

FILED
SECRETARY OF THE
COMMISSION

2009 DEC 18 P 1:28

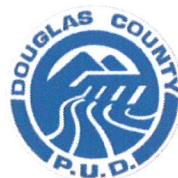
FEDERAL ENERGY
REGULATORY COMMISSION

DRAFT LICENSE APPLICATION VOLUME III: EXHIBITS F-H

EXHIBIT F – GENERAL DESIGN DRAWINGS
EXHIBIT G – PROJECT MAPS
EXHIBIT H – PLANS AND ABILITY OF APPLICANT TO OPERATE THE PROJECT

WELLS HYDROELECTRIC PROJECT
FERC PROJECT NO. 2149-131

SECURITY LEVEL: PUBLIC



Prepared by:
Public Utility District No. 1 of Douglas County
1151 Valley Mall Parkway
East Wenatchee, WA 98802
www.douglaspud.org/relicensing

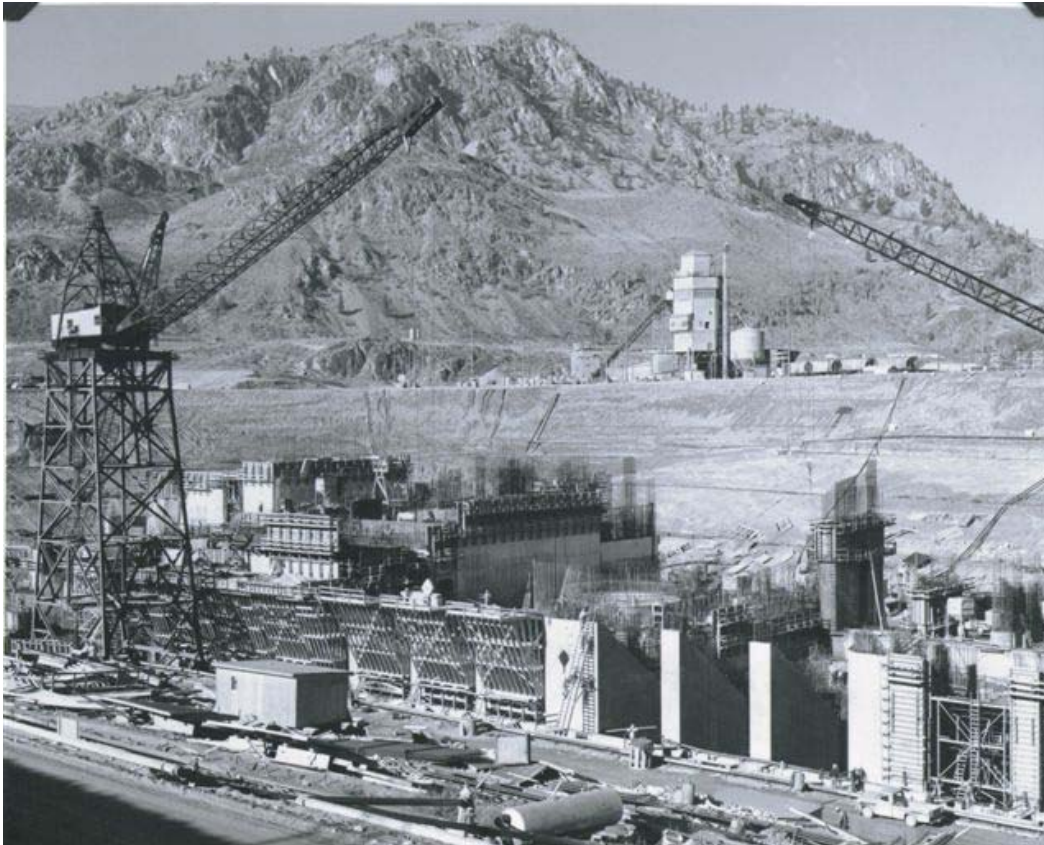
December 2009

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**WELLS HYDROELECTRIC PROJECT
FERC NO. 2149**

DRAFT LICENSE APPLICATION

EXHIBIT F - GENERAL DESIGN DRAWINGS



Prepared by:
Public Utility District No. 1 of Douglas County
1151 Valley Mall Parkway
East Wenatchee, WA 98802
www.douglaspud.org/relicensing

December 2009

INTRODUCTION

The Design Drawings in Exhibit F of the DLA contain specific engineering and design information that relates to the generation and transmission of electric energy and qualify as Critical Energy Infrastructure Information (CEII) pursuant to FERC regulations, 18 C.F.R § 388.113. Accordingly, an original and two copies of Exhibit F have been marked as CEII in accordance with instructions issued by the Secretary and are being filed separately from the public volume of the DLA. Douglas PUD requests that Exhibit F of the DLA be maintained in a non-public file and withheld from public disclosure in accordance with applicable regulations.

**WELLS HYDROELECTRIC PROJECT
FERC NO. 2149**

DRAFT LICENSE APPLICATION

EXHIBIT G - PROJECT MAPS



Prepared by:
Public Utility District No. 1 of Douglas County
1151 Valley Mall Parkway
East Wenatchee, WA 98802
www.douglaspud.org/relicensing

December 2009

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APPENDIX G-1 EXHIBIT G PROJECT MAPS

EXHIBIT G - PROJECT MAPS

The following excerpt from the Code of Federal Regulations (CFR) at 18 CFR § 4.41(h) describes the required content of this Exhibit.

Exhibit G is a map of the project that must conform to the specifications of § 4.39. In addition to the other components of Exhibit G, the applicant must provide the project boundary data in a georeferenced electronic format – such as ArcView shape files, GeoMedia files, MapInfo files, or any similar format. The electronic boundary data must be potentially accurate to ± 40 ft, in order to comply with the National Map Accuracy Standards for maps at a 1:24,000 scale (the scale of the USGS quadrangle maps). The electronic exhibit G data must include a text file describing the map projection used (i.e., UTM, State Plane, Decimal Degrees, etc.), the map datum (i.e., North American 27, North American 83, etc.) and the units of measurement (i.e., feet, meters, miles, etc.). Three sets of the maps must be submitted on CD or other appropriate electronic media. If more than one sheet is used, for the paper maps, the sheets must be numbered consecutively, and each sheet must bear a small insert sketch showing the entire project and indicating that portion of the project depicted on that sheet. Each sheet must contain a minimum of three known reference points. The latitude and longitude coordinates, or stat plane coordinates, of each reference point must be shown. If at any time after the application is filed there is any change in the project boundary, the applicant must submit, within 90 days following the completion of project construction, a final Exhibit G showing the extent of such changes. The map must show:

- (1) Location of the project and principal features. The map must show the location of the project as a whole with reference to the affected stream or other body of water and, if possible, to a nearby town or any other permanent monuments or objects, such as roads, transmissions lines or other structures, that can be noted on the map and recognized in the field. The map must also show the relative locations and physical interrelationships of the principal project works and other features described under paragraph (b) of this section (Exhibit A).*
- (2) Project Boundary. The map must show a project boundary enclosing all project works and other features described under paragraph (b) of this section (Exhibit A) that are to be licensed. If accurate survey information is not available at the time the application is filed, the applicant must so state, and a tentative boundary may be submitted. The boundary must enclose only those lands necessary for operation and maintenance of the project and for other project purposes, such as recreation, shoreline control, or protection of environmental resources (see paragraph (f) of this section (Exhibit E)). Existing residential, commercial, or other structures may be included within the boundary only to the extent that underlying lands are needed for project purposes (e.g., for flowage, public recreation, shoreline control, or protection of environmental resources). If the boundary is on land covered by a public survey, ties must be shown on the map at sufficient points to permit accurate platting of the position of the boundary relative to the lines of the public land survey, the best available legal description of the position of the boundary must be provided, including distances and directions from fixed monuments or physical features. The boundary must be described as follows:
 - (i) Impoundments.**

- (A) *The boundary around a project impoundment must be described by one of the following:*
 - (1) *Contour lines, including the contour elevation (preferred method);*
 - (2) *Specified courses and distances (meets and bounds);*
 - (3) *If the project lands are covered by a public land survey, lines upon or parallel to the lines of the survey; or*
 - (4) *Any combination of the above methods.*
- (B) *The boundary must be located no more than 200 feet (horizontal measurement) from the exterior margin of the reservoir, defined by the normal maximum surface elevation, except where deviations may be necessary in describing the boundary according to the above methods or where additional lands are necessary for project purposes, such as public recreation, shoreline control, or protection of environmental resources.*
- (ii) *Continuous features. The boundary around linear (continuous) project features such as access roads, transmission lines, and conduits may be described by specified distances from center lines or offset lines of survey. The width of such corridors must not exceed 200 feet unless good cause is shown for a greater width. Several sections of a continuous feature may be shown on a single sheet with information showing the sequence of contiguous sections.*
- (iii) *Noncontinuous features.*
 - (A) *The boundary around noncontinuous project works such as dams, spillways, and powerhouses must be described by one of the following:*
 - (1) *Contour lines;*
 - (2) *Specified courses and distances;*
 - (3) *If the project lands are covered by a public land survey, lines upon or parallel to the lines of the survey; or*
 - (4) *Any combination of the above methods.*
 - (B) *The boundary must enclose only those lands that are necessary for safe and efficient operation and maintenance of the project or for other specified project purposes, such as public recreation or protection of environmental resources.*
- (3) *Federal lands. Any public lands and reservations of the United States (Federal lands) [see 16 U.S.C. 796 (1) and (2)] that are within the project boundary, such as lands administered by the U.S. Forest Service, Bureau of Land Management, or National Park Service, or Indian tribal lands, and the boundaries of those Federal lands, must be identified as such on the map by:*
 - (i) *Legal subdivisions of a public land survey of the affected area (a protraction of identified township and section lines is sufficient for this purpose); and*
 - (ii) *The Federal agency, identified by symbol or legend, that maintains or manages each identified subdivision of the public land survey within the project boundary; or*
 - (iii) *In the absence of a public land survey, the location of the Federal lands according to the distances and directions from fixed monuments or physical features. When a Federal survey monument or a Federal bench mark will be destroyed or rendered unusable by the construction of project works, at least two permanent, marked witness monuments or bench marks must be established at accessible points. The*

maps show the location (and elevation, for bench marks) of the survey monument or bench mark which will be destroyed or rendered unusable, as well as of the witness monuments or bench marks. Connecting courses and distances from the witness monuments or bench marks to the original must also be shown.

- (iv) The project location must include the most current information pertaining to affected federal lands as described under § 4.81(b)(5).*
- (4) Non-Federal lands. For those lands within the project boundary not identified under paragraph (h)(3) of this section, the map must identify by legal subdivision:*
 - (i) Lands owned in fee by the applicant and lands that the applicant plans to acquire in fee; and*
 - (ii) Lands over which the applicant has acquired or plans to acquire rights to occupancy and use other than fee title, including rights acquired or to be acquired by easement or lease*

1.0 PROJECT MAPS

The Exhibit G Project Maps show the proposed Project Boundary in relation to the Wells Hydroelectric Project (Project) reservoir, and enclose all the Project works and other features described in Exhibit A proposed for inclusion in the new license. The Exhibit G maps have been prepared to conform to the FERC's exhibit drawing specifications in 18 CFR § 4.39. Table 1.0-1 is a list of Exhibit G drawings being filed with this License Application and copies of the Exhibit G maps are provided in Appendix G-1 to this Exhibit.

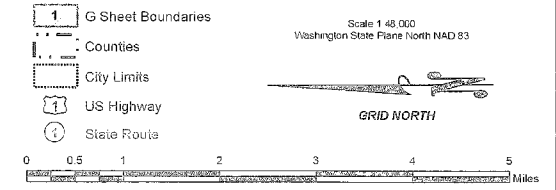
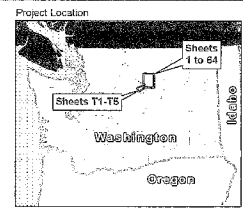
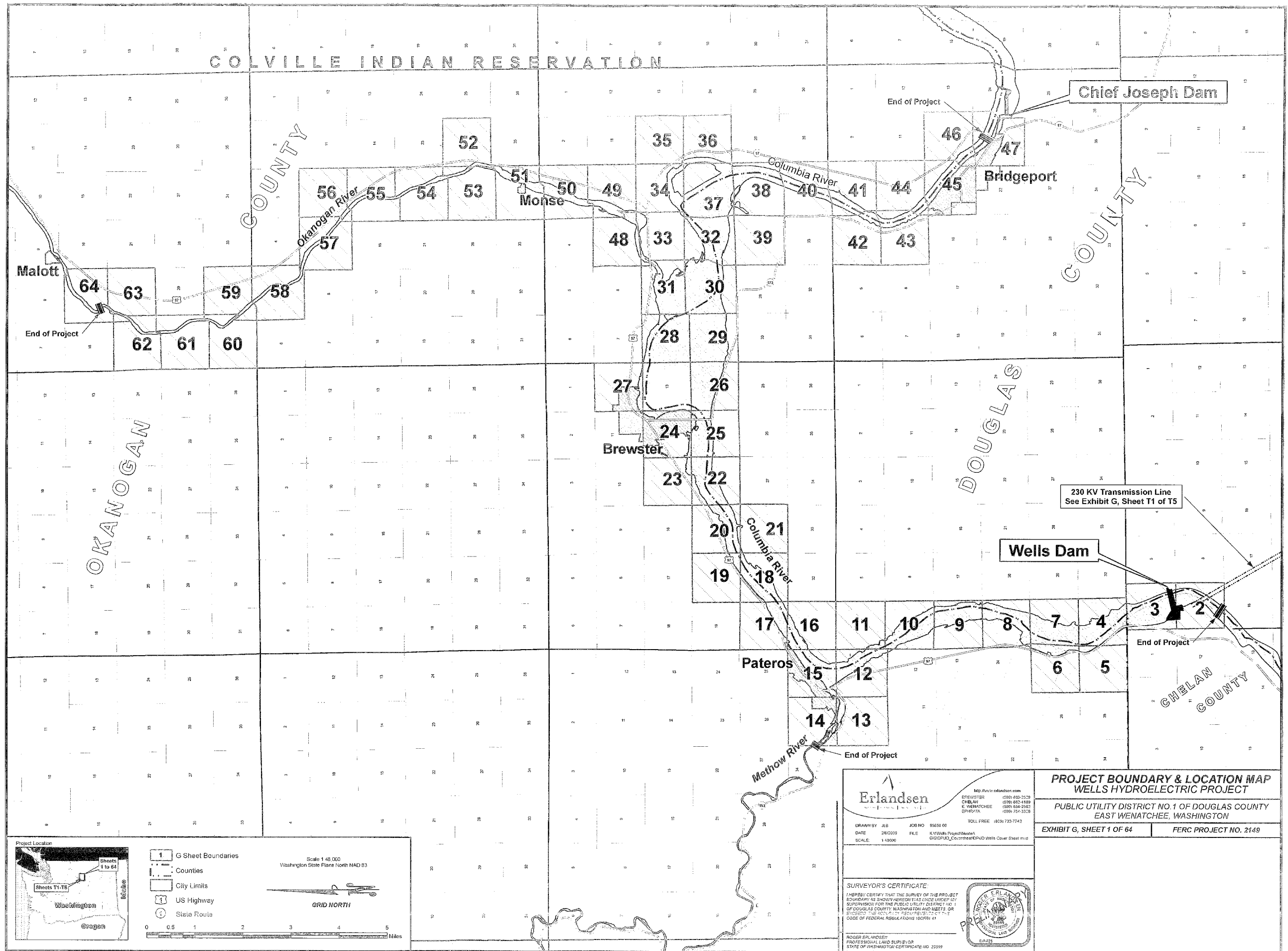
Table 1.0-1 Exhibit G Project Maps for the Wells Project

| Drawing No. | Description |
|--------------------|---|
| Sheet 1 of 64 | Location and Key Map for Exhibit Drawings G-2 through G-64 |
| Sheets 2 - 64 | Project Boundary Maps for Reservoir Portion of the Wells Project |
| Sheet T1 of T5 | Location and Key Map for Transmission Line Exhibit Drawings T2-T5 |
| Sheets T2 - T5 | Project Boundary Maps for the Wells Project Transmission Line |

Douglas PUD owns over 95 percent of the land adjacent to the reservoir within the FERC Project Boundary as discussed in Sections 5.0 and 6.0 of Exhibit A.

Appendix G-1

Exhibit G Project Maps



Erlandson
 CONSULTANTS
 1610 N. 1st Street
 Wenatchee, WA 98801
 TEL: (509) 662-2529
 FAX: (509) 662-2528
 E-MAIL: erlandson@erlandson.com
 WWW: www.erlandson.com

DRAWN BY: JLB JOB NO: 95650 00
 DATE: 2/6/2009 FILE: K:\Wells Project\Master
 SCALE: 1:48000 GISDPUJ_Courthouse\GPD Wells Cover Sheet.mxd

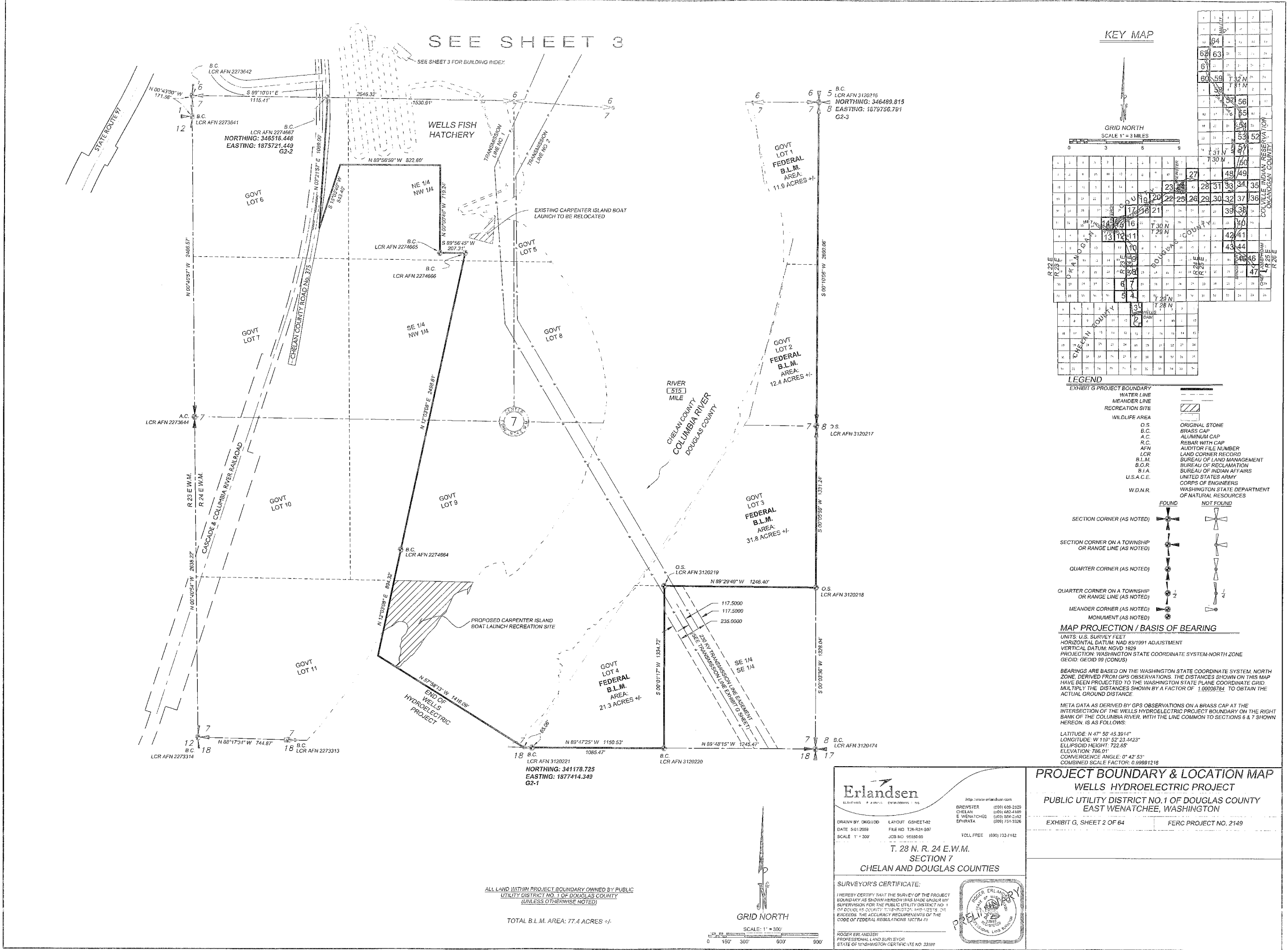
SURVEYOR'S CERTIFICATE
 I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREON WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON AND SHEETS OF EXHIBIT G, SHEETS T1 TO T5 OF THE CODE OF FEDERAL REGULATIONS 101CFR 11

ROGER ERLANDSON
 PROFESSIONAL LAND SURVEYOR
 STATE OF WASHINGTON CERTIFICATE NO. 23599

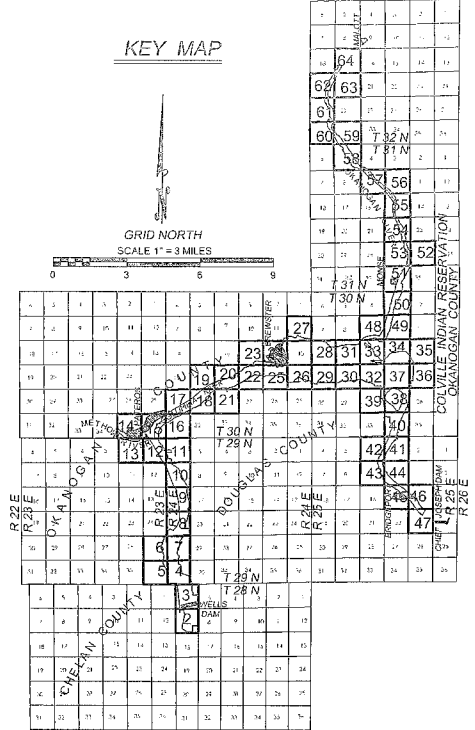
PROJECT BOUNDARY & LOCATION MAP
WELLS HYDROELECTRIC PROJECT
 PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
 EAST WENATCHEE, WASHINGTON

EXHIBIT G, SHEET 1 OF 64 FERC PROJECT NO. 2149

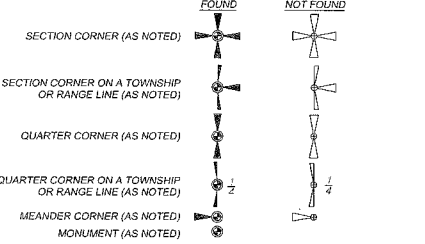
SEE SHEET 3



KEY MAP



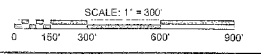
- LEGEND**
- EXHIBIT G PROJECT BOUNDARY
 - WATER LINE
 - MEANDER LINE
 - RECREATION SITE
 - WILDLIFE AREA
 - O.S. ORIGINAL STONE
 - B.C. BRASS CAP
 - A.C. ALUMINUM CAP
 - R.C. REBAR WITH CAP
 - AFN AUDITOR FILE NUMBER
 - LCR LAND CORNER RECORD
 - B.L.M. BUREAU OF LAND MANAGEMENT
 - B.O.R. BUREAU OF RECLAMATION
 - B.I.A. BUREAU OF INDIAN AFFAIRS
 - U.S.A.C.E. UNITED STATES ARMY
 - W.D.N.R. WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES
 - CORPS OF ENGINEERS
 - WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES



ALL LAND WITHIN PROJECT BOUNDARY OWNED BY PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY (UNLESS OTHERWISE NOTED)

TOTAL B.L.M. AREA: 77.4 ACRES +/-

GRID NORTH



Erlandsen
 SURVEYORS & CIVIL ENGINEERS P.S.
 1100 N. 28th St., Suite 200
 Chelan, WA 98820
 (509) 682-2100
 (509) 682-4100
 (509) 682-2502
 (509) 682-3206

DRAWN BY: DRUGOOD LAYOUT: GSHEET-02
 DATE: 5/01/2009 FILE NO: T28-R24-907
 SCALE: 1" = 300' JOB NO: 95580.00 TOLL FREE: (800) 732-7432

T. 28 N. R. 24 E.W.M.
 SECTION 7
 CHELAN AND DOUGLAS COUNTIES

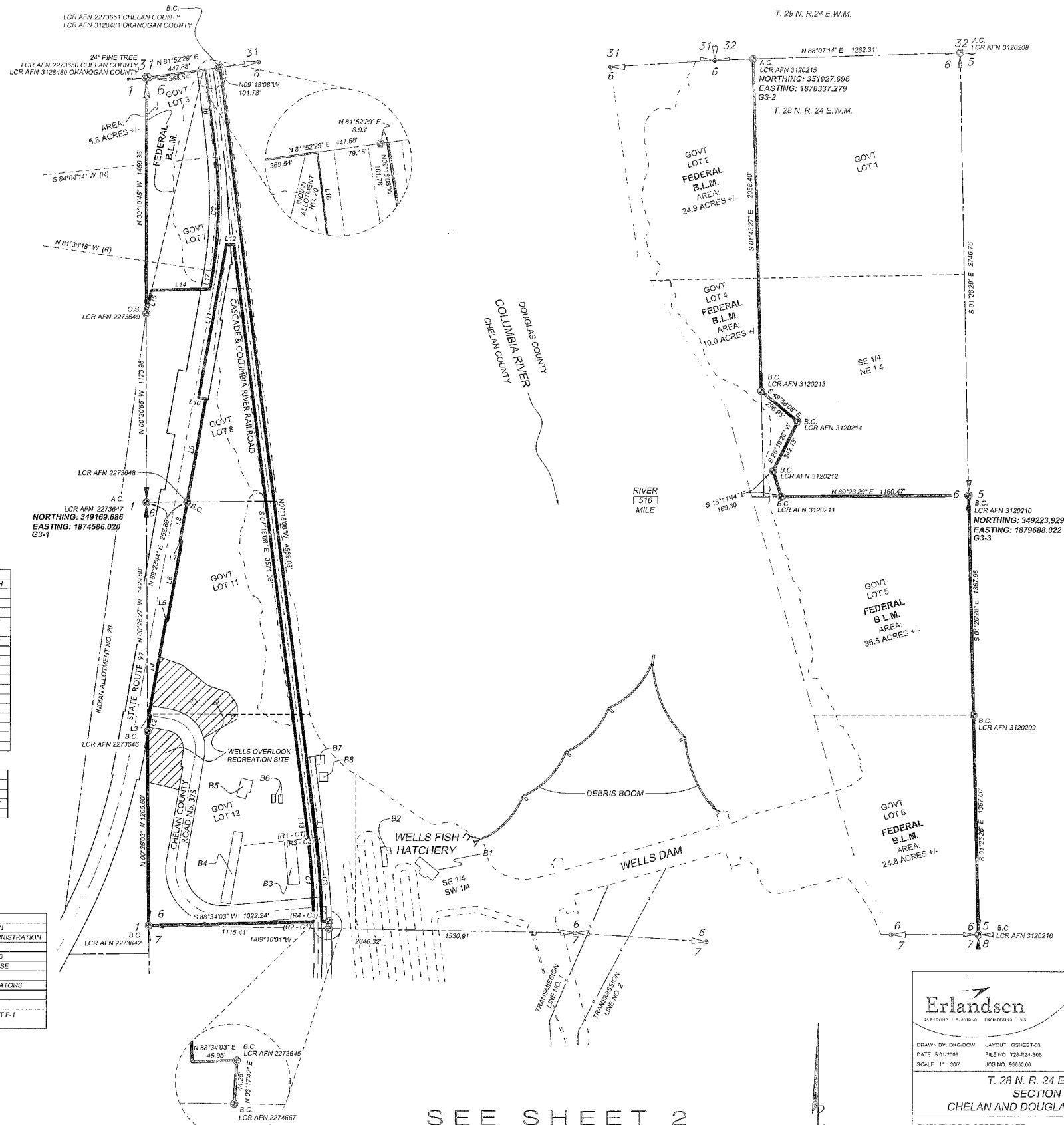
SURVEYOR'S CERTIFICATE:
 I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREON WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON, AND I CERTIFY THAT I EXCEEDED THE ACCURACY REQUIREMENTS OF THE CODE OF FEDERAL REGULATIONS 101CFR61.41

ROGER ERLANDSEN
 PROFESSIONAL LAND SURVEYOR
 STATE OF WASHINGTON CERTIFICATE NO. 23389

PROJECT BOUNDARY & LOCATION MAP
 WELLS HYDROELECTRIC PROJECT
 PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
 EAST WENATCHEE, WASHINGTON

EXHIBIT G, SHEET 2 OF 64 FERC PROJECT NO. 2149

SEE SHEET 4



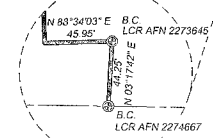
| LINE | BEARING | LENGTH |
|------|---------------|---------|
| L1 | N 07°03'08" W | 150.16' |
| L2 | N 09°59'22" E | 163.90' |
| L3 | N 81°00'38" W | 10.14' |
| L4 | N 09°59'22" E | 592.60' |
| L5 | S 80°00'38" E | 9.84' |
| L6 | N 09°59'22" E | 499.69' |
| L7 | N 80°00'38" W | 10.14' |
| L8 | N 09°59'22" E | 249.14' |
| L9 | N 09°59'22" E | 650.77' |
| L10 | N 80°00'38" W | 45.47' |
| L11 | N 89°52'52" E | 964.38' |
| L12 | N 90°00'00" E | 48.39' |
| L13 | N 07°03'08" W | 149.84' |
| L14 | S 88°50'01" W | 382.35' |
| L15 | S 12°54'00" W | 147.09' |
| L16 | S 07°12'31" E | 545.89' |
| L17 | S 09°29'37" W | 113.03' |

| CURVE | RADIUS | LENGTH | DELTA |
|-------|----------|---------|-----------|
| C1 | 5704.58' | 321.33' | 5°14'10" |
| C2 | 2845.00' | 709.62' | 14°17'28" |
| C3 | 5754.58' | 529.03' | 5°14'10" |

| LINE | BEARING |
|---------|---------------|
| R1 - C1 | S 83°26'56" W |
| R2 - C1 | S 88°41'06" W |
| R3 - C2 | S 83°26'48" W |
| R4 - C3 | S 88°41'03" W |

| BUILDING ID # | BUILDING DESCRIPTION |
|---------------|--|
| B1 | HATCHERY INCUBATION AND ADMINISTRATION |
| B2 | VEHICLE STORAGE |
| B3 | FABRICATION BUILDING |
| B4 | FABRICATION WAREHOUSE |
| B5 | WAREHOUSE |
| B6 | EMERGENCY DIESEL GENERATORS |
| B7 | TOSHIBA BUILDING A |
| B8 | TOSHIBA BUILDING B |

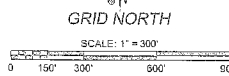
FOR PROJECT FACILITY DETAIL SEE EXHIBIT F-1 HYDROCOMBINE GENERAL LAYOUT



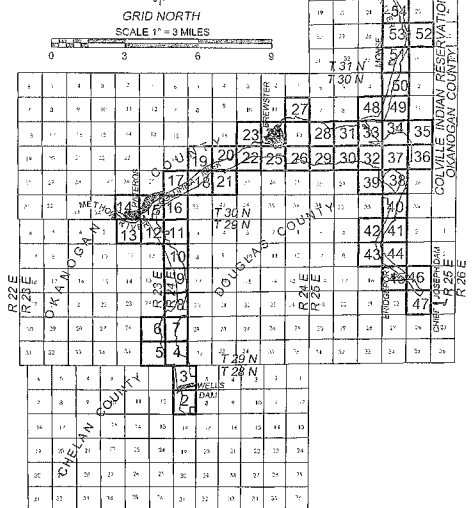
SEE SHEET 2

ALL LAND WITHIN PROJECT BOUNDARY OWNED BY PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY UNLESS OTHERWISE NOTED

TOTAL B.L.M. AREA: 102.0 ACRES +/-



KEY MAP



LEGEND

| | |
|--|-----|
| EXHIBIT G PROJECT BOUNDARY | --- |
| WATER LINE | --- |
| MEANDER LINE | --- |
| RECREATION SITE | --- |
| WILDLIFE AREA | --- |
| LCR AFN 3120210 | --- |
| LCR AFN 3120211 | --- |
| LCR AFN 3120212 | --- |
| LCR AFN 3120213 | --- |
| LCR AFN 3120214 | --- |
| LCR AFN 3120215 | --- |
| LCR AFN 3120209 | --- |
| LCR AFN 3120208 | --- |
| LCR AFN 2273647 | --- |
| LCR AFN 2273648 | --- |
| LCR AFN 2273649 | --- |
| LCR AFN 2273642 | --- |
| LCR AFN 2274667 | --- |
| ORIGINAL STONE | --- |
| BRASS CAP | --- |
| ALUMINUM CAP | --- |
| REBAR WITH CAP | --- |
| AUDITOR FILE NUMBER | --- |
| LAND CORNER RECORD | --- |
| BUREAU OF LAND MANAGEMENT | --- |
| BUREAU OF RECLAMATION | --- |
| BUREAU OF INDIAN AFFAIRS | --- |
| UNITED STATES ARMY | --- |
| CORPS OF ENGINEERS | --- |
| U.S.A.C.E. | --- |
| WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES | --- |
| W.D.N.R. | --- |
| FOUND | --- |
| NOT FOUND | --- |

MAP PROJECTION / BASIS OF BEARING

UNITS: U.S. SURVEY FEET
 HORIZONTAL DATUM: NAD 83/1991 ADJUSTMENT
 VERTICAL DATUM: NAVD83
 PROJECTION: WASHINGTON STATE COORDINATE SYSTEM-NORTH ZONE
 GEOID: GEOID 99 (CONUS)
 BEARINGS ARE BASED ON THE WASHINGTON STATE COORDINATE SYSTEM NORTH ZONE, DERIVED FROM GPS OBSERVATIONS. THE DISTANCES SHOWN ON THIS MAP HAVE BEEN PROJECTED TO THE WASHINGTON STATE PLANE COORDINATE GRID. MULTIPLY THE DISTANCES SHOWN BY A FACTOR OF 1.00002999 TO OBTAIN THE ACTUAL GROUND DISTANCE.
 META DATA AS DERIVED BY GPS OBSERVATIONS AT THE WEST QUARTER CORNER OF SECTION 6 SHOWN HEREON, IS AS FOLLOWS:
 LATITUDE: N 47° 57' 11.8942"
 LONGITUDE: W 119° 52' 39.6381"
 ELLIPSOID HEIGHT: 822.98'
 ELEVATION: 868.00'
 CONVERGENCE ANGLE: 0° 42' 41"
 COMBINED SCALE FACTOR: 0.99990701

Erlandson
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 1100 N. 10th Street, Spokane, WA 99201
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 (509) 325-4189
 (509) 325-2562
 (509) 751-3326

DRAWN BY: DMG/DOW LAYOUT: GSH/ET/03
 DATE: 5/31/2009 FILE NO: T28-R21-305
 SCALE: 1" = 300' JOB NO: 95550.00 TOLL FREE: (800) 732-7142

T. 28 N. R. 24 E.W.M.
 SECTION 6
 CHELAN AND DOUGLAS COUNTIES

SURVEYOR'S CERTIFICATE:
 I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREON WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY WASHINGTON AND MEETS THE REQUIREMENTS OF THE ACCURACY REQUIREMENTS OF THE CODE OF FEDERAL REGULATIONS 43CFR 171.21

RODNEY ERLANDSON
 PROFESSIONAL LAND SURVEYOR
 STATE OF WASHINGTON CERTIFICATE NO. 23539

PROJECT BOUNDARY & LOCATION MAP
WELLS HYDROELECTRIC PROJECT
 PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
 EAST WENATCHEE, WASHINGTON

EXHIBIT G, SHEET 3 OF 64 FERC PROJECT NO. 2149

SEE SHEET 7

SEE SHEET 6

SEE SHEET 5

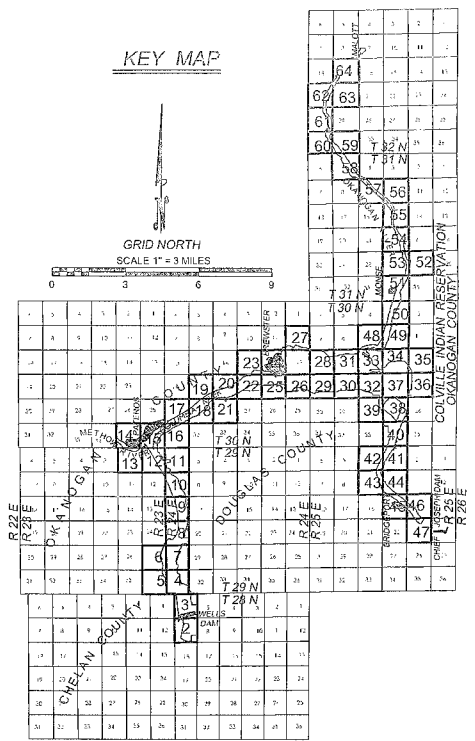
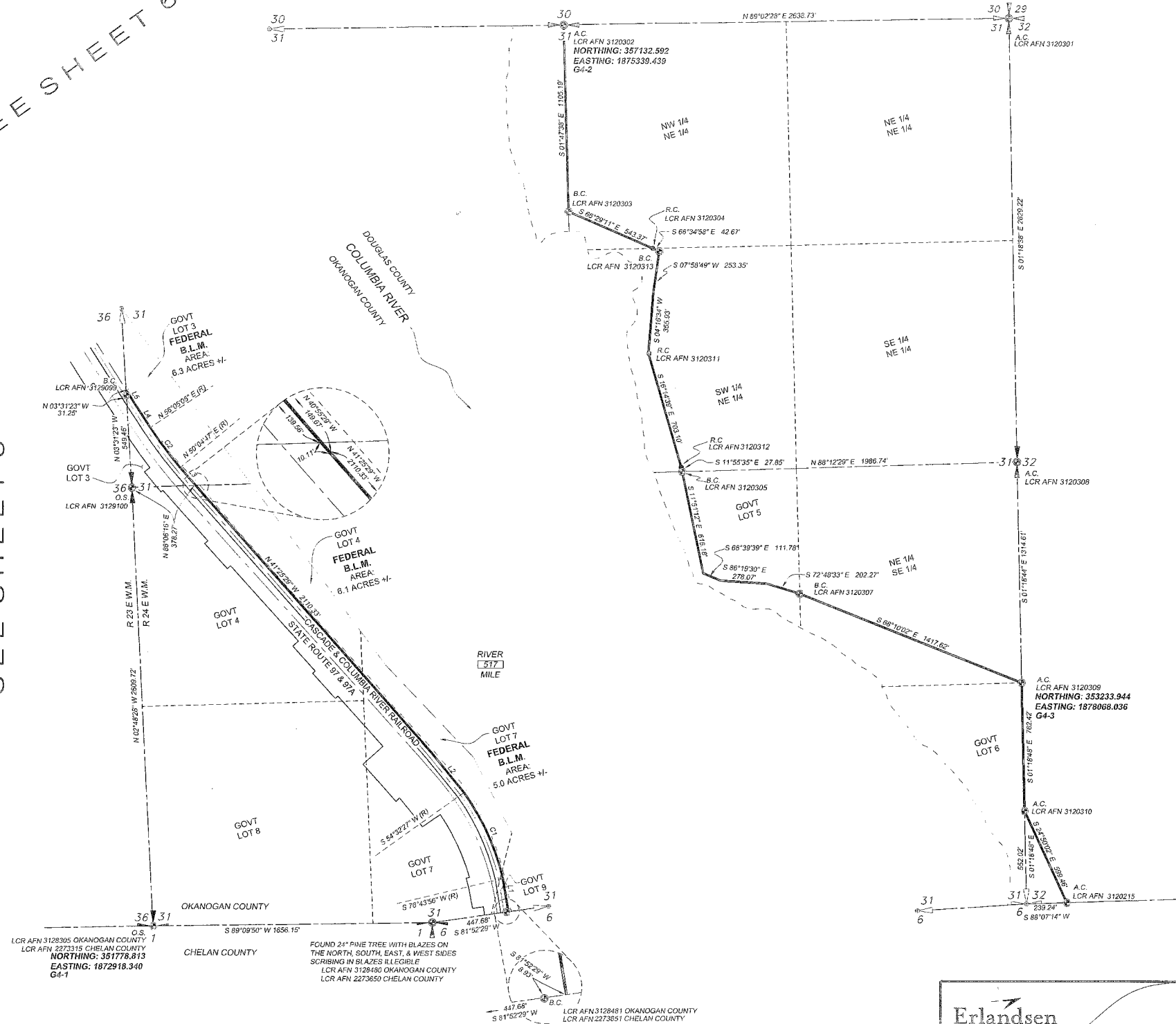
SEE SHEET 3

| LINE | BEARING | LENGTH |
|------|---------------|---------|
| L1 | N 09°16'00" W | 199.30' |
| L2 | N 33°25'30" W | 301.16' |
| L3 | N 40°55'23" W | 149.67' |
| L4 | N 32°54'39" W | 149.67' |
| L5 | N 32°24'39" W | 118.26' |

| CURVE | RADIUS | LENGTH | DELTA |
|-------|----------|---------|----------|
| C1 | 1457.30' | 594.47' | 2°11'23" |
| C2 | 2838.75' | 297.63' | 5°00'18" |

ALL LAND WITHIN PROJECT BOUNDARY OWNED BY PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY (UNLESS OTHERWISE NOTED)

TOTAL B.L.M. AREA: 17.4 ACRES +/-



LEGEND

EXHIBIT G PROJECT BOUNDARY
 WATER LINE
 MEANDER LINE
 RECREATION SITE
 WILDLIFE AREA

O.S. ORIGINAL STONE
 B.C. BRASS CAP
 A.C. ALUMINUM CAP
 R.C. REBAR WITH CAP
 AFN AUDITOR FILE NUMBER
 LCR LAND CORNER RECORD
 B.L.M. BUREAU OF LAND MANAGEMENT
 B.O.R. BUREAU OF RECLAMATION
 B.I.A. BUREAU OF INDIAN AFFAIRS
 U.S.A.C.E. UNITED STATES ARMY
 W.D.N.R. WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES

FOUND NOT FOUND

SECTION CORNER (AS NOTED)

SECTION CORNER ON A TOWNSHIP OR RANGE LINE (AS NOTED)

QUARTER CORNER (AS NOTED)

QUARTER CORNER ON A TOWNSHIP OR RANGE LINE (AS NOTED)

MEANDER CORNER (AS NOTED)

MONUMENT (AS NOTED)

MAP PROJECTION / BASIS OF BEARING

UNITS: U.S. SURVEY FEET
 HORIZONTAL DATUM: NAD 83/1991 ADJUSTMENT
 VERTICAL DATUM: NGVD 1929
 PROJECTION: WASHINGTON STATE COORDINATE SYSTEM-NORTH ZONE
 GEOID: GEOID 99 (CONUS)

BEARINGS ARE BASED ON THE WASHINGTON STATE COORDINATE SYSTEM, NORTH ZONE, DERIVED FROM GPS OBSERVATIONS. THE DISTANCES SHOWN ON THIS MAP HAVE BEEN PROJECTED TO THE WASHINGTON STATE PLANE COORDINATE GRID. MULTIPLY THE DISTANCES SHOWN BY A FACTOR OF 1.00008924 TO OBTAIN THE ACTUAL GROUND DISTANCE.

META DATA AS DERIVED BY GPS OBSERVATIONS AT THE NORTH QUARTER CORNER OF SECTION 31 SHOWN HEREON, IS AS FOLLOWS:

LATITUDE: N 47° 58' 30.1824"
 LONGITUDE: W 119° 52' 27.1102"
 ELLIPSOID HEIGHT: 722.98'
 ELEVATION: 785.07'
 CONVERGENCE ANGLE: 0° 42' 51"
 COMBINED SCALE FACTOR: 0.99991077

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 (509) 662-4100
 (509) 662-4109
 (509) 662-4110
 (509) 662-4111
 (509) 662-4112
 (509) 662-4113
 (509) 662-4114
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 (509) 662-4200

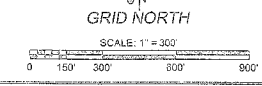
PROJECT BOUNDARY & LOCATION MAP
WELLS HYDROELECTRIC PROJECT
 PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
 EAST WENATCHEE, WASHINGTON

EXHIBIT G, SHEET 4 OF 64 FERC PROJECT NO. 2149

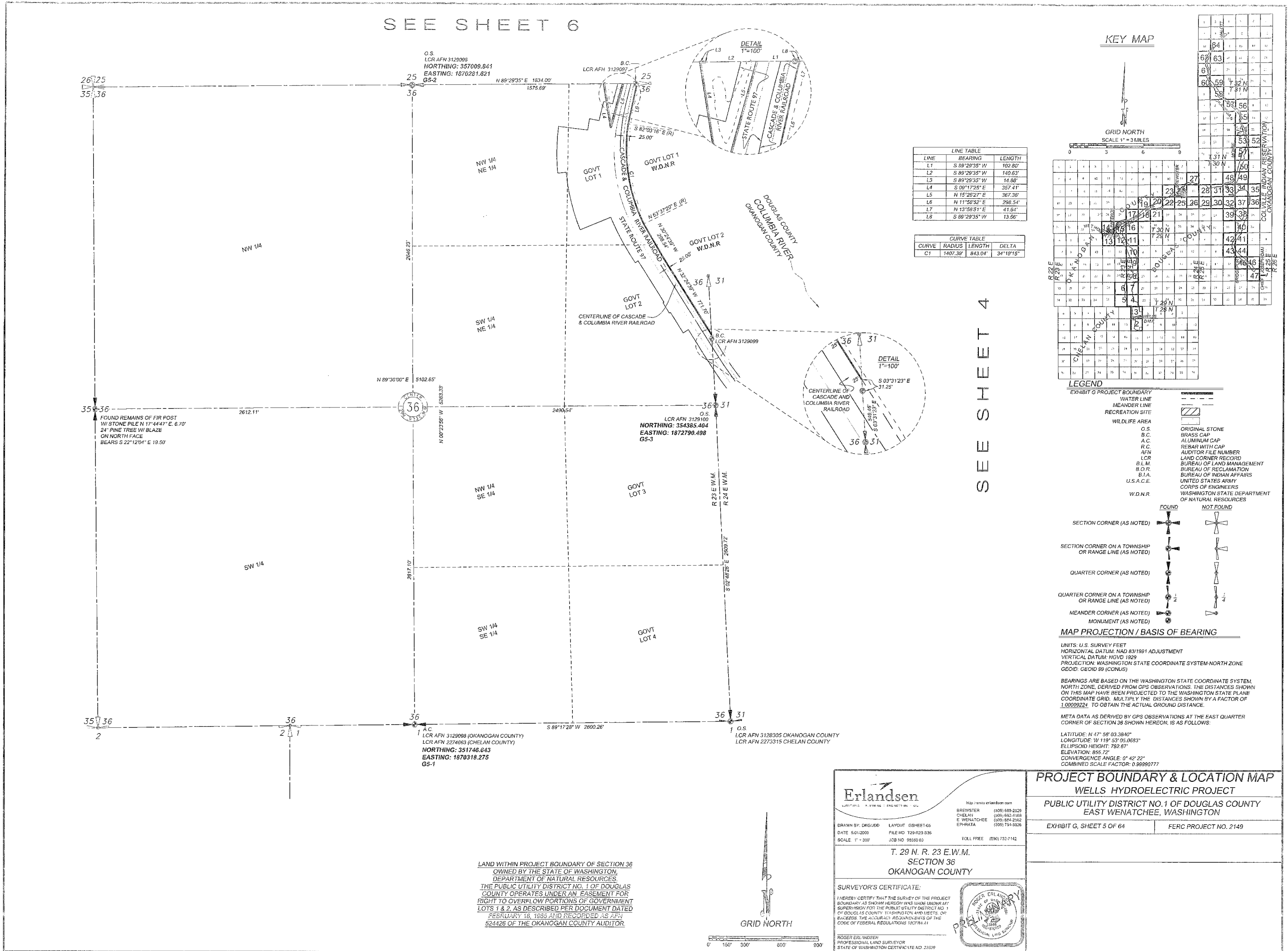
T. 29 N. R. 24 E. W.M.
 SECTIONS 31 & 32
 OKANOGAN AND DOUGLAS COUNTIES

SURVEYOR'S CERTIFICATE:
 I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT (CONTRACT NO. 45 SHOWN HEREON) WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON AND I SET IT OR SUCCESSORS. THE ACCURACY OF THE SURVEY IS IN ACCORDANCE WITH THE CODE OF FEDERAL REGULATIONS 192FR4.11

ROGER ERLANDSEN
 PROFESSIONAL LAND SURVEYOR
 STATE OF WASHINGTON CERTIFICATE NO. 23890



SEE SHEET 6

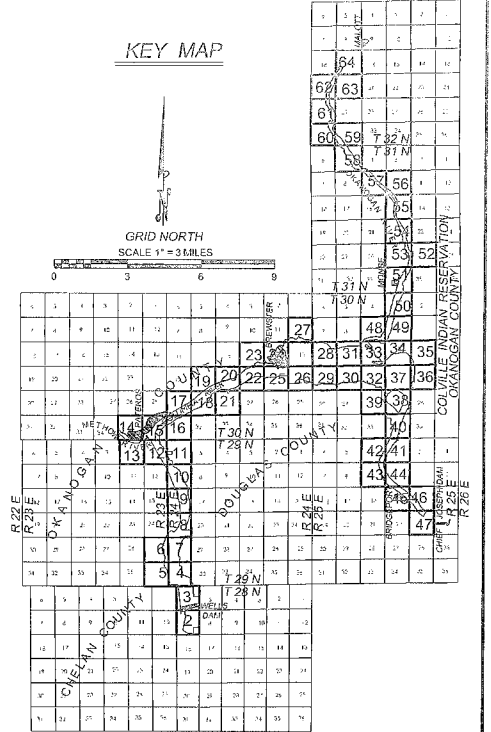


LINE TABLE

| LINE | BEARING | LENGTH |
|------|---------------|---------|
| L1 | S 89°29'35" W | 102.80' |
| L2 | S 89°29'35" W | 140.63' |
| L3 | S 89°29'35" W | 14.88' |
| L4 | S 09°17'25" E | 357.41' |
| L5 | N 15°26'27" E | 367.36' |
| L6 | N 11°58'52" E | 298.54' |
| L7 | N 13°58'51" E | 41.84' |
| L8 | S 89°29'35" W | 13.56' |

CURVE TABLE

| CURVE | RADIUS | LENGTH | DELTA |
|-------|----------|---------|-----------|
| C1 | 1407.38' | 843.04' | 34°19'15" |



- LEGEND
- EXHIBIT G PROJECT BOUNDARY
 - WATER LINE
 - MEANDER LINE
 - RECREATION SITE
 - WILDLIFE AREA
 - O.S.
 - B.C.
 - A.C.
 - R.C.
 - AFN
 - LCR
 - B.L.M.
 - B.O.R.
 - B.I.A.
 - U.S.A.C.E.
 - W.D.N.R.
 - ORIGINAL STONE
 - BRASS CAP
 - ALUMINUM CAP
 - REBAR WITH CAP
 - AUDITOR FILE NUMBER
 - LAND CORNER RECORD
 - BUREAU OF LAND MANAGEMENT
 - BUREAU OF RECLAMATION
 - BUREAU OF INDIAN AFFAIRS
 - UNITED STATES ARMY
 - CORPS OF ENGINEERS
 - WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES

- MAP PROJECTION / BASIS OF BEARING
- UNITS: U.S. SURVEY FEET
- HORIZONTAL DATUM: NAD 83/1981 ADJUSTMENT
- VERTICAL DATUM: NGVD 1929
- PROJECTION: WASHINGTON STATE COORDINATE SYSTEM-NORTH ZONE
- GEOID: GEOID 89 (CONUS)
- BEARINGS ARE BASED ON THE WASHINGTON STATE COORDINATE SYSTEM, NORTH ZONE, DERIVED FROM GPS OBSERVATIONS. THE DISTANCES SHOWN ON THIS MAP HAVE BEEN PROJECTED TO THE WASHINGTON STATE PLANE COORDINATE GRID. MULTIPLY THE DISTANCES SHOWN BY A FACTOR OF 1.00009224 TO OBTAIN THE ACTUAL GROUND DISTANCE.
- META DATA AS DERIVED BY GPS OBSERVATIONS AT THE EAST QUARTER CORNER OF SECTION 36 SHOWN HEREON, IS AS FOLLOWS:
- LATITUDE: N 47° 58' 03.3840"
- LONGITUDE: W 119° 53' 05.0683"
- ELLIPSOID HEIGHT: 792.67'
- ELEVATION: 855.72'
- CONVERGENCE ANGLE: 0° 42' 22"
- COMBINED SCALE FACTOR: 0.99990777

SECTION CORNER (AS NOTED)

SECTION CORNER ON A TOWNSHIP OR RANGE LINE (AS NOTED)

QUARTER CORNER (AS NOTED)

QUARTER CORNER ON A TOWNSHIP OR RANGE LINE (AS NOTED)

MEANDER CORNER (AS NOTED)

MONUMENT (AS NOTED)

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E WENATCHEE (509) 684-2962
EPHRATA (509) 754-3826

T. 29 N. R. 23 E. W.M.
SECTION 36
OKANOGAN COUNTY

SURVEYOR'S CERTIFICATE:

I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREBY WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON AND IS SETS OF RECORD IN ACCORDANCE WITH THE REQUIREMENTS OF THE CODE OF FEDERAL REGULATIONS 100FR4.11

ROGER ERLANDSEN
PROFESSIONAL LAND SURVEYOR
STATE OF WASHINGTON CERTIFICATE NO. 23329

PROJECT BOUNDARY & LOCATION MAP

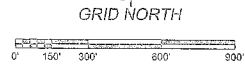
WELLS - HYDROELECTRIC PROJECT

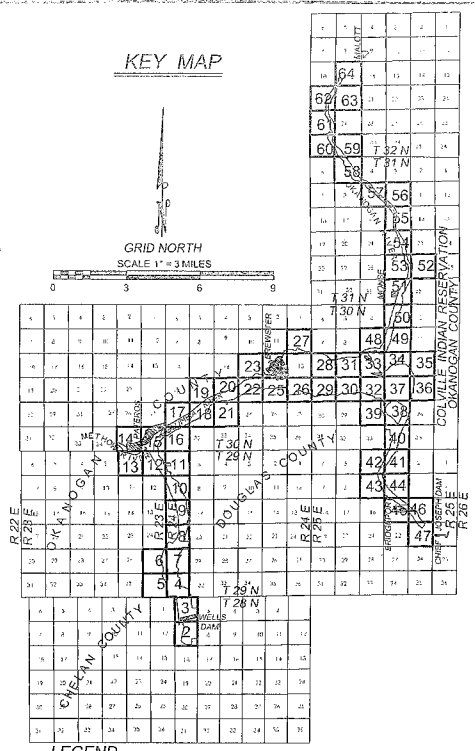
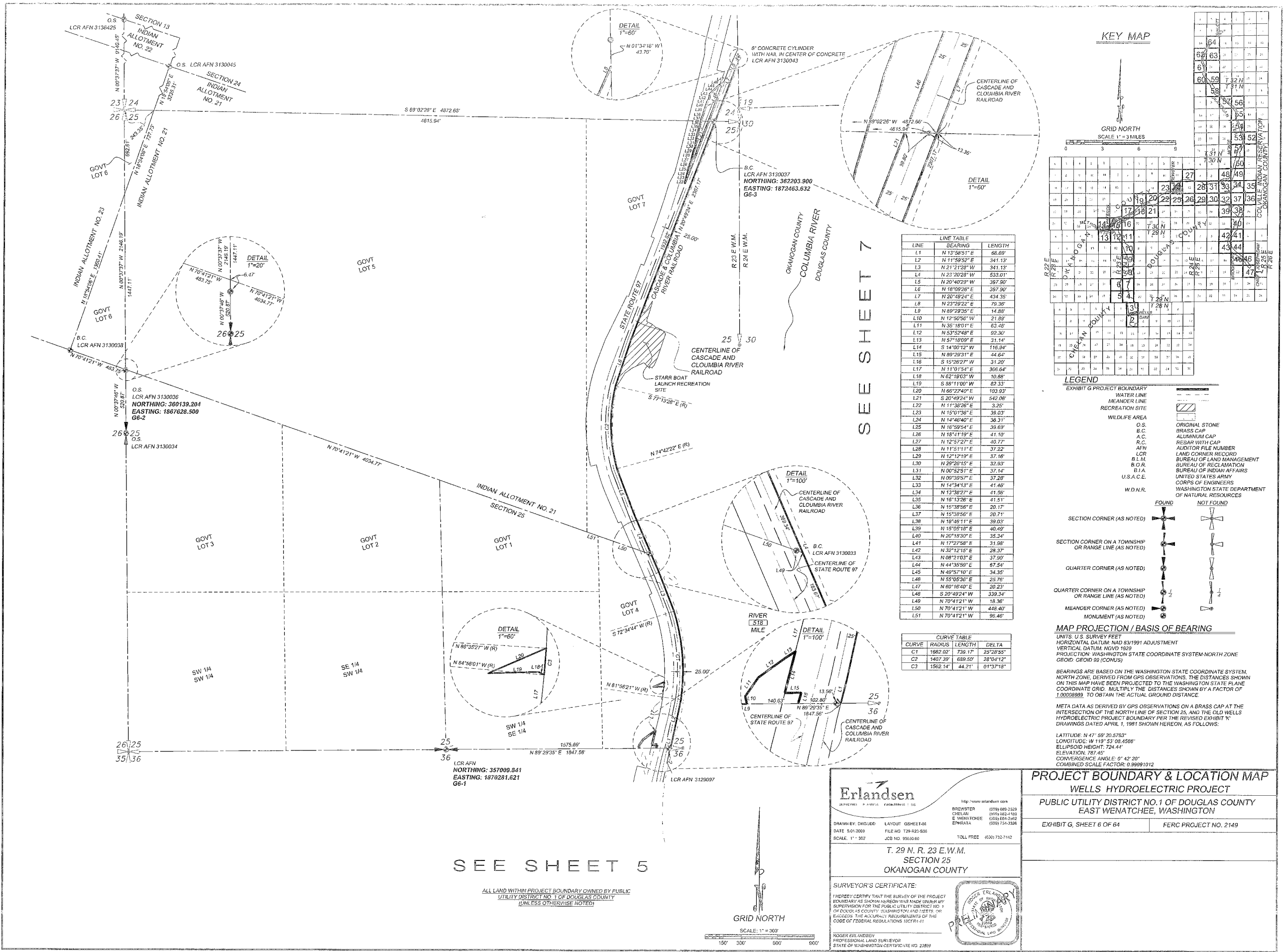
PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
EAST WENATCHEE, WASHINGTON

EXHIBIT G, SHEET 5 OF 64

FERC PROJECT NO. 2149

LAND WITHIN PROJECT BOUNDARY OF SECTION 36 OWNED BY THE STATE OF WASHINGTON, DEPARTMENT OF NATURAL RESOURCES. THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY OPERATES UNDER AN EASEMENT FOR RIGHT TO OVERFLOW PORTIONS OF GOVERNMENT LOTS 1 & 2, AS DESCRIBED PER DOCUMENT DATED FEBRUARY 18, 1985 AND RECORDED AS AFN 524426 OF THE OKANOGAN COUNTY AUDITOR.





