Checklist for Claims of Beneficial Use Received at CSG Counter

Application # S-32892	WRD Reviewer Cory M.
Transfer #	
Date Received 6/14/2021	
CWRE Name Daniel Scalas	

Priority Date: 8/1/1963 RTS Fee

Fees Required:

YES (NO) A fee of $200 must accompany this form for permits with priority dates of July 9, 1987, or later.

YES NO A fee of $200 must accompany this form for any transfers including a water right with a priority date of July 9, 1987, or later.

Example – A transfer involves 5 rights and one of the rights has a priority date of July 9, 1987, or later, the fee is required.

Fill in App or Transfer Number

Map Review:

X Map on polyester film (OAR 690-014-0170(1) & 310-0050(1)(b))
X Application & permit #) or transfer # (OAR 690-014-0100(1))
X Disclaimer (OAR 690-014-0170(5))
X North arrow (OAR 690-310-0050(2)(c))
X CWRE stamp and signature (OAR 690-014 & 310-0050)
X Appropriate scale (1" = 1320', 1" = 400', or the original full-size scale of the county assessor map) (014 & 310)
X Township, range, section, and tax lot numbers (OAR 690-310-0050(4))

MONEY SLIP

DATE: RECEIPT #:

RECEIVED FROM:

APPLICATION
PERMIT
TRANSFER

CASH CHECK # OTHER (IDENTIFY) TOTAL RECD $

1083 TREASURY 4170 MISC CASH ACCT.

0427 COPIES $
OTHER (IDENTIFY) $

0243 Instream Lease 0244 Multi Water Mgmt Plan 0245 Conj Water

1083 TREASURY 4270 WRD OPERATING ACCT.

MISCELLANEOUS 4611
0407 COPY & TAPE FEES
0410 RESEARCH FEES
0408 MISC REVENUE (IDENTIFY)
TC162 DEPOSIT LIAB. (IDENTIFY)
0240 EXTENSION OF TIME

WATER RIGHTS EXAM FEE RECORD FEE
0201 SURFACE WATER 0202
0203 GROUND WATER 0204
0205 TRANSFER

WELL CONSTRUCTION EXAM FEE RECORD FEE
0218 WELL DRILL CONSTRUCTOR 0219
LANDOWNER'S PERMIT 0220
0200 OTHER (IDENTIFY) COBU $200.00

0487 TREASURY 0487 HYDROELECTRIC

LIC NUMBER
0233 POWER LICENSE FEE (FY/WPD)
0231 HYDRO LICENSE FEE (FY/WPD)
HYDRO APPLICATION

SPECIAL INSTRUCTIONS:

RETURN TO APPLICANT – LETTER ATTACHED

Report Review:

X On form provided by the Department (OAR 690-014-0100(1))
X Application & permit #; or transfer # (OAR 690-014)
X Ownership information (OAR 690-014)
X Date of survey (OAR 690-014)
X Person interviewed (OAR 690-014)
X County (OAR 690-014)
X CWRE stamp and signature (OAR 690-014-0100)
X Signature(s) of all permittee of transfer holder (OAR 690-014-0100)

Groundwater File Review: N/A

Pump Test Required? YES NO Pump Test Submitted? YES NO*

*If no, include pump test flyer w/acknowledgment letter

COBU MAP #1296

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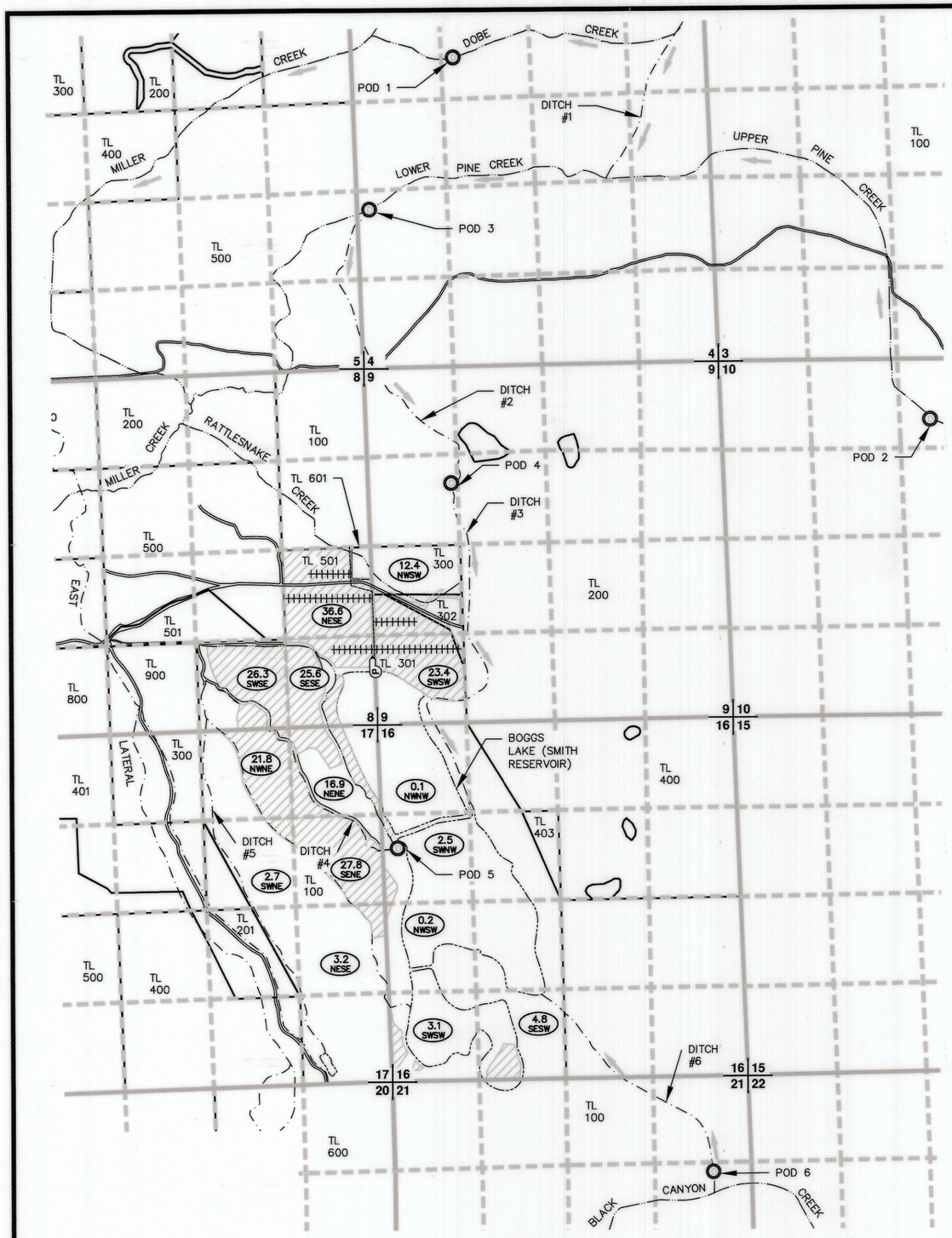

LEGEND

- TL 500 — TAX LOT NUMBER
- POINT OF DIVERSION
- TAX LOT BOUNDARY
- DITCH LINE
- CREEK LINE
- SECTION LINES
- 1/4 1/4 LINES
- LAKE BOUNDARY
- GRAVEL/DIRT ROADWAY
- 9.2 SENE — IRRIGATED ACREAGE 1/4 1/4
- FLOW DIRECTION
- WHEEL LINE
- (P) PUMP

N

1320' 0 660' 1320'
(FEET)

POINTS OF DIVERSION

DATE OF PRIORITY: AUGUST 1, 1963

POD 1 – 1958 FEET NORTH AND 1455 FEET EAST FROM WEST 1/4 CORNER OF SECTION 4, T40S, R14E, W.M., LOCATED IN THE NE 1/4 NW 1/4 OF SECTION 4

POD 2 – 841 FEET SOUTH AND 202 FEET EAST FROM NORTH 1/4 CORNER OF SECTION 10, T40S, R14E, W.M., LOCATED IN THE NW 1/4 NE 1/4 OF SECTION 10

POD 3 – 209 FEET SOUTH AND 186 FEET EAST FROM WEST 1/4 CORNER OF SECTION 4, T40S, R14E, W.M., LOCATED IN THE NW 1/4 SW 1/4 OF SECTION 4

POD 4 – 852 FEET NORTH AND 1015 FEET EAST FROM WEST 1/4 CORNER OF SECTION 9, T40S, R14E, W.M., LOCATED IN THE SW 1/4 NW 1/4 OF SECTION 9

POD 5 – NORTH 17 DEGREES 531/2 MINUTES EAST 872.2 FEET FROM WEST 1/4 CORNER OF SECTION 16, T40S, R14E, W.M., LOCATED IN SW 1/4 NW 1/4

POD 6 – 1369 FEET SOUTH AND 4753 FEET EAST FROM NORTHWEST CORNER OF SECTION 21, T40S, R21E, W.M., LOCATED IN SE 1/4 NE 1/4

NOTES

1. THE PURPOSE OF THIS MAP IS TO IDENTIFY THE LOCATION OF THE WATER RIGHT ONLY, AND IS NOT INTENDED TO PROVIDE DIMENSIONS OR LOCATION OF PROPERTY LINES.
2. FOR TAX LOT INFORMATION, SEE TAX MAPS INCLUDED WITH THIS APPLICATION.
3. THIS MAP WAS PREPARED FROM FIELD MEASUREMENTS, NAIP 2018 AERIAL PHOTOGRAPH, AND KLAMATH COUNTY TAX MAPS 40 14, 40 14 5, 40 14 8, AND 40 14 17.

CLAIM OF BENEFICIAL USE AND FINAL PROOF MAP

FOR

MICHAEL & DIANE TYRHOLM

T40S, R14E, W.M., SEC. 4, 9, 10, 16, 17, & 21

KLAMATH COUNTY, OREGON

PERMIT No. S-28984

APPLICATION No. S-32892

CERTIFIED WATER RIGHT EXAMINER
#88332CWRE
Daniel B. Scalas
April 23, 2015
STATE OF OREGON
RENEWAL 06/30/22

ADKINS ENGINEERING & SURVEYING
o / 541.884.4666
w / AdkinsEngineering.com
1435 ESPLANADE AVENUE, KLAMATH FALLS, OR 97601
SERVING S. OREGON & N. CALIFORNIA
ENGINEERING • SURVEYING • PLANNING • TESTING

CLAIM OF BENEFICIAL USE for Surface Water Permits claiming more than 0.1 cfs

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

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A fee of $200 must accompany this form for permits with priority dates of July 9, 1987, or later.

A separate form shall be completed for each permit.

In cases where a permit has been amended through the permit amendment process, a separate claim for the permit amendment is not required. Incorporate the permit amendment into the claim for the permit.

This form is subject to revision. **Begin each new claim** by checking for a new version of this form at: http://www.oregon.gov/owrd/pages/wr/cwre_info.aspx

The completion of this form is required by OAR 690-014-0100(1) and 690-014-0110(4).

Please type or print in dark ink. If this form is found to contain errors or omissions, it may be returned to you. **Every item must have a response.** If any requested information does not apply to the claim, insert "NA." **Do not delete or alter any section of this form unless directed by the form.** The Department may require the submittal of additional information from any water user or authorized agent.

"Section 8" of this form is intended to aid in the completion of this form and should not be submitted.

If you have questions regarding the completion of this form, please call 503-986-0900 and ask for the Certificate Section.

