

RECORD OF SURVEY
for
BENTON COUNTY

LOCATED IN THE ARCHIMEDES STEWART DONATION LAND CLAIM NO. 46 IN SECTION 25, TOWNSHIP 11 SOUTH, RANGE 5 WEST, AND IN THE JAMES H. STEWART DONATION LAND CLAIM NO. 49, JEHIEL S. KENDALL DONATION LAND CLAIM NO. 48, ARCHIMEDES STEWART DONATION LAND CLAIM NO. 51, IN SECTIONS 19 AND 30 OF TOWNSHIP 11 SOUTH, RANGE 4 WEST, WILLAMETTE MERIDIAN, BENTON COUNTY, OREGON.

APRIL 1, 1989

GPS STATION : "GRAN"
SET 3 1/4" BC "GPS GRANGER 1989"
LATITUDE : N44°37'53.03313"
LONGITUDE : W123°11'53.12020"
θ = -0°54'48.40908"
COMBINED FACTOR : 0.99992743
ELEVATION : 226.597
NORTHING : 363439.2531
EASTING : 1297742.2459

NARRATIVE

BACKGROUND AND PURPOSE

BENTON COUNTY IS IN THE PROCESS OF DEVELOPING A COUNTY WIDE GEOGRAPHIC INFORMATION SYSTEM (GIS). ONE OF THE ESSENTIAL PARTS OF A GIS IS A COORDINATE GRID SYSTEM TO BE USED AS THE BASE LAYER FOR THE ENTIRE GIS.

BENTON COUNTY AND THE UNITED STATES DEPARTMENT OF THE INTERIOR, BUREAU OF LAND MANAGEMENT (BLM) ARE WORKING JOINTLY IN DEVELOPING STATE PLANE COORDINATES FOR ALL GOVERNMENT CORNERS IN BENTON COUNTY. BENTON COUNTY HIRED DAVID EVANS AND ASSOCIATES, INC. TO ESTABLISH ELEVEN FIRST ORDER CONTROL POINTS. THESE POINTS WERE ESTABLISHED BY USING THE STATE-OF-THE-ART CONTROL SURVEYING TECHNOLOGY CALLED GLOBAL POSITIONING SYSTEM (GPS). THESE POINTS ARE IDENTIFIED AS GPS CONTROL POINTS AS SHOWN.

THE OREGON STATE PLANE COORDINATE VALUES GENERATED BY BLM ARE COMPUTED COORDINATES ESTABLISHED FROM THE BEST AVAILABLE EVIDENCE ON FILE IN THE RECORDS OF THE COUNTY SURVEYOR, SUCH AS SURVEYS, GOVERNMENT NOTES, ETC.

THE PURPOSE OF THIS SURVEY IS TO TIE THE GOVERNMENT CORNERS AND ESTABLISH ACCURATE STATE PLANE COORDINATE VALUES, ON THESE GOVERNMENT CORNERS, USING THE ESTABLISHED GPS CONTROL POINTS. THE STATE PLANE COORDINATE VALUES WILL BE INCORPORATED INTO THE BENTON COUNTY COORDINATE GRID SYSTEM.

COORDINATE SYSTEM

THE COORDINATE SYSTEM USED FOR THIS SURVEY IS THE LAMBERT CONFORMAL CONIC PROJECTION OREGON NORTH ZONE (NAD 27). ALL BEARINGS AND DISTANCES SHOWN ON THIS SURVEY ARE GRID BEARINGS AND GRID DISTANCES UNLESS OTHERWISE NOTED. THE COMBINED FACTOR SHOWN FOR EACH LINE IS THE COMBINED SEA LEVEL FACTOR AND SCALE FACTOR.

