

**HOOD RIVER COUNTY  
SURVEYOR'S OFFICE**

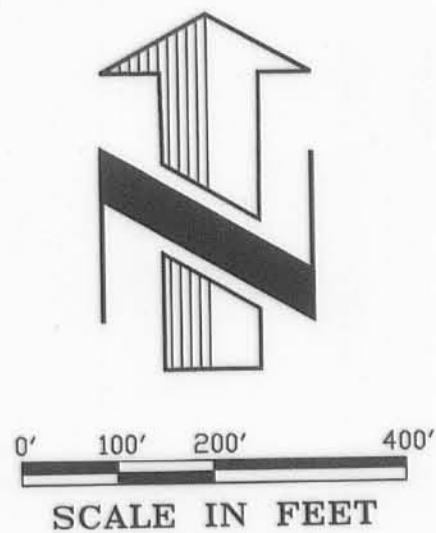
Survey No. *CS 2009 060*

Filed *12-8-09*

By *[Signature]*

**NOTES :**

1. BASIS OF BEARING: BEARINGS BASED ON REFERENCE No. 2 UTILIZING MONUMENTS FOUND ON THE EAST LINE OF THE SE1/4 OF SECTION 31.
2. MONUMENTS SET ON JUNE 26, 2009.
3. THIS SURVEY AMENDS REFERENCE NO. 4. PRIMARY AMENDMENTS RELATE TO THE WIDTH OF THE DIKE EASEMENT AND NOTES RELATED TO THE EXISTING ACCESS ROADS.



**REFERENCES :**

1. SURVEY FOR M.C. SMITH BY DIELSCHNEIDER AND ASSOC. FILED APRIL 26, 1977 C.S. #77-040
2. SURVEY FOR CONNELL, ORMBERS AND NICHOLS BY DANNY L. CRON, PLS 1028 FILED JUNE 12, 1980 C.S. #80-040
3. RED HILL DRIVE RETRACEMENT SURVEY FOR U.S. FOREST SERVICE BY QBEC CONSULTING ENGINEERS FILED JUNE 22, 2009 C.S. 2009 027
4. SURVEY OF A PORTION OF THE SANDERS PROPERTY FOR BONNEVILLE POWER ADMINISTRATION BY TENNESON ENGINEERING CORPORATION WO # 12648 FILED AUGUST 31, 2009 C.S. 2009 045

**LEGEND :**

- ⊙ SET 5/8" x 30" REBAR WITH YELLOW PLASTIC CAP, "B BESEDA PLS 50800"
- ⊙ FOUND MONUMENTS, AS NOTED.
- CALCULATED CORNERS, NOT SET.
- SET HUB & TACK.
- SET P.K. NAIL OR AS NOTED.
- ⊙ SET BRASS SCREW AND WASHER, INSCRIBED "LS 50800"
- x- EXISTING FENCE LINE.

REGISTERED  
PROFESSIONAL  
LAND SURVEYOR  
*[Signature]*  
OREGON  
JULY 13, 1999  
BENJAMIN B. BESEDA  
50800  
EXPIRES: 12/31/2011

Date	No.	Revisions	By	App.
<b>AMENDED SURVEY OF A PORTION OF THE SANDERS PROPERTY FOR BONNEVILLE POWER ADMINISTRATION</b>				
IN THE SW1/4, SECTION 31, TWP.1 N., RANGE 10 E. W.M. HOOD RIVER COUNTY, OREGON				
<b>TENNESON ENGINEERING CORP.</b>				
CONSULTING ENGINEERS 3313 W. 2nd STREET, SUITE 100 THE DALLES, OREGON 97058 PH. 541-296-9177 FAX 541-296-6657				
Survey	Calculation	Design	Date	Scale
B.R.H.	B.B.B.		11/23/2009	1"=200'
Drawn	DWG. No.	Checked & App.	Work Order No.	Sheet
S.D.H.	12648svy Amended	11.18.09	12648	1 of 3

**HOOD RIVER COUNTY  
SURVEYOR'S OFFICE**

Survey No. CS 2009 060

Filed 12-8-09

By R.F.