LINE TABLE

| LINE | BEARING | LENGTH |
|------|---------------|---------|
| L1 | N 13°56'51" E | 66.69' |
| L2 | N 11°58'52" E | 341.13' |
| L3 | N 21°21'28" W | 341.13' |
| L4 | N 23°20'28" W | 533.01' |
| L5 | N 20°40'29" W | 387.90' |
| L6 | N 18°09'28" E | 397.90' |
| L7 | N 20°48'24" E | 434.35' |
| L8 | N 23°29'22" E | 79.36' |
| L9 | N 89°29'35" E | 14.88' |
| L10 | N 12°50'56" W | 21.99' |
| L11 | N 35°18'11" E | 63.48' |
| L12 | N 53°52'48" E | 92.30' |
| L13 | N 57°18'09" E | 31.14' |
| L14 | S 14°00'12" W | 116.94' |
| L15 | N 89°29'31" E | 44.64' |
| L16 | S 15°26'27" W | 31.20' |
| L17 | N 11°01'54" E | 306.64' |
| L18 | N 62°19'03" W | 10.86' |
| L19 | S 86°11'00" W | 82.33' |
| L20 | N 66°22'40" E | 103.03' |
| L21 | S 20°49'24" W | 542.06' |
| L22 | N 11°38'26" E | 3.25' |
| L23 | N 15°01'38" E | 38.03' |
| L24 | N 14°46'40" E | 36.31' |
| L25 | N 16°59'54" E | 39.69' |
| L26 | N 18°11'19" E | 41.10' |
| L27 | N 12°57'27" E | 40.77' |
| L28 | N 11°51'11" E | 37.22' |
| L29 | N 12°12'19" E | 37.16' |
| L30 | N 29°26'15" E | 32.93' |
| L31 | N 00°52'31" E | 37.14' |
| L32 | N 09°39'57" E | 37.28' |
| L33 | N 13°34'13" E | 41.46' |
| L34 | N 13°38'27" E | 41.56' |
| L35 | N 16°13'08" E | 41.51' |
| L36 | N 15°38'56" E | 20.17' |
| L37 | N 15°38'56" E | 20.71' |
| L38 | N 18°46'11" E | 39.03' |
| L39 | N 15°05'18" E | 40.49' |
| L40 | N 20°19'30" E | 35.34' |
| L41 | N 17°27'58" E | 31.98' |
| L42 | N 32°12'15" E | 28.37' |
| L43 | N 08°21'03" E | 37.90' |
| L44 | N 44°35'09" E | 67.54' |
| L45 | N 49°57'10" E | 34.35' |
| L46 | N 55°05'36" E | 25.76' |
| L47 | N 80°18'40" E | 20.23' |
| L48 | S 20°49'24" W | 338.34' |
| L49 | N 70°41'21" W | 18.36' |
| L50 | N 70°41'21" W | 458.40' |
| L51 | N 70°41'21" W | 96.46' |

CURVE TABLE

| CURVE | RADIUS | LENGTH | DELTA |
|-------|----------|---------|-----------|
| C1 | 1862.02' | 735.17' | 25°28'35" |
| C2 | 1407.39' | 639.50' | 28°04'12" |
| C3 | 1562.14' | 44.21' | 01°37'18" |

- LEGEND**
- EXHIBIT G PROJECT BOUNDARY
 - WATER LINE
 - MEANDER LINE
 - RECREATION SITE
 - WILDLIFE AREA
 - ORIGINAL STONE
 - B.C. BRASS CAP
 - A.C. ALUMINUM CAP
 - R.C. REBAR WITH CAP
 - AFN AUDITOR FILE NUMBER
 - LCR LAND CORNER RECORD
 - B.L.M. BUREAU OF LAND MANAGEMENT
 - B.O.R. BUREAU OF RECLAMATION
 - B.I.A. BUREAU OF INDIAN AFFAIRS
 - U.S.A.C.E. UNITED STATES ARMY CORPS OF ENGINEERS
 - W.D.N.R. WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES
- MAP PROJECTION / BASIS OF BEARING**
- UNITS: U.S. SURVEY FEET
 HORIZONTAL DATUM: NAD 83/1991 ADJUSTMENT
 VERTICAL DATUM: NGVD 1929
 PROJECTION: WASHINGTON STATE COORDINATE SYSTEM-NORTH ZONE
 GRID: GCON2 99 (CONUS)
- BEARINGS ARE BASED ON THE WASHINGTON STATE COORDINATE SYSTEM, NORTH ZONE, DERIVED FROM GPS OBSERVATIONS. THE DISTANCES SHOWN ON THIS MAP HAVE BEEN PROJECTED TO THE WASHINGTON STATE PLANE COORDINATE GRID. MULTIPLY THE DISTANCES SHOWN BY A FACTOR OF 1.00008899 TO OBTAIN THE ACTUAL GROUND DISTANCE.
- META DATA AS DERIVED BY GPS OBSERVATIONS ON A BRASS CAP AT THE INTERSECTION OF THE NORTH LINE OF SECTION 25, AND THE OLD WELLS HYDROELECTRIC PROJECT BOUNDARY PER THE REVISED EXHIBIT 'K' DRAWINGS DATED APRIL 1, 1981 SHOWN HEREON, AS FOLLOWS:
 LATITUDE: N 47° 59' 20.5783"
 LONGITUDE: W 119° 53' 08.4568"
 ELLIPSOID HEIGHT: 724.44'
 ELEVATION: 787.45'
 CONVERGENCE ANGLE: 0° 42' 20"
 COMBINED SCALE FACTOR: 0.99991012

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 EMWATA (509) 754-3326

DRAWN BY: DR/DOUG LAYOUT: GS/SHEET-04
 DATE: 5/01/2009 FILE NO: T29-R23-936
 SCALE: 1" = 300' JOB NO: 93630.00 TOLL FREE: (800) 732-7142

T. 29 N. R. 23 E.W.M.
 SECTION 25
 OKANOGAN COUNTY

SURVEYOR'S CERTIFICATE:
 I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREON WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON AND I SETS OUT HEREON THE ACCURATE REQUIREMENTS OF THE CODE OF FEDERAL REGULATIONS 18CFR11.41

ROGER ERLANDSON
 PROFESSIONAL LAND SURVEYOR
 STATE OF WASHINGTON CERTIFICATE NO. 23869

PROJECT BOUNDARY & LOCATION MAP
 WELLS HYDROELECTRIC PROJECT
 PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
 EAST WENATCHEE, WASHINGTON

EXHIBIT G, SHEET 6 OF 64 FERC PROJECT NO. 2149

SEE SHEET 5

ALL LAND WITHIN PROJECT BOUNDARY OWNED BY PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY (UNLESS OTHERWISE NOTED)

GRID NORTH

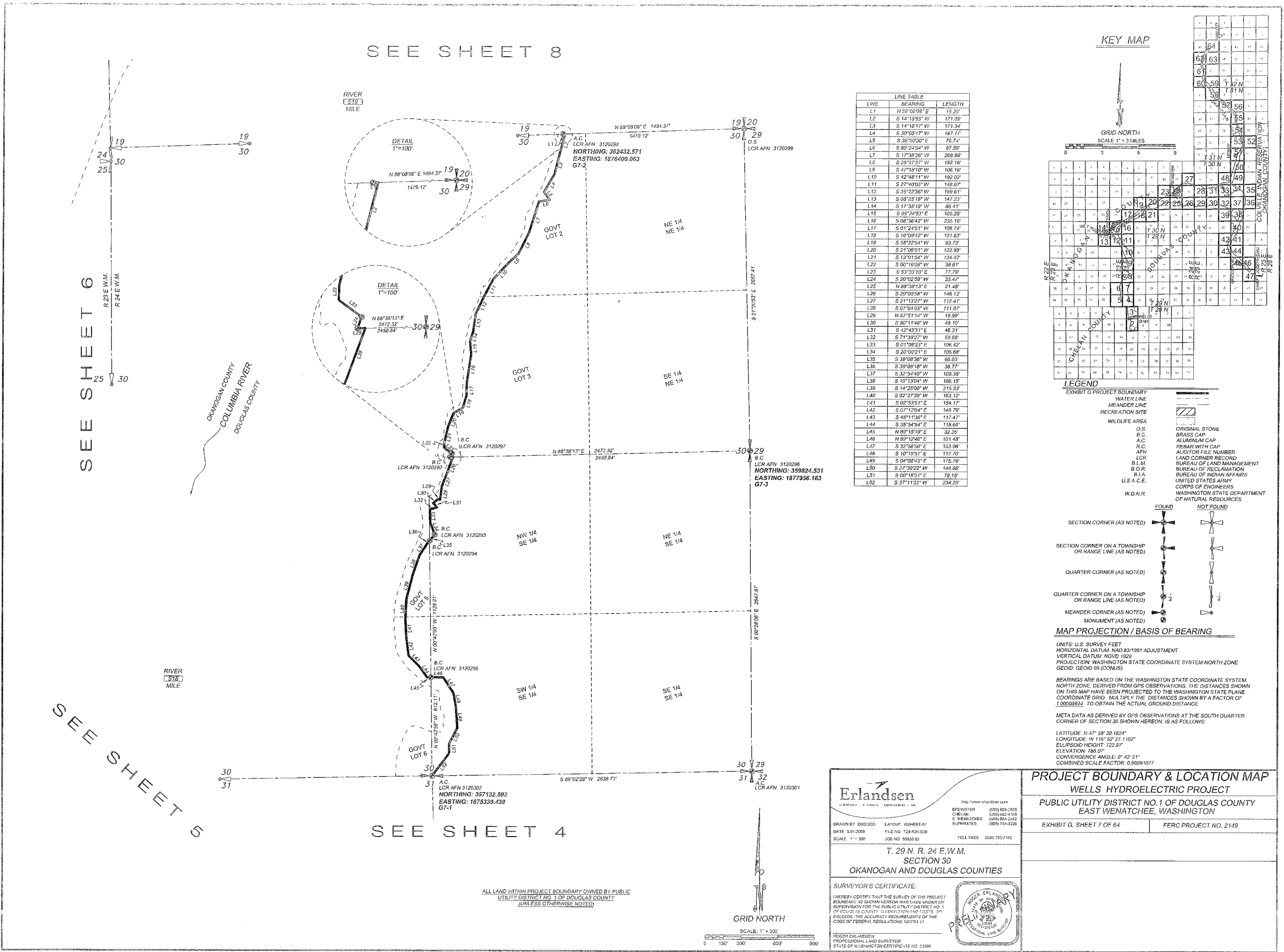


SEE SHEET 8

SEE SHEET 6

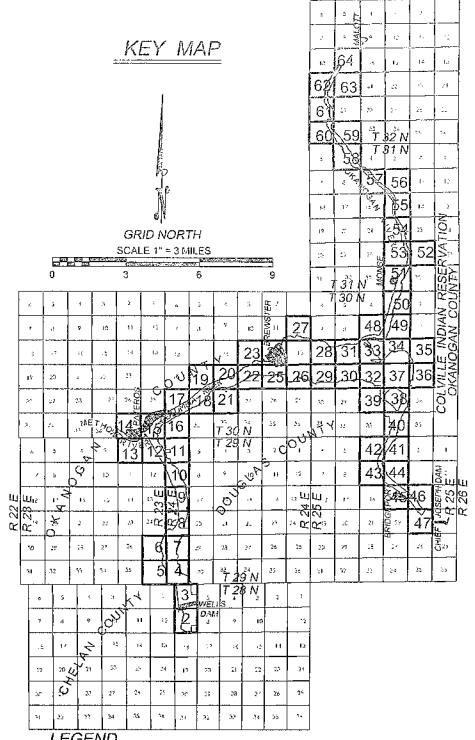
SEE SHEET 5

SEE SHEET 4



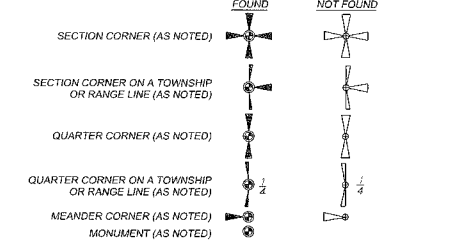
LINE TABLE

| LINE | BEARING | LENGTH |
|------|---------------|---------|
| L1 | N 88°08'06" E | 1494.37 |
| L2 | S 14°19'55" W | 171.09 |
| L3 | S 14°18'17" W | 171.34 |
| L4 | S 30°08'17" W | 167.77 |
| L5 | S 36°50'00" E | 76.74 |
| L6 | S 80°24'04" W | 87.59 |
| L7 | S 17°38'28" W | 268.99 |
| L8 | S 25°57'37" W | 192.16 |
| L9 | S 47°18'10" W | 106.16 |
| L10 | S 42°48'11" W | 192.02 |
| L11 | S 27°40'03" W | 148.87 |
| L12 | S 25°22'36" W | 169.61 |
| L13 | S 08°25'18" W | 147.23 |
| L14 | S 17°38'19" W | 86.41 |
| L15 | S 05°24'53" E | 109.28 |
| L16 | S 08°36'42" W | 235.18 |
| L17 | S 01°24'51" W | 109.74 |
| L18 | S 18°09'42" W | 701.83 |
| L19 | S 59°22'54" W | 93.73 |
| L20 | S 21°08'01" W | 122.99 |
| L21 | S 13°01'54" W | 134.42 |
| L22 | S 00°18'09" W | 38.61 |
| L23 | S 53°33'10" E | 77.79 |
| L24 | S 20°02'59" W | 33.47 |
| L25 | N 88°38'13" E | 21.48 |
| L26 | S 20°00'58" W | 148.13 |
| L27 | S 21°13'21" W | 112.41 |
| L28 | S 07°04'05" W | 111.87 |
| L29 | N 62°51'14" W | 19.99 |
| L30 | S 50°11'48" W | 49.10 |
| L31 | S 42°43'31" E | 46.31 |
| L32 | S 71°39'27" W | 59.88 |
| L33 | S 01°08'23" E | 106.42 |
| L34 | S 20°00'21" E | 106.88 |
| L35 | S 39°08'38" W | 66.03 |
| L36 | S 39°08'18" W | 96.77 |
| L37 | S 32°54'49" W | 109.38 |
| L38 | S 18°13'04" W | 166.15 |
| L39 | S 14°28'00" W | 215.33 |
| L40 | S 02°27'39" W | 163.12 |
| L41 | S 02°53'01" E | 154.17 |
| L42 | S 07°17'09" E | 148.79 |
| L43 | S 45°11'36" E | 117.47 |
| L44 | S 35°54'54" E | 118.68 |
| L45 | N 89°15'19" E | 32.25 |
| L46 | N 89°12'46" E | 101.49 |
| L47 | S 32°58'50" E | 153.06 |
| L48 | S 10°18'51" E | 117.70 |
| L49 | S 04°08'43" E | 175.79 |
| L50 | S 27°39'22" W | 144.56 |
| L51 | S 00°18'31" E | 72.15 |
| L52 | S 37°11'32" W | 234.25 |



LEGEND

| | | |
|----------------------------|-----------------|-----------------------------|
| EXHIBIT G PROJECT BOUNDARY | WATER LINE | ORIGINAL STONE |
| MEANDER LINE | RECREATION SITE | BRASS CAP |
| WILDLIFE AREA | | A.C. |
| | | ALUMINUM CAP |
| | | R.C. |
| | | REBAR WITH CAP |
| | | A.F.N. |
| | | LAND CORNER RECORD |
| | | B.L.M. |
| | | BUREAU OF LAND MANAGEMENT |
| | | B.O.R. |
| | | BUREAU OF RECLAMATION |
| | | B.I.A. |
| | | BUREAU OF INDIAN AFFAIRS |
| | | U.S.A.C.E. |
| | | UNITED STATES ARMY |
| | | CORPS OF ENGINEERS |
| | | WASHINGTON STATE DEPARTMENT |
| | | OF NATURAL RESOURCES |



Erlandsen

REGISTERED PROFESSIONAL LAND SURVEYOR

STATE OF WASHINGTON CERTIFICATE NO. 23590

DATE: 5/01/2009

FILE NO: T29-R24-S30

JOB NO: 95550-03

TOLL FREE: (800) 732-7142

T. 29 N. R. 24 E.W.M.

SECTION 30

OKANOGAN AND DOUGLAS COUNTIES

SURVEYOR'S CERTIFICATE:

I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREON WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON AND MEETS OR EXCEEDS THE ACCURACY REQUIREMENTS OF THE CODE OF FEDERAL REGULATIONS 192FR4.11

PROJECT BOUNDARY & LOCATION MAP

WELLS HYDROELECTRIC PROJECT

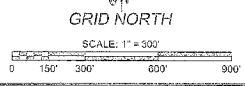
PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY

EAST WENATCHEE, WASHINGTON

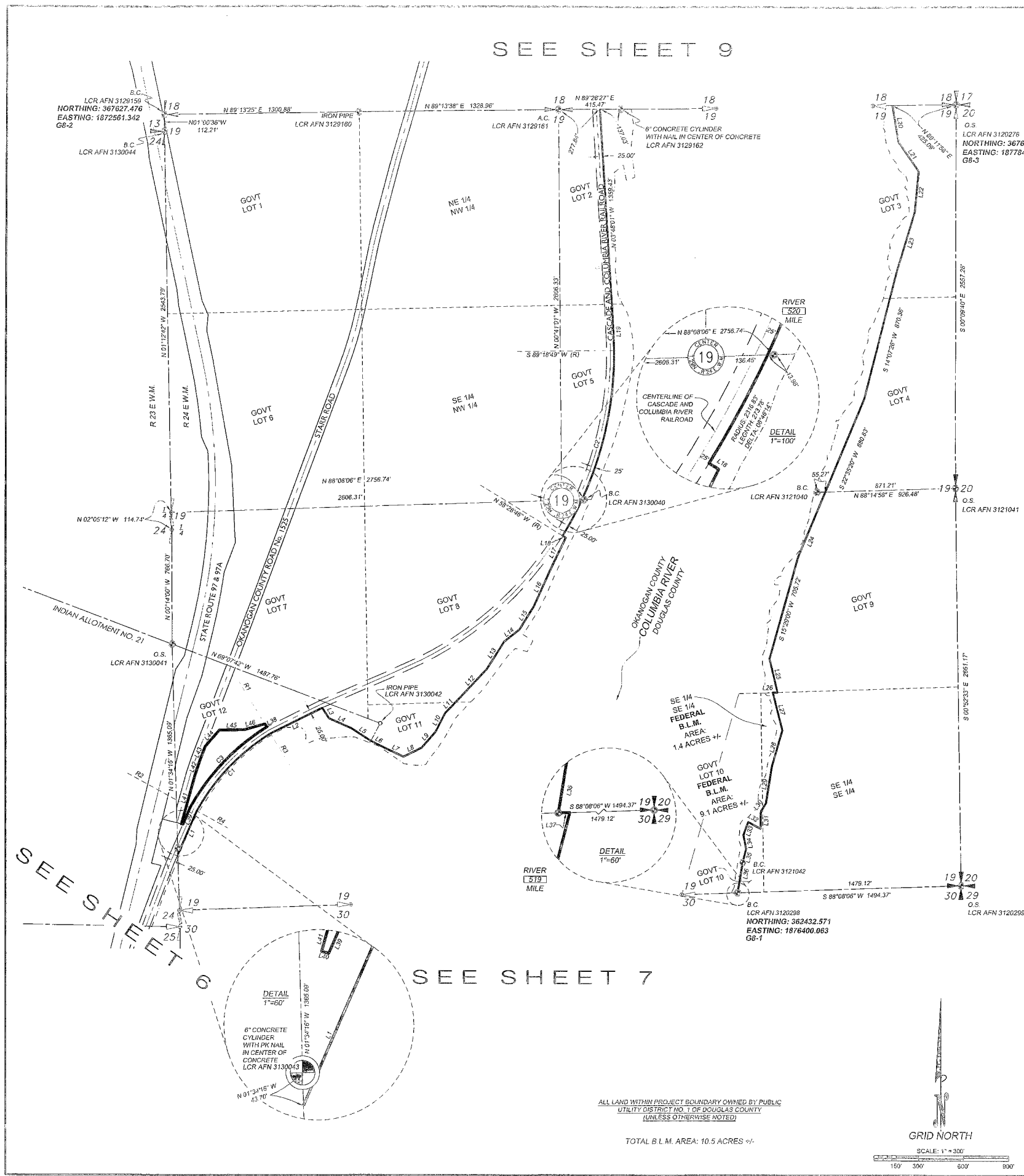
EXHIBIT G, SHEET 7 OF 64

FERC PROJECT NO. 2149

ALL LAND WITHIN PROJECT BOUNDARY OWNED BY PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY (UNLESS OTHERWISE NOTED)



SEE SHEET 9



LINE TABLE

| LINE | BEARING | LENGTH |
|------|---------------|---------|
| L1 | N 25°22'22" E | 318.54' |
| L2 | N 63°39'32" E | 385.70' |
| L3 | S 33°24'16" E | 83.59' |
| L4 | S 66°12'58" E | 160.95' |
| L5 | S 56°34'45" E | 147.99' |
| L6 | S 62°52'38" E | 108.97' |
| L7 | S 64°39'47" E | 140.81' |
| L8 | N 63°30'38" E | 133.89' |
| L9 | N 40°48'52" E | 143.64' |
| L10 | N 26°58'20" E | 138.87' |
| L11 | N 43°20'07" E | 130.19' |
| L12 | N 43°03'32" E | 266.52' |
| L13 | N 32°19'18" E | 217.66' |
| L14 | N 51°07'45" E | 130.34' |
| L15 | N 31°38'47" E | 184.58' |
| L16 | N 24°10'33" E | 253.89' |
| L17 | N 25°31'35" E | 251.13' |
| L18 | N 58°26'46" W | 25.00' |
| L19 | N 02°45'31" W | 290.65' |
| L20 | S 09°40'10" E | 248.36' |
| L21 | S 35°15'58" E | 235.60' |
| L22 | S 05°11'16" W | 273.31' |
| L23 | S 16°41'48" W | 422.71' |
| L24 | S 22°10'29" W | 253.49' |
| L25 | S 13°02'13" E | 232.33' |
| L26 | S 86°07'59" W | 30.74' |
| L27 | S 14°12'06" E | 261.32' |
| L28 | S 16°13'22" W | 250.07' |
| L29 | S 06°53'50" W | 249.26' |
| L30 | S 32°01'47" W | 84.93' |
| L31 | S 01°30'02" W | 115.04' |
| L32 | N 61°09'04" W | 92.94' |
| L33 | S 19°42'18" W | 92.20' |
| L34 | S 10°44'37" E | 94.31' |
| L35 | S 14°24'49" W | 94.28' |
| L36 | S 09°14'28" W | 204.86' |
| L37 | N 88°09'06" E | 15.25' |
| L38 | S 35°02'24" E | 24.36' |
| L39 | S 23°29'22" W | 121.44' |
| L40 | N 76°17'47" W | 9.84' |
| L41 | N 15°27'30" E | 338.67' |
| L42 | N 18°16'49" E | 95.84' |
| L43 | N 20°47'24" E | 108.15' |
| L44 | N 41°02'40" E | 144.26' |
| L45 | N 89°08'16" E | 164.80' |
| L46 | N 74°30'12" E | 144.11' |

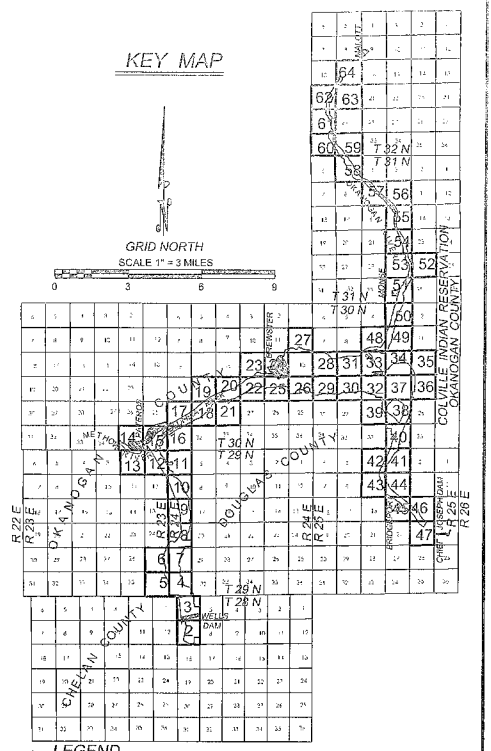
CURVE TABLE

| CURVE | RADIUS | LENGTH | DELTA |
|-------|----------|----------|-----------|
| C1 | 1407.39' | 722.35' | 29°24'26" |
| C2 | 2316.83' | 1302.33' | 32°12'25" |
| C3 | 1457.39' | 752.75' | 29°35'37" |

RADIAL BEARING LINE TABLE

| LINE | BEARING |
|------|---------------|
| R1 | S 31°37'44" E |
| R2 | S 61°13'21" E |
| R3 | S 31°43'20" E |
| R4 | S 61°07'46" E |

KEY MAP



LEGEND

- EXHIBIT G PROJECT BOUNDARY
- WATER LINE
- MEANDER LINE
- RECREATION SITE
- WILDLIFE AREA
- O.S.
- B.C.
- A.C.
- R.C.
- AFN
- LCR
- B.L.M.
- B.O.R.
- B.I.A.
- U.S.A.C.E.
- W.D.N.R.
- WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES
- ORIGINAL STONE
- BRASS CAP
- ALUMINUM CAP
- REBAR WITH CAP
- AUDITOR FILE NUMBER
- LAND CORNER RECORD
- BUREAU OF LAND MANAGEMENT
- BUREAU OF RECLAMATION
- BUREAU OF INDIAN AFFAIRS
- UNITED STATES ARMY
- CORPS OF ENGINEERS
- WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES

MAP PROJECTION / BASIS OF BEARING

UNITS: U.S. SURVEY FEET
 HORIZONTAL DATUM: NAD 83/1991 ADJUSTMENT
 VERTICAL DATUM: NGVD 1929
 PROJECTION: WASHINGTON STATE COORDINATE SYSTEM-NORTH ZONE
 GEOID: GEOID 99 (CONUS)

BEARINGS ARE BASED ON THE WASHINGTON STATE COORDINATE SYSTEM, NORTH ZONE, DERIVED FROM GPS OBSERVATIONS. THE DISTANCES SHOWN ON THIS MAP HAVE BEEN PROJECTED TO THE WASHINGTON STATE PLANE COORDINATE GRID. MULTIPLY THE DISTANCES SHOWN BY A FACTOR OF 1.00009474 TO OBTAIN THE ACTUAL GROUND DISTANCE.

META DATA AS DERIVED BY GPS OBSERVATIONS AT THE NORTHEAST CORNER OF SECTION 19 SHOWN HEREON IS AS FOLLOWS:

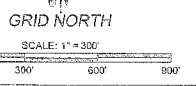
LATITUDE: N 48° 00' 14.1480"
 LONGITUDE: W 119° 51' 48.3186"
 ELLIPSOID HEIGHT: 814.47'
 ELEVATION: 877.49'
 CONVERGENCE ANGLE: 0° 43' 20"
 COMBINED SCALE FACTOR: 0.99990527

SEE SHEET 6

SEE SHEET 7

ALL LAND WITHIN PROJECT BOUNDARY OWNED BY PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY (UNLESS OTHERWISE NOTED)

TOTAL B.L.M. AREA: 10.5 ACRES +/-



Erlandsen
 PROFESSIONAL LAND SURVEYOR
 STATE OF WASHINGTON CERTIFICATE NO. 23599

DATE: 5/01/2009
 SCALE: 1" = 300'

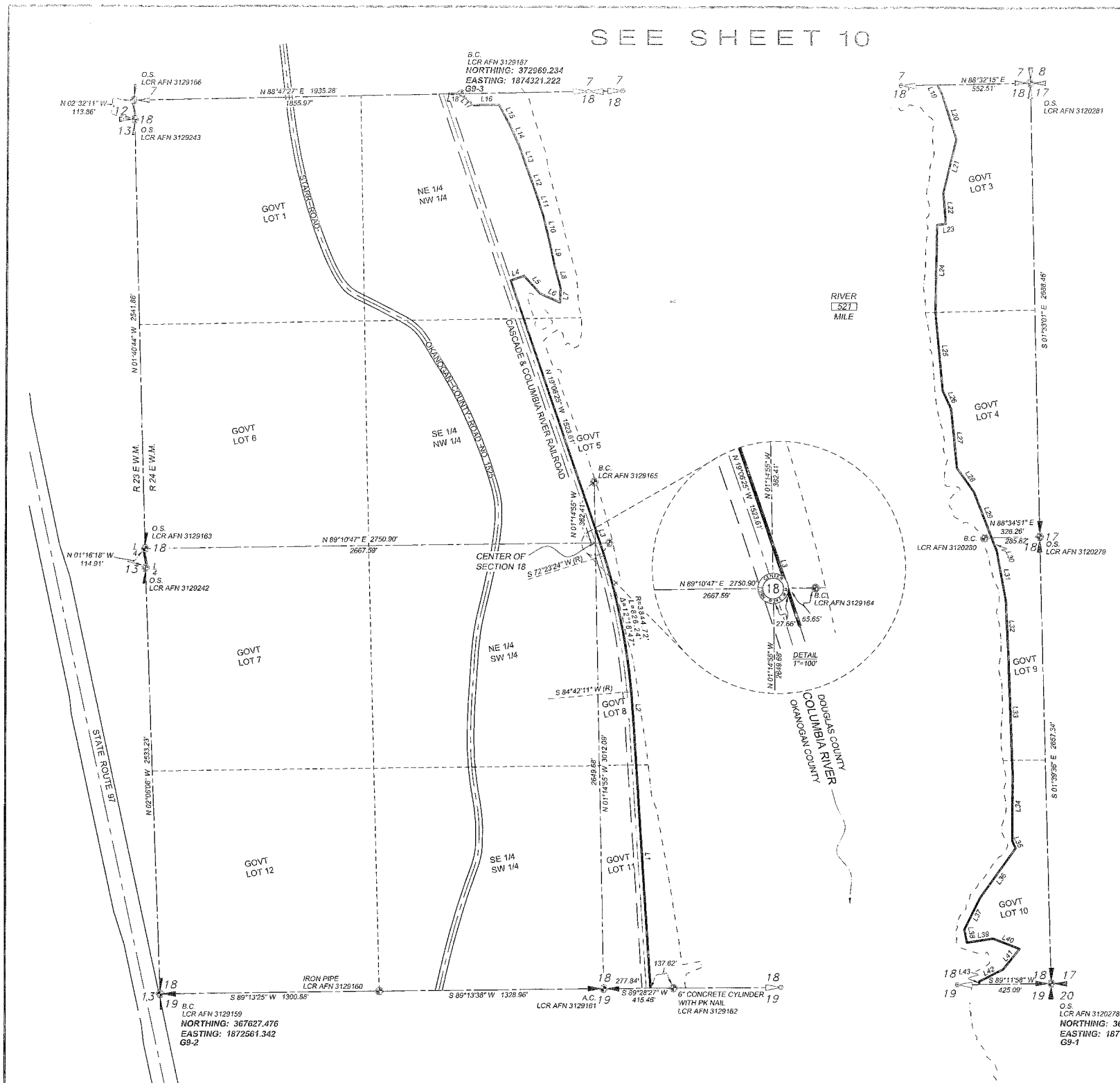
T. 29 N. R. 24 E. W.M.
 SECTION 19
 OKANOGAN AND DOUGLAS COUNTIES

SURVEYOR'S CERTIFICATE:
 I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREON WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON, AND I CERTIFY THAT THE ACCURACY REQUIREMENTS OF THE CODE OF FEDERAL REGULATIONS (30CFR) 11

PROJECT BOUNDARY & LOCATION MAP
 WELLS HYDROELECTRIC PROJECT
 PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
 EAST WENATCHEE, WASHINGTON

EXHIBIT G, SHEET 8 OF 64 FERC PROJECT NO. 2149

SEE SHEET 10



| LINE | BEARING | LENGTH |
|------|-----------------|----------|
| L1 | N 03° 48' 01" W | 1567.31' |
| L2 | N 04° 18' 01" W | 200.32' |
| L3 | N 18° 36' 25" W | 200.32' |
| L4 | N 70° 50' 35" E | 83.21' |
| L5 | S 42° 18' 59" E | 136.23' |
| L6 | S 65° 41' 05" E | 131.58' |
| L7 | N 02° 28' 50" E | 86.17' |
| L8 | N 15° 17' 15" W | 135.72' |
| L9 | N 12° 30' 00" W | 144.12' |
| L10 | N 14° 13' 44" W | 161.62' |
| L11 | N 18° 27' 06" W | 151.53' |
| L12 | N 20° 05' 36" W | 103.62' |
| L13 | N 19° 44' 38" W | 183.25' |
| L14 | N 25° 18' 47" W | 114.93' |
| L15 | N 27° 37' 12" W | 145.56' |
| L16 | S 89° 27' 36" W | 151.51' |
| L17 | N 48° 32' 28" W | 101.14' |
| L18 | S 88° 47' 27" W | 79.31' |
| L19 | S 26° 40' 51" E | 63.85' |
| L20 | S 16° 12' 57" E | 276.93' |
| L21 | S 13° 21' 05" E | 326.73' |
| L22 | S 05° 07' 29" E | 152.16' |
| L23 | S 81° 09' 26" W | 52.65' |
| L24 | S 00° 43' 41" W | 514.16' |
| L25 | S 05° 44' 44" E | 470.18' |
| L26 | S 24° 56' 38" E | 119.10' |
| L27 | S 65° 51' 05" E | 351.79' |
| L28 | S 35° 59' 42" E | 175.58' |
| L29 | S 21° 18' 15" E | 290.84' |
| L30 | S 21° 18' 15" E | 84.16' |
| L31 | S 10° 43' 15" E | 297.50' |
| L32 | S 02° 50' 21" E | 313.86' |
| L33 | S 02° 16' 19" E | 708.84' |
| L34 | S 00° 10' 20" W | 408.57' |
| L35 | S 25° 00' 00" E | 80.00' |
| L36 | S 35° 30' 59" W | 360.33' |
| L37 | S 26° 16' 54" W | 212.32' |
| L38 | S 11° 54' 26" E | 77.90' |
| L39 | N 81° 29' 52" E | 157.74' |
| L40 | S 68° 06' 09" E | 168.11' |
| L41 | S 38° 36' 40" W | 155.51' |
| L42 | S 62° 54' 14" W | 160.52' |
| L43 | S 09° 45' 55" E | 18.86' |

KEY MAP

LEGEND

- EXHIBIT G PROJECT BOUNDARY
- WATER LINE
- MEANDER LINE
- RECREATION SITE
- WILDLIFE AREA
- O.S. ORIGINAL STONE
- B.C. BRASS CAP
- A.C. ALUMINUM CAP
- R.C. REBAR WITH CAP
- AFN AUDITOR FILE NUMBER
- LCR LAND CORNER RECORD
- B.L.M. BUREAU OF LAND MANAGEMENT
- B.O.R. BUREAU OF RECLAMATION
- B.I.A. BUREAU OF INDIAN AFFAIRS
- U.S.A.C.E. UNITED STATES ARMY
- W.D.N.R. CORPS OF ENGINEERS
- WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES

MAP PROJECTION / BASIS OF BEARING

UNITS: U.S. SURVEY FEET
 HORIZONTAL DATUM: NAD 83/1991 ADJUSTMENT
 VERTICAL DATUM: NGVD 1929
 PROJECTION: WASHINGTON STATE COORDINATE SYSTEM-NORTH ZONE
 GEOID: GEOID 99 (CONUS)

BEARINGS ARE BASED ON THE WASHINGTON STATE COORDINATE SYSTEM, NORTH ZONE, DERIVED FROM GPS OBSERVATIONS. THE DISTANCES SHOWN ON THIS MAP HAVE BEEN PROJECTED TO THE WASHINGTON STATE PLANE COORDINATE GRID. MULTIPLY THE DISTANCES SHOWN BY A FACTOR OF 1.0000022, TO OBTAIN THE ACTUAL GROUND DISTANCE.

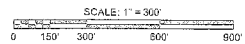
META DATA AS DERIVED BY GPS OBSERVATIONS ON A BRASS CAP AT THE INTERSECTION OF THE PROJECT BOUNDARY OF THE WELLS HYDROELECTRIC PROJECT, 1362.41' NORTHERLY OF THE CENTER OF SAID SECTION PER THE REVISED EXHIBIT 'N' DRAWINGS DATED APRIL 1, 1981 SHOWN HEREON, IS AS FOLLOWS:

LATITUDE: N 48° 00' 43.8432"
 LONGITUDE: W 119° 52' 27.7772"
 ELLIPSOID HEIGHT: 722.64'
 ELEVATION: 785.64'
 CONVERGENCE ANGLE: 0° 17' 59"
 COMBINED SCALE FACTOR: 0.99990639

SEE SHEET 8

ALL LAND WITHIN PROJECT BOUNDARY OWNED BY PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY (UNLESS OTHERWISE NOTED)

GRID NORTH



Erlandsen
 SURVEYORS & ENGINEERS - CO., INC. - COVINGTON, WA, USA
 Web: www.erlandsen.com
 REGISTRATION: (509) 838-2320
 CHIELAN: (509) 882-2188
 E. WIENHART: (509) 882-2302
 EPHRATA: (509) 724-8326

DRAWN BY: DKOJDD LAYOUT: GSHBYT-DR
 DATE: 5/31/2023 FILE NO: T29-R24-S18
 SCALE: 1" = 300' JOB NO: 95550-00 TOLL FREE: (800) 732-7142

T. 29 N. R. 24 E.W.M. SECTION 18 OKANOGAN AND DOUGLAS COUNTIES

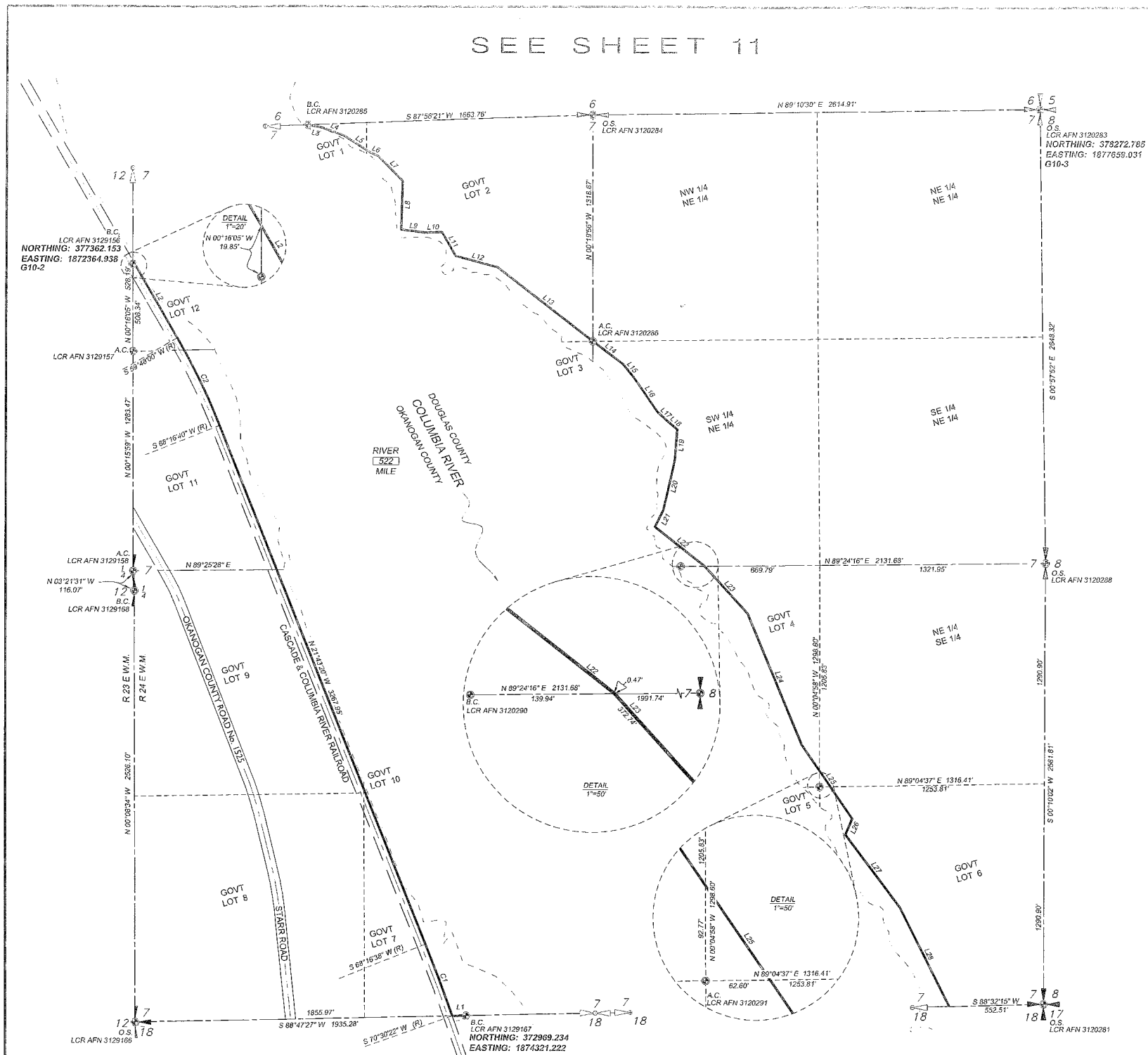
SURVEYOR'S CERTIFICATE:
 I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREON WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON AND I CERTIFY THAT I AM A LICENSED SURVEYOR IN THE STATE OF WASHINGTON AND I AM A MEMBER OF THE NATIONAL BOARD OF SURVEYING AND MAPPING UNDER THE CODE OF FEDERAL REGULATIONS 18CFR1.21

RODGER ERLANDSEN
 PROFESSIONAL LAND SURVEYOR
 STATE OF WASHINGTON CERTIFICATE NO. 23393

PROJECT BOUNDARY & LOCATION MAP
WELLS HYDROELECTRIC PROJECT
PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY EAST WENATCHEE, WASHINGTON

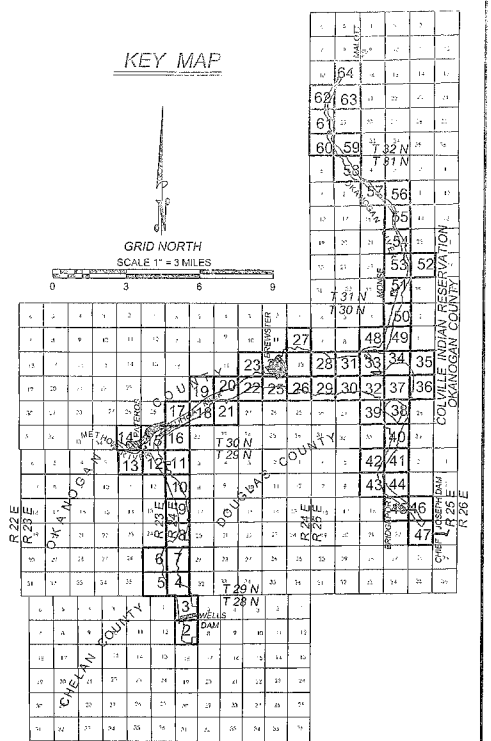
EXHIBIT G, SHEET 9 OF 64 FERC PROJECT NO. 2149

SEE SHEET 11



| LINE | BEARING | LENGTH |
|------|---------------|---------|
| L1 | S 88°47'27" W | 79.31' |
| L2 | N 30°12'00" W | 516.95' |
| L3 | S 73°56'39" E | 87.01' |
| L4 | N 70°15'00" W | 131.04' |
| L5 | N 57°16'29" W | 165.39' |
| L6 | N 67°03'57" W | 52.82' |
| L7 | N 44°50'14" W | 203.69' |
| L8 | N 01°20'30" E | 283.74' |
| L9 | N 82°53'45" W | 136.05' |
| L10 | S 89°07'40" W | 102.43' |
| L11 | N 30°18'17" W | 159.67' |
| L12 | N 75°01'33" W | 285.80' |
| L13 | N 52°15'30" W | 702.12' |
| L14 | N 53°20'45" W | 219.78' |
| L15 | N 39°25'24" W | 103.43' |
| L16 | N 34°48'28" W | 242.66' |
| L17 | N 47°19'21" W | 83.91' |
| L18 | N 50°20'33" W | 71.72' |
| L19 | N 04°27'58" E | 182.42' |
| L20 | N 12°55'17" E | 295.52' |
| L21 | N 25°54'57" E | 110.76' |
| L22 | N 51°43'43" W | 370.49' |
| L23 | N 42°07'07" W | 373.21' |
| L24 | N 22°23'30" W | 831.75' |
| L25 | N 34°21'18" W | 522.76' |
| L26 | N 23°08'54" E | 101.89' |
| L27 | S 36°54'36" E | 525.24' |
| L28 | S 26°40'31" E | 650.55' |

| CURVE | RADIUS | LENGTH | DELTA |
|-------|-----------|---------|----------|
| C1 | 11484.19' | 446.76' | 2°13'44" |
| C2 | 3844.72' | 568.88' | 8°28'40" |



- LEGEND**
- EXHIBIT G PROJECT BOUNDARY
 - WATER LINE
 - MEANDER LINE
 - RECREATION SITE
 - WILDLIFE AREA
 - O.S.
 - B.C.
 - A.C.
 - R.C.
 - AFN
 - LCR
 - B.L.M.
 - B.O.R.
 - B.I.A.
 - U.S.A.C.E.
 - W.D.N.R.
 - ORIGINAL STONE
 - BRASS CAP
 - ALUMINUM CAP
 - REBAR WITH CAP
 - ADDITION FILE NUMBER
 - LAND CORNER RECORD
 - BUREAU OF LAND MANAGEMENT
 - BUREAU OF RECLAMATION
 - BUREAU OF INDIAN AFFAIRS
 - UNITED STATES ARMY
 - CORPS OF ENGINEERS
 - WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES
- FOUND NOT FOUND**
- SECTION CORNER (AS NOTED)
 - SECTION CORNER ON A TOWNSHIP OR RANGE LINE (AS NOTED)
 - QUARTER CORNER (AS NOTED)
 - QUARTER CORNER ON A TOWNSHIP OR RANGE LINE (AS NOTED)
 - MEANDER CORNER (AS NOTED)
 - MONUMENT (AS NOTED)

MAP PROJECTION / BASIS OF BEARING

UNITS: U.S. SURVEY FEET
 HORIZONTAL DATUM: NAD 83/1991 ADJUSTMENT
 VERTICAL DATUM: NGVD 1929
 PROJECTION: WASHINGTON STATE COORDINATE SYSTEM-NORTH ZONE
 GEOID: GEOID 99 (CONUS)

BEARINGS ARE BASED ON THE WASHINGTON STATE COORDINATE SYSTEM, NORTH ZONE, DERIVED FROM GPS OBSERVATIONS. THE DISTANCES SHOWN ON THIS MAP HAVE BEEN PROJECTED TO THE WASHINGTON STATE PLANE COORDINATE GRID. MULTIPLY THE DISTANCES SHOWN BY A FACTOR OF 1.00009304 TO OBTAIN THE ACTUAL GROUND DISTANCE.

