Location of shoe(s) _____
Temp casing Yes Dia _____ From _____ To _____

(7) PERFORATIONS/SCREENS

Perforations Method _____
Screens Type Wire Wrap Material Stainless

Perf/S creen	Casing/ Liner	Screen Dia	From	To	Scrn/slot width	Slot length	# of slots	Tele/ pipe size
		12	73	108	.03			2.5

(8) WELL TESTS: Minimum testing time is 1 hour

Pump Bailer Air Flowing Artesian

Yield gal/min	Drawdown	Drill stem/Pump depth	Duration (hr)
75	2	70	16

Temperature 52 °F Lab analysis Yes By _____
Water quality concerns? Yes (describe) _____
From _____ To _____ Description _____ Amount _____ Units _____

(9) LOCATION OF WELL (legal description)

County MULTNOM Twp 1 N N/S Range 3 E E/W WM
Sec 19 NE 1/4 of the SW 1/4 Tax Lot 00316
Tax Map Number _____ Lot _____
Lat 0° 0' " or _____ DMS or DD
Long 0° 0' " or _____ DMS or DD
 Street address of well Nearest address
16790 NE MASON ST PORTLAND, OR 97230

(10) STATIC WATER LEVEL

Existing Well / Predeepening	Date	SWL (psi)	+ SWL (ft)
Completed Well	10-1-08		18

Flowing Artesian? Dry Hole?

WATER BEARING ZONES Depth water was first found 75'

SWL Date	From	To	Est Flow	SWL (psi)	+ SWL (ft)
10-1-08	75'	108'	40 GPM		18

(11) WELL LOG

Material	From	To
Boulders, sandy gravel.	0	25
Coarse sand, gravel, w/large cobbles.	25	45
Gray-green silty sand, gravels, w/cobbles.	45	75
Light brown silty sand, gravels, w/cobbles, water bearing.	75	83
Light brown silty sand, gravels, water bearing.	83	87
Light brown silty sand, gravels, water bearing with cobbles.	87	108
Green sandstone	108	111
Green silt, dense	111	113

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Date Started 09-10-2008 Completed 10-01-2008

(unbonded) Water Well Constructor Certification

I certify that the work I performed on the construction, deepening, alteration, or abandonment of this well is in compliance with Oregon water supply well construction standards. Materials used and information reported above are true to the best of my knowledge and belief.

License Number _____ Date _____
Password: (if filing electronically) _____
Signed _____

(bonded) Water Well Constructor Certification

I accept responsibility for the construction, deepening, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon water supply well construction standards. This report is true to the best of my knowledge and belief.

License Number 10067 Date _____
Password: (if filing electronically) _____
Signed _____
Contact Info (optional): _____

WATER SUPPLY WELL REPORT - continuation page

WELL I.D. # L 91673

START CARD # 1004851

(5) BORE HOLE CONSTRUCTION

BORE HOLE			SEAL				sacks/
Dia	From	To	Material	From	To	Amt	lbs
16	0	113	Bentonite Chips	0	40	85	S

FILTER PACK			
From	To	Material	Size
40	108	Silica	10/20

(10) STATIC WATER LEVEL

Water Bearing Zones

SWL Date	From	To	Est Flow	SWL(psi)	+	SWL(ft)

(6) CASING/LINER

Casing	Liner	Dia	+	From	To	Gauge	Stl	Plstc	Wld	Thrd
		12	<input checked="checked" type="checkbox"/>	2	73	365	<input checked="checked" type="checkbox"/>	<input checked="checked" type="checkbox"/>	<input checked="checked" type="checkbox"/>	<input type="checkbox"/>
		12	<input type="checkbox"/>	108	113	365	<input checked="checked" type="checkbox"/>	<input checked="checked" type="checkbox"/>	<input checked="checked" type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(11) WELL LOG

Material	From	To
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RECEIVED		
RECEIVED		
DEC 15 2008	DEC 15 2008	
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(7) PERFORATIONS/SCREENS

Perf/Screen	Casing/Liner	Screen Dia	From	To	Scr/slot width	Slot length	# of slots	Tele/pipe size
		12	73	108	03			p. 5.

(8) WELL TESTS: Minimum testing time is 1 hour

Yield gal/min	Drawdown	Drill stem/Pump depth	Duration (hr)

Water Quality Concerns

From	To	Description	Amount	Units

Comments/Remarks



Oregon

Theodore R. Kulongoski, Governor

Water Resources Department
North Mall Office Building
725 Summer Street NE, Suite A
Salem, OR 97301-1266
503-986-0900
FAX 503-986-0904

September 8, 2008

ERIC G HANSEN #10067
TACOMA PUMP & DRILLING CO INC
30316 MOUNTAIN HWY
GRAHAM, WA 98338

SEP 11 2008

FINAL ORDER


Dear Mr. Hansen:

The Special Standard request you submitted for owner: McKinstry Co. LLC, Start Card numbers 1004850 and 1004851 (Wells MKP1 and MKP2), is hereby approved for the following: You may drill these wells within 50 feet from a closed sewer line in the parking lot of this property. The wells shall be continuously cased and continuously sealed to a minimum depth of 40 feet bgs. The annular seals shall be deeper if required by Statute and Rule. These wells may not have split seals (See OAR 690-210-0030). All other construction requirements must be adhered to. Your Special Standard request form is enclosed. This Special Standard is in regards to the minimum well construction standards. Permits may be required from the Water Resources Department, or other agencies, to use these wells.

The Well Construction Standards serve to protect ground water resources. By approving and issuing this special construction standard the Oregon Water Resources Department is not representing that a well constructed in accordance with this condition will maintain structural integrity or that it meets engineering standards. The well constructor/or landowner is responsible for ensuring that a well is constructed in a manner that protects ground water resources as required under Oregon Administrative Rules 690-200 through 690-240.

If you have any questions concerning this letter, please contact me at (503) 986-0851, or by e-mail at Kristopher.R.Byrd@wrdd.state.or.us.

Sincerely,


Kristopher Byrd
Well Construction Program Coordinator
Well Construction and Compliance Section

enclosure

cc: Joel Jeffery, NW Region Well Inspector
File

This is a final order in other than contested case. This order is subject to judicial review under ORS 183.484. Any petition for judicial review must be filed within the 60 day time period specified by ORS 183.484(2). Pursuant to ORS 536.075 and OAR 137-004-0080 you may either petition for judicial review or petition the Director for reconsideration of this order. A petition for reconsideration may be granted or denied by the Director, and if no action is taken within 60 days following the date the petition was filed, the petition shall be deemed denied.

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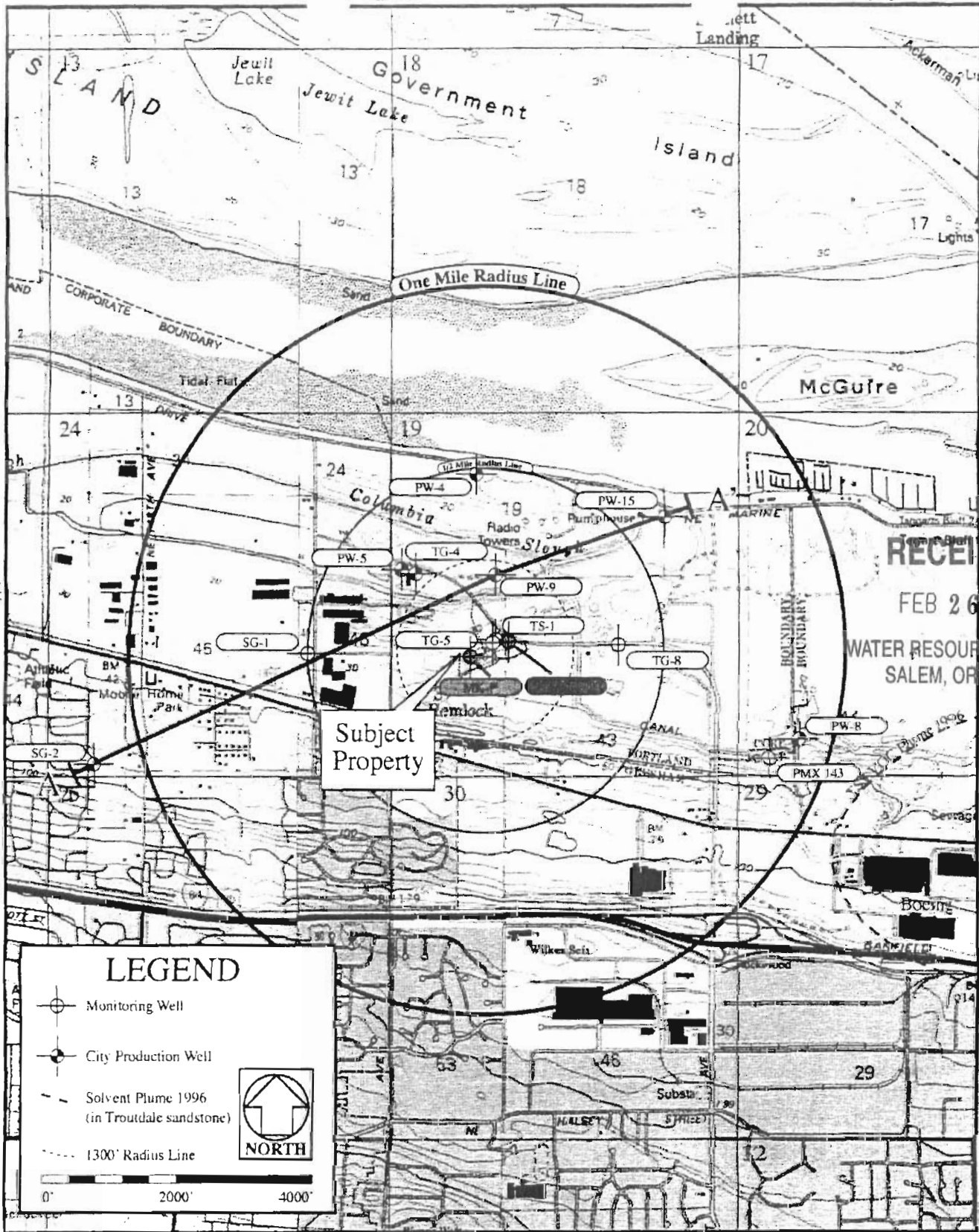
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LEGEND

