

725 Summer St NE, Ste A Salem, OR, 97301 Phone: 503-986-0900 Fax: 503-986-0904

April 24, 2020

**STEPHEN J SCHNEIDER WWC# 649** SCHNEIDER WATER SERVICES 21881 RIVER ROAD NE ST. PAUL, OREGON 97137

# FINAL ORDER

Dear Mr. Schneider:

The Special Standards Request Form you submitted for owner: Townsend Farms Inc., Start Card number 216490 is hereby approved for the following: You may decommission this water supply well as described on your Special Standards Request Form dated April 22, 2020 and attached email decommissioning description dated April 14, 2020. The stipulations for this special standard request approval are; The work on this well shall include the cleaning out and abandoning of the borehole from the current bottom of the well at 260 feet to 297 feet below ground surface. All cased intervals shall be thoroughly ripped or perforated so that grout, applied under 50 psi pressure, may migrate outside the casing and effectively prevent the vertical movement of water. Perforations are not required in the wirewound stainless screened interval. However, perforations are required in the following cased intervals:

25 to 145 feet 145 to 155 feet (An attempt shall be made to perforate this interval) 155 to 205 feet 245 to 260 feet

If grout losses are encountered, then additional cement grout shall be placed in the well using a suitable method and pressure applied again until grout loss subsides. Placement of cement grout shall continue until there is no more grout loss. The casing may be cut and crushed rock placed within a few feet of ground surface as consistent with future work to be done on site. All other well abandonment standards apply as required under Oregon Administrative Rules 690-220. A copy of your Special Standards Request Form is enclosed.

If you have any questions concerning this letter, I may be contacted at (503) 986-0852, or by e-mail at Travis.N.Kelly@oregon.gov.

Sincerely,

Thelly

Travis Kelly, Coordinator Well Construction Program Well Construction and Compliance Section

enclosure

Tommy Laird, Well Inspector, NW Region cc:

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.



**Oregon Water Resources Department** 725 Summer Street NE, Suite A Salem Oregon 97301-1266 (503) 986-0900 www.wrd.state.or.us



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

Before the request can be considered, this form must be completed. Requests shall be submitted to the Well Construction Program Coordinator, Water Resources Department, 725 Summer Street NE, Suite A, Salem OR 97301-1266. Requests may also be considered by the appropriate Regional Manager.

te	of request: Oral approval date (if applicable):						
ıd	ed Well Constructor (name, license #, and mailing address): Steve Schneider, 649						
	21881 River Road NE, St. Paul, OR 97137	·					
	Location of Well: <u>SW of</u> 1/4 <u>NE</u> 1/4 Tax lot <u>701</u> Section <u>27</u>						
	Township <u>1</u> N, Range <u>3</u> E, Multnomah Co	ounty					
	Address at well site: 23303 NE Sandy Blvd, Fairview, OR 97024						
	Start Card Number(s)(for work to be done): 216490						
	Name and Address of Land Owner: Townsend Farms Inc						
	23400 Townsend Way, Fairview, OR 97024						
	Distance to the nearest septic tank, drainfield, closed sewage line (if water supply we	ell)					
	>100'						
5)	The unusual site conditions which necessitate this request: Gravel pack well abandonment						
	requires special standard (OAR 690-220-0090)						
	The proposed construction methods that the bonded well constructor believes will be adequate for this well: (attach additional pages if needed)						
	See attached 4/14/20 email.						

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

See MULT 63478 for existing condition and attached 4/14/20 email to Joel Jeffrey, WRD, for proposed completion (permanent abandonment).

### PLEASE NOTE:

- (1) 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.
- (2) If it should be determined at some future date that the well, due to its construction, is allowing ground water contamination, waste or loss of artesian pressure, the undersigned shall return to the site and rectify the problem.
- (3) If oral approval was granted, a written request must be submitted to the Department either within three (3) working days of the date of oral approval or prior to the completion of the associated well work. Failure to submit a written request as described above may void prior oral 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

Revised 7/26/2006

Special Standards Request Form /2

# **Steve Schneider**

From: Sent: To: Subject: Steve Schneider Tuesday, April 14, 2020 5:15 PM 'JEFFERY Joel W \* WRD' TFI well abandonment

#### Joel,

We completed a new well for Townsend Farms, Inc. (TFI) early this year and about a week ago additional work on the well, including installation of a pitless unit, pump discharge and electric connection was completed. The water quality was tested with no EDB or other contaminants found. The well is now on line. TFI refers to it as their well #4. The log of this well is in the state well log data base along with its alteration log for the pitless installation. I believe they are MULT 133885 and MULT 134403 respectively.