META DATA AS DERIVED BY GPS OBSERVATIONS AT THE CENTER NORTH 1/16 CORNER OF SECTION 7 SHOWN HEREON, IS AS FOLLOWS:

LATITUDE: N 43° 01' 45.4508"
 LONGITUDE: W 119° 52' 27.7108"
 ELLIPSOID HEIGHT: 762.67'
 ELEVATION: 825.82'
 CONVERGENCE ANGLE: 0° 42' 50"
 COMBINED SCALE FACTOR: 0.999906697

SEE SHEET 9

Erlandsen
 SURVEYORS & ENGINEERS, P.L.L.C.
 1100 N. 10TH ST. SUITE 100
 SPOKANE, WASHINGTON 99201
 TEL: (509) 325-2300
 FAX: (509) 325-2301
 WWW.ERLANDSEN.COM

DRAWN BY: DIOGODO LAYOUT: GISHRETT-10
 DATE: 5/01/2009 FILE NO: T29-R24-S07
 SCALE: 1" = 300' JOB NO: 85520-00 TOLL FREE: (800) 732-7142

T. 29 N. R. 24 E. W.M. SECTION 7 OKANOGAN AND DOUGLAS COUNTIES

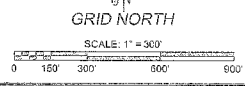
SURVEYOR'S CERTIFICATE:
 I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREON WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON AND I CERTIFY THAT I EXCEEDED THE ACCURACY REQUIREMENTS OF THE CODE OF FEDERAL REGULATIONS 18CFR 1.101

RODER ERLANDSEN
 PROFESSIONAL LAND SURVEYOR
 STATE OF WASHINGTON CERTIFICATE NO. 23389

PROJECT BOUNDARY & LOCATION MAP
 WELLS HYDROELECTRIC PROJECT
 PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
 EAST WENATCHEE, WASHINGTON

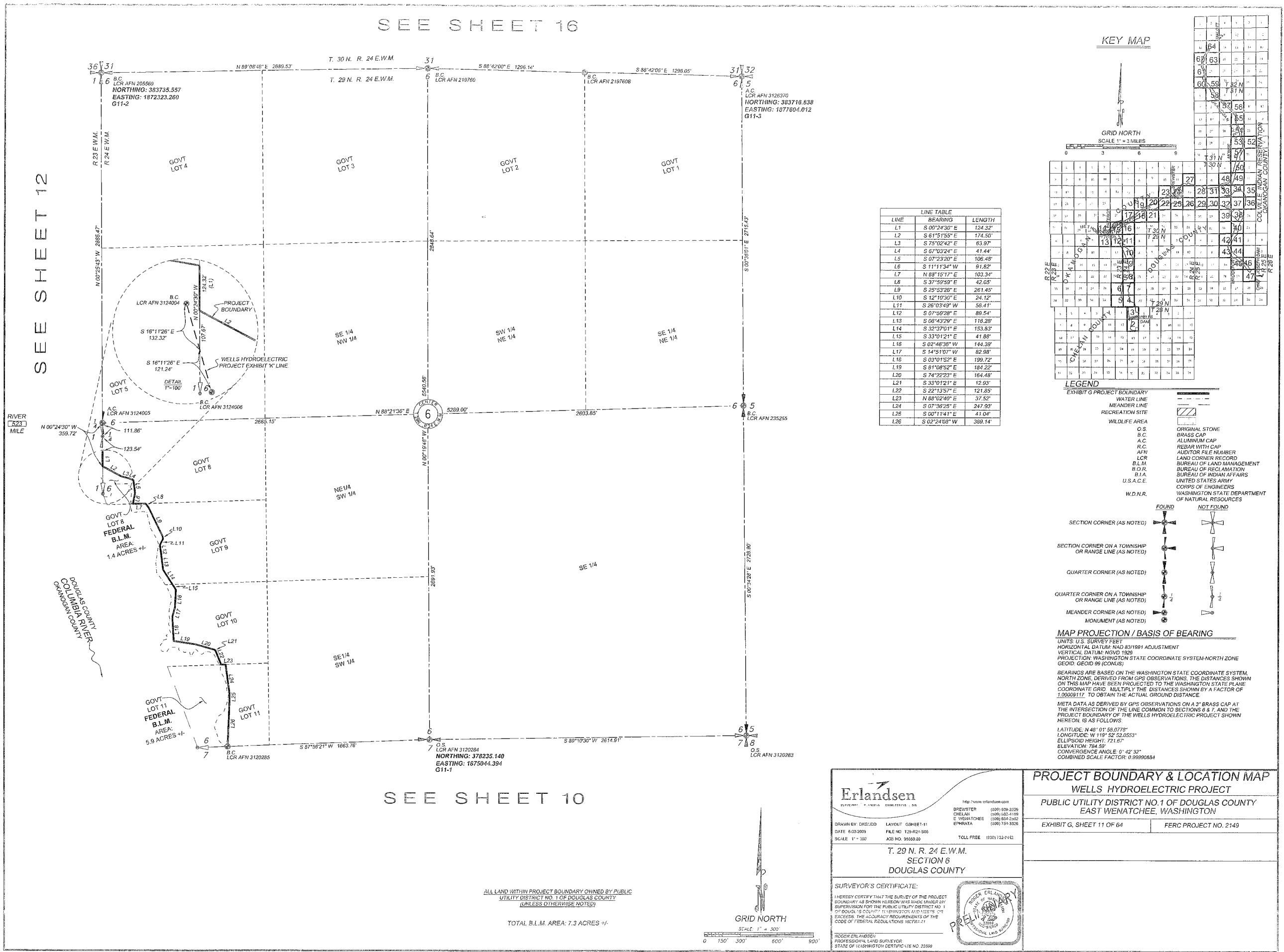
EXHIBIT G, SHEET 10 OF 64 FERC PROJECT NO. 2149

ALL LAND WITHIN PROJECT BOUNDARY OWNED BY PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY (UNLESS OTHERWISE NOTED)



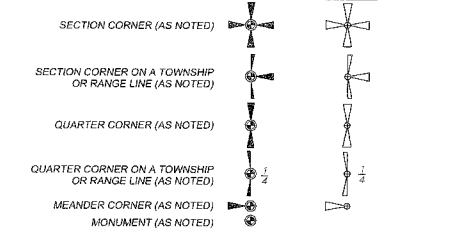
SEE SHEET 16

SEE SHEET 12



| LINE | BEARING | LENGTH |
|------|---------------|---------|
| L1 | S 00°24'30" E | 124.32' |
| L2 | S 61°51'55" E | 174.50' |
| L3 | S 75°02'42" E | 63.97' |
| L4 | S 67°03'24" E | 41.44' |
| L5 | S 07°23'20" E | 106.48' |
| L6 | S 11°11'34" W | 61.82' |
| L7 | N 88°15'17" E | 103.34' |
| L8 | S 37°59'59" E | 42.05' |
| L9 | S 25°53'26" E | 261.45' |
| L10 | S 12°10'30" E | 24.12' |
| L11 | S 26°03'49" W | 58.41' |
| L12 | S 07°59'28" E | 89.54' |
| L13 | S 06°43'29" E | 118.28' |
| L14 | S 32°37'01" E | 153.83' |
| L15 | S 33°01'21" E | 41.88' |
| L16 | S 02°48'36" W | 144.39' |
| L17 | S 14°51'07" W | 82.98' |
| L18 | S 03°01'52" E | 199.72' |
| L19 | S 81°08'52" E | 184.22' |
| L20 | S 74°22'23" E | 164.48' |
| L21 | S 33°01'21" E | 12.93' |
| L22 | S 22°13'57" E | 121.85' |
| L23 | N 88°10'24" W | 37.52' |
| L24 | S 07°36'25" E | 247.93' |
| L25 | S 00°11'41" E | 41.04' |
| L26 | S 02°24'08" W | 389.14' |

- LEGEND**
- EXHIBIT G PROJECT BOUNDARY
 - WATER LINE
 - MEANDER LINE
 - RECREATION SITE
 - WILDLIFE AREA
 - O.S. ORIGINAL STONE
 - B.C. BRASS CAP
 - A.C. ALUMINUM CAP
 - R.C. REBAR WITH CAP
 - AFN AUDITOR FILE NUMBER
 - LCR LAND CORNER RECORD
 - B.L.M. BUREAU OF LAND MANAGEMENT
 - B.O.R. BUREAU OF RECLAMATION
 - B.I.A. BUREAU OF INDIAN AFFAIRS
 - U.S.A.C.E. UNITED STATES ARMY
 - W.D.N.R. CORPS OF ENGINEERS
 - WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES



MAP PROJECTION / BASIS OF BEARING

UNITS: U.S. SURVEY FEET
 HORIZONTAL DATUM: NAD 83/1981 ADJUSTMENT
 VERTICAL DATUM: NGVD 1929
 PROJECTION: WASHINGTON STATE COORDINATE SYSTEM-NORTH ZONE
 GEOID: GEOID 99 (CONUS)

BEARINGS ARE BASED ON THE WASHINGTON STATE COORDINATE SYSTEM, NORTH ZONE, DERIVED FROM GPS OBSERVATIONS. THE DISTANCES SHOWN ON THIS MAP HAVE BEEN PROJECTED TO THE WASHINGTON STATE PLANE COORDINATE GRID. MULTIPLY THE DISTANCES SHOWN BY A FACTOR OF 1.00008117 TO OBTAIN THE ACTUAL GROUND DISTANCE.

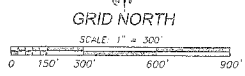
META DATA AS DERIVED BY GPS OBSERVATIONS ON A 3" BRASS CAP AT THE INTERSECTION OF THE LINE COMMON TO SECTIONS 8 & 7, AND THE PROJECT BOUNDARY OF THE WELLS HYDROELECTRIC PROJECT SHOWN HEREON, IS AS FOLLOWS:

LATITUDE: N 48° 01' 58.0778"
 LONGITUDE: W 119° 52' 53.0553"
 ELLIPSOID HEIGHT: 721.67'
 ELEVATION: 784.59'
 CONVERGENCE ANGLE: 0° 42' 32"
 COMBINED SCALE FACTOR: 0.99992684

SEE SHEET 10

ALL LAND WITHIN PROJECT BOUNDARY OWNED BY PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY (UNLESS OTHERWISE NOTED)

TOTAL B.L.M. AREA: 7.3 ACRES +/-



Erlandsen
 SURVEYORS & ENGINEERS, P.S.
 BREWSTER (509) 938-2326
 CHELAN (509) 463-4198
 E. WENATCHEE (509) 866-5462
 EPHRATA (509) 951-3326

DRAWN BY: DKG/DDD LAYOUT: GSH/ET-11
 DATE: 6/03/2009 FILE NO: T29-R24-S05
 SCALE: 1" = 300' JOB NO: 95560.00 TOLL FREE: (800) 732-7432

T. 29 N. R. 24 E.W.M.
 SECTION 6
 DOUGLAS COUNTY

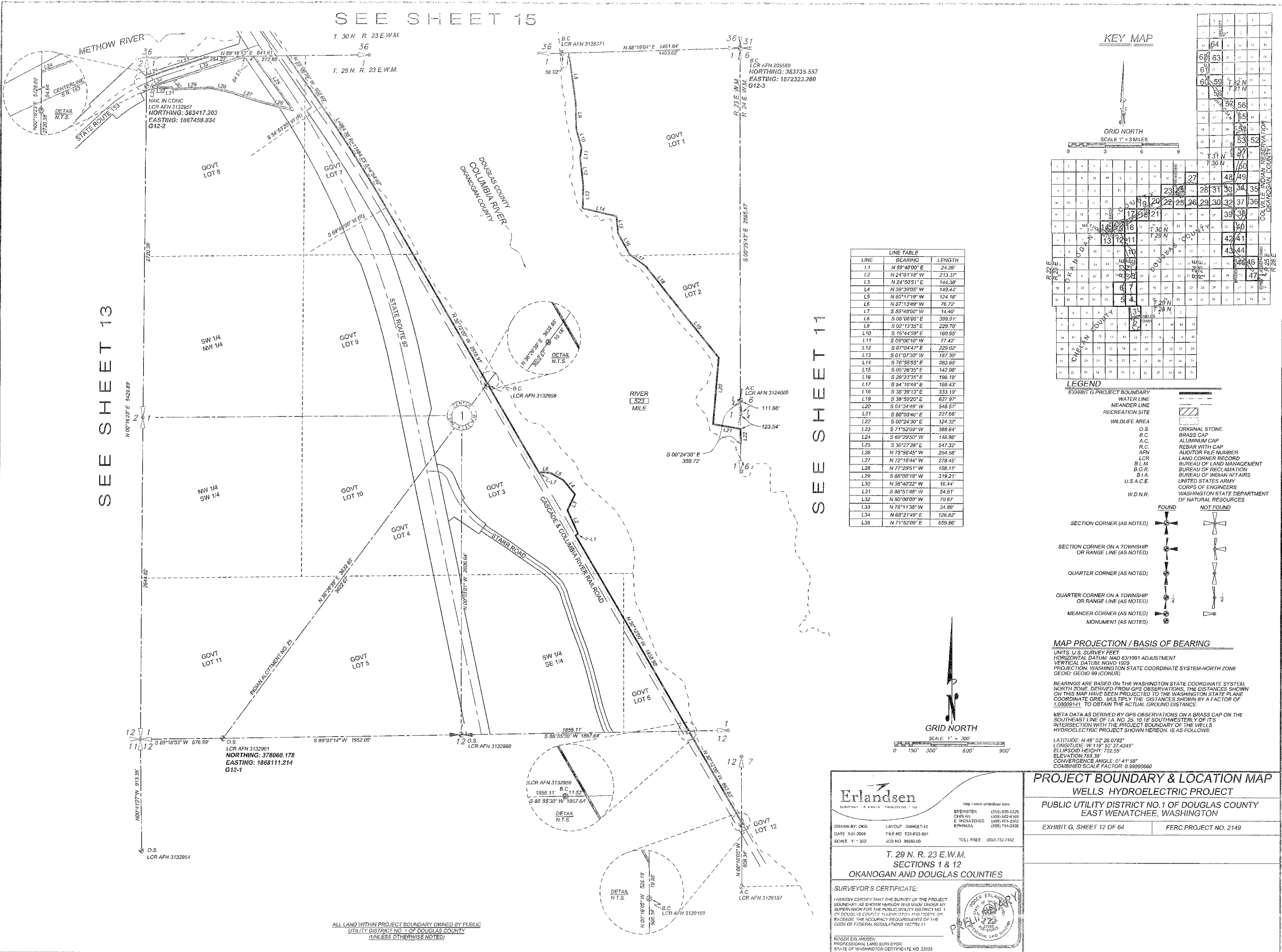
SURVEYOR'S CERTIFICATE:
 I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREON WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON AND I HEREBY CERTIFY THAT I AM A LICENSED SURVEYOR IN WASHINGTON AND I AM IN COMPLIANCE WITH THE REQUIREMENTS OF THE CODE OF FEDERAL REGULATIONS 16CFR1.11

ROGER ERLANDSEN
 PROFESSIONAL LAND SURVEYOR
 STATE OF WASHINGTON CERTIFICATE NO. 21599

PROJECT BOUNDARY & LOCATION MAP
 WELLS HYDROELECTRIC PROJECT
 PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
 EAST WENATCHEE, WASHINGTON

EXHIBIT G, SHEET 11 OF 64 FERC PROJECT NO. 2149

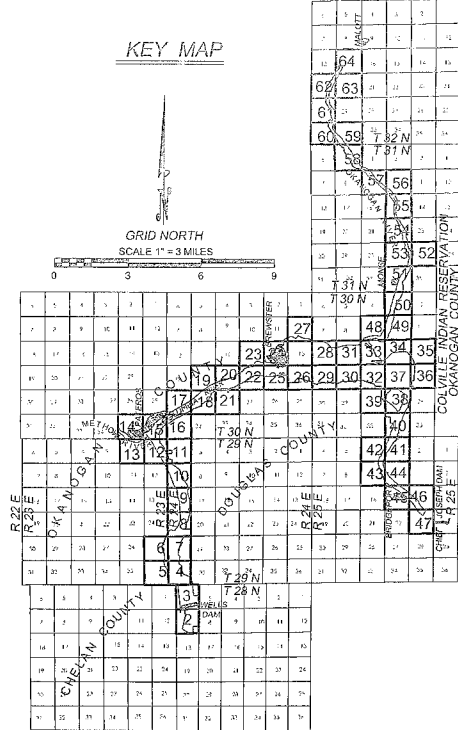
SEE SHEET 15



SEE SHEET 13

SEE SHEET 11

KEY MAP



| LINE | BEARING | LENGTH |
|------|---------------|---------|
| L1 | N 59°48'00" E | 24.26' |
| L2 | N 24°01'18" W | 213.37' |
| L3 | N 24°50'51" E | 144.38' |
| L4 | N 39°39'05" W | 149.44' |
| L5 | N 60°17'19" W | 124.16' |
| L6 | N 67°13'49" W | 76.72' |
| L7 | S 59°48'00" W | 14.40' |
| L8 | S 08°06'08" E | 399.91' |
| L9 | S 02°13'35" E | 229.70' |
| L10 | S 15°44'39" E | 160.95' |
| L11 | S 09°06'10" W | 77.42' |
| L12 | S 07°04'47" E | 229.02' |
| L13 | S 01°07'30" W | 187.30' |
| L14 | S 78°55'55" E | 263.65' |
| L15 | S 05°26'35" E | 142.08' |
| L16 | S 29°23'35" E | 190.19' |
| L17 | S 54°10'40" E | 166.43' |
| L18 | S 38°39'13" E | 333.19' |
| L19 | S 38°59'20" E | 627.97' |
| L20 | S 04°34'49" W | 548.57' |
| L21 | S 80°05'46" E | 227.66' |
| L22 | S 00°24'30" E | 124.32' |
| L23 | S 71°52'09" W | 388.64' |
| L24 | S 69°29'50" W | 148.98' |
| L25 | S 36°27'28" E | 547.32' |
| L26 | N 75°56'45" W | 254.58' |
| L27 | N 72°16'44" W | 278.45' |
| L28 | N 77°29'51" W | 158.11' |
| L29 | S 68°00'19" W | 319.21' |
| L30 | N 38°40'22" W | 16.44' |
| L31 | S 86°51'48" W | 54.61' |
| L32 | N 90°00'00" W | 70.67' |
| L33 | N 78°11'35" W | 34.86' |
| L34 | N 68°21'49" E | 126.82' |
| L35 | N 71°52'09" E | 659.86' |

LEGEND

| | |
|----------------------------|--|
| EXHIBIT G PROJECT BOUNDARY | |
| WATER LINE | |
| MEANDER LINE | |
| RECREATION SITE | |
| WILDLIFE AREA | |
| O.S. | ORIGINAL STONE |
| B.C. | BRASS CAP |
| A.C. | ALUMINUM CAP |
| R.C. | REBAR WITH CAP |
| AFN | AUDITOR FILE NUMBER |
| LCR | LAND CORNER RECORD |
| B.L.M. | BUREAU OF LAND MANAGEMENT |
| B.G.R. | BUREAU OF RECLAMATION |
| B.I.A. | BUREAU OF INDIAN AFFAIRS |
| U.S.A.C.E. | UNITED STATES ARMY |
| | CORPS OF ENGINEERS |
| W.D.N.R. | WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES |

| | | | | | |
|---|--|-------|--|-----------|--|
| SECTION CORNER (AS NOTED) | | FOUND | | NOT FOUND | |
| SECTION CORNER ON A TOWNSHIP OR RANGE LINE (AS NOTED) | | | | | |
| QUARTER CORNER (AS NOTED) | | | | | |
| QUARTER CORNER ON A TOWNSHIP OR RANGE LINE (AS NOTED) | | | | | |
| MEANDER CORNER (AS NOTED) | | | | | |
| MONUMENT (AS NOTED) | | | | | |

MAP PROJECTION / BASIS OF BEARING

UNITS: U.S. SURVEY FEET
 HORIZONTAL DATUM: NAD 83/1991 ADJUSTMENT
 VERTICAL DATUM: NGVD 1929
 PROJECTION: WASHINGTON STATE COORDINATE SYSTEM-NORTH ZONE
 GEOID: GEOID 99 (CONUS)

BEARINGS ARE BASED ON THE WASHINGTON STATE COORDINATE SYSTEM, NORTH ZONE. DERIVED FROM GPS OBSERVATIONS, THE DISTANCES SHOWN ON THIS MAP HAVE BEEN PROJECTED TO THE WASHINGTON STATE PLANE COORDINATE GRID. MULTIPLY THE DISTANCES SHOWN BY A FACTOR OF 1.00009141 TO OBTAIN THE ACTUAL GROUND DISTANCE.

META DATA AS DERIVED BY GPS OBSERVATIONS ON A BRASS CAP ON THE SOUTHEAST CORNER OF TA. NO. 25, 10' 18" SOUTHWESTERLY OF ITS INTERSECTION WITH THE PROJECT BOUNDARY OF THE WELLS HYDROELECTRIC PROJECT SHOWN HEREON, IS AS FOLLOWS:
 LATITUDE: N 48° 02' 26.0782"
 LONGITUDE: W 115° 55' 27.4345"
 ELLIPSOID HEIGHT: 722.53'
 ELEVATION: 765.36'
 CONVERGENCE ANGLE: 0° 41' 58"
 COMBINED SCALE FACTOR: 0.99990860

Erlandsen
 SURVEYORS & ENGINEERS
 1856 11th St. N. Everett, WA 98149
 (206) 835-2320
 (206) 835-4168
 (206) 835-2882
 (206) 754-3336

DRAWN BY: DWK LAYOUT: OSMEET-12
 DATE: 5/01/2008 FILE NO: T29-R23-S01
 SCALE: 1" = 300' JOB NO: 96550.00 TOLL FREE: (800) 732-7442

T. 29 N. R. 23 E.W.M.
 SECTIONS 1 & 12
 OKANOGAN AND DOUGLAS COUNTIES

SURVEYOR'S CERTIFICATE:
 I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREON WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON, AND MEETS THE REQUIREMENTS OF THE ACCURACY REQUIREMENTS OF THE CODE OF FEDERAL REGULATIONS 18CFR79.21

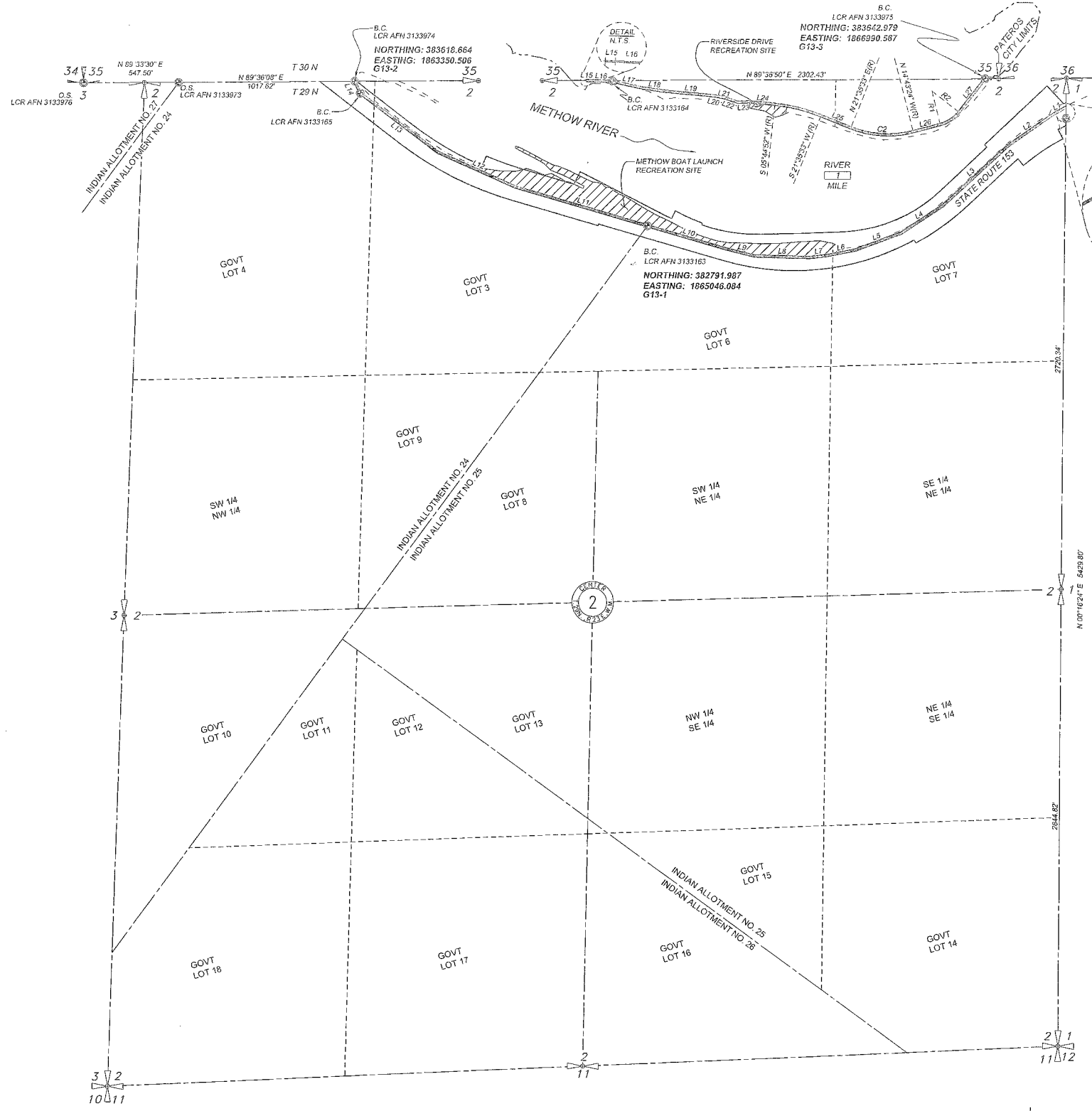
ROGER ERLANDSEN
 PROFESSIONAL LAND SURVEYOR
 STATE OF WASHINGTON CERTIFICATE NO. 23339

PROJECT BOUNDARY & LOCATION MAP
 WELLS HYDROELECTRIC PROJECT
 PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
 EAST WENATCHEE, WASHINGTON

EXHIBIT G, SHEET 12 OF 64 FERC PROJECT NO. 2149

ALL LAND WITHIN PROJECT BOUNDARY OWNED BY PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY (UNLESS OTHERWISE NOTED)

SEE SHEET 14

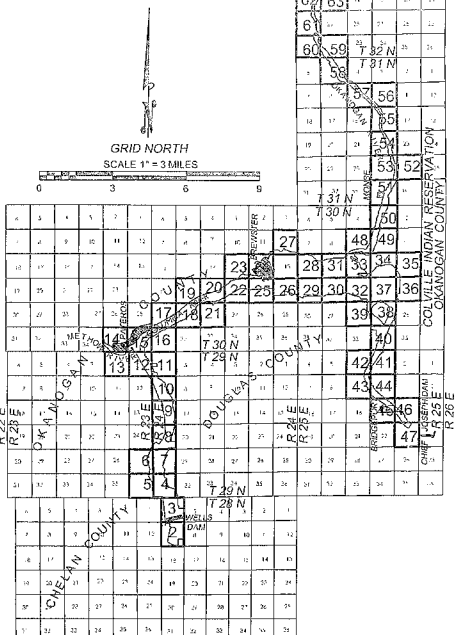


| LINE | BEARING | LENGTH |
|------|---------------|---------|
| L1 | S 60°19'13" W | 94.14' |
| L2 | S 54°50'36" W | 307.54' |
| L3 | S 47°18'42" W | 512.15' |
| L4 | S 56°45'45" W | 283.67' |
| L5 | S 69°29'41" W | 283.98' |
| L6 | S 78°44'01" W | 158.13' |
| L7 | S 83°14'11" W | 109.05' |
| L8 | N 88°32'24" W | 319.91' |
| L9 | N 76°13'24" W | 159.87' |
| L10 | N 73°59'18" W | 481.52' |
| L11 | N 73°53'54" W | 794.99' |
| L12 | N 66°08'58" W | 492.44' |
| L13 | N 53°00'12" W | 582.12' |
| L14 | N 25°14'25" W | 76.07' |
| L15 | S 88°10'13" E | 3.89' |
| L16 | S 88°08'35" E | 152.64' |
| L17 | S 77°59'44" E | 173.96' |
| L18 | S 82°16'53" E | 135.54' |
| L19 | S 84°38'56" E | 285.75' |
| L20 | S 78°23'19" E | 33.51' |
| L21 | S 81°21'02" E | 19.79' |
| L22 | S 71°29'36" E | 77.89' |
| L23 | N 88°24'37" E | 74.97' |
| L24 | S 84°15'08" E | 142.64' |
| L25 | S 68°24'27" E | 186.41' |
| L26 | N 75°16'36" E | 162.62' |
| L27 | N 37°48'39" E | 242.78' |

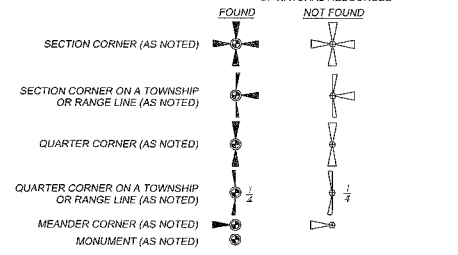
| CURVE | RADIUS | LENGTH | DELTA |
|-------|----------|---------|-----------|
| C1 | 1000.00' | 276.54' | 15°50'41" |
| C2 | 580.00' | 367.62' | 36°18'57" |
| C3 | 200.00' | 130.78' | 37°27'57" |

| RADIAL BEARING TABLE | RT | N 14°43'24" W |
|----------------------|---------------|---------------|
| R1 | N 14°43'24" W | |
| R2 | N 52°11'21" W | |

KEY MAP



- LEGEND**
- EXHIBIT G PROJECT BOUNDARY
 - WATER LINE
 - MEANDER LINE
 - RECREATION SITE
 - WILDLIFE AREA
 - O.S. ORIGINAL STONE
 - B.C. BRASS CAP
 - A.C. ALUMINUM CAP
 - R.C. REBAR WITH CAP
 - AFN AUDITOR FILE NUMBER
 - LCR LAND CORNER RECORD
 - B.L.M. BUREAU OF LAND MANAGEMENT
 - B.O.R. BUREAU OF RECLAMATION
 - B.I.A. BUREAU OF INDIAN AFFAIRS
 - U.S.A.C.E. UNITED STATES ARMY CORPS OF ENGINEERS
 - W.D.N.R. WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES



MAP PROJECTION / BASIS OF BEARING

UNITS: U.S. SURVEY FEET
 HORIZONTAL DATUM: NAD 83/1991 ADJUSTMENT
 VERTICAL DATUM: NAVD 83
 PROJECTION: WASHINGTON STATE COORDINATE SYSTEM-NORTH ZONE
 GEOID: GEOID 99 (CONUS)

BEARINGS ARE BASED ON THE WASHINGTON STATE COORDINATE SYSTEM, NORTH ZONE, DERIVED FROM GPS OBSERVATIONS. THE DISTANCES SHOWN ON THIS MAP HAVE BEEN PROJECTED TO THE WASHINGTON STATE PLANE COORDINATE GRID. MULTIPLY THE DISTANCES SHOWN BY A FACTOR OF 1.00028169 TO OBTAIN THE ACTUAL GROUND DISTANCE.

META DATA AS DERIVED BY GPS OBSERVATIONS ON A 3" BRASS CAP AT THE INTERSECTION OF THE LINE COMMON TO INDIAN ALLOTMENTS 24 & 25, AND THE PROJECT BOUNDARY OF THE WELLS HYDROELECTRIC PROJECT SHOWN HEREON, IS AS FOLLOWS:
 LATITUDE: N 48° 02' 44.8362"
 LONGITUDE: W 119° 54' 53.8856"
 ELLIPSOID HEIGHT: 725.89'
 ELEVATION: 788.83'
 CONVERGENCE ANGLE: 0° 41' 01"
 COMBINED SCALE FACTOR: 0.99992833

Erlandsen
 SURVEYOR & ENGINEER

BRUNSWICK (509) 833-2329
 CHIEFLAP (509) 802-4199
 E. BENTON (509) 804-2002
 EPHWATA (509) 754-2326

DATE: 5/9/2009 LAYOUT: 05/SHEET-11
 FILE NO: T29-R23-302
 JOB NO: 65533.00 TOLL FREE: (800) 732-7442

SCALE: 1" = 300'

T. 29 N. R. 23 E. W.M.
 SECTION 2
 OKANOGAN COUNTY

SURVEYOR'S CERTIFICATE:
 I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREON WAS UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON, AND I HEREBY DO SOLEMNLY SWORE TO THE ACCURACY THEREOF IN THE CODE OF FEDERAL REGULATIONS 1927R-41

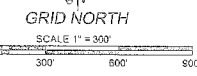
RODER ERLANDSEN
 PROFESSIONAL LAND SURVEYOR
 STATE OF WASHINGTON CERTIFICATE NO. 23599

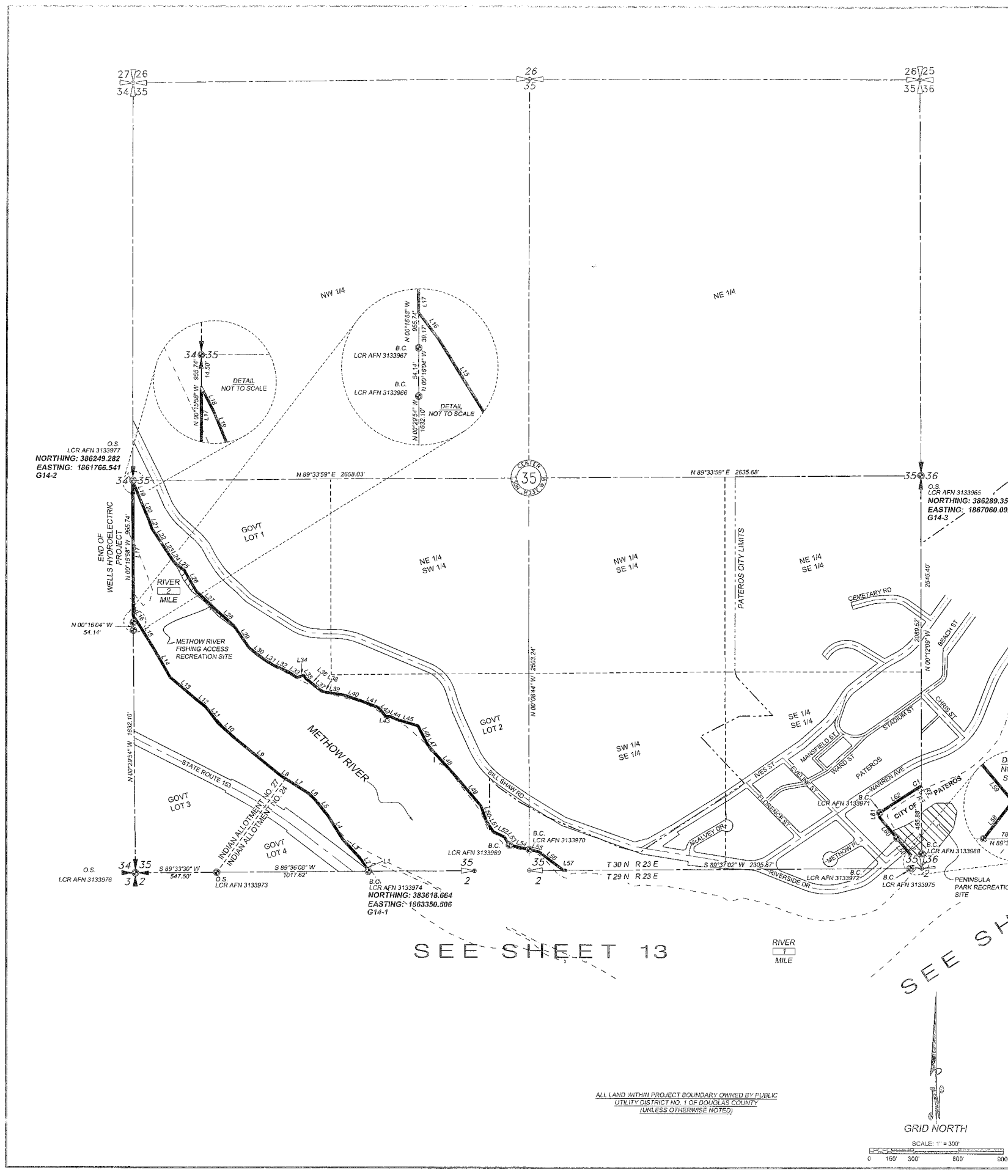
PROJECT BOUNDARY & LOCATION MAP
 WELLS HYDROELECTRIC PROJECT

PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
 EAST WENATCHEE, WASHINGTON

EXHIBIT G, SHEET 13 OF 64 FERC PROJECT NO. 2149

ALL LAND WITHIN PROJECT BOUNDARY OWNED BY PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY (UNLESS OTHERWISE NOTED)

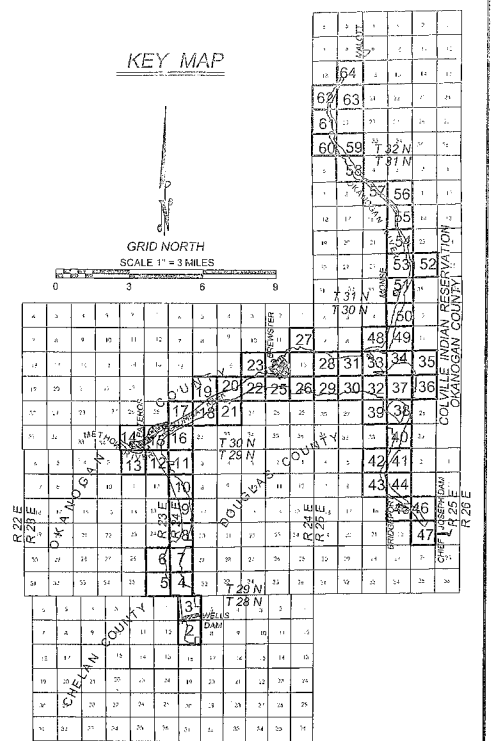




| LINE | BEARING | LENGTH |
|------|---------------|---------|
| L1 | N 25°14'53" W | 18.00' |
| L2 | N 33°07'22" W | 83.18' |
| L3 | N 42°49'19" W | 177.79' |
| L4 | N 31°27'57" W | 178.56' |
| L5 | N 35°20'43" W | 145.87' |
| L6 | N 47°11'13" W | 62.36' |
| L7 | N 57°28'51" W | 180.58' |
| L8 | N 57°29'06" W | 35.24' |
| L9 | N 50°50'38" W | 399.08' |
| L10 | N 48°08'32" W | 152.97' |
| L11 | N 37°02'56" W | 137.20' |
| L12 | N 51°57'21" W | 85.05' |
| L13 | N 49°42'48" W | 227.12' |
| L14 | N 29°27'06" W | 226.95' |
| L15 | N 31°55'36" W | 215.51' |
| L16 | N 37°32'33" W | 37.15' |
| L17 | N 00°15'58" W | 902.07' |
| L18 | S 27°05'16" E | 22.42' |
| L19 | S 22°16'38" E | 62.07' |
| L20 | S 23°21'31" E | 168.03' |
| L21 | S 18°32'28" E | 53.57' |
| L22 | S 33°19'29" E | 143.56' |
| L23 | S 33°37'02" E | 78.19' |
| L24 | S 34°54'02" E | 53.87' |
| L25 | S 51°17'57" E | 82.44' |
| L26 | S 30°12'19" E | 162.72' |
| L27 | S 48°37'39" E | 191.67' |
| L28 | S 48°25'28" E | 151.23' |
| L29 | S 34°48'05" E | 161.14' |
| L30 | S 51°58'15" E | 125.20' |
| L31 | S 57°40'35" E | 71.63' |
| L32 | S 66°09'41" E | 110.02' |
| L33 | S 66°56'48" E | 75.16' |
| L34 | N 09°45'32" E | 46.52' |
| L35 | S 32°52'39" E | 27.90' |
| L36 | S 51°08'17" E | 75.65' |
| L37 | S 51°29'14" E | 67.39' |
| L38 | S 71°34'55" E | 22.64' |
| L39 | S 61°04'03" E | 127.02' |
| L40 | S 71°28'34" E | 125.03' |
| L41 | S 68°36'07" E | 126.03' |
| L42 | S 38°58'59" E | 74.17' |
| L43 | S 05°43'57" E | 34.75' |
| L44 | S 63°32'47" E | 41.61' |
| L45 | S 73°32'34" E | 150.36' |
| L46 | S 26°52'20" E | 131.58' |
| L47 | S 36°21'36" E | 40.12' |
| L48 | S 42°03'36" E | 282.86' |
| L49 | S 40°09'53" E | 234.67' |
| L50 | S 19°31'24" E | 108.28' |
| L51 | S 33°38'49" E | 83.60' |
| L52 | S 64°26'15" E | 81.48' |
| L53 | S 32°49'43" E | 65.59' |
| L54 | S 77°10'19" E | 136.07' |
| L55 | S 77°24'43" E | 67.97' |
| L56 | S 52°57'40" E | 204.19' |
| L57 | S 88°10'13" E | 24.57' |
| L58 | N 37°50'27" E | 63.93' |
| L59 | N 39°49'11" W | 109.95' |
| L60 | N 39°51'35" W | 180.00' |
| L61 | N 00°31'35" W | 32.85' |
| L62 | N 56°56'31" E | 299.93' |

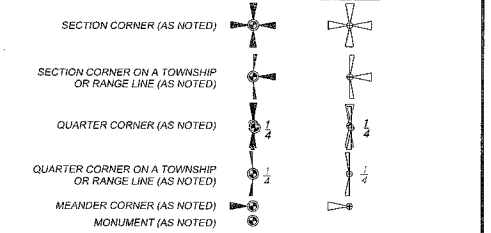
| CURVE | RADIUS | LENGTH | DELTA |
|-------|---------|--------|----------|
| C1 | 544.95' | 35.11' | 3°41'30" |

| LINE | BEARING |
|------|---------------|
| R1 | S 33°03'25" E |
| R2 | S 29°21'58" E |



LEGEND

| | |
|----------------------------|--|
| EXHIBIT G PROJECT BOUNDARY | --- |
| WATER LINE | --- |
| MEANDER LINE | --- |
| RECREATION SITE | --- |
| WILDLIFE AREA | --- |
| O.S. | ORIGINAL STONE |
| B.C. | BRASS CAP |
| A.C. | ALUMINUM CAP |
| R.C. | REBAR WITH CAP |
| AFN | LAND CORNER RECORD |
| LOR | BUREAU OF LAND MANAGEMENT |
| B.L.M. | BUREAU OF RECLAMATION |
| B.O.R. | BUREAU OF INDIAN AFFAIRS |
| B.I.A. | UNITED STATES ARMY |
| U.S.A.C.E. | WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES |
| W.D.N.R. | CORPS OF ENGINEERS |



MAP PROJECTION / BASIS OF BEARING

UNITS: U.S. SURVEY FEET
 HORIZONTAL DATUM: NAD 83/1991 ADJUSTMENT
 VERTICAL DATUM: NAVD 1983
 PROJECTION: WASHINGTON STATE COORDINATE SYSTEM-NORTH ZONE
 GEOID: GEOID 98 (CONUS)

BEARINGS ARE BASED ON THE WASHINGTON STATE COORDINATE SYSTEM, NORTH ZONE. DERIVED FROM GPS OBSERVATIONS. THE DISTANCES SHOWN ON THIS MAP HAVE BEEN PROJECTED TO THE WASHINGTON STATE PLANE COORDINATE GRID. MULTIPLY THE DISTANCES SHOWN BY A FACTOR OF 1.00009144 TO OBTAIN THE ACTUAL GROUND DISTANCE.

META DATA AS DERIVED BY GPS OBSERVATIONS ON A 3" BRASS CAP AT THE INTERSECTION OF THE NORTH-SOUTH CENTERLINE OF SECTION 35 WITH THE PROJECT BOUNDARY OF THE WELLS HYDROELECTRIC PROJECT SHOWN HEREON, IS AS FOLLOWS:

LATITUDE: N 48° 02' 54.3221"
 LONGITUDE: W 119° 55' 02.7699"
 ELLIPSOID HEIGHT: 719.71'
 ELEVATION: 782.31'
 CONVERGENCE ANGLE: 0° 40' 55"
 COMBINED SCALE FACTOR: 0.99990856

SEE SHEET 15

SEE SHEET 12

SEE SHEET 13

Erlandsen
 SURVEYORS & ENGINEERS
 1100 W. 10th Street, Wenatchee, WA 98801
 (509) 662-2420
 (509) 662-4100
 (509) 662-5200
 (509) 662-3326

DRAWN BY: DKG/LOD LAYOUT: OSHER1-14
 DATE: 8/31/2009 FILE NO: 730-R23-535
 SCALE: 1" = 300' JOB NO: 0555000 TOLL FREE: (800) 132-7442

**T. 30 N. R. 23 E. W.M.
 SECTION 35
 OKANOGAN COUNTY**

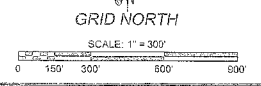
SURVEYOR'S CERTIFICATE:
 I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREON WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON, AND I CERTIFY THAT THE ACCURACY REQUIREMENTS OF THE CODE OF FEDERAL REGULATIONS FACTS-11

ROGER ERLANDSEN
 PROFESSIONAL LAND SURVEYOR
 STATE OF WASHINGTON CERTIFICATE NO. 23899

PROJECT BOUNDARY & LOCATION MAP
WELLS HYDROELECTRIC PROJECT
PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
EAST WENATCHEE, WASHINGTON

EXHIBIT G, SHEET 14 OF 64 FERC PROJECT NO. 2149

ALL LAND WITHIN PROJECT BOUNDARY OWNED BY PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY (UNLESS OTHERWISE NOTED)

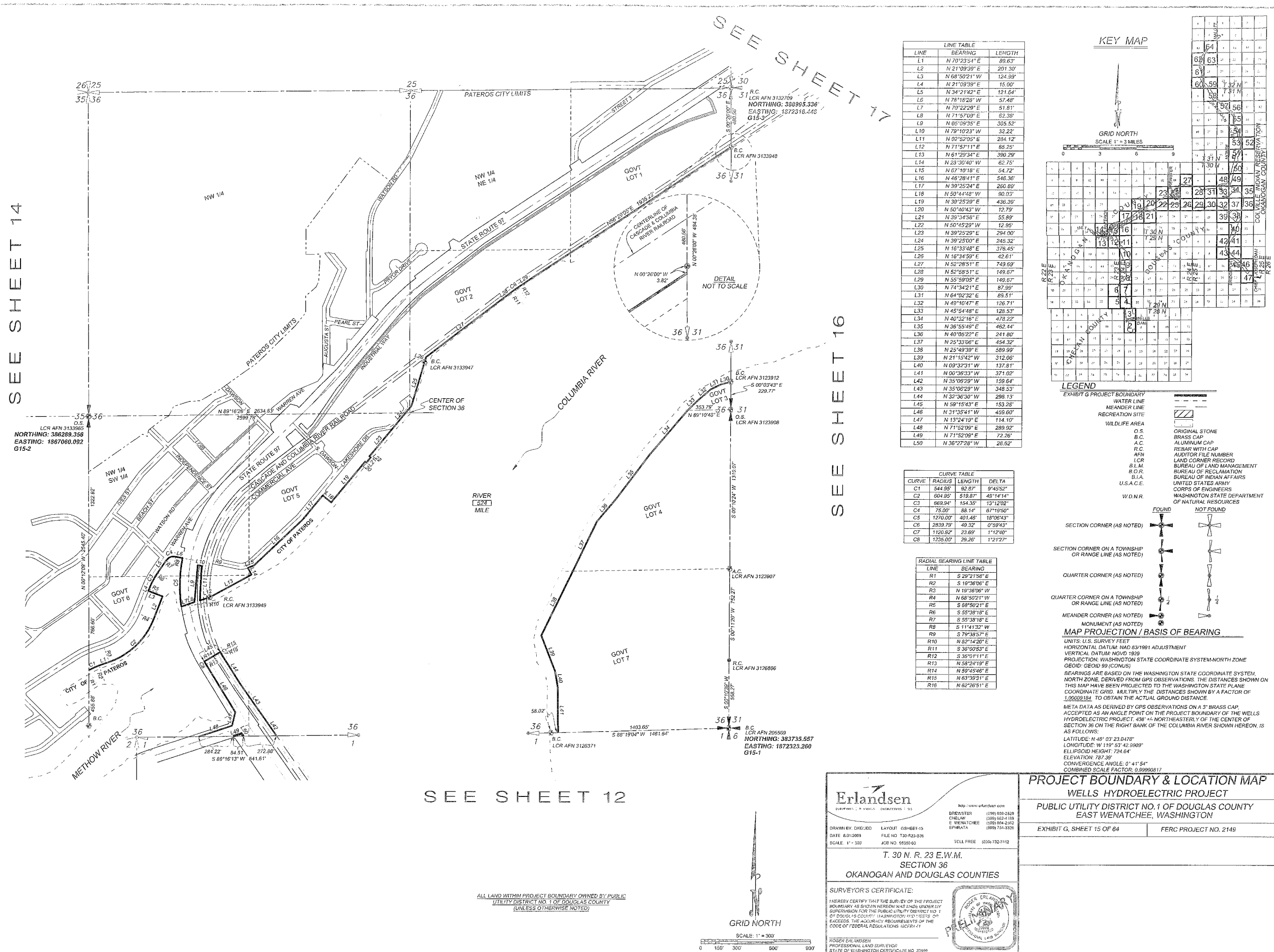


SEE SHEET 14

SEE SHEET 17

SEE SHEET 16

SEE SHEET 12



LINE TABLE

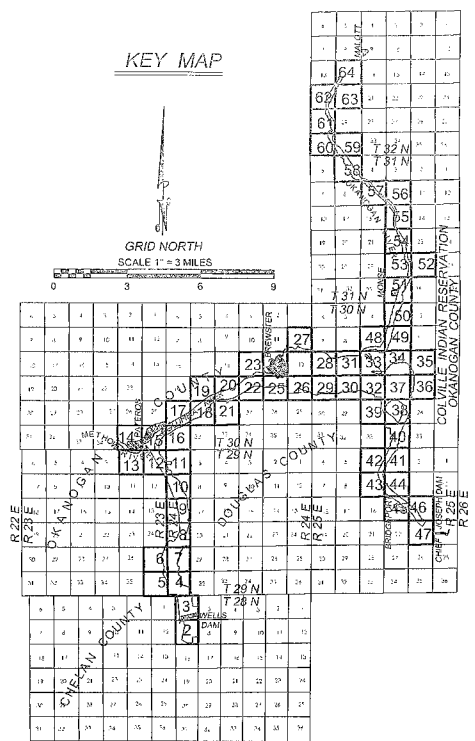
| LINE | BEARING | LENGTH |
|------|---------------|---------|
| L1 | N 70°23'54" E | 89.63' |
| L2 | N 21°09'39" E | 201.30' |
| L3 | N 68°50'21" W | 124.39' |
| L4 | N 21°09'39" E | 15.00' |
| L5 | N 34°21'42" E | 121.64' |
| L6 | N 75°16'28" W | 57.48' |
| L7 | N 70°22'29" E | 51.81' |
| L8 | N 71°57'09" E | 62.38' |
| L9 | N 05°09'35" E | 305.52' |
| L10 | N 79°10'23" W | 32.22' |
| L11 | N 02°52'05" E | 284.12' |
| L12 | N 71°57'11" E | 85.25' |
| L13 | N 61°29'34" E | 300.29' |
| L14 | N 23°30'40" W | 62.75' |
| L15 | N 67°10'18" E | 54.72' |
| L16 | N 46°28'41" E | 546.36' |
| L17 | N 39°25'24" E | 260.89' |
| L18 | N 50°44'42" W | 90.03' |
| L19 | N 30°25'29" E | 436.39' |
| L20 | N 50°40'43" W | 12.79' |
| L21 | N 39°34'58" E | 55.89' |
| L22 | N 50°45'29" W | 12.95' |
| L23 | N 39°25'29" E | 294.00' |
| L24 | N 39°25'00" E | 245.32' |
| L25 | N 16°33'48" E | 376.45' |
| L26 | N 16°34'59" E | 42.61' |
| L27 | N 52°28'51" E | 743.69' |
| L28 | N 52°58'51" E | 149.67' |
| L29 | N 55°59'05" E | 149.67' |
| L30 | N 74°34'21" E | 87.99' |
| L31 | N 64°02'32" E | 89.51' |
| L32 | N 49°10'47" E | 126.71' |
| L33 | N 45°54'48" E | 128.33' |
| L34 | N 40°52'16" E | 473.22' |
| L35 | N 36°55'49" E | 462.44' |
| L36 | N 40°05'22" E | 241.80' |
| L37 | N 25°33'06" E | 454.32' |
| L38 | N 25°49'39" E | 589.99' |
| L39 | N 21°15'42" W | 312.06' |
| L40 | N 09°32'31" W | 137.81' |
| L41 | N 00°36'33" W | 371.02' |
| L42 | N 35°08'29" W | 159.64' |
| L43 | N 35°06'29" W | 348.53' |
| L44 | N 32°36'30" W | 298.13' |
| L45 | N 59°15'43" E | 153.28' |
| L46 | N 31°55'41" W | 455.60' |
| L47 | N 13°24'19" E | 114.10' |
| L48 | N 71°52'09" E | 289.92' |
| L49 | N 71°52'09" E | 72.26' |
| L50 | N 36°27'28" W | 28.62' |

CURVE TABLE

| CURVE | RADIUS | LENGTH | DELTA |
|-------|----------|---------|-----------|
| C1 | 544.95' | 92.87' | 9°45'52" |
| C2 | 604.95' | 513.87' | 48°14'14" |
| C3 | 669.94' | 164.35' | 13°12'02" |
| C4 | 75.00' | 84.14' | 67°19'50" |
| C5 | 1270.00' | 401.46' | 18°06'43" |
| C6 | 2839.79' | 49.32' | 0°59'43" |
| C7 | 1120.62' | 23.69' | 1°12'40" |
| C8 | 1235.00' | 29.26' | 1°21'27" |

RADIAL BEARING LINE TABLE

| LINE | BEARING |
|------|---------------|
| R1 | S 28°21'58" E |
| R2 | S 19°36'06" E |
| R3 | N 19°36'06" W |
| R4 | N 68°50'21" W |
| R5 | S 68°50'21" E |
| R6 | S 53°39'19" E |
| R7 | S 55°33'16" E |
| R8 | S 11°41'32" W |
| R9 | S 79°38'57" E |
| R10 | N 62°14'20" E |
| R11 | S 36°00'53" E |
| R12 | S 35°01'11" E |
| R13 | N 59°45'46" E |
| R14 | N 59°45'46" E |
| R15 | N 63°33'31" E |
| R16 | N 62°26'51" E |



LEGEND

| | | | | | | |
|----------------------------|------------|--------------|-----------------|---------------|------------|--|
| EXHIBIT G PROJECT BOUNDARY | WATER LINE | MEANDER LINE | RECREATION AREA | WILDLIFE AREA | O.S. | ORIGINAL STONE |
| | | | | | B.C. | BRASS CAP |
| | | | | | R.C. | ALUMINUM CAP |
| | | | | | AFN | REBAR WITH CAP |
| | | | | | LCR | AUDITOR FILE NUMBER |
| | | | | | B.L.M. | LAND CORNER RECORD |
| | | | | | B.O.R. | BUREAU OF LAND MANAGEMENT |
| | | | | | B.I.A. | BUREAU OF RECLAMATION |
| | | | | | U.S.A.C.E. | BUREAU OF INDIAN AFFAIRS |
| | | | | | U.S.A.C.E. | UNITED STATES ARMY |
| | | | | | W.D.N.R. | CORPS OF ENGINEERS |
| | | | | | | WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES |

