



Oregon

John A. Kitzhaber, M.D., Governor

Water Resources Department

Commerce Building
158 12th Street NE
Salem, OR 97310-0210
(503) 378-3739
FAX (503) 378-8130

March 31, 1998

Steve Schneider
Schneider Equipment, Inc.
21881 River Road NE
St. Paul, OR 97137

Dear Steve:

Please find attached approved copies of the following special standards:

1. Mount Scott Water District - production well (start card number 95211)
2. Mount Scott Water District - piezometer well (start card number 87136)

If you have any questions concerning this letter, please contact me at the address or phone number listed below.

Sincerely,

Rob Carter
Well Construction Specialist

cc: Richard Edwards, Well Inspector

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MAR 20 1998

WATER RESOURCES DEPT.
SALEM, OREGON

OR CCB No. 39265
WA General Contractor
No. SCHNEI *226LG

**SCHNEIDER
EQUIPMENT, INC.
AND DRILLING CO.**

COMPLETE WATER SYSTEMS
WELL DRILLING • PUMPS • CONTROLS
SALES & SERVICE

21881 River Road N.E., St. Paul, Oregon 97137
Phone (503) 633-2666 • Fax (503) 633-2668

March 19, 1998

Rob Carter
OR Water Resources Dept.
158 - 12th Street NE
Salem, OR 97310

RE: Special Standards for Mt. Scott WD

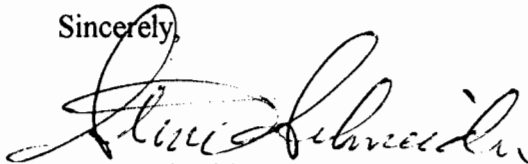
Dear Rob:

Enclosed are two requests for special standards for the Mt. Scott Water District wells related to completing them below ground in vaults. I also added the location of the piezometer well to the sanitary sewer in its request. This is similar to that previously approved for the production well but we did not get approval for the piezometer well at that time because there was the possibility of permanently abandoning it.

If the attached designs are approved, we would cut the casings off and label the wells after the vaults are installed. Vault installation is not done with a drill rig. We expect the District to have the vaults with electric and plumbing installed in approximately two months. Accordingly, we would like to be authorized to remove our equipment from the site and file just one well log for each well once the well heads are complete. In other words, we would like to have up to say 90 days from now to complete the well heads, label the wells and file the well logs without a requirement to keep a drill rig on site. At this time, the wells are completed with extensive grout seals and capped casings above ground.

Please do not hesitate to call if you have any questions or concerns.

Sincerely,



Steve Schneider
Vice President

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Oregon Water Resources Department

MAR 20 1998

REQUEST FOR WRITTEN APPROVAL TO USE CONSTRUCTION METHODS INCLUDED IN OREGON ADMINISTRATIVE RULES 690-200 THROUGH 690-240 WATER RESOURCES DEPT SALEM, OREGON

Before request can be considered, the following must be answered. Requests shall be submitted to the Well Construction Specialist, Water Resources Department. Requests may also be considered by the appropriate Regional Manager.

Date of request: 3/19/98

Bonded Well Constructor (name, license and mailing address): Steve Schneider

WWC 649, 21881 River Rd NE, St. Paul, OR 97137

(1) Location of Well: SE 1/4 SW 1/4 of Section 1, Township 2S, Range 2E, Clackamas County.

Address at well site: next to; 1470 Territory Drive, Clackamas, OR 97015

(2) Start Card Number(s): 95211 (Production Well)

(3) Name and Address of Well Land Owner: Mt. Scott Water District, 10602 SE 129th Ave, Portland, OR 97236

(4) The distance to the nearest well, septic tank or drainfield (if water supply well): Piezometer well is 116' away. No septic tanks or drainfields in the area. Property is to be a park and is surrounded by fairly new residential properties served by sanitary sewer & storm water drains.

(5) The unusual conditions which necessitate this request: Wellowner wishes to place well head in a below ground vault to accommodate future park plan (aesthetics) and to minimize potential for vandalism.

(6) The proposed construction methods that the well constructor believes will be adequate for this well (attach additional pages if needed)

See attached drawings, literature & correspondence.

W-DR, UG
remarks on other dates also

- (7) Diagram showing the pertinent features of the proposed well design and construction (attach additional pages if needed):

see attached

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WATER RESOURCES DEPT.
SALEM, OREGON

PLEASE NOTE:

- (1) If approved, all other phases of well construction must comply with the appropriate standards described in OAR 690-200 through 690-240.
- (2) If it should be determined at some future date that the well, due to its construction, is allowing groundwater contamination, waste or loss of artesian pressure, the undersigned shall return to the site and rectify the problem.
- (3) If verbal approval was granted, a written request must be submitted to the Department either within three (3) working days of the date of verbal approval or prior to the completion of the associated well work. Failure to submit a written request as described above may void prior approval.

I have read and understand the above information. I further attest that the information provided is accurate to the best of my knowledge.

Bonded Constructor Signature: _____

Stephen J. Schneider

For Water Resources Department Use Only

Date: _____

3-31-98

Approved by: _____

[Signature]

Denied by: _____

Remarks: _____

revised: 4-96

Oregon Water Resources Department

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MAR 20 1993

REQUEST FOR WRITTEN APPROVAL TO USE CONSTRUCTION METHODS INCLUDED IN OREGON ADMINISTRATIVE RULES 690-200 THROUGH 690-240 WATER RESOURCES DEP SALEM, OREGON

Before request can be considered, the following must be answered. Requests shall be submitted to the Well Construction Specialist, Water Resources Department. Requests may also be considered by the appropriate Regional Manager.

Date of request: 3/19/98

Bonded Well Constructor (name, license and mailing address): Steve Schneider

WWC 649, 21881 River Rd NE, St. Paul, OR 97137

(1) Location of Well: SE 1/4 SW 1/4 of Section 1, Township 2S, Range 2E, Clackamas County.

Address at well site: next to 1470 Territory Drive
Clackamas, OR 97015

(2) Start Card Number(s): 87136 (Piezometer Well)

(3) Name and Address of ^{well} Land Owner: Mt. Scott Water District
10602 SE 129th Ave
Portland, OR 97236

(4) The distance to the nearest well, septic tank or drainfield (if water supply well): New production well is 116' away, NO septic tanks or drainfields in the area. Property is to be a park and is surrounded by fairly new residential properties served by sanitary sewer & storm water drains.

(5) The unusual conditions which necessitate this request: Well owner wishes to place well head in a below ground vault to accommodate future park plan (aesthetics) and to minimize potential ~~for~~ vandalism. In addition, need approval for less than 50' distance from sanitary sewer.

(6) The proposed construction methods that the well constructor believes will be adequate for this well (attach additional pages if needed)

See attached drawings, literature & correspondence.

Also reference 2/2/98 special standard - well has cement grout seal from 425' up to 8' and "temporary" bentonite from 8' to surface for now (until vault completion approval is obtained). Extensive seal protects against any potential sanitary sewer problem better than minimum standards would.

remark-5501
other dates
also
W-DF, 46

- (7) Diagram showing the pertinent features of the proposed well design and construction (attach additional pages if needed):

see attached

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MAR 20 1998
WATER RESOURCES DEPT.
SALEM, OREGON

PLEASE NOTE:

- (1) If approved, all other phases of well construction must comply with the appropriate standards described in OAR 690-200 through 690-240.
- (2) If it should be determined at some future date that the well, due to its construction, is allowing groundwater contamination, waste or loss of artesian pressure, the undersigned shall return to the site and rectify the problem.
- (3) If verbal approval was granted, a written request must be submitted to the Department either within three (3) working days of the date of verbal approval or prior to the completion of the associated well work. Failure to submit a written request as described above may void prior approval.

I have read and understand the above information. I further attest that the information provided is accurate to the best of my knowledge.

Bonded Constructor Signature: *Stephen Schneider*

For Water Resources Department Use Only

Date: 3-31-98

Approved by: *[Signature]* Denied by: _____

Remarks: _____

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WATER RESOURCES DEPT.
SALEM, OREGON



10602 S.E. 129th Avenue • Portland, OR 97236-6271 • Phone - (503) 761-0220 • Fax - (503) 761-7406

FAX TRANSMITTAL

TO: Steve Schneider COMPANY: Schneider Equipment
 FAX #: 1-503-633-2668 SUBJECT: Well Vaults
 FROM: Tim Janssen DATE: 3/12/98 PAGE 1 OF 6

***** MESSAGE *****

Steve:

The following pages show the dimensions and specs for the vaults for the production and monitoring wells. Both vaults will have the doors with Catalog # 4860 P. The doors will be placed according to ^{Mt.} ~~the~~ Scott's request and we will request the doors be above the wellheads. We would like the wellheads to be 3 ft or so above the floor of the vaults. If you have any questions, please call me.