The Department has a program that allows it to enter into a voluntary agreement with an applicant for expedited services. Under such an agreement, the applicant pays the cost to hire additional staff that would not otherwise be available. This program means a certificate may be issued in about a month. For more information on this program see http://www.oregon.gov/owrd/pages/mgmt_reimbursement_authority.aspx

SECTION 1
GENERAL INFORMATION

1. File Information

APPLICATION # (G, R, S OR T)	PERMIT # (IF APPLICABLE)	PERMIT AMENDMENT # (IF APPLICABLE)
S-32892	**S-28984**	**N/A**

2. Property Owner (current owner information)

APPLICANT/BUSINESS NAME	PHONE NO.	ADDITIONAL CONTACT NO.
Michael and Diane Tyrholm	**541-882-2180**	
ADDRESS **3510 Collier Lane**		

CITY	STATE	ZIP	E-MAIL
Klamath Falls	**OR**	**97603**	

If the current property owner is not the permit or transfer holder of record, it is recommended that an assignment be filed with the Department. ***Each*** *permit or transfer holder of record must sign this form.*

3. Permit or transfer holder of record (this may, or may not, be the current property owner)

PERMIT OR TRANSFER HOLDER OF RECORD		
Same as above		
ADDRESS		
CITY	STATE	ZIP

ADDITIONAL PERMIT OR TRANSFER HOLDER OF RECORD		
ADDRESS		
CITY	STATE	ZIP

4. Date of Site Inspection: **4/07/2009**

5. Person(s) interviewed and description of their association with the project:

NAME	DATE	ASSOCIATION WITH THE PROJECT
Michael Tyrholm	**4/07/2009**	**Owner**

6. County: **Klamath**

7. If any property described in the place of use of the permit or transfer final order is excluded from this report, identify the owner of record for that property (ORS 537.230(4)):

OWNER OF RECORD		
N/A		
ADDRESS		
CITY	STATE	ZIP

Add additional tables for owners of record as needed

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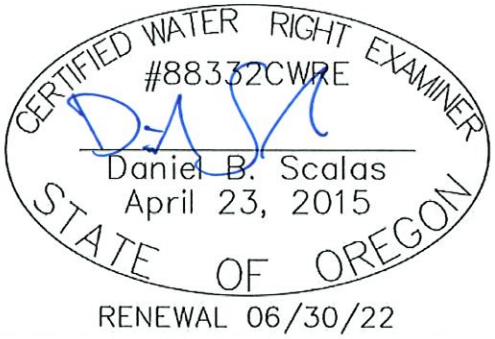
SECTION 2
SIGNATURES

CWRE Statement, Seal and Signature

The facts contained in this Claim of Beneficial Use are true and correct to the best of my knowledge.



CWRE NAME		PHONE NO.	ADDITIONAL CONTACT NO.
Daniel B. Scalas		**(541) 884-4666**	
ADDRESS **1435 Esplanade Ave.**			
CITY **Klamath Falls**	STATE **OR**	ZIP **97601**	E-MAIL **dscalas@adkinsengineering.com**

Permit or Transfer Holder's of Record Signature or Acknowledgement

Each *permit or transfer holder of record must sign this form in the space provided below.*

The facts contained in this Claim of Beneficial Use are true and correct to the best of my knowledge. I +request that the Department issue a water right certificate.

SIGNATURE	PRINT OR TYPE NAME	TITLE	DATE
Mike Tyrholm	**Michael Tyrholm**	**Owner**	2-15-2021
Diane Tyrholm	**Diane Tyrholm**	**Owner**	2-15-2021

SECTION 3

CLAIM DESCRIPTION

1. Point of diversion/appropriation name or number:

POINT OF DIVERSION (POD) NAME OR NUMBER (CORRESPOND TO MAP)
POD 1
POD 2
POD 3
POD 4
POD 5
POD 6

Attach each well log available for the well (include the log for the original well and any subsequent alterations, reconstructions, or deepenings)

2. Point of diversion/appropriation source and, if from surface water, the tributary:

POD/POA NAME OR NUMBER	SOURCE	TRIBUTARY
POD 1	**Dobe Creek**	**Lost River**
POD 2	**Upper Pine Creek**	**Lost River**
POD 3	**Lower Pine Creek**	**Lost River**
POD 4	**Rattlesnake Creek**	**Lost River**
POD 5	**Smith Reservoir**	**Lost River**
POD 6	**Black Canyon Creek**	**Lost River**

3. Developed use(s), period of use, and rate for each use:

POD/POA NAME OR NUMBER	USES	IF IRRIGATION, LIST CROP TYPE	SEASON OR MONTHS WHEN WATER WAS USED	ACTUAL RATE OR VOLUME USED (CFS, GPM, OR AF)
POD 1	**Primary Irrigation**	**Pasture-hay**	**1/1 to 12/31**	**1.14 cfs**
POD 2	**Primary Irrigation**	**Pasture-hay**	**1/1 to 12/31**	**1.53 cfs**
POD 3	**Primary Irrigation**	**Pasture-hay**	**1/1 to 12/31**	**0.72 cfs**
POD 4	**Primary Irrigation**	**Pasture-hay**	**1/1 to 12/31**	**0.34 cfs**
POD 5	**Primary Irrigation**	**Pasture-hay**	**1/1 to 12/31**	**4.24 cfs**
POD 6	**Primary Irrigation**	**Pasture-hay**	**1/1 to 12/31**	**0.51 cfs**
Total Quantity of Water Used				**4.24 cfs**

4. Provide a general narrative description of the distribution works. This description must trace the water system from **each** point of diversion or appropriation to the place of use:

PODs 1-4 & 6 divert into Smith Reservoir (Boggs Lake), where the water is then pumped from POD 5 and used for primary irrigation.

POD 1 - Dobe Creek

Dobe Creek flows into Upper Pine Creek. The diversion Point is located 2,041' north and 985' west from the east quarter corner Section 4, located in the NE1/4 NE1/4 of Section 4, T40S, R14E, W.M. Water is conveyed through Ditch #1 in a southerly direction approximately 2,100' to its intersection with Upper Pine Creek.

POD 2 - Lower Pine Creek

Lower Pine Creek flows into the Miller Creek Ditch. The diversion point is 2,404' north and 174' east from the SW1/4 corner Section 4, located in the NW1/4 SW1/4 of Section 4, T40S, R14E, W.M.

POD 3 – Upper Pine Creek

Water is diverted from POD 3 out of Pine Creek into Ditch #2. Ditch #2 travels for 4,750' where it then meets with POD 4. See description of POD 4 below for more details.

POD 4 – Rattlesnake Creek

Water is diverted from Ditch #2 which is a diversion from POD 3. POD 4 diverts water into Ditch #3 which travels for 5,930' before dumping into Boggs Lake. From Boggs Lake, water is pumped and used for irrigation.

POD 5 – Smith Reservoir

Water is diverted from Smith Reservoir by a 40HP submersible pump and pumped above ground through a 14" steel pipe in a westerly direction approximately 200' before reducing to a 12" steel pipe. The 12" mainline continues up a ridge above ground in a westerly direction approximately 130' before discharging into Ditch #4. From the discharge pipe, Ditch #4 conveys water in both northerly and southerly directions. A headgate is provided to close flow off to the south. Water diverted to the north is conveyed by an earthen ditch approximately 3,550' to another headgate. Water continues north approximately 900' to a tee. At the tee, water is conveyed both easterly and westerly. Water is conveyed ±700' to the east before terminating. This ditch flood irrigates lands in the NWSE 1/4 1/4 Section 8. Water is conveyed westerly approximately 850' then conveys water northerly approximately 1,000' before terminating. This ditch irrigates lands in the NESW 1/4 1/4 of Section 8. Water can be diverted to Ditch #5 which parallels the western side of an existing gravel road. Water is diverted to rangelands west of the road through various sizes of CMP, plastic and steel pipes, ranging from 12" to 20". Excess surface water is captured and conveyed by an earthen ditch to a sump where runoff is temporarily stored. The captured runoff is pumped by a 25HP pump in an easterly direction through ±1,300' of 8" aluminum pipe to an earthen ditch. This ditch conveys water easterly for approximately 330' and empties back into Boggs Lake.

POD 6 – Black Canyon Creek

From POD 6, water is diverted from Black Canyon Creek through Ditch #6. Ditch #6 travels for 4,150' before dumping into Boggs Lake.

Reminder: The map associated with this claim must identify the location of the point(s) of diversion, Donation Land Claims (DLC), Government Lots (GLot), and Quarter-Quarters (QQ).

5. Variations:

Was the use developed differently from what was authorized by the permit, permit amendment final order, or extension final order? If yes, describe below. **YES**

(e.g. *"The permit allowed three points of diversion. The water user only developed one of the points."* or *"The permit allowed 40.0 acres of irrigation. The water user only developed 10.0 acres."*)

Some of the approved lands were inundated by the construction/expansion approved by the OWRD for Permit R-12503. As a result of this, the previous owner (Dick Smith) developed lands contiguous to the reservoir to make up for the lost acreage without applying for a Permit Amendment. Dick Smith did not inform the purchaser of the property, Mike Tyrholm, that he had changed a portion of the place of use as described in Permit S-28984. Mike was unaware of this situation until he asked Adkins Consulting Engineering to review his water rights to make sure all were current with OWRD regulations. Through discussions with OWRD, Dwight French and Gerry Clark decided that since the lands were contiguous with the permitted lands our client, Mike Tyrholm, could have the Permit proofed up on instead of applying for a Permit Amendment which was caused through no fault of his own.

Due to flood irrigation, all of the lands do not receive water. The Final Proof map and COBU application reflect areas that are higher in elevation and those acreages have been removed from the total irrigated acreages.

A sump has been constructed to capture surface runoff and temporarily store the runoff water. A pump was installed to pump the excess water back to Boggs Lake in order to reuse the water.

Permit S-28984 refers to POD 4 being within Rattlesnake Creek. However, the coordinates listed in the permit do not align with Rattlesnake Creek. The final proof map attached reflects the actual location of POD 4, and water has always been diverted at this location.

6. Claim Summary:

POD / POA NAME OR #	MAXIMUM RATE AUTHORIZED	CALCULATED THEORETICAL RATE BASED ON SYSTEM	AMOUNT OF WATER MEASURED	USE	# OF ACRES ALLOWED	# OF ACRES DEVELOPED
POD 1	**1.14cfs**	**5.03 CFS**	**N/A**	**Primary Irrigation**	**337.5**	**207.4**
POD 2	**1.53cfs**	**5.03 CFS**	**N/A**	**Primary Irrigation**	**337.5**	**207.4**
POD 3	**0.72cfs**	**5.03 CFS**	**N/A**	**Primary Irrigation**	**337.5**	**207.4**
POD 4	**0.34cfs**	**5.03 CFS**	**N/A**	**Primary Irrigation**	**337.5**	**207.4**
POD 5	**4.24cfs**	**5.03 CFS**	**N/A**	**Primary Irrigation**	**337.5**	**207.4**
POD 6	**0.51cfs**	**5.03 CFS**	**N/A**	**Primary Irrigation**	**337.5**	**207.4**

SECTION 4

SYSTEM DESCRIPTION

Are there multiple PODs? **YES**

POD Name or Number this section describes (only needed if there is more than one):

POD 1

A. Place of Use

1. Is the right for municipal use? **NO**

TWP	RNG	MER	SEC	QQ	GLOT	DLC	USE	IF IRRIGATION, # PRIMARY ACRES	IF IRRIGATION, # SUPPLEMENTAL ACRES
T40S	**R14E**	**W.M.**	**8**	**NE SE**			**Primary Irrigation**	**36.6**	
T40S	**R14E**	**W.M.**	**8**	**SE SE**			**Primary Irrigation**	**25.6**	
T40S	**R14E**	**W.M.**	**8**	**SW SE**			**Primary Irrigation**	**26.3**	
T40S	**R14E**	**W.M.**	**9**	**NW SW**			**Primary Irrigation**	**12.4**	
T40S	**R14E**	**W.M.**	**9**	**SW SW**			**Primary Irrigation**	**23.4**	
T40S	**R14E**	**W.M.**	**16**	**NW NW**			**Primary Irrigation**	**0.1**	
T40S	**R14E**	**W.M.**	**16**	**SW NW**			**Primary Irrigation**	**2.5**	
T40S	**R14E**	**W.M.**	**16**	**SW SW**			**Primary Irrigation**	**3.1**	
T40S	**R14E**	**W.M.**	**16**	**SE SW**			**Primary Irrigation**	**4.8**	
T40S	**R14E**	**W.M.**	**16**	**NW SW**			**Primary Irrigation**	**0.2**	
T40S	**R14E**	**W.M.**	**17**	**NE NE**			**Primary Irrigation**	**16.9**	
T40S	**R14E**	**W.M.**	**17**	**NW NE**			**Primary Irrigation**	**21.8**	
T40S	**R14E**	**W.M.**	**17**	**SW NE**			**Primary Irrigation**	**2.7**	
T40S	**R14E**	**W.M.**	**17**	**SE NE**			**Primary Irrigation**	**27.8**	
T40S	**R14E**	**W.M.**	**17**	**NE SE**			**Primary Irrigation**	**3.2**	
Total Acres Irrigated								**207.4**	

Reminder: The map associated with this claim must identify Donation Land Claims (DLC), Government Lots (GLot), Quarter Quarters (QQ), and if for irrigation, the number of acres irrigated within each projected DLC, GLot, and QQ.

B. Diversion and Delivery System Information

Provide the following information concerning the diversion and delivery system. Information provided must describe the equipment used to transport and apply the water from the point of diversion to the place of use.