MAP PROJECTION / BASIS OF BEARING

UNITS: U.S. SURVEY FEET
 HORIZONTAL DATUM: NAD 83/1981 ADJUSTMENT
 VERTICAL DATUM: MVD 1929
 PROJECTION: WASHINGTON STATE COORDINATE SYSTEM-NORTH ZONE
 GEOID: GEOID 99 (CONUS)
 BEARINGS ARE BASED ON THE WASHINGTON STATE COORDINATE SYSTEM, NORTH ZONE, DERIVED FROM GPS OBSERVATIONS. THE DISTANCES SHOWN ON THIS MAP HAVE BEEN PROJECTED TO THE WASHINGTON STATE PLANE COORDINATE GRID. MULTIPLY THE DISTANCES SHOWN BY A FACTOR OF 1.0000184 TO OBTAIN THE ACTUAL GROUND DISTANCE.
 META DATA AS DERIVED BY GPS OBSERVATIONS ON A 3" BRASS CAP, ACCEPTED AS AN ANGLE POINT ON THE PROJECT BOUNDARY OF THE WELLS HYDROELECTRIC PROJECT, 436' ± NORTHEASTERLY OF THE CENTER OF SECTION 36 ON THE RIGHT BANK OF THE COLUMBIA RIVER SHOWN HEREON, IS AS FOLLOWS:
 LATITUDE: N 48° 03' 23.0478"
 LONGITUDE: W 119° 53' 42.9909"
 ELLIPSOID HEIGHT: 724.64'
 ELEVATION: 787.35'
 CONVERGENCE ANGLE: 0° 41' 54"
 COMBINED SCALE FACTOR: 0.99999817

Erlandsen
 SURVEYORS & ENGINEERS - P.L.L.C.
 10000 Erlandsen Court
 Everett, WA 98203
 (360) 855-2529
 (360) 852-4119
 (360) 852-5922
 (360) 954-3326

DRAWN BY: DK/UDD LAYOUT: OS/SHEE-15
 DATE: 6/31/2009 FILE NO: T30-R23-S36
 SCALE: 1" = 300' JOB NO: 65550-60 TOLL FREE: (800) 732-7142

T. 30 N. R. 23 E. W.M. SECTION 36 OKANOGAN AND DOUGLAS COUNTIES

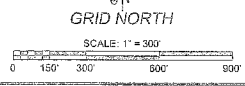
SURVEYOR'S CERTIFICATE:
 I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREON WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON, AND THAT THE DISTANCES AND BEARINGS SHOWN ON THIS MAP EXCEED THE ACCURACY REQUIREMENTS OF THE CODE OF FEDERAL REGULATIONS 18CFR1-21

TRUDY ERLANDSEN
 PROFESSIONAL LAND SURVEYOR
 STATE OF WASHINGTON CERTIFICATE NO. 23589

PROJECT BOUNDARY & LOCATION MAP
WELLS HYDROELECTRIC PROJECT
 PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
 EAST WENATCHEE, WASHINGTON

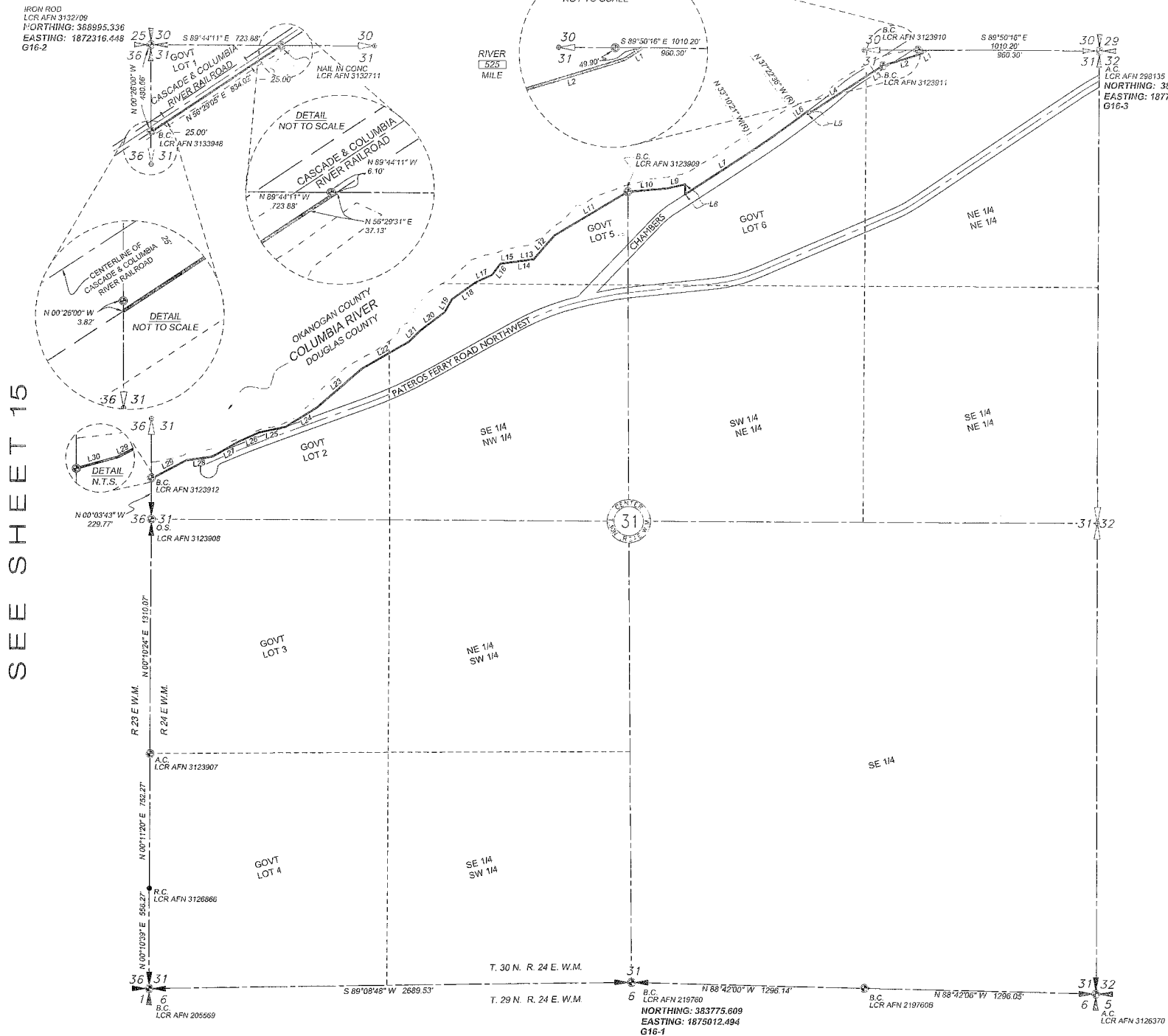
EXHIBIT G, SHEET 15 OF 64 FERC PROJECT NO. 2149

ALL LAND WITHIN PROJECT BOUNDARY OWNED BY PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY (UNLESS OTHERWISE NOTED)



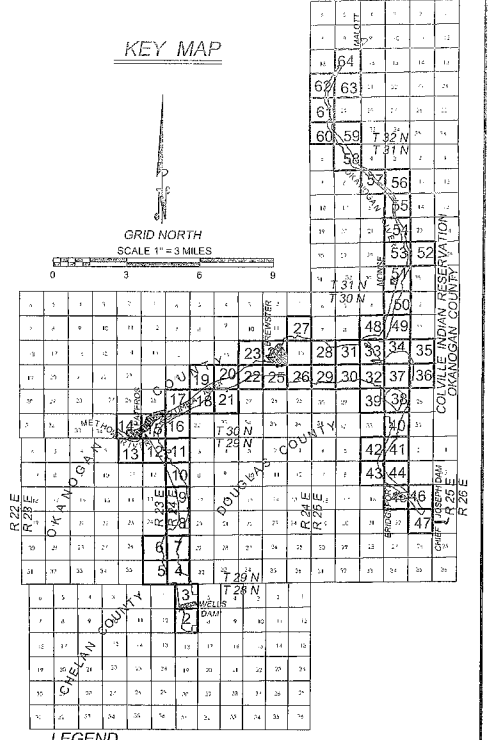
SEE SHEET 17

SEE SHEET 15

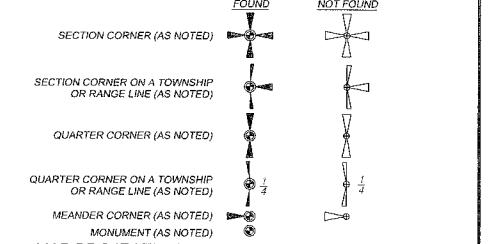


| LINE | BEARING | LENGTH |
|------|---------------|---------|
| L1 | S 77°09'37" W | 39.06' |
| L2 | S 72°52'57" W | 222.30' |
| L3 | S 57°20'52" W | 119.52' |
| L4 | S 56°45'31" W | 376.43' |
| L5 | N 00°14'00" W | 18.52' |
| L6 | S 52°37'24" W | 70.53' |
| L7 | S 56°49'38" W | 456.07' |
| L8 | N 00°13'25" W | 54.56' |
| L9 | S 77°37'07" W | 107.41' |
| L10 | S 85°02'59" W | 214.45' |
| L11 | S 59°01'04" W | 474.06' |
| L12 | S 41°05'18" W | 177.25' |
| L13 | S 81°15'37" W | 15.68' |
| L14 | S 82°12'53" W | 83.33' |
| L15 | S 82°14'35" W | 87.86' |
| L16 | S 38°05'18" W | 76.32' |
| L17 | S 65°37'44" W | 101.28' |
| L18 | S 53°58'51" W | 162.84' |
| L19 | S 29°04'38" W | 80.96' |
| L20 | S 52°44'05" W | 174.19' |
| L21 | S 44°16'07" W | 81.27' |
| L22 | S 59°46'48" W | 303.17' |
| L23 | S 48°57'34" W | 330.65' |
| L24 | S 58°12'22" W | 203.90' |
| L25 | S 77°57'38" W | 153.88' |
| L26 | S 65°56'11" W | 125.66' |
| L27 | S 59°54'25" W | 164.69' |
| L28 | S 81°54'38" W | 150.35' |
| L29 | S 62°05'48" W | 201.81' |
| L30 | S 74°29'17" W | 15.89' |

| CURVE | RADIUS | LENGTH | DELTA |
|-------|----------|---------|----------|
| C1 | 4056.37' | 297.64' | 4°12'15" |



- LEGEND**
- EXHIBIT G PROJECT BOUNDARY
 - WATER LINE
 - MEANDER LINE
 - RECREATION SITE
 - WILDLIFE AREA
 - O.S. ORIGINAL STONE
 - B.C. BRASS CAP
 - A.C. ALUMINUM CAP
 - R.C. REBAR WITH CAP
 - AFN AUDITOR FILE NUMBER
 - LCR LAND CORNER RECORD
 - B.L.M. BUREAU OF LAND MANAGEMENT
 - B.O.R. BUREAU OF RECLAMATION
 - B.I.A. BUREAU OF INDIAN AFFAIRS
 - U.S.A.C.E. UNITED STATES ARMY
 - W.D.N.R. WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES
 - CORPS OF ENGINEERS
 - WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES



MAP PROJECTION / BASIS OF BEARING

UNITS: U.S. SURVEY FEET
 HORIZONTAL DATUM: NAD 83/1991 ADJUSTMENT
 VERTICAL DATUM: NVD10 1928
 PROJECTION: WASHINGTON STATE COORDINATE SYSTEM-NORTH ZONE
 GEOID: GEOID 99 (CONUS)

BEARINGS ARE BASED ON THE WASHINGTON STATE COORDINATE SYSTEM, NORTH ZONE. DERIVED FROM GPS OBSERVATIONS. THE DISTANCES SHOWN ON THIS MAP HAVE BEEN PROJECTED TO THE WASHINGTON STATE PLANE COORDINATE GRID. MULTIPLY THE DISTANCES SHOWN BY A FACTOR OF 1.0000197 TO OBTAIN THE ACTUAL GROUND DISTANCE.

META DATA AS DERIVED BY GPS OBSERVATIONS ON A 3" BRASS CAP AT THE INTERSECTION OF THE NORTH-SOUTH CENTERLINE OF SECTION 31 LINE WITH THE PROJECT BOUNDARY OF THE WELLS HYDROELECTRIC PROJECT SHOWN HEREON, IS AS FOLLOWS:

LATITUDE: N 48° 05' 36.6843"
 LONGITUDE: W 119° 52' 26.7305"
 ELLIPSOID HEIGHT: 723.75'
 ELEVATION: 786.62'
 CONVERGENCE ANGLE: 0° 42' 51"
 COMBINED SCALE FACTOR: 0.999980814

SEE SHEET 11

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**T. 30 N. R. 24 E.W.M.
 SECTION 31
 OKANOGAN AND DOUGLAS COUNTIES**

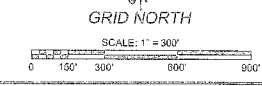
SURVEYOR'S CERTIFICATE:
 I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREON WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON AND MEETS THE REQUIREMENTS OF THE CODE OF FEDERAL REGULATIONS 19CFR 21.

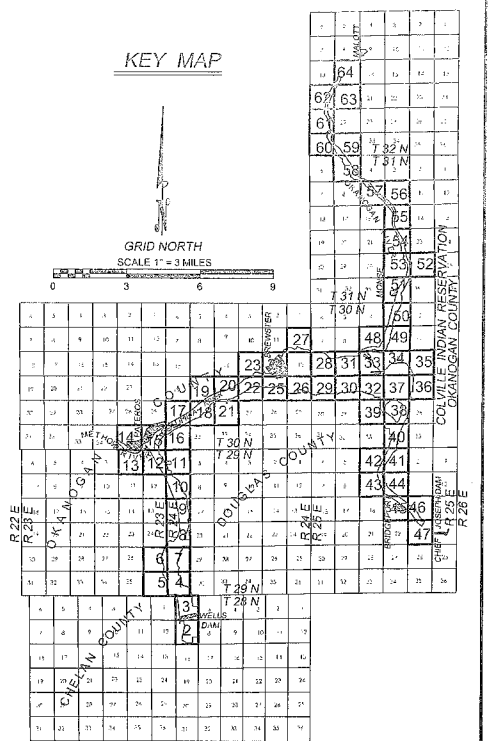
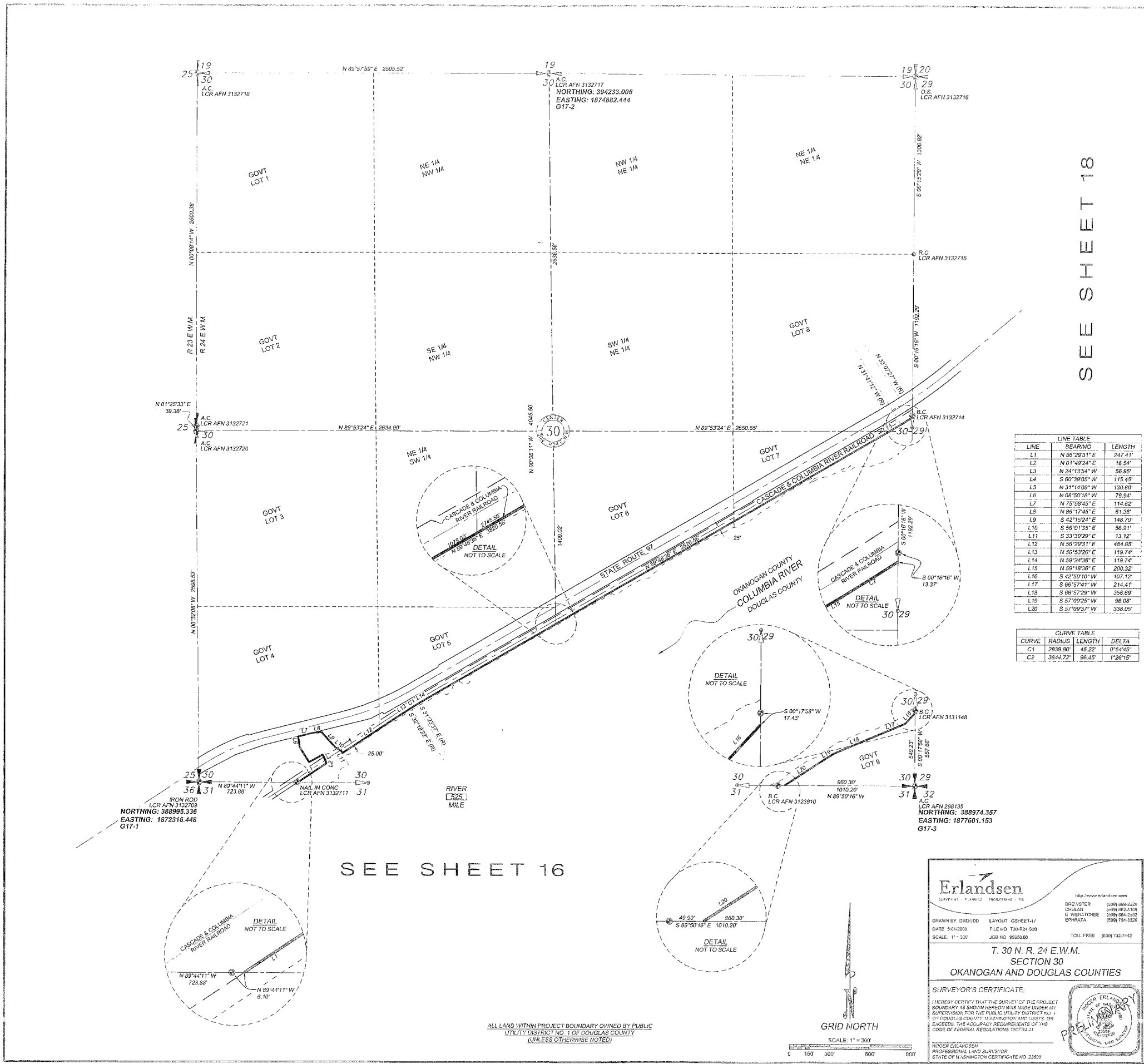
ROGER ERLANDSEN
 PROFESSIONAL LAND SURVEYOR
 STATE OF WASHINGTON CERTIFICATE NO. 23999

PROJECT BOUNDARY & LOCATION MAP
WELLS HYDROELECTRIC PROJECT
PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
EAST WENATCHEE, WASHINGTON

EXHIBIT G, SHEET 16 OF 64 FERC PROJECT NO. 2149

ALL LAND WITHIN PROJECT BOUNDARY OWNED BY PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY (UNLESS OTHERWISE NOTED)





| LINE | BEARING | LENGTH |
|------|---------------|---------|
| L1 | N 55°29'31" E | 247.41' |
| L2 | N 01°49'24" E | 16.54' |
| L3 | N 24°13'54" W | 56.95' |
| L4 | S 60°39'05" W | 115.45' |
| L5 | N 31°14'09" W | 130.80' |
| L6 | N 08°50'18" W | 79.91' |
| L7 | N 75°58'53" E | 114.82' |
| L8 | N 86°17'45" E | 81.38' |
| L9 | S 42°15'24" E | 148.70' |
| L10 | S 56°01'35" E | 56.91' |
| L11 | S 33°30'29" W | 13.12' |
| L12 | N 56°29'31" E | 484.85' |
| L13 | N 56°53'26" E | 179.74' |
| L14 | N 59°24'38" E | 179.74' |
| L15 | N 59°18'08" E | 200.32' |
| L16 | S 42°50'10" W | 107.12' |
| L17 | S 66°57'41" W | 214.41' |
| L18 | S 86°57'29" W | 356.69' |
| L19 | S 57°09'25" W | 96.08' |
| L20 | S 57°09'37" W | 338.05' |

| CURVE | RADIUS | LENGTH | DELTA |
|-------|----------|--------|----------|
| C1 | 2839.80' | 45.22' | 0°54'45" |
| C2 | 3844.72' | 96.45' | 1°26'15" |

- LEGEND**
- EXHIBIT G PROJECT BOUNDARY
 - WATER LINE
 - MEANDER LINE
 - RECREATION SITE
 - WILDLIFE AREA
 - O.S. ORIGINAL STONE
 - B.C. BRASS CAP
 - A.C. ALUMINUM CAP
 - R.C. REBAR WITH CAP
 - AFN AUDITOR FILE NUMBER
 - LCR LAND CORNER RECORD
 - B.L.M. BUREAU OF LAND MANAGEMENT
 - B.O.R. BUREAU OF RECLAMATION
 - B.I.A. BUREAU OF INDIAN AFFAIRS
 - U.S.A.C.E. UNITED STATES ARMY
 - CORPS OF ENGINEERS
 - WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES
 - W.D.N.R.
- MAP PROJECTION / BASIS OF BEARING**
- UNITS: U.S. SURVEY FEET
 HORIZONTAL DATUM: NAD 83/1991 ADJUSTMENT
 VERTICAL DATUM: NGVD 1929
 PROJECTION: WASHINGTON STATE COORDINATE SYSTEM-NORTH ZONE
 GEOID: GEOID 99 (CONUS)
- BEARINGS ARE BASED ON THE WASHINGTON STATE COORDINATE SYSTEM, NORTH ZONE, DERIVED FROM GPS OBSERVATIONS. THE DISTANCES SHOWN ON THIS MAP HAVE BEEN PROJECTED TO THE WASHINGTON STATE PLANE COORDINATE GRID. MULTIPLY THE DISTANCES SHOWN BY A FACTOR OF 1.00003201 TO OBTAIN THE ACTUAL GROUND DISTANCE.
- META DATA AS DERIVED BY GPS OBSERVATIONS ON A 3" BRASS CAP ACCEPTED AS BEING ON THE EAST LINE OF SECTION 30, 13.37' NORTHERLY OF THE INTERSECTION OF SAID EAST LINE WITH THE PROJECT BOUNDARY OF THE WELLS HYDROELECTRIC PROJECT SHOWN HEREON, IS AS FOLLOWS:
- LATITUDE: N 48° 04' 11.1899"
 LONGITUDE: W 115° 57' 47.8916"
 ELLIPSOID HEIGHT: 723.59'
 ELEVATION: 786.47'
 CONVERGENCE ANGLE: 0° 43' 20"
 COMBINED SCALE FACTOR: 0.99990800

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 E. WINGO (509) 468-2520
 EPHRATA (509) 754-3328

DRAWN BY: DKO/DOD LAYOUT: GSHEET-17
 DATE: 5/31/2009 FILE NO: T30-R24-930
 SCALE: 1" = 300' JOB NO: 95550.00 TOLL FREE: (800) 732-7412

**T. 30 N. R. 24 E. W.M.
 SECTION 30
 OKANOGAN AND DOUGLAS COUNTIES**

SURVEYOR'S CERTIFICATE:
 I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREON WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON AND I CERTIFY THAT I EXCEEDED THE ACCURACY REQUIREMENTS OF THE CODE OF FEDERAL REGULATIONS 19CFR17.11

RODER ERLANDSEN
 PROFESSIONAL LAND SURVEYOR
 STATE OF WASHINGTON CERTIFICATE NO. 23599

PROJECT BOUNDARY & LOCATION MAP
WELLS HYDROELECTRIC PROJECT
PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
EAST WENATCHEE, WASHINGTON

EXHIBIT G, SHEET 17 OF 64 FERC PROJECT NO. 2149

ALL LAND WITHIN PROJECT BOUNDARY OWNED BY PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY (UNLESS OTHERWISE NOTED)

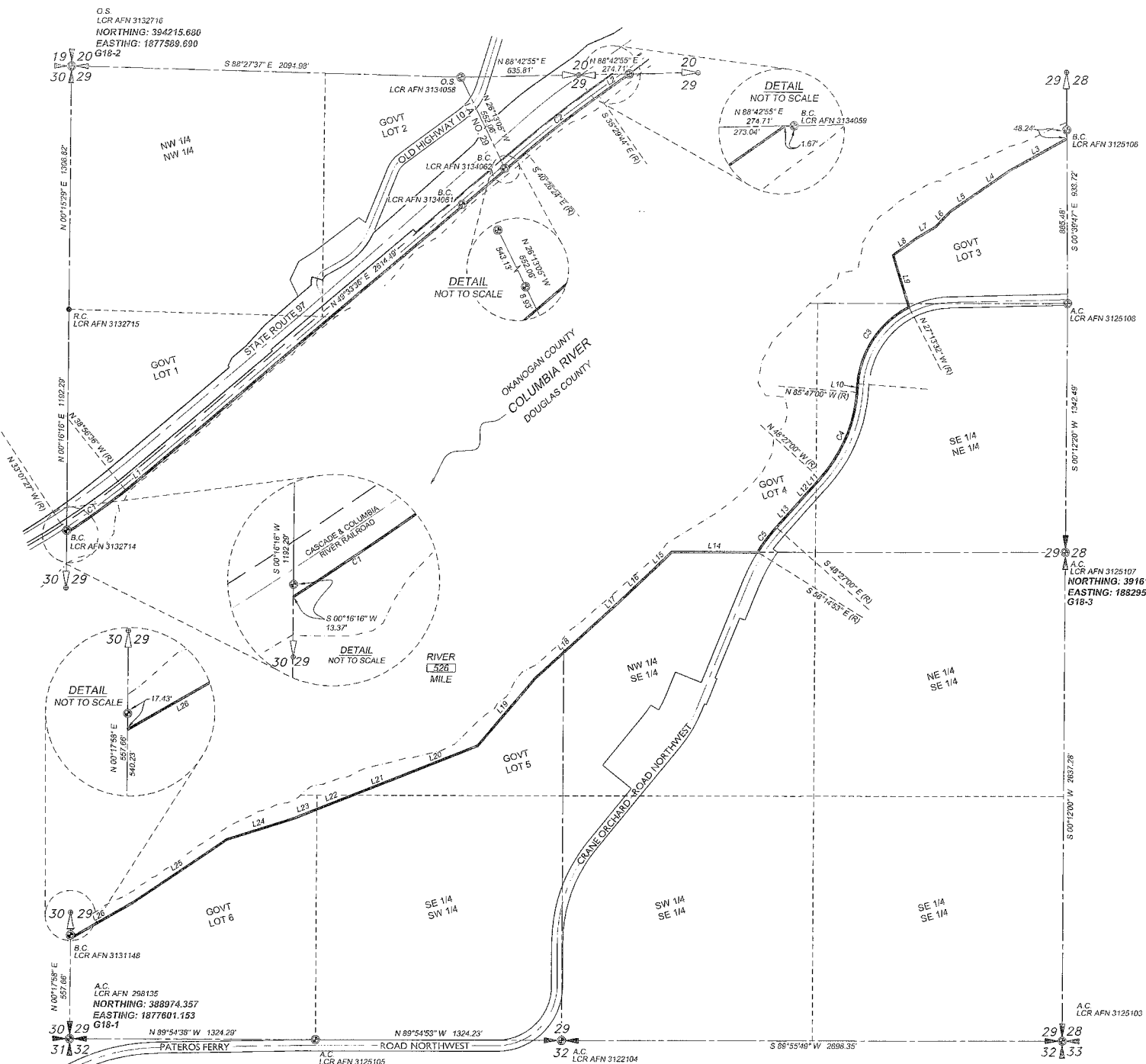
SCALE: 1" = 300'

GRID NORTH

SEE SHEET 19

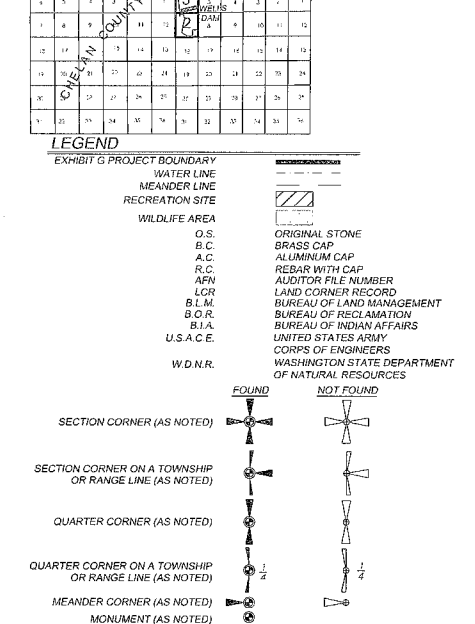
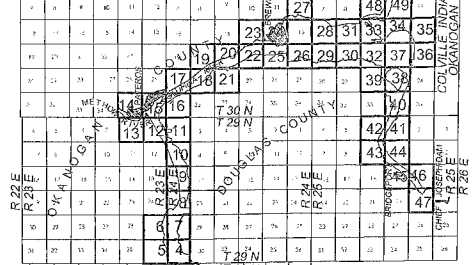
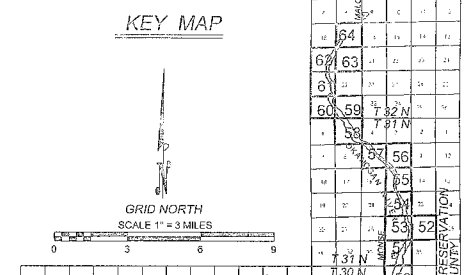
SEE SHEET 17

SEE SHEET 20



| LINE | BEARING | LENGTH |
|------|---------------|--------|
| L1 | N 50°03'36" E | 200.32 |
| L2 | N 54°30'16" E | 200.32 |
| L3 | S 80°47'34" W | 355.03 |
| L4 | S 55°22'58" W | 210.49 |
| L5 | S 55°04'19" W | 165.72 |
| L6 | S 43°30'32" W | 119.95 |
| L7 | S 59°03'00" W | 114.70 |
| L8 | S 54°08'18" W | 159.35 |
| L9 | S 17°21'14" E | 292.28 |
| L10 | S 04°13'00" W | 46.05 |
| L11 | S 41°33'00" W | 42.34 |
| L12 | S 41°33'00" W | 136.53 |
| L13 | S 11°33'00" W | 175.18 |
| L14 | S 89°54'11" W | 481.71 |
| L15 | S 45°27'53" W | 135.41 |
| L16 | S 46°22'06" W | 260.80 |
| L17 | S 47°37'01" W | 77.46 |
| L18 | S 47°37'01" W | 238.36 |
| L19 | S 30°16'49" W | 479.52 |
| L20 | S 89°00'02" W | 343.46 |
| L21 | S 89°19'33" W | 281.07 |
| L22 | S 68°19'33" W | 205.45 |
| L23 | S 68°19'34" W | 131.72 |
| L24 | S 72°25'51" W | 379.62 |
| L25 | S 55°58'31" W | 607.95 |
| L26 | S 80°00'49" W | 388.11 |

| CURVE | RADIUS | LENGTH | DELTA |
|-------|----------|---------|-----------|
| C1 | 3844.72' | 390.48' | 5°49'09" |
| C2 | 5767.80' | 497.74' | 4°56'40" |
| C3 | 507.46' | 518.64' | 58°33'28" |
| C4 | 788.51' | 513.79' | 37°20'00" |
| C5 | 984.92' | 166.43' | 9°47'53" |



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DRAWN BY: DRG/JDD LAYOUT: GSH/ET-18
DATE: 5/01/2008 FILE NO: T36-R24-829
SCALE: 1" = 300' JOB NO: 96550.00 TOLL FREE: (800) 730-7142

T. 30 N. R. 24 E. W.M.
SECTION 29
OKANOGAN AND DOUGLAS COUNTIES

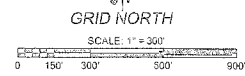
SURVEYOR'S CERTIFICATE:
I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREON WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON AND ASSETS OF SAID DISTRICT. THE ACCURACY OF THE SURVEY IS IN ACCORDANCE WITH THE CODE OF FEDERAL REGULATIONS (30CFR 1.1)

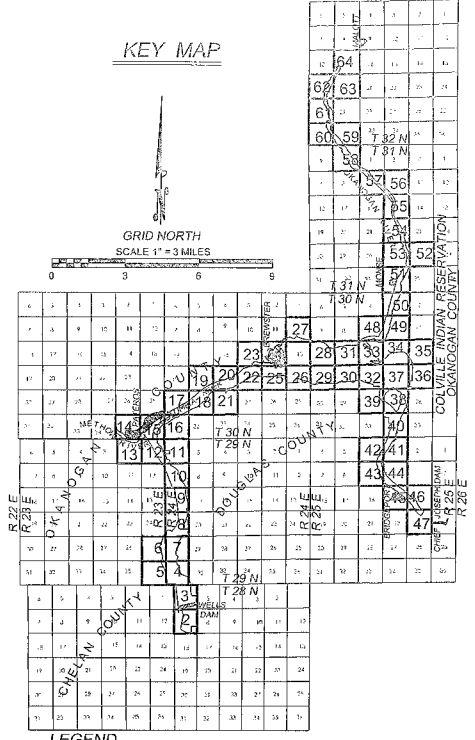
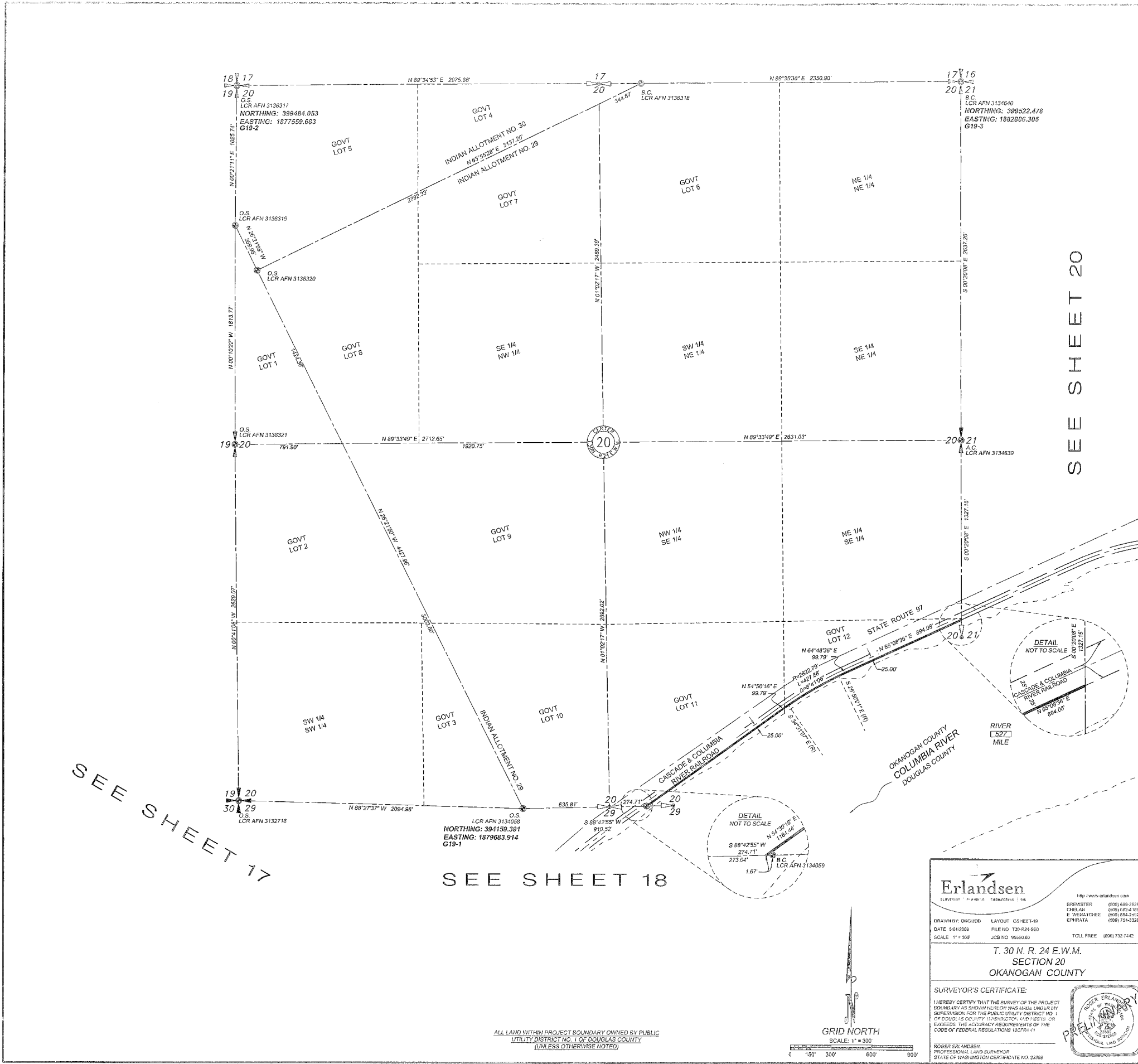
ROGER E. WERBON
PROFESSIONAL LAND SURVEYOR
STATE OF WASHINGTON CERTIFICATE NO. 23999

PROJECT BOUNDARY & LOCATION MAP
WELLS HYDROELECTRIC PROJECT
PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
EAST WENATCHEE, WASHINGTON

EXHIBIT G, SHEET 18 OF 64 FERC PROJECT NO. 2149

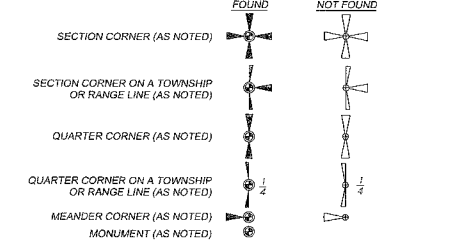
ALL LAND WITHIN PROJECT BOUNDARY OWNED BY PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY (UNLESS OTHERWISE NOTED)





LEGEND

| | |
|----------------------------|--|
| EXHIBIT G PROJECT BOUNDARY | |
| WATER LINE | |
| MEANDER LINE | |
| RECREATION SITE | |
| WILDLIFE AREA | |
| O.S. | ORIGINAL STONE |
| B.C. | BRASS CAP |
| A.C. | ALUMINUM CAP |
| R.C. | REBAR WITH CAP |
| AFN | AUDITOR FILE NUMBER |
| LCR | LAND CORNER RECORD |
| B.L.M. | BUREAU OF LAND MANAGEMENT |
| B.O.R. | BUREAU OF RECLAMATION |
| B.I.A. | BUREAU OF INDIAN AFFAIRS |
| U.S.A.C.E. | UNITED STATES ARMY CORPS OF ENGINEERS |
| W.D.N.R. | WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES |



SEE SHEET 17

SEE SHEET 18

SEE SHEET 20

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 (509) 684-2522
 (509) 754-3536

DRAWN BY: DRICLOUD LAYOUT: OSHEE-10
 DATE: 08/12/2009 FILE NO: T30-R24-S20
 SCALE: 1" = 300' JOB NO: 95550-00 TOLL FREE: (800) 732-7442

**T. 30 N. R. 24 E.W.M.
 SECTION 20
 OKANOGAN COUNTY**

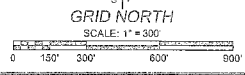
SURVEYOR'S CERTIFICATE:
 I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREON WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON, AND THAT THE DISTANCES AND BEARINGS EXCEEDED THE ACCURACY REQUIREMENTS OF THE CODE OF FEDERAL REGULATIONS 182CFR5.11

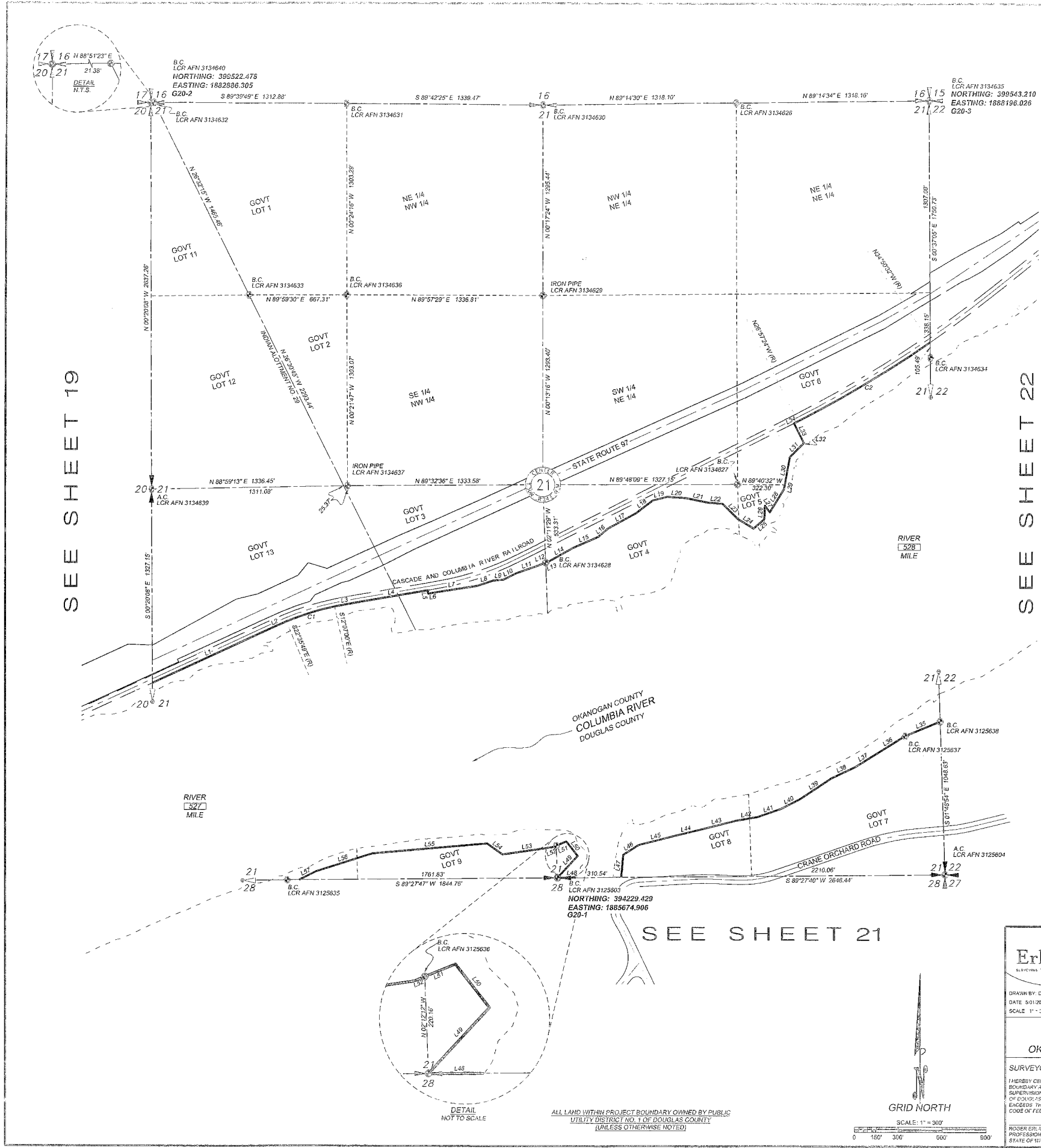
ROBERT ERLANDSEN
 PROFESSIONAL LAND SURVEYOR
 STATE OF WASHINGTON CERTIFICATE NO. 22898

PROJECT BOUNDARY & LOCATION MAP
WELLS HYDROELECTRIC PROJECT
PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
EAST WENATCHEE, WASHINGTON

EXHIBIT G, SHEET 19 OF 64 FERC PROJECT NO. 2149

ALL LAND WITHIN PROJECT BOUNDARY OWNED BY PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY (UNLESS OTHERWISE NOTED)





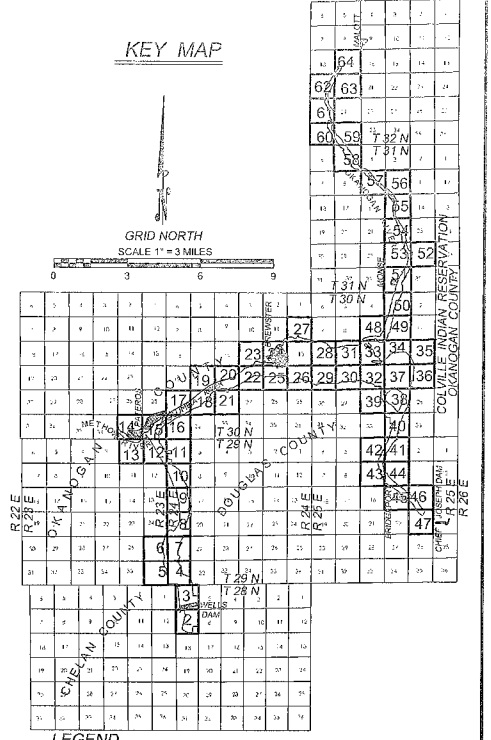
SEE SHEET 19

SEE SHEET 22

SEE SHEET 21

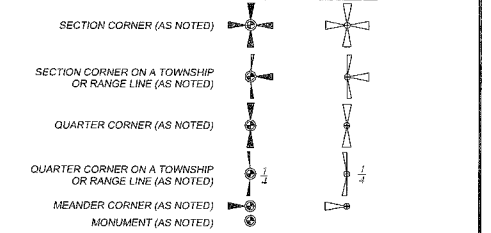
| LINE | BEARING | LENGTH |
|------|---------------|---------|
| L1 | N 65°08'36" E | 657.19' |
| L2 | N 65°53'36" E | 149.50' |
| L3 | N 79°23'36" E | 149.50' |
| L4 | N 80°08'36" E | 494.22' |
| L5 | S 10°29'44" E | 23.20' |
| L6 | N 79°30'16" E | 49.85' |
| L7 | N 80°57'10" E | 287.14' |
| L8 | N 71°44'55" E | 116.92' |
| L9 | N 84°01'56" E | 71.37' |
| L10 | N 63°09'03" E | 84.82' |
| L11 | N 70°31'08" E | 156.90' |
| L12 | N 67°49'30" E | 48.51' |
| L13 | S 67°49'37" E | 28.58' |
| L14 | N 60°45'16" E | 181.64' |
| L15 | N 86°11'10" E | 191.09' |
| L16 | N 49°20'03" E | 86.78' |
| L17 | N 60°59'10" E | 218.79' |
| L18 | N 52°23'06" E | 142.63' |
| L19 | N 75°44'10" E | 102.06' |
| L20 | S 66°31'29" E | 123.38' |
| L21 | S 78°11'33" E | 159.74' |
| L22 | S 88°13'58" E | 96.09' |
| L23 | S 45°14'52" E | 147.53' |
| L24 | S 59°42'52" E | 125.94' |
| L25 | N 48°51'49" E | 96.87' |
| L26 | N 02°07'27" E | 92.93' |
| L27 | S 37°34'28" E | 56.06' |
| L28 | N 31°23'31" E | 186.28' |
| L29 | N 10°13'15" E | 29.42' |
| L30 | N 10°13'18" E | 191.72' |
| L31 | N 44°25'34" E | 133.44' |
| L32 | N 46°01'48" E | 3.74' |
| L33 | N 26°58'10" W | 150.73' |
| L34 | N 63°02'36" E | 29.27' |
| L35 | S 67°25'32" W | 260.27' |
| L36 | S 67°50'19" W | 241.54' |
| L37 | S 68°21'23" W | 158.41' |
| L38 | S 64°29'54" W | 182.27' |
| L39 | S 66°20'18" W | 254.93' |
| L40 | S 63°00'43" W | 148.38' |
| L41 | S 70°50'50" W | 170.86' |
| L42 | S 80°08'55" W | 145.01' |
| L43 | S 75°40'29" W | 264.81' |
| L44 | S 69°17'00" W | 154.72' |
| L45 | S 75°33'32" W | 257.64' |
| L46 | S 68°59'30" W | 123.25' |
| L47 | S 05°20'09" W | 154.39' |
| L48 | S 89°27'40" W | 125.84' |
| L49 | N 42°43'04" E | 204.12' |
| L50 | N 38°09'35" W | 125.45' |
| L51 | S 67°36'00" W | 75.08' |
| L52 | S 67°53'59" W | 25.99' |
| L53 | S 81°33'43" W | 347.34' |
| L54 | N 54°43'54" W | 129.86' |
| L55 | S 84°51'48" W | 783.47' |
| L56 | S 72°16'15" W | 404.91' |
| L57 | S 63°17'55" W | 127.27' |

| CURVE | RADIUS | LENGTH | DELTA |
|-------|----------|----------|-----------|
| C1 | 1854.86' | 344.77' | 10°23'49" |
| C2 | 7663.87' | 1054.77' | 7°53'08" |



LEGEND

| | |
|----------------------------|--|
| EXHIBIT G PROJECT BOUNDARY | ORIGINAL STONE |
| WATER LINE | BRASS CAP |
| MEANDER LINE | ALUMINUM CAP |
| RECREATION SITE | R.C. |
| WILDLIFE AREA | REBAR WITH CAP |
| | AFN |
| | LCR |
| | B.L.M. |
| | B.O.R. |
| | B.I.A. |
| | U.S.A.C.E. |
| | CORPS OF ENGINEERS |
| | WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES |
| | W.D.N.R. |



MAP PROJECTION / BASIS OF BEARING

UNITS: U.S. SURVEY FEET
 HORIZONTAL DATUM: NAD 83/1991 ADJUSTMENT
 VERTICAL DATUM: NGVD 1929
 PROJECTION: WASHINGTON STATE COORDINATE SYSTEM-NORTH ZONE
 GEOID: GEOID 99 (CONUS)

BEARINGS ARE BASED ON THE WASHINGTON STATE COORDINATE SYSTEM NORTH ZONE, DERIVED FROM GPS OBSERVATIONS. THE DISTANCES SHOWN ON THIS MAP HAVE BEEN PROJECTED TO THE WASHINGTON STATE PLANE COORDINATE GRID. MULTIPLY THE DISTANCES SHOWN BY A FACTOR OF 1.0000286 TO OBTAIN THE ACTUAL GROUND DISTANCE.

META DATA AS DERIVED BY GPS OBSERVATIONS AT THE SOUTH QUARTER CORNER OF SECTION 21 SHOWN HEREON, IS AS FOLLOWS:

LATITUDE: N 48° 04' 34.9614"
 LONGITUDE: W 119° 49' 48.1024"
 ELLIPSOID HEIGHT: 735.34'
 ELEVATION: 786.36'
 CONVERGENCE ANGLE: 0° 44' 49"
 COMBINED SCALE FACTOR: 0.9990735

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 SURVEYORS & ENGINEERS, P.L.L.C.
 10000 10th Avenue, Everett, WA 98203
 (360) 835-1100
 (360) 835-1101
 (360) 835-1102
 (360) 835-1103
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 (360) 835-1199
 (360) 835-1200

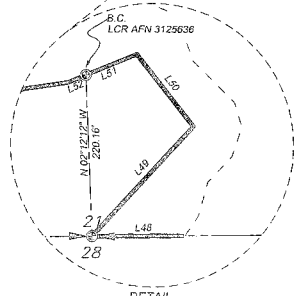
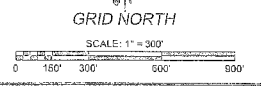
PROJECT BOUNDARY & LOCATION MAP
 WELLS HYDROELECTRIC PROJECT
 PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
 EAST WENATCHEE, WASHINGTON

EXHIBIT G, SHEET 20 OF 64 FERC PROJECT NO. 2149

T. 30 N. R. 24 E. W.M.
 SECTION 21
 OKANOGAN AND DOUGLAS COUNTIES

SURVEYOR'S CERTIFICATE:
 I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREON WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON AND ACCORDING TO THE ACCURACY REQUIREMENTS OF THE CODE OF FEDERAL REGULATIONS 15CFR11.11

ROGER EIL ANDERSON
 PROFESSIONAL LAND SURVEYOR
 STATE OF WASHINGTON CERTIFICATE NO. 23999



ALL LAND WITHIN PROJECT BOUNDARY OWNED BY PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY (UNLESS OTHERWISE NOTED)

SEE SHEET 20

SEE SHEET 18



| LINE | BEARING | LENGTH |
|------|---------------|---------|
| L1 | S 05°20'09" W | 26.39' |
| L2 | S 15°48'13" W | 36.56' |
| L3 | S 15°48'13" W | 160.30' |
| L4 | S 28°48'19" W | 288.33' |
| L5 | S 63°42'19" W | 64.46' |
| L6 | N 71°58'29" W | 148.17' |
| L7 | N 89°31'26" E | 101.92' |
| L8 | N 05°06'05" W | 115.54' |
| L9 | N 00°00'18" W | 127.20' |
| L10 | N 02°50'15" W | 238.44' |
| L11 | N 12°46'05" E | 182.58' |
| L12 | N 60°36'03" E | 28.69' |
| L13 | S 89°27'40" W | 125.84' |
| L14 | S 63°17'55" W | 119.40' |
| L15 | S 74°42'11" W | 327.39' |
| L16 | S 71°16'34" W | 322.17' |
| L17 | S 60°47'34" W | 267.84' |

| CURVE | RADIUS | LENGTH | DELTA |
|-------|---------|---------|-----------|
| C1 | 205.00' | 213.20' | 59°35'18" |

| LINE | BEARING |
|------|---------------|
| R1 | S 44°24'08" E |
| R2 | N 76°00'34" E |

LEGEND

EXHIBIT G PROJECT BOUNDARY

WATER LINE

MEANDER LINE

RECREATION SITE

WILDLIFE AREA

O.S.

BRASS CAP

A.C.

R.C.

AFN

LCR

B.L.M.

B.O.R.

B.I.A.

U.S.A.C.E.

W.D.N.R.

FOUND

NOT FOUND

SECTION CORNER (AS NOTED)

SECTION CORNER ON A TOWNSHIP OR RANGE LINE (AS NOTED)

QUARTER CORNER (AS NOTED)

QUARTER CORNER ON A TOWNSHIP OR RANGE LINE (AS NOTED)

MEANDER CORNER (AS NOTED)

MONUMENT (AS NOTED)

ORIGINAL STONE

REBAR WITH CAP

AUDITOR FILE NUMBER

LAND CORNER RECORD

BUREAU OF LAND MANAGEMENT

BUREAU OF RECLAMATION

BUREAU OF INDIAN AFFAIRS

U.S.A.C.E.

CORPS OF ENGINEERS

WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES

MAP PROJECTION / BASIS OF BEARING

UNITS: U.S. SURVEY FEET

HORIZONTAL DATUM: NAD 83/1981 ADJUSTMENT

VERTICAL DATUM: NGVD 1929

PROJECTION: WASHINGTON STATE COORDINATE SYSTEM-NORTH ZONE (GEOD. GEOID 99 (CONUS))

BEARINGS ARE BASED ON THE WASHINGTON STATE COORDINATE SYSTEM, NORTH ZONE, DERIVED FROM GPS OBSERVATIONS. THE DISTANCES SHOWN ON THIS MAP HAVE BEEN PROJECTED TO THE WASHINGTON STATE PLANE COORDINATE GRID. MULTIPLY THE DISTANCES SHOWN BY A FACTOR OF 1.00009296 TO OBTAIN THE ACTUAL GROUND DISTANCE.