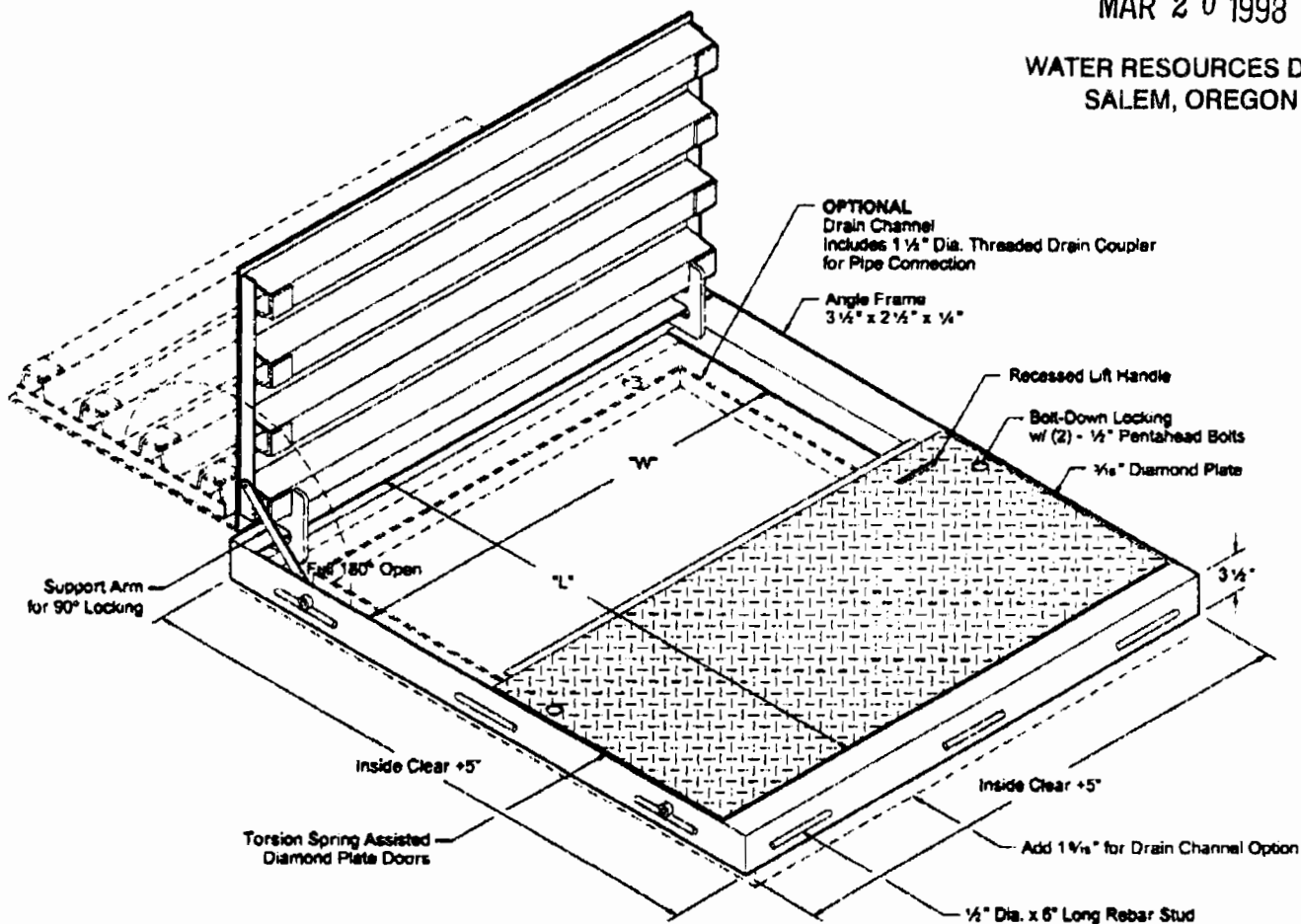
Thanks,
Tim

GALVANIZED STEEL ACCESS DOORS

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SALEM, OREGON



Catalog No.	Clear Opening (W x L)	OPTIONAL Clear Opening w/ Drain Channel	Assembled Weight	Outside Dimensions
3660P	3'-0" x 5'-0"	2'-6" x 4'-9"	377 lbs.	3'-5" x 5'-5"
3672P	3'-0" x 6'-0"	2'-6" x 5'-9"	479 lbs.	3'-5" x 6'-5"
4248P	3'-6" x 4'-0"	3'-0" x 3'-9"	405 lbs.	3'-11" x 4'-5"
4260P	3'-6" x 5'-0"	3'-0" x 4'-9"	501 lbs.	3'-11" x 5'-5"
4272P	3'-6" x 6'-0"	3'-0" x 5'-9"	569 lbs.	3'-11" x 6'-5"
4848P	4'-0" x 4'-0"	3'-6" x 3'-9"	485 lbs.	4'-5" x 4'-5"
4860P	4'-0" x 5'-0"	3'-6" x 4'-9"	546 lbs.	4'-5" x 5'-5"
4872P	4'-0" x 6'-0"	3'-6" x 5'-9"	656 lbs.	4'-5" x 6'-5"

NOTES:

- Frames designed to be cast in concrete.

FINISH:
Hot-dipped galvanized.

LOADING:
Suitable for H-20 wheel load if off-street locations where not subjected to high density traffic.

* ITEMS SHOWN ARE SUBJECT TO CHANGE WITHOUT NOTICE.



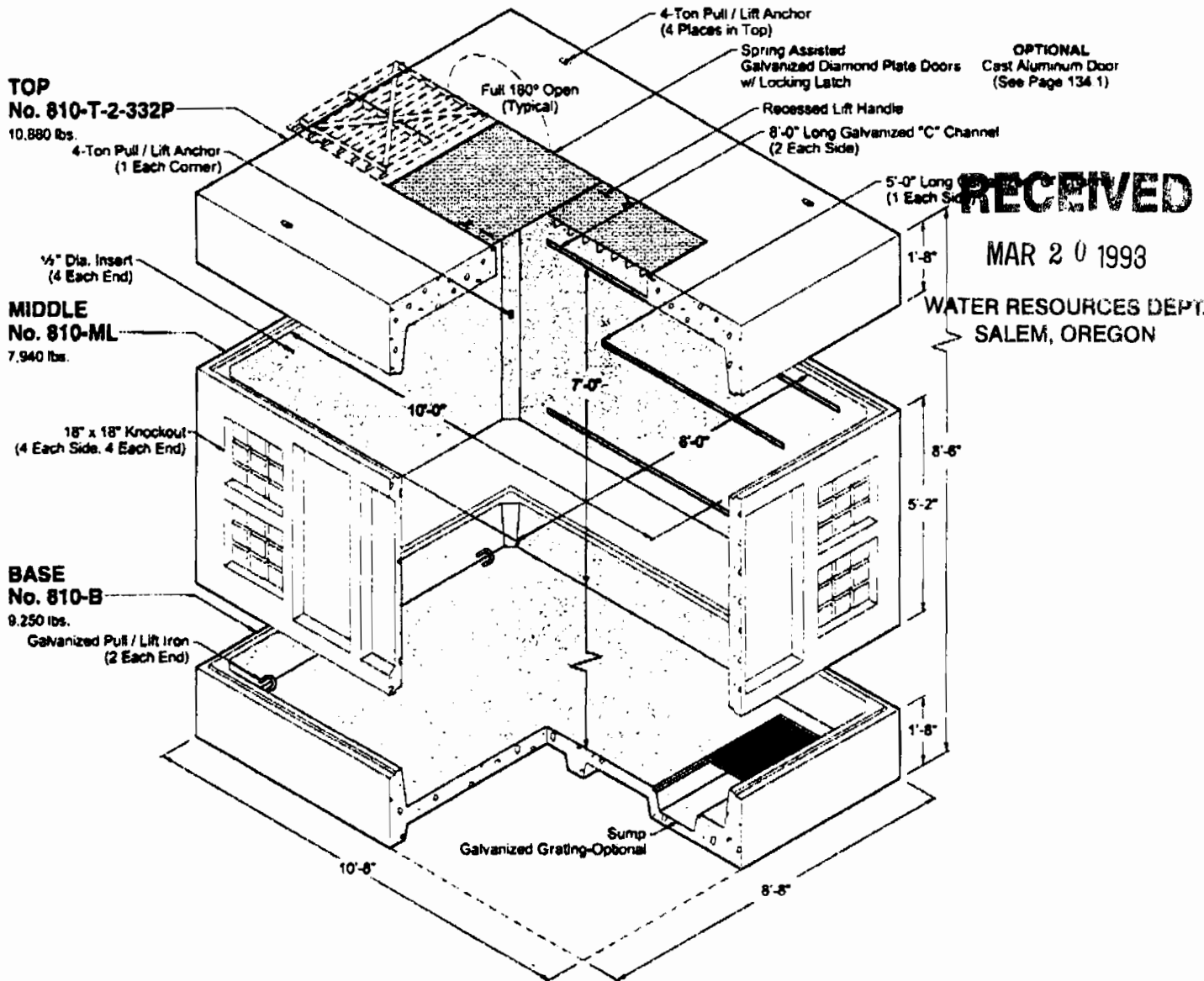
UTILITY VAULT™

PO Box 323
Wilsonville, Oregon 97070-0323

Phone (503) 682-2844
Fax (503) 682-2657

Division of Oldcastle Precast, Inc.

810-LA

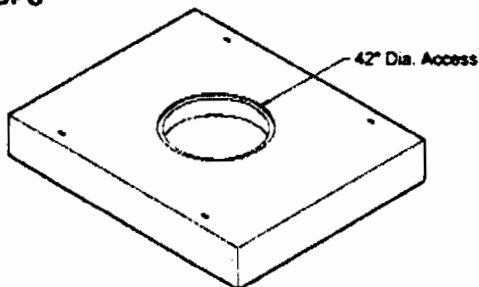


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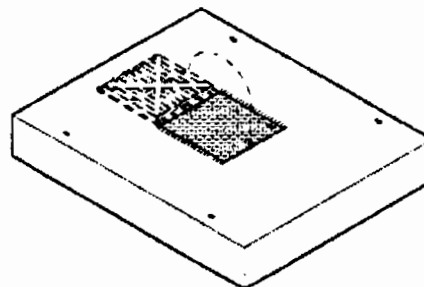
MAR 20 1998

WATER RESOURCES DEPT.
SALEM, OREGON

OPTIONAL TOPS



ROUND ACCESS
No. 810-T-42C
11,470 lbs.



