

NARRATIVE

THE PURPOSE OF THIS SURVEY IS TO PERPETUATE EXISTING MONUMENTATION AND RESOLVE THE EXISTING RIGHT OF WAY (RW) FOR A PORTION OF THE COLUMBIA RIVER HIGHWAY IN THE CITY OF IRRIGON, MORROW COUNTY, OREGON. FOR THIS SURVEY, WE ESTABLISHED A CONTROL NETWORK AND RECOVERED THE POSITION OF MONUMENTS IN THE AREA FOR THE OREGON DEPARTMENT OF TRANSPORTATION (ODOT) AS PART OF THE US730 - 1ST. STREET (IRRIGON) CROSSWALK PROJECT.

RECORD DATA FROM THE ORIGINAL PLAT OF IRRIGON (BOOK O, PAGE 381) WAS USED TO LAY OUT BLOCKS 34 AND 52. THE MIDPOINT BETWEEN THE SOUTH 1/4 CORNER OF SECTION 24 AND THE SOUTHEAST CORNER OF SECTION 24 WAS USED TO DEFINE THE FIRST STREET CENTER LINE ON THE SOUTH END. A MONUMENT (SC1) AT THE INTERSECTION OF OREGON AND FIRST STREET WAS USED TO DEFINE CENTER LINE ON THE NORTH END. THE MEASURED DISTANCE BETWEEN THE CENTER LINE OF FIRST STREET AND THE SOUTHEAST CORNER OF SECTION 24 WAS 1338.565' VERSUS THE RECORD OF 1331.17' FROM THE ORIGINAL TOWNSHIP OF IRRIGON. TO RESOLVE THIS, THE DISTANCE OF THE BLOCKS WERE PRORATED AND THE STREETS WIDTHS WERE DEFINED BY RECORD DATA. THE ORIGINAL PLAT LISTS FIRST STREET AS BEING 60 FEET WIDE. THIS IS CONSISTANT WITH RECORD SURVEYS IN THE AREA AND THE ORIGINAL PLAT, EXCEPT FOR THE PORTION BETWEEN SOUTH MAIN STREET AND IDAHO STREET. MANY SURVEYS LIST THE WIDTH IN THIS AREA AS 40 FEET. I ASKED KEITH WHITE FROM THE CITY OF IRRIGON PUBLIC WORKS ABOUT THIS, AND HE PRODUCED BARGAIN AND SALE DEEDS 2009-23960 AND 2009-23918. THESE DEEDS WIDENED THE EXISTING RIGHT OF WAY FROM 40 FEET TO 60 FEET.