- Monitoring Well
- City Production Well
- Solvent Plume 1996 (in Troutdale sandstone)
- 1300' Radius Line

NORTH

0' 2000' 4000'

ROGER N. SMITH ASSOCIATES, INC.
 Geospatial and Environmental Consulting

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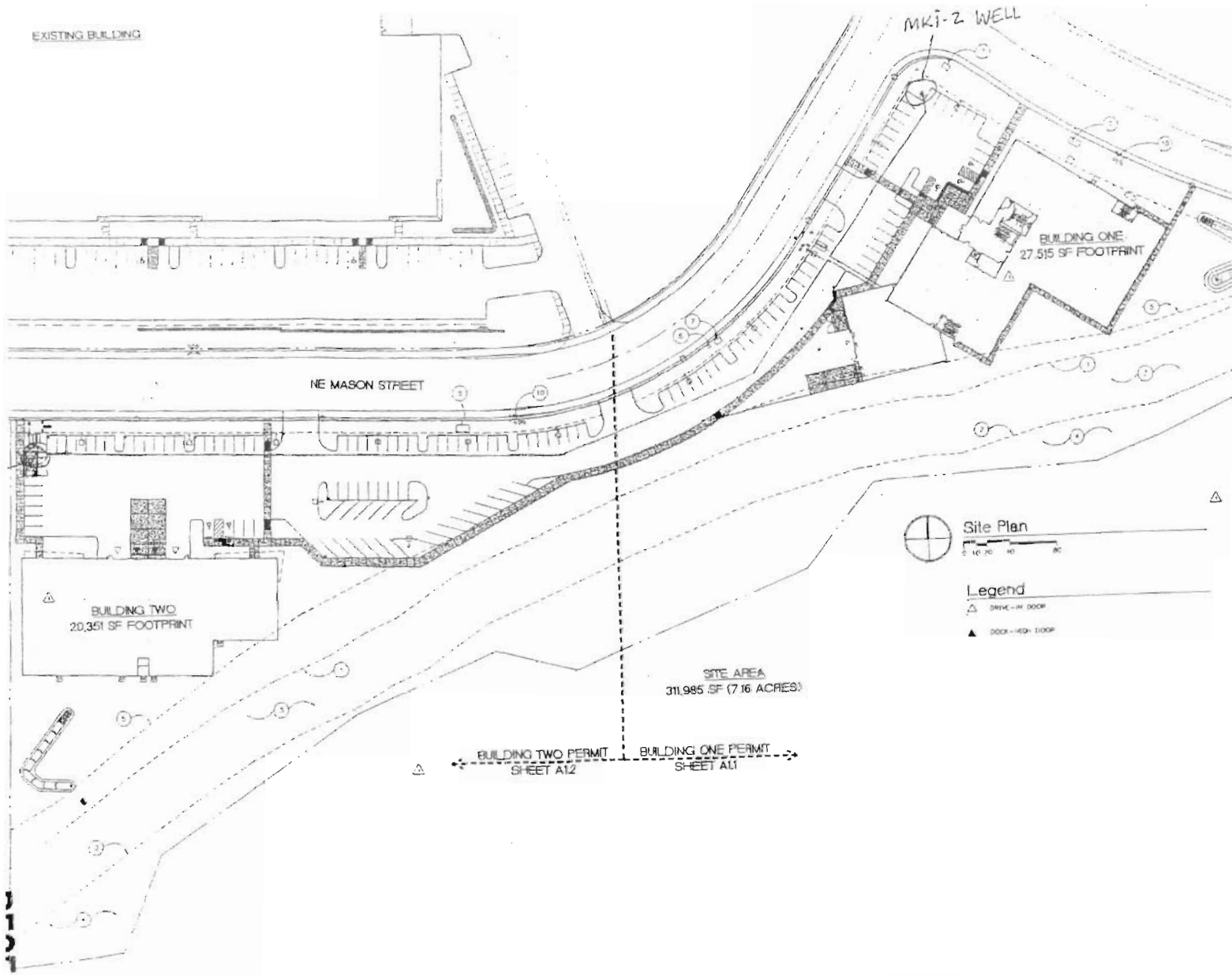
Project Manager
 Roger N. Smith
 Drawn By
 Steven Dopp
 Project Number
 07-856.2
 Date Last Modified
 May 22, 2008

McKinstry Co.
 Low Temperature Geothermal Wells
 and nearby wells

Map adapted from VOPCO © 2006 National Geographic Map
 Approximate Scale: 1:24 000

Figure 1

MULT 97680



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THIS INSTRUMENT PREPARED BY:
Columbia State Bank
1102 Broadway Plaza MS 6100
Tacoma, WA 98402

AFTER RECORDING RETURN TO:
Columbia State Bank, Loan Operations
1102 Broadway Plaza, MS 6100
Tacoma, WA 98402

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(Space Above This Line For Recording Data)

LOAN NUMBER: C-07-03-001363

COMMERCIAL REAL ESTATE DEED OF TRUST

This COMMERCIAL REAL ESTATE DEED OF TRUST ("Security Instrument") is made on May 8, 2007 by McKinstry Portland, L.L.C, a Washington Limited Liability Company, whose address is 5005 3rd Avenue South, Seattle, Washington 98134 the grantor(s) ("Grantor"). The trustee is Fidelity National Title Company of Oregon whose address is 900 SW Fifth Avenue, Portland, Oregon 97204, ("Trustee"). The beneficiary is Columbia State Bank whose address is 721 2nd Avenue, Seattle, Washington 98104 ("Lender"), which is organized and existing under the laws of the state of Washington. Grantor in consideration of loans extended by Lender up to a maximum principal amount of One Million Five Hundred Forty-five Thousand and 00/100 Dollars (\$1,545,000.00) ("Maximum Principal Amount"), and for other valuable consideration, the receipt of which is acknowledged, irrevocably grants, conveys and assigns to Trustee, in trust, with power of sale, the following described property located in the County of Multnomah, State of Oregon:

Address: SW of Airport Way and NE Mason Street, Portland, Oregon 97230

Legal Description: Parcel ID: R525662, R525665, R240283, R525667

Parcel I: Lots 6 and 7, Bernard Commerce Center No. 2, In the City of Portland, Multnomah County, Oregon.

Parcel II: Parcel 1, Partition Plat No. 1998-145, In the City of Portland, Multnomah County, Oregon.

Parcel III: Part of Lot 8, Bernard Commerce Center No. 2, in the City of Portland, Multnomah County, Oregon, described as follows: Commencing at a brass stud with a 3/4-inch iron brass washer stamped "PLS 1678", marking the Northeast corner of Lot 10 of said "Bernard Commerce Center No. 2", said point being on the South right-of-way line of Northeast Mason Street; thence South 88 degrees 27' 58" East along said South right-of-way line, a distance of 480.00 feet to a point on the Northerly line of said Lot 8, said point being the true point of the beginning of the parcel of land herein described; thence continuing along said South right-of-way line, South 88 degrees 27' 58" East a distance of 146.38 feet to the Northeast corner of said Lot 8; thence South 01 degrees 04' 45" West, along the Easterly line of said Lot 8, a distance of 273.28 feet to a 5/8-inch iron rod with a yellow plastic cap stamped "PLS 1678", marking a point of curve in said Easterly line; thence along a 244.40 foot radius curve, through a central angle of 22 degrees 12' 20", an arc distance of 94.72 feet (the long chord of said curve bears South 12 degrees 05' 55" West, a distance of 94.13 feet) to a point of tangency; thence continuing along said Easterly line, South 22 degrees 09' 20" West, a distance of 88.72 feet to a point in the Southerly line of the tract of land described in that deed recorded as Document No. 2002-144577, Multnomah County deed records; thence along said Southerly line, South 82 degrees 49' 32" West, a distance of 101.07 feet to a point; thence North 01 degrees 32' 02" East, at right angles to said South right-of-way line of said Northeast Mason Street, a distance of 464.11 feet to the true point of beginning.