LOCKING GALV. STEEL DOOR
No. 810-T-332P
11,770 lbs.

For Details and Additional Information, See:

- Reverse Side
- ACCESS DOORS Section
- RISERS Section
- Racking and Hardware, Page 64.0

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Wilsonville, Oregon 97070-0323

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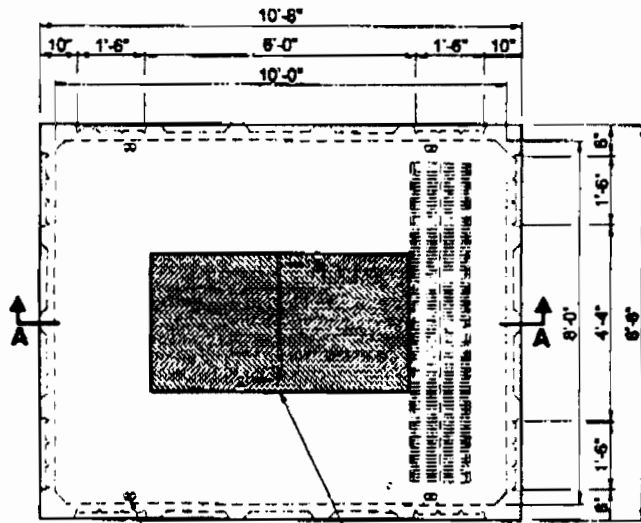
Division of Oldcastle Precast, Inc.

810-LA

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MAR 20 1998

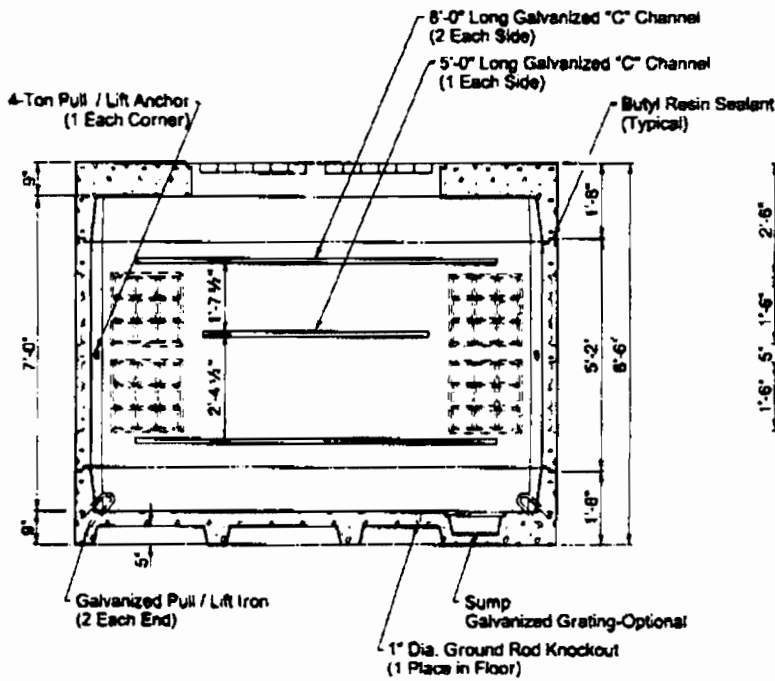
WATER RESOURCES DEPT.
SALEM, OREGON



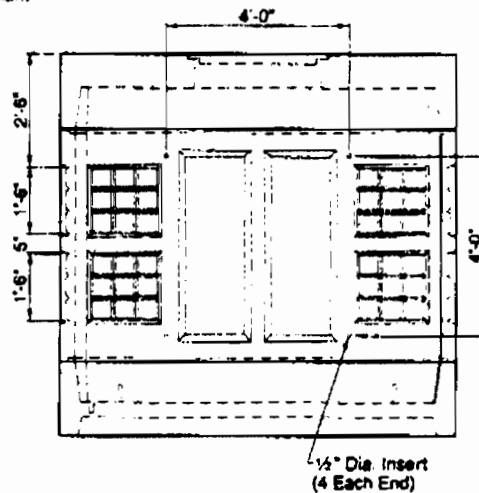
(4) - 4-Ton Lift Anchors

No. 2-332P
Spring Assisted
Galvanized Diamond Plate Doors
w/ Locking Latch

PLAN VIEW



SECTION AA



END VIEW

SCALE: 1/4" = 1'-0"



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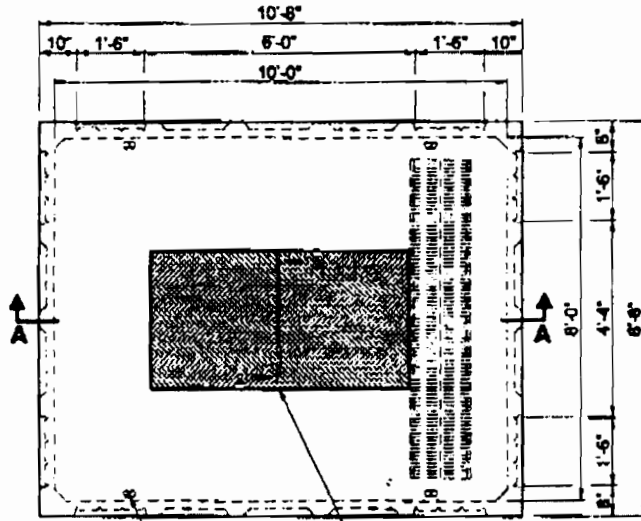
* ITEMS SHOWN ARE SUBJECT TO CHANGE WITHOUT NOTICE.

810-LA

RECEIVED

MAR 20 1993

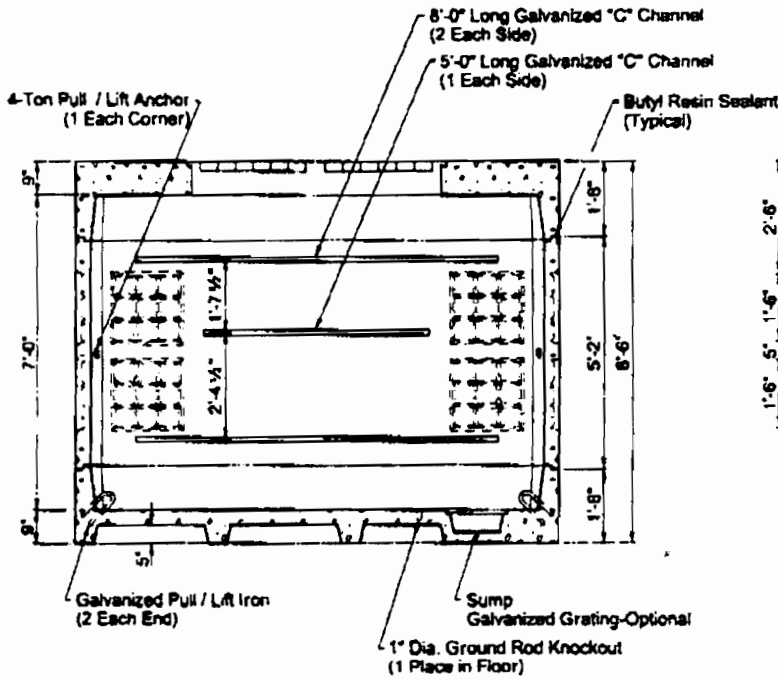
WATER RESOURCES DEPT.
SALEM, OREGON



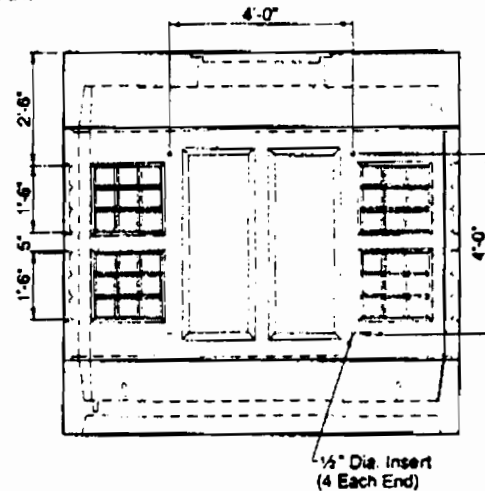
(4) - 4-Ton Lift Anchors

No. 2-332P
Spring Assisted
Galvanized Diamond Plate Doors
w/ Locking Latch

PLAN VIEW



SECTION AA



END VIEW

SCALE: 1/4" = 1'-0"



