

CONTROL NARRATIVE

PROJECT: BIRCH CREEK ROAD: WALLA WALLA RIVER BRIDGE REPLACEMENT LOCATION: CITY OF MILTON FREEWATER, UMATILLA COUNTY ODOT KEY NUMBER: 18420 HORIZONTAL SURVEY DATUM - NAD 83(2011) EPOCH 2010 (INTERNATIONAL FEET) VERTICAL SURVEY DATUM - NAVD 88 (INTERNATIONAL FEET)

GPS HORIZONTAL CONTROL SURVEY

PRIMARY CONTROL WAS ESTABLISHED ON THIS PROJECT BY USING GPS AND THE ONLINE POSITIONING USER SERVICE (OPUS) TO ESTABLISH A POSITION ON POINT COE_OI. A SUBSEQUENT RTK GPS SURVEY WAS PERFORMED USING COE_OI AS A BASE POINT TO ESTABLISH POSITIONS ON CONTROL POINTS 700-705. THE BEARINGS SHOWN ON THIS SURVEY ARE GRID BEARINGS BASED ON THE OREGON STATE PLANE COORDINATE SYSTEM, NAD83 (2011) EPOCH 2010. COORDINATES WERE MOVED TO GROUND BY UTILIZING A LOCAL DATUM PLANE (LDP) COORDINATE SYSTEM. TO CONVERT THE PROJECT LDP COORDINATES TO THE OREGON COORDINATE SYSTEM, NORTH ZONE, NAD83 (2011) EPOCH 2010, MULTIPLY THE VALUES BY A COMBINED FACTOR OF 0.99995606.

NETWORK POINT COORDINATE TABLE

Y:\18420_Birch Creek\18420ret.dgn :: Default

| PT | LDP | LDP | | |
|--------|-----------|------------|---------|---|
| ID | NORTHING | EASTING | DATE | DESCRIPTION |
| COE_O1 | 849242.49 | 8742413.67 | 6/13/14 | FOUND 2-1/2" ALUMINUM CAP MARKED AS SHOWN |
| 700 | 849360.25 | 8742398.37 | 6/13/14 | SET MAGNAIL IN PAVEMENT |
| 701 | 849302.77 | 8742241.16 | 6/13/14 | SET 12" NAIL |
| 702 | 849379.59 | 8742247.38 | 6/13/14 | SET MAGNAIL IN PAVEMENT |
| 703 | 848587.65 | 8742318.76 | 6/13/14 | SET 12" NAIL |
| 704 | 848892.44 | 8743020.47 | 6/13/14 | SET 12" NAIL |
| 705 | 848888.43 | 8742505.66 | 6/13/14 | SET HUB & TACK |

NARRATIVE

THE PURPOSE OF THIS SURVEY IS TO RESOLVE THE FIELD LOCATION OF THE EXISTING RIGHT OF WAY FOR A PORTION OF BIRCH CREEK ROAD IN THE VICINITY OF THE EXISTING BRIDGE CROSSING THE WALLA WALLA RIVER IN MILTON FREEWATER, OREGON. THIS SURVEY IS ALSO TO PERPETUATE ANY EXISTING SURVEY MONUMENTS THAT LIE WITHIN THE PROJECT FOOTPRINT WHICH MAY BE DESTROYED DUE TO A FUTURE BRIDGE REPLACEMENT PROJECT. PERPETUATION OF THE MONUMENT LOCATIONS WAS ACCOMPLISHED BY TYING THE MONUMENTS TO THE PROJECT CONTROL NETWORK. THIS SURVEY WAS MADE AT THE REQUEST OF THE OREGON DEPARTMENT OF TRANSPORTATION. THIS SURVEY MEETS THE REQUIREMENTS FOR A RECOVERY SURVEY AS OUTLINED IN THE OREGON REVISED STATUTES, CHAPTER 209,155.

THIS SURVEY WAS PERFORMED USING INTERNATIONAL FEET UNITS.

THIS SURVEY WAS PERFORMED IN JUNE 2014. THE SURVEY EQUIPMENT USED CONSISTED OF LEICA DUAL FREQUENCY GPS RECEIVERS (GPS1200 AND GS14), A LEICA TS-15 ROBOTIC TOTAL STATION AND A LEICA VIVA DATA COLLECTOR.