0' 50' 100' 200'  
SCALE IN FEET

TAX LOT 01N-10E-31 803

TAX LOT 01N-10E-31 802

NORTH LINE OF THE  
SOUTH 1/2 OF THE  
SOUTH 1/2, SECTION 31

TRAVELED

STA. 0+59.86 START  
OF AREA #1 DIKE.

RED HILL DRIVE

336.5'±  
N 88°13'41" W  
STA. 1+00 START  
OF DIKE EASEMENT.

2638.40' (PER REF.#2)

SET 5/8" REBAR AT  
STA. 1+25.09 BEING A  
25' S'LY OFFSET OF  
THE N. LINE OF THE  
S1/2 OF THE S1/2

**NOTES:**

1. BASIS OF BEARING: BEARINGS BASED ON REFERENCE No. 2 UTILIZING MONUMENTS FOUND ON THE EAST LINE OF THE SE1/4 OF SECTION 31.
2. MONUMENTS SET ON JUNE 26, 2009.
3. THIS SURVEY AMENDS REFERENCE NO. 4. PRIMARY AMENDMENTS RELATE TO THE WIDTH OF THE DIKE EASEMENT AND NOTES RELATED TO THE EXISTING ACCESS ROADS.

LINE	BEARING	DISTANCE
L1	S 06°30'40" W	40.14'
L2	S 06°30'40" W	132.28'
L3	S 35°03'36" W	156.79'
L4	S 61°01'43" W	128.32'
L5	S 48°53'08" W	98.77'
L6	S 27°59'32" W	150.03'
L7	S 40°12'48" W	112.76'
L8	S 24°31'33" W	112.57'
L9	S 11°52'58" W	61.42'
L10	S 51°34'19" W	191.69'
L11	S 71°06'30" W	58.37'
L12	S 82°46'59" W	77.68'
L13	S 66°22'13" W	100.13'
L14	S 84°21'36" W	113.06'
L15	N 87°04'54" W	111.15'
L16	S 40°19'34" W	33.90'
L17	S 10°19'34" W	31.79'

APPROX. CENTERLINE MIDDLE  
FORK HOOD RIVER

DIKE AREA #1

30.0'

EXISTING 10'  
ACCESS ROAD

TAX LOT 01N-10E-31 900  
(SANDERS, INST. #800929)

STA. 6+85 END  
OF DIKE AREA #1.

P.T. STA. 6+92.56

TAX LOT 01N-10E-31 902

STA. 9+53 START  
OF DIKE AREA #2

P.C. STA. 9+66.01  
N 88°49'22" W

1581'±

30.0'

DIKE AREA #2

P.C. STA.  
11+64.72

STA. 11+51 END  
OF DIKE AREA #2

TAX LOT 01N-10E-31 903  
(SANDERS, INST. #800931)

30.0'

CENTERLINE DIKE  
EASEMENT

HOOD RIVER

MIDDLE FORK

DIKE AREA #3

STA. 14+97 END OF  
DIKE AREA #3

P.C. STA. 19+16.14

STA. 19+01 START  
OF DIKE AREA #4

EXISTING 10'  
ACCESS ROAD

N 01°10'38" E  
158.82'

DIKE AREA #4

SET 5/8" REBAR AT  
STA. 20+53.90  
TERMINUS OF DIKE  
EASEMENT & AREA #4

2577.20' PER REF.#2 (2442'± DEED)  
2183'±

S 88°49'22" E  
2760.03' (PER REF.#2)

SECTION COR.  
CALC. POSITION  
PER REF.#2

**LEGEND:**

- ⊙ SET 5/8" X 30" REBAR WITH YELLOW PLASTIC CAP, "B BESEDA PLS 50800"
- ⊙ FOUND MONUMENTS, AS NOTED.
- CALCULATED CORNERS, NOT SET.
- SET HUB & TACK.
- SET P.K. NAIL OR AS NOTED.
- ◆ SET BRASS SCREW AND WASHER, INSCRIBED "LS 50800"
- x- EXISTING FENCE LINE.