TFI is now wanting to abandon the well that was replaced, which is MULT 63478. This well has a gravel pack and accordingly, we need WRD's concurrence as to how to proceed. As you are aware, previous discussions related to this well included varying interpretations as to the existance of one or more confining units, in particular the clay identified on the log as existing from 233-238. TFI's replacement Well #4 is located only about 30' away from MULT 63478 and is sealed continuously to a depth of 342'. As you can see from its formation log, no confining unit was found anywhere within the upper 297', the total depth of MULT 63478. A registered geologist was on site during the drilling of Well 4, as was I for most of it. None of us saw evidence of the confining unit in the cuttings or evidence of such by the drilling action; it simply was not there. As such, it appears the alleged confining unit identified in MULT 63478 is discontinuous since it was not evidenced at a distance of only about 30' away.

In light of this information, we believe an appropriate approach for abandonment of MULT 63478 would be to remove the pump, bail sediment, perforate the cased portion of the well from the bottom up to approximately 145' (just below the existing lower cement seal), pressure grout the lower hole (using neat cement grout with a retarder), allow the grout to migrate for at least 30 minutes under pressure, perforate the remaining casing to within a few feet of the surface (except at intervals that might exhibit perforator refusal from existing seal), finish grouting to within a few feet of surface. We would apply and maintain a head of water on the well during the perforating and grouting of the lower part of the hole to minimize potential of slough. Pressure grouting would include a temporary mechanical seal of the grout pipe to the casing at the surface in order for the grout to be applied under pressure to the lower perforated interval. We would attempt a pressure of about 50 psi at the well head to allow the grout to migrate. At the conclusion, we would cut off the casing a few feet below ground and backfill the hole above the cut off casing with crushed rock since TFI intends to pave over this location.

We believe this approach affords far less risk of an unsuccessful abandonment that could easily occur if attempts at over-drilling the whole casing and screen in order to remove it and the gravel pack are attempted. We fear that the casing and/or especially the screen may fail during the over-drill resulting in a damaged or destroyed path for installation of abandonment grout.

Please review and let us know what you think. We hope that our proposed approach, or something similar, will meet with WRD's approval and will afford the best chance for a successful abandonment that protects the resource.

Regards,

Steve Schneider MGWC, VP

=

zip 97024

#### STATE OF OREGON

#### WATER SUPPLY WELL REPORT

(as required by ORS 537.765)

Instructions for completing this report are on the last page of this form. (1) LAND OWNER Well Number TOWNSEND FARMS Name 23303 NE SANDY Address

FAIRVIEW State

#### City (2) TYPE OF WORK

X New Well 🔲 Deepening 🗌 Alteration (repair/recondition) 🗌 Abandonment

OR

(3) DRILL METHOD:								
Rotary Air 🕅 Rotary Mud 🗌 Cable 🗌 Auger								
□ Other								
(4) PRC								
Dome	stic 🛛	Comm					n	
_	Thermal Injection Livestock Other							
(5) BORE HOLE CONSTRUCTION: 260								
Special Construction approval $\Box$ Yes $\textcircled{B}$ No Depth of Completed Well $\underline{260}_{ft}$ .								
Explosiv	Explosives used 🗆 Yes 🖄 No Type Amount							
	HOLE				SEAL			
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			Sacks or p 10 s	ounds SKS				
			Bento	onit	e 25	35	10 s	<u>sks _</u>
			Cemer		145	155	4 s	sks
7-7/8	260	297						
How was			Method		A 🗆	BX	C 🗆 D	Ε
🔀 Other	- pour	red i	into a	annu	lar			
Backfill	placed fr	om _3	5ft. to	- <b>1</b> 4	5. ft.	Materia	al Drill	. qel -
Gravel pl	laced fro	m 15	Backfill placed from <u>35</u> ft. to <u>145</u> ft. Material <u>Drill gel</u> Gravel placed from <u>155</u> ft. to <u>260</u> ft. Size of gravel <u>1/4x3/8</u>					
(6) CASING/LINER:								
(6) CAS	SING/L	INER						
.,	Diameter		: n To	Gaug	e Steel	Plastic		Threaded
• •	Diameter		: n To	Gaug		Plastic	<b>IX</b>	Threaded
.,	Diameter	Fror	: n то 2 205	Gaug	e Steel	Plastic		_
.,	Diameter	From	: n то 2 205	Gaug 250	e Steel	Plastic	<b>IX</b>	_
.,	Diameter	From	: n то 2 205	Gaug 250	e Steel	Plastic	<b>X</b> <b>X</b>	_
.,	Diameter	From	: n то 2 205	Gaug 250	e Steel	Plastic	<b>X</b> <b>X</b>	_
Casing: _   Liner:	Diameter 8 <sup>11</sup> 8 <sup>11</sup>	From	: n To 2 205 5 260	Gaug 250 250			<b>X</b> <b>X</b>	_
Casing: _   Liner:	Diameter 8 <sup>11</sup> 8 <sup>11</sup> oe used	F From	: n To 2 205 5 260 1 − − − − − − − − − − − − − − − − − − −	Gaug 250 250			<b>X</b> <b>X</b>	_
Casing:  Liner: Drive Sh Final loc	Diameter 8" 8" oe used ation of	From 24!	: n To 2 205 5 260 de □ Ou	Gaug 250 250 itside	e Steel 		<b>X</b> <b>X</b>	_
Casing:  Liner: Drive Sh Final loc (7) PEF	Diameter 8" 8" oe used ation of	Fror 24! Dinsic shoe(s) TION	: n To 2 205 5 260 1 − − − − − − − − − − − − − − − − − − −	Gaug 250 250 utside	e Steel 		<b>X</b> <b>X</b>	_
Casing:	Diameter 8" 8" oe used ation of <b>RFORA</b>	From 24! 24! Dinsic shoe(s) TION 15	n To 2 205 5 260 de 0 0	Gaug 250 250 utside	e Steel <b>X</b> <b>X</b> <b>X</b> 			_
Casing:  Liner: Drive Sh Final loc (7) PEH Pe \$\vec{V} Sc	Diameter 8" 8" oe used ation of <b>RFORA</b> reforation	r Fror 241 241 1 Insid shoe(s) TION	n To 2 205 5 260 de □ Ou S/SCRF Methoc Type₩	Gaug 250 250 utside	e Steel - 34 - 34 	Ma Ma	Image: State stat	
Casing:  Liner: Drive Sh Final loc (7) PEF Dre Q Sc From	Diameter 8" 8" oe used ation of <b>RFORA</b> reforation recens	r Fror 24 24 Insid shoe(s) TION 15 Slot size	n To 2 205 5 260 5 260 6 □ Ou 8/SCRF Methoc TypeW	Gaug 250 250 utside	e Steel 	Ma Tele/pij size	Image: Casing	
Casing:  Liner: Drive Sh Final loc (7) PEH Pe \$\vec{V} Sc	Diameter 8" 8" oe used ation of <b>RFORA</b> reforation	r Fror + 24! □ lnsic shoe(s) TION Is Slot size	n To 2 205 5 260 5 260 6 □ Ou 8/SCRF Methoc TypeW	Gaug 250 250 utside	e Steel - 34 - 34 	Ma Ma	Image: Casing	