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Together with all easements, appurtenances abutting streets and alleys, improvements, buildings, fixtures, tenements, hereditaments, equipment, rents, income, profits and royalties, personal goods of whatever description and all other rights and privileges including all minerals, oil, gas, water (whether groundwater, subterranean or otherwise), water rights (whether riparian, appropriate or otherwise, and whether or not appurtenant to the above-described real property), wells, well permits, ditches, ditch rights, reservoirs, reservoir rights, reservoir sites, storage rights, dams and water stock that may now, or at any time in the future, be located on and/or used in connection with the above-described real property, payment awards, amounts received from eminent domain, amounts received from any and all insurance payments, and timber which may now or later be located, situated, or affixed on and used in connection therewith (hereinafter called the "Property").

RELATED DOCUMENTS. The words "Related Documents" mean all promissory notes, security agreements, prior mortgages, prior deeds of trust, business loan agreements, construction loan agreements, resolutions, guaranties, environmental agreements, subordination agreements, assignments of leases and rents and any other documents or agreements executed in connection with this Security Instrument whether now or hereafter existing. The Related Documents are hereby made a part of this Security Instrument by reference thereto, with the same force and effect as if fully set forth herein.

INDEBTEDNESS. This Security Instrument secures the principal amount shown above as may be evidenced by a promissory note or notes of even, prior or subsequent date hereto, including future advances and every other indebtedness of any and every kind now or hereafter owing from Grantor to Lender, howsoever created or arising, whether primary, secondary or contingent, together with any interest or charges provided in or arising out of such indebtedness, as well as the agreements and covenants of this Security Instrument and all Related Documents (hereinafter all referred to as the "Indebtedness").

FUTURE ADVANCES. To the extent permitted by law, this Security Instrument will secure future advances as if such advances were made on the date of this Security Instrument regardless of the fact that from time to time there may be no balance due under the note and regardless of whether the Lender is obligated to make such future advances.

CROSS COLLATERALIZATION. It is the expressed intent of Grantor to cross collateralize all of its Indebtedness and obligations to the Lender, howsoever arising and whensoever incurred.

WARRANTIES. Grantor, for itself, its heirs, personal representatives, successors, and assigns, represents, warrants, covenants and agrees with Lender, its successors and assigns, as follows:

Performance of Obligations. Grantor promises to perform all terms, conditions, and covenants of this Security Instrument and Related Documents in accordance with the terms contained therein.

Defense and Title to Property. At the time of execution and delivery of this instrument, Grantor is lawfully seized of the estate hereby conveyed and has the exclusive right to mortgage, grant, convey and assign the Property. Grantor covenants that the Property is unencumbered and free of all liens, except for encumbrances of record acceptable to Lender. Further, Grantor covenants that Grantor will warrant and defend generally the title to the Property against any and all claims and demands whatsoever, subject to the easements, restrictions, or other encumbrances of record acceptable to Lender, as may be listed in the schedule of exceptions to coverage in any abstract of title or title insurance policy insuring Lender's interest in the Property.

Condition of Property. The Grantor promises at all times to preserve and to maintain the Property and every part thereof in good repair, working order, and condition and will from time to time, make all needful and proper repairs so that the value of the Property shall not in any way be impaired.

Removal of any Part of the Property. Grantor promises not to remove any part of the Property from its present location, except for replacement, maintenance and relocation in the ordinary course of business.

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Alterations to the Property. Grantor promises to abstain from the commission of any waste on the Property. Further, Grantor shall make no material alterations, additions or improvements of any type whatever to the Property, regardless of whether such alterations, additions or improvements would increase the value of the Property, nor permit anyone to do so except for tenant improvements and completion of items pursuant to approved plans and specifications, without Lender's prior written consent, which consent may be withheld by Lender in its sole discretion. Grantor will comply with all laws and regulations of all public authorities having jurisdiction over the premises relating to the use, occupancy and maintenance thereof and shall upon request promptly submit to Lender evidence of such compliance.

Due on Sale - Lender's Consent. Grantor shall not sell, further encumber or otherwise dispose of, except as herein provided, any or all of its interest in any part of or all of the Property without first obtaining the written consent of Lender. If any encumbrance, lien, transfer or sale or agreement for these is created, Lender may declare immediately due and payable, the entire balance of the Indebtedness.

Insurance. Grantor promises to keep the Property insured against such risks and in such form as may within the sole discretion of Lender be acceptable, causing Lender to be named as loss payee or if requested by Lender, as mortgagee. The insurance company shall be chosen by Grantor subject to Lender's approval, which shall not be unreasonably withheld. All insurance policies must provide that Lender will get a minimum of 10 days notice prior to cancellation. At Lender's discretion, Grantor may be required to produce receipts of paid premiums and renewal policies. If Grantor fails to obtain the required coverage, Lender may do so at Grantor's expense. Grantor hereby directs each and every insurer of the Property to make payment of loss to Lender with the proceeds to be applied, only at Lender's option, to the repair and replacement of the damage or loss or to be applied to the Indebtedness with the surplus, if any, to be paid by Lender to Grantor.

Payment of Taxes and Other Applicable Charges. Grantor promises to pay and to discharge liens, encumbrances, taxes, assessments, lease payments and any other charges relating to the Property when levied or assessed against Grantor or the Property.

Environmental Laws and Hazardous or Toxic Materials. Grantor and every tenant have been, are presently and shall continue to be in strict compliance with any applicable local, state and federal environmental laws and regulations. Further, neither Grantor nor any tenant shall manufacture, store, handle, discharge or dispose of hazardous or toxic materials as may be defined by any state or federal law on the Property, except to the extent the existence of such materials has been presently disclosed in writing to Lender. Grantor will immediately notify Lender in writing of any assertion or claim made by any party as to the possible violation of applicable state and federal environmental laws including the location of any hazardous or toxic materials on or about the Property. Grantor indemnifies and holds Lender harmless from any liability or expense of whatsoever nature incurred directly or indirectly as a result of Grantor's violation of applicable local, state and federal environmental laws and regulations or Grantor's involvement with hazardous or toxic materials.

Financial Information. Grantor agrees to supply Lender such financial and other information concerning its affairs and the status of any of its assets as Lender, from time to time, may reasonably request. Grantor further agrees to permit Lender to verify accounts as well as to inspect, copy and to examine the books, records and files of Grantor.

Lender's Right to Enter. The Lender or Lender's agents shall have the right and access to inspect the Property at all reasonable times in order to attend to Lender's interests and ensure compliance with the terms of this Security Instrument. If the Property, or any part thereof, shall require inspection, repair or maintenance which the Grantor has failed to provide, the Lender, after reasonable notice, may enter upon the Property to effect such obligation; and the cost thereof shall be added to the Indebtedness and paid on the Lender's demand by the Grantor.

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ASSIGNMENT OF LEASES AND RENTS. As additional security for the payment of the Indebtedness and the performance of the covenants contained herein, Grantor hereby assigns and transfers over to Lender all rents, income and profits ("Rents") under any present or future leases, subleases or licenses of the Property, including any guaranties, extensions, amendments or renewals thereof, from the use of the Property. So long as Grantor is not in default, Grantor may receive, collect and enjoy all Rents accruing from the Property, but not more than one month in advance of the due date. Lender may also require Grantor, tenant and any other user of the Property to make payments of Rents directly to Lender. However, by receiving any such payments, Lender is not, and shall not be considered, an agent for any party or entity. Any amounts collected may, at the Lender's sole discretion, be applied to protect the Lender's interest in the Property, including but not limited to the payment of taxes and insurance premiums and to the Indebtedness. At Lender's sole discretion, all leases, subleases and licenses must first be approved by Lender.

CONDEMNATION. Grantor shall give Lender notice of any action taken or threatened to be taken by private or public entities to appropriate the Property or any part thereof, through condemnation, eminent domain or any other action. Further, Lender shall be permitted to participate or intervene in any of the above described proceedings in any manner it shall at its sole discretion determine. Lender is hereby given full power, right and authority to receive and receipt for any and all damages awarded as a result of the full or partial taking or appropriation and in its sole discretion, to apply said awards to the Indebtedness, whether or not then due or otherwise in accordance with applicable law. Unless Lender otherwise agrees in writing, any application of proceeds to the Indebtedness shall not extend or postpone the due date of the payments due under the Indebtedness or change the amount of such payments.

GRANTOR'S ASSURANCES. At any time, upon a request of Lender, Grantor will execute and deliver to the Lender, and if appropriate, cause to be recorded, such further mortgages, assignments, assignments of leases and rents, security agreements, pledges, financing statements, or such other document as Lender may require, in Lender's sole discretion, to effectuate, complete and to perfect as well as to continue to preserve the Indebtedness, or the lien or security interest created by this Security Instrument.