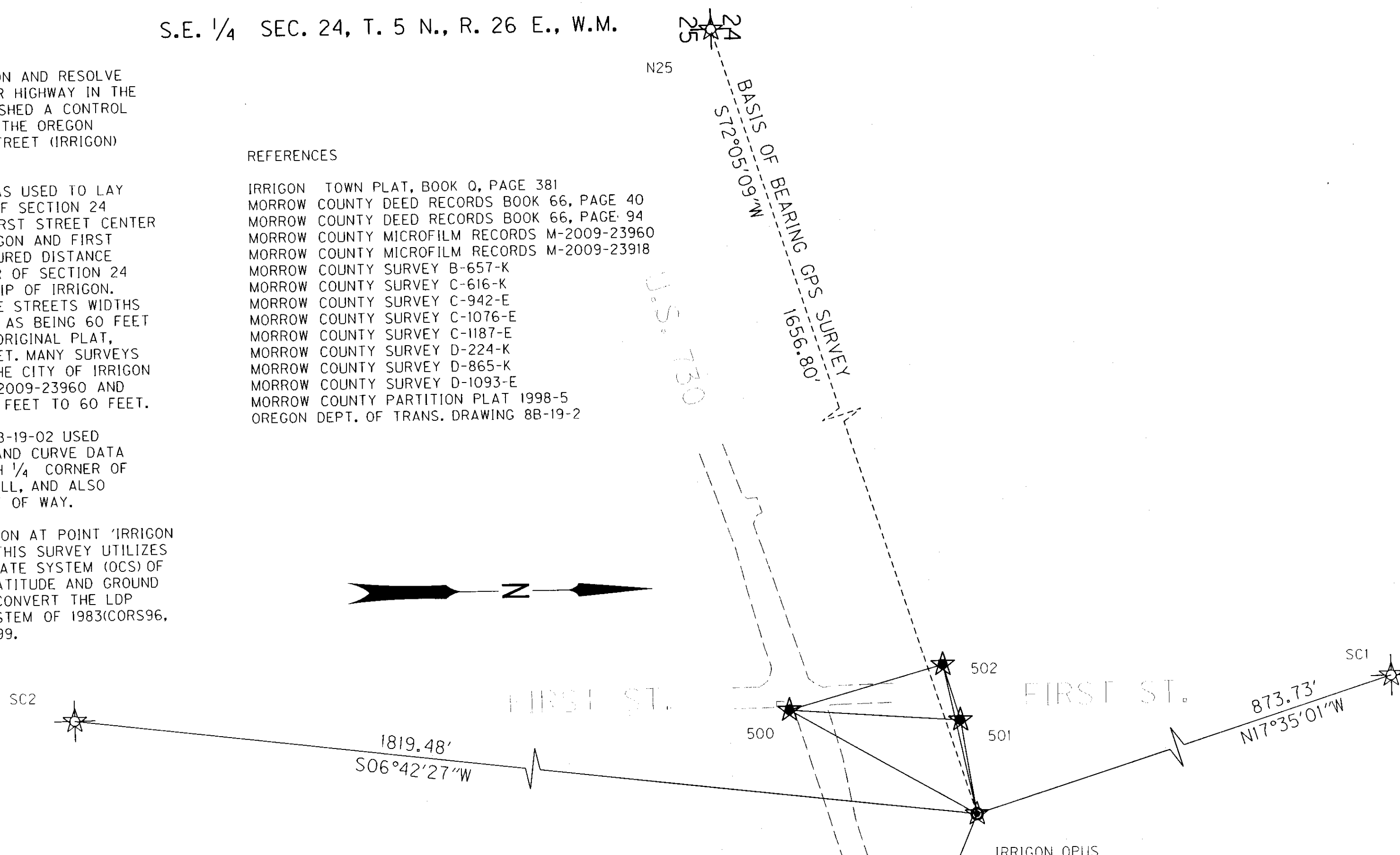
THE RELOCATED COLUMBIA RIVER HIGHWAY AS SHOWN BY ODOT DRAWING 8B-19-02 USED OREGON STATE PLANE COORDINATES, NORTH ZONE. THE RECORD BEARINGS AND CURVE DATA ARE FROM THIS DRAWING WERE USED FOR THIS PROJECT, USING THE SOUTH 1/4 CORNER OF SECTION 24 AS A COMMON POINT. THIS FITS THE EXISTING CONDITIONS WELL, AND ALSO MATCHES WELL WITH RECORD SURVEY MONUMENTS FOUND ALONG THE RIGHT OF WAY.

THE BASIS OF BEARING WAS ESTABLISHED BY GPS, USING AN OPUS SOLUTION AT POINT 'IRRIGON\_OPUS' WHICH IS UNITED STATES COAST AND GEODETIC BENCHMARK V640. THIS SURVEY UTILIZES A LOCAL DATUM PLANE (LDP) WHICH IS RELATIVE TO THE OREGON COORDINATE SYSTEM (OCS) OF 1983 (CORS96, EPOCH 2002), NORTH ZONE, WITH RESPECT TO THE LOCAL LATITUDE AND GROUND ELEVATION. THE LDP COORDINATES DEFINE TRUE GROUND DISTANCES. TO CONVERT THE LDP COORDINATES, FOR THE CONTROL POINTS, TO THE OREGON COORDINATE SYSTEM OF 1983(CORS96, EPOCH 2002), NORTH ZONE, MULTIPLY THE LDP COORDINATES BY 0.99996399.

REFERENCES

- IRRIGON TOWN PLAT, BOOK O, PAGE 381
- MORROW COUNTY DEED RECORDS BOOK 66, PAGE 40
- MORROW COUNTY DEED RECORDS BOOK 66, PAGE 94
- MORROW COUNTY MICROFILM RECORDS M-2009-23960
- MORROW COUNTY MICROFILM RECORDS M-2009-23918
- MORROW COUNTY SURVEY B-657-K
- MORROW COUNTY SURVEY C-616-K
- MORROW COUNTY SURVEY C-942-E
- MORROW COUNTY SURVEY C-1076-E
- MORROW COUNTY SURVEY C-1187-E
- MORROW COUNTY SURVEY D-224-K
- MORROW COUNTY SURVEY D-865-K
- MORROW COUNTY SURVEY D-1093-E
- MORROW COUNTY PARTITION PLAT 1998-5
- OREGON DEPT. OF TRANS. DRAWING 8B-19-2