1. Is a pump used? **YES**

2. Pump Information

Manufacturer	Model	Serial Number	Type (centrifugal, turbine or submersible)	Intake size	Discharge size
Unknown	**Unknown**	**Unknown**	**Submersible**	**Unknown**	**14”**
Vertiline	**8CH**	**D06668**	**Submersible**	**10”**	**8”**

3. Motor Information

Manufacturer	Horsepower
Unknown	**40 HP**
Halloshaft	**25 HP**

4. Theoretical Pump Capacity

Horsepower	Operating PSI	Lift from Source to Pump	Lift from Pump to Place of Use	Total Pump Output (in CFS)
40	**0**	**17’**	**0’**	**16.56**
25	**0**	**35’**	**0’**	**5.03**

5. Provide pump calculations:

See Appendix E.

6. Measured Pump Capacity (using meter if meter was present and system was operating)

Initial Meter Reading	Ending Meter Reading	Duration of Time Observed	Total Pump Output (in CFS)
N/A			

Reminder: For pump calculations use the reference information at the end of this document.

7. Is the distribution system piped? **YES**

8. Mainline Information

Mainline Size	Length	Type of Pipe	Buried or Above Ground
14”	**200’**	**Steel**	**Aboveground**
12”	**130’**	**Steel**	**Aboveground**

9. Lateral or Handline Information

Lateral or Handline Size	Length	Type of Pipe	Buried or Above Ground
Wheel Line	**3700’**	**Aluminum**	**Above ground**

10. Sprinkler Information

Size	Operating PSI	Sprinkler Output (GPM)	Total Number of Sprinklers	Maximum Number Used	Total Sprinkler Output (CFS)
19/64”	**65**	**19.9**	**130**	**130**	**5.76**

Reminder: For sprinkler output determination use the reference information at the end of this document.

11. Pivot Information

MANUFACTURER	MAXIMUM WETTED RADIUS	OPERATING PSI	TOTAL PIVOT OUTPUT (GPM)	TOTAL PIVOT OUTPUT (CFS)
N/A				

12. Additional notes or comments related to the system:

N/A

C. Storage

1. Does the distribution system include in-system storage (e.g. storage tank, bulge in system / reservoir) **NO**

D. Gravity Flow Pipe

(THE DEPARTMENT TYPICALLY USES THE HAZEN-WILLIAM'S FORMULA FOR A GRAVITY FLOW PIPE SYSTEM)

1. Does the system involve a gravity flow pipe? **NO**

E. Gravity Flow Canal or Ditch

(THE DEPARTMENT TYPICALLY USES MANNING'S FORMULA FOR CANALS AND DITCHES)

1. Is a gravity flow canal or ditch used to convey the water as part of the distribution system? **YES**

2. Complete the table:

CANAL OR DITCH TYPE (MATERIAL)	TOP WIDTH OF CANAL OR DITCH	BOTTOM WIDTH OF CANAL OR DITCH	DEPTH	"N" FACTOR	AMOUNT OF FALL	LENGTH OF CANAL / DITCH	SLOPE	COMPUTED RATE (IN CFS)
Earth	**11.6'**	**3.3'**	**2.1'**	**0.03**	**58'**	**2,100'**	**2.8%**	**148.8**

3. Provide calculations:

See Appendix E.

4. If an actual measurement was taken, provide the following:

DATE OF MEASUREMENT	WHO MADE THE MEASUREMENT	MEASUREMENT METHOD	MEASURED QUANTITY OF WATER (IN CFS)
N/A			

Attach measurement notes.

POD 2

A. Place of Use

1. Is the right for municipal use? **NO**

TWP	RNG	MER	SEC	QQ	GLOT	DLC	USE	IF IRRIGATION, # PRIMARY ACRES	IF IRRIGATION, # SUPPLEMENTAL ACRES
T40S	**R14E**	**W.M.**	**8**	**NE SE**			**Primary Irrigation**	**36.6**	
T40S	**R14E**	**W.M.**	**8**	**SE SE**			**Primary Irrigation**	**25.6**	
T40S	**R14E**	**W.M.**	**8**	**SW SE**			**Primary Irrigation**	**26.3**	
T40S	**R14E**	**W.M.**	**9**	**NW SW**			**Primary Irrigation**	**12.4**	
T40S	**R14E**	**W.M.**	**9**	**SW SW**			**Primary Irrigation**	**23.4**	
T40S	**R14E**	**W.M.**	**16**	**NW NW**			**Primary Irrigation**	**0.1**	
T40S	**R14E**	**W.M.**	**16**	**SW NW**			**Primary Irrigation**	**2.5**	
T40S	**R14E**	**W.M.**	**16**	**SW SW**			**Primary Irrigation**	**3.1**	
T40S	**R14E**	**W.M.**	**16**	**SE SW**			**Primary Irrigation**	**4.8**	
T40S	**R14E**	**W.M.**	**16**	**NW SW**			**Primary Irrigation**	**0.2**	
T40S	**R14E**	**W.M.**	**17**	**NE NE**			**Primary Irrigation**	**16.9**	
T40S	**R14E**	**W.M.**	**17**	**NW NE**			**Primary Irrigation**	**21.8**	
T40S	**R14E**	**W.M.**	**17**	**SW NE**			**Primary Irrigation**	**2.7**	
T40S	**R14E**	**W.M.**	**17**	**SE NE**			**Primary Irrigation**	**27.8**	
T40S	**R14E**	**W.M.**	**17**	**NE SE**			**Primary Irrigation**	**3.2**	
Total Acres Irrigated								**207.4**	

B. Diversion and Delivery System Information

Provide the following information concerning the diversion and delivery system. Information provided must describe the equipment used to transport and apply the water from the point of diversion to the place of use.

1. Is a pump used? **YES**

2. Pump Information

MANUFACTURER	MODEL	SERIAL NUMBER	TYPE (CENTRIFUGAL, TURBINE OR SUBMERSIBLE)	INTAKE SIZE	DISCHARGE SIZE
Unknown	**Unknown**	**Unknown**	**Submersible**	**Unknown**	**14"**
Vertiline	**8CH**	**D06668**	**Submersible**	**10"**	**8"**

3. Motor Information

MANUFACTURER	HORSEPOWER
Unknown	**40 HP**
Halloshaft	**25 HP**

4. Theoretical Pump Capacity

HORSEPOWER	OPERATING PSI	LIFT FROM SOURCE TO PUMP	LIFT FROM PUMP TO PLACE OF USE	TOTAL PUMP OUTPUT (IN CFS)
40	**0**	**17'**	**0'**	**16.56**
25	**0**	**35'**	**0'**	**5.03**

5. Provide pump calculations:

See Appendix E.

6. Measured Pump Capacity (using meter if meter was present and system was operating)

INITIAL METER READING	ENDING METER READING	DURATION OF TIME OBSERVED	TOTAL PUMP OUTPUT (IN CFS)
N/A			

Reminder: For pump calculations use the reference information at the end of this document.

7. Is the distribution system piped? **YES**

8. Mainline Information

MAINLINE SIZE	LENGTH	TYPE OF PIPE	BURIED OR ABOVE GROUND
14"	**200'**	**Steel**	**Aboveground**
12"	**130'**	**Steel**	**Aboveground**

9. Lateral or Handline Information

LATERAL OR HANDLINE SIZE	LENGTH	TYPE OF PIPE	BURIED OR ABOVE GROUND
Wheel Line	**3700'**	**Aluminum**	**Above ground**

10. Sprinkler Information

SIZE	OPERATING PSI	SPRINKLER OUTPUT (GPM)	TOTAL NUMBER OF SPRINKLERS	MAXIMUM NUMBER USED	TOTAL SPRINKLER OUTPUT (CFS)
19/64"	**65**	**19.9**	**130**	**130**	**5.76**

Reminder: For sprinkler output determination use the reference information at the end of this document.

11. Pivot Information

MANUFACTURER	MAXIMUM WETTED RADIUS	OPERATING PSI	TOTAL PIVOT OUTPUT (GPM)	TOTAL PIVOT OUTPUT (CFS)
N/A				

12. Additional notes or comments related to the system:

N/A

C. Storage

1. Does the distribution system include in-system storage (e.g. storage tank, bulge in system / reservoir) **NO**

D. Gravity Flow Pipe

(THE DEPARTMENT TYPICALLY USES THE HAZEN-WILLIAM'S FORMULA FOR A GRAVITY FLOW PIPE SYSTEM)

1. Does the system involve a gravity flow pipe? **NO**

E. Gravity Flow Canal or Ditch

(THE DEPARTMENT TYPICALLY USES MANNING'S FORMULA FOR CANALS AND DITCHES)

1. Is a gravity flow canal or ditch used to convey the water as part of the distribution system? **YES**

2. Complete the table:

CANAL OR DITCH TYPE (MATERIAL)	TOP WIDTH OF CANAL OR DITCH	BOTTOM WIDTH OF CANAL OR DITCH	DEPTH	"N" FACTOR	AMOUNT OF FALL	LENGTH OF CANAL / DITCH	SLOPE	COMPUTED RATE (IN CFS)
Earth	**9'**	**4.5'**	**1.3'**	**0.03**	**250'**	**8400'**	**3.0%**	**70.2**

3. Provide calculations:

See Appendix E.

4. If an actual measurement was taken, provide the following:

DATE OF MEASUREMENT	WHO MADE THE MEASUREMENT	MEASUREMENT METHOD	MEASURED QUANTITY OF WATER (IN CFS)
N/A			

Attach measurement notes.

POD 3

A. Place of Use

1. Is the right for municipal use? **NO**

TWP	RNG	MER	SEC	QQ	GLOT	DLC	USE	IF IRRIGATION, # PRIMARY ACRES	IF IRRIGATION, # SUPPLEMENTAL ACRES
T40S	**R14E**	**W.M.**	**8**	**NE SE**			**Primary Irrigation**	**36.6**	
T40S	**R14E**	**W.M.**	**8**	**SE SE**			**Primary Irrigation**	**25.6**	
T40S	**R14E**	**W.M.**	**8**	**SW SE**			**Primary Irrigation**	**26.3**	
T40S	**R14E**	**W.M.**	**9**	**NW SW**			**Primary Irrigation**	**12.4**	
T40S	**R14E**	**W.M.**	**9**	**SW SW**			**Primary Irrigation**	**23.4**	
T40S	**R14E**	**W.M.**	**16**	**NW NW**			**Primary Irrigation**	**0.1**	
T40S	**R14E**	**W.M.**	**16**	**SW NW**			**Primary Irrigation**	**2.5**	
T40S	**R14E**	**W.M.**	**16**	**SW SW**			**Primary Irrigation**	**3.1**	
T40S	**R14E**	**W.M.**	**16**	**SE SW**			**Primary Irrigation**	**4.8**	
T40S	**R14E**	**W.M.**	**16**	**NW SW**			**Primary Irrigation**	**0.2**	
T40S	**R14E**	**W.M.**	**17**	**NE NE**			**Primary Irrigation**	**16.9**	
T40S	**R14E**	**W.M.**	**17**	**NW NE**			**Primary Irrigation**	**21.8**	
T40S	**R14E**	**W.M.**	**17**	**SW NE**			**Primary Irrigation**	**2.7**	
T40S	**R14E**	**W.M.**	**17**	**SE NE**			**Primary Irrigation**	**27.8**	
T40S	**R14E**	**W.M.**	**17**	**NE SE**			**Primary Irrigation**	**3.2**	
Total Acres Irrigated								**207.4**	

B. Diversion and Delivery System Information

Provide the following information concerning the diversion and delivery system. Information provided must describe the equipment used to transport and apply the water from the point of diversion to the place of use.

1. Is a pump used? **YES**

2. Pump Information

MANUFACTURER	MODEL	SERIAL NUMBER	TYPE (CENTRIFUGAL, TURBINE OR SUBMERSIBLE)	INTAKE SIZE	DISCHARGE SIZE
Unknown	**Unknown**	**Unknown**	**Submersible**	**Unknown**	**14”**
Vertiline	**8CH**	**D06668**	**Submersible**	**10”**	**8”**

3. Motor Information

MANUFACTURER	HORSEPOWER
Unknown	**40 HP**
Halloshaft	**25 HP**

4. Theoretical Pump Capacity

HORSEPOWER	OPERATING PSI	LIFT FROM SOURCE TO PUMP	LIFT FROM PUMP TO PLACE OF USE	TOTAL PUMP OUTPUT (IN CFS)
40	**0**	**17’**	**0’**	**16.56**
25	**0**	**35’**	**0’**	**5.03**

5. Provide pump calculations:

See Appendix E.

6. Measured Pump Capacity (using meter if meter was present and system was operating)

INITIAL METER READING	ENDING METER READING	DURATION OF TIME OBSERVED	TOTAL PUMP OUTPUT (IN CFS)
N/A			

Reminder: For pump calculations use the reference information at the end of this document.

