

ENGLISH

# OREGON DEPARTMENT OF TRANSPORTATION

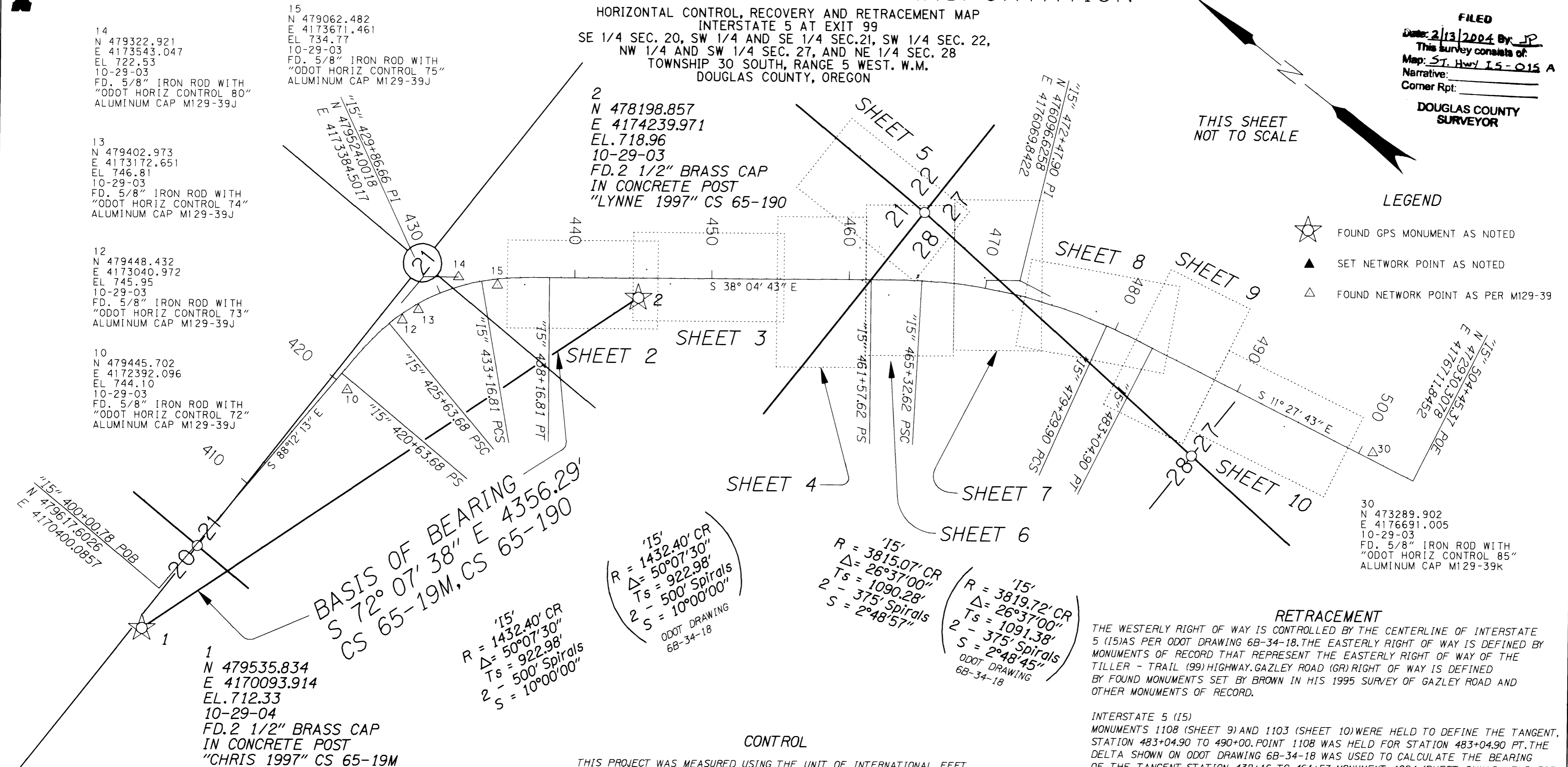
HORIZONTAL CONTROL, RECOVERY AND RETRACEMENT MAP  
INTERSTATE 5 AT EXIT 99  
SE 1/4 SEC. 20, SW 1/4 AND SE 1/4 SEC. 21, SW 1/4 SEC. 22,  
NW 1/4 AND SW 1/4 SEC. 27, AND NE 1/4 SEC. 28  
TOWNSHIP 30 SOUTH, RANGE 5 WEST. W.M.  
DOUGLAS COUNTY, OREGON