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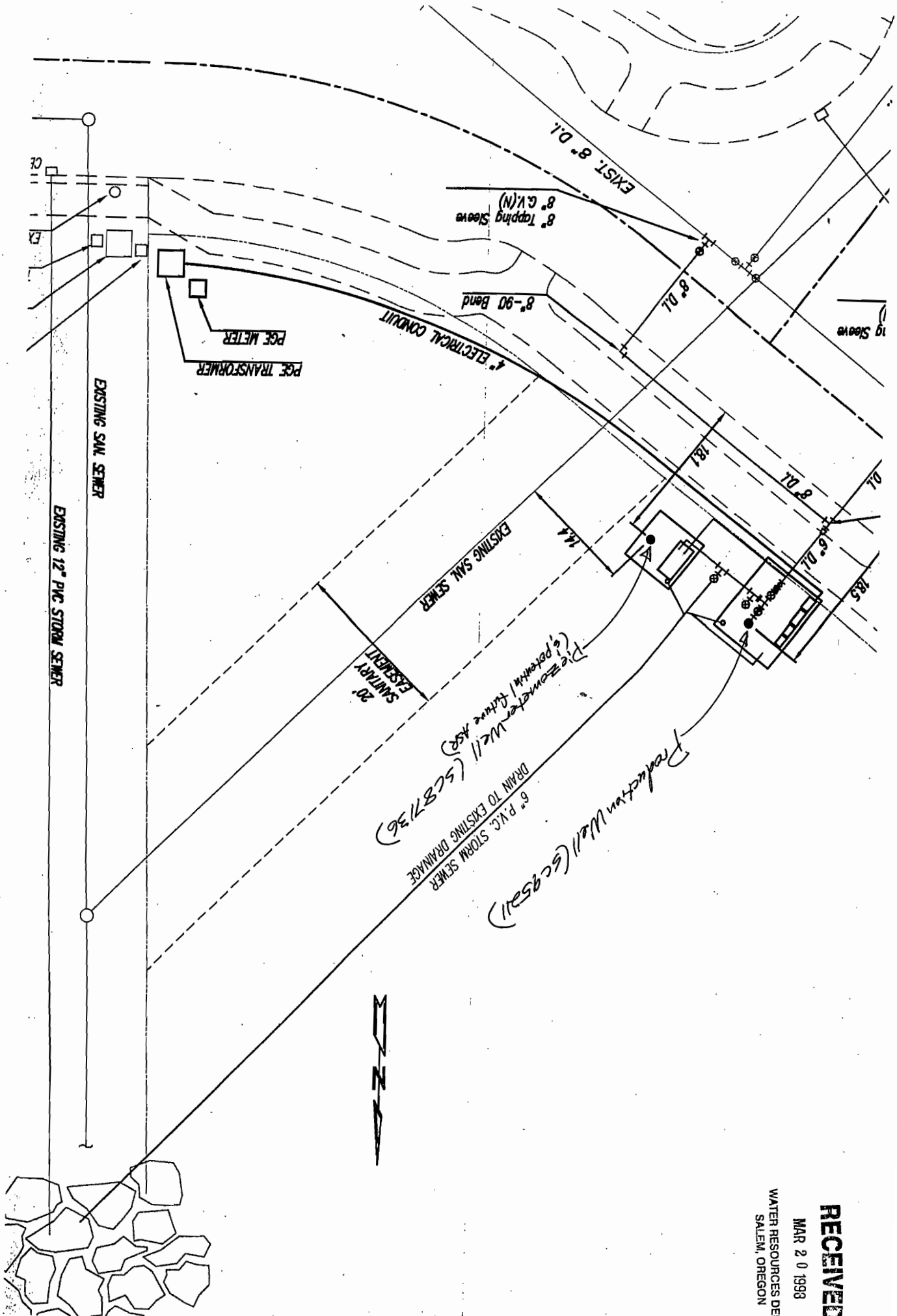
Division of Oldcastle Precast, Inc.

35.1

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© 1998 Oldcastle Precast, Inc.

Issue: 1998



RECEIVED
 MAR 20 1998
 WATER RESOURCES DEPT
 SALEM, OREGON

Oregon Water Resources Department

REQUEST FOR WRITTEN APPROVAL TO USE CONSTRUCTION METHODS NOT INCLUDED IN OREGON ADMINISTRATIVE RULES 690-200 THROUGH 690-240

Before request can be considered, the following must be answered. Requests shall be submitted to the Well Construction Specialist, Water Resources Department. Requests may also be considered by the appropriate Regional Manager.

Date of request: 2/2/98

Bonded Well Constructor (name, license and mailing address): Steve Schneider
WWC 649, 21881 River Rd NE, St. Paul, OR 97137

(1) Location of Well: SE 1/4 SW 1/4 of Section 1, Township 2S,
 Range 2E, Clackamas County.

Address at well site: next to 1470 Territory Drive
Clackamas, OR 97015

(2) Start Card Number(s): 87136

(3) Name and Address of ~~Land~~ ^{Well} Owner: Mt. Scott Water District
18602 SE 29th Ave
Portland, OR 97236

(4) The distance to the nearest well, septic tank or drainfield (if water supply well): New production

well 2/6 away. No septic tanks or drainfields in the area - area
is to be part and is surrounded by fairly new residential properties, served by
 (5) The unusual conditions which necessitate this request: sanitary ground & storm water drains

Well owner wishes to convert test hole to piezometer well
with potential future use also for ASR. Park setting
suggests flush completion would be most aesthetically desirable.
 (6) The proposed construction methods that the well constructor believes will be adequate for
 this well (attach additional pages if needed)

Basically the 8" casing will be abandoned by perforating
(4 row rotary) and then grouting almost full depth
after 4" casing installation. See attached sketches
of before and after.

1 of 6

W-UG, OT

remark conversion / ss on other dates also

- (7) Diagram showing the pertinent features of the proposed well design and construction (attach additional pages if needed):

See attached.

PLEASE NOTE:

- (1) If approved, all other phases of well construction must comply with the appropriate standards described in OAR 690-200 through 690-240.
- (2) If it should be determined at some future date that the well, due to its construction, is allowing groundwater contamination, waste or loss of artesian pressure, the undersigned shall return to the site and rectify the problem.
- (3) If verbal approval was granted, a written request must be submitted to the Department either within three (3) working days of the date of verbal approval or prior to the completion of the associated well work. Failure to submit a written request as described above may void prior approval.

I have read and understand the above information. I further attest that the information provided is accurate to the best of my knowledge.

Bonded Constructor Signature:

Stephen Schneider

For Water Resources Department Use Only

Date:

2-2-98

Approved by:

[Signature]

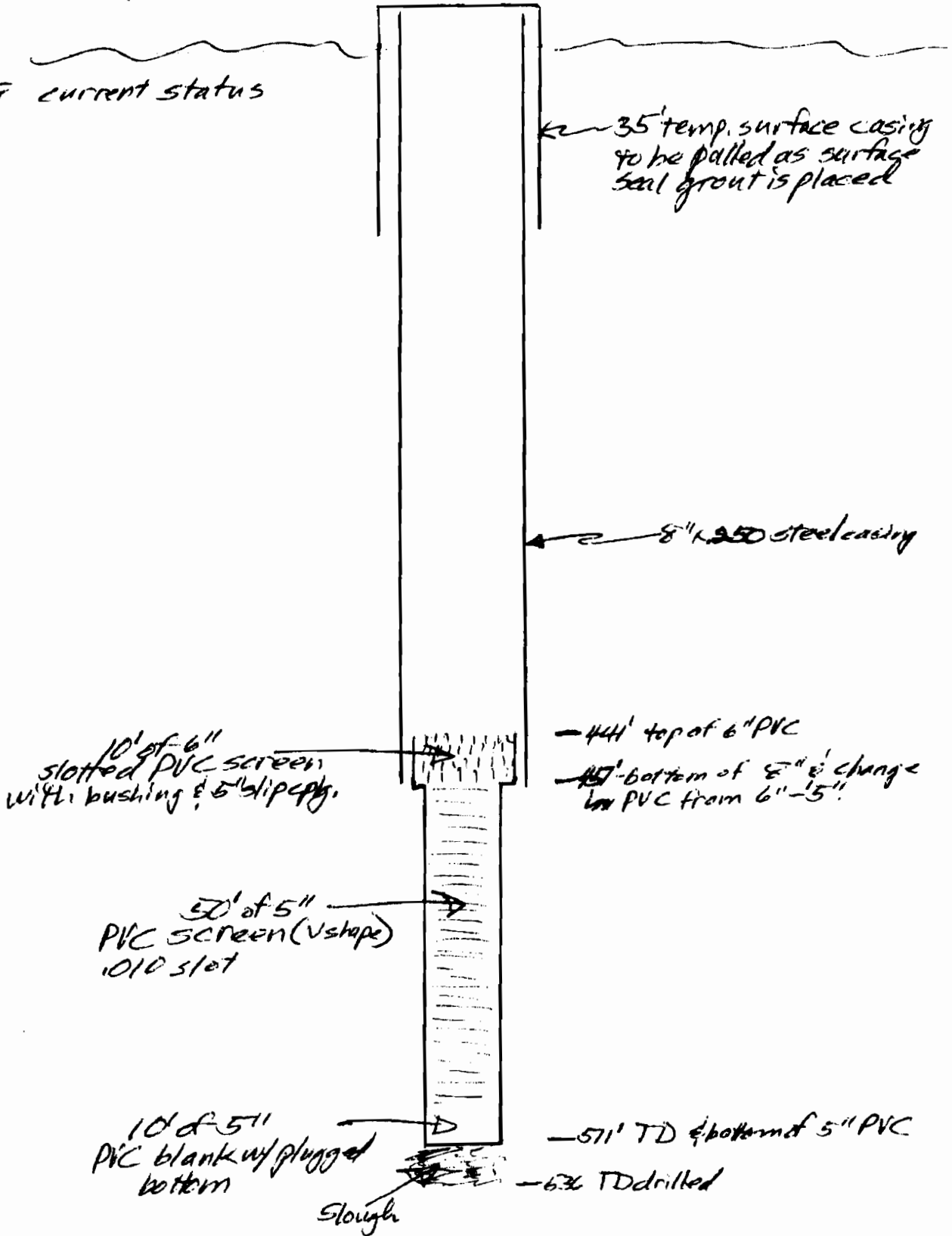
Denied by:

Remarks:

revised: 4-96

Mt. Scott W.D. Test Well - S.C. #87136

11/30/98 current status



← 35' temp. surface casing to be pulled as surface seal grout is placed

← 8" x 2.50 steel casing

10' of 6" slotted PVC screen with bushing & 5" slip cap

- 44' top of 6" PVC

- 44' bottom of 8" & change in PVC from 6" - 5"

50' of 5" PVC screen (V shape) 0.10 slot

10' of 5" PVC blank w/ plugged bottom

- 51' TD @ bottom of 5" PVC

- 63' TD drilled

Slough

Mt. Scott W.D. Test Well - S.C. #87136

← Slope ground surface to street * "Sherwood" cover mound ground around well

2/12/98 Proposed Completion

8" casing to have water injected continuously to prevent slough at start of perforating until grouting is completed (or at least up in top 60' of hole)

4 rows of air rotary perforations in 8" casing from top to w/30'. Grout to pumped thru flush OD tremie from bottom to top. Initial grout placement of calculated minimum 10 annulus volume will be allowed to set prior to additional grouting to minimize risk of getting grout in aquifer.