REGISTERED  
PROFESSIONAL  
LAND SURVEYOR

*[Signature]*

OREGON  
JULY 13, 1999  
BENJAMIN B. BESEDA  
50800

EXPIRES: 12/31/2011

Date	No.	Revisions	By	App.
<b>AMENDED SURVEY OF A PORTION OF THE SANDERS PROPERTY FOR BONNEVILLE POWER ADMINISTRATION</b>				
IN THE SW1/4, SECTION 31, TWP.1 N., RANGE 10 E. W.M. HOOD RIVER COUNTY, OREGON				
<b>TENNESON ENGINEERING CORP.</b> CONSULTING ENGINEERS 3313 W. 2nd. STREET, SUITE 100 THE DALLES, OREGON 97058 PH. 541-296-9177 FAX 541-296-6657				
Survey	Calculation	Design	Date	Scale
B.R.H.	B.B.B.		11/23/2009	1"=100'
Drawn	DWG. No.	Checked & App.	Work Order No.	Sheet
S.D.H.	12648sv Amended	11.18.09 PPS	12648	2 of 3

CS 2009 060.2

Survey No. CS 2009 060

Filed 12-8-09

By R.F.

**LEGAL DESCRIPTION FOR DIKE EASEMENT:**

A STRIP OF LAND 30 FEET IN WIDTH LYING IN THOSE TRACTS OF LAND DESCRIBED IN INSTRUMENTS #80-0929 AND #80-0931, RECORDS OF HOOD RIVER COUNTY, IN THE SOUTH 1/2 OF THE SOUTHWEST 1/4 OF SECTION 31, TOWNSHIP 1 NORTH, RANGE 10 EAST, WILLAMETTE MERIDIAN, HOOD RIVER COUNTY, OREGON, DESCRIBED AS FOLLOWS.

A STRIP OF LAND 30.00 FEET IN WIDTH LYING 15.00 FEET ON EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE.

