

**NARRATIVE:**

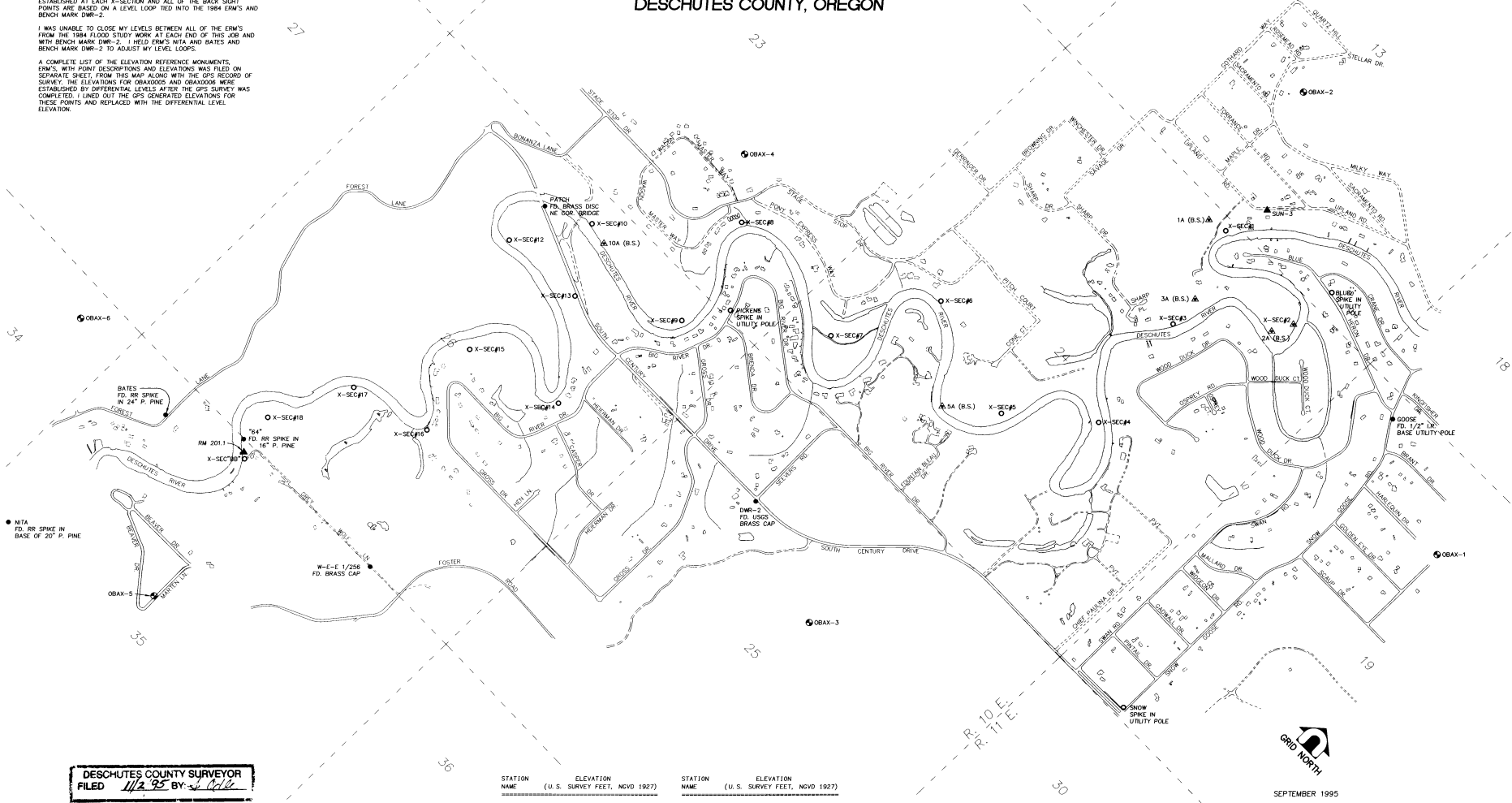
THE PURPOSE OF THIS SURVEY WAS TO ESTABLISH HORIZONTAL AND VERTICAL CONTROL FOR MAPPING OF A PORTION OF THE DESCHUTES RIVER FOR A FLOOD STUDY. EXISTING DESCHUTES COUNTY GPS CONTROL POINTS WERE OCCUPIED FOR HORIZONTAL AND VERTICAL CONTROL. TRIMBLE 4000 SSB DUAL FREQUENCY RECEIVERS WERE USED TO ESTABLISH THE NEW CONTROL POINTS (SEE SEPARATE GPS SURVEY REPORT).

EXISTING ELEVATION REFERENCE MARKS, ERMS, FROM THE 1984 FLOOD STUDY CONTROL SURVEY IMMEDIATELY UPSTREAM AND DOWNSTREAM OF THE CURRENT FLOOD STUDY WERE TIED WITH MY LEVEL LOOPS. THE ELEVATION FOR THE IRON RODS, ERMS, ESTABLISHED AT EACH X-SECTION AND ALL OF THE BACK-SIGHT POINTS ARE BASED ON A LEVEL LOOP TIED INTO THE 1984 ERMS AND BENCH MARK DWR-2.

