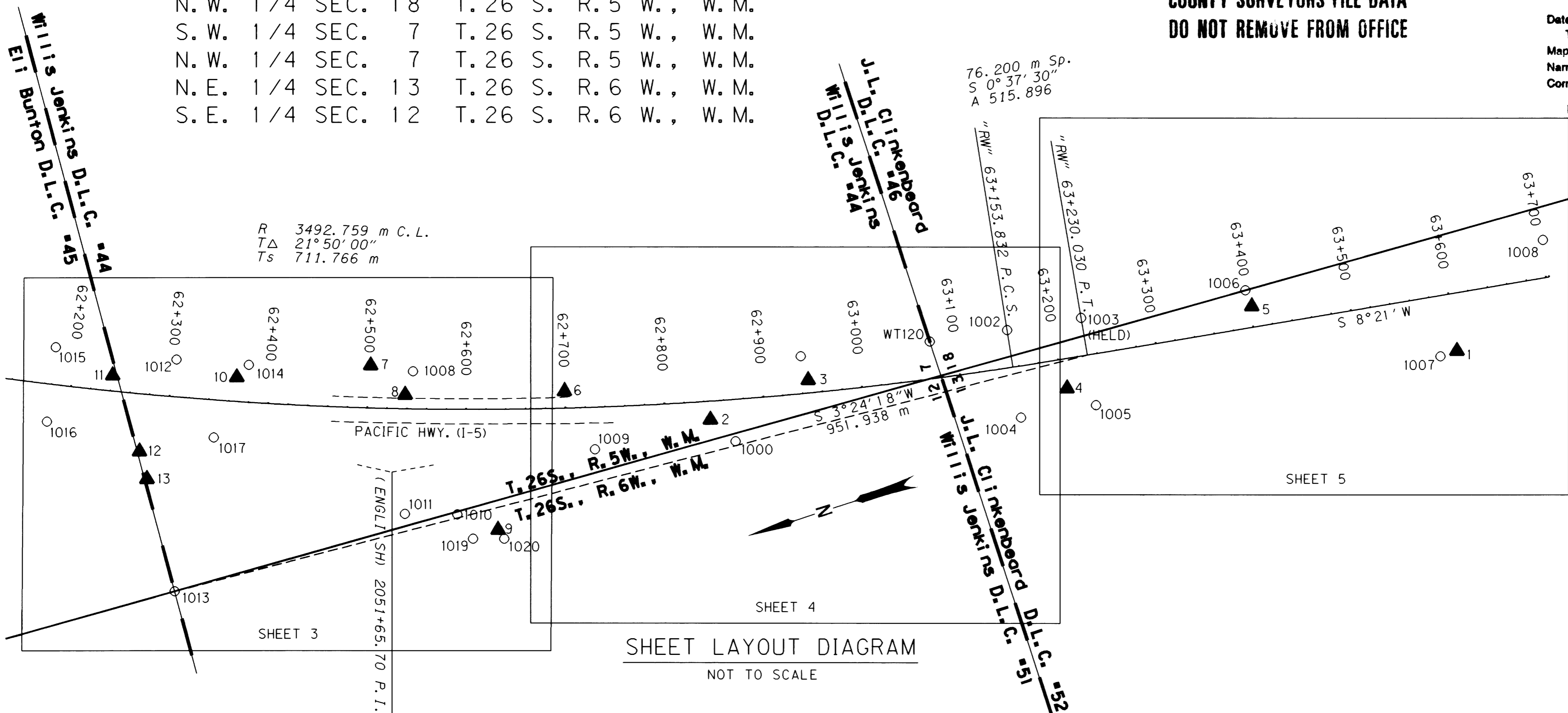


N. W. 1/4 SEC. 18 T. 26 S. R. 5 W., W. M.
 S. W. 1/4 SEC. 7 T. 26 S. R. 5 W., W. M.
 N. W. 1/4 SEC. 7 T. 26 S. R. 5 W., W. M.
 N. E. 1/4 SEC. 13 T. 26 S. R. 6 W., W. M.
 S. E. 1/4 SEC. 12 T. 26 S. R. 6 W., W. M.