BASIS OF BEARING AND CONTROL NETWORK SCHEMATIC  
NOT TO SCALE



NETWORK POINT COORDINATE TABLE

PT. NO.	GRID NORTHING	GRID EASTING	DATE	DESCRIPTION
IRRIGON_OPUS	814,095.320	8,457,305.453	2/02/2012	FOUND 3/2" BRASS DISK MARKED "U.S. GEODETIC & COASTAL SURVEY, V640, 1968", IN CONCRETE HEADWALL
SC1	814,928.224	8,457,041.500	2/02/2012	FOUND IRON ROD WITH 2 1/2" DIA. ALUMINUM CAP IN MONUMENT BOX.
SC2	812,288.293	8,457,092.935	2/02/2012	FOUND 5/8" DIA. IRON ROD, 3" BELOW PAVEMENT.
NE25	813,632.552	8,458,405.679	2/02/2012	FOUND 2" DIA. ALUMINUM CAP, FLUSH WITH PAVEMENT, MARKING UNREADABLE, T 5 N, R 26 E, W.M., NE. CORNER SEC. 25
N25	813,585.700	8,455,728.959	2/02/2012	FOUND 1/2" IRON ROD, T 5 S, R 26 E, W. M., N. 1/4, SEC. 25, 8" BELOW PAVEMENT, CS C-1187-E
500	813,722.386	8,457,092.103	2/02/2012	SET 8" SPIKE AS TEMPORARY CONTROL POINT
501	814,064.512	8,457,117.361	2/02/2012	SET MAG NAIL IN PAVEMENT NORTH SIDE OF ROADWAY NEAR CURB
502	814,030.665	8,457,006.527	2/02/2012	SET MAG NAIL IN PAVEMENT SOUTH SIDE OF ROADWAY NEAR WEST END OF CURB

NETWORK DISTANCE AND BEARING TABLE

AT	TO	DISTANCE (FT)	BEARING
IRRIGON_OPUS	500	429.65'	S29°46'24"W
IRRIGON_OPUS	501	190.60'	S80°41'53"W
IRRIGON_OPUS	502	305.84'	S77°47'44"W
500	501	343.06'	N04°13'20"E
500	502	319.94'	N15°30'51"W
501	502	115.89'	S73°01'05"W

RECEIVED BY  
Morrow County Surveyor  
Date: 5-20-2013  
Rec'd By: S.K.H.  
No.: 2013-25C  
Folder No.: 1672

LEGEND

- IRRIGON\_OPUS
- SET GPS STATION
- FOUND MONUMENT USED AS GPS STATION
- LINES OF OBSERVATION

REGISTERED PROFESSIONAL LAND SURVEYOR  
*Robert E. Butler*  
OREGON  
July 25, 1995  
ROBERT ERICH BUTLER  
2733  
EXPIRES: 12/31/2013

OREGON DEPARTMENT OF TRANSPORTATION  
RIGHT-OF-WAY NETWORK CONTROL, RECOVERY, AND RETRACEMENT MAP  
U.S. 730: IRRIGON (FIRST ST.) CROSSWALK  
COLUMBIA RIVER HIGHWAY NO. 2  
MORROW COUNTY  
ODOT REGION 5  
3012 ISLAND AVE.  
LA GRANDE, OR. 97850-9497  
FEBRUARY 2, 2012  
NOT TO SCALE  
SHEET 1 OF 2