7. Is the distribution system piped? **YES**

8. Mainline Information

MAINLINE SIZE	LENGTH	TYPE OF PIPE	BURIED OR ABOVE GROUND
14”	**200’**	**Steel**	**Aboveground**
12”	**130’**	**Steel**	**Aboveground**

9. Lateral or Handline Information

LATERAL OR HANDLINE SIZE	LENGTH	TYPE OF PIPE	BURIED OR ABOVE GROUND
Wheel Line	**3700’**	**Aluminum**	**Above ground**

10. Sprinkler Information

SIZE	OPERATING PSI	SPRINKLER OUTPUT (GPM)	TOTAL NUMBER OF SPRINKLERS	MAXIMUM NUMBER USED	TOTAL SPRINKLER OUTPUT (CFS)
19/64”	**65**	**19.9**	**130**	**130**	**5.76**

Reminder: For sprinkler output determination use the reference information at the end of this document.

11. Pivot Information

MANUFACTURER	MAXIMUM WETTED RADIUS	OPERATING PSI	TOTAL PIVOT OUTPUT (GPM)	TOTAL PIVOT OUTPUT (CFS)
N/A				

12. Additional notes or comments related to the system:

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N/A

C. Storage

1. Does the distribution system include in-system storage (e.g. storage tank, bulge in system / reservoir) **NO**

D. Gravity Flow Pipe

(THE DEPARTMENT TYPICALLY USES THE HAZEN-WILLIAM'S FORMULA FOR A GRAVITY FLOW PIPE SYSTEM)

1. Does the system involve a gravity flow pipe? **NO**

E. Gravity Flow Canal or Ditch

(THE DEPARTMENT TYPICALLY USES MANNING'S FORMULA FOR CANALS AND DITCHES)

1. Is a gravity flow canal or ditch used to convey the water as part of the distribution system? **YES**

2. Complete the table:

CANAL OR DITCH TYPE (MATERIAL)	TOP WIDTH OF CANAL OR DITCH	BOTTOM WIDTH OF CANAL OR DITCH	DEPTH	"N" FACTOR	AMOUNT OF FALL	LENGTH OF CANAL / DITCH	SLOPE	COMPUTED RATE (IN CFS)
Earth	**12.0'**	**6.0'**	**1.5'**	**0.03**	**29'**	**10,900'**	**0.3%**	**43.1**

3. Provide calculations:

See Appendix E.

4. If an actual measurement was taken, provide the following:

DATE OF MEASUREMENT	WHO MADE THE MEASUREMENT	MEASUREMENT METHOD	MEASURED QUANTITY OF WATER (IN CFS)
N/A			

Attach measurement notes.

POD 4

A. Place of Use

1. Is the right for municipal use? **NO**

TWP	RNG	MER	SEC	QQ	GLOT	DLC	USE	IF IRRIGATION, # PRIMARY ACRES	IF IRRIGATION, # SUPPLEMENTAL ACRES
T40S	**R14E**	**W.M.**	**8**	**NE SE**			**Primary Irrigation**	**36.6**	
T40S	**R14E**	**W.M.**	**8**	**SE SE**			**Primary Irrigation**	**25.6**	
T40S	**R14E**	**W.M.**	**8**	**SW SE**			**Primary Irrigation**	**26.3**	
T40S	**R14E**	**W.M.**	**9**	**NW SW**			**Primary Irrigation**	**12.4**	
T40S	**R14E**	**W.M.**	**9**	**SW SW**			**Primary Irrigation**	**23.4**	
T40S	**R14E**	**W.M.**	**16**	**NW NW**			**Primary Irrigation**	**0.1**	
T40S	**R14E**	**W.M.**	**16**	**SW NW**			**Primary Irrigation**	**2.5**	
T40S	**R14E**	**W.M.**	**16**	**SW SW**			**Primary Irrigation**	**3.1**	
T40S	**R14E**	**W.M.**	**16**	**SE SW**			**Primary Irrigation**	**4.8**	
T40S	**R14E**	**W.M.**	**16**	**NW SW**			**Primary Irrigation**	**0.2**	
T40S	**R14E**	**W.M.**	**17**	**NE NE**			**Primary Irrigation**	**16.9**	
T40S	**R14E**	**W.M.**	**17**	**NW NE**			**Primary Irrigation**	**21.8**	
T40S	**R14E**	**W.M.**	**17**	**SW NE**			**Primary Irrigation**	**2.7**	
T40S	**R14E**	**W.M.**	**17**	**SE NE**			**Primary Irrigation**	**27.8**	
T40S	**R14E**	**W.M.**	**17**	**NE SE**			**Primary Irrigation**	**3.2**	
Total Acres Irrigated								**207.4**	

B. Diversion and Delivery System Information

Provide the following information concerning the diversion and delivery system. Information provided must describe the equipment used to transport and apply the water from the point of diversion to the place of use.

1. Is a pump used? **YES**

2. Pump Information

MANUFACTURER	MODEL	SERIAL NUMBER	TYPE (CENTRIFUGAL, TURBINE OR SUBMERSIBLE)	INTAKE SIZE	DISCHARGE SIZE
Unknown	**Unknown**	**Unknown**	**Submersible**	**Unknown**	**14"**
Vertiline	**8CH**	**D06668**	**Submersible**	**10"**	**8"**

3. Motor Information

MANUFACTURER	HORSEPOWER
Unknown	**40 HP**
Halloshaft	**25 HP**

4. Theoretical Pump Capacity

HORSEPOWER	OPERATING PSI	LIFT FROM SOURCE TO PUMP	LIFT FROM PUMP TO PLACE OF USE	TOTAL PUMP OUTPUT (IN CFS)
40	**0**	**17'**	**0'**	**16.56**
25	**0**	**35'**	**0'**	**5.03**

5. Provide pump calculations:

See Appendix E.

6. Measured Pump Capacity (using meter if meter was present and system was operating)

INITIAL METER READING	ENDING METER READING	DURATION OF TIME OBSERVED	TOTAL PUMP OUTPUT (IN CFS)
N/A			

Reminder: For pump calculations use the reference information at the end of this document.

7. Is the distribution system piped? **YES**

8. Mainline Information

MAINLINE SIZE	LENGTH	TYPE OF PIPE	BURIED OR ABOVE GROUND
14"	**200'**	**Steel**	**Aboveground**
12"	**130'**	**Steel**	**Aboveground**

9. Lateral or Handline Information

LATERAL OR HANDLINE SIZE	LENGTH	TYPE OF PIPE	BURIED OR ABOVE GROUND
Wheel Line	**3700'**	**Aluminum**	**Above ground**

10. Sprinkler Information

SIZE	OPERATING PSI	SPRINKLER OUTPUT (GPM)	TOTAL NUMBER OF SPRINKLERS	MAXIMUM NUMBER USED	TOTAL SPRINKLER OUTPUT (CFS)
19/64"	**65**	**19.9**	**130**	**130**	**5.76**

Reminder: For sprinkler output determination use the reference information at the end of this document.

11. Pivot Information

MANUFACTURER	MAXIMUM WETTED RADIUS	OPERATING PSI	TOTAL PIVOT OUTPUT (GPM)	TOTAL PIVOT OUTPUT (CFS)
N/A				

12. Additional notes or comments related to the system:

N/A

C. Storage

1. Does the distribution system include in-system storage (e.g. storage tank, bulge in system / reservoir) **NO**

D. Gravity Flow Pipe

(THE DEPARTMENT TYPICALLY USES THE HAZEN-WILLIAM'S FORMULA FOR A GRAVITY FLOW PIPE SYSTEM)

1. Does the system involve a gravity flow pipe? **NO**

E. Gravity Flow Canal or Ditch

(THE DEPARTMENT TYPICALLY USES MANNING'S FORMULA FOR CANALS AND DITCHES)

1. Is a gravity flow canal or ditch used to convey the water as part of the distribution system? **YES**

2. Complete the table:

CANAL OR DITCH TYPE (MATERIAL)	TOP WIDTH OF CANAL OR DITCH	BOTTOM WIDTH OF CANAL OR DITCH	DEPTH	"N" FACTOR	AMOUNT OF FALL	LENGTH OF CANAL / DITCH	SLOPE	COMPUTED RATE (IN CFS)
Earth	**12'**	**6'**	**1.5'**	**0.03**	**11**	**5,930'**	**0.2%**	**36.0**

3. Provide calculations:

See Appendix E.

4. If an actual measurement was taken, provide the following:

DATE OF MEASUREMENT	WHO MADE THE MEASUREMENT	MEASUREMENT METHOD	MEASURED QUANTITY OF WATER (IN CFS)
N/A			

Attach measurement notes.

POD 5

A. Place of Use

1. Is the right for municipal use? **NO**

TWP	RNG	MER	SEC	QQ	GLOT	DLC	USE	IF IRRIGATION, # PRIMARY ACRES	IF IRRIGATION, # SUPPLEMENTAL ACRES
T40S	**R14E**	**W.M.**	**8**	**NE SE**			**Primary Irrigation**	**36.6**	
T40S	**R14E**	**W.M.**	**8**	**SE SE**			**Primary Irrigation**	**25.6**	
T40S	**R14E**	**W.M.**	**8**	**SW SE**			**Primary Irrigation**	**26.3**	
T40S	**R14E**	**W.M.**	**9**	**NW SW**			**Primary Irrigation**	**12.4**	
T40S	**R14E**	**W.M.**	**9**	**SW SW**			**Primary Irrigation**	**23.4**	
T40S	**R14E**	**W.M.**	**16**	**NW NW**			**Primary Irrigation**	**0.1**	
T40S	**R14E**	**W.M.**	**16**	**SW NW**			**Primary Irrigation**	**2.5**	
T40S	**R14E**	**W.M.**	**16**	**SW SW**			**Primary Irrigation**	**3.1**	
T40S	**R14E**	**W.M.**	**16**	**SE SW**			**Primary Irrigation**	**4.8**	
T40S	**R14E**	**W.M.**	**16**	**NW SW**			**Primary Irrigation**	**0.2**	
T40S	**R14E**	**W.M.**	**17**	**NE NE**			**Primary Irrigation**	**16.9**	
T40S	**R14E**	**W.M.**	**17**	**NW NE**			**Primary Irrigation**	**21.8**	
T40S	**R14E**	**W.M.**	**17**	**SW NE**			**Primary Irrigation**	**2.7**	
T40S	**R14E**	**W.M.**	**17**	**SE NE**			**Primary Irrigation**	**27.8**	
T40S	**R14E**	**W.M.**	**17**	**NE SE**			**Primary Irrigation**	**3.2**	
Total Acres Irrigated								**207.4**	

B. Diversion and Delivery System Information

Provide the following information concerning the diversion and delivery system. Information provided must describe the equipment used to transport and apply the water from the point of diversion to the place of use.

1. Is a pump used? **YES**

2. Pump Information

MANUFACTURER	MODEL	SERIAL NUMBER	TYPE (CENTRIFUGAL, TURBINE OR SUBMERSIBLE)	INTAKE SIZE	DISCHARGE SIZE
Unknown	**Unknown**	**Unknown**	**Submersible**	**Unknown**	**14”**
Vertiline	**8CH**	**D06668**	**Submersible**	**10”**	**8”**
Pacific	**Unknown**	**FS 61271**	**Centrifugal**	**8”**	**8”**

3. Motor Information

MANUFACTURER	HORSEPOWER
Unknown	**40 HP**
Halloshaft	**25 HP**
U.S. Electrical	**50 HP**

4. Theoretical Pump Capacity

HORSEPOWER	OPERATING PSI	LIFT FROM SOURCE TO PUMP	LIFT FROM PUMP TO PLACE OF USE	TOTAL PUMP OUTPUT (IN CFS)
40	**0**	**17’**	**0’**	**16.56**
25	**0**	**35’**	**0’**	**5.03**
50	**0**	**10’**	**0’**	**33.05**

5. Provide pump calculations:

See Appendix E.

6. Measured Pump Capacity (using meter if meter was present and system was operating)

INITIAL METER READING	ENDING METER READING	DURATION OF TIME OBSERVED	TOTAL PUMP OUTPUT (IN CFS)
N/A			

Reminder: For pump calculations use the reference information at the end of this document.