FILED  
Date: 2/13/2004 By: JP  
This survey consists of:  
Map: ST. HWY I5-015 A  
Narrative: \_\_\_\_\_  
Corner Rpt: \_\_\_\_\_  
DOUGLAS COUNTY SURVEYOR

THIS SHEET NOT TO SCALE

### LEGEND

- ☆ FOUND GPS MONUMENT AS NOTED
- ▲ SET NETWORK POINT AS NOTED
- △ FOUND NETWORK POINT AS PER M129-39



### NARRATIVE

THE PURPOSE OF THIS MAP OF SURVEY IS TO COMPLY WITH ORS 209.155.

THE PURPOSE OF THIS SURVEY IS TO RECORD THE POSITIONS OF NETWORK POINTS FOUND AND SET, RECORD THE POSITIONS OF EXISTING MONUMENTATION, AND TO RESOLVE THE EXISTING RIGHT OF WAY OF INTERSTATE 5, THE OLD TILLER-TRAIL HIGHWAY, AND GAZLEY ROAD, COUNTY ROAD #35A IN THE PROJECT AREA

### RECOVERY

THE MONUMENTS RECOVERED WERE TIED IN ACCORDANCE WITH ODOT STANDARDS. THE MEASUREMENTS WERE THEN ADJUSTED BY LEAST SQUARES METHOD USING CAICE SOFTWARE TO CHECK FOR BLUNDERS.

### GAZLEY ROAD RETRACEMENT

MONUMENTS APO2 AND APO3 (SHEET 5) WERE HELD TO ESTABLISH THE TANGENT, STATION 13+44 TO 14+81. MONUMENT APO3 WAS HELD FOR STATION 13+44.26. THE ALIGNMENT WAS BACKED IN FROM STATION 13+44.26 PT USING DATA AS PER BROWN'S 1995 SURVEY OF GAZLEY ROAD TO ITS INTERSECTION WITH THE TILLER - TRAIL HIGHWAY. THE BEGINNING STATION WAS CHANGED TO REFLECT THE ACTUAL INTERSECTION WITH THE TILLER - TRAIL HIGHWAY ALIGNMENT. MONUMENTS 1123, 1124, 1125 AND 1127 (SHEET 5) WERE HELD TO ESTABLISH THE TANGENT, STATION 19+00 TO 20+68. THE CURVE, STATION 14+81 TO 19+00, WAS CHANGED TO FIT THE CALCULATED SEMI - TANGENT LENGTH FROM MONUMENT 1123 (SHEET 5) TO THE INTERSECTION OF THE TANGENTS. THE RIGHT OF WAY SHOWN VARIES IN WIDTH DUE TO THE NON-CONCENTRIC POSITION OF THE FOUND MONUMENTS. THE FOUND MONUMENTS WERE HELD TO DETERMINE THE RIGHT OF WAY LOCATION SHOWN.

### CONTROL

THIS PROJECT WAS MEASURED USING THE UNIT OF INTERNATIONAL FEET.

THE NETWORK AND MONUMENT MEASUREMENTS WERE INTERMITTENTLY PERFORMED BY ODOT SURVEY CREWS FROM OCTOBER 27, 2003 THROUGH JANUARY 16, 2004.

THIS SURVEY IS BASED UPON TWO GPS POINTS (CHRIS AND LYNNE) THAT WERE SET IN SURVEY CS 65-19. THESE TWO MONUMENTS WERE RECOVERED AND HELD FOR THE BASIS OF BEARING AND COORDINATES.

THIS PROJECT UTILIZES A LOCAL DATUM PLANE (LDP) WHICH WAS DERIVED FROM THE STATE PLANE COORDINATES (NAD 83 (1991)) AS SHOWN ON CS 65-19. THESE COORDINATES WERE THEN CONVERTED TO INTERNATIONAL FEET USING A CONVERSION FACTOR OF 0.3048. THESE COORDINATES WERE ADJUSTED TO THE LDP USING A CONVERSION FACTOR OF 0.99986799.

TO CONVERT COORDINATES SHOWN TO STATE PLANE COORDINATES MULTIPLY BY 0.99986799.