ATTORNEY-IN-FACT. Grantor appoints Lender as attorney-in-fact on behalf of Grantor. If Grantor fails to fulfill any of Grantor's obligations under this Security Instrument or any Related Documents, including those obligations mentioned in the preceding paragraph, Lender as attorney-in-fact may fulfill the obligations without notice to Grantor. This power of attorney shall not be affected by the disability of the Grantor.

EVENTS OF DEFAULT. The following events shall constitute default under this Security Instrument (each an "Event of Default"):

- (a) Failure to make required payments when due under Indebtedness;
- (b) Failure to perform or keep any of the covenants of this Security Instrument or a default under any of the Related Documents;
- (c) The making of any oral or written statement or assertion to the Lender that is false or misleading in any material respect by Grantor or any person obligated on the Indebtedness;
- (d) The death, dissolution, insolvency, bankruptcy or receivership proceeding of Grantor or of any person or entity obligated on the Indebtedness;
- (e) Any assignment by the Grantor for the benefit of the Grantor's creditors;
- (f) A material adverse change occurs in the financial condition, ownership or management of Grantor or any person obligated on the Indebtedness; or
- (g) The Lender deems itself insecure for any reason whatsoever.

REMEDIES ON DEFAULT. Upon the occurrence of an Event of Default, Lender may, without demand or notice, pay any or all taxes, assessments, premiums, and liens required to be paid by Grantor, effect any insurance provided for herein, make such repairs, cause the abstracts of title or title insurance policy and tax histories of the Property to be certified to date, or procure new abstracts of title or title insurance and tax histories in case none

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were furnished to it, and procure title reports covering the Property, including surveys. The amounts paid for any such purposes will be added to the Indebtedness and will bear interest at the rate of interest otherwise accruing on the Indebtedness until paid. In the event of foreclosure, the abstracts of title or title insurance shall become the property of the Lender. All abstracts of title, title insurance, tax histories, surveys, and other documents pertaining to the Indebtedness will remain in Lender's possession until the Indebtedness is paid in full.

IN THE EVENT OF THE SALE OF THIS PROPERTY UNDER THE PROCEDURE FOR FORECLOSURE OF A SECURITY INSTRUMENT BY ADVERTISEMENT, AS PROVIDED BY APPLICABLE LAW, OR IN THE EVENT THE LENDER EXERCISES ITS RIGHTS UNDER THE ASSIGNMENT OF LEASES AND RENTS, THE GRANTOR HEREBY WAIVES ANY RIGHT TO ANY NOTICE OTHER THAN THAT PROVIDED FOR SPECIFICALLY BY STATUTE, OR TO ANY JUDICIAL HEARING PRIOR TO SUCH SALE OR OTHER EXERCISE OF RIGHTS.

Upon the occurrence of an Event of Default, Lender may, without notice unless required by law, and at its option, declare the entire Indebtedness due and payable, as it may elect, regardless of the date or dates of maturity thereof and, if permitted by state law, is authorized and empowered to sell or to cause the Property to be sold at public auction, and to execute and deliver to the purchaser or purchasers at such sale any deeds of conveyance good and sufficient at law, pursuant to the statute in such case made and provided, and out of the proceeds of the sale to retain the sums then due hereunder and all costs and charges of the sale, including attorneys' fees, rendering any surplus to the party or parties entitled to it. The recitals in the trustee's deed shall be prima facie evidence of the truth of the statements made in it. If Lender chooses to invoke the power of sale, Lender or Trustee will provide notice of sale pursuant to applicable law. Any such sale or a sale made pursuant to a judgment or a decree for the foreclosure hereof may, at the option of Lender, be made en masse. The commencement of proceedings to foreclose this Mortgage in any manner authorized by law shall be deemed as exercise of the above option.

Upon the occurrence of an Event of Default, Lender shall immediately be entitled to make application for and obtain the appointment of a receiver for the Property and of the earnings, income, issue and profits of it, with the powers as the court making the appointments confers. Grantor hereby irrevocably consents to such appointment and waives notice of any application therefor.

NO WAIVER. No delay or failure of Lender to exercise any right, remedy, power or privilege hereunder shall affect that right, remedy, power or privilege nor shall any single or partial exercise thereof preclude the exercise of any right, remedy, power or privilege. No Lender delay or failure to demand strict adherence to the terms of this Security Instrument shall be deemed to constitute a course of conduct inconsistent with Lender's right at any time, before or after an event of default, to demand strict adherence to the terms of this Security Instrument and the Related Documents.

SUBSTITUTE TRUSTEE. Lender may from time to time remove Trustee and appoint a successor trustee to any Trustee appointed hereunder. Without conveyance of the Property, the successor trustee shall succeed to all the title, power and duties conferred upon Trustee herein and by applicable law.

JOINT AND SEVERAL LIABILITY. If this Security Instrument should be signed by more than one person, all persons executing this Security Instrument agree that they shall be jointly and severally bound, where permitted by law.

SURVIVAL. The Lender's rights in this Security Instrument will continue in its successors and assigns. This Security Instrument is binding on all heirs, executors, administrators, assigns and successors of the Grantor.

NOTICES AND WAIVER OF NOTICE. Unless otherwise required by applicable law, any notice or demand given by Lender to any party is considered effective when it is deposited in the United States Mail with the appropriate postage, mailed to the address of the party given at the beginning of this Security Instrument unless an alternative address has been provided to Lender in writing. To the extent permitted by law, Grantor waives notice of Lender's acceptance of this Security Instrument, defenses based on suretyship, any defense arising from any election by Lender under the United States Bankruptcy Code, Uniform Commercial Code, as enacted in the state

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where the Lender is located or other applicable law or in equity, demand, notice of acceleration, notice of nonpayment, presentment, protest, notice of dishonor and any other notice.

TO THE EXTENT PERMITTED BY LAW, GRANTOR WAIVES ANY RIGHT TO NOTICE, OTHER THAN THE NOTICE PROVIDED ABOVE, AND WAIVES ANY RIGHT TO ANY HEARING, JUDICIAL OR OTHERWISE, PRIOR TO THE LENDER EXERCISING ITS RIGHTS UNDER THIS SECURITY INSTRUMENT.

WAIVER OF APPRAISEMENT RIGHTS. Grantor waives all appraisal rights relating to the Property to the extent permitted by law.

LENDER'S EXPENSES. Grantor agrees to pay all expenses incurred by Lender in connection with enforcement of its rights under the Indebtedness, this Security Instrument or in the event Lender is made party to any litigation because of the existence of the Indebtedness or this Security Instrument, as well as court costs, collection charges and reasonable attorneys' fees and disbursements.

ASSIGNABILITY. Lender may assign or otherwise transfer this Security Instrument or any of Lender's rights under this Security Instrument without notice to Grantor. Grantor may not assign this Security Instrument or any part of the Security Instrument without the express written consent of Lender.

GOVERNING LAW AND JURISDICTION. This Security Instrument will be governed by the laws of the State of Oregon.

SEVERABILITY. If a court of competent jurisdiction determines any term or provision of this Security Instrument is invalid or prohibited by applicable law, that term or provision will be ineffective to the extent required. Any term or provision that has been determined to be invalid or prohibited will be severed from the rest of the Security Instrument without invalidating the remainder of either the affected provision or this Security Instrument.

WAIVER OF JURY TRIAL. All parties to this Deed of Trust waive any right to trial by jury to the extent allowed by law. This jury trial waiver applies to any claims or disputes related or incidental to the relationship established between the parties to this Deed of Trust.

ORAL AGREEMENTS DISCLAIMER. Oral agreements or oral commitments to loan money, extend credit, or to forbear from enforcing repayment of a debt are not enforceable under Washington law.

By signing this Security Instrument, each Grantor acknowledges that all provisions have been read and understood. Signed and sealed by Grantor (s):

McKinstry Portland, LLC

By: Douglas J Moore Date _____
Its: **Member**

By: Dean C Allen Date _____
Its: **General Manager**

By: William Teplicky Date _____
Its: **Member**

Witnessed by:

Name: _____ Date _____

Name: _____ Date _____

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BUSINESS ACKNOWLEDGMENT

STATE OF WASHINGTON)
)
COUNTY OF KING)

On this the [redacted], before me, [redacted], a [redacted], personally appeared **Douglas J Moore, Member** on behalf of **McKinstry Portland, LLC**, a Washington Limited Liability Company, to me personally known or who having proven to me on the basis of satisfactory evidence to be the person whose name is subscribed within this instrument and who acknowledged that he/she holds the position set forth and that he/she is being authorized to do so, executed the foregoing instrument for the purpose therein contained, by signing the name of the Limited Liability Company by himself/herself as **Member of McKinstry Portland, LLC**, and that the foregoing instrument is the voluntary act and deed of the Limited Liability Company. In witness whereof, I hereunto set my hand and, if applicable, official seal.

My commission expires: [redacted] _____
[redacted]

[redacted], in and for the state of
Washington, residing at [redacted],
[redacted].