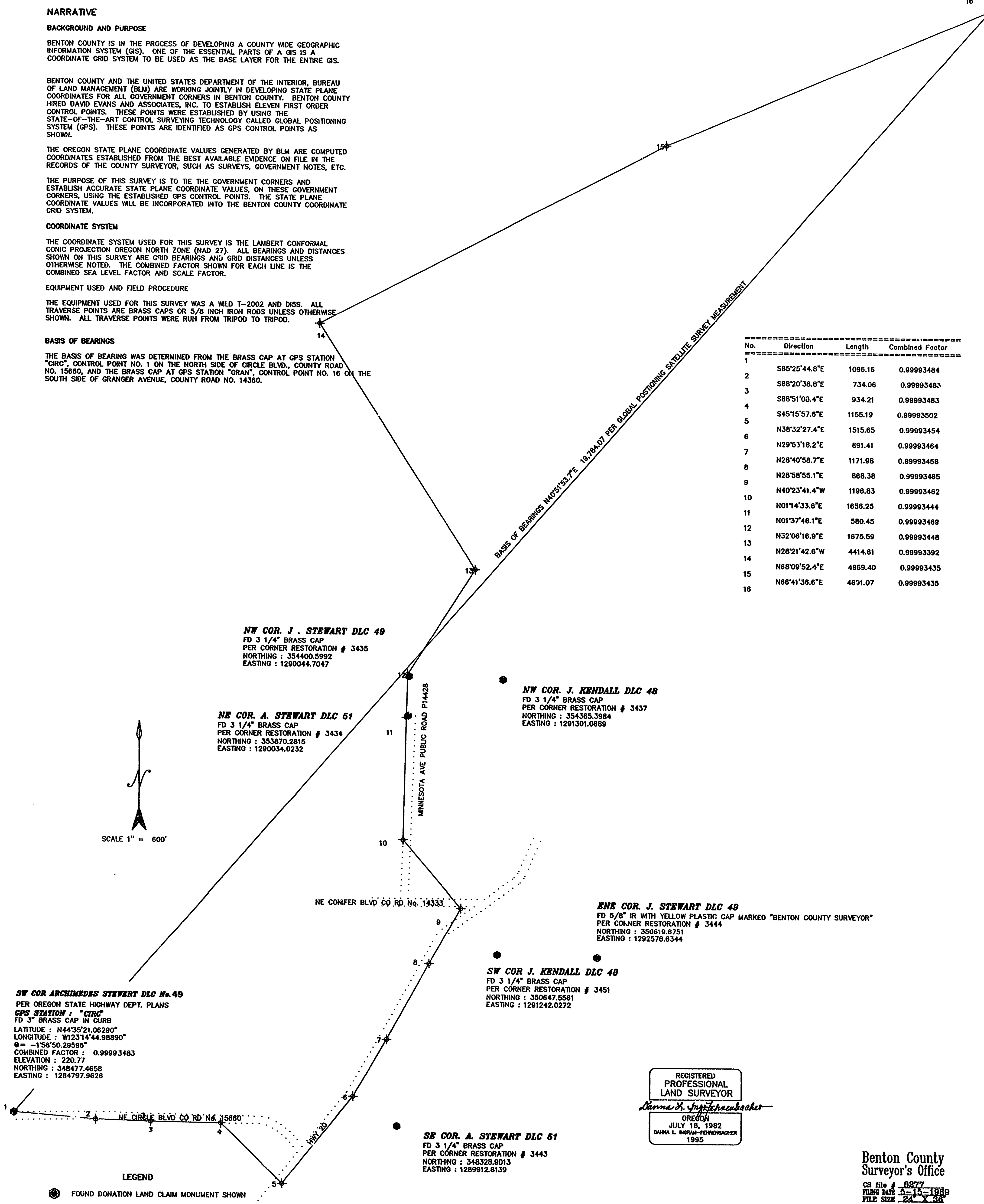
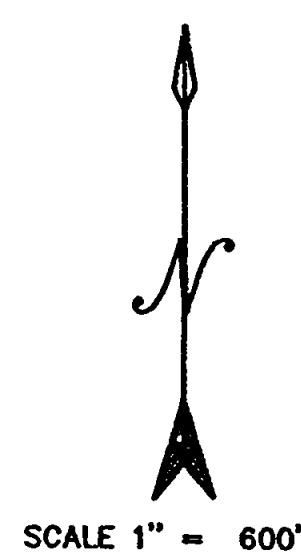
EQUIPMENT USED AND FIELD PROCEDURE

THE EQUIPMENT USED FOR THIS SURVEY WAS A WILD T-2002 AND DISS. ALL TRAVERSE POINTS ARE BRASS CAPS OR 5/8 INCH IRON RODS UNLESS OTHERWISE SHOWN. ALL TRAVERSE POINTS WERE RUN FROM TRIPOD TO TRIPOD.

BASIS OF BEARINGS

THE BASIS OF BEARING WAS DETERMINED FROM THE BRASS CAP AT GPS STATION "GRAN", CONTROL POINT NO. 1 ON THE NORTH SIDE OF CIRCLE BLVD., COUNTY ROAD NO. 15860, AND THE BRASS CAP AT GPS STATION "GRAN", CONTROL POINT NO. 16 ON THE SOUTH SIDE OF GRANGER AVENUE, COUNTY ROAD NO. 14360.