10" of 6" slotted PVC screen with 1/2" bushing & 5" slip pipe.

50' of 5" PVC screen (V shape) 10/10 slot

10" d-5" PVC blank w/ plugged bottom

Slough

35' temp. surface casing to be pulled as surface seal grout is placed

4" SCD to welded steel casing

8" L250 steel casing (cut off below ground surface as needed to install and seal cover on 4" casing)

CSSI 10x20 sand pack fill to prevent grout migration.

4x8 shale trap - 441' top of 6" PVC

45' bottom of 8" & change low PVC from 6"-5"

4x6 shale trap 5

511' TD & bottom of 5" PVC

536' TD drilled

CH2MHILL
MT. SCOTT WELL
 by Schneider Drilling Co.
 March 1996

<u>Depth</u>		
<u>From</u>	<u>To</u>	<u>Description</u>
0	3	Top soil, brown
3	20	Clay, brown, fine, sandy
20	24	Basalt, black, soft
24	30	Basalt, black, med, broken
30	35	Basalt, brown, soft, broken
35	60	Basalt, black, brown, & red, soft
60	70	Gravel 1"-, sluffing
70	75	Gravel 2"-, & sand, brown, med
75	84	Gravel 2"-
84	89	Clay, brown
89	97	Basalt, black, cindery
97	114	Basalt, black, vesicular, soft, w/claystone, brown
114	119	Basalt, black & gray, vesicular
119	133	Basalt, black, fractured, med-hard
133	137	Basalt, brown, broken, & claystone, brown
137	140	Clay, brown
140	145	Gravel & sand, brown, cemented
145	156	Gravel 2"-, & sand, brown, med
156	169	Gravel 2"-, & sand, brown, w/clay, brown
169	177	Sandstone, claystone, brown
177	181	Sandstone, & sand, brown, med-fine
181	199	Sand, brown, med-course, & gravel, 2"-
199	206	Sand, brown, med-course, w/gravel
206	213	Gravel 2"-, & sand, med-course
213	225	Gravel 2"-, sand, med, cemented
225	227	Sandstone, brown
227	229	Clay, brown
229	232	Clay, gray
232	236	Gravel 1"-, sand, black
236	248	Gravel & sand, cemented, w/some claystone
248	252	Gravel & claystone, brown
252	256	Claystone, brown
256	259	Sandstone, brown
259	275	Claystone, sandstone & clay lenses, brown
275	283	Claystone & siltstone, dark gray
283	296	Sandstone, black
296	298	Clay, blue-gray
298	305	Sandstone & claystone, brown, w/some gravel
305	307	Clay & claystone, gray
307	317	Sandstone & claystone, brown, w/some gravel
317	319	Claystone & clay, brown
319	322	Clay, gray & sandstone
332	327	Sandstone, brown

327	332	Sandstone & claystone, brown
332	336	Clay, gray
336	345	Sandstone, gray
345	347	Sand, black, w/some gravel & wood
347	354	Clay, blue
354	357	Claystone & sandstone, black
357	363	Clay, dark brown & claystone, sand, fine
363	372	Sandstone, clay & siltstone, black
372	380	Claystone & siltstone, dark gray
380	390	Sandstone & claystone, black
390	393	Claystone, gray
393	398	Clay, blue
398	411	Clay w/sand, green, dry
411	417	Sandstone, green-blue
417	421	Clay, blue, sticky
421	425	Clay, brown, sticky
425	430	Clay, gray, sticky
430	443	Clay, blue, sticky
443	445	Sand, dark gray, fine
445	451	Clay, blue
451	495	Sand, silty, gray, w/wood
495	497	Clay, blue
497	505	Clay, gray, sticky
505	515	Clay, brown, sticky
515	527	Clay, gray, sticky
527	536	Claystone, siltstone & clay, multi-colored



April 9, 1998

To: OR Water Resources Dept.
Rob Carter
Phone: 800-624-3199
Fax: 503-378-8130

From: Schneider Equipment, Inc. & Drilling Co.
Steve Schneider
Phone: 503-633-2666
Fax: 503-633-2668

Pages: 1

Subject: Mt. Scott WD wells

Rob:

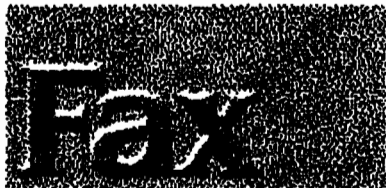
Thought I'd give you a quick 'quarterly' update. Pursuant to the last special standards to put both wells in vaults, we have completed the wells temporarily above ground and moved the rig offsite. Final pump design is being reviewed and vaults and installation coordinated so the approved below ground (vault) completion can be completed. We expect that this should be the last quarterly report since the wells should be completed and logs filed before June 30, 1998.

Please call if you have any questions.

Regards,

Steve

Cc: Tim Janssen



January 30, 1998

To: OR Water Resources Dept.
Rob Carter
Phone: 800-624-3199
Fax: 503-378-8130

From: Schneider Equipment, Inc. & Drilling Co.
Steve Schneider
Phone: 503-633-2666
Fax: 503-633-2668

Pages: 5

Subject: Mt. Scott WD test well completion

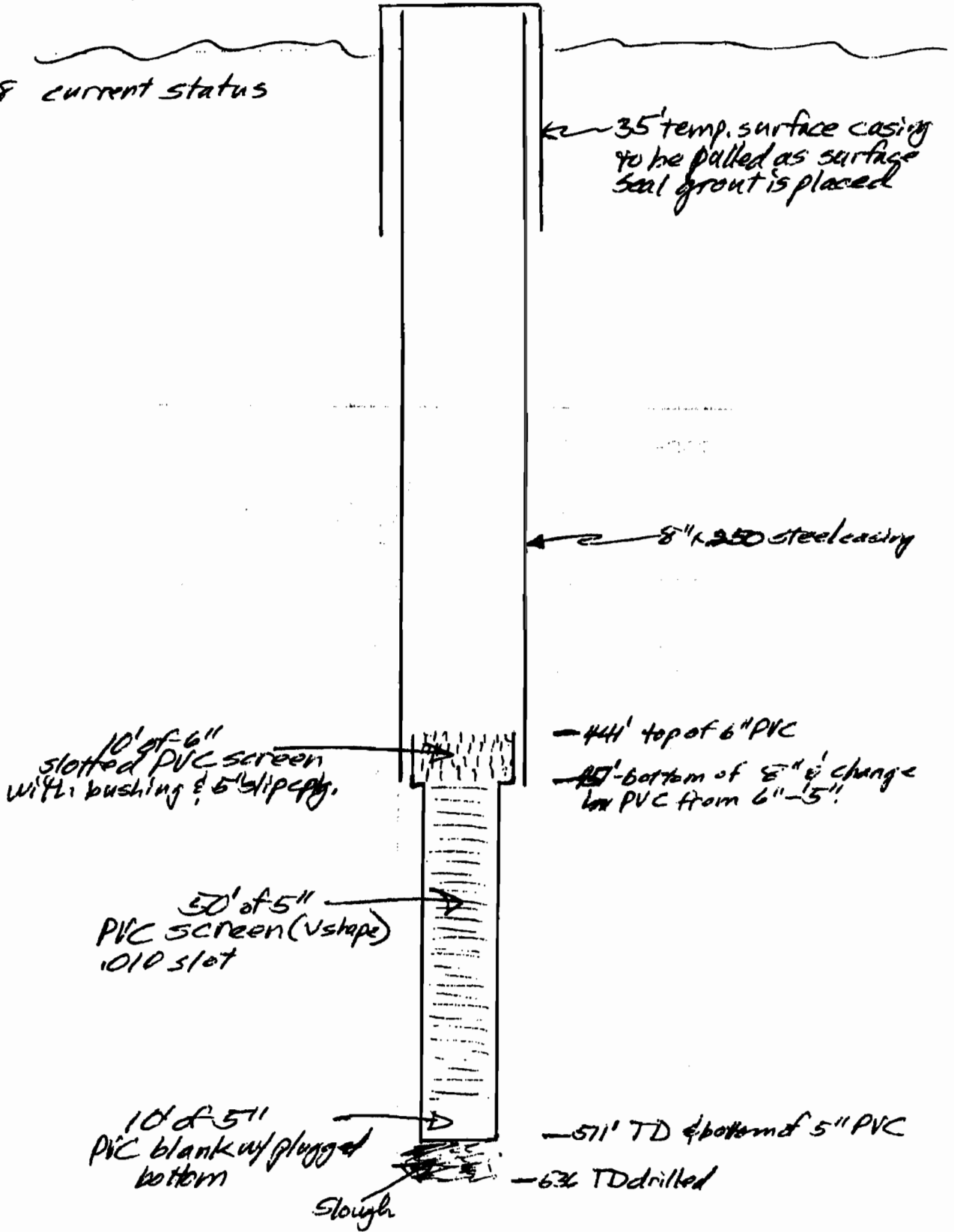
Rob:

Attached is a sketch of the well's current construction and a sketch of the proposed completion in addition to the formation log. I'll see you this afternoon to discuss.