(Official _____ Seal)

BUSINESS ACKNOWLEDGMENT

STATE OF WASHINGTON)
)
COUNTY OF KING)

On this the [redacted], before me, [redacted], a [redacted], personally appeared **Dean C Allen, General Manager** on behalf of **McKinstry Portland, LLC**, a Washington Limited Liability Company, to me personally known or who having proven to me on the basis of satisfactory evidence to be the person whose name is subscribed within this instrument and who acknowledged that he/she holds the position set forth and that he/she is being authorized to do so, executed the foregoing instrument for the purpose therein contained, by signing the name of the Limited Liability Company by himself/herself as **General Manager of McKinstry Portland, LLC**, and that the foregoing instrument is the voluntary act and deed of the Limited Liability Company. In witness whereof, I hereunto set my hand and, if applicable, official seal.

My commission expires: [redacted] _____
[redacted]

[redacted], in and for the state of
Washington, residing at [redacted],
[redacted].

(Official _____ Seal)

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BUSINESS ACKNOWLEDGMENT

STATE OF WASHINGTON)
)
COUNTY OF KING)

On this the [redacted], before me, [redacted], a [redacted], personally appeared William Teplicky, Member on behalf of McKinstry Portland, LLC, a Washington Limited Liability Company, to me personally known or who having proven to me on the basis of satisfactory evidence to be the person whose name is subscribed within this instrument and who acknowledged that he/she holds the position set forth and that he/she is being authorized to do so, executed the foregoing instrument for the purpose therein contained, by signing the name of the Limited Liability Company by himself/herself as Member of McKinstry Portland, LLC, and that the foregoing instrument is the voluntary act and deed of the Limited Liability Company. In witness whereof, I hereunto set my hand and, if applicable, official seal.

My commission expires: [redacted] _____
[redacted]

[redacted], in and for the state of
Washington, residing at [redacted],
[redacted].

(Official _____ Seal)

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STATE OF OREGON
WATER SUPPLY WELL REPORT
(as required by ORS 537.765 & OAR 690-205-0210)

WELL LABEL # L 91674
START CARD # 1004850

(1) LAND OWNER Owner Well I.D. 2
First Name _____ Last Name _____
Company MCKINSTRY COLLC
Address PO BOX 24567
City SEATTLE State WA Zip 98124

(2) TYPE OF WORK New Well Deepening Conversion
 Alteration (repair/recondition) Abandonment

(3) DRILL METHOD
 Rotary Air Rotary Mud Cable Auger Cable Mud
 Reverse Rotary Other _____

(4) PROPOSED USE Domestic Irrigation Community
 Industrial/ Commercial Livestock Dewatering
 Thermal Injection Other _____

(5) BORE HOLE CONSTRUCTION Special Standard (Attach copy)
Depth of Completed Well 120 ft.

BORE HOLE SEAL

Dia	From	To	Material	From	To	Amt	sacks/ lbs
16	0	120	Bentonite Chips	0	40	100	S

How was seal placed: Method A B C D E
 Other _____

Backfill placed from _____ ft. to _____ ft. Material _____
Filter pack from 40 ft. to 120 ft. Material Silica Sand Size 10/20

Explosives used: Yes Type _____ Amount _____

(6) CASING/LINER

Casing	Liner	Dia	+	From	To	Gauge	Stl	Plstc	Wld	Thrd
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	12	<input checked="" type="checkbox"/>	2	79.5	.365	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	12	<input type="checkbox"/>	115	120	.365	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Shoe Inside Outside Other Location of shoe(s) _____
Temp casing Yes Dia _____ From _____ To _____

(7) PERFORATIONS/SCREENS
Perforations Method _____
Screens Type Wire Wrap Material Stainless

Pert/S creen	Casing Liner	Screen Dia	From	To	Scrn/slot width	Slot length	# of slots	Tele/ pipe size
		12	79.5	115	03			9.5

(8) WELL TESTS: Minimum testing time is 1 hour
 Pump Bailer Air Flowing Artesian
Yield gal/min 93 Drawdown 41 Drill stem/Pump depth 75 Duration (hr) 16

Temperature 52 °F Lab analysis Yes By _____
Water quality concerns? Yes (describe below) No
From _____ To _____ Description _____ Amount _____ Units _____

(9) LOCATION OF WELL (legal description)
County MULTNOM Twp 1 N N/S Range 3 E E/W WM
Sec 19 NE 1/4 of the SW 1/4 Tax Lot 00311
Tax Map Number _____ Lot _____
Lat _____ " or _____ DMS or DD
Long _____ " or _____ DMS or DD
 Street address of well Nearest address

16790 NE MASON ST PORTLAND, OR 97230

(10) STATIC WATER LEVEL
Date 10-21-08 SWL(psi) _____ + SWL(ft) _____
Existing Well / Predeepening _____
Completed Well _____ - 21.5
Flowing Artesian? Dry Hole?

WATER BEARING ZONES Depth water was first found 60'

SWL Date	From	To	Est Flow	SWL(psi)	+ SWL(ft)
<u>10-21-08</u>	<u>60</u>	<u>114</u>	<u>450GPM</u>		<u>-21.5</u>

(11) WELL LOG Ground Elevation _____

Material	From	To
Silty sand, coarse gravel.	0	25
Sandy gravel, trace cobbles, boulders.	25	60
Sand, gravel, boulders, water bearing.	60	114
Green sandstone.	114	115
Black sandstone.	115	120

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Date Started 10-14-2008 Completed 10-21-2008

(unbonded) Water Well Constructor Certification
I certify that the work I performed on the construction, deepening, alteration, or abandonment of this well is in compliance with Oregon water supply well construction standards. Materials used and information reported above are true to the best of my knowledge and belief.
License Number _____ Date _____
Password: (if filing electronically) _____
Signed _____

(bonded) Water Well Constructor Certification
I accept responsibility for the construction, deepening, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon water supply well construction standards. This report is true to the best of my knowledge and belief.
License Number 10067 Date _____
Password: (if filing electronically) _____
Signed _____
Contact Info (optional) _____



Oregon

Theodore R. Kulongoski, Governor

Water Resources Department
 North Mall Office Building
 725 Summer Street NE, Suite A
 Salem, OR 97301-1266
 503-986-0900
 FAX 503-986-0904

September 8, 2008

ERIC G HANSEN #10067
 TACOMA PUMP & DRILLING CO INC
 30316 MOUNTAIN HWY
 GRAHAM, WA 98338

SEP 11 2008

FINAL ORDER

Dear Mr. Hansen:

The Special Standard request you submitted for owner: McKinsty Co. LLC, Start Card numbers 1004850 and 1004851 (Wells MKP1 and MKP2), is hereby approved for the following: You may drill these wells within 50 feet from a closed sewer line in the parking lot of this property. The wells shall be continuously cased and continuously sealed to a minimum depth of 40 feet bgs. The annular seals shall be deeper if required by Statute and Rule. These wells may not have split seals (See OAR 690-210-0030). All other construction requirements must be adhered to. Your Special Standard request form is enclosed. This Special Standard is in regards to the minimum well construction standards. Permits may be required from the Water Resources Department, or other agencies, to use these wells.

The Well Construction Standards serve to protect ground water resources. By approving and issuing this special construction standard the Oregon Water Resources Department is not representing that a well constructed in accordance with this condition will maintain structural integrity or that it meets engineering standards. The well constructor/or landowner is responsible for ensuring that a well is constructed in a manner that protects ground water resources as required under Oregon Administrative Rules 690-200 through 690-240.

If you have any questions concerning this letter, please contact me at (503) 986-0851, or by e-mail at Kristopher.R.Byrd@wrdd.state.or.us.