> RECEIVED BY Umatilia County Surveyor Date: 11/10/2014 Rec'd By! Day Kerest No.: 4-138-B

PROFESSIONAL LAND SURVEYOR Bt Et OREGON JAN. 14, 2003 BRET N. ELITHORP RENEWAL DATE: DEC. 31, 2015 SIGNED: 11/6/2014

REGISTERED

SHEET INDEX

- 1. NARRATIVE, REFERENCES, CONTROL NETWORK SCHEMATIC. BASIS OF BEARING, SHEET LAYOUT AND SHEET INDEX
- 2.-3. SURVEY

REFERENCES

- 1. SURVEY NO. I-165-B BY DAVID H. KRUMBEIN. DATED DEC. 10. 1974
- 2. SURVEY NO. 03-23-C BY PAUL P. TOMKINS, DATED JUNE 1, 2002
- 3. SURVEY NO. 08-49-B BY WILLIAM R. WELLS. DATED FEB. 20. 2008
- 4. SURVEY NO. 12-118-C BY GARY R. ROBERTS, FILED AUG. 29, 2012
- 5. BOARD ORDER NO. RD2014-16, DOCUMENT NO. 2014-6200814, FILED SEPT. 19, 2014
- 6. BOARD ORDER NO. RD2014-19, DOCUMENT NO. 2014-6200817, FILED SEPT. 19, 2014

BIRCH CREEK ROAD (COUNTY ROAD NO. 550)

THIS RESOLUTION COVERS A PORTION OF BIRCH CREEK ROAD FROM TUM-A-LUM ROAD EAST TO TELEPHONE POLE ROAD. THE RECORD SHAPE OF THE ALIGNMENTS FOR BIRCH CREEK ROAD AND EASTSIDE ROAD SHOWN ON LEGALIZATION SURVEY NO. 12-118-C. UMATILLA COUNTY SURVEY RECORDS, WERE RECREATED, SCALED TO GROUND DISTANCES USING THE SCALE FACTOR 0.99995297 SHOWN ON SAID LEGALIZATION SURVEY, AND POSITIONED BY HOLDING THE RAILROAD SPIKE FOUND AT THE INTERSECTION OF TUM-A-LUM ROAD WITH BIRCH CREEK ROAD (POINT 1001) AND ROTATING TO THE RAILROAD SPIKE FOUND IN THE CENTERLINE OF EASTSIDE ROAD AT THE INTERSECTION WITH THE SOUTH LINE OF SECTION 25 (POINT NO. 1006), RECORD STATIONING WAS HELD AT 0+00.00 B.O.P. AT THE INTERSECTION OF TUM-A-LUM ROAD WITH BIRCH CREEK ROAD. THE BOARD ORDER NO. RD2014-16 WHICH LEGALIZED BIRCH CREEK ROAD (COUNTY ROAD NO. 550) IS RECORDED AS DOCUMENT NO. 2014-6200814, UMATILLA COUNTY DEED RECORDS. RIGHT OF WAY WIDTHS WERE DETERMINED FROM SAID BOARD ORDER.

EASTSIDE ROAD (COUNTY ROAD NO. 575)

THIS RESOLUTION COVERS A PORTION OF EASTSIDE ROAD (COUNTY ROAD 575) FROM BIRCH CREEK ROAD SOUTHERLY APPROXIMATELY 2375 FEET. THE RECORD SHAPE OF THE ALIGNMENT FOR EASTSIDE ROAD SHOWN ON LEGALIZATION SURVEY NO. 12-118-C. UMATILLA COUNTY SURVEY RECORDS, WAS RECREATED, SCALED TO GROUND DISTANCES USING THE SCALE FACTOR 0.99995297 SHOWN ON SAID LEGALIZATION SURVEY, AND POSITIONED BY HOLDING THE INTERSECTION WITH THE LEGALIZED CENTERLINE ALIGNMENT FOR BIRCH CREEK ROAD AND ROTATING TO THE RAILROAD SPIKE FOUND IN THE CENTERLINE OF EASTSIDE ROAD AT THE INTERSECTION WITH THE SOUTH LINE OF SECTION 25 (POINT NO. 1006). RECORD STATIONING WAS HELD AT RECORD GRID STATION 19+24.16 P.R.C. (GROUND STATION "E"19+24.25 P.R.C.). AT THE INTERSECTION OF EASTSIDE ROAD WITH BIRCH CREEK ROAD. THE BOARD ORDER NO. RD2014-19 WHICH LEGALIZED EASTSIDE ROAD (COUNTY ROAD NO. 575) IS RECORDED AS DOCUMENT NO. 2014-6200817, UMATILLA COUNTY DEED RECORDS. RIGHT OF WAY WIDTHS WERE DETERMINED FROM SAID BOARD