7. Is the distribution system piped? **YES**

8. Mainline Information

MAINLINE SIZE	LENGTH	TYPE OF PIPE	BURIED OR ABOVE GROUND
14”	**200’**	**Steel**	**Aboveground**
12”	**130’**	**Steel**	**Aboveground**
8”	**1810’**	**Steel**	**Aboveground**

9. Lateral or Handline Information

LATERAL OR HANDLINE SIZE	LENGTH	TYPE OF PIPE	BURIED OR ABOVE GROUND
Wheel Line	**3700’**	**Aluminum**	**Above ground**

10. Sprinkler Information

SIZE	OPERATING PSI	SPRINKLER OUTPUT (GPM)	TOTAL NUMBER OF SPRINKLERS	MAXIMUM NUMBER USED	TOTAL SPRINKLER OUTPUT (CFS)
19/64”	**65**	**19.9**	**130**	**130**	**5.76**

Reminder: For sprinkler output determination use the reference information at the end of this document.

11. Pivot Information

Manufacturer	Maximum Wetted Radius	Operating PSI	Total Pivot Output (GPM)	Total Pivot Output (CFS)
N/A				

12. Additional notes or comments related to the system:

N/A

C. Storage

1. Does the distribution system include in-system storage (e.g. storage tank, bulge in system / reservoir) **NO**

D. Gravity Flow Pipe

(The Department typically uses the Hazen-William's formula for a gravity flow pipe system)

1. Does the system involve a gravity flow pipe? **NO**

E. Gravity Flow Canal or Ditch

(The Department typically uses Manning's formula for canals and ditches)

1. Is a gravity flow canal or ditch used to convey the water as part of the distribution system? **YES**

2. Complete the table:

Canal or Ditch Type (Material)	Top Width of Canal or Ditch	Bottom Width of Canal or Ditch	Depth	"N" Factor	Amount of Fall	Length of Canal / Ditch	Slope	Computed Rate (in cfs)
Earth	**21'**	**12'**	**1.5'**	**0.03**	**11**	**3,550'**	**0.3%**	**90.0**

3. Provide calculations:

See Appendix E.

4. If an actual measurement was taken, provide the following:

Date of Measurement	Who Made the Measurement	Measurement Method	Measured Quantity of Water (in cfs)
N/A			

Attach measurement notes.

POD 6

A. Place of Use

1. Is the right for municipal use? **NO**

TWP	RNG	MER	SEC	QQ	GLOT	DLC	USE	IF IRRIGATION, # PRIMARY ACRES	IF IRRIGATION, # SUPPLEMENTAL ACRES
T40S	**R14E**	**W.M.**	**8**	**NE SE**			**Primary Irrigation**	**36.6**	
T40S	**R14E**	**W.M.**	**8**	**SE SE**			**Primary Irrigation**	**25.6**	
T40S	**R14E**	**W.M.**	**8**	**SW SE**			**Primary Irrigation**	**26.3**	
T40S	**R14E**	**W.M.**	**9**	**NW SW**			**Primary Irrigation**	**12.4**	
T40S	**R14E**	**W.M.**	**9**	**SW SW**			**Primary Irrigation**	**23.4**	
T40S	**R14E**	**W.M.**	**16**	**NW NW**			**Primary Irrigation**	**0.1**	
T40S	**R14E**	**W.M.**	**16**	**SW NW**			**Primary Irrigation**	**2.5**	
T40S	**R14E**	**W.M.**	**16**	**SW SW**			**Primary Irrigation**	**3.1**	
T40S	**R14E**	**W.M.**	**16**	**SE SW**			**Primary Irrigation**	**4.8**	
T40S	**R14E**	**W.M.**	**16**	**NW SW**			**Primary Irrigation**	**0.2**	
T40S	**R14E**	**W.M.**	**17**	**NE NE**			**Primary Irrigation**	**16.9**	
T40S	**R14E**	**W.M.**	**17**	**NW NE**			**Primary Irrigation**	**21.8**	
T40S	**R14E**	**W.M.**	**17**	**SW NE**			**Primary Irrigation**	**2.7**	
T40S	**R14E**	**W.M.**	**17**	**SE NE**			**Primary Irrigation**	**27.8**	
T40S	**R14E**	**W.M.**	**17**	**NE SE**			**Primary Irrigation**	**3.2**	
Total Acres Irrigated								**207.4**	

B. Diversion and Delivery System Information

Provide the following information concerning the diversion and delivery system. Information provided must describe the equipment used to transport and apply the water from the point of diversion to the place of use.

1. Is a pump used? **YES**

2. Pump Information

MANUFACTURER	MODEL	SERIAL NUMBER	TYPE (CENTRIFUGAL, TURBINE OR SUBMERSIBLE)	INTAKE SIZE	DISCHARGE SIZE
Unknown	**Unknown**	**Unknown**	**Submersible**	**Unknown**	**14"**
Vertiline	**8CH**	**D06668**	**Submersible**	**10"**	**8"**

3. Motor Information

MANUFACTURER	HORSEPOWER
Unknown	**40 HP**
Halloshaft	**25 HP**

4. Theoretical Pump Capacity

HORSEPOWER	OPERATING PSI	LIFT FROM SOURCE TO PUMP	LIFT FROM PUMP TO PLACE OF USE	TOTAL PUMP OUTPUT (IN CFS)
40	**0**	**17'**	**0'**	**16.56**
25	**0**	**35'**	**0'**	**5.03**

5. Provide pump calculations:

See Appendix E.

6. Measured Pump Capacity (using meter if meter was present and system was operating)

INITIAL METER READING	ENDING METER READING	DURATION OF TIME OBSERVED	TOTAL PUMP OUTPUT (IN CFS)
N/A			

Reminder: For pump calculations use the reference information at the end of this document.

7. Is the distribution system piped? **YES**

8. Mainline Information

MAINLINE SIZE	LENGTH	TYPE OF PIPE	BURIED OR ABOVE GROUND
14"	**200'**	**Steel**	**Aboveground**
12"	**130'**	**Steel**	**Aboveground**

9. Lateral or Handline Information

LATERAL OR HANDLINE SIZE	LENGTH	TYPE OF PIPE	BURIED OR ABOVE GROUND
Wheel Line	**3700'**	**Aluminum**	**Above ground**

10. Sprinkler Information

SIZE	OPERATING PSI	SPRINKLER OUTPUT (GPM)	TOTAL NUMBER OF SPRINKLERS	MAXIMUM NUMBER USED	TOTAL SPRINKLER OUTPUT (CFS)
19/64"	**65**	**19.9**	**130**	**130**	**5.76**

Reminder: For sprinkler output determination use the reference information at the end of this document.

11. Pivot Information

MANUFACTURER	MAXIMUM WETTED RADIUS	OPERATING PSI	TOTAL PIVOT OUTPUT (GPM)	TOTAL PIVOT OUTPUT (CFS)
N/A				

12. Additional notes or comments related to the system:

N/A

Reminder: For pump calculations use the reference information at the end of this document.

C. Storage

1. Does the distribution system include in-system storage (e.g. storage tank, bulge in system / reservoir) **NO**

D. Gravity Flow Pipe

(THE DEPARTMENT TYPICALLY USES THE HAZEN-WILLIAM'S FORMULA FOR A GRAVITY FLOW PIPE SYSTEM)

1. Does the system involve a gravity flow pipe? **NO**

E. Gravity Flow Canal or Ditch

(THE DEPARTMENT TYPICALLY USES MANNING'S FORMULA FOR CANALS AND DITCHES)

1. Is a gravity flow canal or ditch used to convey the water as part of the distribution system? **YES**

2. Complete the table:

CANAL OR DITCH TYPE (MATERIAL)	TOP WIDTH OF CANAL OR DITCH	BOTTOM WIDTH OF CANAL OR DITCH	DEPTH	"N" FACTOR	AMOUNT OF FALL	LENGTH OF CANAL / DITCH	SLOPE	COMPUTED RATE (IN CFS)
Earth	**7.5'**	**1'**	**2.7'**	**0.03**	**163'**	**4,150'**	**3.9%**	**128.2**

3. Provide calculations:

See Appendix E.

4. If an actual measurement was taken, provide the following:

DATE OF MEASUREMENT	WHO MADE THE MEASUREMENT	MEASUREMENT METHOD	MEASURED QUANTITY OF WATER (IN CFS)
N/A			

Attach measurement notes.

SECTION 5
CONDITIONS

All conditions contained in the permit, permit amendment, or any extension final order shall be addressed. Reports that do not address all performance related conditions will be returned.

1. Time Limits:

Permits and any extension final orders contain any or all of the following dates: the date when the actual construction work was to begin, the date when the construction was to be completed, and the date when the complete application of water to the proposed use was to be completed. These dates may be referred to as ABC dates. Describe how the water user has complied with each of the development timelines established in the permit or permit extension of time:

	DATE FROM PERMIT	DATE ACCOMPLISHED*	DESCRIPTION OF ACTIONS TAKEN BY WATER USER TO COMPLY WITH THE TIME LIMITS
ISSUANCE DATE	**11/15/1963**		
BEGIN CONSTRUCTION (A)	**11/15/1964**	**Unknown. Constructed by previous owner.**	**Pumps installed and ditches constructed to convey water to permitted grounds.**
COMPLETE CONSTRUCTION (B)	**10/1/2013**	**Unknown. Constructed by previous owner.**	**Pumps installed and ditches constructed to convey water to permitted grounds.**
COMPLETE APPLICATION OF WATER (C)	**10/1/2013**	**9/1/2012**	**Full beneficial use of water applied to land.**

* MUST BE WITHIN PERIOD BETWEEN PERMIT OR ANY EXTENSION FINAL ORDER ISSUANCE AND THE DATE TO COMPLETELY APPLY WATER

2. Is there an extension final order(s)? **YES**

3. Measurement Conditions:

a. Does the permit, permit amendment, or any extension final order require the installation of a meter or approved measuring device? **NO**

4. Recording and reporting conditions

a. Is the water user required to report the water use to the Department? **NO**

5. Fish Screening

a. Are any points of diversion required to be screened to prevent fish from entering the point of diversion? **NO**

Reminder: If fish screening devices were required, the COBU map must indicate their location in relation to the point of diversion.

Reminder: Failure to submit evidence of a timely installed fish screen may result in an unfavorable determination. In order to receive a favorable approval, the ODFW/WRD "Fish Screen Inspection" form needs to have been previously submitted or be attached to this form.

6. By-pass Devices

a. Are any points of diversion required to have a by-pass device to prevent fish from entering the point of diversion? **NO**

11. Other conditions required by permit, permit amendment final order, or extension final order:

a. Was the water user required to restore the riparian area if it was disturbed? **NO**

b. Was a fishway required? **NO**

c. Was submittal of a water management and conservation plan required? **NO**

d. Other conditions? **NO**

If "YES" to any of the above, identify the condition and describe the water user's actions to comply with the condition(s):

N/A

SECTION 6

ATTACHMENTS

Provide a list of any additional documents you are attaching to this report:

ATTACHMENT NAME	DESCRIPTION
Appendix A	**Copy of Permit S-28984**
Appendix B	**Copy of Extension of Time Final Order**
Appendix C	**Copy of Final Proof Map on Paper**
Appendix D	**Signed Mylar Map**
Appendix E	**Theoretical Pump, Gravity Flow Ditch, and Sprinkler Calculations**
Appendix F	**Email Correspondence Between OWRD and Adkins**
Appendix G	**Copy of Tax Maps 40-14, 40-14-08, & 40-14-17**

SECTION 7

CLAIM OF BENEFICIAL USE MAP

The Claim of Beneficial Use Map must be submitted with this claim. Claims submitted without the Claim of Beneficial Use map will be returned. The map shall be submitted on poly film at a scale of 1" = 1320 feet, 1" = 400 feet, or the original full-size scale of the county assessor map for the location.

Provide a general description of the survey method used to prepare the map. Examples of possible methods include, but are not limited to, a traverse survey, GPS, or the use of aerial photos. If the basis of the survey is an aerial photo, provide the source, date, series and the aerial photo identification number.

The survey methods used to complete this Final Proof and COBU application include field measurements and NAIP 2018 aerial photography.

Map Checklist

Please be sure that the map you submit includes ALL the items listed below.
(Reminder: Incomplete maps and/or claims may be returned.)

☒ Map on polyester film

☒ Appropriate scale (1" = 400 feet, 1" = 1320 feet, or the original full-size scale of the county assessor map)

☒ Township, Range, Section, Donation Land Claims, and Government Lots

☒ If irrigation, number of acres irrigated within each projected Donation Land Claims, Government Lots, Quarter-Quarters

☒N/A Locations of fish screens and/or fish by-pass devices in relationship to point of diversion

☒N/A Locations of meters and/or measuring devices in relationship to point of diversion or appropriation

☒ Conveyance structures illustrated (pumps, reservoirs, pipelines, ditches, etc.)