COMMENCING AT THE SOUTHWEST CORNER OF SAID SECTION 31; THENCE ALONG THE WEST LINE OF SAID SOUTH 1/2, NORTH 06°13'26" EAST 1,403.81 FEET TO THE NORTHWEST CORNER OF SAID SOUTH 1/2; THENCE ALONG THE NORTH LINE OF SAID SOUTH 1/2, SOUTH 88°13'41" EAST 1,639.40 FEET TO THE TRUE POINT OF BEGINNING OF THIS DESCRIPTION, FURTHER BEING DIKE CENTERLINE STATION 1+00; THENCE LEAVING SAID NORTH LINE, SOUTH 06°30'40" WEST 132.28 FEET; THENCE ON A 50.00 FOOT RADIUS CURVE TO THE RIGHT THROUGH A CENTRAL ANGLE OF 28°32'55" A DISTANCE OF 24.91 FEET (THE LONG CHORD OF WHICH BEARS SOUTH 20°47'08" WEST 24.66 FEET); THENCE SOUTH 35°03'36" WEST 156.79 FEET; THENCE ON A 50.00 FOOT RADIUS CURVE TO THE RIGHT THROUGH A CENTRAL ANGLE OF 25°58'07" A DISTANCE OF 22.66 FEET (THE LONG CHORD OF WHICH BEARS SOUTH 48°02'39" WEST 22.47 FEET); THENCE SOUTH 61°01'43" WEST 128.32 FEET; THENCE ON A 50.00 FOOT RADIUS CURVE TO THE LEFT THROUGH A CENTRAL ANGLE OF 12°08'34" A DISTANCE OF 10.60 FEET (THE LONG CHORD OF WHICH BEARS SOUTH 54°57'26" WEST 10.58 FEET); THENCE SOUTH 48°53'08" WEST 98.77 FEET; THENCE ON A 50.00 FOOT RADIUS CURVE TO THE LEFT THROUGH A CENTRAL ANGLE OF 20°53'37" A DISTANCE OF 18.23 FEET (THE LONG CHORD OF WHICH BEARS SOUTH 38°26'20" WEST 18.13 FEET); THENCE SOUTH 27°59'32" WEST 150.03 FEET; THENCE ON A 50.00 FOOT RADIUS CURVE TO THE RIGHT THROUGH A CENTRAL ANGLE OF 12°13'16" A DISTANCE OF 10.66 FEET (THE LONG CHORD OF WHICH BEARS SOUTH 34°06'10" WEST 10.64 FEET); THENCE SOUTH 40°12'48" WEST 112.76 FEET; THENCE ON A 50.00 FOOT RADIUS CURVE TO THE LEFT THROUGH A CENTRAL ANGLE OF 15°41'15" A DISTANCE OF 13.69 FEET (THE LONG CHORD OF WHICH BEARS SOUTH 32°22'10" WEST 13.65 FEET); THENCE SOUTH 24°31'33" WEST 112.57 FEET; THENCE ON A 50.00 FOOT RADIUS CURVE TO THE LEFT THROUGH A CENTRAL ANGLE OF 12°38'34" A DISTANCE OF 11.03 FEET (THE LONG CHORD OF WHICH BEARS SOUTH 18°12'15" WEST 11.01 FEET); THENCE SOUTH 11°52'58" WEST 61.42 FEET; THENCE ON A 50.00 FOOT RADIUS CURVE TO THE RIGHT THROUGH A CENTRAL ANGLE OF 39°41'21" A DISTANCE OF 34.64 FEET (THE LONG CHORD OF WHICH BEARS SOUTH 31°43'39" WEST 33.95 FEET); THENCE SOUTH 51°34'19" WEST 191.69 FEET; THENCE ON A 50.00 FOOT RADIUS CURVE TO THE RIGHT THROUGH A CENTRAL ANGLE OF 19°32'11" A DISTANCE OF 17.05 FEET (THE LONG CHORD OF WHICH BEARS SOUTH 61°20'24" WEST 16.97 FEET); THENCE SOUTH 71°06'30" WEST 58.37 FEET; THENCE ON A 50.00 FOOT RADIUS CURVE TO THE RIGHT THROUGH A CENTRAL ANGLE OF 11°40'29" A DISTANCE OF 10.19 FEET (THE LONG CHORD OF WHICH BEARS SOUTH 76°56'45" WEST 10.17 FEET); THENCE SOUTH 82°46'59" WEST 77.68 FEET; THENCE ON A 50.00 FOOT RADIUS CURVE TO THE LEFT THROUGH A CENTRAL ANGLE OF 16°24'46" A DISTANCE OF 14.32 FEET (THE LONG CHORD OF WHICH BEARS SOUTH 74°34'36" WEST 14.27 FEET); THENCE SOUTH 66°22'13" WEST 100.13 FEET; THENCE ON A 50.00 FOOT RADIUS CURVE TO THE RIGHT THROUGH A CENTRAL ANGLE OF 17°59'23" A DISTANCE OF 15.70 FEET (THE LONG CHORD OF WHICH BEARS SOUTH 75°21'54" WEST 15.63 FEET); THENCE SOUTH 84°21'36" WEST 113.06 FEET; THENCE ON A 50.00 FOOT RADIUS CURVE TO THE RIGHT THROUGH A CENTRAL ANGLE OF 08°33'30" A DISTANCE OF 7.47 FEET (THE LONG CHORD OF WHICH BEARS SOUTH 88°38'21" WEST 7.46 FEET); THENCE NORTH 87°04'54" WEST 111.15 FEET; THENCE ON A 50.00 FOOT RADIUS CURVE TO THE LEFT THROUGH A CENTRAL ANGLE OF 52°35'32" A DISTANCE OF 45.90 FEET (THE LONG CHORD OF WHICH BEARS SOUTH 66°37'20" WEST 44.30 FEET); THENCE SOUTH 40°19'34" WEST 33.90 FEET; THENCE ON A 50.00 FOOT RADIUS CURVE TO THE LEFT THROUGH A CENTRAL ANGLE OF 30°00'00" A DISTANCE OF 26.18 FEET (THE LONG CHORD OF WHICH BEARS SOUTH 25°19'34" WEST 25.88 FEET); THENCE SOUTH 10°19'34" WEST 31.79 FEET TO THE TERMINUS POINT OF THIS DESCRIPTION, SAID TERMINUS POINT BEARS SOUTH 88°49'22" EAST 475.16 FEET AND THENCE NORTH 01°10'38" EAST 158.82 FEET FROM THE SOUTHWEST CORNER OF SAID SECTION 31.

THE ABOVE DESCRIBED 30 FOOT WIDE STRIP CONTAINS 1.346 ACRES.