META DATA AS DERIVED BY GPS OBSERVATIONS AT THE NORTH QUARTER CORNER OF SECTION 28 SHOWN HEREON, IS AS FOLLOWS:

LATITUDE: N 48° 04' 34.9614"

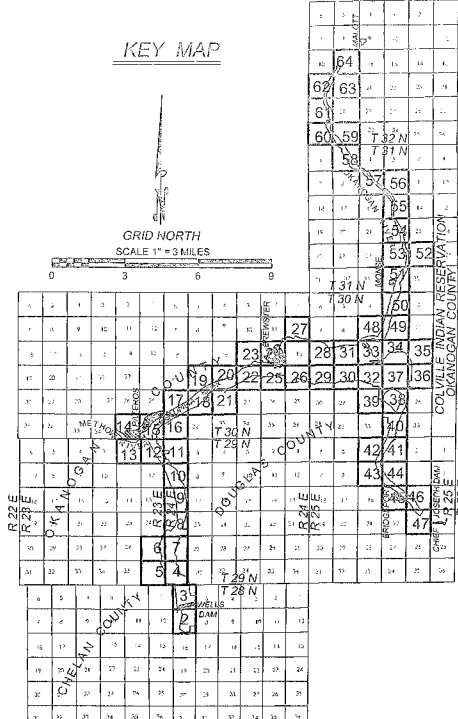
LONGITUDE: W 119° 42' 48.1084"

ELLIPSOID HEIGHT: 735.34'

ELEVATION: 796.36'

CONVERGENCE ANGLE: 0° 44' 49"

COMBINED SCALE FACTOR: 0.99990735



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E WENATCHEE (509) 884-2562

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TOLL FREE (800) 732-7412

T. 30 N. R. 24 E.W.M.
SECTION 28
DOUGLAS COUNTY

SURVEYOR'S CERTIFICATE:

I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREON WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON AND I AM A LICENSED SURVEYOR IN THE STATE OF WASHINGTON UNDER THE CODE OF FEDERAL REGULATIONS 12CFR4.1

ROBERT ERLANDSON
PROFESSIONAL LAND SURVEYOR
STATE OF WASHINGTON CERTIFICATE NO. 23592

PROJECT BOUNDARY & LOCATION MAP

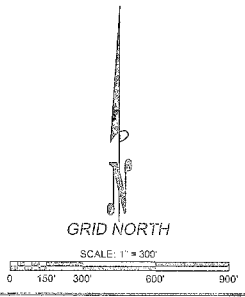
WELLS HYDROELECTRIC PROJECT

PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
EAST WENATCHEE, WASHINGTON

EXHIBIT G, SHEET 21 OF 64

FERC PROJECT NO. 2149

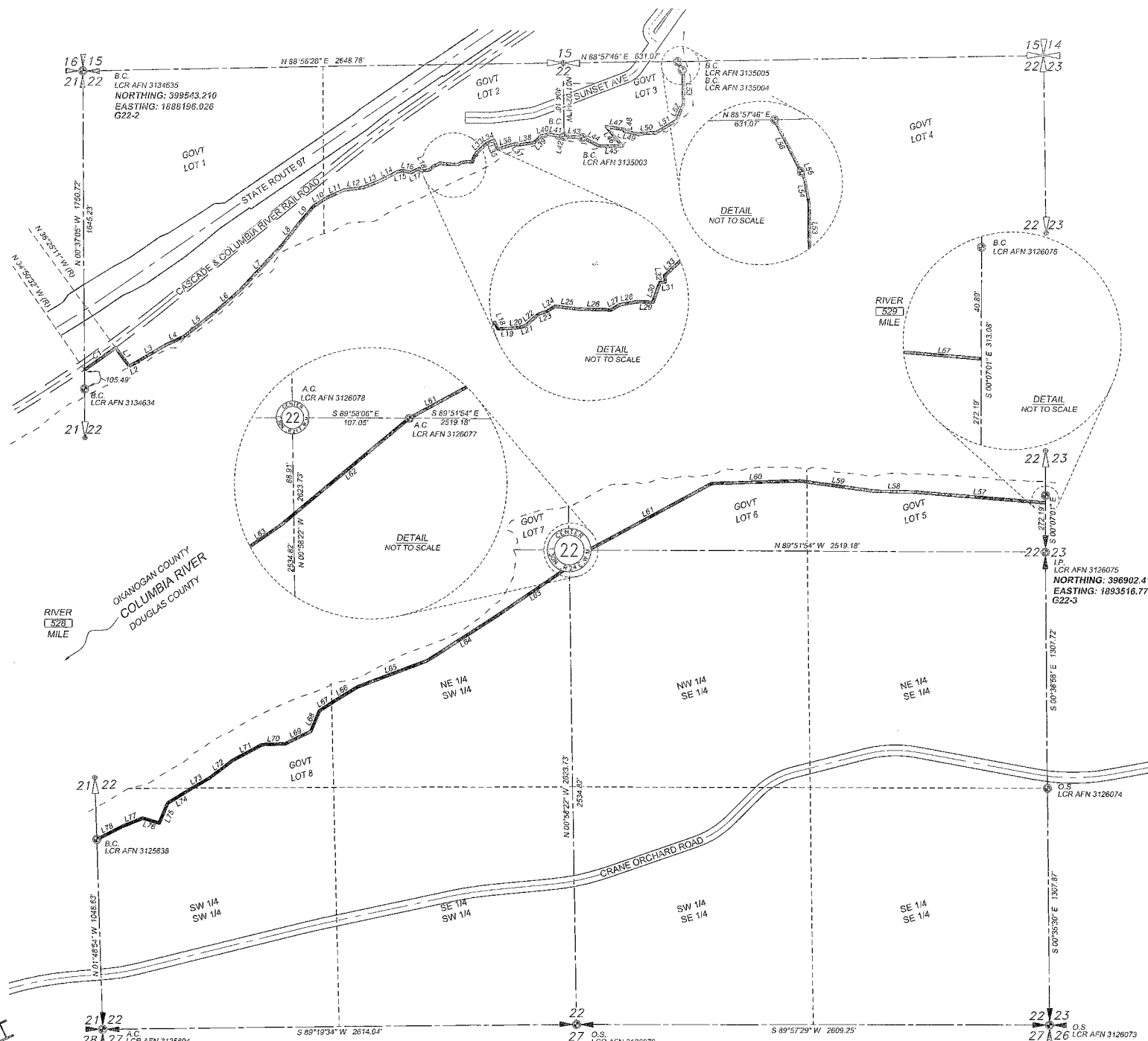
ALL LAND WITHIN PROJECT BOUNDARY OWNED BY PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY (UNLESS OTHERWISE NOTED)



SEE SHEET 23

SEE SHEET 20

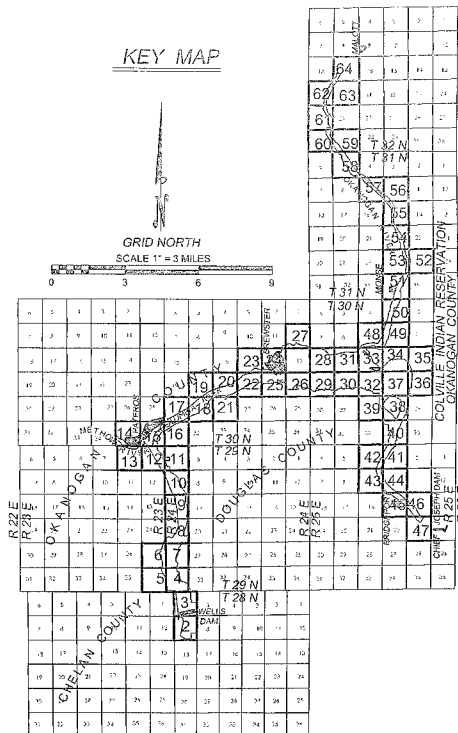
SEE SHEET 21



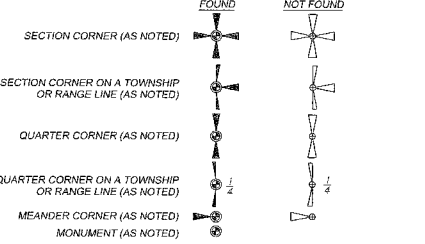
| LINE | BEARING | LENGTH |
|------|---------------|---------|
| L1 | S 35°25'11" E | 126.04' |
| L2 | N 63°03'22" E | 41.21' |
| L3 | N 59°32'14" E | 185.73' |
| L4 | N 65°43'17" E | 107.16' |
| L5 | N 51°42'31" E | 218.90' |
| L6 | N 49°08'18" E | 183.00' |
| L7 | N 42°44'03" E | 331.58' |
| L8 | N 38°05'24" E | 166.89' |
| L9 | N 40°04'00" E | 113.20' |
| L10 | N 57°12'37" E | 85.58' |
| L11 | N 55°54'03" E | 98.09' |
| L12 | N 63°03'12" E | 105.61' |
| L13 | N 68°06'59" E | 100.93' |
| L14 | N 61°58'38" E | 102.59' |
| L15 | N 75°44'30" E | 29.02' |
| L16 | S 80°03'06" E | 49.26' |
| L17 | N 68°38'15" E | 50.72' |
| L18 | S 24°43'55" E | 12.66' |
| L19 | N 87°32'17" E | 39.85' |
| L20 | N 61°14'34" E | 13.45' |
| L21 | N 66°49'21" E | 9.82' |
| L22 | N 48°40'09" E | 29.16' |
| L23 | N 69°02'09" E | 19.02' |
| L24 | N 57°00'13" E | 15.10' |
| L25 | S 83°41'32" E | 45.07' |
| L26 | S 88°40'00" E | 88.53' |
| L27 | N 59°28'45" E | 19.20' |
| L28 | N 79°39'51" E | 31.99' |
| L29 | S 88°43'08" E | 29.56' |
| L30 | N 19°01'07" E | 38.01' |
| L31 | N 82°37'50" E | 10.08' |
| L32 | N 08°39'22" W | 11.07' |
| L33 | N 47°03'07" E | 78.11' |
| L34 | N 65°47'23" E | 45.72' |
| L35 | S 22°58'11" E | 53.04' |
| L36 | N 72°40'43" E | 109.75' |
| L37 | S 38°34'01" E | 12.67' |
| L38 | N 80°25'12" E | 92.12' |
| L39 | N 44°10'29" E | 48.58' |
| L40 | N 75°13'59" E | 38.16' |
| L41 | S 82°24'49" E | 78.53' |
| L42 | S 26°44'00" E | 13.26' |
| L43 | S 86°50'00" E | 101.12' |
| L44 | S 63°30'25" E | 194.04' |
| L45 | N 89°40'13" E | 126.25' |
| L46 | N 39°41'50" W | 137.67' |
| L47 | S 61°49'40" E | 98.58' |
| L48 | S 00°56'36" E | 76.32' |
| L49 | S 78°53'34" E | 76.69' |
| L50 | N 84°30'26" E | 105.91' |
| L51 | N 58°47'36" E | 129.56' |
| L52 | N 22°01'51" E | 99.18' |
| L53 | N 00°52'52" W | 155.30' |
| L54 | N 10°36'56" W | 22.95' |
| L55 | N 27°28'01" W | 6.94' |
| L56 | N 27°28'13" W | 83.83' |
| L57 | N 85°20'47" W | 730.41' |
| L58 | N 89°04'24" W | 212.62' |
| L59 | N 82°14'19" W | 415.99' |
| L60 | S 88°16'01" W | 487.35' |
| L61 | S 61°22'38" W | 773.21' |
| L62 | S 49°54'42" W | 153.49' |
| L63 | S 55°26'49" W | 461.21' |
| L64 | S 55°48'10" W | 482.52' |
| L65 | S 69°06'57" W | 414.53' |
| L66 | S 59°00'49" W | 162.77' |
| L67 | S 56°53'25" W | 83.76' |
| L68 | S 22°38'40" W | 125.05' |
| L69 | S 64°02'50" W | 155.22' |
| L70 | S 87°53'50" W | 126.93' |
| L71 | S 61°52'48" W | 185.00' |
| L72 | S 52°47'32" W | 159.78' |
| L73 | S 59°32'44" W | 139.31' |
| L74 | S 58°36'32" W | 132.65' |
| L75 | S 22°30'34" W | 119.99' |
| L76 | N 73°30'14" W | 96.58' |
| L77 | S 68°07'56" W | 119.54' |
| L78 | S 62°46'35" W | 159.68' |

| CURVE | RADIUS | LENGTH | DELTA |
|-------|----------|---------|----------|
| C1 | 7663.87' | 211.01' | 1°34'39" |

KEY MAP



- LEGEND**
- EXHIBIT G PROJECT BOUNDARY
 - WATER LINE
 - MEANDER LINE
 - RECREATION SITE
 - WILDLIFE AREA
 - O.S. ORIGINAL STONE
 - B.C. BRASS CAP
 - A.C. ALUMINUM CAP
 - R.C. REBAR WITH CAP
 - AFN AUDITOR FILE NUMBER
 - LCR LAND CORNER RECORD
 - B.L.M. BUREAU OF LAND MANAGEMENT
 - B.O.R. BUREAU OF RECLAMATION
 - B.I.A. BUREAU OF INDIAN AFFAIRS
 - U.S.A.C.E. UNITED STATES ARMY
 - U.S.A.C.E. CORPS OF ENGINEERS
 - W.D.N.R. WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES



MAP PROJECTION / BASIS OF BEARING

UNITS: U.S. SURVEY FEET
 HORIZONTAL DATUM: NAD 83/1981 ADJUSTMENT
 VERTICAL DATUM: NGVD 1929
 PROJECTION: WASHINGTON STATE COORDINATE SYSTEM-NORTH ZONE
 GEOID: GEOID 99 (CONUS)
 BEARINGS ARE BASED ON THE WASHINGTON STATE COORDINATE SYSTEM NORTH ZONE, DERIVED FROM GPS OBSERVATIONS. THE DISTANCES SHOWN ON THIS MAP HAVE BEEN PROJECTED TO THE WASHINGTON STATE PLANE COORDINATE GRID. MULTIPLY THE DISTANCES SHOWN BY A FACTOR OF 1.00008228 TO OBTAIN THE ACTUAL GROUND DISTANCE.
 META DATA AS DERIVED BY GPS OBSERVATIONS AT THE BRASS CAP 420' SOUTHEAST OF THE NORTH QUARTER CORNER OF SECTION 22 SHOWN HEREON, IS AS FOLLOWS:
 LATITUDE: N 48° 05' 23.1477"
 LONGITUDE: W 118° 49' 29.4184"
 ELLIPSOID HEIGHT: 724.53'
 ELEVATION: 787.59'
 CONVERGENCE ANGLE: 0° 45' 48"
 COMBINED SCALE FACTOR: 0.99990772

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 1100 N. 24th St., Wenatchee, WA 98801
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 (509) 838-4188
 (509) 838-2326
 (509) 754-3326

DRAWN BY: OKS LAYOUT: GSHWET-22
 DATE: 5/01/2005 FILE NO: T30-R24-922
 SCALE: 1" = 300' JOB NO: 95550.00 TOLL FREE: (800) 732-7442

T. 30 N. R. 24 E. W.M. SECTION 22 OKANOGAN AND DOUGLAS COUNTIES

SURVEYOR'S CERTIFICATE:
 I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREON WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON, AND I HEREBY DO SO BECAUSE THE ACCURACY REQUIREMENTS OF THE CODE OF FEDERAL REGULATIONS (30 CFR 171.21)

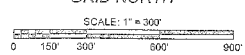
NOOR ERLANDSEN
 PROFESSIONAL LAND SURVEYOR
 STATE OF WASHINGTON CERTIFICATE NO. 23850

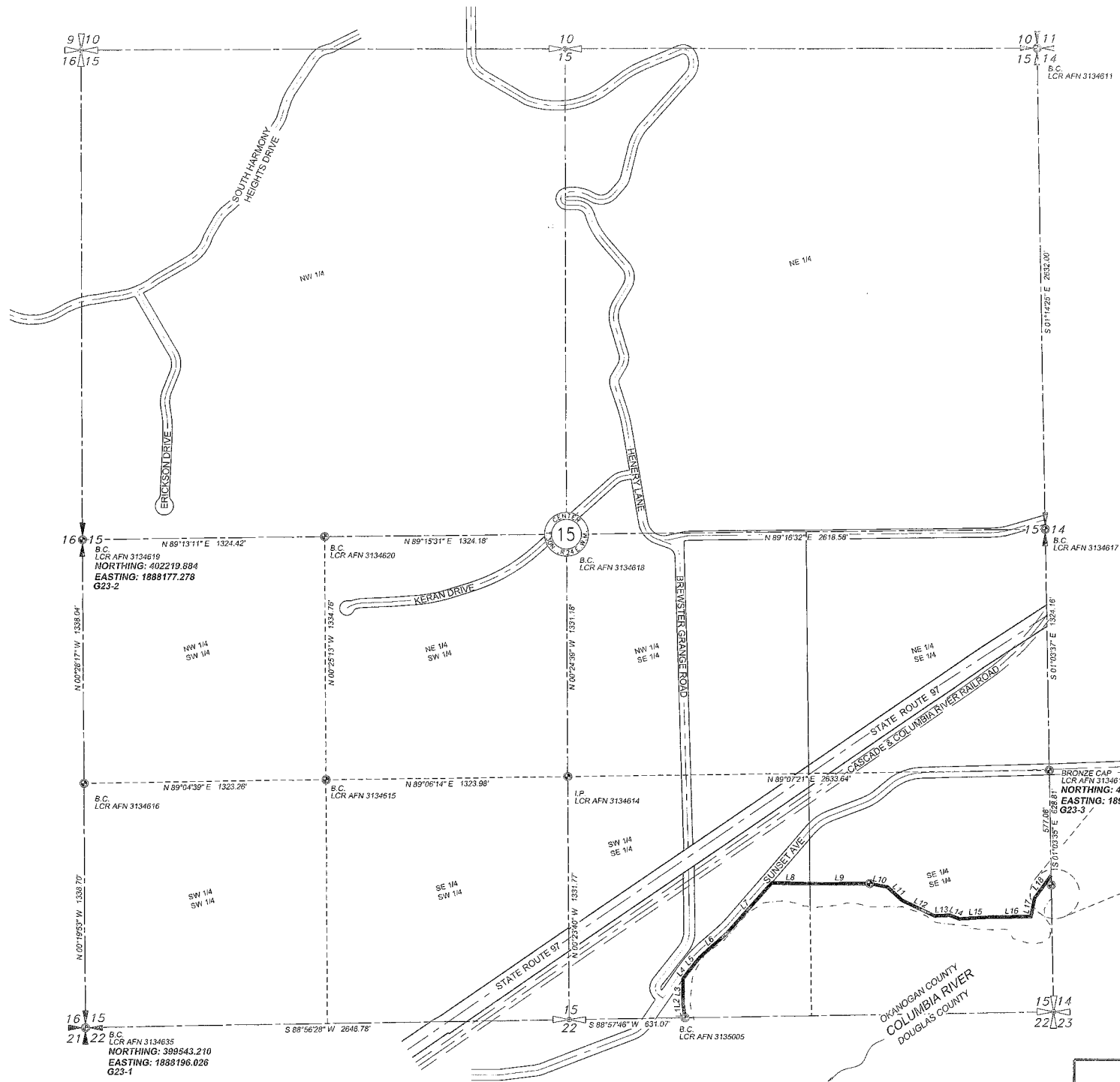
PROJECT BOUNDARY & LOCATION MAP
WELLS HYDROELECTRIC PROJECT
 PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
 EAST WENATCHEE, WASHINGTON

EXHIBIT G, SHEET 22 OF 64 FERC PROJECT NO. 2149

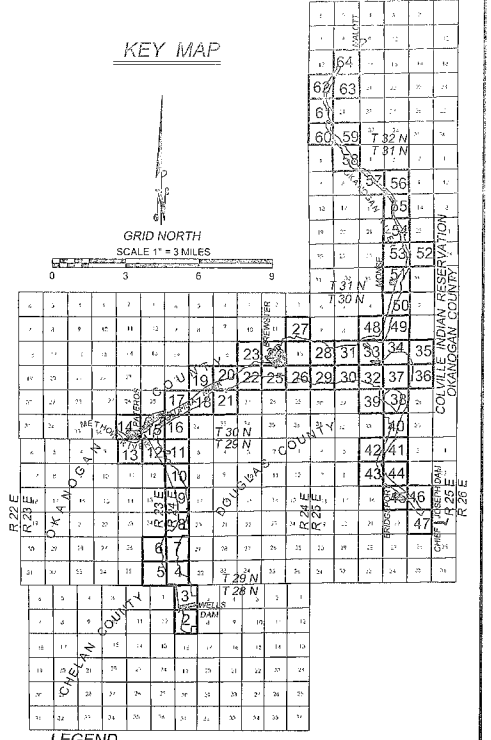
ALL LAND WITHIN PROJECT BOUNDARY OWNED BY PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY (UNLESS OTHERWISE NOTED)

GRID NORTH

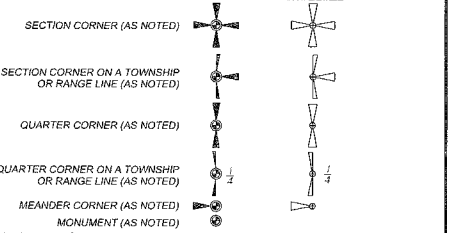




| LINE | BEARING | LENGTH |
|------|---------------|---------|
| L1 | N 27°24'02" W | 0.31' |
| L2 | N 07°45'13" W | 73.50' |
| L3 | N 00°01'30" W | 140.96' |
| L4 | N 35°54'20" E | 47.02' |
| L5 | N 38°35'31" E | 101.57' |
| L6 | N 48°22'12" E | 194.76' |
| L7 | N 41°26'08" E | 370.26' |
| L8 | S 89°09'48" E | 207.57' |
| L9 | N 89°49'11" E | 333.10' |
| L10 | S 79°10'42" E | 98.19' |
| L11 | S 47°40'11" E | 109.30' |
| L12 | S 64°24'09" E | 195.55' |
| L13 | N 87°10'04" E | 83.22' |
| L14 | S 89°32'57" E | 56.41' |
| L15 | N 86°36'35" E | 183.23' |
| L16 | N 89°47'28" E | 209.48' |
| L17 | N 10°41'11" E | 103.63' |
| L18 | N 35°59'35" E | 154.43' |



- LEGEND**
- EXHIBIT G PROJECT BOUNDARY
 - WATER LINE
 - MEANDER LINE
 - RECREATION SITE
 - WILDLIFE AREA
 - O.S. ORIGINAL STONE
 - B.C. BRASS CAP
 - A.C. ALUMINUM CAP
 - R.C. REBAR WITH CAP
 - AFN AUDITOR FILE NUMBER
 - LCR LAND CORNER RECORD
 - B.L.M. BUREAU OF LAND MANAGEMENT
 - B.O.R. BUREAU OF RECLAMATION
 - B.I.A. BUREAU OF INDIAN AFFAIRS
 - U.S.A.C.E. UNITED STATES ARMY
 - W.D.N.R. CORPS OF ENGINEERS
 - WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES



MAP PROJECTION / BASIS OF BEARING

UNITS: U.S. SURVEY FEET
 HORIZONTAL DATUM: NAD 83/1991 ADJUSTMENT
 VERTICAL DATUM: NGVD 1929
 PROJECTION: WASHINGTON STATE COORDINATE SYSTEM-NORTH ZONE
 GEOID: GEOID 99 (CONUS)

BEARINGS ARE BASED ON THE WASHINGTON STATE COORDINATE SYSTEM, NORTH ZONE, DERIVED FROM GPS OBSERVATIONS. THE DISTANCES SHOWN ON THIS MAP HAVE BEEN PROJECTED TO THE WASHINGTON STATE PLANE COORDINATE GRID. MULTIPLY THE DISTANCES SHOWN BY A FACTOR OF 1.00009236 TO OBTAIN THE ACTUAL GROUND DISTANCE.

META DATA AS DERIVED BY GPS OBSERVATIONS ON A BRASS CAP ON THE EAST LINE OF SECTION 15, 51.37' SOUTHERLY OF THE INTERSECTION OF SAID EAST LINE WITH THE WELLS HYDROELECTRIC PROJECT BOUNDARY SHOWN HEREON, IS AS FOLLOWS:

LATITUDE: N 48° 05' 34.1964"
 LONGITUDE: W 119° 47' 51.8651"
 ELLIPSOID HEIGHT: 725.40'
 ELEVATION: 758.51'
 CONVERGENCE ANGLE: 0° 46' 16"
 COMBINED SCALE FACTOR: 0.99990765

SEE SHEET 22

SEE SHEET 24

Erlandsen
 SURVEYORS & ENGINEERS

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 CHIELAN (509) 430-4188
 E. WELCH (509) 624-2462
 EPHRATA (509) 754-4326

T. 30 N. R. 24 E.W.M.
 SECTION 15
 OKANOGAN COUNTY

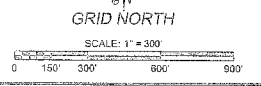
SURVEYOR'S CERTIFICATE:
 I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREON WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON AND MEETS THE REQUIREMENTS OF THE WASHINGTON STATE CODE OF FEDERAL REGULATIONS 18CFR1.21

RODGER ERLANDSEN
 PROFESSIONAL LAND SURVEYOR
 STATE OF WASHINGTON CERTIFICATE NO. 23589

PROJECT BOUNDARY & LOCATION MAP
 WELLS HYDROELECTRIC PROJECT
 PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
 EAST WENATCHEE, WASHINGTON

EXHIBIT G, SHEET 23 OF 64 FERC PROJECT NO. 2149

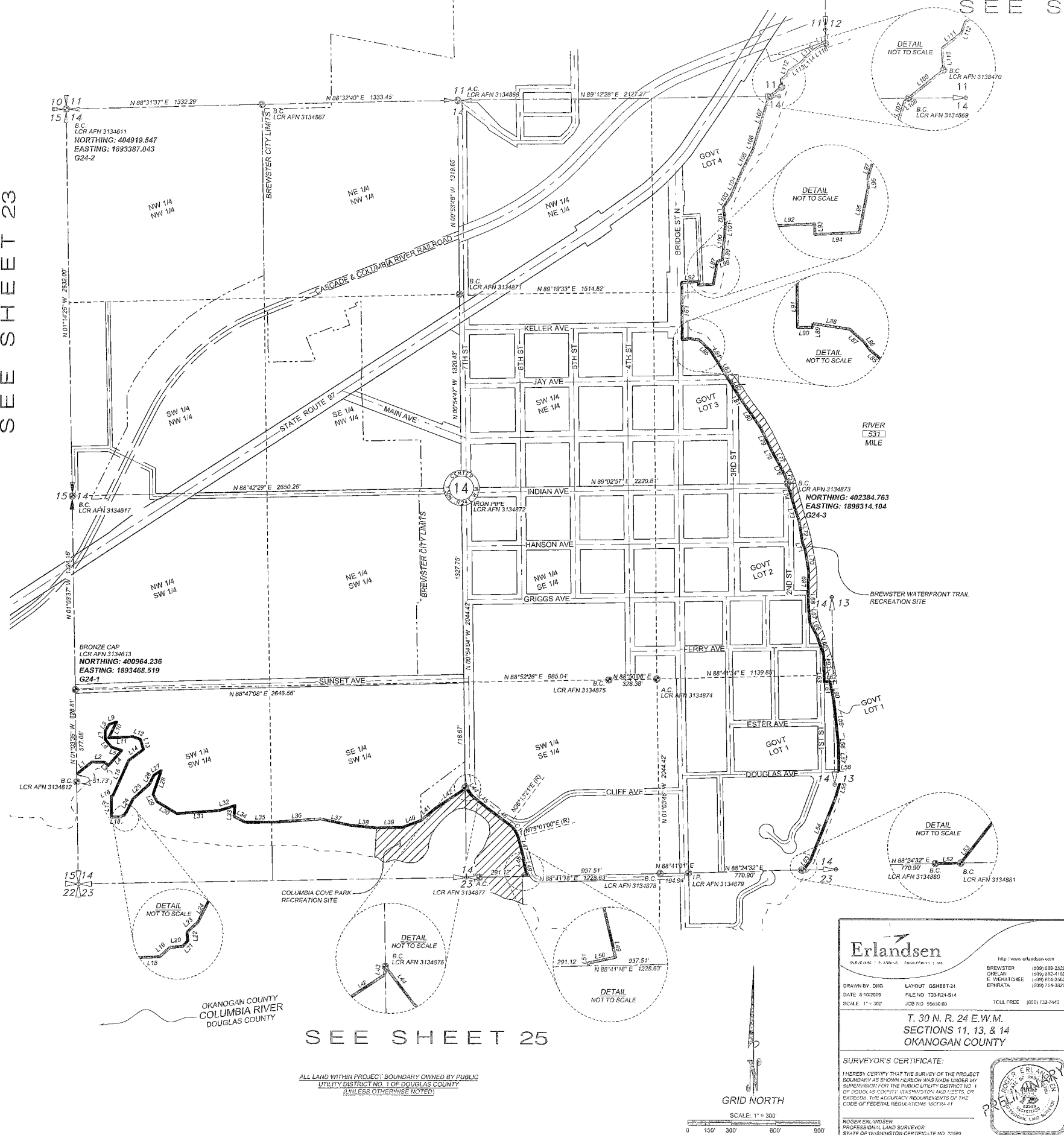
ALL LAND WITHIN PROJECT BOUNDARY OWNED BY PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY (UNLESS OTHERWISE NOTED)



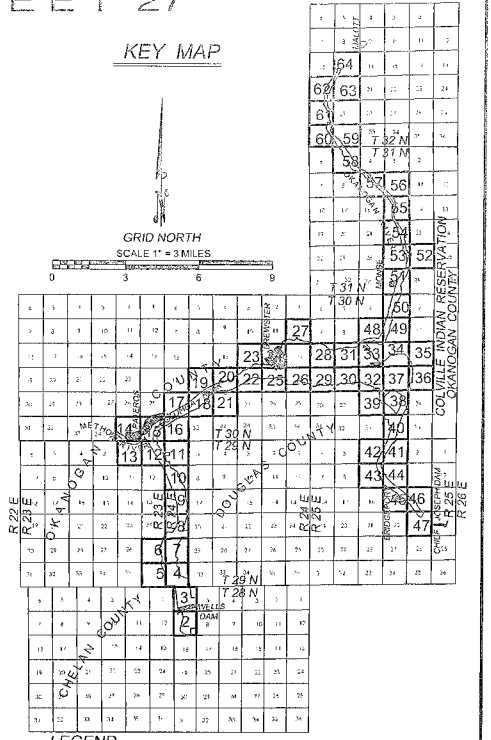
| LINE | BEARING | LENGTH |
|------|---------------|--------|
| L1 | N 51°02'33" E | 133.24 |
| L2 | S 88°52'22" E | 88.59 |
| L3 | S 48°54'03" E | 32.30 |
| L4 | N 41°38'28" E | 137.56 |
| L5 | N 71°53'35" W | 71.23 |
| L6 | N 40°30'37" W | 68.11 |
| L7 | N 02°12'42" W | 58.30 |
| L8 | N 31°24'21" E | 52.10 |
| L9 | N 70°51'26" E | 54.47 |
| L10 | S 25°59'08" W | 120.06 |
| L11 | N 87°19'52" E | 165.74 |
| L12 | S 69°27'37" E | 52.69 |
| L13 | S 17°00'38" E | 71.77 |
| L14 | S 53°03'48" W | 124.47 |
| L15 | S 24°03'23" W | 260.71 |
| L16 | S 61°10'08" W | 13.83 |
| L17 | S 00°06'48" E | 142.35 |
| L18 | N 88°08'36" E | 67.74 |
| L19 | N 47°52'46" E | 12.63 |
| L20 | N 84°49'57" E | 11.73 |
| L21 | N 41°52'43" E | 6.50 |
| L22 | N 05°17'06" W | 7.96 |
| L23 | N 47°52'46" E | 13.56 |
| L24 | N 26°07'19" E | 89.80 |
| L25 | N 47°45'10" E | 152.20 |
| L26 | N 27°32'37" E | 70.94 |
| L27 | N 58°09'50" E | 55.96 |
| L28 | S 18°24'45" W | 171.09 |
| L29 | S 28°11'09" E | 57.53 |
| L30 | S 59°14'10" E | 156.80 |
| L31 | N 85°41'93" E | 267.64 |
| L32 | N 72°41'14" E | 112.10 |
| L33 | S 06°04'52" W | 73.44 |
| L34 | S 82°35'23" E | 86.72 |
| L35 | N 89°41'05" E | 205.09 |
| L36 | N 85°57'00" E | 311.27 |
| L37 | S 78°09'03" E | 207.89 |
| L38 | S 84°32'56" E | 177.46 |
| L39 | N 88°36'19" E | 176.13 |
| L40 | N 68°41'02" E | 134.37 |
| L41 | N 49°37'18" E | 127.69 |
| L42 | N 58°30'31" E | 242.35 |
| L43 | N 04°20'11" E | 11.15 |
| L44 | S 37°11'21" E | 94.63 |
| L45 | S 51°04'01" E | 170.26 |
| L46 | S 53°49'39" E | 159.62 |
| L47 | S 14°09'00" E | 141.13 |
| L48 | S 04°31'23" W | 15.62 |
| L49 | S 13°08'18" E | 106.85 |
| L50 | S 77°33'35" W | 31.39 |
| L51 | S 01°13'44" E | 3.20 |
| L52 | N 88°54'19" E | 11.64 |
| L53 | N 37°51'30" E | 75.56 |
| L54 | N 21°34'10" E | 461.76 |
| L55 | N 15°53'30" E | 183.20 |
| L56 | S 88°46'37" W | 26.12 |
| L57 | N 01°03'51" W | 171.22 |
| L58 | N 04°10'24" W | 38.16 |
| L59 | N 06°17'17" W | 260.82 |
| L60 | N 10°57'32" W | 113.35 |
| L61 | N 11°07'56" W | 19.40 |
| L62 | S 88°39'42" W | 39.48 |
| L63 | N 01°33'51" W | 44.92 |
| L64 | N 01°10'36" W | 137.85 |
| L65 | N 19°08'58" W | 143.54 |
| L66 | N 28°25'23" W | 100.86 |
| L67 | N 04°53'34" W | 108.68 |
| L68 | N 01°36'18" W | 98.89 |
| L69 | N 01°34'03" E | 139.99 |
| L70 | N 09°19'23" W | 153.03 |
| L71 | N 23°40'24" W | 45.20 |
| L72 | N 08°48'24" W | 154.70 |
| L73 | N 18°05'11" W | 122.14 |
| L74 | N 16°36'04" W | 147.43 |
| L75 | N 16°36'04" W | 45.55 |
| L76 | N 26°27'30" W | 98.16 |
| L77 | N 29°35'27" W | 59.95 |
| L78 | N 28°38'14" W | 21.11 |
| L79 | N 26°13'28" W | 189.36 |
| L80 | N 34°47'41" W | 201.20 |
| L81 | N 34°51'47" W | 90.10 |
| L82 | N 30°33'56" W | 65.58 |
| L83 | N 32°13'33" W | 194.13 |
| L84 | N 31°50'12" W | 75.10 |
| L85 | N 49°38'38" W | 36.30 |
| L86 | N 37°00'42" W | 24.55 |
| L87 | N 49°10'04" W | 41.74 |
| L88 | N 61°28'09" W | 83.03 |
| L89 | S 00°53'21" E | 8.39 |
| L90 | S 69°05'52" W | 35.00 |
| L91 | N 00°53'24" W | 389.23 |
| L92 | N 87°13'48" E | 114.29 |
| L93 | S 00°48'12" E | 23.86 |
| L94 | N 87°13'48" E | 99.99 |
| L95 | N 10°48'01" E | 102.77 |
| L96 | N 02°37'05" W | 21.18 |
| L97 | N 15°56'27" E | 34.00 |
| L98 | N 67°05'31" E | 37.78 |
| L99 | N 03°54'21" E | 71.19 |
| L100 | N 05°23'14" E | 100.00 |
| L101 | N 02°01'01" E | 82.20 |
| L102 | N 06°58'18" W | 102.29 |
| L103 | N 33°48'29" E | 58.60 |
| L104 | N 23°25'37" E | 185.60 |
| L105 | N 27°12'48" E | 161.97 |
| L106 | N 15°46'38" E | 97.03 |
| L107 | N 16°29'53" E | 275.92 |
| L108 | N 50°43'43" E | 11.45 |
| L109 | N 50°46'18" E | 101.50 |
| L110 | N 03°42'58" W | 49.68 |
| L111 | N 51°10'12" E | 54.80 |
| L112 | N 19°16'29" E | 27.17 |
| L113 | N 55°09'18" E | 105.61 |
| L114 | N 41°25'41" E | 34.15 |
| L115 | N 47°48'44" E | 89.11 |
| L116 | N 59°28'23" E | 74.02 |
| L117 | N 71°12'00" E | 5.11 |

| CURVE | RADIUS | LENGTH | DELTA |
|-------|---------|---------|-----------|
| C1 | 160.00' | 188.32' | 36°47'35" |

SEE SHEET 23



SEE SHEET 27



LEGEND

| | | | | |
|----------------------------|---|---------------------------|---|---------------------------|
| EXHIBIT G PROJECT BOUNDARY | WATER LINE | RECREATION SITE | WILDLIFE AREA | ORIGINAL STONE |
| MEANDER LINE | RECREATION SITE | WILDLIFE AREA | O.S. | BRASS CAP |
| SECTION CORNER (AS NOTED) | SECTION CORNER ON A TOWNSHIP OR RANGE LINE (AS NOTED) | QUARTER CORNER (AS NOTED) | QUARTER CORNER ON A TOWNSHIP OR RANGE LINE (AS NOTED) | MEANDER CORNER (AS NOTED) |
| MONUMENT (AS NOTED) | | | | |

MAP PROJECTION / BASIS OF BEARING

UNITS: U.S. SURVEY FEET
 HORIZONTAL DATUM: NAD 83/1981 ADJUSTMENT
 VERTICAL DATUM: NGVD 1989
 PROJECTION: WASHINGTON STATE COORDINATE SYSTEM-NORTH ZONE
 GEOID: GEOID 99 (CONUS)

BEARINGS ARE BASED ON THE WASHINGTON STATE COORDINATE SYSTEM, NORTH ZONE, DERIVED FROM GPS OBSERVATIONS. THE DISTANCES SHOWN ON THIS MAP HAVE BEEN PROJECTED TO THE WASHINGTON STATE PLANE COORDINATE GRID. MULTIPLY THE DISTANCES SHOWN BY A FACTOR OF 1.00002934 TO OBTAIN THE ACTUAL GROUND DISTANCE.

META DATA AS DERIVED BY GPS OBSERVATIONS ON THE BRASS CAP AT THE INTERSECTION OF THE EAST-WEST CENTERLINE OF SECTION 14 WITH THE WELLS HYDROELECTRIC PROJECT BOUNDARY SHOWN HEREON, IS AS FOLLOWS:

LATITUDE: N 48° 05' 53.7701"
 LONGITUDE: W 115° 46' 40.3460"
 ELLIPSOID HEIGHT: 745.26'
 ELEVATION: 808.45'
 CONVERGENCE ANGLE: 0° 47' 08"
 COMBINED SCALE FACTOR: 0.99920657

Erlandsen
 SURVEYORS & ENGINEERS
 1100 N. 24th St., Wenatchee, WA 98091
 (509) 838-2329
 (509) 832-4188
 (509) 832-3562
 (509) 754-3326

DRAWN BY: DMO LAYOUT: OSMBE124
 DATE: 6/10/2009 FILE NO: T30-R24-S14
 SCALE: 1" = 300' JOB NO: 09450.00 TOLL FREE: (800) 732-7442

T. 30 N. R. 24 E.W.M. SECTIONS 11, 13, & 14 OKANOGAN COUNTY

SURVEYOR'S CERTIFICATE:
 I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREON WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON, AND I HEREBY DECLARE THE ACCURACY REQUIREMENTS OF THE CODE OF FEDERAL REGULATIONS 182CFR1.11

RODGER ERLANDSEN
 PROFESSIONAL LAND SURVEYOR
 STATE OF WASHINGTON CERTIFICATE NO. 20399

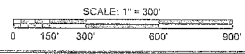
PROJECT BOUNDARY & LOCATION MAP
WELLS HYDROELECTRIC PROJECT
PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
EAST WENATCHEE, WASHINGTON

EXHIBIT G, SHEET 24 OF 64 FERC PROJECT NO. 2149

SEE SHEET 25

ALL LAND WITHIN PROJECT BOUNDARY OWNED BY PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY (UNLESS OTHERWISE NOTED)

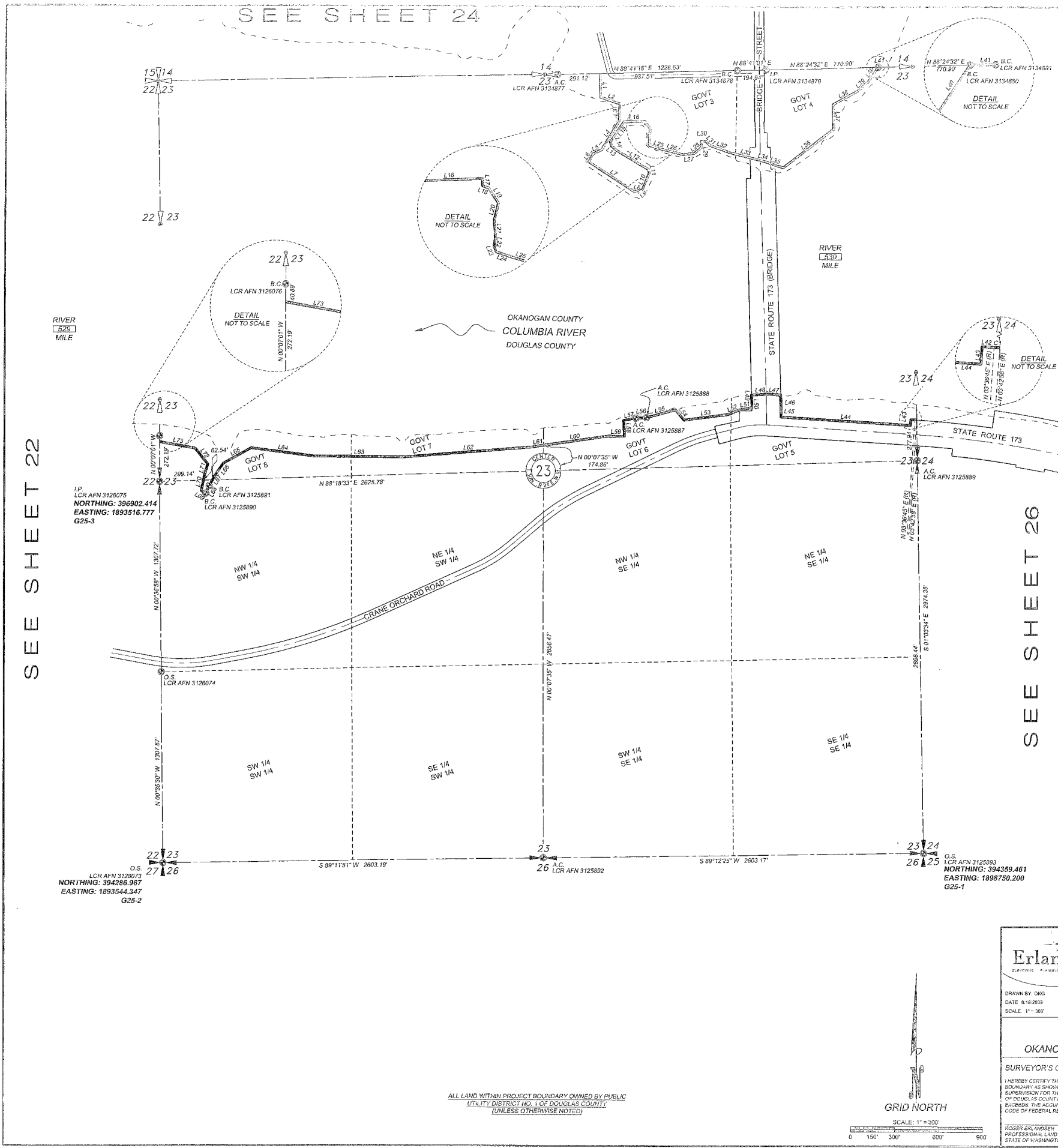
GRID NORTH



SEE SHEET 24

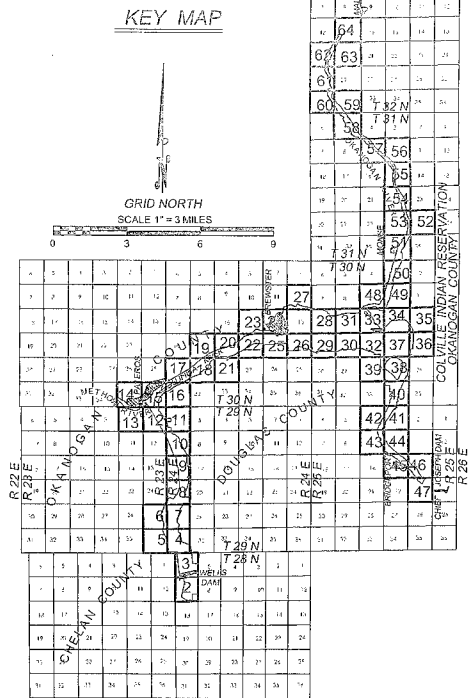
SEE SHEET 22

SEE SHEET 26



| LINE | BEARING | LENGTH |
|------|---------------|---------|
| L1 | S 01°13'44" E | 161.68' |
| L2 | S 71°24'20" E | 138.75' |
| L3 | S 01°29'59" W | 116.48' |
| L4 | S 30°56'21" W | 228.54' |
| L5 | S 63°46'33" W | 69.21' |
| L6 | S 28°03'41" W | 58.93' |
| L7 | S 57°19'11" E | 373.91' |
| L8 | S 83°54'44" E | 32.00' |
| L9 | N 50°07'10" E | 32.32' |
| L10 | N 22°01'01" E | 117.58' |
| L11 | N 13°06'35" W | 25.04' |
| L12 | N 59°18'17" W | 258.07' |
| L13 | N 50°27'36" W | 40.35' |
| L14 | N 17°25'46" W | 31.88' |
| L15 | N 33°43'21" E | 164.11' |
| L16 | N 87°50'01" E | 147.10' |
| L17 | S 01°17'18" E | 16.25' |
| L18 | S 71°09'47" E | 14.30' |
| L19 | S 33°11'43" E | 41.44' |
| L20 | S 13°16'26" W | 38.52' |
| L21 | S 03°25'29" E | 41.75' |
| L22 | S 08°03'53" W | 20.06' |
| L23 | S 23°11'28" E | 12.79' |
| L24 | S 71°27'30" W | 40.64' |
| L25 | S 74°12'08" E | 25.61' |
| L26 | S 75°59'55" E | 169.13' |
| L27 | N 84°46'47" E | 76.35' |
| L28 | N 50°37'51" E | 65.06' |
| L29 | N 01°17'33" W | 40.99' |
| L30 | N 88°18'17" E | 28.74' |
| L31 | S 40°18'24" E | 43.20' |
| L32 | S 70°24'27" E | 145.46' |
| L33 | S 76°02'25" E | 203.68' |
| L34 | S 75°46'06" E | 39.81' |
| L35 | S 71°15'13" E | 134.21' |
| L36 | N 52°31'42" E | 433.99' |
| L37 | N 01°59'20" W | 168.24' |
| L38 | N 61°23'02" E | 194.77' |
| L39 | N 47°47'29" W | 93.77' |
| L40 | N 33°45'39" E | 120.34' |
| L41 | N 88°54'19" E | 11.64' |
| L42 | N 88°23'15" W | 27.08' |
| L43 | S 03°36'45" W | 40.00' |
| L44 | N 88°23'15" W | 887.77' |
| L45 | N 01°13'15" W | 113.42' |
| L46 | N 01°44'04" W | 35.53' |
| L47 | N 82°34'21" W | 76.17' |
| L48 | S 85°52'22" W | 124.91' |
| L49 | S 01°44'04" E | 41.66' |
| L50 | S 01°13'15" E | 43.68' |
| L51 | S 79°07'19" W | 66.80' |
| L52 | S 87°19'31" W | 80.67' |
| L53 | S 82°43'51" W | 306.07' |
| L54 | N 39°24'29" W | 91.50' |
| L55 | S 74°35'12" W | 205.96' |
| L56 | S 87°11'02" W | 73.73' |
| L57 | S 79°18'36" W | 83.12' |
| L58 | S 02°58'30" E | 107.88' |
| L59 | S 89°27'41" W | 116.77' |
| L60 | S 81°46'46" W | 442.69' |
| L61 | S 81°46'46" W | 72.39' |
| L62 | S 83°14'29" W | 880.04' |
| L63 | N 89°27'52" W | 618.35' |
| L64 | N 82°30'28" W | 434.52' |
| L65 | S 60°56'23" W | 218.65' |
| L66 | S 34°45'59" W | 81.69' |
| L67 | S 29°58'43" W | 100.81' |
| L68 | S 24°18'23" W | 56.29' |
| L69 | N 51°23'11" W | 35.76' |
| L70 | N 11°41'48" E | 112.35' |
| L71 | N 16°18'35" E | 75.73' |
| L72 | N 38°27'40" W | 139.17' |
| L73 | N 79°48'21" W | 246.06' |

| CURVE TABLE | | | |
|-------------|----------|--------|----------|
| CURVE | RADIUS | LENGTH | DELTA |
| CT | 7100.00' | 12.84' | 0°05'13" |



| LEGEND | |
|---|--|
| EXHIBIT G PROJECT BOUNDARY | — |
| WATER LINE | — |
| MEANDER LINE | — |
| RECREATION SITE | — |
| WILDLIFE AREA | — |
| O.S. | ORIGINAL STONE |
| B.C. | BRASS CAP |
| A.C. | ALUMINUM CAP |
| R.C. | REBAR WITH CAP |
| AFN | AUDITOR FILE NUMBER |
| LCR | LAND CORNER RECORD |
| B.L.M. | BUREAU OF LAND MANAGEMENT |
| B.O.R. | BUREAU OF RECLAMATION |
| B.I.A. | BUREAU OF INDIAN AFFAIRS |
| U.S.A.C.E. | UNITED STATES ARMY |
| W.D.N.R. | CORPS OF ENGINEERS |
| | WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES |
| FOUND | NOT FOUND |
| SECTION CORNER (AS NOTED) | — |
| SECTION CORNER ON A TOWNSHIP OR RANGE LINE (AS NOTED) | — |
| QUARTER CORNER (AS NOTED) | — |
| QUARTER CORNER ON A TOWNSHIP OR RANGE LINE (AS NOTED) | — |
| MEANDER CORNER (AS NOTED) | — |
| MONUMENT (AS NOTED) | — |

MAP PROJECTION / BASIS OF BEARING

UNITS: U.S. SURVEY FEET
 HORIZONTAL DATUM: NAD 83/1981 ADJUSTMENT
 VERTICAL DATUM: NGVD 1929
 PROJECTION: WASHINGTON STATE COORDINATE SYSTEM-NORTH ZONE
 GEOID: GEOID 98 (CONUS)

BEARINGS ARE BASED ON THE WASHINGTON STATE COORDINATE SYSTEM, NORTH ZONE, DERIVED FROM GPS OBSERVATIONS. THE DISTANCES SHOWN ON THIS MAP HAVE BEEN PROJECTED TO THE WASHINGTON STATE PLANE COORDINATE GRID. MULTIPLY THE DISTANCES SHOWN BY A FACTOR OF 1.00009522 TO OBTAIN THE ACTUAL GROUND DISTANCE.