☒ Point(s) of diversion or appropriation (illustrated and coordinates)

☒ Tax lot boundaries and numbers

☒ Source illustrated if surface water

☒ Disclaimer ("This map is not intended to provide legal dimensions or locations of property ownership lines")

☒ Application and permit number or transfer number

☒ North arrow

☒ Legend

☒ CWRE stamp and signature

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APPENDIX A
Copy of Permit S-28984

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Permit No. 28984

***APPLICATION FOR PERMIT**

Combining Appls. Nos 32892 and 33889 for Permit.

To Appropriate the Public Waters of the State of Oregon

I, Richard ... Smith
(Name of applicant)

of Lorella Route, Bonanza
(Mailing address)

State of Oregon, do hereby make application for a permit to appropriate the following described public waters of the State of Oregon, SUBJECT TO EXISTING RIGHTS:

If the applicant is a corporation, give date and place of incorporation .....

1. The source of the proposed appropriation is Dobe Cr., Upper Pine Cr., Lower Pine Cr., (Name of stream)
Rattlesnake Cr., Black Canyon Cr. & /Smith Reservoir, a tributary of Lost River and Tule Lake

2. The amount of water which the applicant intends to apply to beneficial use is .24
cubic feet per second. Dobe-27½; Upper Pine-36½; Lower Pine-17½; Rattlesnake-8½; Black Canyon-12½;
(If water is to be used from more than one source, give quantity from each) & Res.

**3. The use to which the water is to be applied is irrigation
(Irrigation, power, mining, manufacturing, domestic supplies, etc.)

Dobe Creek-
4. The point of diversion is located 1958 ft. N. (N. or S.) and 1455 ft. E. (E. or W.) from the W¼
corner of Section 4, T. 40 S., R. 14 E., W.M. in the NE¼ NW¼, Sec. 4; Upper Pine Cr.-
(Section or subdivision) NW¼ NE¼ of Sec 10
841 Ft. S. & 202 Ft. E. of N¼ cor. of Sec. 10, T. 40 S., R. 14 E.; Lower Pine Cr.-
209 ft. S. & 186 ft. E. of W¼ cor. of Sec. 4, T. 40 S., R. 14 E., in the NW¼ SW¼, Sec. 4;
Rattlesnake Creek- 852 ft. N. & 1015 ft. E. of the W¼ cor. of Sec. 9, T. 40 S., R. 14 E.,
(If preferable, give distance and bearing to section corner)
in SW¼ NW¼ of Sec. 9; Black Canyon Cr.-1368 ft. S. & 4753 ft. E. of the NW cor. of Sec. 21,
(If there is more than one point of diversion, each must be described. Use separate sheet if necessary)
T. 40 S., R. 14 E., W.M. in the SE¼ NE¼ of Sec. 21 (See Remarks)
being within the ..... of Sec. ....., Tp. ....., R. ....., W. M., in the county of .....
(Give smallest legal subdivision) (N. or S.) (E. or W.)

5. The main ditch to be one half mile
(Main ditch, canal or pipe line) (Miles or feet)
in length, terminating in the NE¼-SE¼ of Sec. 8, Tp. 40S,
(Smallest legal subdivision) (N or S.)
R. 14E (E. or W.), W. M., the proposed location being shown throughout on the accompanying map.

DESCRIPTION OF WORKS

Diversion Works—

6. (a) Height of dam 3 feet, length on top 25 feet, length at bottom
10 feet; material to be used and character of construction rock & earth
(Loose rock, concrete, masonry,
rock and brush, timber crib, etc., wasteway over or around dam)

(b) Description of headgate Concrete with flash-boards. Opening 2'0"
(Timber, concrete, etc., number and size of openings)
deep by 1'0" wide

28984

Canal System or Pipe Line—

7. (a) Give dimensions at each point of canal where materially changed in size, stating mil

headgate. At headgate: width on top (at water line) 9.0 feet; width on

3.0 feet; depth of water 1.5 feet; grade 1.0 feet fall

thousand feet.

(b) At ..... miles from headgate: width on top (at water line) .....

..... feet; width on bottom ..... feet; depth of water .....

grade ..... feet fall per one thousand feet.

(c) Length of pipe, ... ft.; size at intake, ... in.; size at .....

from intake ..... in.; size at place of use ..... in.; difference in elevation b

intake and place of use, ... ft. Is grade uniform? ..... Estimated c

..... sec. ft.

8. Location of area to be irrigated, or place of use $E\frac{1}{2}$-SE_4 Sec. 8, $W\frac{1}{2}$-SW_4 Sec. NW_4, SW_4 Sec. 16, NE_4-NE_4 S T. 40 S, R 14 E., W. M.

Township North or South	Range E. or W. of Willamette Meridian	Section	Forty-acre Tract	Number Acres To Be Irri
40 S.	14 E.	8	NE_4-SE_4	40.0
			SE_4-SE_4	40.0
		9	NW_4-SW_4	40.0
			SW_4-SW_4	40.0
		16	NW_4-NW_4	39.9
			SW_4-NW_4	12.4
			SW_4-SW_4	40.0
			NE_4-SW_4	2.6
			SE_4-SW_4	24.3
			NW_4-SW_4	18.3
		17	NE_4-NE_4	40.0
				337.5

(If more space required, attach separate sheet)

(a) Character of soil Sandy, clay loam

(b) Kind of crops raised Grains, grasses and row-crops

Power or Mining Purposes—

9. (a) Total amount of power to be developed ..... theoretical hors

(b) Quantity of water to be used for power ..... sec. ft.

(c) Total fall to be utilized ..... feet.
(Head)

(d) The nature of the works by means of which the power is to be developed

Municipal or Domestic Supply— 28984

10. (a) To supply the city of .....

..... (Name of) County, having a present population of .....

and an estimated population of ..... in 19.....

(b) If for domestic use state number of families to be supplied .....

(Answer questions 11, 12, 13, and 14 in all cases)

11. Estimated cost of proposed works, $ 5,000.00

12. Construction work will begin on or before Oct. 1st, 1961 ③

13. Construction work will be completed on or before Oct. 1st, 1963

14. The water will be completely applied to the proposed use on or before Oct. 1st, 1965

Richard A. Smith
(Signature of applicant)
By [signature]
Engineer

Remarks:

The lands to be irrigated are productive and the crops that can be raised will more than justify the costs.

In filing this application the applicant does not waive or abandon any vested rights appurtenant to said lands.

Item 4 (cont.) pumping plant is located N 17° 53½' E 872.2 feet from the west quarter section corner of Section 16, T. 40 S., R. 14 E., W.M. being within the SW¼-NW¼ of said Section 16.

STATE OF OREGON, }
County of Marion, } ss.

This is to certify that I have examined the foregoing application, together with the accompanying maps and data, and return the same for completion

In order to retain its priority, this application must be returned to the State Engineer, with corrections on or before ~~August 14~~ ~~August 20~~, ~~1961~~ 1962

PERMIT

STATE OF OREGON, }
County of Marion, } *ss.*

This is to certify that I have examined the foregoing application and do hereby grant th
SUBJECT TO EXISTING RIGHTS and the following limitations and conditions:

The right herein granted is limited to the amount of water which can be applied to benef

and shall not exceed 4.24 *cubic feet per second measured at the point of diversion f*

stream, or its equivalent in case of rotation with other water users, from Dobe Creek, Uppe
Creek, Lower Pine Creek, Rattlesnake Creek, Black Canyon Creek and Smith Rese
be constructed under application No. R-32891, permit No. R- 3511 ; being 1.1
from Dobe Creek, 1.53 c.f.s. from Upper Pine Creek, 0.72 c.f.s. from Lower Pi
0.34 c.f.s. from Rattlesnake Creek and 0.51 c.f.s. from Black Canyon Creek.

The use to which this water is to be applied is irrigation

If for irrigation, this appropriation shall be limited to 1/40th *of one cubic*

second or its equivalent for each acre irrigated from direct flow and shall be further l
to a diversion of not to exceed 3 acre feet per acre for each acre irrigated
the irrigation season of each year from direct flow and storage from reservoi
be constructed under permit No. R-3511.

and shall be subject to such reasonable rotation system as may be ordered by the proper state offic

The priority date of this permit is August 1, 1963

Actual construction work shall begin on or before November 15, 1964 *a*

thereafter be prosecuted with reasonable diligence and be completed on or before October 1, 19 65

Complete application of the water to the proposed use shall be made on or before October 1,

WITNESS my hand this 15th *day of* November, *19* 63

STATE EN

BC Extended to Oct. 1, 1969 BC Extended to Oct. 1, 1976 Extended to Oct. 1 1971

ended to Oct. 1 1973

APPENDIX B
Copy of Extension of Time Final Order

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Oregon Water Resources Department
Water Right Services Division

Water Rights Application
Number S-32892

Final Order
Extension of Time for Permit Number S-28984
Permit Holder: Michael Tyrholm & Diane L. Cross-Tyrholm
Trustees of the Michael and Diane Tyrholm Trust

Appeal Rights
This is a final order in other than a contested case. This order is subject to judicial review under ORS 183.484. A request 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 file 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.

Application History

Permit S-28984 was issued by the Department on November 15, 1963. The permit called for completion of construction by October 1, 1965 and complete application of water to beneficial use by October 1, 1966. On May 5, 2011, Michael Tyrholm & Diane L. Cross-Tyrholm-Trustees of the Michael and Diane Tyrholm Trust submitted to the Department an Application for Extension of Time for Permit S-28984. In accordance with OAR 690-315-0050(2), on September 20, 2011, the Department issued a Proposed Final Order proposing to extend the time to complete construction to October 1, 2013 and the time to apply water to full beneficial use to October 1, 2013. The protest period closed November 4, 2011, in accordance with OAR 690-315-0060(1). No protest was filed.

The Department adopts and incorporates by reference the Proposed Final Order dated September 20, 2011.

At time of issuance of the Proposed Final Order the Department concluded that, based on the factors demonstrated by the applicant, the permit may be extended subject to the following additional condition:

CONDITION

Last Extension Condition

This is to be the last extension of time granted for Permit G-28984. Any future extensions of time requests will be denied.

The applicant has demonstrated good cause for the permit extension pursuant to ORS 537.230, 539.010(5) and OAR 690-315-0040(2).

Order

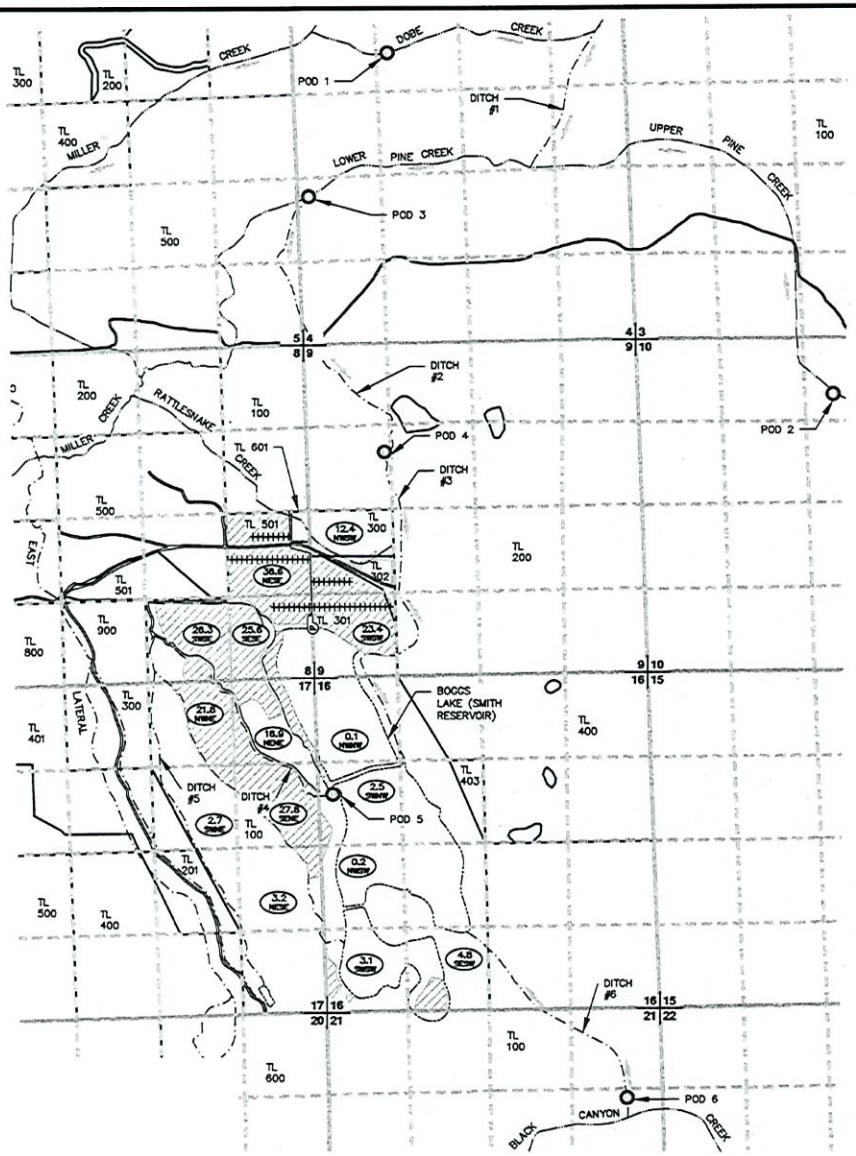
The extension of time for Application S-32892, Permit S-28984, therefore, is approved. The deadline for completing construction is extended from October 1, 1973 to October 1, 2013. The deadline for applying water to full beneficial use within the terms and conditions of the permit is extended from October 1, 1973 to October 1, 2013.