Sincerely,

Kristopher Byrd
 Well Construction Program Coordinator
 Well Construction and Compliance Section

enclosure

cc: Joel Jeffery, NW Region Well Inspector
 File

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DEC 15 2008

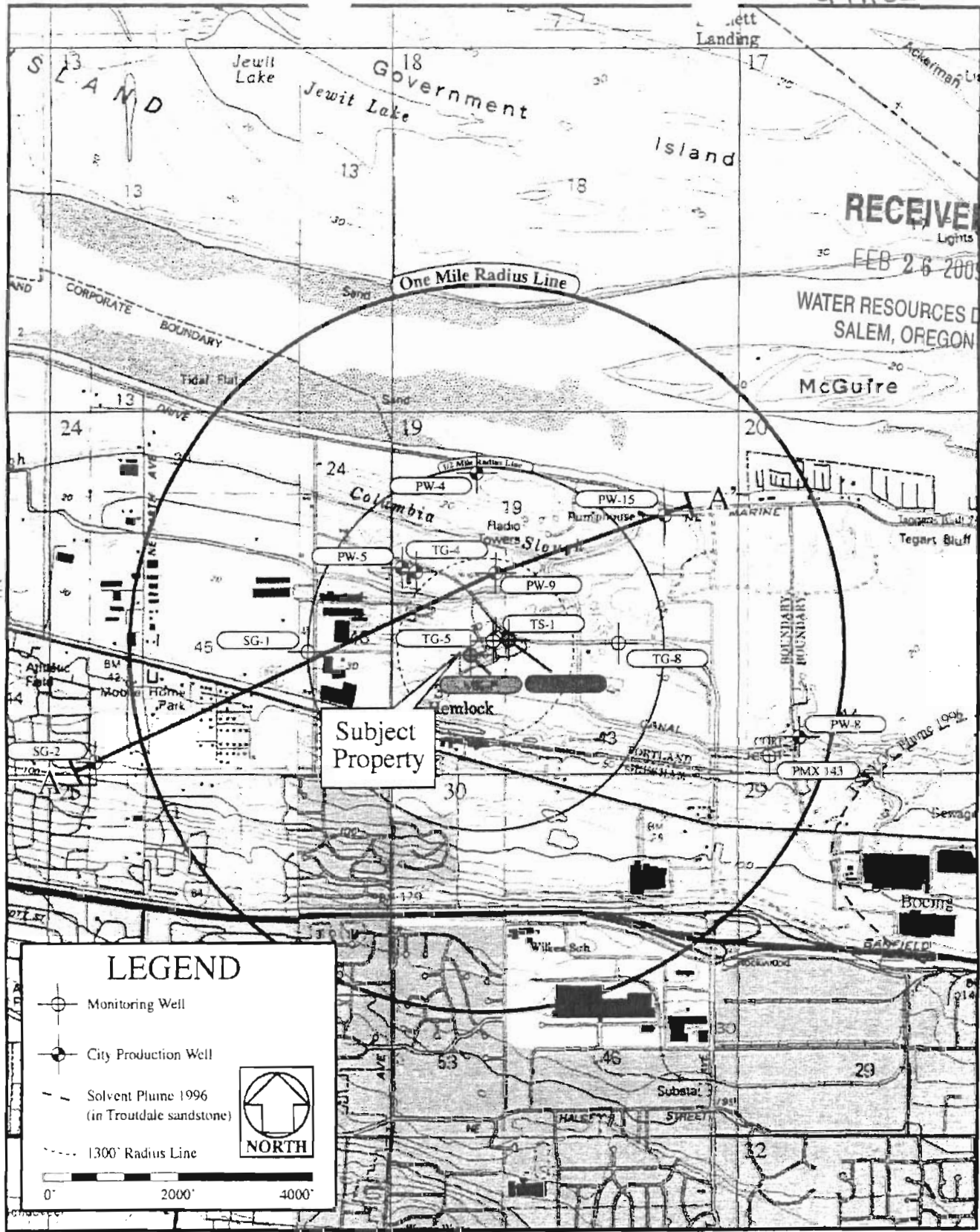
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This is a final order in other than contested case. This order is subject to judicial review under ORS 183.484. Any petition for judicial review must be filed within the 60 day time period specified by ORS 183.484(2). Pursuant to ORS 536.075 and OAR 137-004-0080 you may either petition for judicial review or petition the Director for reconsideration of this order. A petition for reconsideration may be granted or denied by the Director, and if no action is taken within 60 days following the date the petition was filed, the petition shall be deemed denied.



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LEGEND

- Monitoring Well
- City Production Well
- Solvent Plume 1996 (in Troutdale sandstone)
- 1300' Radius Line



0' 2000' 4000'

ROGER N. SMITH ASSOCIATES, INC.
Geotechnical and Environmental Consultants

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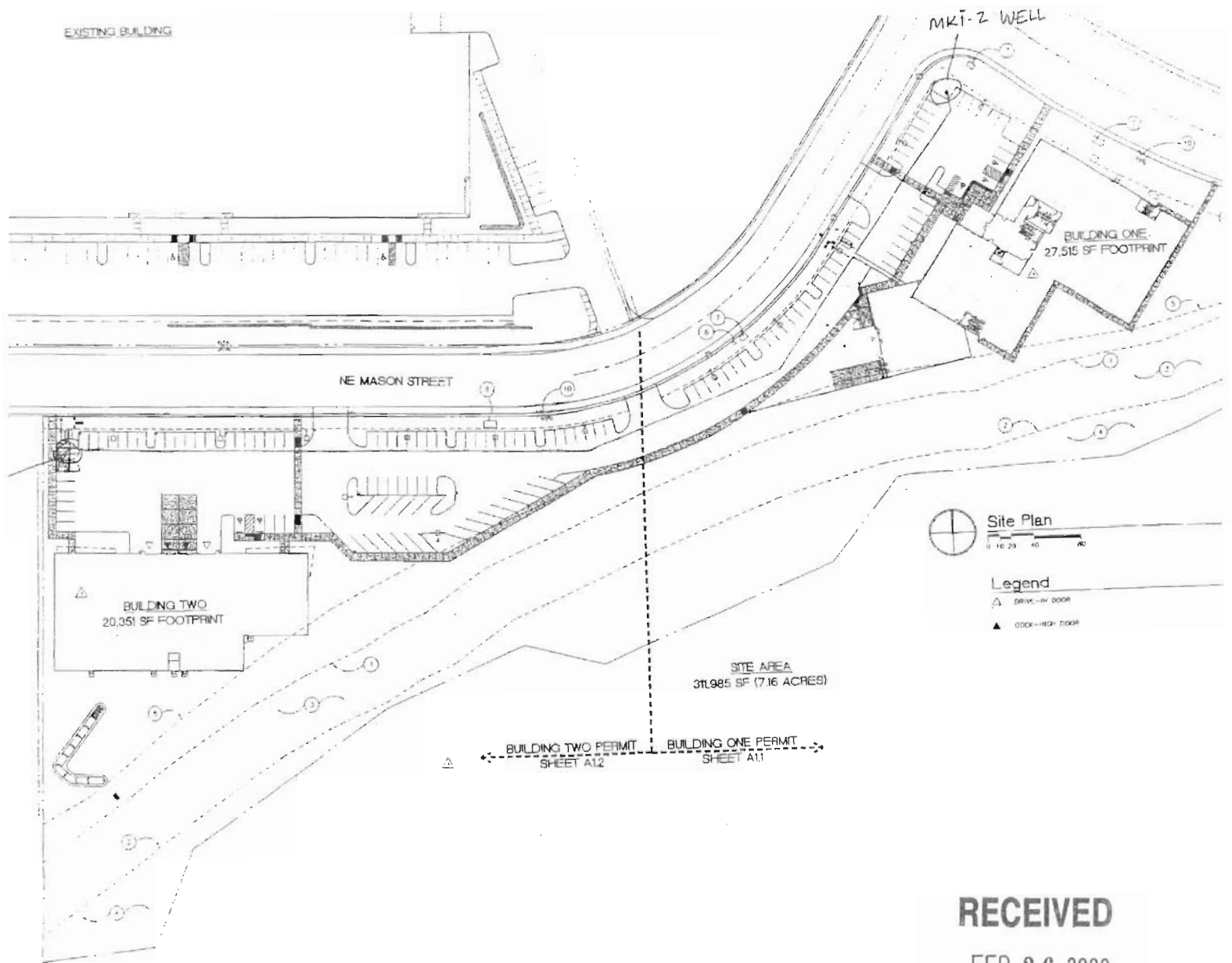
DEC 15 2008

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SALEM, OREGON

Project Manager Roger N. Smith
Drawn By Steven Dopp
Project Number 07-856.2
Date Last Modified May 22, 2008

<p>McKinstry Co. Low Temperature Geothermal Wells and nearby wells</p>	<p>Figure 1</p>
<p>Map adapted from TOPO © 2006 National Geographic Map Approximate Scale: 1:24 000</p>	

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Low Temperature Geothermal System**Description of Project Located at:**

**McKinstry Co. Oregon HQ Building,
16790 NE Mason Street, Portland, OR 97230**

Township, Range and Section Location: T1N, R3E, 19c db

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The following narrative describes a low temperature geothermal (LTG) system proposed for the heating and cooling of the new Oregon headquarter building of McKinstry Company LLC located at 16790 NE Mason Street, Portland (see Figure 1). The site is located within the City of Portland's Columbia South Shore Well Field (CSSWF), near the intersection of NE Airport Way and NE Mason Street.

The proposed LTG system will involve two wells (identified as W-1 and W-2); one withdrawing and the other re-injecting groundwater from/to the shallow Troutdale Groundwater Aquifer (TGA). One well will be located near the northwest boundary of the project property, a second well will be located in the southeast corner of the property approximately 800 feet apart (see Figures 1, 2 and 3). Water withdrawn from one of these well will be circulated through a heat exchanger in the new building (identified as Building #1 on Figure 2) then re-injected back into the same aquifer through the second well. A unique feature of this system will be the seasonal reversal of this flow direction during changes of the seasons. This flow reversal will retrieve warm water that had been injected during summer months to be used in winter. Thus, not only will the system be a non-consumptive use of the groundwater but the net thermal input into the aquifer will be low.