Regards,
Steve

Mt. Scott W.D. Test Well - S.C. #87136

11/30/98 current status



Mt. Scott W.D. Test Well - S.C. #87136

1/30/98 proposed completion

gherard
flush grade

35' temp. surface casing
to be pulled as surface
seal grout is placed

4" sch 40 steel pipe - welded

air rotary perforations
in 8" from top to ~430'
with grout pumped thru
1" frame from bottom to top.

8" x 250 steel casing

10' plug.
approx 430' - grout/sand interface

cast 10 x 20
sand backfill to prevent
downward grout migration
10' of 6"
slotted PVC screen
with bushing & 5" slip cap.

- 441' top of 6" PVC
- 457' bottom of 8" & change
to PVC from 6" - 5"

stone
traps
4x16

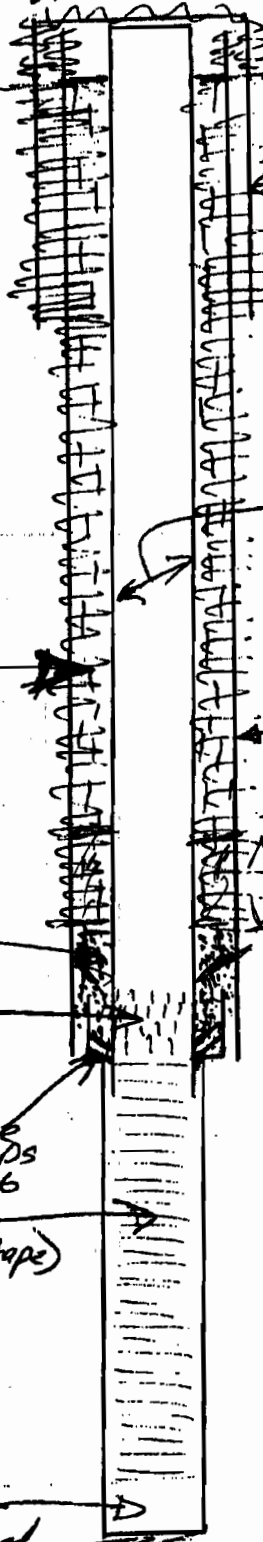
50' of 5"
PVC screen (V shape)
10/10 slot

10' of 5"
PVC blank out/plugged
bottom

- 511' TD @ bottom of 5" PVC

- 636 TD drilled

Slough



CH2MHILL
MT. SCOTT WELL
 by Schneider Drilling Co.
 March 1996

<u>Depth</u>		<u>Description</u>
<u>From</u>	<u>To</u>	
0	3	Top soil, brown
3	20	Clay, brown, fine, sandy
20	24	Basalt, black, soft
24	30	Basalt, black, med, broken
30	35	Basalt, brown, soft, broken
35	60	Basalt, black, brown, & red, soft
60	70	Gravel 1"-, sluffing
70	75	Gravel 2"-, & sand, brown, med
75	84	Gravel 2"-
84	89	Clay, brown
89	97	Basalt, black, cindery
97	114	Basalt, black, vesicular, soft, w/claystone, brown
114	119	Basalt, black & gray, vesicular
119	133	Basalt, black, fractured, med-hard
133	137	Basalt, brown, broken, & claystone, brown
137	140	Clay, brown
140	145	Gravel & sand, brown, cemented
145	156	Gravel 2"-, & sand, brown, med
156	169	Gravel 2"-, & sand, brown, w/clay, brown
169	177	Sandstone, claystone, brown
177	181	Sandstone, & sand, brown, med-fine
181	199	Sand, brown, med-course, & gravel, 2"-
199	206	Sand, brown, med-course, w/gravel
206	213	Gravel 2"-, & sand, med-course
213	225	Gravel 2"-, sand, med, cemented
225	227	Sandstone, brown
227	229	Clay, brown
229	232	Clay, gray
232	236	Gravel 1"-, sand, black
236	248	Gravel & sand, cemented, w/some claystone
248	252	Gravel & claystone, brown
252	256	Claystone, brown
256	259	Sandstone, brown
259	275	Claystone, sandstone & clay lenses, brown
275	283	Claystone & siltstone, dark gray
283	296	Sandstone, black
296	298	Clay, blue-gray
298	305	Sandstone & claystone, brown, w/some gravel
305	307	Clay & claystone, gray
307	317	Sandstone & claystone, brown, w/some gravel
317	319	Claystone & clay, brown
319	322	Clay, gray & sandstone
322	327	Sandstone, brown

327	332	Sandstone & claystone, brown
332	336	Clay, gray
336	345	Sandstone, gray
345	347	Sand, black, w/some gravel & wood
347	354	Clay, blue
354	357	Claystone & sandstone, black
357	363	Clay, dark brown & claystone, sand, fine
363	372	Sandstone, clay & siltstone, black
372	380	Claystone & siltstone, dark gray
380	390	Sandstone & claystone, black
390	393	Claystone, gray
393	398	Clay, blue
398	411	Clay w/sand, green, dry
411	417	Sandstone, green-blue
417	421	Clay, blue, sticky
421	425	Clay, brown, sticky
425	430	Clay, gray, sticky
430	443	Clay, blue, sticky
443	445	Sand, dark gray, fine
445	451	Clay, blue
451	495	Sand, silty, gray, w/wood
495	497	Clay, blue
497	505	Clay, gray, sticky
505	515	Clay, brown, sticky
515	527	Clay, gray, sticky
527	536	Claystone, siltstone & clay, multi-colored



December 19, 1997

To: OR Water Resources Dept.
Rob Carter
Phone: 800-624-3199
Fax: 503-378-8130

From: Schneider Equipment, Inc. & Drilling Co.
Steve Schneider
Phone: 503-633-2666
Fax: 503-633-2668

Pages: 1

Subject: Mt. Scott Water District well update (SC 95211 & 87136)

Rob:

Just a quarterly update on the project:

We have exchanged the cable tool rig for a mud rotary on the production well (95211) and have drilled, cased and are currently sealing to 450'+/-. We will then switch to reverse circulation and drill, screen and filter pack the lower hole (probably the first part of January). Expect to have test pump data by the end of January and a decision shortly thereafter as to what to do with the first well (87136).

Aren't you surprised not to be receiving a special standard request from me again?

Have a Merry Christmas!

Regards,

Steve

September 12, 1997

WATER
RESOURCES
DEPARTMENT

Steve Schneider
Schneider Equipment, Inc.
21881 River Road NE
St. Paul, OR 97137

Dear Steve:

I have received your request for a modification of your most recent special standard (dated July 18, 1997) on the Mt. Scott Water Dist. well (start card number 87136).

You are currently constructing an additional production well on the site and have requested permission to leave well 87136 in its current condition until the new well is completed and the water right finalized. This will allow the District to better decide whether to complete or abandon well 87136.

Your request is approved with the following conditions:

1. An operable drilling machine must be present on the site until well 87136 has been either completed or abandoned.
2. Either you or a representative of the District must provide me with a quarterly site progress report (beginning on October 1, 1997) until completion of the project.

If you have any questions concerning this letter, please contact me at the address or phone number listed below.

Sincerely,



Rob Carter

Well Construction Specialist

cc: Jeff Barry, CH2M Hill
John Thomas, Mt. Scott W.D.
Richard Edwards, Well Inspector

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Commerce Building
158 12th Street NE
Salem, OR 97310-0210
(503) 378-3739
FAX (503) 378-8130

W-OT
remark

RECEIVED

SEP - 2 1997

WATER RESOURCES DEPT.
SALEM, OREGON

OR CCB No. 39265
WA General Contractor
No. SCHNEI *226LG



**SCHNEIDER
EQUIPMENT, INC.
AND DRILLING CO.**

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21881 River Road N.E., St. Paul, Oregon 97137
Phone (503) 633-2666 • Fax (503) 633-2668

Thursday, August 28, 1997

Rob Carter
OR Water Resources Dept.
158 - 12th Street NE
Salem, OR 97310

REF: Mt. Scott Water District Well – Start Card No. 87136

Dear Rob:

This letter is pursuant to our telcon on Tuesday, August 26, 1997 and your approval on July 18, 1997 for additional extension of time to allow temporary drilling machine removal until September 30, 1997 on the above referenced well.

On August 15, 1997, the District authorized us to proceed with converting the referenced well into a production well as soon as possible. Our first order of activity involved a video scan of the well which revealed a much larger than anticipated opening in the temporary casing believed created by drilling up through a deformation caused by formation slough during advancement of the casing. The casing strength at this hole has been significantly reduced. In addition the encrustation observed on the casing interior and time the casing has been in the ground gives us major concern about trying to extract the casing in order to convert the test hole to a production well.

We are therefore beginning construction of a production well approximately 16' from the test well (Start Card No. 95211 has been submitted). The production well construction will probably take until the end of the year to complete. We probably will want to eventually abandon the test well by backfilling the PVC screened interval below 440' with a clean sand or gravel to protect the aquifer, perforating the 8" casing and pressure cement grouting the well above approximately 440' to within approximately 5' of land surface, and removing the shallow (35' bgs) temporary 10" casing; however, there is a possibility that the test well could prove useful as a piezometer or observation well to the District if during their permit process a protest is filed. Their permit is reportedly satisfactorily through the initial review phase and ready for the public comment phase. Accordingly, we would like to keep our options open regarding the 8" test well until the permit is through it's public review phase. This should be long before we are nearing completion of the production well. Considering that we will be actively pursuing construction at the site from now

until both wells are complete (or abandoned), we would like your approval to not have a rig directly over the test hole prior to September 30, 1997, but to have a rig on site at least pursuing construction of the production well and to complete (or abandon) the test hole in conjunction with the production well construction, and certainly without leaving the site vacated of a rig being used for active construction (including abandonment) of either well.