DATED: February 3, 2012

Dwight French
Water Right Services Division Administrator, *for*
PHILLIP C. WARD, DIRECTOR

- If you have any questions about statements contained in this document, please contact Jerry Gainey at (503) 986-0812.
- If you have other questions about the Department or any of its programs, please contact our Water Resources Customer Service Group at (503) 986-0900

APPENDIX C
Copy of Final Proof Map on Paper



LEGEND

- TL 500 — TAX LOT NUMBER
- POINT OF DIVERSION
- TAX LOT BOUNDARY
- DITCH LINE
- CREEK LINE
- SECTION LINES
- 1/4 1/4 LINES
- LAKE BOUNDARY
- GRAVEL/DIRT ROADWAY
- IRRIGATED ACREAGE (9.2 ACRES) — 1/4 1/4
- FLOW DIRECTION
- WHEEL LINE
- PUMP

N

1320' 0 660' 1320'
(FEET)

POINTS OF DIVERSION

DATE OF PRIORITY: AUGUST 1, 1963

POD 1 – 1958 FEET NORTH AND 1455 FEET EAST FROM WEST 1/4 CORNER OF SECTION 4, T40S, R14E, W.M., LOCATED IN THE NE 1/4 NW 1/4 OF SECTION 4

POD 2 – 841 FEET SOUTH AND 202 FEET EAST FROM NORTH 1/4 CORNER OF SECTION 10, T40S, R14E, W.M., LOCATED IN THE NW 1/4 NE 1/4 OF SECTION 10

POD 3 – 209 FEET SOUTH AND 186 FEET EAST FROM WEST 1/4 CORNER OF SECTION 4, T40S, R14E, W.M., LOCATED IN THE NW 1/4 SW 1/4 OF SECTION 4

POD 4 – 852 FEET NORTH AND 1015 FEET EAST FROM WEST 1/4 CORNER OF SECTION 9, T40S, R14E, W.M., LOCATED IN THE SW 1/4 NW 1/4 OF SECTION 9

POD 5 – NORTH 17 DEGREES 531/2 MINUTES EAST 872.2 FEET FROM WEST 1/4 CORNER OF SECTION 16, T40S, R14E, W.M., LOCATED IN SW 1/4 NW 1/4

POD 6 – 1369 FEET SOUTH AND 4753 FEET EAST FROM NORTHWEST CORNER OF SECTION 21, T40S, R21E, W.M., LOCATED IN SE 1/4 NE 1/4

NOTES

1. THE PURPOSE OF THIS MAP IS TO IDENTIFY THE LOCATION OF THE WATER RIGHT ONLY, AND IS NOT INTENDED TO PROVIDE DIMENSIONS OR LOCATION OF PROPERTY LINES.
2. FOR TAX LOT INFORMATION, SEE TAX MAPS INCLUDED WITH THIS APPLICATION.
3. THIS MAP WAS PREPARED FROM FIELD MEASUREMENTS, NAIP 2018 AERIAL PHOTOGRAPH, AND KLAMATH COUNTY TAX MAPS 40 14, 40 14 5, 40 14 8, AND 40 14 17.

CLAIM OF BENEFICIAL USE AND FINAL PROOF MAP
FOR
MICHAEL & DIANE TYRHOLM
T40S, R14E, W.M., SEC. 4, 9, 10, 16, 17, & 21
KLAMATH COUNTY, OREGON
PERMIT No. S-28984
APPLICATION No. S-32892

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CERTIFIED WATER RIGHT EXAMINER #88332 OWRE
Daniel B. Scalas
April 23, 2015
STATE OF OREGON
RENEWAL 06/30/22

ADKINS ENGINEERING & SURVEYING
o / 541.884.4666
w / AdkinsEngineering.com
1435 ESPLANADE AVENUE, KLAMATH FALLS, OR 97601
SERVING S. OREGON & N. CALIFORNIA
ENGINEERING • SURVEYING • PLANNING • TESTING

APPENDIX D
Signed Mylar Map

APPENDIX E
Theoretical Pump, Gravity Flow Ditch, and Sprinkler Calculations

Mike Tyrholm

January 24, 2014

Job No.: 1413-0201

Application #: S-32892
Permit #: S-28984

Pump Capacity Calculation Sheet

using Department designed formula:

(hp)(efficiency) / (lift + psi head) = capacity in cfs

Efficiency:

Centrifugal = 6.61
Turbine/Submersible = 7.04

Data Entry (fill in underlined blanks)

HP = 40
Efficiency = 7.04
Lift = 17
PSI = 0 (assumed)

Results Calculated

(hp)(efficiency) =	281.6
Head based on psi =	0.0
Total dynamic head = (head + lift)	17.0

Pump Capacity = 16.56 feet per second

Mike Tyrholm

January 24, 2014

Job No.: 1413-0201

Application #: S-72129
Permit #: S-53428

Pump Capacity Calculation Sheet

using Department designed formula:

(hp)(efficiency) / (lift + psi head) = capacity in cfs

Efficiency:

Centrifugal = 6.61
Turbine/Submersible = 7.04

Data Entry (fill in underlined blanks)

HP = 40
Efficiency = 6.61
Lift = 45
PSI = 0 (assumed)

Results Calculated

(hp)(efficiency) =	264.4
Head based on psi =	0.0
Total dynamic head = (head + lift)	45.0

Pump Capacity = 5.88 feet per second

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Mike Tyrholm

January 24, 2014

Job No.: 1413-0201

Application #: S-32892
Permit #: S-28984

Pump Capacity Calculation Sheet

using Department designed formula:

(hp)(efficiency) / (lift + psi head) = capacity in cfs

Efficiency:

Centrifugal = 6.61
Turbine/Submersible = 7.04

Data Entry (fill in underlined blanks)

HP = 25
Efficiency = 7.04
Lift = 35
PSI = 0 (assumed)

Results Calculated

(hp)(efficiency) =	176
Head based on psi =	0.0
Total dynamic head = (head + lift)	35.0

Pump Capacity = 5.03 feet per second

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Mike Tyrholm

January 24, 2014

Job No.: 1413-0201

Application #: S-32892
Permit #: S-28984

Pump Capacity Calculation Sheet

using Department designed formula:

(hp)(efficiency) / (lift + psi head) = capacity in cfs

Efficiency:

Centrifugal = 6.61
Turbine/Submersible = 7.04

Data Entry (fill in underlined blanks)

HP = 50
Efficiency = 6.61
Lift = 10
PSI = 0 (assumed)

Results Calculated

(hp)(efficiency) =	330.5
Head based on psi =	0.0
Total dynamic head = (head + lift)	10.0

Pump Capacity = 33.05 feet per second

Mike Tyrholm January 24, 2014

1413-0201

Application #: S-32892
Permit #: S-28984

Ditch Capacity Calcualtor

using Manning's Formula

POD 5

Data Entry (fill in underlined blanks)

Top Width = 21 feet
Bottom Width = 12 feet
Depth = 1.5 feet
Fall = 11 feet per 3550 feet of distance
Grade = 0.00309859 , or 0.3%
n Factor = 0.03

Results calculated

Area of cross-section = 24.75 square feet
Wetted Perimeter = 21.4868 feet
Hydraulic Radius = 1.15187
Velocity = 3.636 feet per second

Calculated Ditch Capacity = 90.0 cubic feet per second

Name

Date: November 8, 2018

Job No.: 1413-0201

Application #: S-32892
Permit #: S-28984

Sprinkler Capacity Calculator

Data Entry (fill in underlined blanks)

Sprinkler group 1

Nozzle size = 19/64 inch (type an apostrophe before the size)
Pressure = 65 PSI
Number of heads = 130

Results calculated

Sprinkler group 1 capacity = 2587 gpm, or 5.76 cfs

Total sprinkler capacity = 2587 gpm, or 5.76 cfs

Note: If entered values return a result of "#N/A" gpm, then the sprinkler capacity chart does not contain a rate for that nozzle size and PSI.

APPENDIX F
Email Correspondence Between OWRD and Adkins

Gerry Clark

From: Doug Adkins <douga@adkinsengineering.com>
Sent: Monday, January 06, 2014 3:38 PM
To: Gerry Clark (gerald.e.clark@state.or.us)
Cc: Jerry Sauter (jerry.k.sauter@state.or.us); Jon Moritz; Vickie Ream
Subject: FW: Tyrholm, Application S-72129, Permit S-53428

Good New Year to You, Gerry

Boy, it must be time for me to retire.

In the below email to you, I was asking about permit S-28924 but referenced Permit S-53428. Guess what, I was having a senior moment. S-53428 is a permit for other Tyrholm properties, which is the permit Jerry Sauter sent the 60 day notice on. We are working on that one as well, and will finish it by the end of February.

Permit S-28924 is the permit that we were going to amend, however, after your and Dewight's review, we all agreed to just do a COBU & FP for the actual place of use, instead of filing for a time extension and permit amendment. We are also working on that one. I hope to have that one submitted by the end of February or sooner.

Doug

From: Gerry Clark [mailto:gerald.e.clark@state.or.us]
Sent: Monday, December 30, 2013 5:25 PM
To: Doug Adkins
Cc: Andy Hanson; Jerry Sauter; Jon Moritz; Vickie Ream
Subject: RE: Tyrholm, Application S-72129, Permit S-53428

Doug,

Thanks for your well wishes!

I will place a copy of your message in the file. Since we know that you are working on this, Jerry will not take action on the file at the first of the year. Jerry may want to have a specific date to put in the file regarding when we might expect the Claim.

Happy New Year!

Gerry

Gerry Clark
Water Right Services Division
Water Resources Department
725 Summer Street NE, Suite A
Salem, Oregon 97301

Phone: 503-986-0811

From: Doug Adkins [mailto:douga@adkinsengineering.com]
Sent: Monday, December 30, 2013 12:47 PM

To: Gerry Clark (gerald.e.clark@state.or.us)
Cc: Vickie Ream; Andy Hanson; Jon Moritz
Subject: Tyrholm, Application S-72129, Permit S-53428

Hello Gerry

Hope you had a great Christmas, and have a great New Year party planned.