META DATA AS DERIVED BY GPS OBSERVATIONS AT THE WEST QUARTER CORNER OF SECTION 23 SHOWN HEREON IS AS FOLLOWS:

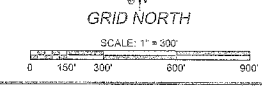
LATITUDE: N 48° 05' 00.3134"
 LONGITUDE: W 119° 47' 52.1061"
 ELLIPSOID HEIGHT: 787.05'
 ELEVATION: 850.19'
 CONVERGENCE ANGLE: 0° 46' 15"
 COMBINED SCALE FACTOR: 0.99990179

O.S.
 LCR AFN 3126074
 NORTHING: 394286.967
 EASTING: 1893544.347
 G25-2

A.C.
 LCR AFN 3125892
 NORTHING: 394359.461
 EASTING: 1898750.200
 G25-1

O.S.
 LCR AFN 3125893
 NORTHING: 394359.461
 EASTING: 1898750.200
 G25-1

ALL LAND WITHIN PROJECT BOUNDARY OWNED BY PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, (UNLESS OTHERWISE NOTED)



Erlandsen
 SURVEYORS & ENGINEERS, P.L.L.C.
 1160 1/2 Erlandsen Way
 BRENSTER (509) 669-2529
 CHELAN (509) 662-4189
 WHEAT RIDGE (509) 686-2662
 EMERATA (509) 734-3336

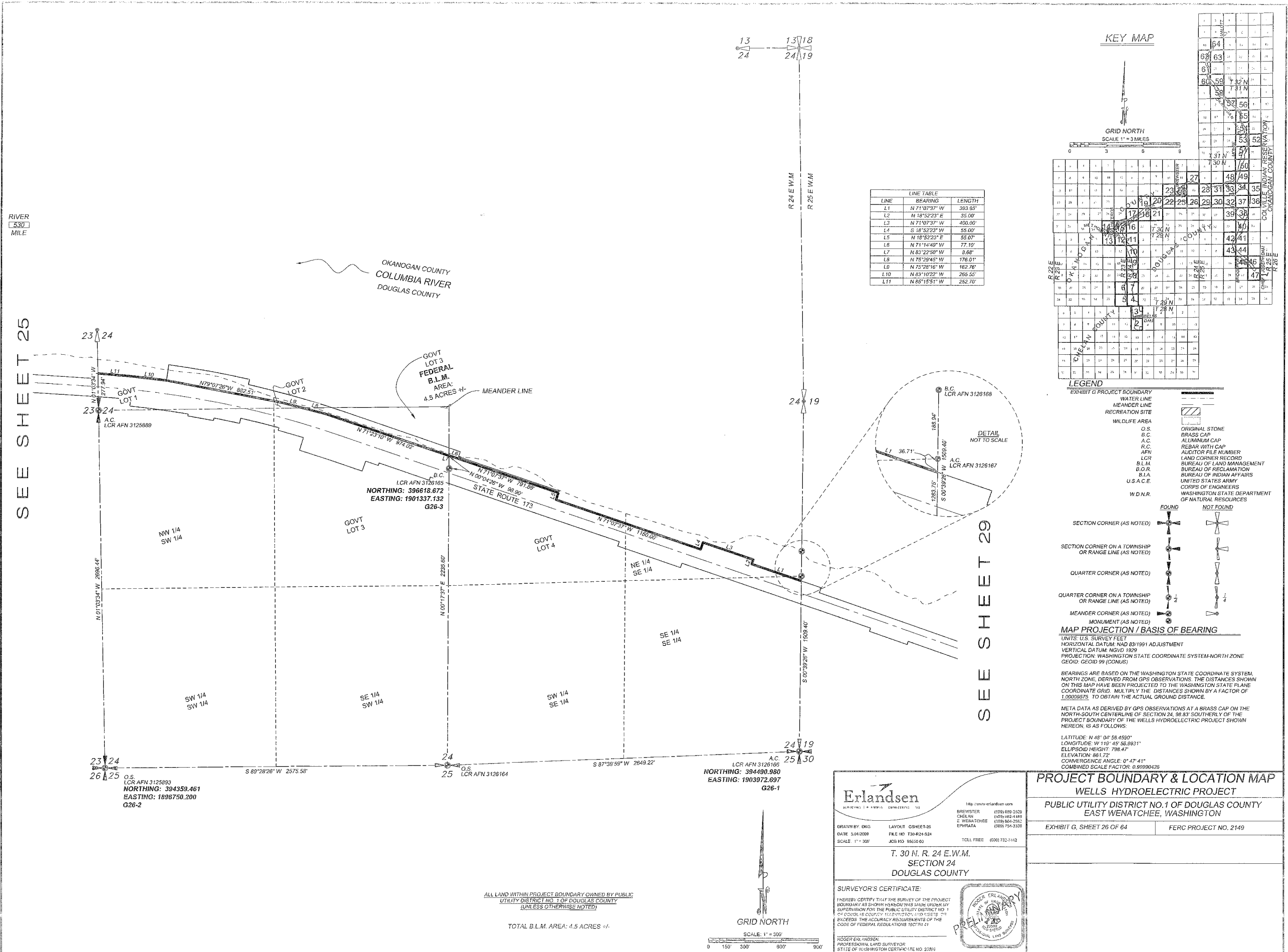
DRAWN BY: DMG LAYOUT: GSH-EET-2b
 DATE: 6/18/2009 FILE NO: T30-R24-923
 SCALE: 1" = 300' JOB NO: 05550.00 TOLL FREE: (800) 732-7142

T. 30 N. R. 24 E. W.M.
 SECTION 23
 OKANOGAN AND DOUGLAS COUNTIES

SURVEYOR'S CERTIFICATE:
 I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREON WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON, AND I CERTIFY THAT I AM A LICENSED PROFESSIONAL LAND SURVEYOR OF THE STATE OF WASHINGTON, LICENSE NO. 23599

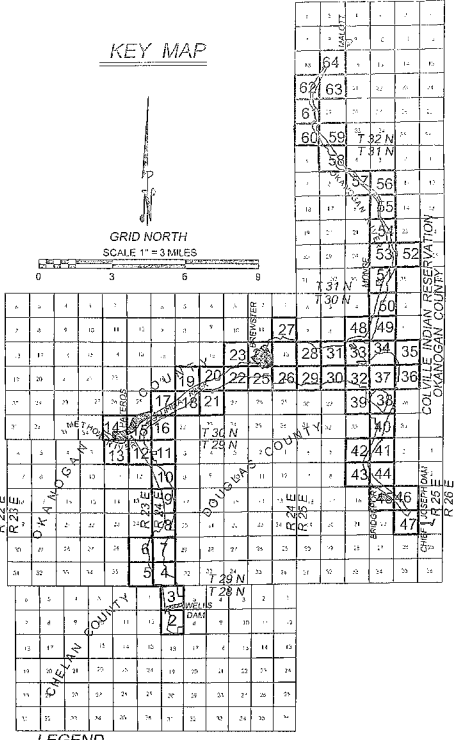
PROJECT BOUNDARY & LOCATION MAP
 WELLS HYDROELECTRIC PROJECT
 PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
 EAST WENATCHEE, WASHINGTON

EXHIBIT G, SHEET 25 OF 64 FERC PROJECT NO. 2149



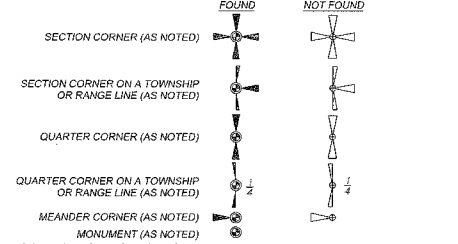
LINE TABLE

| LINE | BEARING | LENGTH |
|------|---------------|---------|
| L1 | N 71°07'37" W | 383.95' |
| L2 | N 18°52'23" E | 35.00' |
| L3 | N 71°07'37" W | 498.00' |
| L4 | S 18°52'23" W | 55.00' |
| L5 | N 18°52'23" E | 55.00' |
| L6 | N 71°14'49" W | 77.10' |
| L7 | N 83°22'50" W | 3.68' |
| L8 | N 75°29'45" W | 176.01' |
| L9 | N 75°29'16" W | 162.76' |
| L10 | N 83°10'22" W | 285.55' |
| L11 | N 65°15'51" W | 252.70' |



LEGEND

| EXHIBIT G PROJECT BOUNDARY | SYMBOL |
|----------------------------|--|
| WATER LINE | — |
| MEANDER LINE | - - - |
| RECREATION SITE | ▨ |
| WILDLIFE AREA | ▨ |
| O.S. | ORIGINAL STONE |
| B.C. | BRASS CAP |
| A.C. | ALUMINUM CAP |
| R.C. | REBAR WITH CAP |
| AFN | AUDITOR FILE NUMBER |
| LCR | LAND CORNER RECORD |
| B.L.M. | BUREAU OF LAND MANAGEMENT |
| B.O.R. | BUREAU OF RECLAMATION |
| B.I.A. | BUREAU OF INDIAN AFFAIRS |
| U.S.A.C.E. | UNITED STATES ARMY |
| W.D.N.R. | CORPS OF ENGINEERS |
| W.D.N.R. | WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES |



Erlandsen

1100 7th Avenue, Bremerton, WA 98311

PH: (360) 835-1100

DRIVEN BY: DRG LAYOUT: GSHEET-26

DATE: 5/31/2028 FILE NO: T30-R24-S24

SCALE: 1" = 300' JOB NO: 95630 00 TOLL FREE: (800) 732-7442

T. 30 N. R. 24 E.W.M. SECTION 24 DOUGLAS COUNTY

SURVEYOR'S CERTIFICATE:

I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREON WAS DONE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON, AND I CERTIFY THAT THE ACCURACY MEASUREMENTS OF THE CODE OF FEDERAL REGULATIONS 19C.F.R. 31

RODGER ENLANDSEN
PROFESSIONAL LAND SURVEYOR
STATE OF WASHINGTON CERTIFICATE NO. 23895

PROJECT BOUNDARY & LOCATION MAP

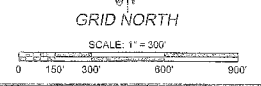
WELLS HYDROELECTRIC PROJECT

PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
EAST WENATCHEE, WASHINGTON

EXHIBIT G, SHEET 26 OF 64 FERC PROJECT NO. 2149

ALL LAND WITHIN PROJECT BOUNDARY OWNED BY PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY (UNLESS OTHERWISE NOTED)

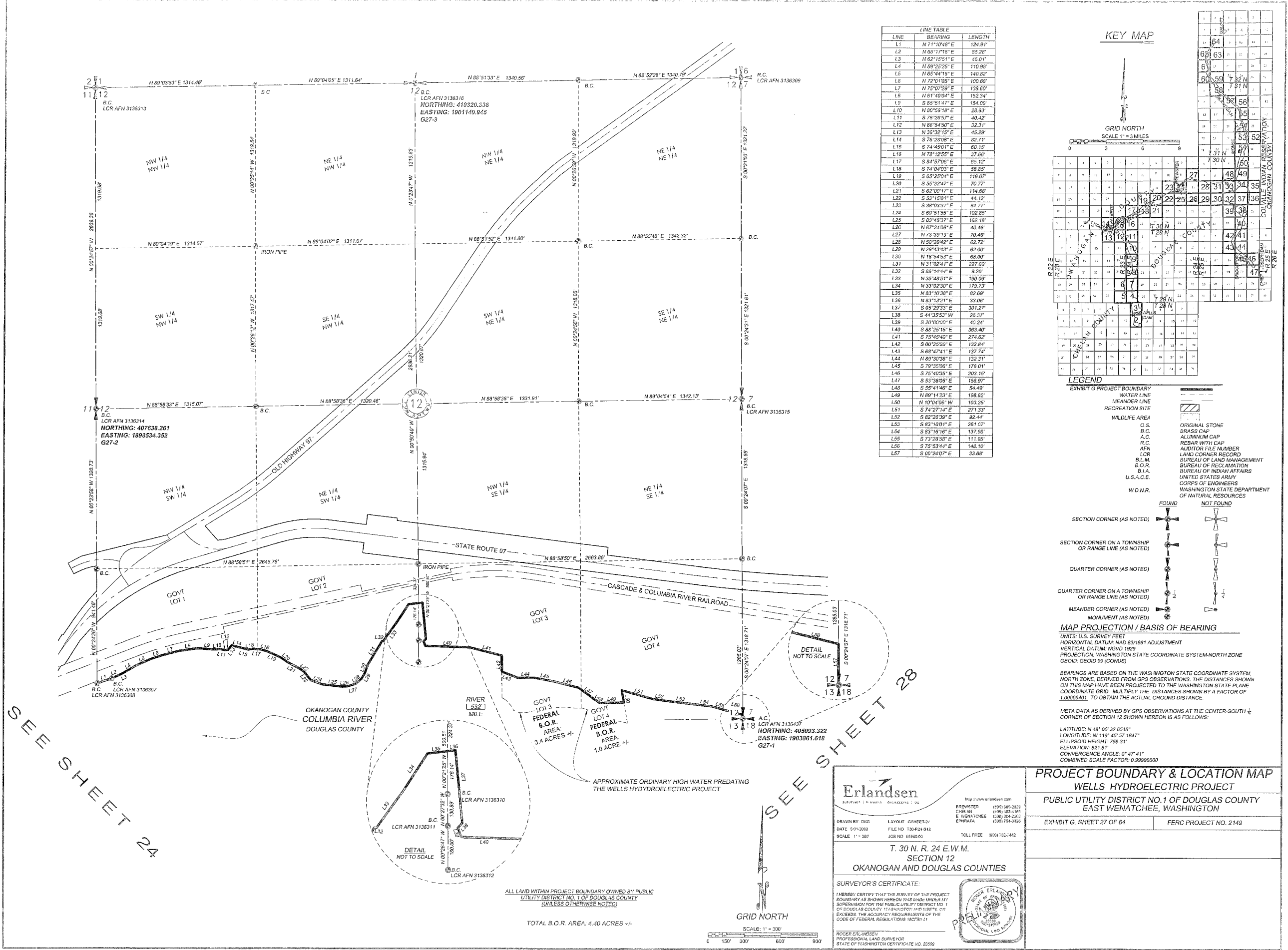
TOTAL B.L.M. AREA: 4.5 ACRES +/-



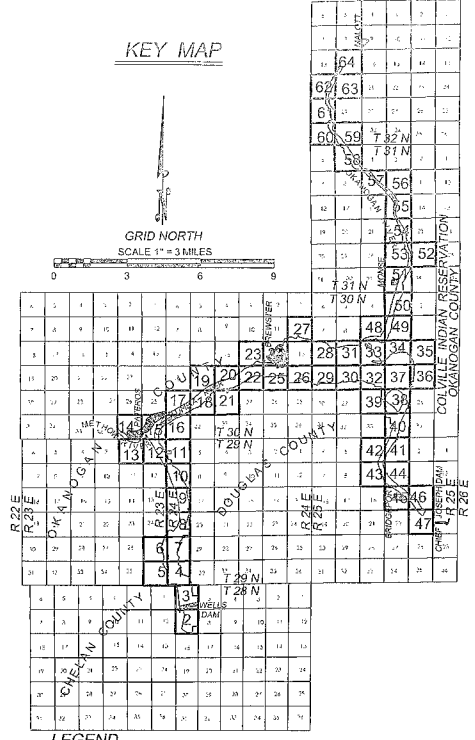
SEE SHEET 25

SEE SHEET 29

RIVER
3.30
MILE

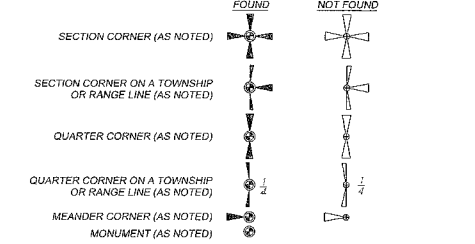


| LINE | BEARING | LENGTH |
|------|---------------|---------|
| L1 | N 71°10'48" E | 124.91' |
| L2 | N 66°17'18" E | 55.28' |
| L3 | N 62°15'51" E | 46.01' |
| L4 | N 59°25'25" E | 110.98' |
| L5 | N 65°44'16" E | 140.82' |
| L6 | N 72°0'10" E | 100.88' |
| L7 | N 75°0'29" E | 158.60' |
| L8 | N 81°10'04" E | 152.34' |
| L9 | S 85°51'47" E | 154.00' |
| L10 | N 80°56'18" E | 28.83' |
| L11 | S 78°26'57" E | 40.42' |
| L12 | N 86°64'90" E | 32.31' |
| L13 | N 38°32'15" E | 45.29' |
| L14 | S 76°28'08" E | 82.71' |
| L15 | S 74°45'01" E | 60.16' |
| L16 | N 78°12'55" E | 37.69' |
| L17 | S 84°57'06" E | 65.12' |
| L18 | S 74°04'03" E | 58.55' |
| L19 | S 65°25'04" E | 119.07' |
| L20 | S 55°32'47" E | 70.77' |
| L21 | S 62°08'17" E | 114.68' |
| L22 | S 53°15'01" E | 44.12' |
| L23 | S 38°03'37" E | 84.77' |
| L24 | S 68°51'56" E | 102.85' |
| L25 | S 83°45'37" E | 162.18' |
| L26 | N 67°24'06" E | 40.46' |
| L27 | N 73°39'13" E | 70.46' |
| L28 | N 50°20'42" E | 62.72' |
| L29 | N 29°43'43" E | 62.00' |
| L30 | N 18°54'53" E | 68.00' |
| L31 | N 31°02'41" E | 227.00' |
| L32 | S 88°14'44" E | 9.20' |
| L33 | N 35°48'51" E | 190.08' |
| L34 | N 33°02'30" E | 179.73' |
| L35 | N 83°10'38" E | 82.69' |
| L36 | N 83°13'21" E | 33.06' |
| L37 | S 03°29'33" E | 301.27' |
| L38 | S 44°35'53" W | 26.37' |
| L39 | S 20°00'00" E | 40.24' |
| L40 | S 88°29'15" E | 363.40' |
| L41 | S 75°45'40" E | 274.62' |
| L42 | S 00°25'20" E | 132.84' |
| L43 | S 68°47'41" E | 137.74' |
| L44 | N 89°30'38" E | 132.31' |
| L45 | S 79°35'06" E | 178.01' |
| L46 | S 75°40'35" E | 203.15' |
| L47 | S 53°38'05" E | 152.97' |
| L48 | S 55°41'46" E | 54.49' |
| L49 | N 89°14'23" E | 198.82' |
| L50 | N 10°04'06" W | 103.25' |
| L51 | S 74°27'14" E | 271.33' |
| L52 | S 82°26'39" E | 92.44' |
| L53 | S 83°10'01" E | 261.07' |
| L54 | S 83°16'16" E | 137.98' |
| L55 | S 73°28'58" E | 111.85' |
| L56 | S 75°53'44" E | 148.10' |
| L57 | S 00°24'07" E | 33.68' |



LEGEND

| | | | | |
|----------------------------|--|--------------|---------------------------|--------------------|
| EXHIBIT G PROJECT BOUNDARY | WATER LINE | MEANDER LINE | RECREATION SITE | WILDLIFE AREA |
| O.S. | BRASS CAP | A.C. | ALUMINUM CAP | REBAR WITH CAP |
| AFN | LAND CORNER RECORD | B.L.M. | BUREAU OF LAND MANAGEMENT | B.O.R. |
| B.I.A. | BUREAU OF INDIAN AFFAIRS | U.S.A.C.E. | UNITED STATES ARMY | CORPS OF ENGINEERS |
| W.D.N.R. | WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES | | | |



MAP PROJECTION / BASIS OF BEARING

UNITS: U.S. SURVEY FEET
 HORIZONTAL DATUM: NAD 83/1981 ADJUSTMENT
 VERTICAL DATUM: NGVD 1929
 PROJECTION: WASHINGTON STATE COORDINATE SYSTEM-NORTH ZONE
 GEOID: GEOID 96 (CONUS)

BEARINGS ARE BASED ON THE WASHINGTON STATE COORDINATE SYSTEM NORTH ZONE. DERIVED FROM GPS OBSERVATIONS. THE DISTANCES SHOWN ON THIS MAP HAVE BEEN PROJECTED TO THE WASHINGTON STATE PLANE COORDINATE GRID. MULTIPLY THE DISTANCES SHOWN BY A FACTOR OF 1.00000491 TO OBTAIN THE ACTUAL GROUND DISTANCE.

META DATA AS DERIVED BY GPS OBSERVATIONS AT THE CENTER-SOUTH CORNER OF SECTION 12 SHOWN HEREON IS AS FOLLOWS:

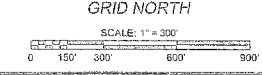
LATITUDE: N 48° 06' 32.6516"
 LONGITUDE: W 119° 45' 57.1847"
 ELLIPSOID HEIGHT: 758.31'
 ELEVATION: 921.51'
 CONVERGENCE ANGLE: 0° 47' 41"
 COMBINED SCALE FACTOR: 0.99999660

SEE SHEET 24

SEE SHEET 28

ALL LAND WITHIN PROJECT BOUNDARY OWNED BY PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY (UNLESS OTHERWISE NOTED)

TOTAL B.O.R. AREA: 4.40 ACRES +/-



Erlandsen
 SURVEYORS & ENGINEERS
 1100 N. 24th St., Suite 100, Wenatchee, WA 98801
 (509) 665-2328
 (509) 665-2329
 (509) 665-2330
 (509) 665-2331
 (509) 665-2332
 (509) 665-2333

DRAWN BY: DMO LAYOUT: OSHEET-2/ DATE: 5/01/2009 FILE NO: T30-R24-S12 SCALE: 1" = 300'

T. 30 N. R. 24 E. W. M. SECTION 12 OKANOGAN AND DOUGLAS COUNTIES

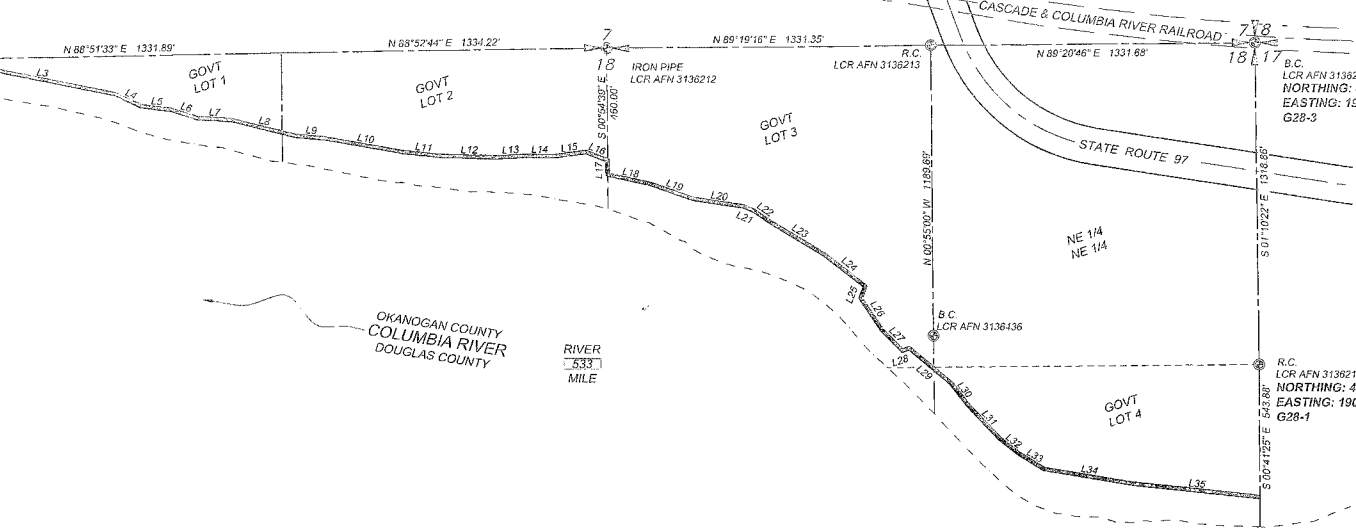
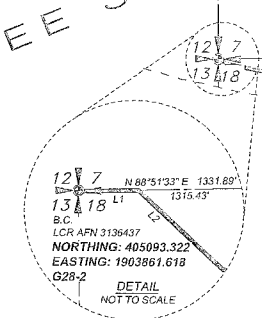
SURVEYOR'S CERTIFICATE:
 I HEREBY CERTIFY THAT THE SURVEY OF THIS PROJECT BOUNDARY AS SHOWN HEREON WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON AND I HEREBY DO HEREBY CERTIFY THAT THE ACCURACY REQUIREMENTS OF THE CODE OF FEDERAL REGULATIONS 182784.11

ROGER ERLANDSEN
 PROFESSIONAL LAND SURVEYOR
 STATE OF WASHINGTON CERTIFICATE NO. 23590

PROJECT BOUNDARY & LOCATION MAP
 WELLS HYDROELECTRIC PROJECT
 PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
 EAST WENATCHEE, WASHINGTON

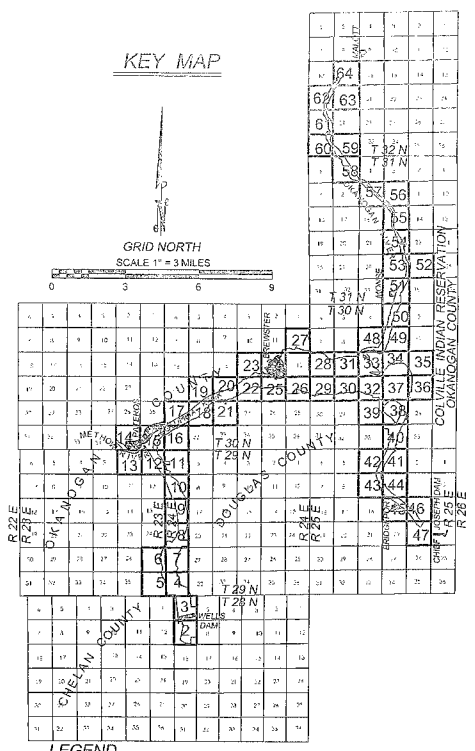
EXHIBIT G, SHEET 27 OF 64 FERC PROJECT NO. 2149

SEE SHEET 27



SEE SHEET 31

| LINE | BEARING | LENGTH |
|------|------------------|--------|
| L1 | N 88° 51' 33\"/> | |



- LEGEND**
- EXHIBIT G PROJECT BOUNDARY
 - WATER LINE
 - MEANDER LINE
 - RECREATION SITE
 - WILDLIFE AREA
 - O.S. ORIGINAL STONE
 - B.C. BRASS CAP
 - A.C. ALUMINUM CAP
 - R.C. REBAR WITH CAP
 - AFN AUDITOR FILE NUMBER
 - LCR LAND CORNER RECORD
 - B.L.M. BUREAU OF LAND MANAGEMENT
 - B.O.R. BUREAU OF RECLAMATION
 - B.I.A. BUREAU OF INDIAN AFFAIRS
 - U.S.A.C.E. UNITED STATES ARMY
 - W.D.N.R. WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES
- FOUND NOT FOUND**
- SECTION CORNER (AS NOTED)
 - SECTION CORNER ON A TOWNSHIP OR RANGE LINE (AS NOTED)
 - QUARTER CORNER (AS NOTED)
 - QUARTER CORNER ON A TOWNSHIP OR RANGE LINE (AS NOTED)
 - MEANDER CORNER (AS NOTED)
 - MONUMENT (AS NOTED)

MAP PROJECTION / BASIS OF BEARING

UNITS: U.S. SURVEY FEET
 HORIZONTAL DATUM: NAD 83/1991 ADJUSTMENT
 VERTICAL DATUM: MVD 1928
 PROJECTION: WASHINGTON STATE COORDINATE SYSTEM-NORTH ZONE
 GEOID: GEOID 98 (CONUS)

BEARINGS ARE BASED ON THE WASHINGTON STATE COORDINATE SYSTEM-NORTH ZONE. DERIVED FROM GPS OBSERVATIONS. THE DISTANCES SHOWN ON THIS MAP HAVE BEEN PROJECTED TO THE WASHINGTON STATE PLANE COORDINATE GRID. MULTIPLY THE DISTANCES SHOWN BY A FACTOR OF 1.00009286 TO OBTAIN THE ACTUAL GROUND DISTANCE.

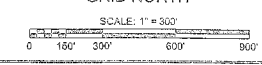
META DATA AS DERIVED BY GPS OBSERVATIONS AT THE NORTH QUARTER CORNER OF SECTION 18 SHOWN HEREON, IS AS FOLLOWS:

LATITUDE: N 48° 06' 19.8879"
 LONGITUDE: W 119° 44' 38.7828"
 ELLIPSOID HEIGHT: 840.97'
 ELEVATION: 904.29'
 CONVERGENCE ANGLE: 0° 48' 39"
 COMBINED SCALE FACTOR: 0.99990205

SEE SHEET 29

ALL LAND WITHIN PROJECT BOUNDARY OWNED BY PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY (UNLESS OTHERWISE NOTED)

GRID NORTH



Erlandsen
 SURVEYORS & ENGINEERS P.L.L.C.
 1000 1st Avenue, Ephrata, WA 98941
 (509) 555-2529
 (509) 552-4108
 (509) 754-2582
 (509) 754-3328

DRAWN BY: DRG LAYOUT: GSHBET-28
 DATE: 5/01/2009 FILE NO: T30-R25-818
 SCALE: 1" = 300' JOB NO: 00550-00 TOLL FREE: (800) 732-7142

T. 30 N. R. 25 E. W.M.
 SECTION 18
 OKANOGAN COUNTY

SURVEYOR'S CERTIFICATE:
 I HEREBY CERTIFY THAT THE SURVEY OF THIS PROJECT DOCUMENT AS SHOWN HEREON WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON AND I CERTIFY THAT I AM A LICENSED SURVEYOR UNDER THE CODE OF FEDERAL REGULATIONS 18CFR-11

ROGER ERLANDSEN
 PROFESSIONAL LAND SURVEYOR
 STATE OF WASHINGTON CERTIFICATE NO. 22592

PROJECT BOUNDARY & LOCATION MAP
 WELLS HYDROELECTRIC PROJECT
 PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
 EAST WENATCHEE, WASHINGTON

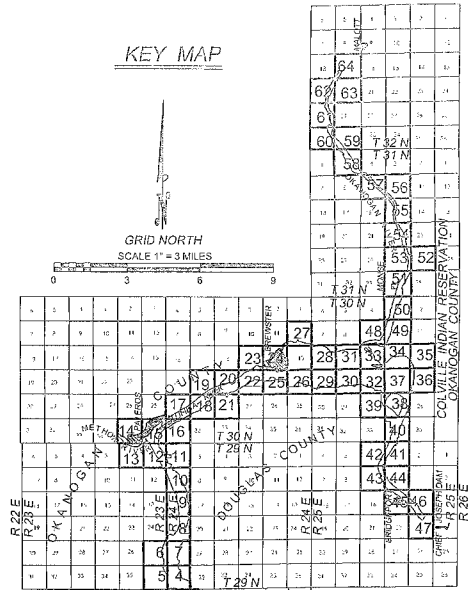
EXHIBIT G, SHEET 28 OF 64 FERC PROJECT NO. 2149

SEE SHEET 28

RIVER
3.34
MILE

OKANOGAN COUNTY
COLUMBIA RIVER
DOUGLAS COUNTY

KEY MAP



GRID NORTH
SCALE 1" = 3 MILES

| LINE | BEARING | LENGTH |
|------|---------------|---------|
| L1 | N 38°04'25" W | 145.20' |
| L2 | S 10°54'00" W | 81.30' |
| L3 | S 35°16'50" W | 25.44' |
| L4 | N 14°40'44" W | 106.86' |
| L5 | S 75°38'43" W | 473.84' |
| L6 | S 78°25'19" W | 172.58' |
| L7 | S 70°00'51" W | 250.05' |
| L8 | N 78°45'07" W | 287.99' |
| L9 | N 78°08'48" W | 157.45' |
| L10 | S 00°08'46" E | 331.98' |
| L11 | N 71°07'37" W | 72.51' |
| L12 | N 18°52'23" E | 40.00' |
| L13 | N 71°07'37" W | 156.05' |

| CURVE | RADIUS | LENGTH | DELTA |
|-------|----------|--------|----------|
| C1 | 8050.00' | 95.44' | 0°31'30" |

LEGEND

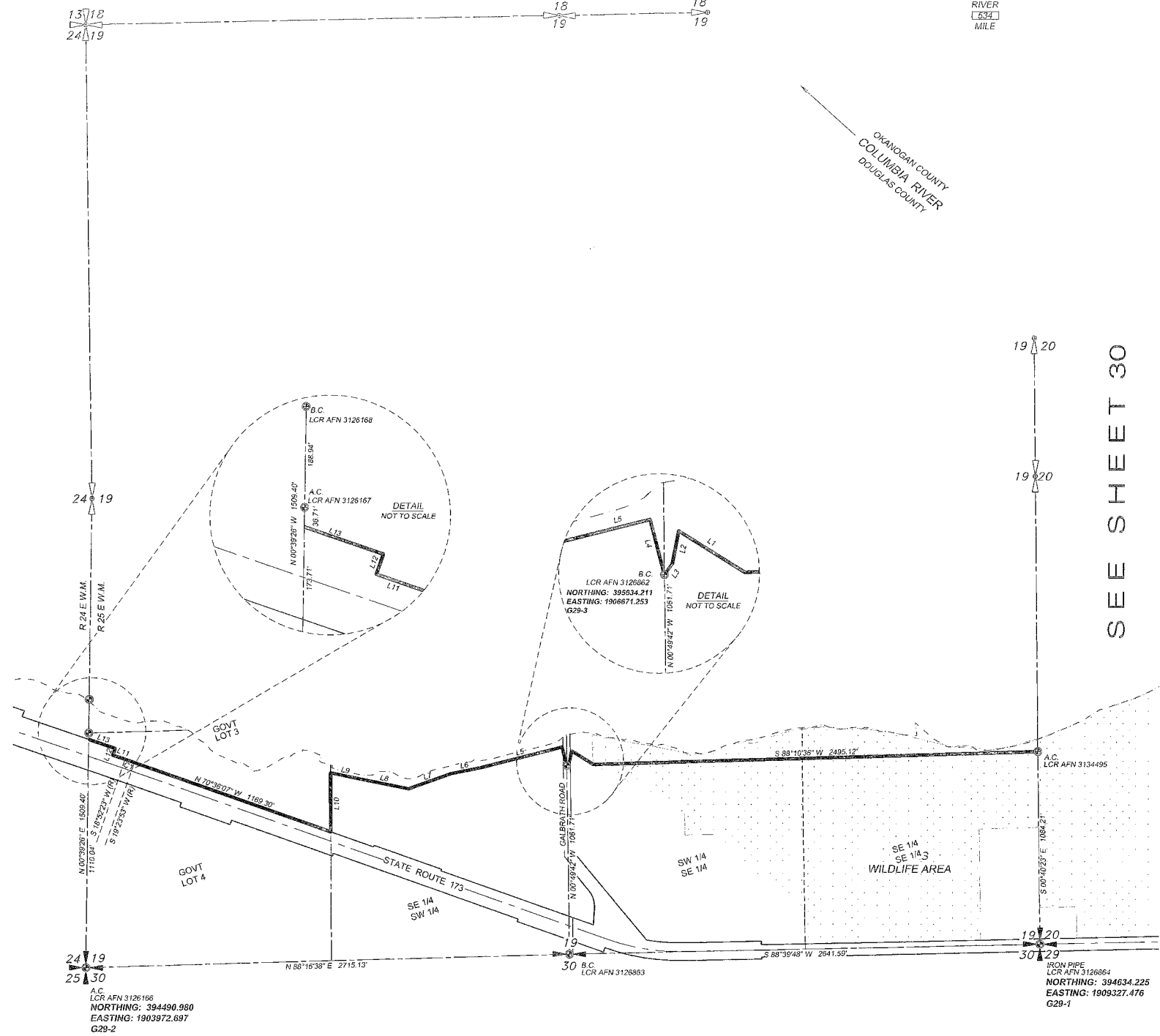
- EXHIBIT G PROJECT BOUNDARY
- WATER LINE
- MEANDER LINE
- RECREATION SITE
- WILDLIFE AREA
- O.S. ORIGINAL STONE
- B.C. BRASS CAP
- A.C. ALUMINUM CAP
- R.C. REBAR WITH CAP
- AFN AUDITOR FILE NUMBER
- LCR LAND CORNER RECORD
- B.L.M. BUREAU OF LAND MANAGEMENT
- B.O.R. BUREAU OF RECLAMATION
- S.I.A. BUREAU OF INDIAN AFFAIRS
- U.S.A.C.E. UNITED STATES ARMY
- W.D.N.R. CORPS OF ENGINEERS
- WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES

- SECTION CORNER (AS NOTED)
- SECTION CORNER ON A TOWNSHIP OR RANGE LINE (AS NOTED)
- QUARTER CORNER (AS NOTED)
- QUARTER CORNER ON A TOWNSHIP OR RANGE LINE (AS NOTED)
- MEANDER CORNER (AS NOTED)
- MONUMENT (AS NOTED)

MAP PROJECTION / BASIS OF BEARING
 UNITS: U.S. SURVEY FEET
 HORIZONTAL DATUM: NAD 83/1991 ADJUSTMENT
 VERTICAL DATUM: NAVD 83
 PROJECTION: WASHINGTON STATE COORDINATE SYSTEM-NORTH ZONE
 GEOID: GEOID 99 (CONUS)
 BEARINGS ARE BASED ON THE WASHINGTON STATE COORDINATE SYSTEM, NORTH ZONE, DERIVED FROM GPS OBSERVATIONS. THE DISTANCES SHOWN ON THIS MAP HAVE BEEN PROJECTED TO THE WASHINGTON STATE PLANE COORDINATE GRID. MULTIPLY THE DISTANCES SHOWN BY A FACTOR OF 1.00000224 TO OBTAIN THE ACTUAL GROUND DISTANCE.
 META DATA AS DERIVED BY GPS OBSERVATIONS ON A BRASS CAP AT THE INTERSECTION OF THE NORTH-SOUTH CENTERLINE OF SECTION 19, AND THE PROJECT BOUNDARY OF THE WELLS HYDROELECTRIC PROJECT SHOWN HEREON, IS AS FOLLOWS:
 LATITUDE: N 48° 04' 45.0287"
 LONGITUDE: W 119° 44' 38.6443"
 ELLIPSOID HEIGHT: 725.65'
 ELEVATION: 788.99'
 CONVERGENCE ANGLE: 0° 48' 40"
 COMBINED SCALE FACTOR: 0.99950777

SEE SHEET 26

SEE SHEET 30



A.C.
LCR AFN 3126166
NORTHING: 394490.980
EASTING: 1903972.697
G29-2

B.C.
LCR AFN 3126863

IRON PIPE
LCR AFN 3126864
NORTHING: 394634.225
EASTING: 1909327.476
G29-1

ALL LAND WITHIN PROJECT BOUNDARY OWNED BY PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY (UNLESS OTHERWISE NOTED)

GRID NORTH



Erlandsen
 SURVEYORS & ENGINEERS
 1100 1/2 AVENUE
 BREWSTER (509) 626-2428
 CHELAN (509) 624-1189
 E. WENATCHEE (509) 344-2462
 EPHRATA (509) 754-3326

DRAWN BY: DEG LAYOUT: GSHBET-29
 DATE: 8/18/2023 FILE NO: T30-R23-S19
 SCALE: 1" = 300' JOB NO: 95510-00 TOLL FREE: (800) 732-7442

T. 30 N. R. 25 E.W.M.
 SECTION 19
 DOUGLAS COUNTY

SURVEYOR'S CERTIFICATE:
 I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT & BOUNDARY AS SHOWN THEREON WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON AND I HEREBY CERTIFY THAT THE SURVEY COMPLETION DATE IS 8/18/2023 AND I AM A LICENSED PROFESSIONAL LAND SURVEYOR IN THE STATE OF WASHINGTON CERTIFICATE NO. 23699

PROJECT BOUNDARY & LOCATION MAP
 WELLS HYDROELECTRIC PROJECT
 PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
 EAST WENATCHEE, WASHINGTON

EXHIBIT G, SHEET 29 OF 64 FERC PROJECT NO. 2149

SEE SHEET 31

RIVER
532
MILE

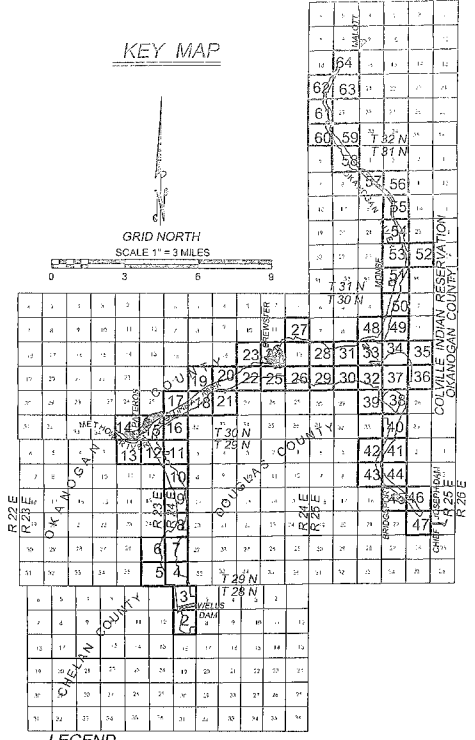
17
20

17
20

17
20

O.S.
LCR AFN 3135703
NORTHING: 400488.395
EASTING: 1915190.473
G30-3

KEY MAP



| LINE | BEARING | LENGTH |
|------|---------------|---------|
| L1 | N 49°05'10" W | 56.13' |
| L2 | S 85°11'37" W | 93.95' |
| L3 | S 84°44'08" W | 58.19' |
| L4 | S 79°41'53" W | 88.12' |
| L5 | S 80°50'39" W | 74.95' |
| L6 | S 84°30'43" W | 161.44' |
| L7 | S 84°40'11" W | 126.78' |
| L8 | S 84°51'08" W | 33.05' |
| L9 | S 85°56'00" W | 126.15' |
| L10 | S 83°28'51" W | 71.84' |
| L11 | S 61°34'10" W | 213.37' |
| L12 | S 84°32'59" W | 32.41' |
| L13 | N 88°45'50" W | 129.22' |
| L14 | S 50°15'39" W | 102.23' |
| L15 | S 01°30'29" E | 18.53' |
| L16 | N 27°50'00" W | 101.39' |
| L17 | N 47°03'47" W | 139.62' |
| L18 | N 78°43'57" W | 117.54' |
| L19 | N 38°10'43" W | 70.99' |
| L20 | S 70°10'48" W | 88.63' |
| L21 | S 16°23'08" W | 55.13' |

SEE SHEET 29

19
20

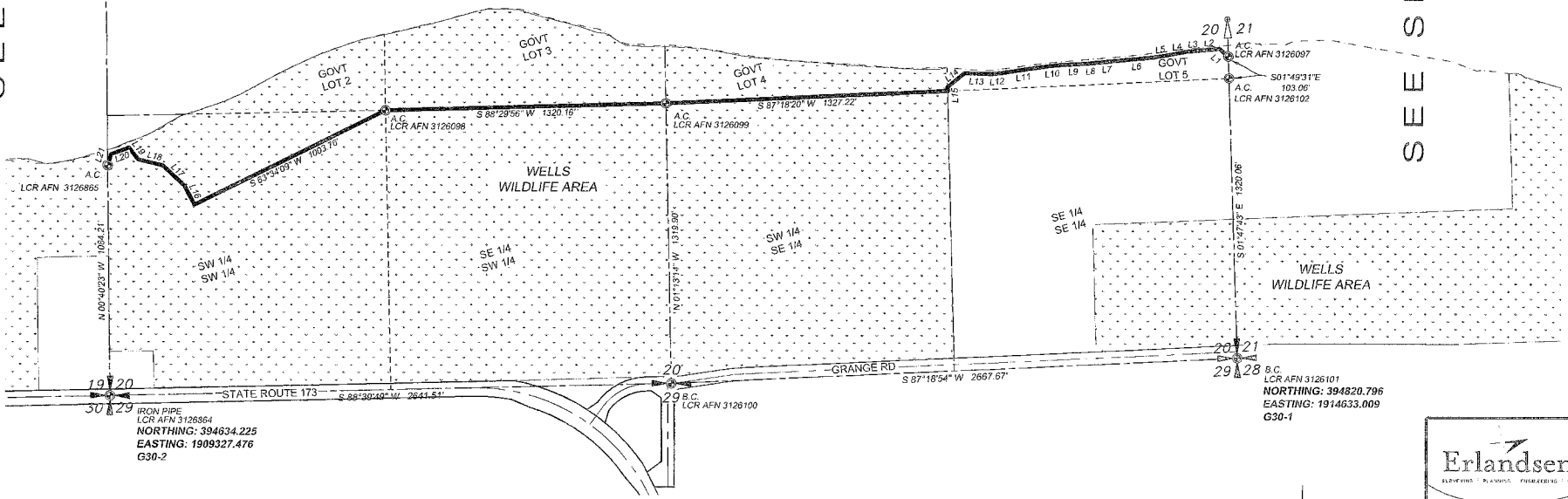
19
20

GOVT
LOT 1
FEDERAL
B.L.M.
AREA
7.7 ACRES +/-

RIVER
535
MILE

20
21

SEE SHEET 32



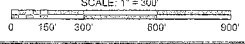
IRON PIPE
LCR AFN 3126884
NORTHING: 394634.225
EASTING: 1909327.476
G30-2

B.C.
LCR AFN 3126101
NORTHING: 394820.796
EASTING: 1914633.009
G30-1

ALL LAND WITHIN PROJECT BOUNDARY OWNED BY PUBLIC
UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
(UNLESS OTHERWISE NOTED)

TOTAL B.L.M. AREA: 7.7 ACRES +/-

GRID NORTH



- LEGEND**
- EXHIBIT G PROJECT BOUNDARY
 - WATER LINE
 - MEANDER LINE
 - RECREATION SITE
 - WILDLIFE AREA
 - ORIGINAL STONE
 - B.R.S. CAP
 - ALUMINUM CAP
 - R.C.
 - REBAR WITH CAP
 - A.F.N.
 - LAND CORNER RECORD
 - B.L.M.
 - BUREAU OF LAND MANAGEMENT
 - B.O.R.
 - BUREAU OF RECLAMATION
 - B.I.A.
 - BUREAU OF INDIAN AFFAIRS
 - U.S.A.C.E.
 - UNITED STATES ARMY
 - CORPS OF ENGINEERS
 - WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES
 - W.D.N.R.

- FOUND** **NOT FOUND**
- SECTION CORNER (AS NOTED)
 - SECTION CORNER ON A TOWNSHIP OR RANGE LINE (AS NOTED)
 - QUARTER CORNER (AS NOTED)
 - QUARTER CORNER ON A TOWNSHIP OR RANGE LINE (AS NOTED)
 - MEANDER CORNER (AS NOTED)
 - MONUMENT (AS NOTED)

MAP PROJECTION / BASIS OF BEARING

UNITS: U.S. SURVEY FEET
 HORIZONTAL DATUM: NAD 83/1991 ADJUSTMENT
 VERTICAL DATUM: NGVD 1929
 PROJECTION: WASHINGTON STATE COORDINATE SYSTEM-NORTH ZONE
 GEOID: GEOID 99 (CONUS)
 BEARINGS ARE BASED ON THE WASHINGTON STATE COORDINATE SYSTEM, NORTH ZONE, DERIVED FROM GPS OBSERVATIONS. THE DISTANCES SHOWN ON THIS MAP HAVE BEEN PROJECTED TO THE WASHINGTON STATE PLANE COORDINATE GRID. MULTIPLY THE DISTANCES SHOWN BY A FACTOR OF 1.00002213 TO OBTAIN THE ACTUAL GROUND DISTANCE.
 META DATA AS DERIVED BY GPS OBSERVATIONS ON AN ALUMINUM CAP AT THE CENTER-SOUTH 1/16 CORNER OF SECTION 20 SHOWN HEREON, IS AS FOLLOWS:
 LATITUDE: N 45° 04' 49.0253"
 LONGITUDE: W 119° 43' 20.9745"
 ELLIPSOID HEIGHT: 723.27'
 ELEVATION: 786.70'
 CONVERGENCE ANGLE: 0° 49' 37"
 COMBINED SCALE FACTOR: 0.99990788

Erlandsen
 SURVEYORS & ENGINEERS
 1100 N. 25th St., Suite 100
 Wenatchee, WA 98801
 (509) 838-2329
 (509) 842-4109
 (509) 844-3262
 (509) 754-3300

DRAWN BY: DMG LAYOUT: GSHEET-31
 DATE: 5-01-2009 FILE NO: T30-R25-G30
 SCALE: 1" = 300' JOB NO: 05550-00 TOLL FREE: (800) 732-7412

T. 30 N. R. 25 E.W.M.
 SECTION 20
 DOUGLAS COUNTY

SURVEYOR'S CERTIFICATE:
 I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREON WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, 1100 N. 25th St. and 1100 E. 3rd St. IN ACCORDANCE WITH THE ACCURACY REQUIREMENTS OF THE CODE OF FEDERAL REGULATIONS 19CFR 41

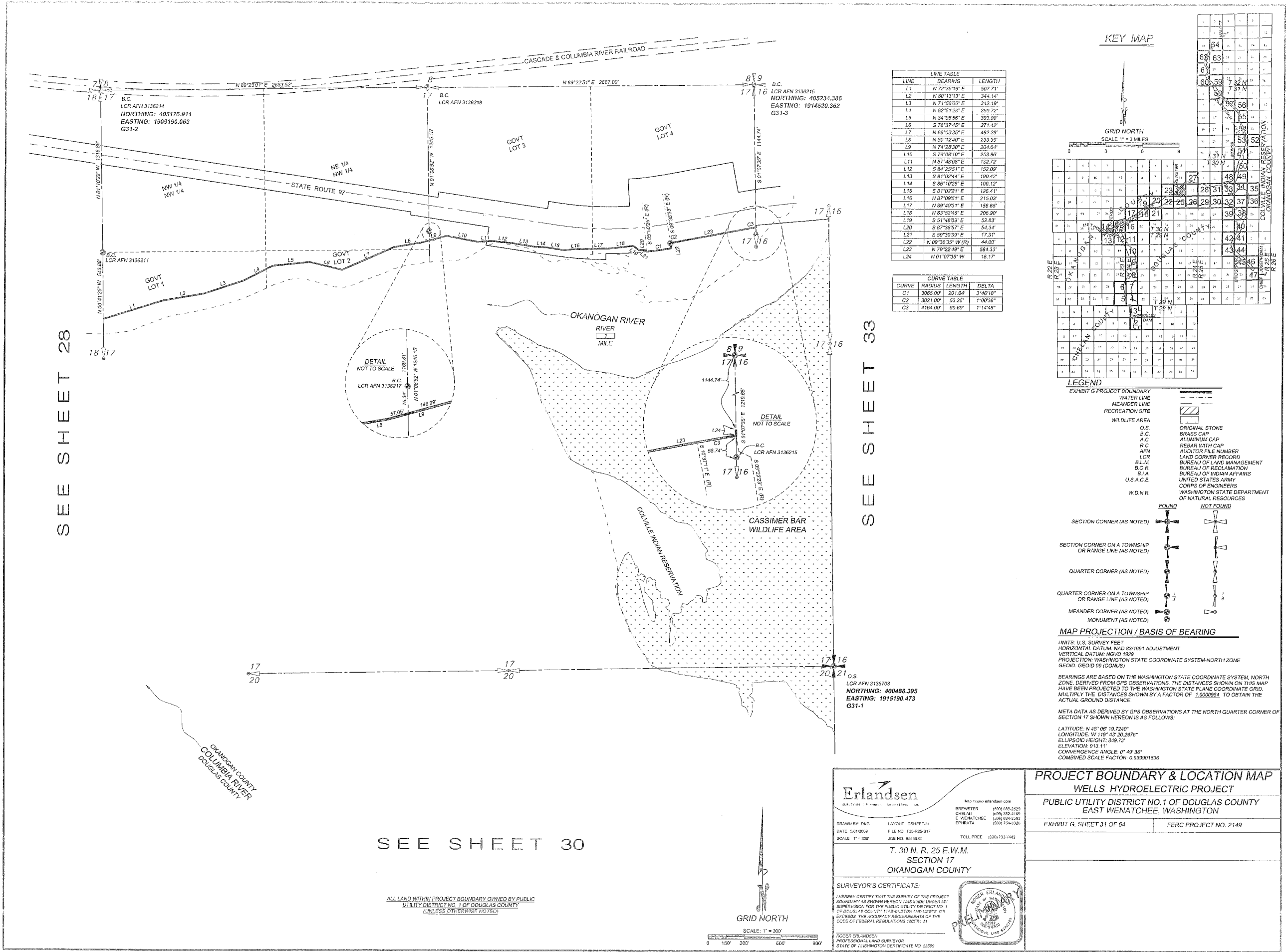
ROGER ERLANDSEN
 PROFESSIONAL LAND SURVEYOR
 STATE OF WASHINGTON CERTIFICATE NO. 23599

PROJECT BOUNDARY & LOCATION MAP
 WELLS HYDROELECTRIC PROJECT
 PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
 EAST WENATCHEE, WASHINGTON

| | |
|---------------------------|-----------------------|
| EXHIBIT G, SHEET 30 OF 64 | FERC PROJECT NO. 2149 |
|---------------------------|-----------------------|

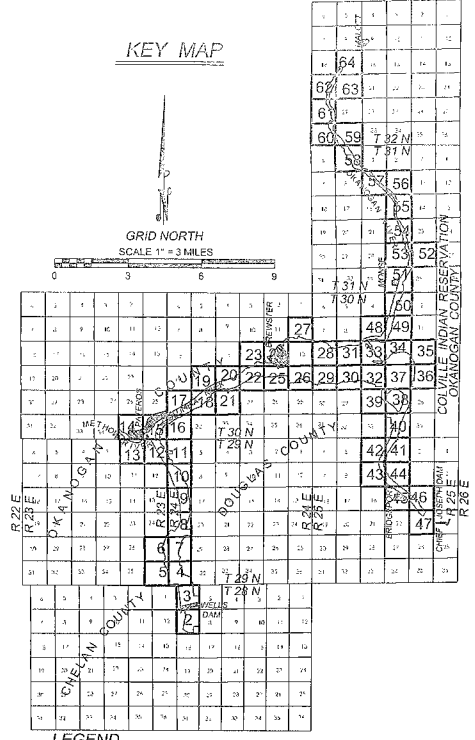
SEE SHEET 28

SEE SHEET 33

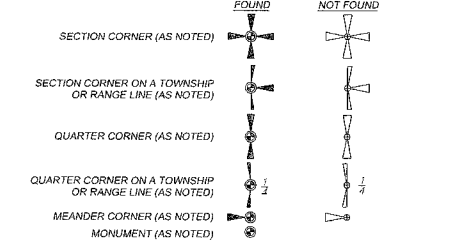


| LINE | BEARING | LENGTH |
|------|-------------------|---------|
| L1 | N 72°30'18" E | 507.71' |
| L2 | N 90°13'13" E | 344.14' |
| L3 | N 71°56'08" E | 342.19' |
| L4 | N 82°51'28" E | 280.72' |
| L5 | N 84°09'58" E | 303.90' |
| L6 | S 76°37'45" E | 271.42' |
| L7 | N 68°10'35" E | 462.28' |
| L8 | N 80°12'40" E | 233.39' |
| L9 | N 74°28'30" E | 204.04' |
| L10 | S 79°08'10" E | 253.86' |
| L11 | N 87°46'08" E | 132.72' |
| L12 | S 84°25'51" E | 152.09' |
| L13 | S 81°02'44" E | 180.42' |
| L14 | S 86°10'28" E | 100.12' |
| L15 | S 81°02'21" E | 126.41' |
| L16 | N 87°09'51" E | 215.03' |
| L17 | N 89°40'31" E | 156.65' |
| L18 | N 83°52'48" E | 206.90' |
| L19 | S 51°48'03" E | 52.83' |
| L20 | S 67°36'57" E | 54.34' |
| L21 | S 50°30'35" E | 17.31' |
| L22 | N 09°36'35" W (R) | 44.00' |
| L23 | N 79°22'49" E | 584.33' |
| L24 | N 01°07'35" W | 16.17' |

| CURVE | RADIUS | LENGTH | DELTA |
|-------|----------|---------|----------|
| C1 | 3065.00' | 201.64' | 3°46'10" |
| C2 | 3021.00' | 53.25' | 1°00'58" |
| C3 | 4164.00' | 90.60' | 1°14'48" |



- LEGEND**
- EXHIBIT G PROJECT BOUNDARY
 - WATER LINE
 - MEANDER LINE
 - RECREATION SITE
 - WILDLIFE AREA
 - O.S. ORIGINAL STONE
 - B.C. BRASS CAP
 - A.C. ALUMINUM CAP
 - R.C. REBAR WITH CAP
 - AFN AUDITOR FILE NUMBER
 - LCR LAND CORNER RECORD
 - B.L.M. BUREAU OF LAND MANAGEMENT
 - B.O.R. BUREAU OF RECLAMATION
 - B.I.A. BUREAU OF INDIAN AFFAIRS
 - U.S.A.C.E. UNITED STATES ARMY
 - CORPS OF ENGINEERS
 - WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES
 - W.D.N.R.