The LTG system is anticipated to withdraw water at rates up to 300 gpm (gallons per minute) or 0.668 cfs (cubic feet per second) from the aquifer. However, limited hydraulic conductivity may not allow this high of yield. The re-injection rate will equal the withdrawal rate, no other use of the water is intended. A stainless steel plate in the building heating exchanger will separate groundwater from building circulation fluids preventing any building circulation fluids from interacting with the groundwater.

A 20 hp 440-V, 3-phase variable speed submersible pump will be used to pump groundwater. The flow rate will vary with heating/cooling demand from the building. Estimated typical flow will be 100-150 gpm.

The following narrative describes the hydrogeology in the McKinstry project area:

Local hydrogeology is fairly well understood because of the drilling, hydrogeologic mapping, aquifer testing and modeling done by the City of Portland before and since the CSSWF was completed. Two monitoring wells were installed by the City of Portland in Mason Street near the project. Logs from these wells have been used to describe the geology beneath the project site. Three geologic units relevant to the McKinstry LTG project are: 1.) the Overbank Deposits, 2.) the Troutdale Gravels and 3.) the underlying Troutdale silts and siltstones. The Overbank Deposits are near-surface silts and sands

originating from floods of the modern (since the end of the Pleistocene Era) Columbia River. This unit is approximately 10 feet thick at the property (see attached cross-section, Figure 7). Below the Overbank Deposit is a unit of unconsolidated and semi-consolidated silty-sandy-cobbly gravel called the Troutdale Gravels. This unit is approximately 100 feet thick in the project area (see cross-section). An unconsolidated upper sub-unit of these gravels is approximately 70 feet thick underlain by a consolidated to semi-consolidated subunit that is 30 to 40 feet thick. Beneath the Troutdale Gravel unit is a thick (approximately 134 feet) sequence of predominantly silts and siltstones. The top of this unit, at 114 feet below ground surface, forms the bottom of the Troutdale Gravel and isolates these gravels from underlying aquifers. Diagrams showing these units and sub-units are presented on the well construction diagrams completed following the recent installation of the two LTG well, W-1 and W-2 (see Figures 4 and 5).

The hydrogeology of interest for the McKinstry project is the saturated portions of Troutdale Gravels and the underlying silts and siltstones. The saturated portion of the unconsolidated gravel sub-unit is referred to as the Unconsolidated Gravel Aquifer (UGA). At the project site this aquifer extends from the water table (21 feet below ground surface or bgs) to 80 feet bgs. The semi-consolidated or consolidated portion of the Troutdale Gravels (referred to as the Troutdale Gravel Aquifer or TGA) underlies the UGA and extends from approximately 80 feet bgs to 114 feet bgs where the silts and siltstones (referred to as Confining Unit 1 or CU1). The UGA and the TGA are hydraulically connected and often referred together as the Troutdale Gravel Aquifer. Because of their depositional character (unconsolidated and consolidated) the aquifers may have different groundwater production capabilities. It has been our experience to find higher productivity in the lower semi-consolidated or consolidated TGA sub-unit than in the UGA.

During the drilling of the monitoring wells (TG-5 and TS-1, approximately 100 feet west of W-1) in Mason Street in 1998, production rates were estimated at different depths. These estimates were made by airlifting water out of the drill casing with a fairly short zone of aquifer exposed to the bottom of the casing. Moderately high flow rates of 100-200 gpm were noted near the bottom of the TGA.

The closest City CSSWF production well to the project site is PW-9 (see Figures 1 and 6) located approximately 0.19 miles (1,000 feet) north of the project site. This well draws water from the Troutdale Sand And Gravel Aquifer (SGA). This is an aquifer located two confining units below the TGA. The hydrogeologic cross-section A-A' (see Figure 7) shows the site well W-1, two monitoring wells, and PW-9 and their relationship to the underlying hydrogeologic units. A second City well PW-5 approximate 1,200 feet northwest of the project site also draws water from the SGA. No operating City wells draw water from the shallow TGA to be used by this project circulation wells. Because the TGA is isolated from underlying aquifers and because of the non-consumptive character of the LTG system, it is considered unlikely the new LTG wells will interfere with other production wells in the area.

Natural recharge to the TGA in the project is from precipitation and infiltration at the ground surface in areas to the south and southeast of the project area. Discharge of the Troutdale Gravel Aquifer in this area is considered to be the Willamette River located 1.17 miles (6,200 feet) southwest of the site.

List of Figures

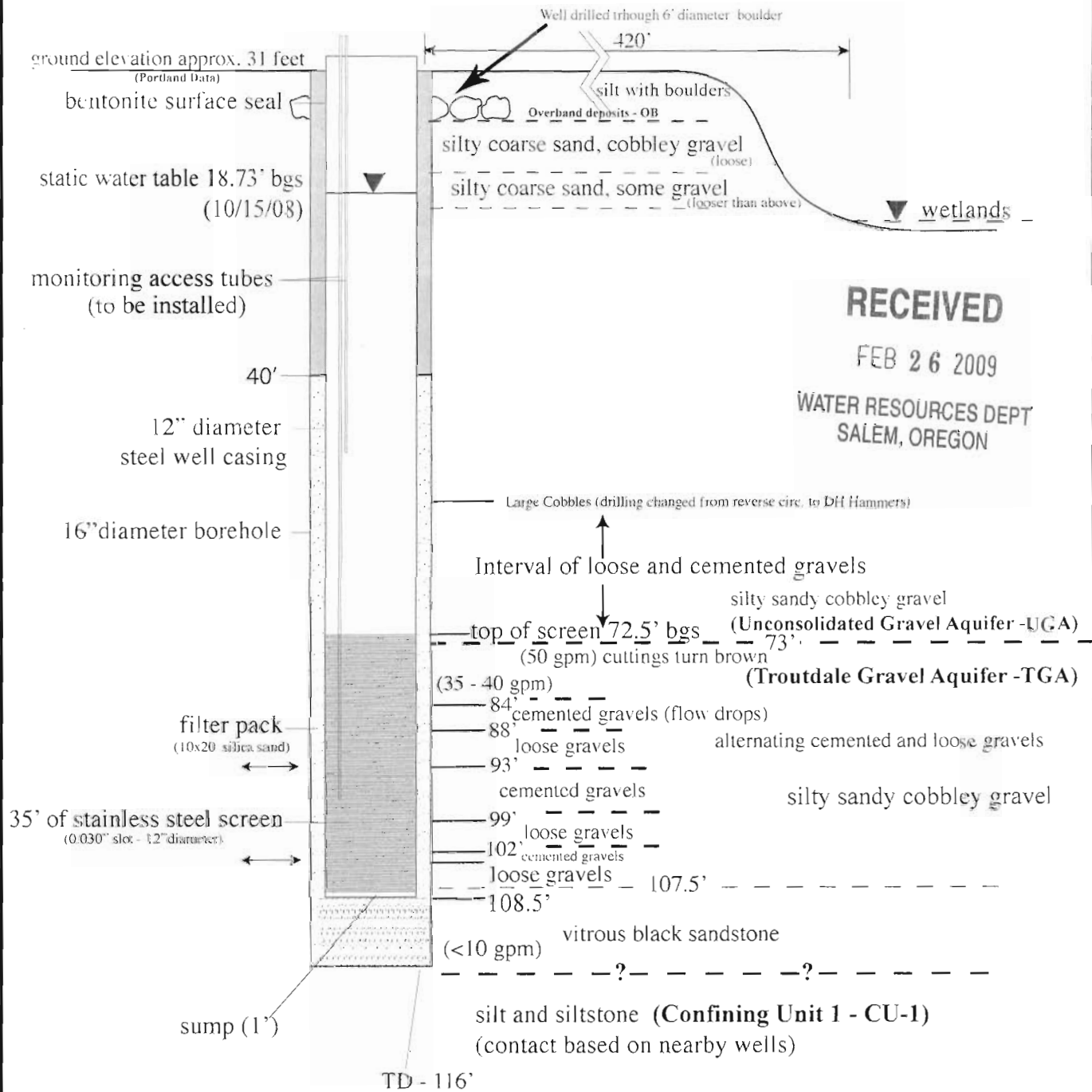
- Figure 1. McKinstry HQ Property Showing LTG Wells and Nearby Production Wells
- Figure 2. McKinstry HQ Low Temperature Geothermal Well Locations Relative to Quarter Corner
- Figure 3. Ztec Engineers Topographic Map
- Figure 4. McKinstry HQ W-1 Well Diagram (as built)
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- Figure 6. McKinstry Property 16790 NE Mason Street Showing Hydrogeologic Cross-Section and Nearby City Production Wells
- Figure 7. Hydrogeologic Cross-Section A-A

