

**COUNTY SURVEYORS FILE DATA  
DO NOT REMOVE FROM OFFICE**

**DAM CONTROL SURVEY  
MILLTOWN HILL RESERVOIR**

T22S, R4W, W.M., SECTIONS 31, 32, 33, AND 35  
T23S, R4W, W.M., SECTIONS 1, 8, 20, 21, 23, 27, 32, AND 35

Found a 3" brass cap in concrete set flush with ground stamped "Doug. Co. Surveyors Office ADAM 1978" at the intersection of Interstate Highway #5 and Frontage Road (Co. Rd. #8) and the Interstate Highway #5 on-ramp. Brass cap is 1.5 ft. East of fence.

Found a 3" brass cap set flush in top of concrete rail of overcrossing structure at SE Corner of Interstate Highway #5 and Elkhead Road (Co. Rd. #7) marked "Oregon State Highway Dept. DCSO EDEN 1978".

1-7-10 - Approximately 33 miles North of Roseburg take Exit #154. From intersection of Co. Rd. #7 and Co. Rd. #8 travel North then East on Co. Rd. #8 1.2 miles to "S" turn, monument is located 60 ft. South of rd. centerline in middle of turn.

1-7-20 - From intersection of Co. Rd. #7 and Co. Rd. #8 travel North then East on Co. Rd. #8 approximately 4.7 miles to intersection of Co. Rd. #8A, travel North and East on Co. Rd. #8A approximately 1.0 mile to house and mobile home on North. Monument is located approximately 150 feet North of road and 80 ft. South of mobile home.

1-5-10 - From intersection of Co. Rd. #7 and Co. Rd. #8 travel East on Co. Rd. #7 approximately 0.6 miles to BLM Rd. #24-4-6.0 travel South on Rd. #24-4-6.0, 1.8 miles to BLM Rd. #23-4-7.2 turn left on Rd. #23-4-7.2 travel 3.0 miles (approximately 300 ft. from end of road) to flagged line on East, travel 400 ft. Southeast to a 30" D. Fir snag on ridge top monument is located 100 ft. North of snag on exposed rock face.

1-5-20 - From intersection of Co. Rd. #7 and Co. Rd. #8 travel East on Co. Rd. #7 to intersection of Co. Rd. #7 and Co. Rd. #8, travel North on Co. Rd. #8 approximately 1.0 mile to BLM Rd. #23-4-15.1 travel East on BLM Rd. #23-4-15.1 approximately 2.0 miles, monument is located 25 ft. South of road (near gravel stockpile).

1-3-10 - From intersection of Co. Rd. #7 and Co. Rd. #8 travel East and South on Co. Rd. #7 approximately 6.4 miles to South end of Co. Rd. #7 which is the North End of Co. Rd. #50 continue South on Co. Rd. #50 approximately 4.1 miles to driveway on left (approximately 0.1 mile South of Co. Rd. #190) travel North and East approximately 0.4 miles to powerline travel North on powerline road approximately 0.6 miles to access road to East, travel East 0.2 miles to access road to North, travel North 0.5 miles to access road to West, travel West 0.2 miles to East-West fence line, then follow road on ridgetop Northwest approximately 0.2 miles to powerline, then 100 ft. North of ridge top and in centerline of powerline R/W.

1-3-20 - From intersection of Co. Rd. #7 and Co. Rd. #8 travel East and South on Co. Rd. #7 to intersection of Co. Rd. #69, travel East and South on Co. Rd. #69 approximately 1.1 miles to BLM Rd. #23-4-28.1 travel East on Rd. #23-4-28.1 approximately 5.0 miles to logging Rd. on left travel 0.2 miles Northwest to landing area. Monument is located on West Side of landing.

CON. MON. #3 - From intersection of Co. Rd. #7 and Co. Rd. #8 travel East and South approximately 5.2 miles to intersection of Co. Rd. #7 and Co. Rd. #8. Found 3" brass cap in concrete stamped "Co. Rd. #8 Con. Mon. #3 1978" Monument bears South 28° West, 41.5 ft. from center of intersection.

**SURVEY FOR:**

Douglas County Water Resources Department  
Justice Building  
Roseburg, Oregon 97470  
(503) 440-4255

**SURVEY BY:**

Donald A. Bentz Surveyor Inc.  
P.O. Box 901  
Winchester, Oregon 97495  
(503) 673-0166

NOTE: Bearing and distances shown are true.  
Based on Oregon State Plane Coordinates System South Zone.