> I, BRET N. ELITHORP, STATE THAT THIS SURVEY WAS PREPARED USING HEWLETT-PACKARD PRODUCT #51645a ON CONTINENTAL #JPC4M2 POLYESTER FILM.

Baa_ BRET N. ELITHORP

11/6/14 DATE

OREGON DEPARTMENT OF TRANSPORTATION

HORIZONTAL CONTROL, RECOVERY AND RETRACEMENT MAP BIRCH CREEK RD: WALLA WALLA RIVER BRIDGE REPLACEMENT

BIRCH CREEK ROAD UMATILLA COUNTY



FOR ODOT REGION 5 3012 ISLAND AVENUE LA GRANDE, OR 97850

NOVEMBER 6. 2014 SHEET 1 OF 3

11/6/2014 9:12:03 AM

hwyr51g

Rotation: 0° Scale: 1"=100"

SE 1/4 SEC 24 T6N R35E WM NE 1/4 SEC 25 T6N R35E WM 2003-4530325 2006-5030358 TOTO, -- BIRCH CREEK ROAD N 89°16′11″,E (N 89°16′09″ E) LEGEND 2003-4530325 RECORD DATA PER 2007-52105431 COUNTY SURVEY 12-118-C FOUND MONUMENT NOTED IN TABLE FOUND GPS STATION SET NETWORK POINT ---- EDGE OF GRAVEL --- EDGE OF PAVEMENT N 89:07:29" E BIRCH CREEK ROAD------ RIGHT-OF-WAY ---- PROPERTY LINE $-\times$ - FENCE 2011-5840442 RECEIVED BY Umatilla County Surveyor Date: 11/10/2014 Rec'd By. 17 org The No.: 14-138-B REGISTERED **PROFESSIONAL** LAND SURVEYOR OREGON NOTE: ALL RECORD DATA SHOWN HEREON IS ON GRID PER SURVEY NO 12-118-C. JAN. 14, 2003 BRET N. ELITHORP TO OBTAIN THE RECORD GROUND DISTANCE, DIVIDE *63148 THE GRID DISTANCE BY 0.99995297. RENEWAL DATE: DEC. 31, 2015 SCALE 1" = 100' SEE SHEET 3 SIGNED: 11/6/2014 50 0 100 200 FEET RECOVERED MONUMENT LIST LDP PΤ LDP NORTHING | EASTING | STATION ΙD OFFSET DATE DESCRIPTION & REFERENCE DOCUMENTS 1000 | 849314.92 | 8742429.90 15+82.06 0.03' RT 06/13/2014 FOUND RAILROAD SPIKE W/ PUNCH MARK, MARKED "LS 2627", SURVEY NO. 12-118-C OREGON DEPARTMENT OF TRANSPORTATION 1001 849338.32 8740865.29 0+00.00 0.00 06/13/2014 FOUND RAILROAD SPIKE W/ PUNCH MARK, MARKED "LS 2627", SURVEY NO. 12-118-C HORIZONTAL CONTROL, RECOVERY AND RETRACEMENT MAP 1003 | 848904.46 | 8744878.90 19+22.76 N/A 06/13/2014 FOUND RAILROAD SPIKE W/ PUNCH MARK, MARKED "LS 2627", SURVEY NO. 12-118-C 1004 849323.47 8740865.63 0+00.16 | 14.86' RT 06/13/2014 FOUND 3" BRASS CAP MARKED "TON R35E S24/S25 1974 PLS 933", DOWN 9", SURVEY NO. 1-165-5 BIRCH CREEK RD: WALLA WALLA RIVER BRIDGE REPLACEMENT 1005 | 849370.11 | 8743548.60 30+40.23 06/13/2014 FOUND 2-3/8" BRASS CAP MARKED "T6N R35E R36E S24/S19/S25/S30 2008 PLS 1106", SURVEY NO. 8-49-B N/A BIRCH CREEK ROAD 1007 848869.91 8742618.64 21+02.73 | 0.03' LT FOUND RAILROAD SPIKE W/ PUNCH MARK, MARKED "LS 2627", SURVEY NO. 12-118-C 06/24/2014 UMATILLA COUNTY 06/24/2014 FOUND RAILROAD SPIKE W/ PUNCH MARK, MARKED "LS 2627", SURVEY NO. 12-118-C _1009 | 848668.50 | 8742369.68 | "E"22+67.60 | 0.01' RT 06/24/2014 FOUND RAILROAD SPIKE W/ PUNCH MARK, MARKED "LS 2627", SURVEY NO. 12-118-C 1010 849347.36 8741571.93 7+06.70 | 0.03' LT FOUND RAILROAD SPIKE W/ PUNCH MARK, MARKED "LS 2627", SURVEY NO. 12-118-C 06/26/2014 FOR ODOT REGION 5 1012 | 849067.57 | 8742493.40 | FOUND RAILROAD SPIKE W/ PUNCH MARK, MARKED "LS 2627", SURVEY NO. 12-118-C 18+37.43 | 0.01' RT 06/25/2014