HORIZONTAL MEASUREMENTS WERE MADE USING A LEICA TCA 1800. THE NETWORK WAS MEASURED IN ACCORDANCE WITH ODOT STANDARDS. THE HORIZONTAL MEASUREMENTS WERE THEN ADJUSTED BY LEAST SQUARES METHODS USING CAICE SOFTWARE.

ELEVATIONS WERE DERIVED BY RUNNING A CLOSED LEVEL LOOP WITH A LEICA NA2002 DIGITAL LEVEL. BENCH MARKS J 747 (NGS), K 747 (NGS), AND LYNNE (ODOT) WERE HELD IN THE ADJUSTMENT. THE LEVEL LOOP WAS ADJUSTED BY LEAST SQUARES METHOD USING CAICE SOFTWARE. ELEVATIONS WERE RUN ONLY IN AREAS WHERE TOPOGRAPHIC DATA WAS COLLECTED.

**RETRACEMENT**  
THE WESTERLY RIGHT OF WAY IS CONTROLLED BY THE CENTERLINE OF INTERSTATE 5 (I5) AS PER ODOT DRAWING 68-34-18. THE EASTERLY RIGHT OF WAY IS DEFINED BY MONUMENTS OF RECORD THAT REPRESENT THE EASTERLY RIGHT OF WAY OF THE TILLER - TRAIL (99) HIGHWAY. GAZLEY ROAD (GR) RIGHT OF WAY IS DEFINED BY FOUND MONUMENTS SET BY BROWN IN HIS 1995 SURVEY OF GAZLEY ROAD AND OTHER MONUMENTS OF RECORD.

INTERSTATE 5 (I5) MONUMENTS 1108 (SHEET 9) AND 1103 (SHEET 10) WERE HELD TO DEFINE THE TANGENT, STATION 483+04.90 TO 490+00. POINT 1108 WAS HELD FOR STATION 483+04.90 PT. THE DELTA SHOWN ON ODOT DRAWING 68-34-18 WAS USED TO CALCULATE THE BEARING OF THE TANGENT, STATION 438+16 TO 461+57. MONUMENT 1004 (SHEET 2) WAS HELD FOR THE PT OF THE CURVE STATION 420+63 TO 438+16. THE TANGENTS WERE INTERSECTED AND THE CURVE DATA WAS CHANGED SO THAT THE SEMI-TANGENT LENGTH MATCHED THE CALCULATED DISTANCE FROM MONUMENT 1108 TO THE PI. THE TANGENT WAS THEN EXTENDED TO STATION 504+45. THE ALIGNMENT FROM STATION 400+00 TO 438+16 WAS CALCULATED AS PER DATA SHOWN ON ODOT DRAWING 68-34-18. ODOT DRAWING 68-34-18 AND DEED BOOK 267, PAGE 306 WERE USED TO DEFINE SHOWN RIGHT OF WAY.

TILLER - TRAIL HIGHWAY (99) MONUMENTS 1021 (SHEET 3) AND 1016 (SHEET 5) WERE HELD TO ESTABLISH THE NORTHERLY TANGENT. MONUMENTS APO8 (SHEET 7) AND 1112 (SHEET 9) WERE HELD TO ESTABLISH THE SOUTHERLY TANGENT. THE TANGENTS WERE INTERSECTED TO ESTABLISH THE PI. THE CURVE DATA WAS CHANGED TO MATCH THE CALCULATED DELTA WITH THE SEMI - TANGENT LENGTH SHOWN ON ODOT DRAWING 3B-11-8. THE STATIONING WAS CHANGED TO MATCH A STATION OF 61+18.80 FOR THE PC AS SHOWN ON DRAWING 3B-11-8. THE RIGHT OF WAY SHOWN VARIES IN WIDTH DUE TO THE NON-CONCENTRIC POSITION OF THE FOUND MONUMENTS. DEED BOOK 1356, PAGE 344 AND THE FOUND MONUMENTS WERE HELD TO DETERMINE THE RIGHT OF WAY LOCATION SHOWN.

I, JODY FRASIER, CERTIFY THAT THIS PLAT OF SURVEY WAS PREPARED USING HP C4871A INK WITH HP 51642B MYLAR  
*Jody Frasier*

REGISTERED PROFESSIONAL LAND SURVEYOR  
*Jody Frasier*  
JODY S. FRASIER  
2-98  
EXPIRES 12-31-2005