PURPOSE OF THIS SURVEY WAS TO TIE PHOTO CONTROL FLIGHT PANELS AND MONUMENTS. THIS WAS ACCOMPLISHED BY USING WILD 1" THEODOLITE AND HEWLET-PACKARD 3808 DISTANCE METER. BASE OF BEARING WAS DETERMINED FROM FOUND MONUMENTS ON INTERSTATE HIGHWAY #5 USING STATE PLANE COORDINATES PER CS 60/23. FIELD CREW: J. ARTMAN, M. HOLT, AND R. BOLIN. COMPUTATIONS: J. LUNDEEN. DRAFTING: C. BYERS

CP - 1 - From intersection of Co. Rd. #7 and Co. Rd. #8 travel North then East on Co. Rd. #8 approximately 4.7 miles to intersection of Co. Rd. #8A travel North and East on Co. Rd. #8A approximately 5.5 miles to intersection at London Springs. Travel South on Rouse Creek Rd. approximately 1.0 mile to BLM Rd. (Fire Clay Rd.) Travel South and West approximately 2.0 miles turn left at intersection travel South and West approximately 2.0 miles to top of ridge and large landing. Monument is on West edge of landing overlooking valley.

CP - 3 - From intersection of Co. Rd. #7 and Co. Rd. #8 travel East on Co. Rd. #7 approximately 0.6 miles to BLM Rd. #24-4-6.0 travel South on Rd. #24-4-6.0 1.3 miles turn left travel South and East approximately 1.0 miles to landing on ridge top. Monument is on East edge of landing overlooking valley.

CP - 2 - From intersection of Co. Rd. #7 and Co. Rd. #8 travel East and South on Co. Rd. #7 approximately 5.5 miles to intersection of Co. Rd. #69-A. Travel South and East on Co. Rd. #69 approximately 1.1 miles to BLM Rd. #23-4-28.1. Travel East on Rd. #23-4-28.1 approximately 1.5 miles (3rd Rd. on left) to logging access Rd. Travel North approximately 0.2 miles to landing. Monument is on Northwest side of landing overlooking valley.

W.C. 1/4 S32 and S33 - From intersection of Co. Rd. #7 and Co. Rd. #8 travel North and East on Co. Rd. #8 approximately 1.9 miles. Corner is 30 ft. South of road near fence corner (E-W-S) with location tag.

REGISTERED  
PROFESSIONAL  
LAND SURVEYOR

OREGON  
JULY 12, 1968  
DONALD A. BENTZ  
839

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**DO NOT REMOVE FROM OFFICE**

**DAM CONTROL SURVEY**  
**MILLTOWN HILL RESERVOIR**

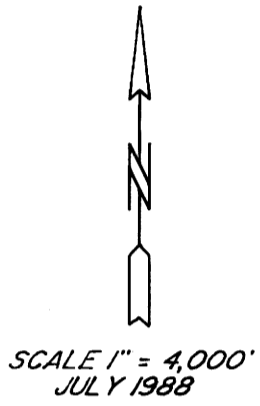
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FILED  
 COUNTY SURVEYORS OFFICE

Computations for the project used OCS 27 and received corrections for Second Class, Second Order. The basis of bearing was computed from two control stations ADAM and EDEN, rated 1/25,000.

Distance reductions were controlled with leveled elevations for ADAM, EDEN, Co. Rd. #8 Con.Mon.#3, Panel 1-7-10, Panel 1-3-10 and Panel 1-7-20. The initial check into published coordinates for Con.Mon.#3 missed by 2.1 feet in northing and 0.3 feet in easting. Adjusting into these coordinates resulted in poor closures for several figures of the control traverse which otherwise close well. The published coordinates for Con.Mon.#3 resulted from a dead end tie from Red.Ecc. and involved one leg approximately East 19,500 feet; the total length of the traverse was approximately 27,000 feet. A small angular problem in the easterly leg could easily account for the 2.1 feet miss in northings. The Milltown Hill work had many cross checks available and I judged it more reliable than the coordinates for Con.Mon. #3.

Computations involved several figures with closures: 1/218,000, 1/145,000, 1/108,000, 1/62,000, and 1/42,000. An overall check between points at opposite ends of the project separated by several figures was 1/242,000. The resulting adjusted coordinates for Con.Mon.#3 missed the published coordinates by 1.6 feet in northings and 0.0 feet in eastings.