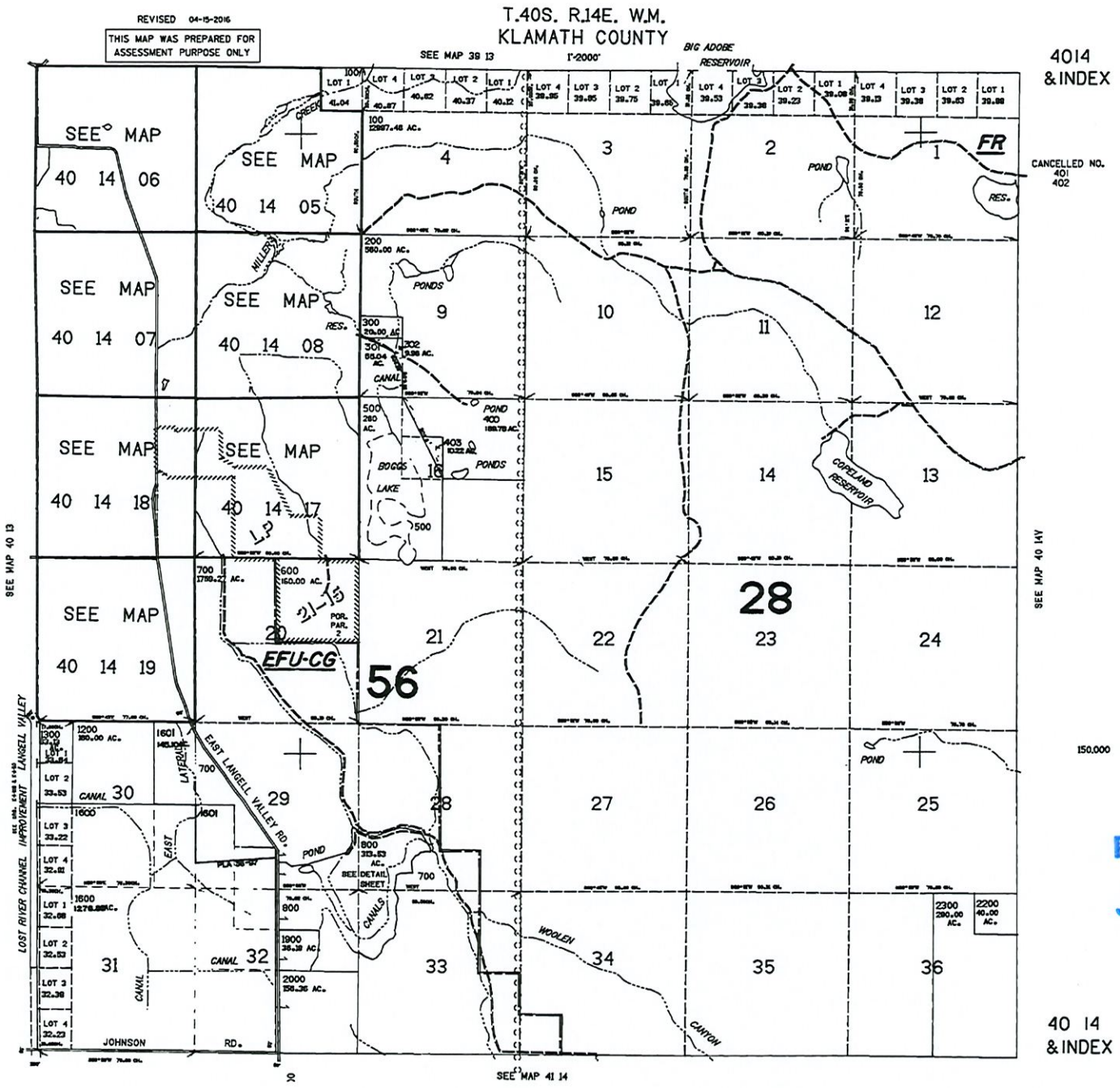
I'm trying to get back to finish this project. If you remember, on November 22 you, Dwight, and I discussed the referenced permit regarding a Permit Amendment. Your resolution was for us to file the COBU for the lands where the water has been used, instead of doing a time extension and permit amendment. I noticed a letter in the file dated Nov. 4 from Jerry Sauter that gave Mr. Tyrholm 60 days to either submit a time extension request or file the COBU. At that time I asked how much time we had to file the COBU, and if I remember, Dwight did not set a completion date. I did say I wanted to get it done sooner than later so what was discussed was not forgotten.

Would you please confirm that we are not under the 60 day deadline (January 3, 2014) to get the COBU submitted? We are preparing the final map and COBU document, and is taking a little longer because Andy is in New Jersey working from home (by not switching people,this will save the client several dollars).

If I don't hear from your before, HAVE A HAPPY NEW YEAR!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!

Doug

APPENDIX G
Copy of Tax Maps 40-14, 40-14-08, & 40-14-17


REVISED 04-15-2016
THIS MAP WAS PREPARED FOR ASSESSMENT PURPOSE ONLY
T.40S. R.14E. W.M.
KLAMATH COUNTY
1"=2000'
SEE MAP 39 13
4014 & INDEX
BIG ADOBE RESERVOIR
CANCELLED NO. 401 402
FR
SEE MAP 40 14 06
SEE MAP 40 14 05
SEE MAP 40 14 07
SEE MAP 40 14 08
SEE MAP 40 14 18
SEE MAP 40 14 17
SEE MAP 40 14 19
SEE MAP 40 13
SEE MAP 40 14V
EFU-CG
56
28
POND
RES.
CANAL
MILLER CREEK
PONDS
BOGGS LAKE
COPELAND RESERVOIR
LOST RIVER CHANNEL IMPROVEMENT LANGELL VALLEY
EAST LANGELL VALLEY RD.
LATERAL
EAST CANAL
CANALS
WOOLEN CANYON
JOHNSON RD.
SEE DETAIL SHEET
150.000
SEE MAP 41 14
40 14 & INDEX
RECEIVED
JUN 14 2021
OWRD

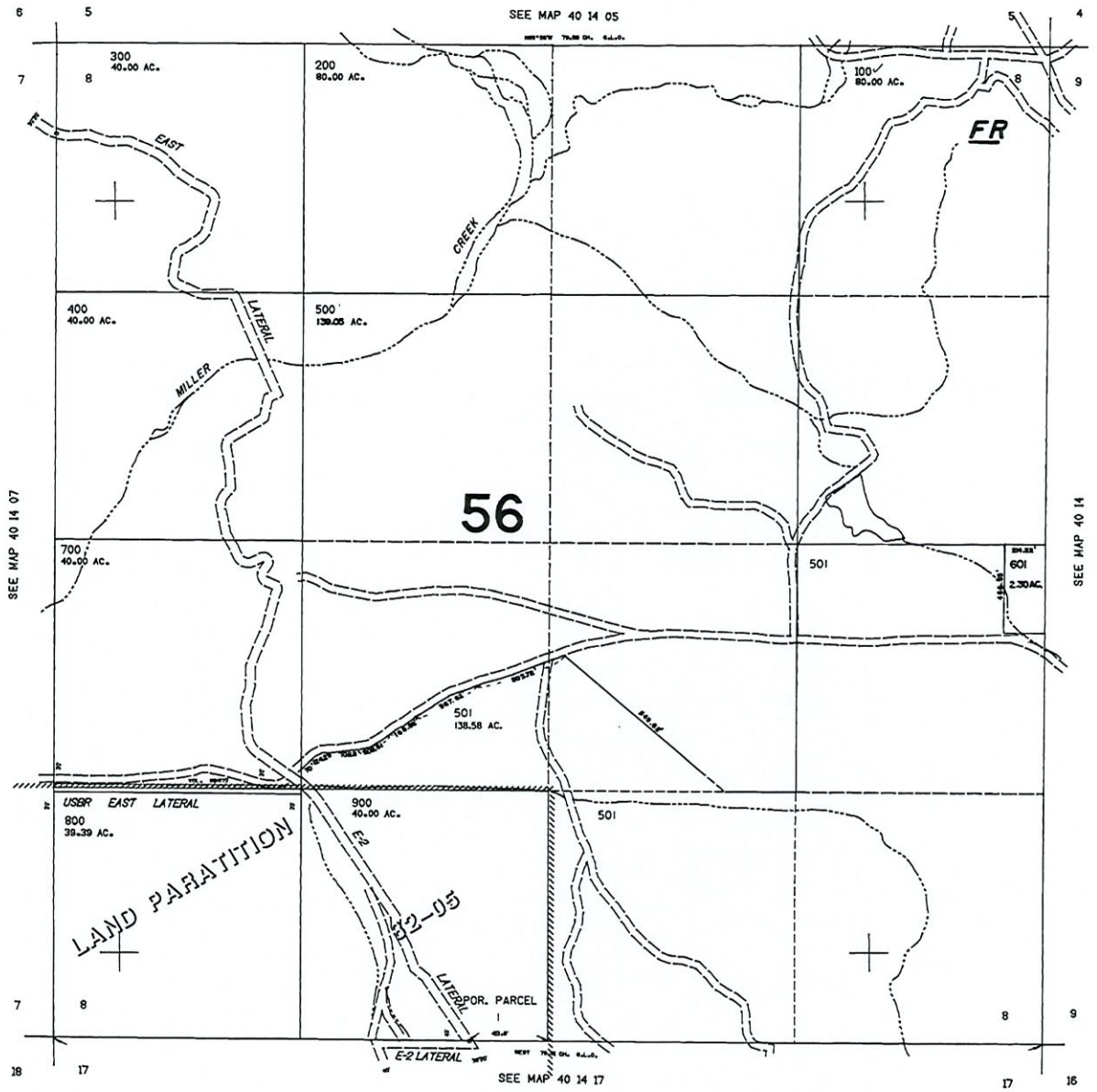
REVISED 4-23-07

THIS MAP WAS PREPARED FOR ASSESSMENT PURPOSE ONLY

SECTION 08 T.40S. R.14E. W.M.
KLAMATH COUNTY

1"=400'

40 14 08



CANCELLED NO.
900MI
600
1000

182,000

7,000

RECEIVED
JUN 14 2021
OWRD

40 14 08

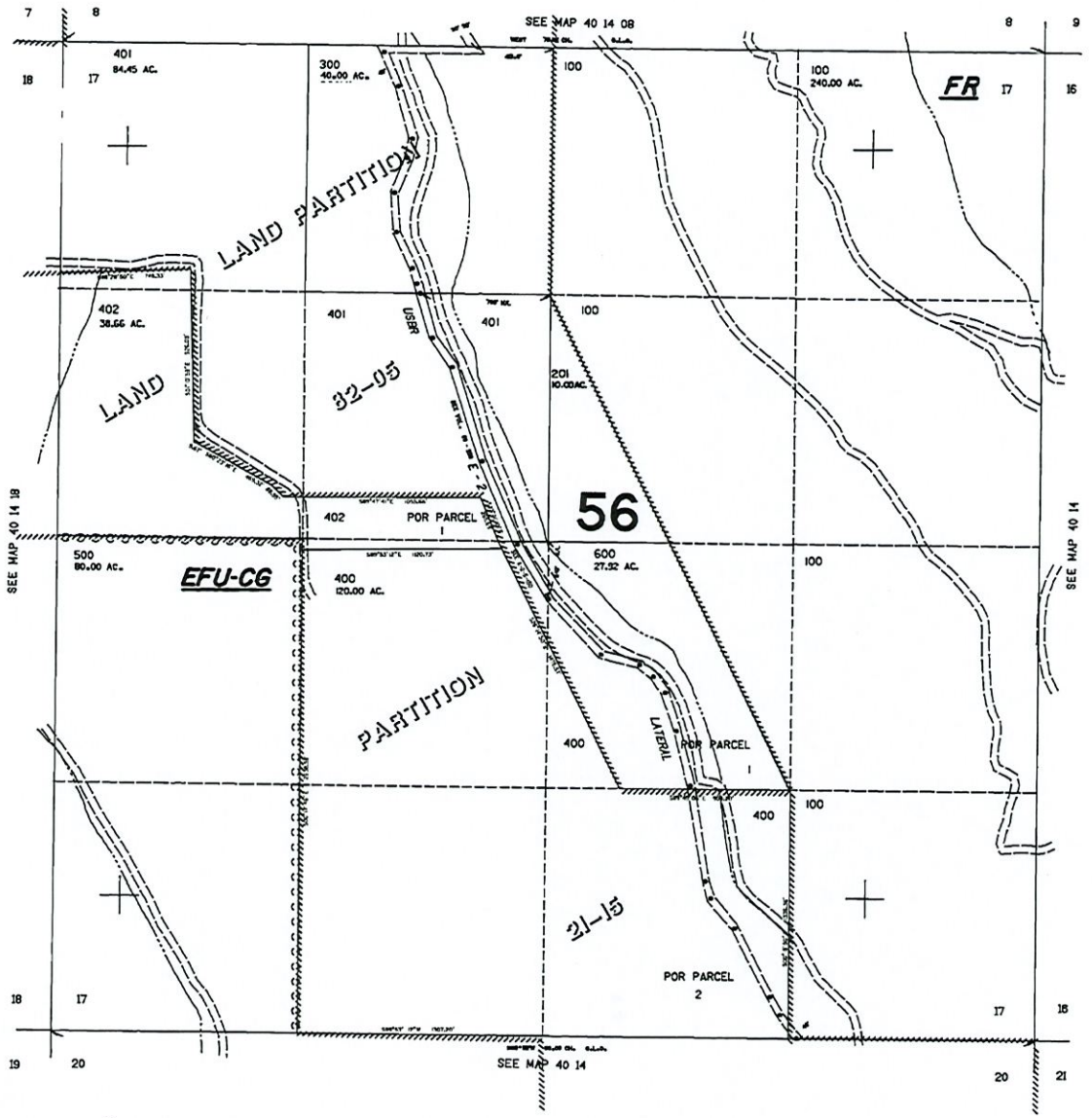
REVISED 04-13-2016

THIS MAP WAS PREPARED FOR ASSESSMENT PURPOSE ONLY

SECTION 17 T.40S. R.14E. W.M.
KLAMATH COUNTY

1"=400'

40 14 17



CANCELLED NO.
200
601
700

157.000

7.000

RECEIVED
JUN 14 2021
OWRD

40 14 17