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Well W-1



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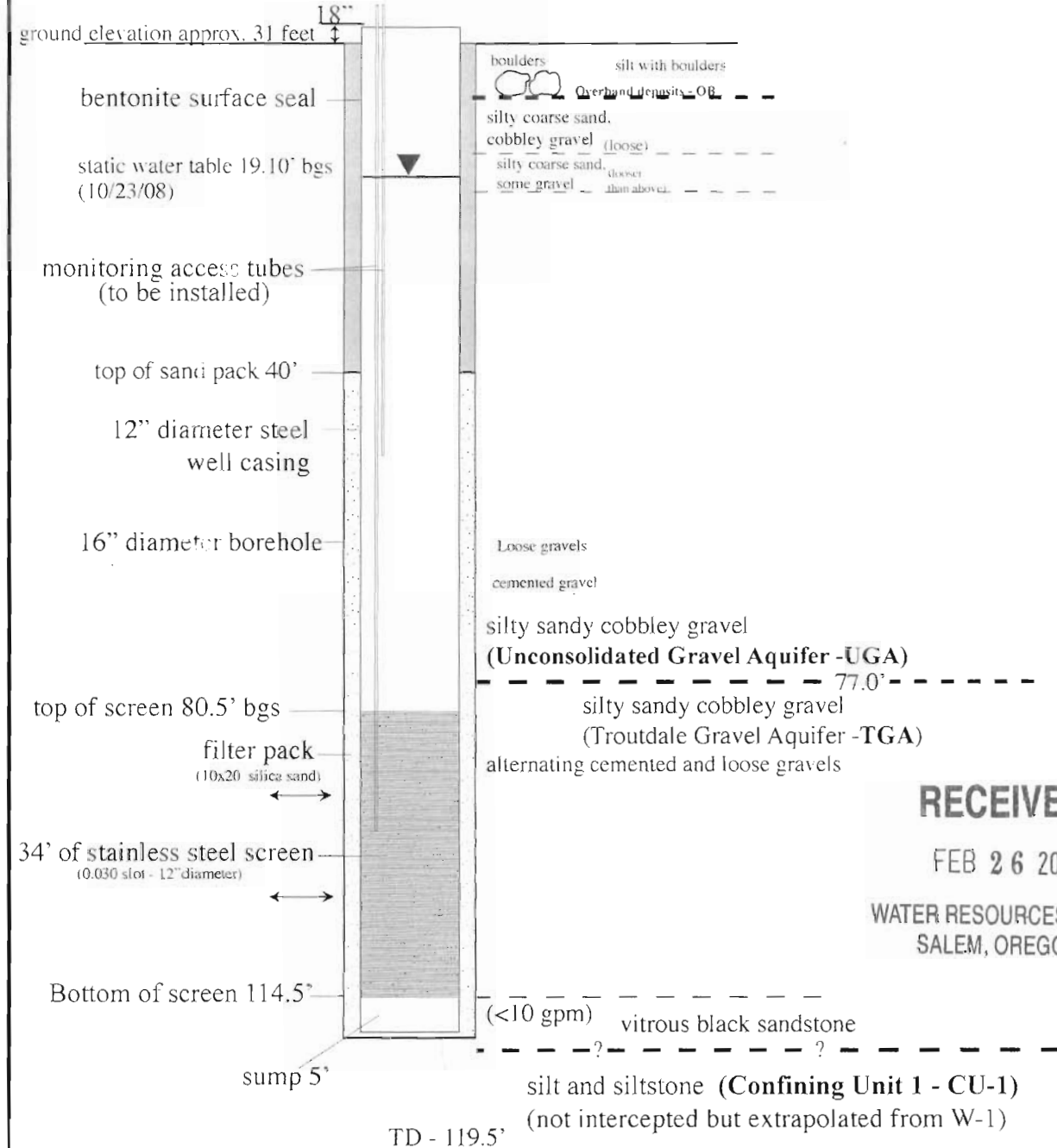
Project Manager
 Roger N. Smith
 Drawn By
 Katharine Coates
 Project Number
 07-856
 Date Last Modified
 November 25, 2008

McKinstry HQ
 W-1 Well Diagram (as built)

Horizontal scale: 1 inch = 20 inches
 Vertical scale: 1 inch = 20 feet Horizontal = 12X Vertical

Figure 4

Well W-2



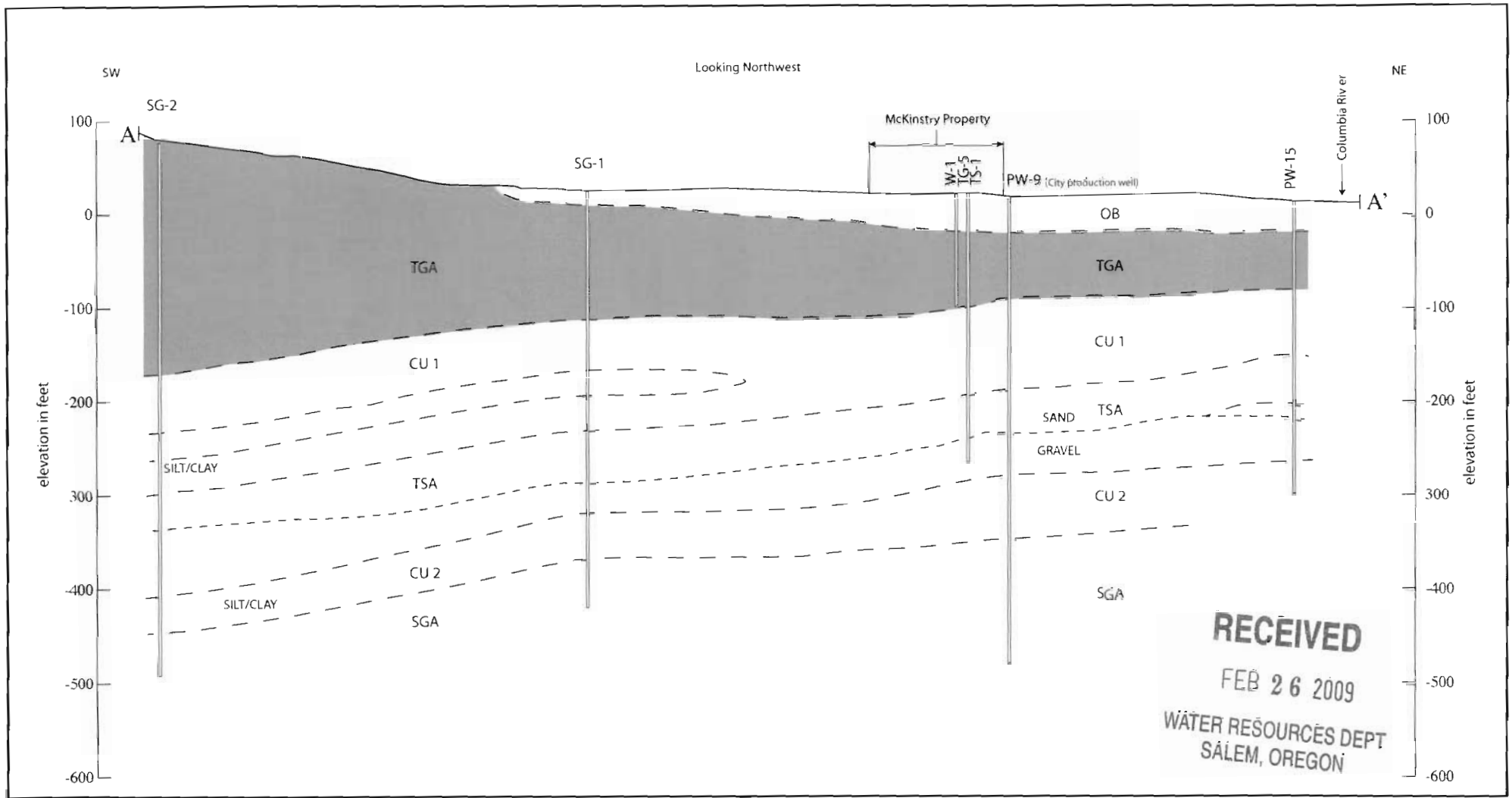
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Project Manager Roger N. Smith
Drawn By Katharine Coates
Project Number 07-856
Date Last Modified January 13, 2009

McKinstry HQ W-2 Well Diagram (as built)	
Horizontal scale: 1 inch = 20 inches	Figure 5
Vertical scale: 1 inch = 20 feet Vertical = 12X Horizontal	



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Groundwater and Environmental Consultants

LEGEND

- OB - Ovebank Deposits (silts and sands)
- TGA - Troutdale Gravel Aquifer (silts gravel and sands)
- CU 1 - Confining Unit 1 (silt clay with sand units)
- TSA - Troutdale Sand Aquifer (sand and sandstone - upper unit gravel and conglomerate - lower unit)
- CU 2 - Confining Unit 2 (clay and silt)
- SGA - Troutdale Sand and Gravel Aquifer



Hydrogeologic Cross-Section A-A'

Figure adapted from JO 7-98 Portland Bureau of Water Works Report
University of Oregon Hydrologic Sciences Report Columbia South Shore Well Field

Figure 7

Project Number 07-256
Drawn By Steven Dope
Date Last Modified January 20, 2009

5-1-1/82