MAP PROJECTION / BASIS OF BEARING

UNITS: U.S. SURVEY FEET
 HORIZONTAL DATUM: NAD 83/1981 ADJUSTMENT
 VERTICAL DATUM: NGVD 1929
 PROJECTION: WASHINGTON STATE COORDINATE SYSTEM-NORTH ZONE
 GEOID: GEOID 99 (CONUS)

BEARINGS ARE BASED ON THE WASHINGTON STATE COORDINATE SYSTEM, NORTH ZONE. DISTANCES DERIVED FROM GPS OBSERVATIONS. THE DISTANCES SHOWN ON THIS MAP HAVE BEEN PROJECTED TO THE WASHINGTON STATE PLANE COORDINATE GRID. MULTIPLY THE DISTANCES SHOWN BY A FACTOR OF 1.0000992 TO OBTAIN THE ACTUAL GROUND DISTANCE.

META DATA AS DERIVED BY GPS OBSERVATIONS AT THE NORTH QUARTER CORNER OF SECTION 17 SHOWN HEREON IS AS FOLLOWS:

LATITUDE: N 48° 08' 19.7249"
 LONGITUDE: W 119° 43' 20.2976"
 ELLIPSOID HEIGHT: 849.72'
 ELEVATION: 913.11'
 CONVERGENCE ANGLE: 0° 49' 38"
 COMBINED SCALE FACTOR: 0.999901638

SEE SHEET 30

ALL LAND WITHIN PROJECT BOUNDARY OWNED BY PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY (UNLESS OTHERWISE NOTED)

Erlandsen
 SURVEYORS & ENGINEERS, P.A.
 1500 428-2329
 BREWSTER (509) 852-4188
 CHELAN (509) 854-5462
 SE. WENATCHEE (509) 754-2326
 EMWATA

DRAWN BY: DRG LAYOUT: DSHEET-11
 DATE: 5/31/2009 FILE NO: T30-R25-S17
 SCALE: 1" = 300' JOB NO: 95530.00 TOLL FREE: (800) 732-7412

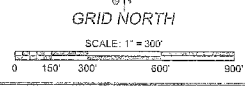
T. 30 N. R. 25 E. W.M.
 SECTION 17
 OKANOGAN COUNTY

SURVEYOR'S CERTIFICATE:
 I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREON WAS UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON. METERS 105 EXCEEDED THE ACCURACY REQUIREMENTS OF THE CODE OF FEDERAL REGULATIONS 19CFR 1.11

ROGER ERLANDSEN
 PROFESSIONAL LAND SURVEYOR
 STATE OF WASHINGTON CERTIFICATE NO. 23592

PROJECT BOUNDARY & LOCATION MAP
 WELLS HYDROELECTRIC PROJECT
 PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
 EAST WENATCHEE, WASHINGTON

EXHIBIT G, SHEET 31 OF 64 FERC PROJECT NO. 2149

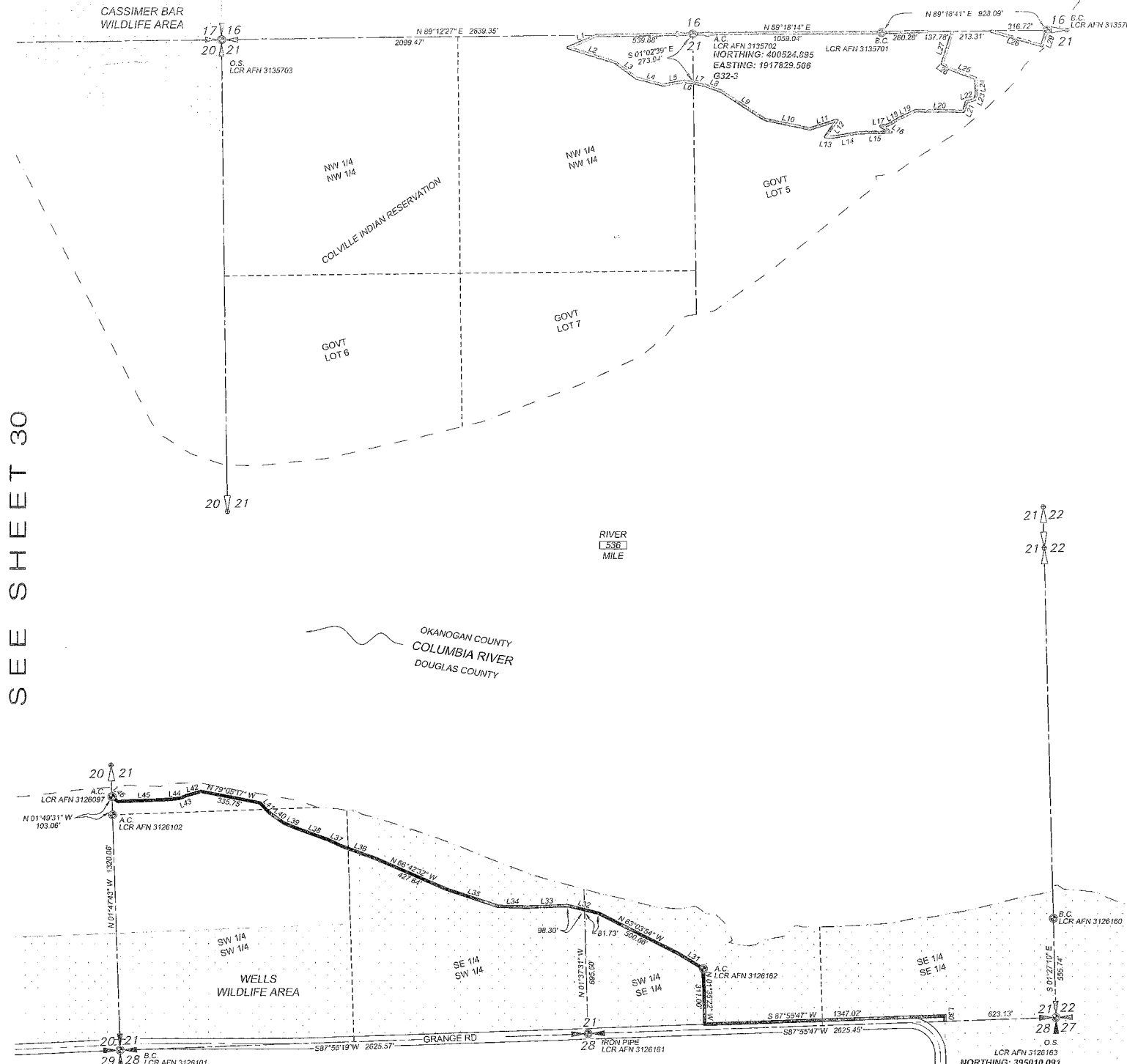


SEE SHEET 33

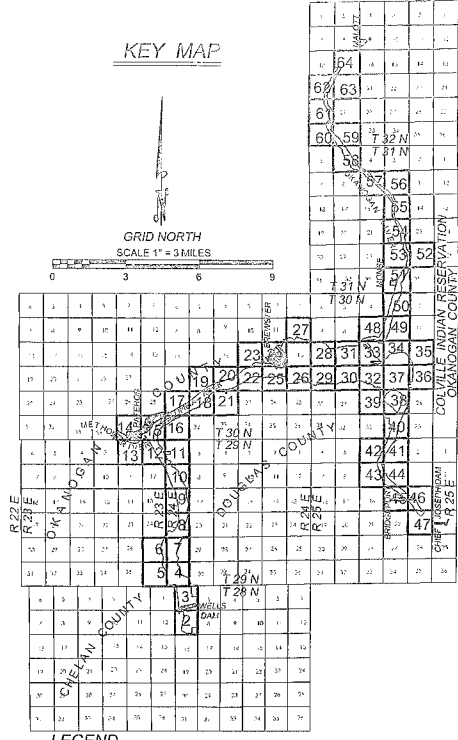
SEE SHEET 30

SEE SHEET 37

SEE SHEET 39

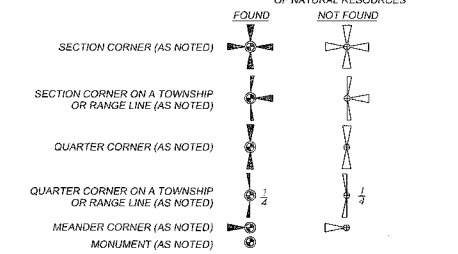


| LINE | BEARING | LENGTH |
|------|---------------|---------|
| L1 | S 86°17'10" W | 171.48' |
| L2 | S 73°05'45" E | 272.99' |
| L3 | S 83°16'03" E | 152.97' |
| L4 | S 75°44'34" E | 154.94' |
| L5 | N 79°32'50" E | 120.45' |
| L6 | S 78°59'21" E | 50.22' |
| L7 | S 78°59'21" E | 61.96' |
| L8 | S 70°16'59" E | 100.13' |
| L9 | S 57°15'03" E | 292.16' |
| L10 | S 78°14'02" E | 290.02' |
| L11 | N 71°54'28" E | 150.25' |
| L12 | S 34°29'10" W | 112.23' |
| L13 | S 84°46'33" E | 34.72' |
| L14 | N 80°17'36" E | 156.55' |
| L15 | N 88°55'52" E | 178.69' |
| L16 | N 80°09'07" W | 66.66' |
| L17 | N 80°17'35" E | 44.75' |
| L18 | N 58°51'09" E | 67.50' |
| L19 | N 64°57'30" E | 104.82' |
| L20 | S 89°20'57" E | 258.69' |
| L21 | N 16°51'27" E | 55.01' |
| L22 | N 74°51'32" E | 47.20' |
| L23 | N 16°51'24" E | 35.02' |
| L24 | N 03°41'24" W | 85.43' |
| L25 | N 69°26'45" W | 153.29' |
| L26 | N 55°41'35" W | 49.99' |
| L27 | N 17°05'26" E | 188.88' |
| L28 | S 74°13'55" E | 300.14' |
| L29 | N 18°01'52" E | 89.69' |
| L30 | N 01°12'41" W | 30.00' |
| L31 | N 58°45'23" W | 163.26' |
| L32 | N 76°19'55" W | 180.03' |
| L33 | S 87°42'21" W | 228.69' |
| L34 | N 88°50'31" W | 162.15' |
| L35 | N 71°44'22" W | 305.02' |
| L36 | N 69°41'05" W | 209.71' |
| L37 | N 65°08'45" W | 82.94' |
| L38 | N 68°57'39" W | 177.00' |
| L39 | N 68°03'42" W | 83.03' |
| L40 | N 55°09'51" W | 96.26' |
| L41 | N 44°34'17" W | 85.09' |
| L42 | S 74°15'03" W | 84.78' |
| L43 | S 66°26'03" W | 38.39' |
| L44 | S 82°50'08" W | 54.01' |
| L45 | S 87°45'57" W | 296.46' |
| L46 | N 46°52'12" W | 42.56' |



LEGEND

| | |
|----------------------------|--|
| EXHIBIT G PROJECT BOUNDARY | --- |
| WATER LINE | — |
| MEANDER LINE | - - - |
| RECREATION SITE | ▨ |
| WILDLIFE AREA | ▤ |
| O.S. | ORIGINAL STONE |
| B.C. | BRASS CAP |
| A.C. | ALUMINUM CAP |
| R.C. | REBAR WITH CAP |
| AFN | AUDITOR FILE NUMBER |
| LCR | LAND CORNER RECORD |
| B.L.M. | BUREAU OF LAND MANAGEMENT |
| B.O.R. | BUREAU OF RECLAMATION |
| B.I.A. | BUREAU OF INDIAN AFFAIRS |
| U.S.A.C.E. | UNITED STATES ARMY |
| W.D.N.R. | CORPS OF ENGINEERS |
| | WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES |



Erlandsen
 SURVEYOR'S CERTIFICATE:
 I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT SHOWN AS SHOWN HEREON WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON. ALL DISTANCES ON THIS MAP EXCEEDED THE ACCURACY REQUIREMENTS OF THE CODE OF FEDERAL REGULATIONS 43 CFR 171.11

ROGER ERLANDSEN
 PROFESSIONAL LAND SURVEYOR
 STATE OF WASHINGTON CERTIFICATE NO. 23599

PROJECT BOUNDARY & LOCATION MAP
 WELLS HYDROELECTRIC PROJECT
 PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
 EAST WENATCHEE, WASHINGTON

EXHIBIT G, SHEET 32 OF 64 FERC PROJECT NO. 2149

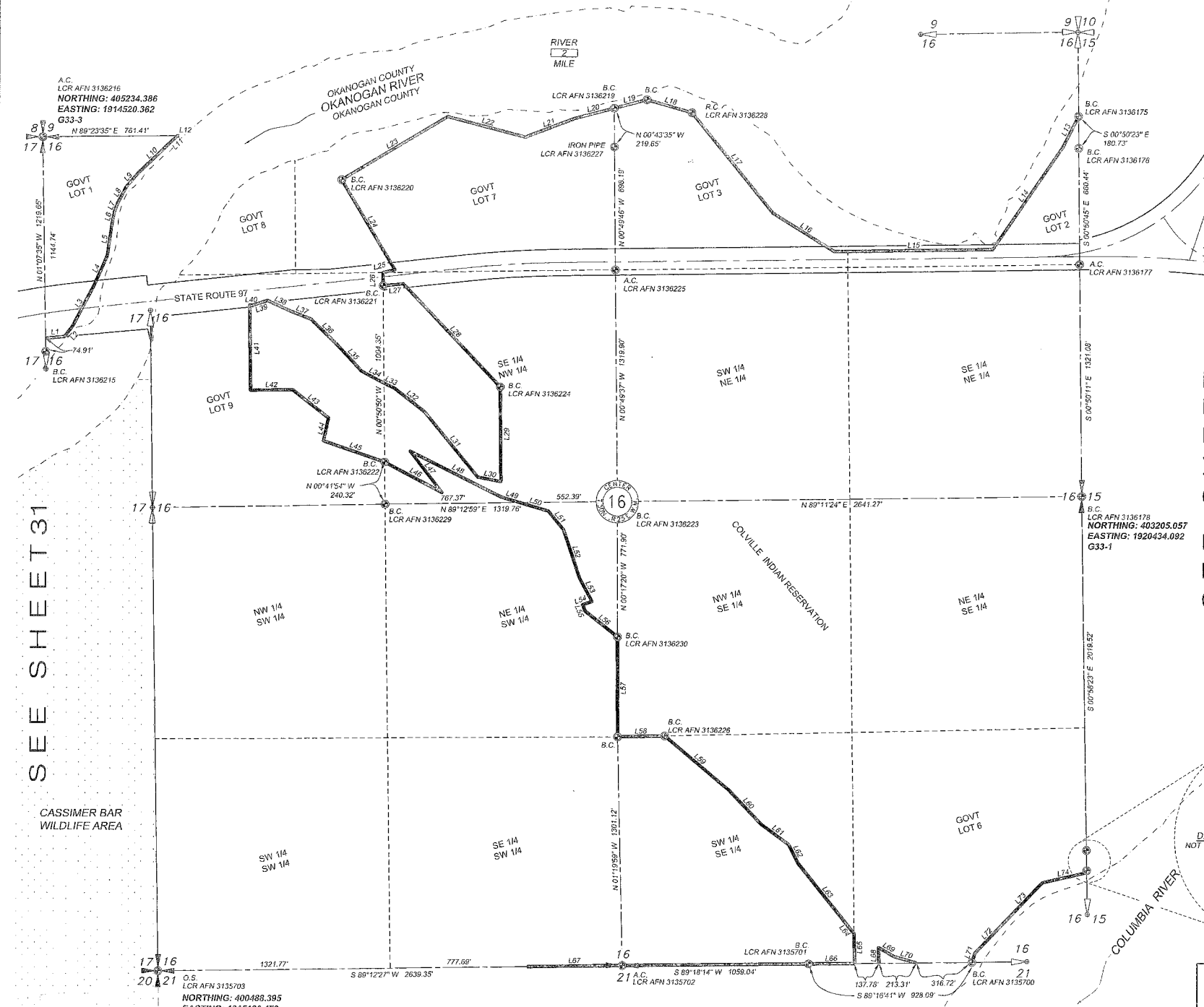
T. 30 N. R. 25 E.W.M.
 SECTION 21
 DOUGLAS AND OKANOGAN COUNTIES

SCALE: 1" = 300'

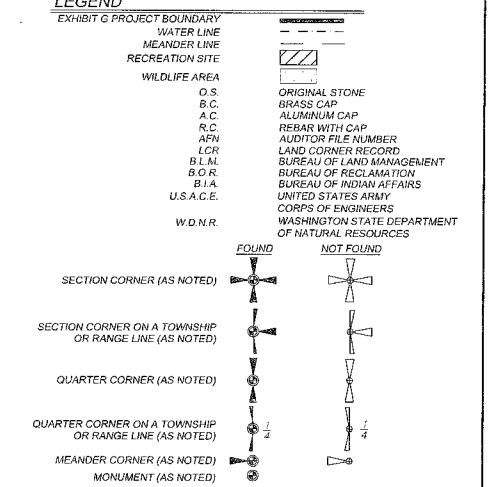
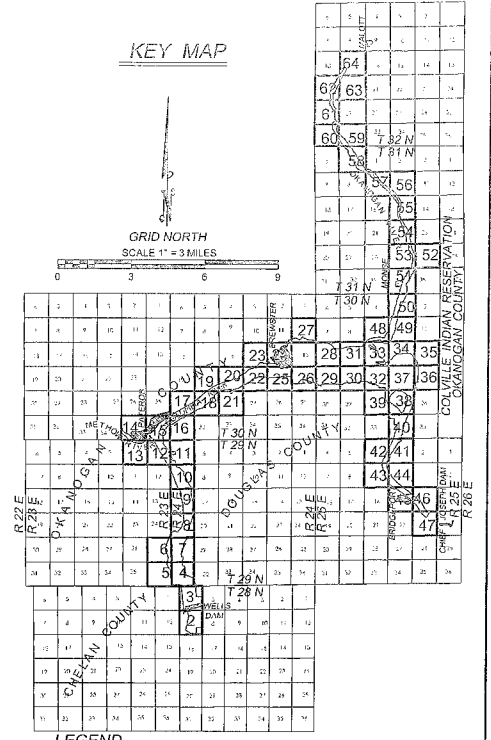
GRID NORTH

ALL LAND WITHIN PROJECT BOUNDARY OWNED BY PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY (UNLESS OTHERWISE NOTED)

SEE SHEET 48



| LINE | BEARING | LENGTH |
|------|---------------|---------|
| L1 | N 84°44'00" E | 107.85' |
| L2 | N 37°47'15" E | 74.80' |
| L3 | N 27°00'35" E | 265.21' |
| L4 | N 23°32'53" E | 180.10' |
| L5 | N 07°32'42" E | 183.58' |
| L6 | N 11°57'04" E | 70.82' |
| L7 | N 19°45'10" E | 54.29' |
| L8 | N 27°45'49" E | 99.61' |
| L9 | N 40°22'09" E | 102.01' |
| L10 | N 48°05'53" E | 272.31' |
| L11 | N 48°17'28" E | 36.89' |
| L12 | N 89°23'33" E | 8.82' |
| L13 | S 28°35'47" W | 108.04' |
| L14 | S 34°1'48" W | 700.13' |
| L15 | S 89°04'22" W | 903.82' |
| L16 | N 58°00'13" W | 410.78' |
| L17 | N 39°12'47" W | 733.11' |
| L18 | N 74°08'33" W | 266.68' |
| L19 | S 75°19'33" W | 102.28' |
| L20 | S 75°21'43" W | 220.16' |
| L21 | S 89°08'34" W | 300.19' |
| L22 | N 75°26'15" W | 457.16' |
| L23 | S 59°05'49" W | 699.58' |
| L24 | S 30°52'14" E | 594.99' |
| L25 | S 75°42'55" W | 69.05' |
| L26 | S 08°52'30" E | 74.15' |
| L27 | N 58°07'13" E | 114.93' |
| L28 | S 43°28'29" E | 806.07' |
| L29 | S 00°44'10" E | 539.10' |
| L30 | N 79°15'16" W | 136.21' |
| L31 | N 39°13'57" W | 480.85' |
| L32 | N 52°10'57" W | 216.10' |
| L33 | N 64°02'49" W | 66.68' |
| L34 | N 61°38'51" W | 143.40' |
| L35 | N 42°49'38" W | 201.72' |
| L36 | N 45°05'18" W | 212.04' |
| L37 | N 68°13'20" W | 129.65' |
| L38 | N 65°28'14" W | 140.46' |
| L39 | S 71°39'41" W | 86.17' |
| L40 | S 88°27'15" W | 18.72' |
| L41 | S 00°51'36" E | 483.85' |
| L42 | N 89°09'37" E | 239.36' |
| L43 | S 51°53'25" E | 289.84' |
| L44 | S 11°32'40" W | 134.01' |
| L45 | S 70°56'26" E | 387.74' |
| L46 | S 61°57'09" E | 368.34' |
| L47 | N 37°42'50" W | 296.70' |
| L48 | S 63°29'17" E | 581.72' |
| L49 | S 72°32'10" E | 171.52' |
| L50 | S 73°22'10" E | 189.31' |
| L51 | S 30°30'08" E | 137.51' |
| L52 | S 18°25'50" E | 290.05' |
| L53 | S 28°00'10" E | 151.24' |
| L54 | S 89°35'34" W | 54.89' |
| L55 | S 20°24'26" E | 39.50' |
| L56 | S 51°39'03" E | 234.30' |
| L57 | S 00°12'59" E | 370.17' |
| L58 | N 88°43'24" E | 267.93' |
| L59 | S 49°55'15" E | 478.30' |
| L60 | S 43°38'50" E | 264.65' |
| L61 | S 53°49'20" E | 196.51' |
| L62 | S 26°22'18" E | 119.70' |
| L63 | S 38°38'28" E | 467.48' |
| L64 | S 38°31'59" E | 43.39' |
| L65 | S 00°45'44" E | 168.83' |
| L66 | S 89°16'41" W | 260.28' |
| L67 | S 89°12'27" W | 539.88' |
| L68 | N 00°47'23" W | 88.40' |
| L69 | S 60°14'23" E | 100.01' |
| L70 | S 74°13'50" E | 132.68' |
| L71 | N 18°01'48" E | 54.13' |
| L72 | N 43°49'10" E | 256.60' |
| L73 | N 43°49'10" E | 299.40' |
| L74 | N 77°09'10" E | 258.62' |
| L75 | N 00°56'38" W | 35.61' |



MAP PROJECTION / BASIS OF BEARING

UNITS: U.S. SURVEY FEET
 HORIZONTAL DATUM: NAD 83/1991 ADJUSTMENT
 VERTICAL DATUM: NGVD 1989
 PROJECTION: WASHINGTON STATE COORDINATE SYSTEM-NORTH ZONE
 GEOID: GEOID 99 (CONUS)

BEARINGS ARE BASED ON THE WASHINGTON STATE COORDINATE SYSTEM, NORTH ZONE, DERIVED FROM GPS OBSERVATIONS. THE DISTANCES SHOWN ON THIS MAP HAVE BEEN PROJECTED TO THE WASHINGTON STATE PLANE COORDINATE GRID. MULTIPLY THE DISTANCES SHOWN BY A FACTOR OF 1.00009244 TO OBTAIN THE ACTUAL GROUND DISTANCE.

META DATA AS DERIVED BY GPS OBSERVATIONS AT THE CENTER QUARTER CORNER OF SECTION 16 SHOWN HEREON IS AS FOLLOWS:

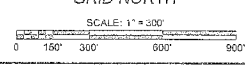
LATITUDE: N 48° 05' 58.7892"
 LONGITUDE: W 119° 41' 53.2304"
 ELLIPSOID HEIGHT: 726.27'
 ELEVATION: 788.72'
 CONVERGENCE ANGLE: 0° 50' 43"
 COMBINED SCALE FACTOR: 0.99950757

SEE SHEET 31

SEE SHEET 34

SEE SHEET 32

ALL LAND WITHIN PROJECT BOUNDARY OWNED BY PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY (UNLESS OTHERWISE NOTED)



Erlandsen
 SURVEYORS & ENGINEERS
 1100 N. 10TH ST. SPOKANE, WA 99201
 (509) 622-2520
 (509) 622-2521
 (509) 622-2522
 (509) 622-2523
 (509) 622-2524
 (509) 622-2525

DRAWN BY: BDKG LAYOUT: OSHEET-31
 DATE: 04-20-2009 FILE NO: 130-R25-S16
 SCALE: 1" = 300' JOB NO: 95550-00 TOLL FREE: (800) 732-7412

T. 30 N. R. 25 E. W. M.
 SECTION 16
 OKANOGAN COUNTY

SURVEYOR'S CERTIFICATE:
 I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREON WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON AND I CERTIFY ON BEHALF OF SAID DISTRICT THAT THE SURVEY CONFORMS TO THE ACCURACY REQUIREMENTS OF THE CODE OF FEDERAL REGULATIONS 16CFR41.41

ROGER ERLANDSEN
 PROFESSIONAL LAND SURVEYOR
 STATE OF WASHINGTON CERTIFICATE NO. 23899

PROJECT BOUNDARY & LOCATION MAP
WELLS HYDROELECTRIC PROJECT
 PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
 EAST WENATCHEE, WASHINGTON

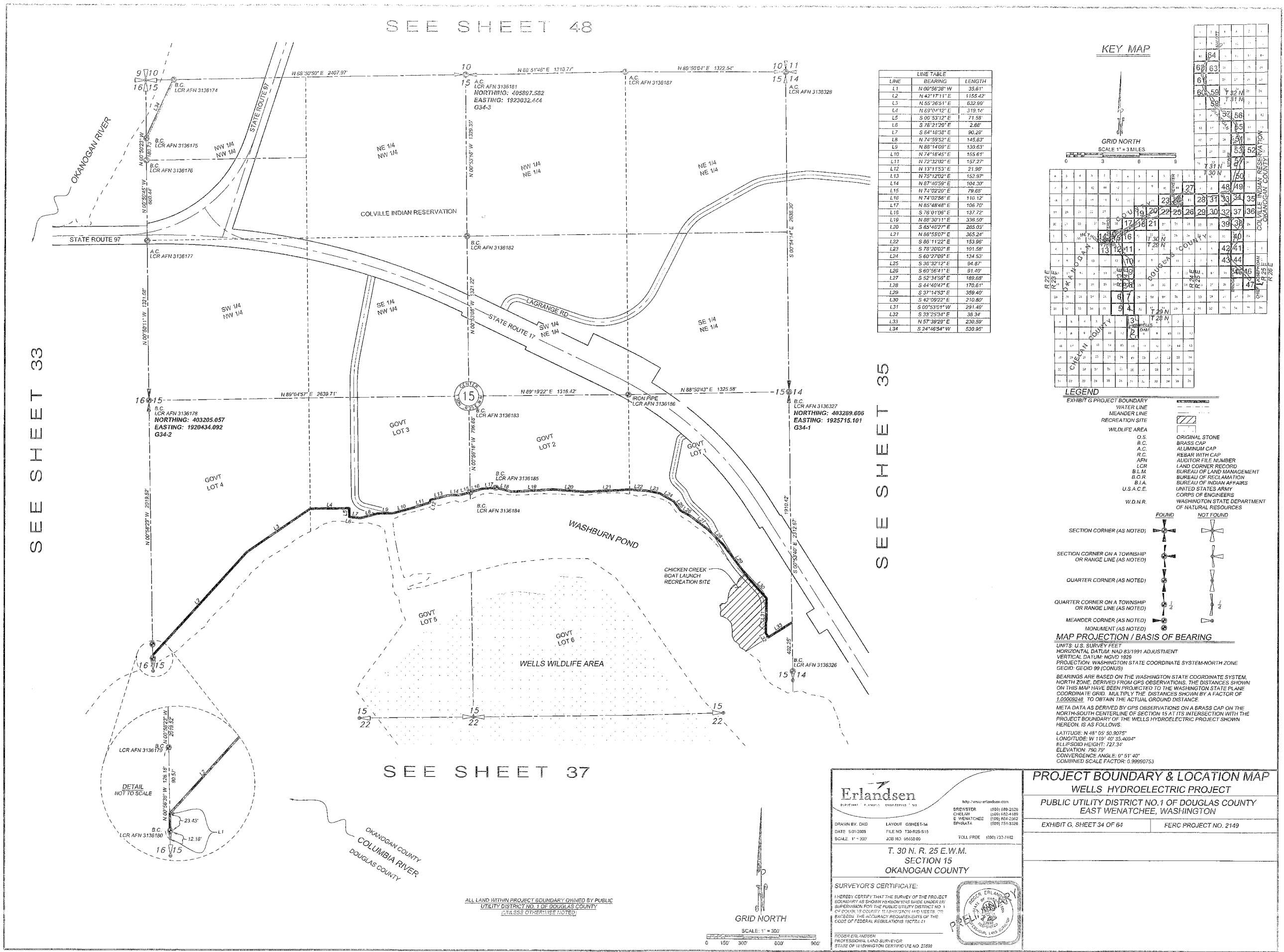
EXHIBIT G, SHEET 33 OF 64 FERC PROJECT NO. 2149

SEE SHEET 48

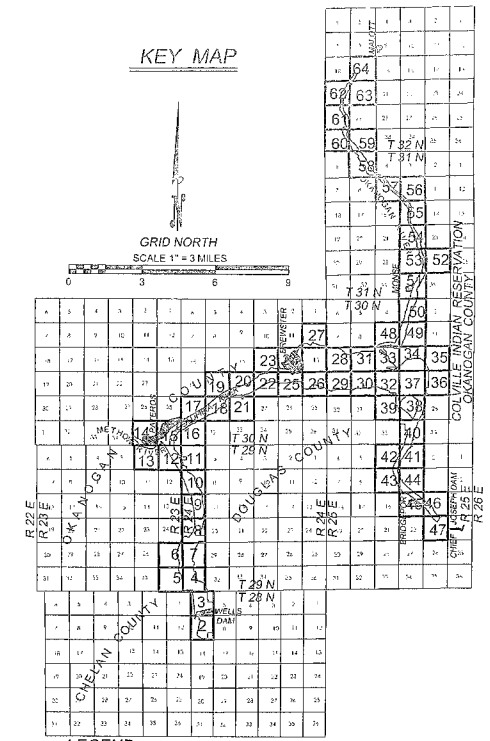
SEE SHEET 33

SEE SHEET 35

SEE SHEET 37



| LINE | BEARING | LENGTH |
|------|---------------|----------|
| L1 | N 00°56'38" W | 35.61' |
| L2 | N 42°17'11" E | 1155.42' |
| L3 | N 53°26'51" E | 632.99' |
| L4 | N 63°04'12" E | 319.74' |
| L5 | S 00°53'12" E | 71.58' |
| L6 | S 73°21'29" E | 2.88' |
| L7 | S 84°16'38" E | 90.29' |
| L8 | N 74°59'52" E | 145.63' |
| L9 | N 88°14'09" E | 130.63' |
| L10 | N 74°18'45" E | 155.61' |
| L11 | N 72°32'02" E | 157.27' |
| L12 | N 13°11'33" E | 21.96' |
| L13 | N 63°12'02" E | 153.97' |
| L14 | N 67°40'59" E | 104.30' |
| L15 | N 74°02'20" E | 79.68' |
| L16 | N 74°02'56" E | 110.12' |
| L17 | N 85°48'48" E | 106.70' |
| L18 | S 76°01'06" E | 137.72' |
| L19 | N 88°30'11" E | 338.50' |
| L20 | S 85°40'27" E | 285.03' |
| L21 | N 68°53'07" E | 385.24' |
| L22 | S 86°11'22" E | 153.96' |
| L23 | S 72°20'02" E | 101.58' |
| L24 | S 60°27'09" E | 134.53' |
| L25 | S 36°32'12" E | 94.87' |
| L26 | S 60°56'41" E | 91.40' |
| L27 | S 52°34'56" E | 188.68' |
| L28 | S 44°40'47" E | 170.67' |
| L29 | S 37°14'53" E | 359.40' |
| L30 | S 42°06'22" E | 210.40' |
| L31 | S 00°53'01" W | 291.49' |
| L32 | S 33°25'34" E | 38.34' |
| L33 | N 57°39'29" E | 230.59' |
| L34 | S 24°46'54" W | 530.95' |

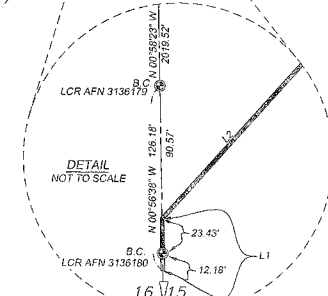


LEGEND

| | | | | | | | | | | | | | | |
|----------------------------|---|---------------------------|---|---------------------------|---------------------|-------------------|---------------------|------------------------|----------------------------------|------------------------------|---------------------------------|-------------------------------|-----------------------------|--|
| EXHIBIT G PROJECT BOUNDARY | WATER LINE | MEANDER SITE | RECREATION SITE | WILDLIFE AREA | O.S. BRASS CAP | R.C. ALUMINUM CAP | R.C. REBAR WITH CAP | AFN LAND CORNER RECORD | B.L.M. BUREAU OF LAND MANAGEMENT | B.O.R. BUREAU OF RECLAMATION | B.I.A. BUREAU OF INDIAN AFFAIRS | U.S.A.C.E. UNITED STATES ARMY | W.D.N.R. CORPS OF ENGINEERS | WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES |
| SECTION CORNER (AS NOTED) | SECTION CORNER ON A TOWNSHIP OR RANGE LINE (AS NOTED) | QUARTER CORNER (AS NOTED) | QUARTER CORNER ON A TOWNSHIP OR RANGE LINE (AS NOTED) | MEANDER CORNER (AS NOTED) | MONUMENT (AS NOTED) | FOUND | NOT FOUND | | | | | | | |

MAP PROJECTION / BASIS OF BEARING

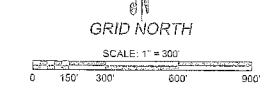
UNITS: U.S. SURVEY FEET
 HORIZONTAL DATUM: NAD 83/1991 ADJUSTMENT
 VERTICAL DATUM: NGVD 1929
 PROJECTION: WASHINGTON STATE COORDINATE SYSTEM-NORTH ZONE
 GEOID: GEOID 99 (CONUS)
 BEARINGS ARE BASED ON THE WASHINGTON STATE COORDINATE SYSTEM NORTH ZONE, DERIVED FROM GPS OBSERVATIONS. THE DISTANCES SHOWN ON THIS MAP HAVE BEEN PROJECTED TO THE WASHINGTON STATE PLANE COORDINATE GRID. MULTIPLY THE DISTANCES SHOWN BY A FACTOR OF 1.0000282 TO OBTAIN THE ACTUAL GROUND DISTANCE.
 META DATA AS DERIVED BY GPS OBSERVATIONS ON A BRASS CAP ON THE NORTH-SOUTH CENTERLINE OF SECTION 15 AT ITS INTERSECTION WITH THE PROJECT BOUNDARY OF THE WELLS HYDROELECTRIC PROJECT SHOWN HEREON IS AS FOLLOWS:
 LATITUDE: N 48° 05' 50.8075"
 LONGITUDE: W 119° 40' 35.4084"
 ELLIPSOID HEIGHT: 727.34'
 ELEVATION: 740.79'
 CONVERGENCE ANGLE: 0° 51' 40"
 COMBINED SCALE FACTOR: 0.99980753

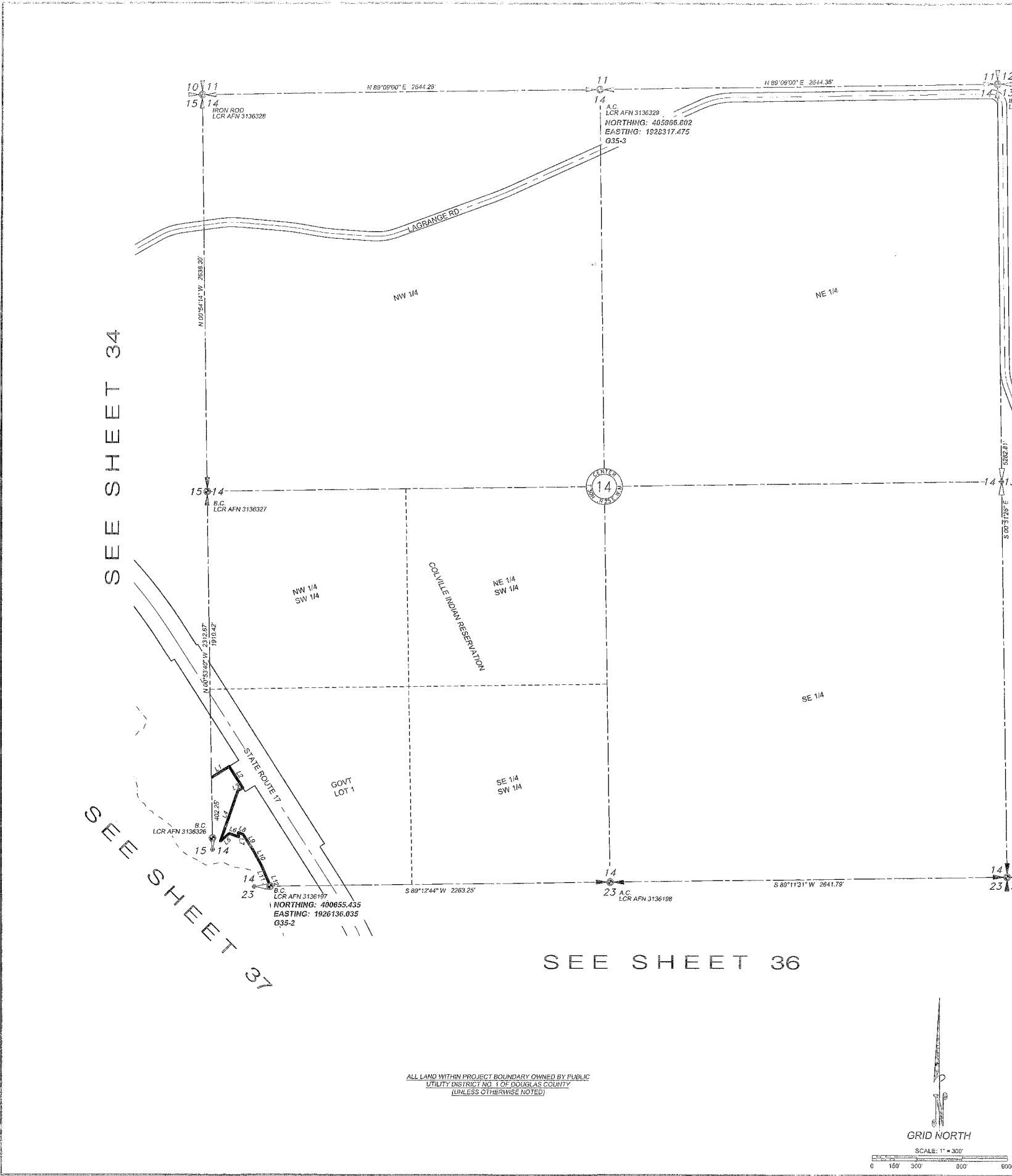


Erlandsen
 SURVEYOR'S CERTIFICATE:
 I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREON WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON AND IS IN ACCORDANCE WITH THE CODE OF FEDERAL REGULATIONS 19CFR101.11
 T. 30 N. R. 25 E. W.M.
 SECTION 15
 OKANOGAN COUNTY
 SURVEYOR'S CERTIFICATE:
 I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREON WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON AND IS IN ACCORDANCE WITH THE CODE OF FEDERAL REGULATIONS 19CFR101.11
 POOLEY ERLANDSEN
 PROFESSIONAL LAND SURVEYOR
 STATE OF WASHINGTON CERTIFICATE NO. 23592

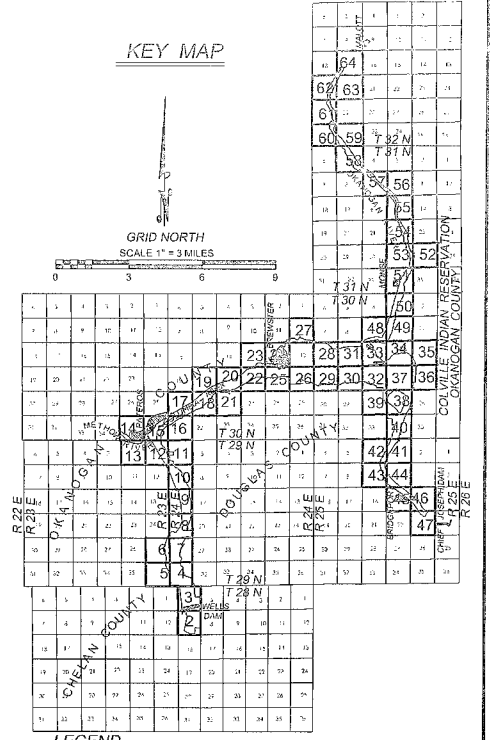
PROJECT BOUNDARY & LOCATION MAP
 WELLS HYDROELECTRIC PROJECT
 PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
 EAST WENATCHEE, WASHINGTON
 EXHIBIT G, SHEET 34 OF 64
 FERC PROJECT NO. 2149

ALL LAND WITHIN PROJECT BOUNDARY OWNED BY PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY (UNLESS OTHERWISE NOTED)



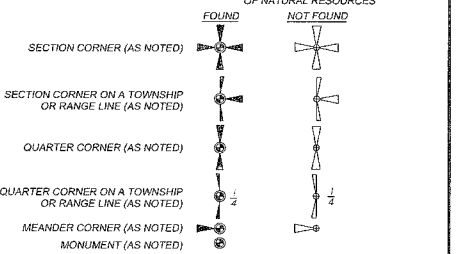


| LINE | BEARING | LENGTH |
|------|---------------|---------|
| L1 | N 57°39'29" E | 138.55' |
| L2 | S 32°20'31" E | 169.51' |
| L3 | S 61°43'00" W | 36.42' |
| L4 | S 16°03'00" W | 357.33' |
| L5 | N 48°22'44" E | 73.49' |
| L6 | S 71°12'31" E | 67.56' |
| L7 | N 02°24'29" W | 28.80' |
| L8 | S 66°38'41" E | 33.18' |
| L9 | S 32°52'24" E | 123.99' |
| L10 | S 28°27'13" E | 117.43' |
| L11 | S 23°00'54" E | 122.74' |
| L12 | S 21°14'51" E | 26.54' |



LEGEND

| | |
|----------------------------|--|
| EXHIBIT G PROJECT BOUNDARY | |
| WATER LINE | |
| MEANDER LINE | |
| RECREATION SITE | |
| WILDLIFE AREA | |
| O.S. | ORIGINAL STONE |
| B.C. | BRASS CAP |
| A.C. | ALUMINUM CAP |
| R.C. | REBAR WITH CAP |
| AFN | LAND CORNER RECORD |
| LCR | LAND CORNER RECORD |
| B.L.M. | BUREAU OF LAND MANAGEMENT |
| B.O.R. | BUREAU OF RECLAMATION |
| B.I.A. | BUREAU OF INDIAN AFFAIRS |
| U.S.A.C.E. | UNITED STATES ARMY |
| W.D.N.R. | CORPS OF ENGINEERS |
| | WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES |



MAP PROJECTION / BASIS OF BEARING

UNITS: U.S. SURVEY FEET
 HORIZONTAL DATUM: NAD 83/1981 ADJUSTMENT
 VERTICAL DATUM: NGVD 1929
 PROJECTION: WASHINGTON STATE COORDINATE SYSTEM-NORTH ZONE
 GEOID: GEOID 99 (CONUS)

BEARINGS ARE BASED ON THE WASHINGTON STATE COORDINATE SYSTEM, NORTH ZONE, DERIVED FROM GPS OBSERVATIONS. THE DISTANCES SHOWN ON THIS MAP HAVE BEEN PROJECTED TO THE WASHINGTON STATE PLANE COORDINATE GRID. MULTIPLY THE DISTANCES SHOWN BY A FACTOR OF 1.0000225 TO OBTAIN THE ACTUAL GROUND DISTANCE.

META DATA AS DERIVED BY GPS OBSERVATIONS ON A BRASS CAP ON THE LINE COMMON TO SECTIONS 14 & 15, 402.25 FEET SOUTHERLY OF THE PROJECT BOUNDARY OF THE WELLS HYDROELECTRIC PROJECT SHOWN HEREON, IS AS FOLLOWS:
 LATITUDE: N 48° 05' 35.8988"
 LONGITUDE: W 119° 39' 56.4857"
 ELLIPSOID HEIGHT: 723.06'
 ELEVATION: 786.50'
 CONVERGENCE ANGLE: 0° 52' 10"
 COMBINED SCALE FACTOR: 0.99990776

SEE SHEET 34

SEE SHEET 37

SEE SHEET 36

ALL LAND WITHIN PROJECT BOUNDARY OWNED BY PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY (UNLESS OTHERWISE NOTED)

Erlandsen
 SURVEYORS & ENGINEERS

1510 1/2 W. 10TH AVE. SUITE 100
 BEND, OR 97701
 (503) 338-5528
 (509) 984-2168
 (509) 984-2562
 (509) 518-1336

DRAWN BY: DKO
 DATE: 5/31/2019
 SCALE: 1" = 300'

LAYOUT: GSH-EET-14
 FILE NO: T30-R25-S14
 JOB NO: 55305.00
 TOLL FREE: (800) 732-7442

T. 30 N. R. 25 E. W.M.
 SECTION 14
 OKANOGAN COUNTY

SURVEYOR'S CERTIFICATE:
 I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREON WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON, AND I CERTIFY THAT THE ACCURACY REQUIREMENTS OF THE CODES OF FEDERAL REGULATIONS (30CFR) ARE MET.

ROGER ERLANDSEN
 PROFESSIONAL LAND SURVEYOR
 STATE OF WASHINGTON CERTIFICATE NO. 23597

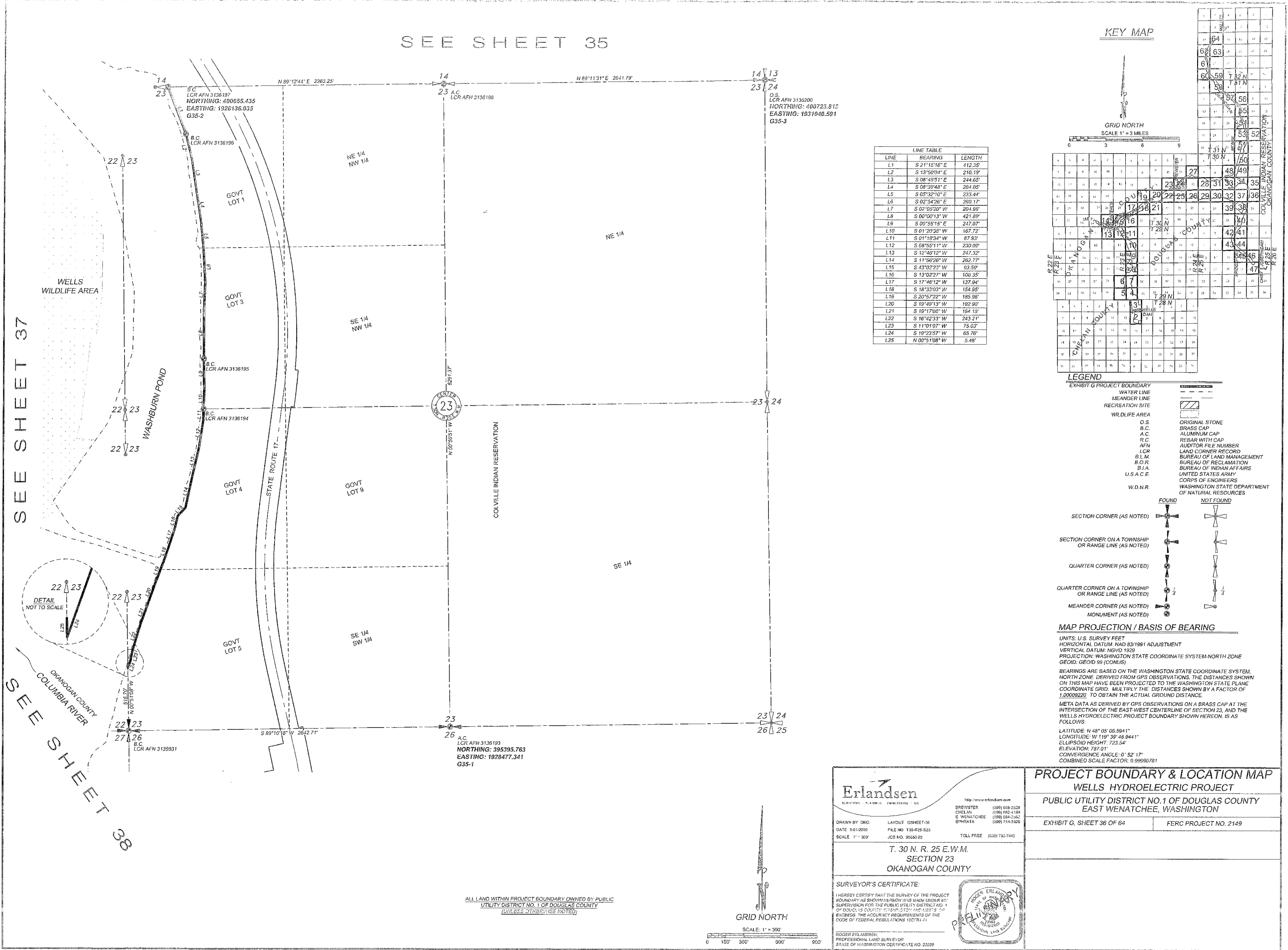
PROJECT BOUNDARY & LOCATION MAP
 WELLS HYDROELECTRIC PROJECT
 PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
 EAST WENATCHEE, WASHINGTON

EXHIBIT G, SHEET 35 OF 64 FERC PROJECT NO. 2149

SEE SHEET 35

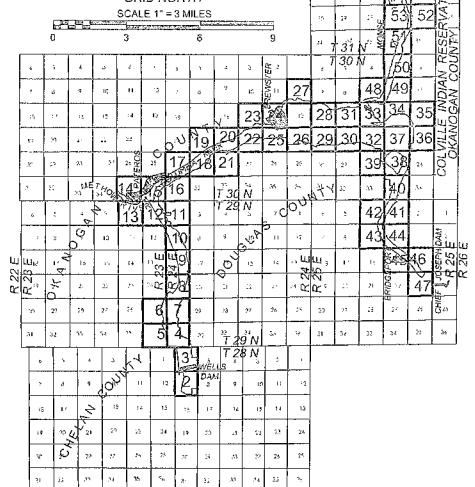
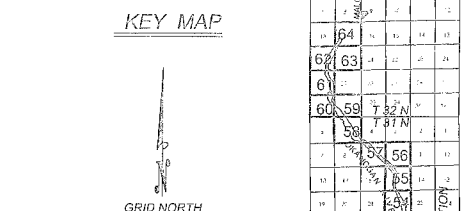
SEE SHEET 37

SEE SHEET 38



LINE TABLE

| LINE | BEARING | LENGTH |
|------|---------------|---------|
| L1 | S 21°12'16" E | 412.35' |
| L2 | S 13°50'04" E | 210.19' |
| L3 | S 08°45'51" E | 244.65' |
| L4 | S 02°35'48" E | 284.05' |
| L5 | S 05°32'10" E | 233.44' |
| L6 | S 02°54'26" E | 260.17' |
| L7 | S 02°03'20" W | 204.86' |
| L8 | S 00°00'13" W | 421.89' |
| L9 | S 00°55'15" E | 247.07' |
| L10 | S 01°20'35" W | 167.72' |
| L11 | S 01°18'34" W | 87.83' |
| L12 | S 08°55'11" W | 220.09' |
| L13 | S 12°46'12" W | 247.32' |
| L14 | S 11°56'26" W | 262.77' |
| L15 | S 43°02'23" W | 93.59' |
| L16 | S 13°02'23" W | 100.35' |
| L17 | S 17°46'12" W | 137.04' |
| L18 | S 16°33'03" W | 154.55' |
| L19 | S 20°57'22" W | 185.96' |
| L20 | S 19°45'13" W | 192.90' |
| L21 | S 19°17'00" W | 164.15' |
| L22 | S 16°42'33" W | 243.21' |
| L23 | S 11°01'07" W | 75.03' |
| L24 | S 19°23'57" W | 65.76' |
| L25 | N 00°51'08" W | 5.48' |



LEGEND

- EXHIBIT G PROJECT BOUNDARY
- WATER LINE
- MEANDER LINE
- RECREATION SITE
- WILDLIFE AREA
- ORIGINAL STONE
- BRASS CAP
- ALUMINUM CAP
- REBAR WITH CAP
- AUDITOR FILE NUMBER
- LAND CORNER RECORD
- LCR
- B.L.M.
- B.O.R.
- B.I.A.
- U.S.A.C.E.
- CORPS OF ENGINEERS
- WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES

FOUND NOT FOUND

SECTION CORNER (AS NOTED)

SECTION CORNER ON A TOWNSHIP OR RANGE LINE (AS NOTED)

QUARTER CORNER (AS NOTED)

QUARTER CORNER ON A TOWNSHIP OR RANGE LINE (AS NOTED)

MEANDER CORNER (AS NOTED)

MONUMENT (AS NOTED)

MAP PROJECTION / BASIS OF BEARING

UNITS: U.S. SURVEY FEET

HORIZONTAL DATUM: NAD 83/1981 ADJUSTMENT

VERTICAL DATUM: NGVD 1929

PROJECTION: WASHINGTON STATE COORDINATE SYSTEM-NORTH ZONE

GEOID: GEOID 99 (CONUS)

BEARINGS ARE BASED ON THE WASHINGTON STATE COORDINATE SYSTEM, NORTH ZONE. DERIVED FROM GPS OBSERVATIONS. THE DISTANCES SHOWN ON THIS MAP HAVE BEEN PROJECTED TO THE WASHINGTON STATE PLANE COORDINATE GRID. MULTIPLY THE DISTANCES SHOWN BY A FACTOR OF 1.0000220 TO OBTAIN THE ACTUAL GROUND DISTANCE.