Thank you for your consideration of this request, if you have any questions or want to discuss further, please do not hesitate to call.

Sincerely,

A handwritten signature in black ink, appearing to read "Steve Schneider". The signature is fluid and cursive, with the first name "Steve" written in a larger, more prominent script than the last name "Schneider".

Steve Schneider
Vice President

RECEIVED

SEP - 2 1997

WATER RESOURCES DEPT.
SALEM, OREGON

CC: Mt. Scott Water District
CH2M Hill



Oregon

John A. Kitzhaber, M.D., Governor

Water Resources Department

Commerce Building
158 12th Street NE
Salem, OR 97310-0210
(503) 378-3739
FAX (503) 378-8130

November 17, 1997

Steve Schneider
Schneider Equipment, Inc.
21881 River Road NE
St. Paul, OR 97137

Dear Steve:

I have received and reviewed your request for a special standard on the Mt. Scott Water Dist. well (start card number 95211).

Recent information obtained by the District indicates the presence of a sanitary sewer line within 50 feet of this well. It is anticipated that this well will be sealed extensively into the basalts at approximately 450 feet below land surface. Given this type of construction, your request is approved with the following conditions:

1. The well must be continuously sealed to a minimum of 200 feet or 25 feet into the basalt rock overlying the target aquifer.
2. The District must be informed that this well is located within the minimum setback distances and that frequent water potability testing is recommended.

If you have any questions concerning this letter, please contact me at the address or phone number listed above, or by e-mail at Robert.L.Carter@wrds.state.or.us.

Sincerely,

Rob Carter

Well Construction Specialist

cc: Richard Edwards, Well Inspector

m:\wp\ss97\schneid.6

W-5L



November 13, 1997

To: OR Water Resources Dept.
Rob Carter
Phone: 800-624-3199
Fax: 503-378-8130

From: Schneider Equipment Inc. & Drilling Co.
Steve Schneider
Phone: 503-633-2666
Fax: 503-633-2668

Pages: 6

Subject: Mt. Scott WD Special Standard

Rob:

Apparently the District didn't get all the sanitary sewer lines located earlier and have just discovered we are within 50 feet of one. We propose an extensive seal (estimated 450' depth) on this well, do you see a problem with us proceeding? FYI, we have the cable tool portion of the well drilled to 173 feet and expect to be changing to mud rotary equipment next week if this special standard request is okay. If the nearby test hole is abandoned would it need a special standard? If it is desired to convert the test hole to a well (e.g. piezometer), we will submit a special standard request on it also related to this sanitary sewer location issue.

Please do not hesitate to call if you have any questions regarding this latest little event on this interesting and prolonged project.

Regards,
Steve

Oregon Water Resources Department

REQUEST FOR WRITTEN APPROVAL TO USE CONSTRUCTION METHODS NOT INCLUDED IN OREGON ADMINISTRATIVE RULES 690-200 THROUGH 690-240

Before request can be considered, the following must be answered. Requests shall be submitted to the Well Construction Specialist, Water Resources Department. Requests may also be considered by the appropriate Regional Manager.

Date of request: 11/13/97

Bonded Well Constructor (name, license and mailing address): Stephen J. Schneider
WWC 649 21887 River Rd NE, St. Paul, OR 97137

(1) Location of Well: SE 1/4 SW 1/4 of Section 1, Township 2S,
Range 2E, Clackamas County.

Address at well site: next to 14701 Territory Drive
Clackamas, OR 97015

(2) Start Card Number(s): 95211

(3) Name and Address of Land Owner: Mt. Scott Water District
10602 SE 129th Ave. Portland, OR 97236

(4) The distance to the nearest well, septic tank or drainfield (if water supply well): nearest
well is approx. 16' away (SC #87136). No known septic or drainfields
in the vicinity

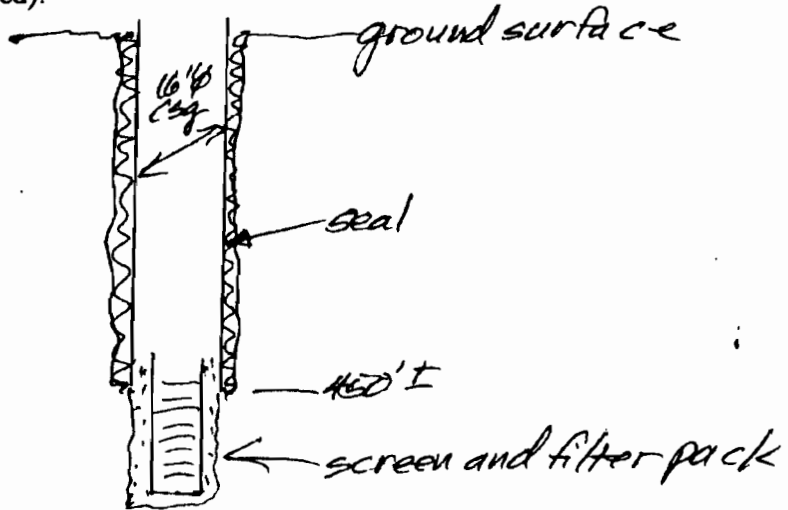
(5) The unusual conditions which necessitate this request: _____

See attached letter from Mt. Scott W/D
dated 11/12/97 re: 8" sewer line within 50 feet just
recently discovered.

(6) The proposed construction methods that the well constructor believes will be adequate for this well (attach additional pages if needed)

Provide a deeper seal - seal depth is expected
to run from 0 to approximately 450' bgs.

- (7) Diagram showing the pertinent features of the proposed well design and construction (attach additional pages if needed):



PLEASE NOTE:

- (1) If approved, all other phases of well construction must comply with the appropriate standards described in OAR 690-200 through 690-240.
- (2) If it should be determined at some future date that the well, due to its construction, is allowing groundwater contamination, waste or loss of artesian pressure, the undersigned shall return to the site and rectify the problem.
- (3) If verbal approval was granted, a written request must be submitted to the Department either within three (3) working days of the date of verbal approval or prior to the completion of the associated well work. Failure to submit a written request as described above may void prior approval.

I have read and understand the above information. I further attest that the information provided is accurate to the best of my knowledge.

Bonded Constructor Signature: *Klaus Schneider*
V.P. Schneider Drilling Co.

For Water Resources Department Use Only

Date: 11-17-97

Approved by: *[Signature]* Denied by: _____

Remarks: see attached letter



10802 S.E. 129th Avenue • Portland, OR 97236-6271 • Phone - (503) 761-0220 • Fax - (503) 761-7406

Wednesday, November 12, 1997

Steve Schneider
Schneider Equipment, Inc. and Drilling Co.
21881 River Road N.E.
St. Paul, OR 97137

Dear Steve:

The Mt. Scott Water District has recently discovered that a Clackamas County sewer line runs within 30 feet of the new well Schneider Equipment has been drilling for the District (see Attachment I). Before the drilling began, Mt. Scott staff requested utility locates and reviewed a Clackamas County Assessor's map, of which neither showed a sewer line cutting through the North Clackamas County Parks and Recreation property. The Assessor's map only shows a 10 foot pedestrian walkway easement (see Attachment II), but it does not show an easement for a sewer line. The locates only indicated a sewer line running along the eastern edge of the Park's property. Given the locates and County information, the well was located so that it would be at least 50 feet from the sewer line.

While completing the design for the pump vault, the District discovered a sewer line closer than the 50 foot designation. It is our understanding that you will be requesting a waiver from the State Water Resources Department for the 50 foot setback requirement based on your well casing design for the project. Please keep us advised as to the outcome.

Sincerely,

Tim Janssen
Tim Janssen
Associate Engineer

1/4 SEC. 1 T2S R2E W.M. LACKAMAS COUNTY

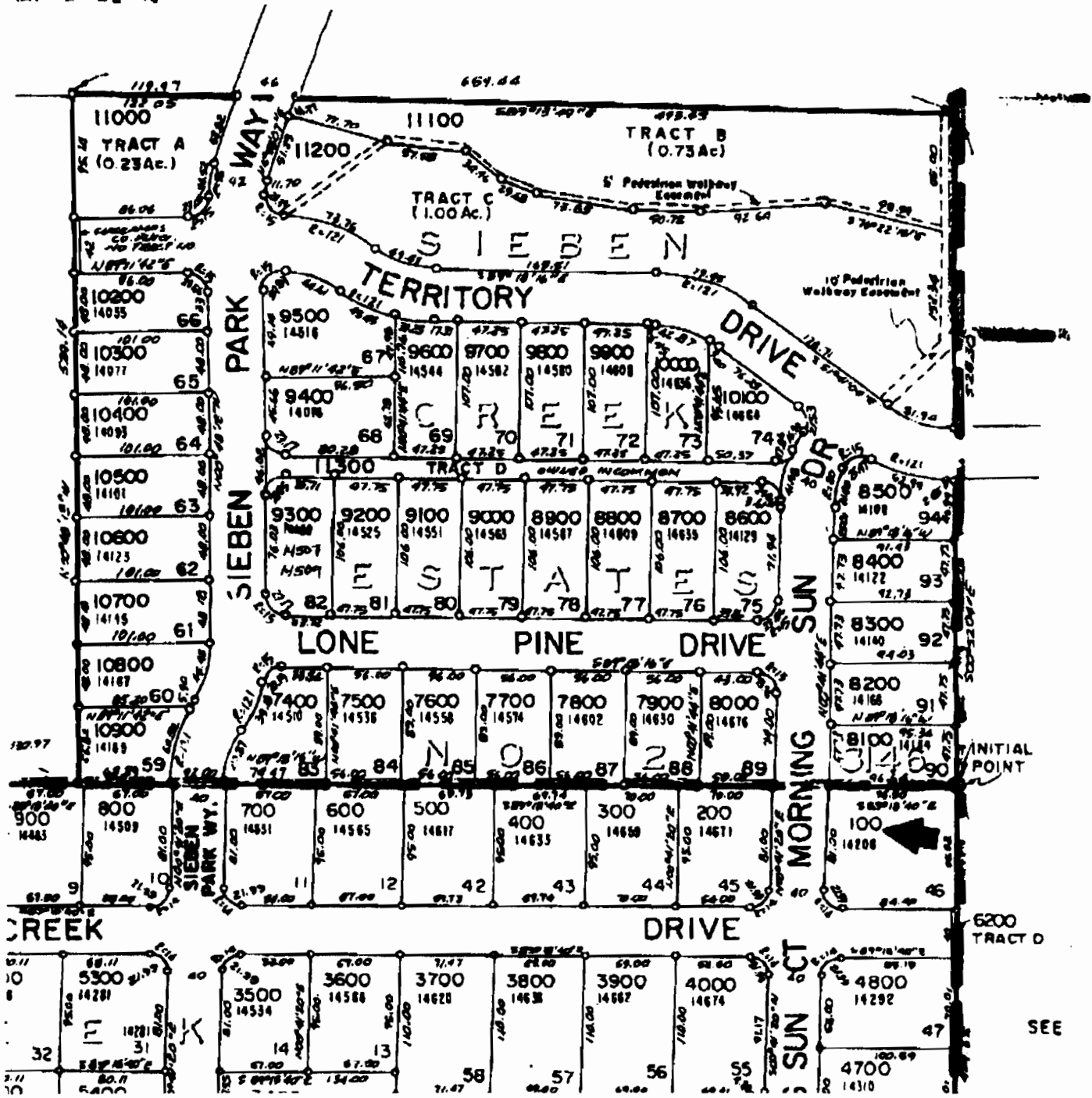
SCALE 1" = 100'