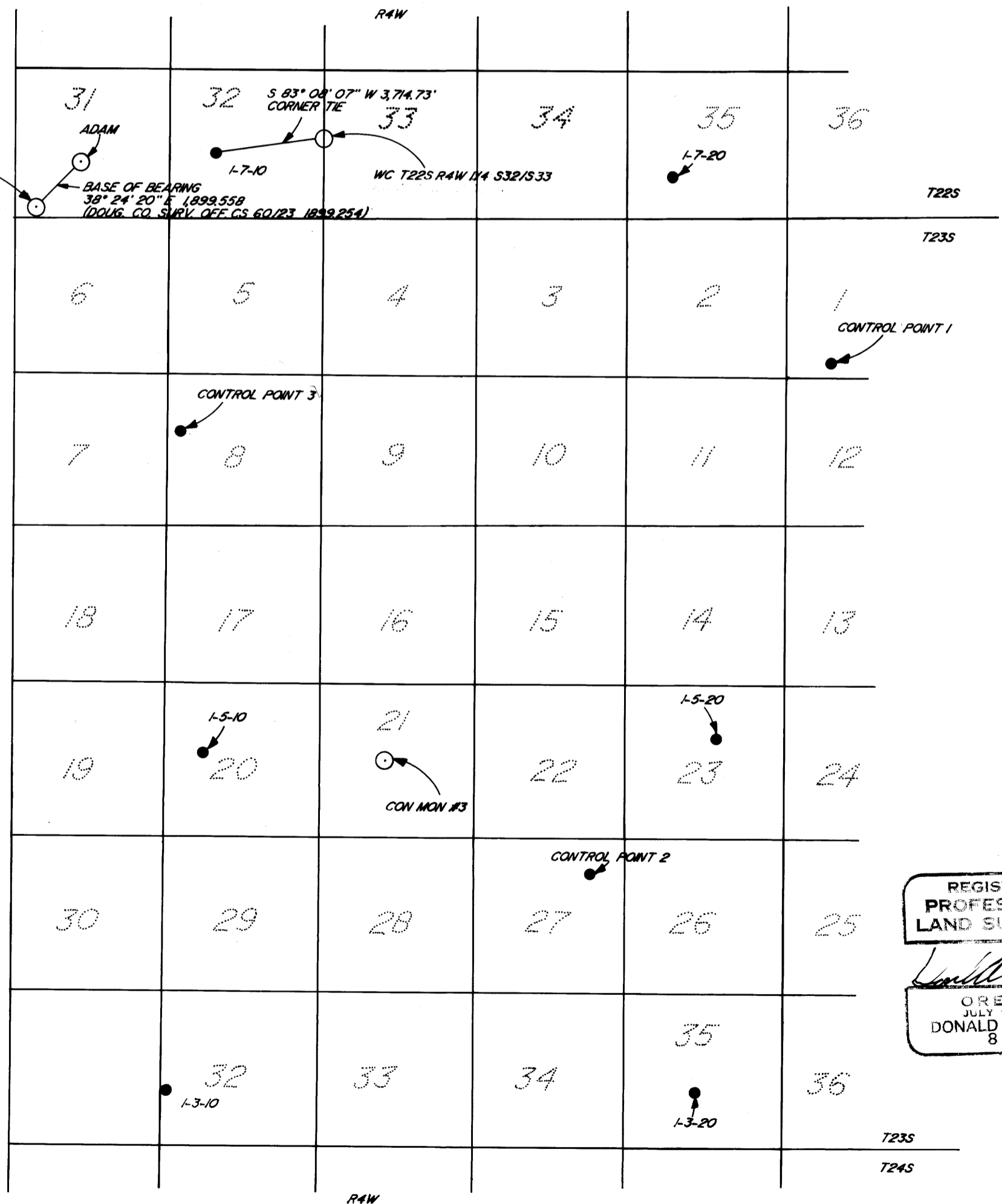


● - SET 5/8" x 30" I.R. WITH PLASTIC CAP MKD. "BENTZ SURV. INC." AND 6" ALUMINUM GUARD POST.

○ - FOUND BRASS CAP AS NOTED

- ADAM N = 720,420,570  
E = 1280,551,610
- EDEN N = 718,932,250  
E = 1279,371,750
- 1-7-10 N = 720,314,651  
E = 1285,142,322
- 1-7-20 N = 719,791,039  
E = 1300,970,239
- 1-5-10 N = 699,642,586  
E = 1285,179,978
- 1-5-20 N = 700,499,912  
E = 1302,937,593
- 1-3-10 N = 687,988,442  
E = 1284,153,046
- 1-3-20 N = 688,338,149  
E = 1302,408,907

- WC TO 1/4 S32/S33 N = 720,822,969  
E = 1288,822,104
  - CONTROL POINT 1 N = 713,655,638  
E = 1306,256,237
  - CONTROL POINT 2 N = 695,921,689  
E = 1298,791,417
  - CONTROL POINT 3 N = 710,626,013  
E = 1283,033,704
  - CONC. MON #3 N = 699,414,995  
E = 1291,359,849
- PUBLISHED PER DOUG. CO. SURVEYORS OFFICE 1974
- N = 699,413,414  
E = 1291,359,950



REGISTERED PROFESSIONAL LAND SURVEYOR  
 DONALD A. BENTZ  
 OREGON JULY 12, 1968  
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