COUNTY SURVEYORS FILE DATA
 DO NOT REMOVE FROM OFFICE

FILED
 Date: 5/30/2000 By: JP
 This survey consists of: 5
 Map: M134-74 A
 Narrative:
 Corner Rpt:

DOUGLAS COUNTY
 SURVEYOR



SHEET LAYOUT DIAGRAM
 NOT TO SCALE

SURVEY NARRATIVE

THE PURPOSE OF THIS METRIC SURVEY NETWORK WAS TO ESTABLISH CONTROL FOR AN O.D.O.T. ROCKFALL AND SLIDE MITIGATION PROJECT CALLED SUTHERLIN CR.-WILBUR ROAD ROCKFALL. THE SURVEY WAS CONDUCTED ON JULY 19 AND 20, 1999. THE ORIGINAL FIELD SURVEY NOTES ARE ARCHIVED IN SALEM AS BOOK *3686.

THIS SURVEY UTILIZES A LOCAL DATUM PLANE (LDP) WHICH IS RELATIVE TO THE OREGON COORDINATE SYSTEM (OCS) OF 1927 SOUTH ZONE WITH RESPECT TO THE LOCAL LATITUDE AND GROUND ELEVATION. THE LDP COORDINATES DEFINE TRUE GROUND DISTANCES. COORDINATES FOR THIS NETWORK ARE BASED ON THE POINT OF INTERSECTION AT ENGLISH STATION 2051+65.70 SHOWN ON O.D.O.T. RIGHT-OF-WAY MAP NO. 8B-26-7 DATED JUNE 1962 (REV. APRIL 1984). SET POINTS HAVE HAD THEIR POINT NUMBERS STAMPED ON THE CAPS IN THE FIELD. O.D.O.T. ORANGE CARSONITE POSTS WERE USED TO MARK THE LOCATION OF THE SET POINTS.

THE INITIAL BASIS OF BEARING FOR THE HORIZONTAL CONTROL NETWORK (POINT #2 TO POINT #1) WAS ASSUMED AND THE NETWORK WAS RUN. THE R/W MONUMENTS WERE THEN TIED. POINTS *1003 AT ENGLISH STATION "RW" 2074+47.19, 125 FT. LT., *1005 AT ENGLISH STATION "RW" 2074+47.19, 170 FT. RT., AND *1008 AT ENGLISH STATION "RW" 2090+00, 125 FT. LT. WERE USED TO RESOLVE THE BASIS OF BEARING. THE DISTANCE BETWEEN POINTS *1003 AND *1005 WAS SPLIT TO ESTABLISH ONE POINT ON THE R/W CENTERLINE AT THE P.T. RECORD DISTANCE IS 295 FEET (89.916 METERS) AND THE MEASURED DISTANCE WAS 89.869 METERS. ENGLISH COORDINATES FOR THIS POINT WERE CALCULATED UTILIZING THE AFOREMENTIONED P.I. COORDINATES, AND THE RECORD BEARING AND SEMI-TANGENT DISTANCE SHOWN ON SAID MAP. THESE COORDINATES WERE THEN CONVERTED TO METRIC COORDINATES USING A CONVERSION FACTOR OF 0.30480061 (OR ONE METER = 3937 U.S. SURVEY FEET/1200). POINT *1003 WAS CALCULATED USING THE SPLIT OFFSET DISTANCE (38.0765 m) AND A BEARING AT RIGHT ANGLES TO THE RECORD SEMI-TANGENT BEARING (S8°21'W). POINTS *1003 AND *1008 MARK A 38.1 m (125 FT.) OFFSET LINE TO THE AHEAD TANGENT OF A CURVE ON THE R/W CENTERLINE. POINT *1003 WAS HELD AND THE WHOLE PROJECT WAS ROTATED ABOUT IT UNTIL THE AHEAD BEARING WAS S8°21'W. THIS IS THE BASIS OF BEARING TAKEN FROM SAID R/W MAP. (SEE SHEET 2 FOR SCHEMATIC)