ATTACHMENT II

22E01CC

14700

IAP 2 2E 1C



SEE

July 18, 1997

WATER
RESOURCES
DEPARTMENT

Steve Schneider
Schneider Equipment , Inc.
21881 River Road NE
St. Paul, OR 97137

Dear Steve:

I have received your request for an additional extension in time to allow temporary drilling machine removal on the Mt. Scott Water Dist. well (start card number 87136).

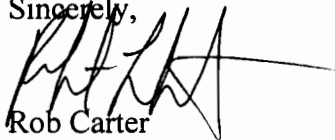
Your request is approved with the following conditions:

1. The well must be completed/abandoned or a drilling machine must be returned to the well no later than September 30, 1997.
2. No additional extensions of time will be granted for this project.

The above time frame should provide the District with adequate time to finalize plans for the well.

If you have any questions concerning this letter, please contact me at the address or phone number listed below.

Sincerely,



Rob Carter
Well Construction Specialist

cc: Jeff Barry, CH2M Hill
John Thomas, Mt. Scott W.D.
Richard Edwards, Well Inspector

m:\wp\ss97\schneid.2



Commerce Building
158 12th Street NE
Salem, OR 97310-0210
(503) 378-3739
FAX (503) 378-8130

W-DR

RECEIVED

JUL 17 1997

WATER RESOURCES DEPT.
SALEM, OREGON

OR CCB No. 39265
WA General Contractor
No. SCHNEI *226LG

**SCHNEIDER
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AND DRILLING CO.**

COMPLETE WATER SYSTEMS
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21881 River Road N.E., St. Paul, Oregon 97137
Phone (503) 633-2666 • Fax (503) 633-2668

Tuesday, July 15, 1997

Rob Carter
Water Resources Dept.
158 - 12th Street NE
Salem, OR 97310

RE: Mt. Scott Water District Well – Start Card No. 87136

Dear Rob:

Pursuant to our telcons and yours with Jeff Barry of CH2M Hill, it is requested that the special standard approved May 15, 1996, to allow temporary rig removal on the above referenced well be extended once again for a period up to September 30, 1997. We understand that you would like construction of the well to be complete by this time or at least have a rig on site actively pursuing completion. This request is to allow Mt. Scott Water District additional time to finalize completion plans for the well.

Please call myself or Jeff Barry at (503) 235-5022 x4477, if you have any questions.

Sincerely,



Steve Schneider
Vice President

Cc: Jeff Barry, CH2M Hill
Daryl Zinser, Mt. Scott Water District



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AND DRILLING CO.**

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*Confirmation
letter*

OR CCB No. 39265
WA General Contractor
No. SCHNEI *226LG

21881 River Road N.E., St. Paul, Oregon 97137
Phone (503) 633-2666 ♦ Fax (503) 633-2668

October 9, 1996

Oregon Water Resources Dept.
158 - 12th St. NE
Salem, OR 97310

ATTN: Rob Carter
RE: Mt. Scott Water District Well
Start Card No. 87136

RECEIVED

OCT 11 1996

WATER RESOURCES DEPT.
SALEM, OREGON

Dear Rob:

Pursuant to our site visit of Friday, October 4, 1996, it is requested that the special standard approved May 15, 1996, to allow temporary rig removal on the above referenced well be extended for a period up to May 1, 1997. This extension will allow the Mt. Scott Water District time to coordinate financing for well completion along with the time to date used for coordinating the property easements, etc. with the North Clackamas County Parks District.

Please call myself or Jeff Barry at CH2M Hill (503)235-5022 x4477, if you have any questions.

Sincerely,



Stephen J. Schneider
Vice President - Drill Operations

cc: Jeff Barry
Daryl Zinser

May 15, 1996

WATER
RESOURCES
DEPARTMENT

Steve Schneider
Schneider Equipment , Inc.
21881 River Road NE
St. Paul, OR 97137

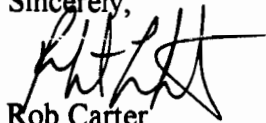
Dear Steve:

Please find enclosed a copy of the following approved special standard request:

1. Mount Scott Water District

If you have any questions concerning this letter, please contact me by phone at (541) 396-3121 x388, by fax at (541) 396-6233 or by letter at 290 N. Central Street, Coquille, OR 97423.

Sincerely,



Rob Carter
Well Construction Specialist

cc: Richard Edwards, Well Inspector

c:\wp\ss96\schneid.1



Oregon Water Resources Department

REQUEST FOR WRITTEN APPROVAL TO USE CONSTRUCTION METHODS NOT INCLUDED IN OREGON ADMINISTRATIVE RULES 690-200 THROUGH 690-240

Before request can be considered, the following must be answered. Requests shall be submitted to the Well Construction Specialist, Water Resources Department. Requests may also be considered by the appropriate Regional Manager.

Date of request: May 14, 1996

Bonded Well Constructor (name, license and mailing address): Steve Schneider
WWC 649, 2188 River Rd NE, St. Paul, OR 97137

(1) Location of Well: SE 1/4 SW 1/4 of Section 1, Township 2S
Range 2E, Clackamas County.

Address at well site: next to 1470 Territory Drive
Clackamas OR 97015

(2) Start Card Number(s): 87136

(3) Name and Address of ^{well} Land Owner: Mt. Scott Water District
10602 SE 129th Ave
Portland, OR 97

(4) The distance to the nearest well, septic tank or drainfield (if water supply well): well

over 100' (none known to be in the area) - only sanitary sewer and storm water drains in the area

(5) The unusual conditions which necessitate this request: Mt. Scott Water

District is negotiating intergovernmental agreement with N. Clackamas City Parks Dist (landowner) and needs until approximately 6/14/96 to finalize that agreement.

(6) The proposed construction methods that the well constructor believes will be adequate for this well (attach additional pages if needed)

No construction changes except to allow temporary rig removal while site negotiations are being finalized. We will weld cap on 8" casing and excavate 2'-3' down around the casing and back filling with granular material to temporarily protect the well from surface water

w-DR

- (7) Diagram showing the pertinent features of the proposed well design and construction (attach additional pages if needed):

no specific permanent design/construction variances are anticipated

PLEASE NOTE:

- (1) If approved, all other phases of well construction must comply with the appropriate standards described in OAR 690-200 through 690-240.
- (2) If it should be determined at some future date that the well, due to its construction, is allowing groundwater contamination, waste or loss of artesian pressure, the undersigned shall return to the site and rectify the problem.
- (3) If verbal approval was granted, a written request must be submitted to the Department either within three (3) working days of the date of verbal approval or prior to the completion of the associated well work. Failure to submit a written request as described above may void prior approval.

I have read and understand the above information. I further attest that the information provided is accurate to the best of my knowledge.

Bonded Constructor Signature: _____

Stephen Schneider

For Water Resources Department Use Only

Date: _____

5-15-96

Approved by: _____

[Signature]

Denied by: _____

Remarks: _____



SCHNEIDER EQUIPMENT, INC. AND DRILLING CO.

WELL DRILLING
IRRIGATION
CONTROL SYSTEMS

OR CCB #39265
WA Gen. Cont. #SCHNEI*226LG

PUMPS
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SALES AND SERVICE

FAX (503) 633-2668

21881 River Road N.E. St. Paul, Oregon 97137 (503) 633-2666

FAX TRANSMITTAL

DATE: 5/20/96

TO: Rob Carter
WRID
Fax 396-6233

NUMBER OF PAGES (INCLUDING COVER SHEET): 1

RE: Mt. Scott WD ASR Well (SC #87136)

MEMO: Rob - I noticed an error in my 5/14/96
request for variance! The "8" casing" is "10"
casing". Thought I'd send you this note
for your file since it was brought to my
attention today. If you need a resubmitted
let me know; otherwise I'll presume this fax
is all you need. Thanks for your prompt
reply to the request.

Regards,
Steve S.