06/25/2014 FOUND RAILROAD SPIKE (NO PUNCH MARK), MARKED "LS 2627", SURVEY NO. 12-118-C

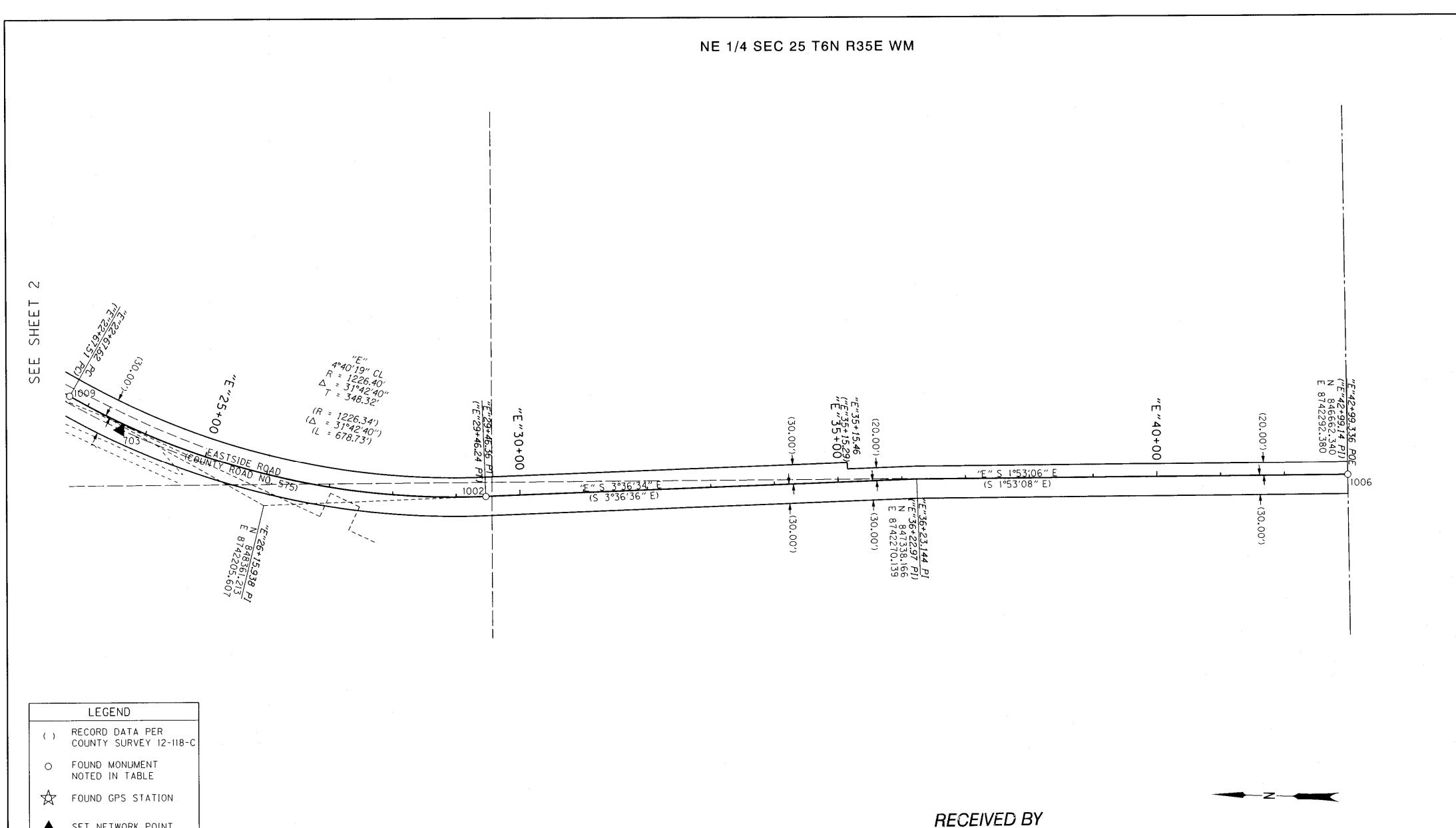
Y:\18420_Birch Creek\1842Oret.dgn :: Default 11/6