THE ABOVE DESCRIBED EASEMENT SHALL ALSO INCLUDE RIGHT OF REASONABLE ACCESS TO THE VARIOUS SECTIONS OF THE DIKE BY THE MOST DIRECT ROUTE FROM RED HILL DRIVE COUNTY ROAD ACROSS THE EXISTING ROADWAYS AS SHOWN ON THIS SURVEY ON SAID TRACTS OF LAND DESCRIBED IN INSTRUMENTS #80-0929 AND #80-0931, RECORDS OF HOOD RIVER COUNTY.

**REFERENCES :**

- 1) SURVEY FOR M.C. SMITH BY  
DIELSCHNEIDER AND ASSOC.  
FILED APRIL 26, 1977  
C.S. #77-040
- 2) SURVEY FOR CONNELL, ORMBERS AND  
NICHOLS  
BY DANNY L. CRON, PLS 1028  
FILED JUNE 12, 1980  
C.S. #80-040
- 3) RED HILL DRIVE RETRACEMENT SURVEY  
FOR U.S. FOREST SERVICE  
BY DBEC CONSULTING ENGINEERS  
FILED JUNE 22, 2009  
C.S. 2009 027

**NOTES :**

- 1) BASIS OF BEARING: BEARINGS BASED ON REFERENCE No. 2 UTILIZING MONUMENTS FOUND ON THE EAST LINE OF THE SE1/4 OF SECTION 31.
- 2) MONUMENTS SET ON JUNE 26, 2009.

CURVE	DELTA	RADIUS	ARC LENGTH	TANGENT	CHORD BEARING	CHORD LENGTH
C1	28°32'55"	50.00'	24.91'	12.72'	S 20°47'08" W	24.66'
C2	25°58'07"	50.00'	22.66'	11.53'	S 48°02'39" W	22.47'
C3	12°08'34"	50.00'	10.60'	5.32'	S 54°57'26" W	10.58'
C4	20°53'37"	50.00'	18.23'	9.22'	S 38°26'20" W	18.13'
C5	12°13'16"	50.00'	10.66'	5.35'	S 34°06'10" W	10.64'
C6	15°41'15"	50.00'	13.69'	6.89'	S 32°22'10" W	13.65'
C7	12°38'34"	50.00'	11.03'	5.54'	S 18°12'15" W	11.01'
C8	39°41'21"	50.00'	34.64'	18.05'	S 31°43'39" W	33.95'
C9	19°32'11"	50.00'	17.05'	8.61'	S 61°20'24" W	16.97'
C10	11°40'29"	50.00'	10.19'	5.11'	S 76°56'45" W	10.17'
C11	16°24'46"	50.00'	14.32'	7.21'	S 74°34'36" W	14.27'
C12	17°59'23"	50.00'	15.70'	7.91'	S 75°21'54" W	15.63'
C13	08°33'30"	50.00'	7.47'	3.74'	S 88°38'21" W	7.46'
C14	52°35'32"	50.00'	45.90'	24.71'	S 66°37'20" W	44.30'
C15	30°00'00"	50.00'	26.18'	13.40'	S 25°19'34" W	25.88'

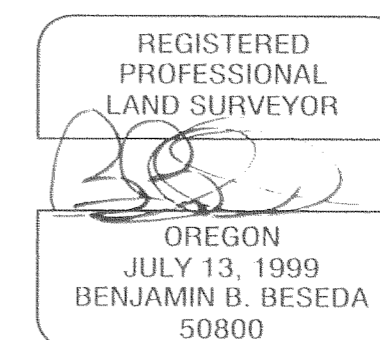
**NARRATIVE :**

THE PURPOSE OF THIS SURVEY WAS TO MAP THE EXTENTS OF A DIKE EASEMENT ON TAX LOTS 1N-10E-31 900 AND 903. TITLE TO THESE PROPERTIES IS VESTED IN JACK AND CAROL SANDERS. THEY LIE IN THE SOUTHWEST 1/4 OF SECTION 31, TOWNSHIP 1 NORTH, RANGE 10 EAST, W.M., HOOD RIVER COUNTY, OREGON. PRIOR TO CONDUCTING THE FIELDWORK, MAPPING, AND CALCULATIONS NECESSARY FOR THIS SURVEY, RESEARCH WAS MADE TO OBTAIN A COPY OF THE DEEDS FOR THE SUBJECT PROPERTY AND TO OBTAIN COPIES OF PRIOR SURVEYS CONDUCTED ON OR IN THE VICINITY OF THE SUBJECT PROPERTIES. SURVEYS USED AS A PART OF THE RESOLUTION SHOWN HEREON ARE LISTED AS REFERENCES.