A LEICA TCA1800 TOTAL STATION (S/N 271323) WAS USED TO ESTABLISH HORIZONTAL CONTROL FOR THIS PROJECT. THE TCA1800 TOTAL STATION HAS A STANDARD ANGULAR ERROR OF +/- 1 SECOND AND A STANDARD DISTANCE ERROR OF +/- 2 mm, +/- 2 PPM.

THE LEAST SQUARES ADJUSTMENT PRODUCED: ANGULAR RESIDUALS (THE AMOUNT THE FIELD OBSERVED ANGLES WERE CHANGED DUE TO THE ADJUSTMENT) AVERAGING 1.69 SECONDS AND NO GREATER THAN 5 SECONDS; AND DISTANCE RESIDUALS (THE AMOUNTS THE FIELD OBSERVED DISTANCES WERE CHANGED DUE TO THE ADJUSTMENT) AVERAGING LESS THAN 0.6 mm AND NO GREATER THAN 2 mm.

THERE IS A 95% PROBABILITY THAT THE FINAL POSITIONS OF THE CONTROL POINTS ARE WITHIN THE ERROR ELIPSES AS SHOWN IN THE "CONFIDENCE LEVEL LIMITS" TABLE.

RETRACEMENT NARRATIVE

RETRACEMENT OF THE RIGHT-OF-WAY CENTERLINE WAS ACCOMPLISHED BY HOLDING THE TANGENT FORMED BY POINTS *1003 AND *1008 AT THE SPLIT OF POINTS *1003 AND *1005. THIS TANGENT WAS PROJECTED BACK ON LINE TO THE RECORD P.I. (ENGLISH 2051+65.70). A SECOND TANGENT WAS ESTABLISHED BACK ON LINE FROM THIS P.I. AT AN ANGLE EQUAL TO THE RECORD DELTA (21°50') FOR THE ENCLOSED CURVE. CURVE DATA FROM MAP NO. 8B-26-7 PRODUCED AN ALIGNMENT THAT CLOSELY SPLIT THE FOUND PINS AND MATCHED HORIZONTAL CONTROL POINT MONUMENT STATIONING WITHIN 2 mm. METRIC STATIONING WAS ESTABLISHED FROM ENGLISH STATION "RW" 2074+47.19 P.T. (METRIC 63+230.030 P.T.) BY MULTIPLYING ENGLISH STATIONING BY 0.30480061. METRIC COORDINATES AND STATIONING MAY ALSO BE DIVIDED BY THIS FACTOR TO OBTAIN ENGLISH COORDINATES AND STATIONING RESPECTIVELY. THE R/W BOUNDARIES FOR THE INTERSTATE WERE RESOLVED FROM THIS CENTERLINE, BUT THE ADJOINING PROPERTIES WERE NOT RETRACED.

LEGEND	
▲	SET NETWORK POINT
○	FOUND MONUMENT

REGISTERED
 PROFESSIONAL
 LAND SURVEYOR

Christine V. Blevis
 OREGON
 JULY 19, 1994
 CHRISTINE V. BLEVINS
 2669

Expires : Dec. 31, 2001

OREGON DEPARTMENT OF TRANSPORTATION
 HORIZONTAL CONTROL, RECOVERY AND RETRACEMENT MAP
 SUTHERLIN CR. - WILBUR RD. ROCKFALL
 PACIFIC HWY (I-5)
 DOUGLAS COUNTY
 O.D.O.T. 3500 N.W. STEWART PARKWAY, ROSEBURG, OR. 97470
 MAY 17, 2000 SHEET 1 OF 5



MAP FILE M134-74A

MAP FILE M134-74A