I WAS UNABLE TO CLOSE MY LEVELS BETWEEN ALL OF THE ERMS FROM THE 1984 FLOOD STUDY WORK AT EACH END OF THIS JOB AND WITH BENCH MARK DWR-2. I HELD DAVIS' NITA AND BATES AND BENCH MARK DWR-2 TO ADJUST MY LEVEL LOOPS.

A COMPLETE LIST OF THE ELEVATION REFERENCE MONUMENTS, ERMS, WITH POINT DESCRIPTIONS AND ELEVATIONS WAS FILED ON SEPARATE SHEET, FROM THIS MAP ALONG WITH THE GPS RECORD OF SURVEY. THE ELEVATIONS FOR BRASSGOS AND OBAXSON WERE ESTABLISHED BY DIFFERENTIAL LEVELS AFTER THE GPS SURVEY WAS COMPLETED. I LINED OUT THE GPS GENERATED ELEVATIONS FOR THESE POINTS AND REPLACED WITH THE DIFFERENTIAL LEVEL ELEVATION.

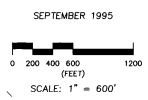
# GEODETIC CONTROL DESCHUTES RIVER FLOOD STUDY DESCHUTES COUNTY LOCATED IN SECTION 19, T. 20 S., R. 11 E., AND IN SECTIONS 13, 23, 24, 25, 26, 34 AND 35, T. 20 S., R. 10 E., W.M., DESCHUTES COUNTY, OREGON



**DESCHUTES COUNTY SURVEYOR**  
FILED 11/2/95 BY: *[Signature]*

STATION NAME	ELEVATION (U.S. SURVEY FEET, NGVD 1927)	STATION NAME	ELEVATION (U.S. SURVEY FEET, NGVD 1927)
XSEC#1	4176.13	XSEC#14	4173.69
1A (B.S.)	4178.54	XSEC#15	4164.56
XSEC#2	4157.50	XSEC#16	4170.32
2A (B.S.)	4158.84	XSEC#17	4161.81
XSEC#3	4158.42	XSEC#18	4168.53
3A (B.S.)	4157.37	XSEC#18B	4172.99
XSEC#4	4157.10	PATCH	4174.80
XSEC#5	4159.23	SUN-3	4179.31 [4179.44]
5A (B.S.)	4159.52	BATES	4178.80 [4178.60]
XSEC#6	4165.23	W-E-E 1/256	4188.70 [4188.64]
XSEC#7	4160.40	GOOSE	4178.37
XSEC#8	4166.54	BLUE	4163.98
XSEC#9	4160.51	SNOW	4182.42
XSEC#10	4160.37	PICKENS	4167.25
10A (B.S.)	4160.45	NITA	4189.92 [4189.82]
XSEC#12	4163.44	RM 201.1	4173.20 [4173.11]
XSEC#13	4163.26	"64"	4176.22 [4176.10]

- LEGEND:**
- SET 3" BRASS CAP ON 2" G.I.P. WITH "DAVID EVANS AND ASSOCIATES, INC." CASTING CAP STAMPED WITH STATION NAME
  - SET 5/8" IRON ROD WITH YELLOW PLASTIC CAP STAMPED "D.E.A. INC." UNLESS OTHERWISE NOTED.
  - ▲ SET 1/2" IRON ROD WITH RED PLASTIC CAP STAMPED "D.E.A. CONTROL"
  - FOUND MONUMENT AS NOTED
  - ▲ FOUND 5/8" IRON ROD WITH 2" USE ALUMINUM CAP
  - USCE U.S. CORPS ARMY ENGINEERS
  - (B.S.) BACK-SIGHT POINT
  - [ ] RECORD FROM 1984 FIELD SURVEY FOR USCE FLOOD STUDY



REGISTERED PROFESSIONAL LAND SURVEYOR  
*David K. Bateman*  
OREGON  
JULY 26, 1978  
DAVID K. BATEMAN  
10 88  
RENEWS 12-31-95

**ae**  
 DAVID EVANS AND ASSOCIATES, INC.  
 BEND OREGON 97701 (503)389-7614

**GEODETIC CONTROL  
DESCHUTES RIVER FLOOD STUDY  
DESCHUTES COUNTY  
LOCATED IN SECTION 19, T. 20 S., R. 11 E. AND IN  
SECTIONS 13, 23, 24, 25, 26, 34 AND 35, T. 20 S., R. 10 E., W.M.,  
DESCHUTES COUNTY, OREGON**

Scale: 1" = 600'  
 DATE: SEPTEMBER 26, 1995  
 DRAWN BY: D.A.N.  
 FILE: D:\OBAX\0005\OBAX\_GEOCONTROL.DWG