No.	Direction	Length	Combined Factor
1			
2	S85°25'44.8"E	1096.16	0.99993484
3	S88°20'38.8"E	734.06	0.99993483
4	S88°51'08.4"E	934.21	0.99993483
5	S45°15'57.6"E	1155.19	0.99993502
6	N38°32'27.4"E	1515.65	0.99993454
7	N29°53'18.2"E	891.41	0.99993464
8	N28°40'58.7"E	1171.98	0.99993458
9	N28°58'55.1"E	868.38	0.99993465
10	N40°23'41.4"W	1198.83	0.99993462
11	N01°14'33.6"E	1656.25	0.99993444
12	N01°37'46.1"E	580.45	0.99993469
13	N52°06'16.9"E	1675.59	0.99993448
14	N28°21'42.6"W	4414.61	0.99993392
15	N68°09'52.4"E	4969.40	0.99993435
16	N66°41'36.6"E	4691.07	0.99993435



NW COR. J. STEWART DLC 49
FD 3 1/4" BRASS CAP
PER CORNER RESTORATION # 3435
NORTHING : 354400.5992
EASTING : 1290044.7047

NE COR. A. STEWART DLC 51
FD 3 1/4" BRASS CAP
PER CORNER RESTORATION # 3434
NORTHING : 353870.2815
EASTING : 1290034.0232

NW COR. J. KENDALL DLC 48
FD 3 1/4" BRASS CAP
PER CORNER RESTORATION # 3437
NORTHING : 354365.3984
EASTING : 1291301.0889

ENE COR. J. STEWART DLC 49
FD 5/8" IR WITH YELLOW PLASTIC CAP MARKED "BENTON COUNTY SURVEYOR"
PER CORNER RESTORATION # 3444
NORTHING : 350619.6751
EASTING : 1292576.6344

SW COR. J. KENDALL DLC 48
FD 3 1/4" BRASS CAP
PER CORNER RESTORATION # 3451
NORTHING : 350847.5581
EASTING : 1291242.0272

SW COR. ARCHIMEDES STEWART DLC No. 49
PER OREGON STATE HIGHWAY DEPT. PLANS
GPS STATION : "CIRC"
FD 3" BRASS CAP IN CURB
LATITUDE : N44°35'21.06290"
LONGITUDE : W123°14'44.98890"
θ = -1°56'50.29596"
COMBINED FACTOR : 0.99993483
ELEVATION : 220.77
NORTHING : 348477.4658
EASTING : 1284797.9626

SE COR. A. STEWART DLC 51
FD 3 1/4" BRASS CAP
PER CORNER RESTORATION # 3443
NORTHING : 348328.9013
EASTING : 1289912.6139

SW COR. JAMES H. STEWART DLC 49
FD 5/8" IRON ROD
PER CORNER RESTORATION # 3334
NORTHING : 347041.4867
EASTING : 1289883.9624

REGISTERED
PROFESSIONAL
LAND SURVEYOR
Danna L. Ingram-Fehrenbacher
OREGON
JULY 16, 1982
DANNA L. INGRAM-FEHNRENBACHER
1985

Benton County
Surveyor's Office
CS file # 8277
FILING DATE 5-15-1989
FILE SIZE 24 X 36

LEGEND

- FOUND DONATION LAND CLAIM MONUMENT SHOWN
- FOUND MONUMENT SHOWN
- ⊕ GPS MONUMENT SHOWN
- ⊕ SET 5/8" IRON ROD WITH RED PLASTIC MARKED : "BENTON CO CONTROL PT"
- ⋯ APPROXIMATE EDGE OF TRAVELED WAY
- TRAVERSE LINES RUN
- BC = BRASS CAP
- IR = IRON ROD
- OD = OUTSIDE DIAMETER
- GPS = GLOBAL POSITIONING SATELLITE SURVEY

NOTE : ALL BEARINGS AND DISTANCES ARE GRID NAD 27.
ALL NORTHINGS, EASTINGS AND DISTANCES ARE IN U.S. FEET.
ALL PIPES ARE MEASURED INSIDE DIAMETERS UNLESS OTHERWISE NOTED.

BENTON COUNTY PUBLIC WORKS 360 S.W. AVERY AVENUE CORVALLIS, OREGON 97333	
"CIRC" TO "GRAN" CONTROL SURVEY	
COUNTY SURVEYOR : DANNA INGRAM-FEHNRENBACHER	PROJECT MANAGER : RAY WILSON
SCALE : 1" = 600'	DRAWN BY : R J ZIMMER
DATE : MARCH 28, 1989	DRAWING FILE NAME : CIRGRAN
REVISED : 5-15-89	SHEET 1 OF 1