1013 | 848981.59 | 8742502.65 | 19+24.20 | 0.03' LT |

11/6/2014 9:12:45 AM

M h

3012 ISLAND AVENUE LA GRANDE, OR 97850 NOVEMBER 6, 2014 SCALE: 1" = 100' SHEET 2 OF 3



▲ SET NETWORK POINT

---- EDGE OF GRAVEL

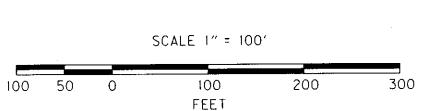
— — EDGE OF PAVEMENT

---- RIGHT-OF-WAY

NOTE: ALL RECORD DATA SHOWN HEREON IS ON GRID PER SURVEY NO 12-118-C.
TO OBTAIN THE RECORD GROUND DISTANCE, DIVIDE THE GRID DISTANCE BY 0.99995297.

Umatilla County Surveyor
Date: 11/16/2014
Rec'd By: Vay Xolan

No.: 14-138-B



RECOVERED MONUMENT LIST

| PΤ | LDP | LDP | | | | |
|------|-----------|------------------|-------------|-------|------------|---|
| ID | NORTHING | EASTING STAT | TION OFF | SET | DATE | DESCRIPTION & REFERENCE DOCUMENTS |
| 1002 | 848013.57 | 8742227.51 "E"29 | 9+46.40 0.0 | 3′ RT | 06/13/2014 | FOUND RAILROAD SPIKE W/ PUNCH MARK, MARKED "LS 2627", SURVEY NO. 12-118-C |
| 1006 | 846662.35 | 8742292.37 "E"42 | 2+99.33 0.0 | 1' RT | | FOUND RAILROAD SPIKE W/ PUNCH MARK, MARKED "LS 2627", SURVEY NO. 12-118-C |
| 1009 | 848668.50 | 8742369.68 "E"22 | 2+67.60 0.0 | 2′ RT | 06/24/2014 | FOUND RAILROAD SPIKE W/ PUNCH MARK, MARKED "LS 2627", SURVEY NO. 12-118-C |

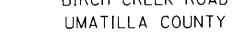
REGISTERED PROFESSIONAL LAND SURVEYOR

BD <___ OREGON JAN. 14, 2003 BRET N. ELITHORP *63148

RENEWAL DATE: DEC. 31, 2015 SIGNED: 1/6/2014

OREGON DEPARTMENT OF TRANSPORTATION

HORIZONTAL CONTROL, RECOVERY AND RETRACEMENT MAP BIRCH CREEK RD: WALLA WALLA RIVER BRIDGE REPLACEMENT BIRCH CREEK ROAD





FOR ODOT REGION 5 3012 ISLAND AVENUE LA GRANDE, OR 97850 NOVEMBER 6, 2014 SCALE: 1" = 100' SHEET 3 OF 3