IN THE FIELD, MONUMENTS WERE FOUND ON THE EAST LINE OF SECTION 31 AS SHOWN. THESE MONUMENTS WERE HELD AS SHOWN AND UTILIZED AS THE BASIS OF BEARING FOR THIS SURVEY. THE BOUNDARY OF THE SUBJECT PROPERTY WAS THEN CALCULATED PRIMARILY PER REFERENCE #2, A CIRCA 1980 SURVEY OF THE PARENT TRACT TO THE CURRENT TWO TAX LOTS. SURVEY REFERENCE #1 WAS ALSO UTILIZED TO APPROXIMATELY MAP THE DEED EXCEPTION IN THE NORTHEAST CORNER OF TAX LOT 900. THE WEST LINE OF THE SUBJECT PROPERTIES IS THE MIDDLE FORK OF THE HOOD RIVER. IT IS APPROXIMATELY MAPPED BASED ON FIELD TOPOGRAPHY OF THE EASTERLY EDGE OF WATER AND ASSESSOR'S MAP. THIS COMPLETED THE RESOLUTION OF THE BOUNDARY OF THE SUBJECT PROPERTY. THE LOCATION OF A DIKE CONSTRUCTED FOR PROTECTION OF IMPROVEMENTS ON THE SUBJECT PROPERTIES FROM FLOODING OF THE MIDDLE FORK OF THE HOOD RIVER IS SHOWN IN DETAIL WITH CENTERLINE DIMENSIONING. THE EASEMENT IS TIED TO THE BOUNDARY OF THE SUBJECT PROPERTY AS SHOWN. MONUMENTS WERE SET AS SHOWN NEAR THE STARTING POINT AND AT THE TERMINUS POINT OF THE DIKE EASEMENT.

SET MONUMENTS ARE 5/8" X 30" REBAR WITH YELLOW PLASTIC CAP INSCRIBED "B BESEDA PLS 50800".

LINE	BEARING	DISTANCE
L1	S 06°30'40" W	39.00'
L2	S 06°30'40" W	132.28'
L3	S 35°03'36" W	156.79'
L4	S 61°01'43" W	128.32'
L5	S 48°53'08" W	98.77'
L6	S 27°59'32" W	150.03'
L7	S 40°12'48" W	112.76'
L8	S 24°31'33" W	112.57'
L9	S 11°52'58" W	61.42'
L10	S 51°34'19" W	191.69'
L11	S 71°06'30" W	58.37'
L12	S 82°46'59" W	77.68'
L13	S 66°22'13" W	100.13'
L14	S 84°21'36" W	113.06'
L15	N 87°04'54" W	111.15'
L16	S 40°19'34" W	33.90'
L17	S 10°19'34" W	31.79'



EXPIRES: 12/31/2011

Date	No.	Revisions	By	App.
<b>AMENDED SURVEY OF A PORTION OF THE SANDERS PROPERTY FOR BONNEVILLE POWER ADMINISTRATION</b>				
IN THE SW1/4, SECTION 31, TWP.1 N., RANGE 10 E. W.M. HOOD RIVER COUNTY, OREGON				
<b>TENNESON ENGINEERING CORP.</b> CONSULTING ENGINEERS 3313 W. 2nd. STREET, SUITE 100 THE DALLES, OREGON 97058 PH. 541-296-9177 FAX 541-296-6657				
Survey	Calculation	Design	Date	Scale
B.R.H.	B.B.B.		11/23/2009	N.T.S.
Drawn	DWG. No.	Checked & App.	Work Order No.	Sheet
S.D.H.	12648sxy Amended	BRB	12648	3 of 3

CS 2009 060.3