SET AND RECOVERED MONUMENT LIST

PT. NO.	LDP NORTHING	LDP EASTING	STATION & ALIGNMENT	OFFSET	DATE	DESCRIPTION & REFERENCE DOCUMENTS
IRRIGON_OPUS	814,095.320	8,457,305.453	489+32.25 US 730	259.11' Lt.	2/02/2012	FOUND 3 1/2" BRASS DISK MARKED "U.S. GEODETIC & COASTAL SURVEY, V640, 1968", IN CONCRETE HEADWALL
SC1	814,928.224	8,457,041.500	FIRST ST. & OREGON ST.	N/A	2/02/2012	FOUND IRON ROD WITH 2 1/2" DIA. ALUMINUM CAP IN MONUMENT BOX., NOTED ON CS B-657-K
SC2	812,288.293	8,457,092.935	FIRST ST. & WYOMING AVE.	N/A	2/02/2012	FOUND 5/8" DIA. IRON ROD, 3" BELOW PAVEMENT.
NE25	813,632.552	8,458,405.679	DIVISION RD. & IDAHO AVE.	N/A	2/02/2012	FOUND 2" DIA. ALUMINUM CAP, FLUSH WITH PAVEMENT, MARKING UNREADABLE, T 5 N, R 26 E, W.M., NE. CORNER SEC. 25
N25	813,585.700	8,455,728.959	SECOND ST. & IDAHO AVE.	N/A	2/02/2012	FOUND 1/2" IRON ROD, T 5 S, R 26 E, W. M., N. 1/4, SEC. 25, 8" BELOW PAVEMENT, CS C-1187-E
500	813,722.386	8,457,092.103	486+18.76 US 730	32.21' Rt.	2/02/2012	SET 8" SPIKE AS TEMPORARY CONTROL POINT
501	814,064.512	8,457,117.361	487+46.81 US 730	285.62' Lt.	2/02/2012	SET MAG NAIL IN PAVEMENT NORTH SIDE OF ROADWAY NEAR CURB
502	814,030.665	8,457,006.527	486+33.07 US 730	287.40' Lt.	2/02/2012	SET MAG NAIL IN PAVEMENT SOUTH SIDE OF ROADWAY NEAR WEST END OF CURB
1000	813,461.880	8,456,408.860	478+85.71 US 730	49.71' Rt.	2/02/2012	FOUND IRON ROD, 1" BELOW PAVEMENT IN GRAVEL APPROACH TO R.V. PARK, NO SUPPORTING DATA
1001	813,581.329	8,456,733.607	482+32.87 US 730	49.88' Rt.	2/02/2012	FOUND 1/2" DIA. IRON ROD, 3" ABOVE GROUND
1002	813,582.605	8,456,736.991	482+36.50 US 730	49.82' Rt.	2/02/2012	FOUND 1/2" IRON ROD WITH PLASTIC CAP, 3" ABOVE GROUND, SLIGHTLY BENT
1003	813,688.571	8,450,45.253	485+63.53 US 730	49.68' Rt.	2/02/2012	FOUND IRON ROD WITH DAMAGED PLASTIC CAP, FLUSH WITH PAVEMENT, PARTITION PLAT NO. 1998-5
1004	813,609.126	8,457,067.319	485+63.53 FIRST ST.	49.68' Rt.	2/02/2012	THE E 1/16 OF SECTIONS 24 & 25 IS A CALCULATED POINT.

N25 TO E 1/16 SECTIONS 24 & 25

L1 N. 88°59'50" E. 1,338.57"  
 (N. 89°41'18" E. 1,338.26') CS C-1187-E  
 (1,338.78') CS D-865-K  
 (1,338.15') CS C-942-E  
 (N. 89°42'57" E. 1,338.15') CS C-942-E  
 (N. 89°43'13" E. 1,338.79') CS D-224-K