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

🗆 Pump	🔀 Bailer	🕅 Air	Artesian			
Yield gal/min	Drawdown	Drill stem at	Time			
55	10		l hr.			
180		115	2 hrs.			
Temperature of water Depth Artesian Flow Found Was a water analysis done?  Yes By whom						
Did any strata cor	atain water not suit	able for intended use	? 🗌 Too little			

 $\square$ 

□ Salty □ Muddy □ Odor □ Colored □ Other Depth of strata: .

#### WELL I.D. # L\_ 47470 START CARD #\_\_\_\_139288

(9) LOCATION OI County MULTNO Township 1N Section 27	F WELL by legal	description:		
County PIOLITIC	Latitude	Lo	ongitude	
Township 77	N or S Range		E or W.	WM.
Tax Lot	LotBloc	:kSu	bdivision <sub>.</sub> -	
Street Address of V	Well (or nearest address	) <u>23303 N</u>	E SAND	<u>N</u>
		FAIRVIEW	, OR	
(10) STATIC WAT				
	elow land surface.		Date 03/	26/01
Artesian pressure _	lb. per	square inch	Date	
(11) WATER BEAI	RING ZONES:			
Depth at which water	was first found 2	05		
From	To	Estimated F		SWL
205	245	180 c	<u>jpm</u>	57
		DECEN		
		RECEN	/EU	
			0004	
		IMAR 3 0	2001	
(12) WELL LOG:				
Gro	und Elevation WAT	<u>Er resour</u> Salem, or	CES DEI	<u>רכ</u>
Mate		From		SWL
Topsoil/silt	w glav	0	4	
Fine compact			10	
Fine compact		10	16	
Fine to med.		16	63	
sand, brown,	-		0.5	
Med. to coar	-	63	77	1
gravel/cobk			- 11	
Fine to med.		<i>r</i> el 77	233	57
	e, some gray			11 II
Soft brown o		233	235	11
Soft gray cl		235	238	11
Fine to coar	_	238	247	57
Fine to med.			254	
Fine to med.		254	267	
Coarse gray		267	291	
grave				
Sticky lt. 1		291	297	
WELL COMPLET	TED @ 250 F1	٢.		
			26/01	

#### (unbonded) Water Well Constructor Certification:

I certify that the work I performed on the construction, 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.

	WWC Number	
Signed	Date	

WWC Number 1266

Date 03/26/01

#### (bonded) Water Well Constructor Certification:

I accept responsibility for the construction, 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.

FIRST COPY - CONSTRUCTOR SECOND COPY - CUSTOMER **ORIGINAL – WATER RESOURCES DEPARTMENT** 

Signed