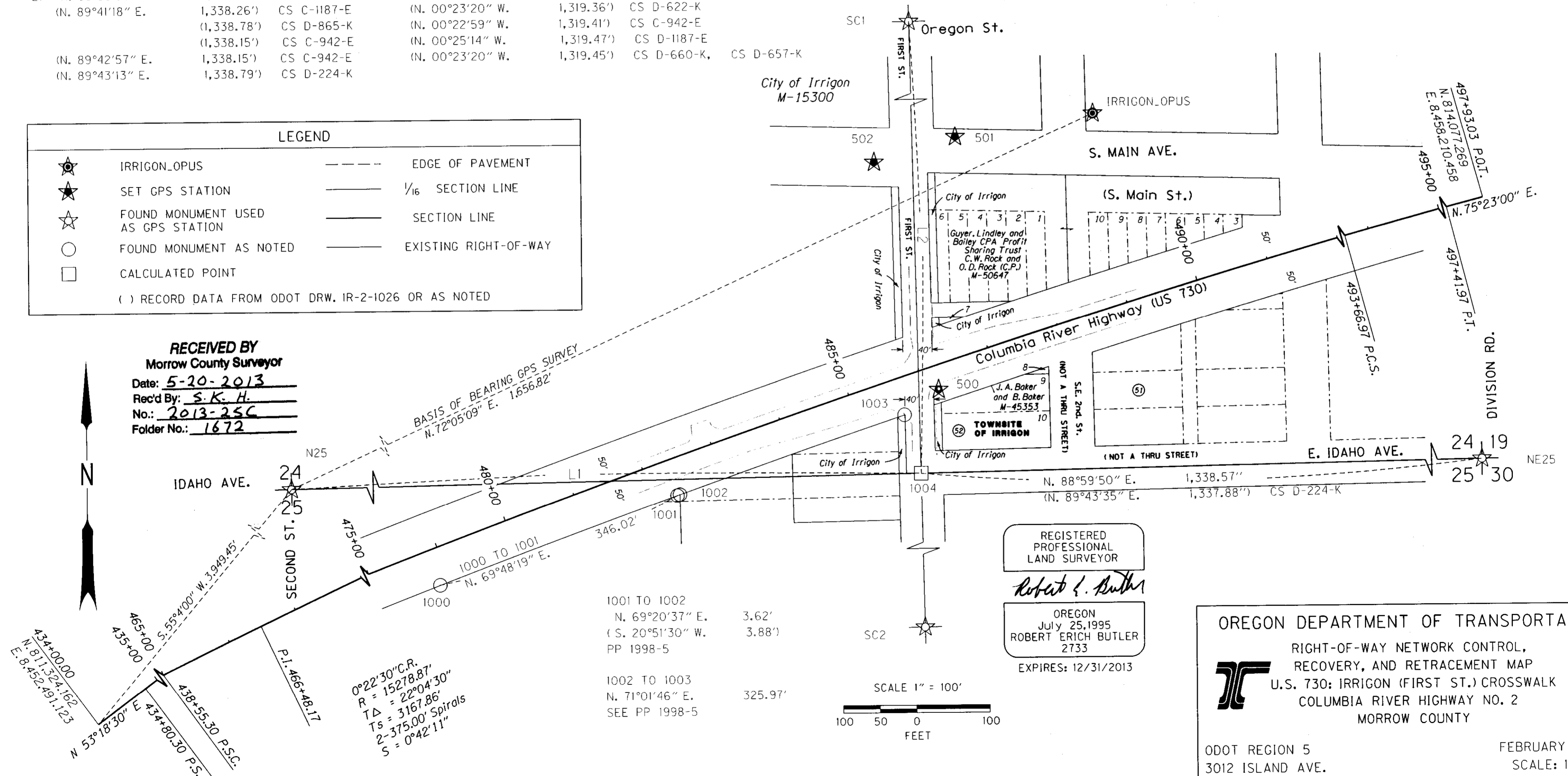
SC1 TO E 1/16 SECTIONS 24 & 25

L2 N. 01°07'17" W. 1,319.35'  
 (N. 00°23'20" W. 1,319.36') CS D-622-K  
 (N. 00°22'59" W. 1,319.41') CS C-942-E  
 (N. 00°25'14" W. 1,319.47') CS D-1187-E  
 (N. 00°23'20" W. 1,319.45') CS D-660-K, CS D-657-K

**LEGEND**

★	IRRIGON_OPUS	---	EDGE OF PAVEMENT
★	SET GPS STATION	---	1/16 SECTION LINE
☆	FOUND MONUMENT USED AS GPS STATION	---	SECTION LINE
○	FOUND MONUMENT AS NOTED	---	EXISTING RIGHT-OF-WAY
□	CALCULATED POINT		

( ) RECORD DATA FROM ODOT DRW. IR-2-1026 OR AS NOTED



**RECEIVED BY**  
 Morrow County Surveyor  
 Date: 5-20-2013  
 Rec'd By: S.K.H.  
 No.: 2013-25C  
 Folder No.: 1672

0°22'30" C.R.  
 R = 15278.87'  
 TΔ = 22°04'30"  
 Ts = 3167.86'  
 2-375.00' Spirals  
 S = 0°42'11"

REGISTERED PROFESSIONAL LAND SURVEYOR  
*Robert E. Butler*  
 OREGON  
 July 25, 1995  
 ROBERT ERICH BUTLER  
 2733  
 EXPIRES: 12/31/2013

OREGON DEPARTMENT OF TRANSPORTATION  
 RIGHT-OF-WAY NETWORK CONTROL, RECOVERY, AND RETRACEMENT MAP  
 U.S. 730: IRRIGON (FIRST ST.) CROSSWALK  
 COLUMBIA RIVER HIGHWAY NO. 2  
 MORROW COUNTY

ODOT REGION 5  
 3012 ISLAND AVE.  
 LA GRANDE, OR. 97850-9497  
 FEBRUARY 2, 2012  
 SCALE: 1" = 100'  
 SHEET 2 OF 2