META DATA AS DERIVED BY GPS OBSERVATIONS ON A BRASS CAP AT THE INTERSECTION OF THE EAST-WEST CENTERLINE OF SECTION 23, AND THE WELLS HYDROELECTRIC PROJECT BOUNDARY SHOWN HEREON, IS AS FOLLOWS:

LATITUDE: N 48° 05' 05.5941"

LONGITUDE: W 119° 39' 48.9441"

ELLIPSOID HEIGHT: 723.54'

ELEVATION: 737.91'

CONVERGENCE ANGLE: 0° 52' 17"

COMBINED SCALE FACTOR: 0.99980781

Erlandsen

SURVEYORS & ENGINEERS

1000 688-2328
1000 682-4189
1000 684-2262
1000 754-9306

DRAWN BY: DMG LAYOUT: GSHMET-36
DATE: 5/31/2000 FILE NO: T30-R25-923
SCALE: 1" = 300' JOB NO: 95560-00 TOLL FREE: (800) 732-7452

T. 30 N. R. 25 E.W.M.
SECTION 23
OKANOGAN COUNTY

SURVEYOR'S CERTIFICATE:

I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREON WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON, AND THAT I AM A LICENSED SURVEYOR IN THE STATE OF WASHINGTON AND AM A MEMBER OF THE PROFESSIONAL LAND SURVEYORS OF THE STATE OF WASHINGTON.

ROGER ERLANDSEN
PROFESSIONAL LAND SURVEYOR
STATE OF WASHINGTON CERTIFICATE NO. 23359

PROJECT BOUNDARY & LOCATION MAP

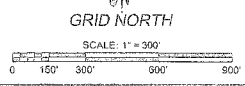
WELLS HYDROELECTRIC PROJECT

PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
EAST WENATCHEE, WASHINGTON

EXHIBIT G, SHEET 36 OF 64

FERC PROJECT NO. 2149

ALL LAND WITHIN PROJECT BOUNDARY OWNED BY PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY (UNLESS OTHERWISE NOTED)

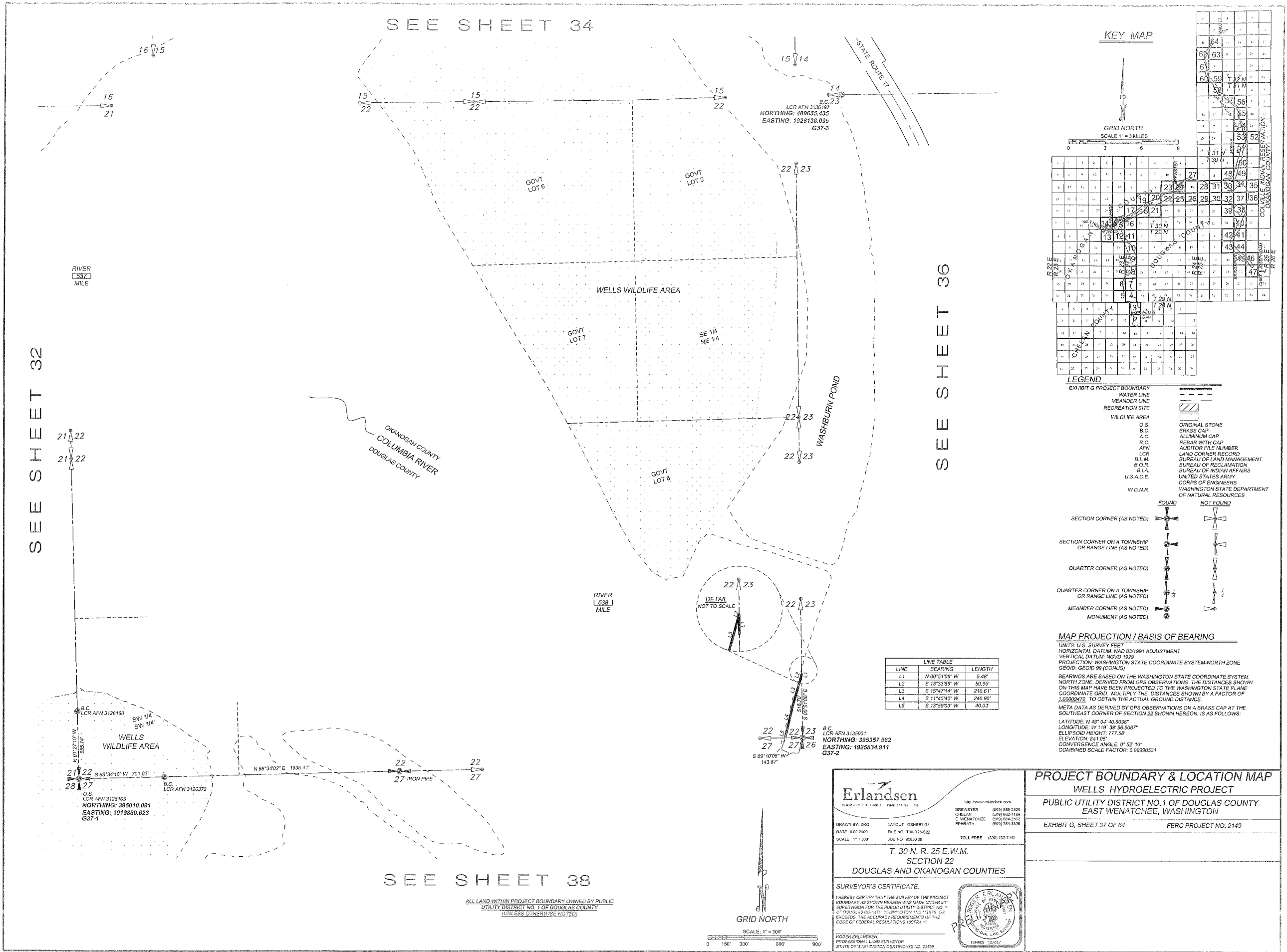


SEE SHEET 34

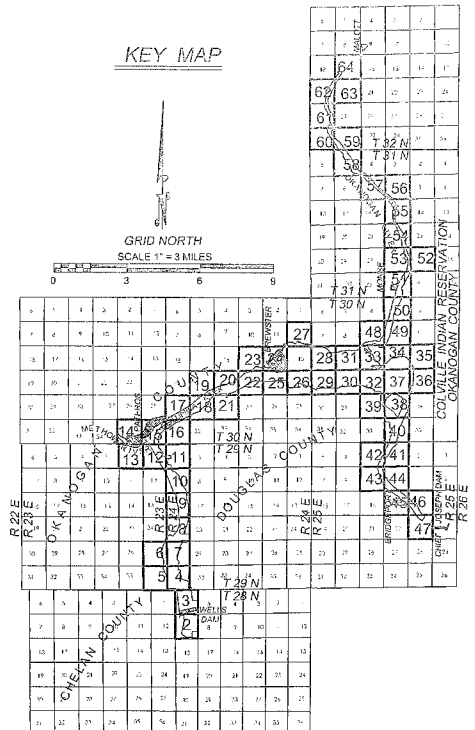
SEE SHEET 32

SEE SHEET 36

SEE SHEET 38



KEY MAP



- LEGEND**
- EXHIBIT G PROJECT BOUNDARY
 - WATER LINE
 - MEANDER LINE
 - RECREATION LINE
 - RECREATION SITE
 - WILDLIFE AREA
 - O.S.
 - B.C.
 - A.C.
 - R.C.
 - AFN
 - LCR
 - B.L.M.
 - B.O.R.
 - B.I.A.
 - U.S.A.C.E.
 - W.D.N.R.
 - ORIGINAL STONE
 - BRASS CAP
 - ALUMINUM CAP
 - REBAR WITH CAP
 - AUDITOR FILE NUMBER
 - LAND CORNER RECORD
 - BUREAU OF LAND MANAGEMENT
 - BUREAU OF RECLAMATION
 - BUREAU OF INDIAN AFFAIRS
 - UNITED STATES ARMY
 - CORPS OF ENGINEERS
 - WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES
- FOUND NOT FOUND**
- SECTION CORNER (AS NOTED)
 - SECTION CORNER ON A TOWNSHIP OR RANGE LINE (AS NOTED)
 - QUARTER CORNER (AS NOTED)
 - QUARTER CORNER ON A TOWNSHIP OR RANGE LINE (AS NOTED)
 - MEANDER CORNER (AS NOTED)
 - MONUMENT (AS NOTED)

LINE TABLE

| LINE | BEARING | LENGTH |
|------|---------------|---------|
| L1 | N 05°51'08" W | 5.48' |
| L2 | S 13°33'35" W | 50.93' |
| L3 | S 15°47'14" W | 210.61' |
| L4 | S 11°45'40" W | 240.89' |
| L5 | S 13°59'03" W | 40.03' |

MAP PROJECTION / BASIS OF BEARING

UNITS: U.S. SURVEY FEET
 HORIZONTAL DATUM: NAD 83/1981 ADJUSTMENT
 VERTICAL DATUM: NGVD 1929
 PROJECTION: WASHINGTON STATE COORDINATE SYSTEM-NORTH ZONE
 GEOID: GEOID 99 (CONUS)

BEARINGS ARE BASED ON THE WASHINGTON STATE COORDINATE SYSTEM, NORTH ZONE, DERIVED FROM GPS OBSERVATIONS. THE DISTANCES SHOWN ON THIS MAP HAVE BEEN PROJECTED TO THE WASHINGTON STATE PLANE COORDINATE GRID. MULTIPLY THE DISTANCES SHOWN BY A FACTOR OF 1.000000 TO OBTAIN THE ACTUAL GROUND DISTANCE.

META DATA AS DERIVED BY GPS OBSERVATIONS ON A BRASS CAP AT THE SOUTHEAST CORNER OF SECTION 22 SHOWN HEREON, IS AS FOLLOWS:
 LATITUDE: N 48° 04' 40.5036"
 LONGITUDE: W 119° 39' 56.5067"
 ELLIPSOID HEIGHT: 777.58'
 ELEVATION: 841.05'
 CONVERGENCE ANGLE: 0° 52' 10"
 COMBINED SCALE FACTOR: 0.99950531

Erlandsen
 SURVEYORS & ENGINEERS

Who knows erlandsen.com
 BRIDGEMAN (509) 588-5520
 CHELSEA (509) 662-1168
 E. WENATCHEE (509) 664-2502
 BEMATO (509) 754-3336

DRAWN BY: DMG LAYOUT: GSHBET-1/V
 DATE: 6.02.2009 FILE NO: T32-R25-022
 SCALE: 1" = 300' JOB NO: 95530.00 TOLL FREE: (800) 732-7142

**T. 30 N. R. 25 E.W.M.
 SECTION 22
 DOUGLAS AND OKANOGAN COUNTIES**

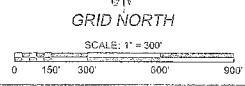
SURVEYOR'S CERTIFICATE:
 I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREON WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON, AND I HEREBY CERTIFY THAT THE ACCURACY REQUIREMENTS OF THE CODE OF FEDERAL REGULATIONS 18CFR 1.11

RODGER ERLANDSEN
 PROFESSIONAL LAND SURVEYOR
 STATE OF WASHINGTON CERTIFICATE NO. 22589

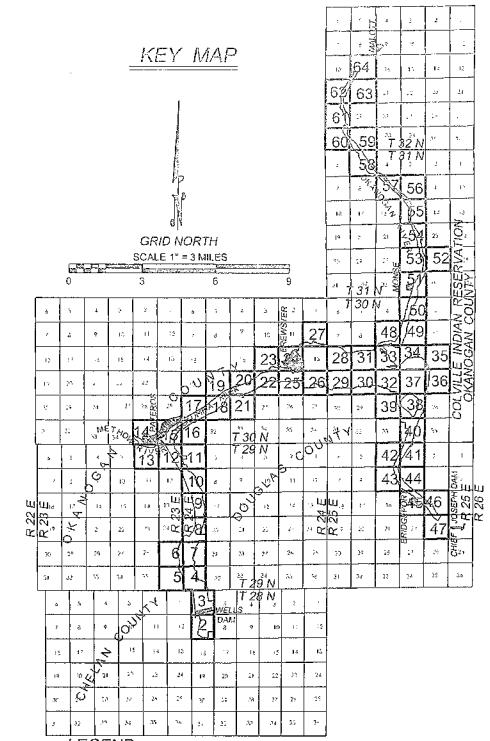
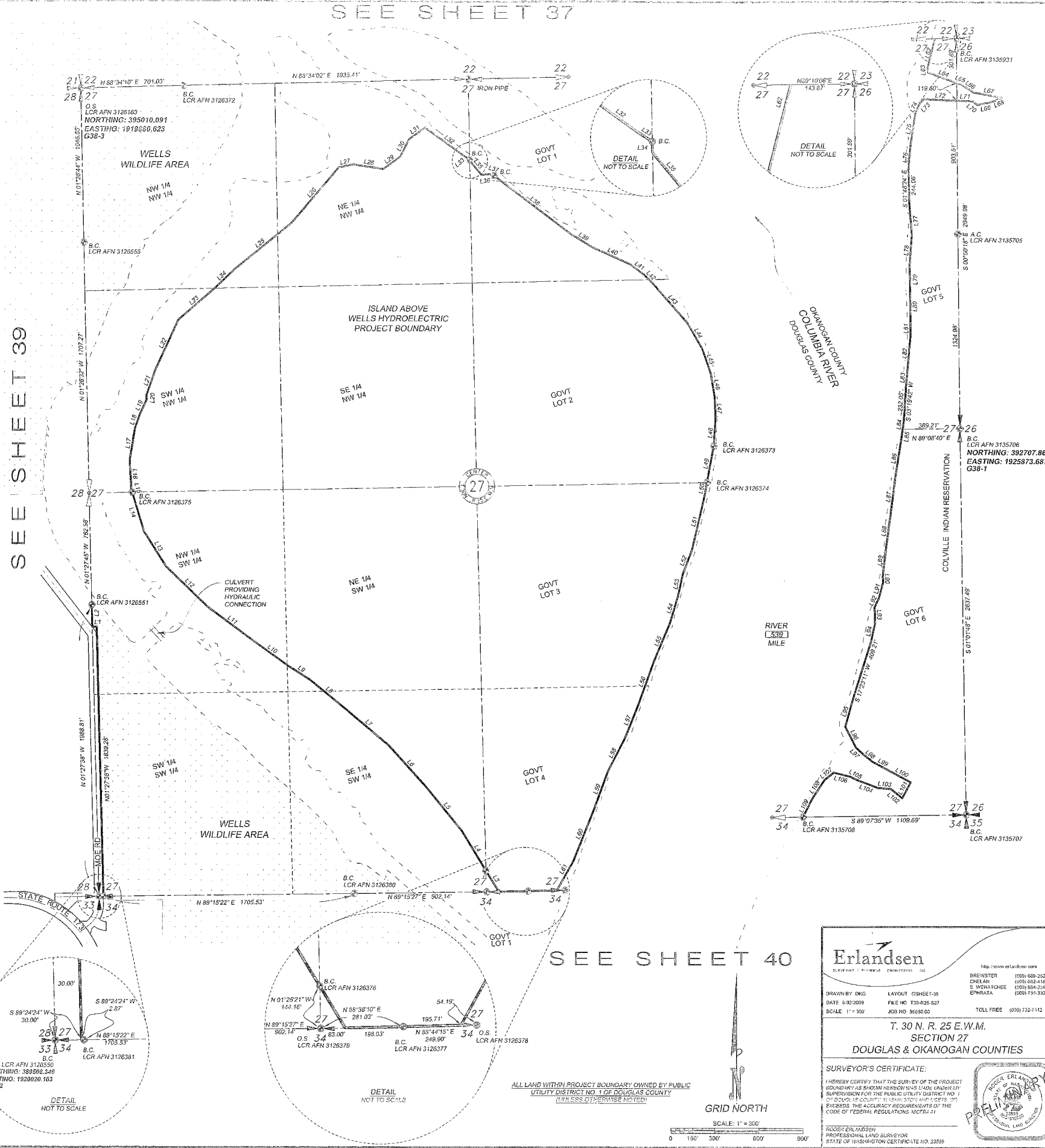
PROJECT BOUNDARY & LOCATION MAP
WELLS HYDROELECTRIC PROJECT
PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
EAST WENATCHEE, WASHINGTON

EXHIBIT G, SHEET 37 OF 64 FERC PROJECT NO. 2149

ALL LAND WITHIN PROJECT BOUNDARY OWNED BY PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY (UNLESS OTHERWISE NOTED)



| LINE | BEARING | LENGTH |
|------|---------------|---------|
| L1 | S 53°22'22" W | 30.00' |
| L2 | N 01°27'33" W | 149.59' |
| L3 | N 31°20'17" W | 166.42' |
| L4 | N 31°20'17" W | 317.59' |
| L5 | N 39°09'48" W | 387.00' |
| L6 | N 41°52'37" W | 374.52' |
| L7 | N 49°45'48" W | 411.09' |
| L8 | N 50°34'17" W | 288.32' |
| L9 | N 57°26'35" W | 181.62' |
| L10 | N 54°15'42" W | 289.45' |
| L11 | N 53°23'03" W | 383.58' |
| L12 | N 45°43'00" W | 352.75' |
| L13 | N 32°17'12" W | 281.60' |
| L14 | N 16°46'34" W | 279.22' |
| L15 | N 16°48'48" W | 21.83' |
| L16 | N 02°57'38" W | 199.70' |
| L17 | N 09°00'54" E | 271.04' |
| L18 | N 18°59'10" E | 57.34' |
| L19 | N 24°44'43" E | 108.25' |
| L20 | N 02°38'06" E | 39.83' |
| L21 | N 18°59'10" E | 171.49' |
| L22 | N 24°23'10" E | 379.93' |
| L23 | N 48°54'31" E | 330.86' |
| L24 | N 48°13'41" E | 176.37' |
| L25 | N 50°46'30" E | 500.12' |
| L26 | N 49°20'00" E | 498.28' |
| L27 | N 77°41'38" E | 89.82' |
| L28 | S 81°25'28" E | 208.77' |
| L29 | N 53°30'31" E | 159.36' |
| L30 | N 26°43'21" E | 133.19' |
| L31 | N 54°35'06" E | 134.77' |
| L32 | S 54°28'30" E | 354.75' |
| L33 | S 57°19'24" E | 9.47' |
| L34 | S 01°27'59" E | 4.88' |
| L35 | S 39°45'41" E | 127.51' |
| L36 | N 84°22'28" E | 52.48' |
| L37 | S 73°55'25" E | 35.20' |
| L38 | S 02°58'31" E | 652.06' |
| L39 | S 88°52'38" E | 172.95' |
| L40 | S 06°04'04" E | 281.61' |
| L41 | S 54°09'34" E | 118.38' |
| L42 | S 45°40'36" E | 81.73' |
| L43 | S 41°27'02" E | 361.22' |
| L44 | S 30°10'23" E | 204.37' |
| L45 | S 19°39'40" E | 179.20' |
| L46 | S 09°22'30" E | 169.75' |
| L47 | S 02°02'46" E | 149.39' |
| L48 | S 03°46'47" W | 178.17' |
| L49 | S 10°17'19" W | 252.55' |
| L50 | S 10°16'17" W | 93.11' |
| L51 | S 13°02'35" W | 375.65' |
| L52 | S 20°14'32" W | 183.28' |
| L53 | S 12°00'18" W | 141.81' |
| L54 | S 16°28'05" W | 205.83' |
| L55 | S 22°47'54" W | 278.63' |
| L56 | S 19°53'08" W | 313.85' |
| L57 | S 21°46'10" W | 290.45' |
| L58 | S 21°12'01" W | 248.21' |
| L59 | S 20°06'40" W | 281.84' |
| L60 | S 21°45'48" W | 377.45' |
| L61 | S 29°17'47" W | 228.46' |
| L62 | S 13°59'03" W | 200.36' |
| L63 | S 03°40'03" E | 34.99' |
| L64 | S 70°04'09" E | 206.62' |
| L65 | S 70°03'09" E | 38.82' |
| L66 | S 57°39'49" E | 96.81' |
| L67 | S 79°26'49" E | 182.83' |
| L68 | S 67°26'36" W | 80.61' |
| L69 | S 78°53'31" W | 93.45' |
| L70 | N 53°09'14" W | 43.17' |
| L71 | N 87°54'57" W | 105.56' |
| L72 | N 87°54'57" W | 224.33' |
| L73 | S 41°40'46" W | 43.79' |
| L74 | S 22°56'56" W | 67.16' |
| L75 | S 08°24'30" W | 224.44' |
| L76 | S 04°20'20" W | 160.00' |
| L77 | S 04°54'21" E | 200.19' |
| L78 | S 03°49'38" W | 213.38' |
| L79 | S 01°29'49" E | 197.53' |
| L80 | S 00°53'02" E | 168.42' |
| L81 | S 00°23'08" W | 121.81' |
| L82 | S 04°36'47" W | 216.62' |
| L83 | S 05°08'55" W | 117.85' |
| L84 | S 07°42'57" W | 59.72' |
| L85 | S 07°42'57" W | 81.59' |
| L86 | S 06°49'30" W | 247.70' |
| L87 | S 07°09'51" W | 277.69' |
| L88 | S 07°37'00" W | 185.97' |
| L89 | S 06°31'00" W | 208.52' |
| L90 | S 02°44'53" E | 43.17' |
| L91 | S 14°20'57" W | 108.21' |
| L92 | S 25°11'17" W | 71.65' |
| L93 | S 02°30'09" E | 107.18' |
| L94 | S 12°17'44" W | 128.17' |
| L95 | S 15°25'38" W | 200.97' |
| L96 | S 28°57'18" E | 158.57' |
| L97 | S 46°50'45" E | 63.89' |
| L98 | S 51°28'01" E | 85.40' |
| L99 | S 61°58'48" E | 128.77' |
| L100 | S 61°35'47" E | 165.96' |
| L101 | S 27°41'38" W | 122.54' |
| L102 | N 51°17'08" W | 98.80' |
| L103 | N 84°22'51" W | 98.80' |
| L104 | N 69°12'24" W | 154.02' |
| L105 | N 63°00'53" W | 46.75' |
| L106 | N 76°40'24" W | 117.64' |
| L107 | S 50°58'30" W | 81.31' |
| L108 | S 32°56'31" W | 148.71' |
| L109 | S 26°22'57" W | 141.61' |



Erlandsen
SURVEYORS & ENGINEERS, INC.

DRAWN BY: DMG LAYOUT: OSHEET-38
DATE: 02/02/09 FILE NO: T30-425-927
SCALE: 1" = 300' JOB NO: 56540.00 TOLL FREE: (800) 732-7142

T. 30 N. R. 25 E.W.M.
SECTION 27
DOUGLAS & OKANOGAN COUNTIES

SURVEYOR'S CERTIFICATE:

I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREON WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON, AND I CERTIFY THAT THE ACCURACY PROVIDES THAT THE CODE OF FEDERAL REGULATIONS (40CFR41)

ROBERT ERLANDSEN
PROFESSIONAL LAND SURVEYOR
STATE OF WASHINGTON CERTIFICATE NO. 23839

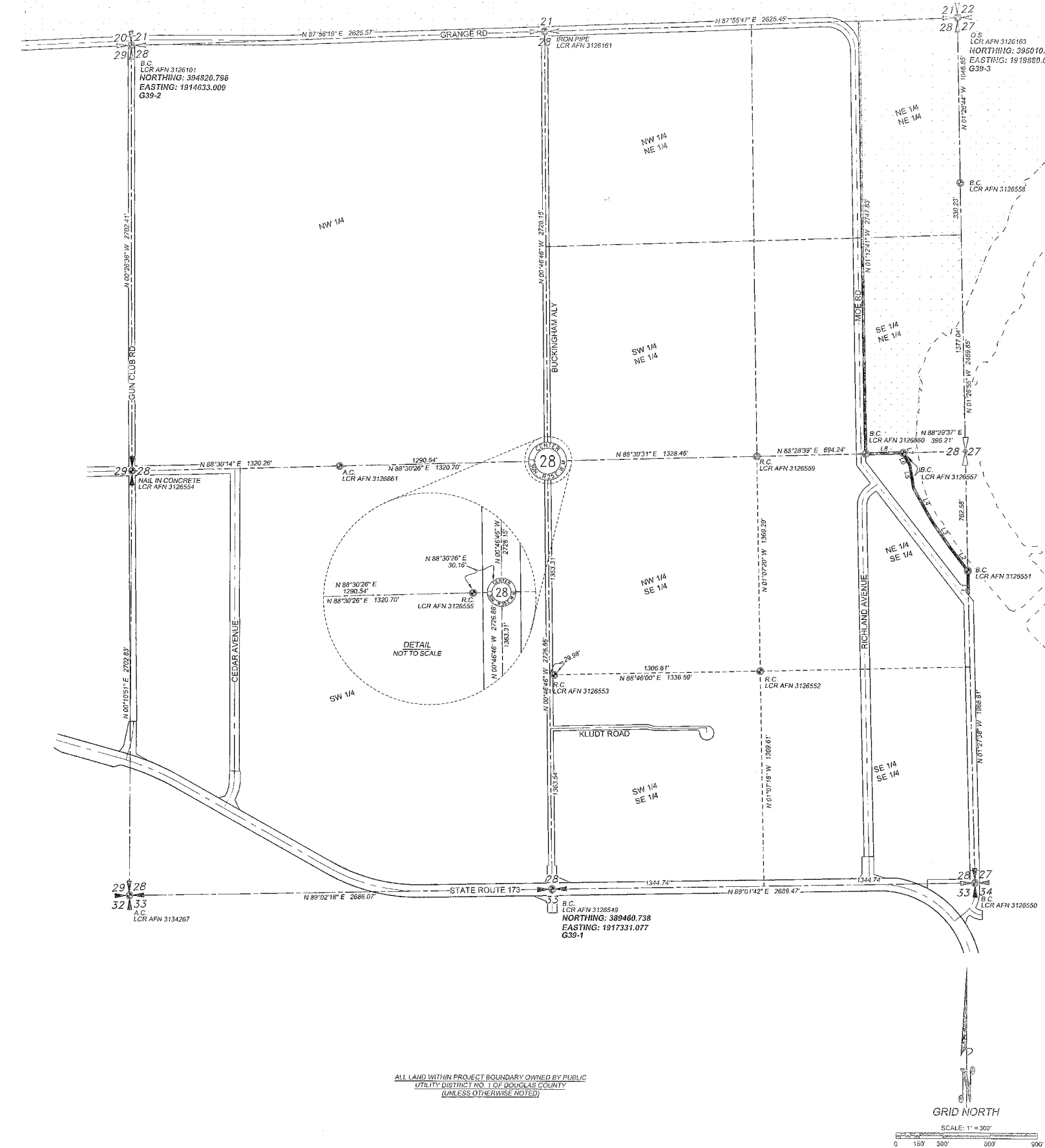
PROJECT BOUNDARY & LOCATION MAP
WELLS HYDROELECTRIC PROJECT

PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
EAST WENATCHEE, WASHINGTON

EXHIBIT G, SHEET 38 OF 64 FERC PROJECT NO. 2149

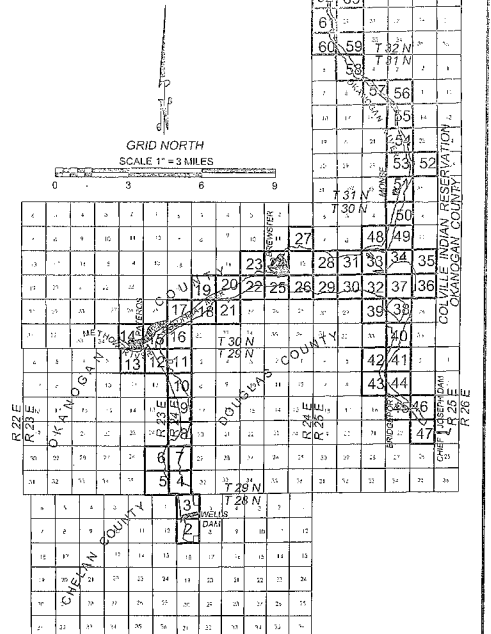
SEE SHEET 32

WELLS
WILDLIFE AREA



| LINE | BEARING | LENGTH |
|------|-----------------|---------|
| L1 | N 01° 27' 38" W | 140.09' |
| L2 | N 37° 37' 57" W | 185.45' |
| L3 | N 31° 27' 31" W | 212.85' |
| L4 | N 29° 11' 53" W | 233.17' |
| L5 | N 09° 42' 33" W | 151.29' |
| L6 | N 30° 17' 33" W | 69.98' |
| L7 | N 23° 46' 39" W | 16.83' |
| L8 | S 88° 32' 16" W | 238.20' |

KEY MAP



SEE SHEET 38

LEGEND

EXHIBIT G PROJECT BOUNDARY: Dashed line

WATER LINE: Solid line with wavy pattern

MEANDER LINE: Dashed line with 'M'

RECREATION SITE: Dotted area

WILDLIFE AREA: Stippled area

ORIGINAL STONE: Circle with 'O.S.'

GRASS CAP: Circle with 'G.C.'

ALUMINUM CAP: Circle with 'A.C.'

REBAR WITH CAP: Circle with 'R.C.'

AUDITOR FILE NUMBER: Circle with 'AFN'

LAND CORNER RECORD: Circle with 'L.C.R.'

BUREAU OF LAND MANAGEMENT: Circle with 'B.L.M.'

BUREAU OF RECLAMATION: Circle with 'B.O.R.'

BUREAU OF INDIAN AFFAIRS: Circle with 'B.I.A.'

UNITED STATES ARMY: Circle with 'U.S.A.C.E.'

CORPS OF ENGINEERS: Circle with 'C.O.E.'

WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES: Circle with 'W.D.N.R.'

FOUND: Circle with 'F'

NOT FOUND: Circle with 'N.F.'

SECTION CORNER (AS NOTED): Circle with 'S.C.'

SECTION CORNER ON A TOWNSHIP OR RANGE LINE (AS NOTED): Circle with 'S.C.T.R.L.'

QUARTER CORNER (AS NOTED): Circle with 'Q.C.'

QUARTER CORNER ON A TOWNSHIP OR RANGE LINE (AS NOTED): Circle with 'Q.C.T.R.L.'

MEANDER CORNER (AS NOTED): Circle with 'M.C.'

MONUMENT (AS NOTED): Circle with 'M.'

MAP PROJECTION / BASIS OF BEARING

UNITS: U.S. SURVEY FEET

HORIZONTAL DATUM: NAD 83/1991 ADJUSTMENT

VERTICAL DATUM: NGVD 1929

PROJECTION: WASHINGTON STATE COORDINATE SYSTEM-NORTH ZONE

GEOID: GEOID 99 (CONUS)

BEARINGS ARE BASED ON THE WASHINGTON STATE COORDINATE SYSTEM NORTH ZONE, DERIVED FROM GPS OBSERVATIONS. THE DISTANCES SHOWN ON THIS MAP HAVE BEEN PROJECTED TO THE WASHINGTON STATE PLANE COORDINATE GRID. MULTIPLY THE DISTANCES SHOWN BY A FACTOR OF 1.00029217 TO OBTAIN THE ACTUAL GROUND DISTANCE.

META DATA AS DERIVED BY GPS OBSERVATIONS ON A BRASS CAP AT THE INTERSECTION OF THE MOST EASTERLY ANGLE POINT OF THE WELLS HYDROELECTRIC PROJECT BOUNDARY, AND THE EAST-WEST CENTERLINE OF SECTION 28 SHOWN HEREON, IS AS FOLLOWS:

LATITUDE: N 43° 04' 10.7335"

LONGITUDE: W 119° 41' 28.6750"

ELLIPSOID HEIGHT: 728.85'

ELEVATION: 799.38'

CONVERGENCE ANGLE: 0° 51' 00"

COMBINED SCALE FACTOR: 0.99990784

Erlandsen

1850 6th Street
Wenatchee, WA 98801
Phone: (509) 864-2562
Fax: (509) 864-2562

DATE: 5.03.2009
SCALE: 1" = 300'

LAYOUT: 03SHEET-38
FILE NO: T30-R25-S25
JOB NO: 05510.00
TOLL FREE: (800) 732-7442

**T. 30 N. R. 25 E.W.M.
SECTION 28
DOUGLAS COUNTY**

SURVEYOR'S CERTIFICATE:

I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREON WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON, AND THAT IT COMPLETES THE ACCURACY REQUIREMENTS OF THE CODE OF FEDERAL REGULATIONS 18CFR 141.

ROGER ERLANDSEN
PROFESSIONAL LAND SURVEYOR
STATE OF WASHINGTON CERTIFICATE NO. 23189

PROJECT BOUNDARY & LOCATION MAP
WELLS HYDROELECTRIC PROJECT

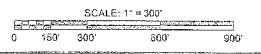
PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
EAST WENATCHEE, WASHINGTON

EXHIBIT G, SHEET 39 OF 64

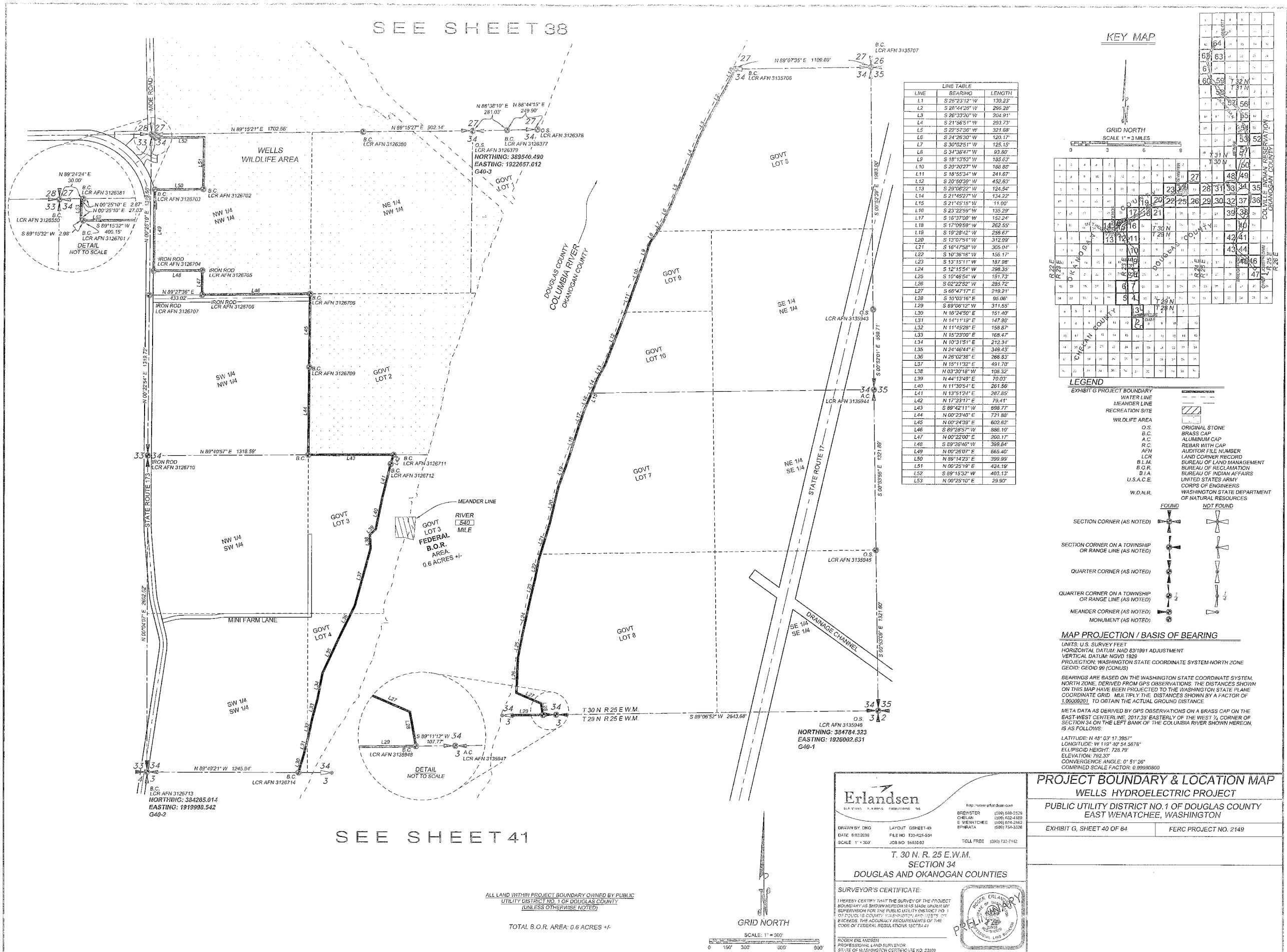
FERC PROJECT NO. 2149

ALL LAND WITHIN PROJECT BOUNDARY OWNED BY PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY (UNLESS OTHERWISE NOTED)

GRID NORTH



SEE SHEET 38



| LINE | BEARING | LENGTH |
|------|---------------|---------|
| L1 | S 26°23'12" W | 130.23' |
| L2 | S 28°44'38" W | 286.20' |
| L3 | S 26°33'00" W | 204.91' |
| L4 | S 21°56'51" W | 293.73' |
| L5 | S 22°57'36" W | 321.68' |
| L6 | S 24°26'30" W | 120.17' |
| L7 | S 30°02'51" W | 125.15' |
| L8 | S 34°38'47" W | 93.80' |
| L9 | S 18°13'33" W | 183.63' |
| L10 | S 20°20'27" W | 186.80' |
| L11 | S 18°55'34" W | 241.67' |
| L12 | S 20°50'39" W | 452.63' |
| L13 | S 29°06'22" W | 124.54' |
| L14 | S 21°45'27" W | 134.22' |
| L15 | S 21°45'15" W | 11.00' |
| L16 | S 23°22'59" W | 135.29' |
| L17 | S 18°37'00" W | 153.24' |
| L18 | S 17°09'59" W | 262.55' |
| L19 | S 19°28'42" W | 256.67' |
| L20 | S 13°07'51" W | 312.09' |
| L21 | S 16°47'58" W | 305.04' |
| L22 | S 10°36'18" W | 156.17' |
| L23 | S 13°15'11" W | 187.38' |
| L24 | S 12°15'54" W | 298.35' |
| L25 | S 10°46'54" W | 191.73' |
| L26 | S 02°22'52" W | 285.72' |
| L27 | S 66°47'17" E | 218.21' |
| L28 | S 10°03'16" E | 95.06' |
| L29 | S 89°06'12" W | 311.55' |
| L30 | N 16°24'50" E | 151.40' |
| L31 | N 14°11'13" E | 147.36' |
| L32 | N 11°45'28" E | 158.87' |
| L33 | N 13°23'00" E | 168.47' |
| L34 | N 10°31'51" E | 212.34' |
| L35 | N 24°46'44" E | 348.43' |
| L36 | N 28°02'38" E | 266.83' |
| L37 | N 15°11'32" E | 491.70' |
| L38 | N 03°30'18" W | 108.32' |
| L39 | N 44°13'49" E | 70.03' |
| L40 | N 11°30'51" E | 261.56' |
| L41 | N 13°12'12" E | 287.25' |
| L42 | N 17°23'17" E | 78.41' |
| L43 | S 89°42'11" W | 698.77' |
| L44 | N 00°23'40" E | 721.98' |
| L45 | N 00°24'39" E | 602.62' |
| L46 | S 89°28'57" W | 886.10' |
| L47 | N 00°22'00" E | 200.17' |
| L48 | S 89°30'40" W | 399.84' |
| L49 | N 00°26'07" E | 665.40' |
| L50 | N 89°14'23" E | 399.99' |
| L51 | N 00°25'19" E | 424.19' |
| L52 | S 89°15'32" W | 403.13' |
| L53 | N 00°25'10" E | 29.90' |

KEY MAP

LEGEND

- EXHIBIT G PROJECT BOUNDARY
- WATER LINE
- MEANDER LINE
- RECREATION SITE
- WILDLIFE AREA
- O.S.
- B.C.
- A.C.
- R.C.
- AFN
- LCR
- B.L.M.
- B.O.R.
- B.I.A.
- U.S.A.C.E.
- W.D.N.R.
- ORIGINAL STONE
- BRASS CAP
- ALUMINUM CAP
- REBAR WITH CAP
- AUDITOR FILE NUMBER
- LAND CORNER RECORD
- BUREAU OF LAND MANAGEMENT
- BUREAU OF RECLAMATION
- BUREAU OF INDIAN AFFAIRS
- UNITED STATES ARMY
- CORPS OF ENGINEERS
- WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES

MAP PROJECTION / BASIS OF BEARING

UNITS: U.S. SURVEY FEET
 HORIZONTAL DATUM: NAD 83/1981 ADJUSTMENT
 VERTICAL DATUM: NGVD 1929
 PROJECTION: WASHINGTON STATE COORDINATE SYSTEM-NORTH ZONE
 GEOID: GEOID 99 (CONUS)

BEARINGS ARE BASED ON THE WASHINGTON STATE COORDINATE SYSTEM, NORTH ZONE, DERIVED FROM GPS OBSERVATIONS. THE DISTANCES SHOWN ON THIS MAP HAVE BEEN PROJECTED TO THE WASHINGTON STATE PLANE COORDINATE GRID. MIXTURE THE DISTANCES SHOWN BY A FACTOR OF 1.00028201 TO OBTAIN THE ACTUAL GROUND DISTANCE.

META DATA AS DERIVED BY GPS OBSERVATIONS ON A BRASS CAP ON THE EAST-WEST CENTERLINE, 2017.35' EASTERLY OF THE WEST 1/4 CORNER OF SECTION 34 ON THE LEFT BANK OF THE COLUMBIA RIVER SHOWN HEREON, IS AS FOLLOWS:
 LATITUDE: N 48° 03' 17.3857"
 LONGITUDE: W 119° 40' 54.5678"
 ELLIPSOID HEIGHT: 729.79'
 ELEVATION: 762.35'
 CONVERGENCE ANGLE: 0° 51' 26"
 COMBINED SCALE FACTOR: 0.99980800

Erlandsen
 SURVEYORS & ENGINEERS

11000 1st Avenue S.E.
 Bellevue, WA 98006
 (206) 835-5500
 (206) 835-5501
 (206) 835-5502
 (206) 835-5503

DRAWN BY: DMG LAYOUT: OSHEE1-40
 DATE: 02/20/2019 FILE NO: 130-025-034
 SCALE: 1" = 300' JOB NO: 5830-00 TOLL FREE: (800) 732-7142

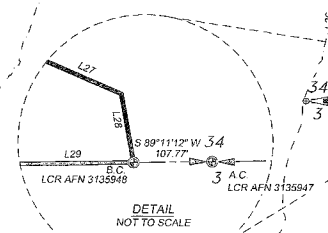
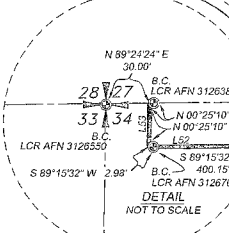
T. 30 N. R. 25 E. W.M.
 SECTION 34
 DOUGLAS AND OKANOGAN COUNTIES

SURVEYOR'S CERTIFICATE:
 I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREON WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON AND I CERTIFY THAT THE ACCURACY REQUIREMENTS OF THE CODE OF FEDERAL REGULATIONS 101CFR14.1

RODGER ERLANDSEN
 PROFESSIONAL LAND SURVEYOR
 STATE OF WASHINGTON CERTIFICATE NO. 23309

PROJECT BOUNDARY & LOCATION MAP
 WELLS HYDROELECTRIC PROJECT
 PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
 EAST WENATCHEE, WASHINGTON

EXHIBIT G, SHEET 40 OF 64 FERC PROJECT NO. 2149

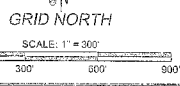


B.C.
 LCR AFN 3126713
 NORTHING: 384285.014
 EASTING: 1919998.542
 G40-2

O.S.
 LCR AFN 3135046
 NORTHING: 384784.323
 EASTING: 1926002.631
 G40-1

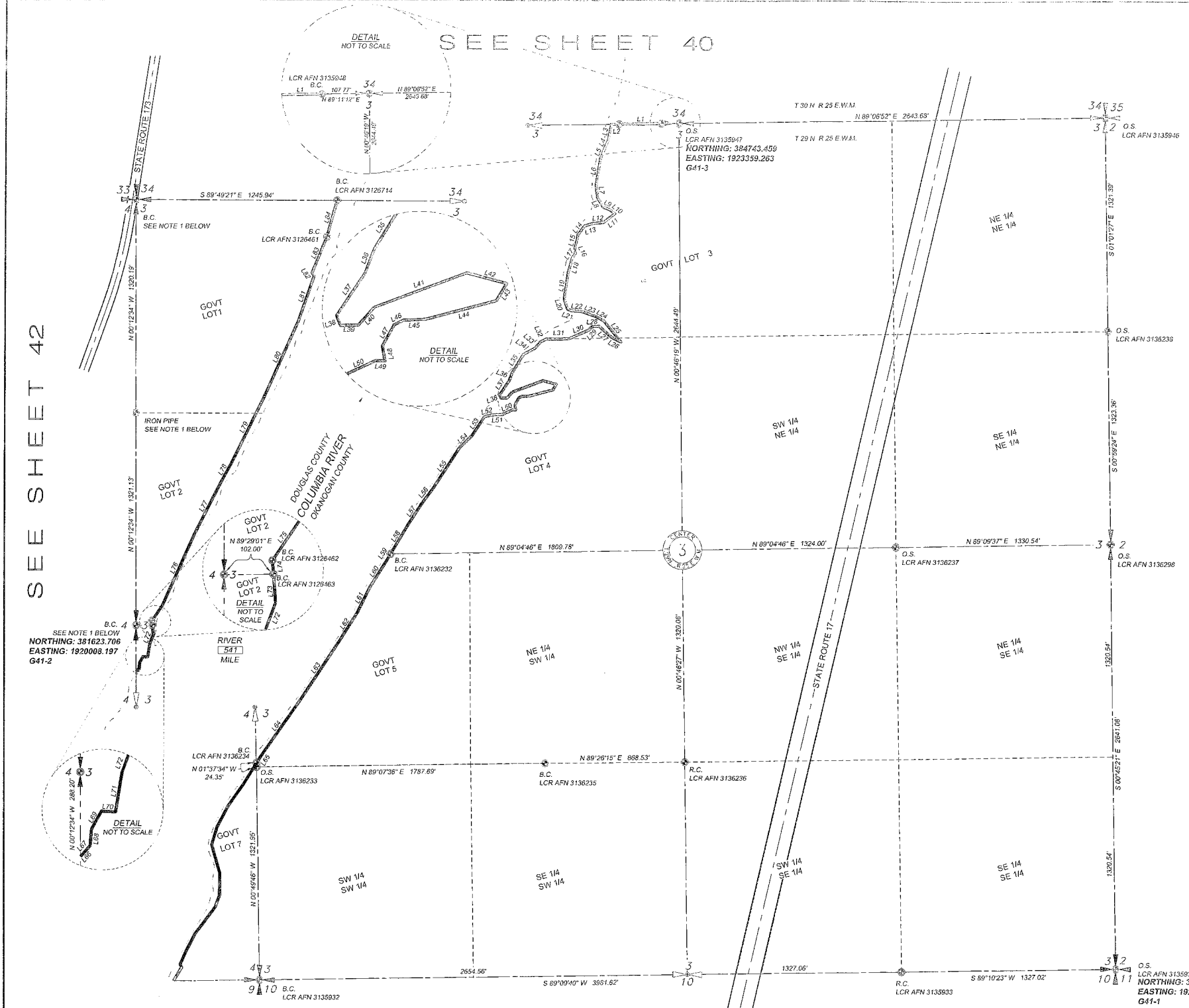
ALL LAND WITHIN PROJECT BOUNDARY OWNED BY PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY (UNLESS OTHERWISE NOTED)

TOTAL B.O.R. AREA: 0.6 ACRES +/-

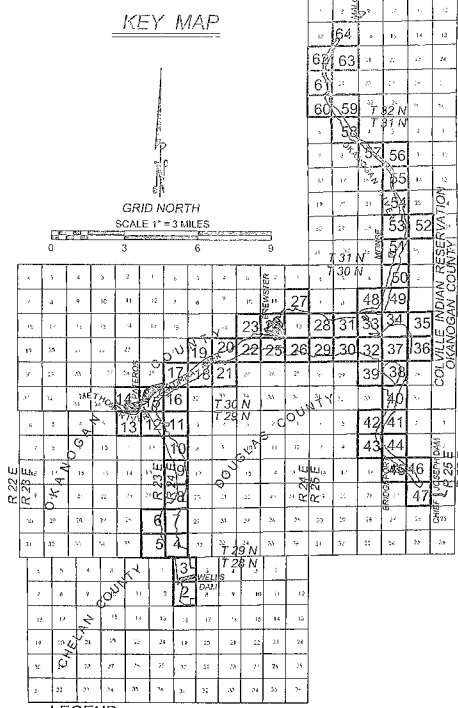


SEE SHEET 41

SEE SHEET 42



| LINE | BEARING | LENGTH |
|------|---------------|---------|
| L1 | S 89°06'12" W | 263.11' |
| L2 | S 89°06'12" W | 48.44' |
| L3 | S 10°42'10" W | 100.82' |
| L4 | S 24°40'19" W | 52.18' |
| L5 | S 20°50'53" W | 71.73' |
| L6 | S 09°05'26" W | 157.50' |
| L7 | S 06°35'37" E | 81.05' |
| L8 | S 31°09'34" E | 69.37' |
| L9 | S 70°31'24" E | 38.66' |
| L10 | S 52°50'31" E | 45.02' |
| L11 | S 52°08'34" W | 91.52' |
| L12 | S 86°29'18" W | 62.52' |
| L13 | S 72°36'33" W | 56.60' |
| L14 | S 25°14'07" W | 66.04' |
| L15 | S 12°31'47" W | 101.32' |
| L16 | S 27°32'20" E | 15.83' |
| L17 | S 34°28'20" W | 36.54' |
| L18 | S 14°59'58" W | 102.33' |
| L19 | S 08°04'14" W | 157.45' |
| L20 | S 17°44'45" E | 67.03' |
| L21 | S 71°59'18" W | 38.02' |
| L22 | S 87°41'35" E | 55.69' |
| L23 | S 70°36'15" E | 97.06' |
| L24 | S 61°31'29" E | 56.66' |
| L25 | S 39°06'57" E | 169.15' |
| L26 | N 62°38'15" W | 66.99' |
| L27 | N 46°30'21" W | 99.10' |
| L28 | S 88°41'21" W | 45.35' |
| L29 | S 42°47'28" W | 29.35' |
| L30 | S 65°28'42" W | 134.44' |
| L31 | S 89°06'34" W | 138.07' |
| L32 | S 64°51'40" W | 40.02' |
| L33 | S 40°46'40" W | 52.45' |
| L34 | S 60°49'47" W | 81.61' |
| L35 | S 31°32'26" W | 133.63' |
| L36 | S 20°36'22" W | 52.84' |
| L37 | S 33°51'11" W | 104.88' |
| L38 | S 21°14'08" E | 21.91' |
| L39 | N 89°04'46" E | 37.58' |
| L40 | N 41°27'12" E | 49.08' |
| L41 | N 69°24'51" E | 203.84' |
| L42 | S 75°21'40" E | 85.27' |
| L43 | S 30°23'21" W | 41.11' |
| L44 | S 75°33'09" W | 153.09' |
| L45 | S 67°36'25" W | 45.01' |
| L46 | S 62°51'36" W | 21.65' |
| L47 | S 28°56'58" W | 49.65' |
| L48 | S 10°13'41" E | 31.34' |
| L49 | N 88°14'20" W | 19.49' |
| L50 | S 64°53'44" W | 71.85' |
| L51 | S 88°36'53" W | 64.97' |
| L52 | S 75°33'09" W | 49.36' |
| L53 | S 32°43'43" W | 139.84' |
| L54 | S 45°52'02" W | 106.10' |
| L55 | S 32°46'17" W | 295.81' |
| L56 | S 36°16'37" W | 128.45' |
| L57 | S 32°21'37" W | 140.47' |
| L58 | S 30°41'20" W | 221.82' |
| L59 | S 30°41'20" W | 45.54' |
| L60 | S 31°48'38" W | 200.74' |
| L61 | S 25°59'05" W | 173.91' |
| L62 | S 32°02'48" W | 199.11' |
| L63 | S 33°22'54" W | 458.23' |
| L64 | S 35°04'36" W | 412.87' |
| L65 | S 31°37'11" W | 55.17' |
| L66 | N 41°29'17" E | 4.41' |
| L67 | N 41°33'17" E | 29.23' |
| L68 | N 04°41'04" E | 35.29' |
| L69 | N 29°10'35" E | 41.64' |
| L70 | S 87°27'18" E | 29.06' |
| L71 | N 08°06'44" E | 83.55' |
| L72 | N 20°17'53" E | 59.22' |
| L73 | N 04°32'37" W | 58.81' |
| L74 | N 04°17'25" W | 28.78' |
| L75 | N 33°58'03" E | 114.03' |
| L76 | N 23°52'33" E | 483.71' |
| L77 | N 26°54'56" E | 363.71' |
| L78 | N 28°12'04" E | 144.74' |
| L79 | N 26°04'52" E | 445.88' |
| L80 | N 23°59'43" E | 517.59' |
| L81 | N 19°07'12" E | 295.40' |
| L82 | N 35°33'45" E | 23.59' |
| L83 | N 22°21'15" E | 249.52' |
| L84 | N 15°30'04" E | 232.47' |



LEGEND

| | |
|---|--|
| EXHIBIT G PROJECT BOUNDARY | --- |
| WATER LINE | --- |
| MEANDER LINE | --- |
| RECREATION SITE | --- |
| WILDLIFE AREA | --- |
| O.S. | ORIGINAL STONE |
| B.C. | BRASS CAP |
| A.C. | ALUMINUM CAP |
| R.C. | REBAR WITH CAP |
| AFN | AUDITOR'S FILE NUMBER |
| LCR | LAND CORNER RECORD |
| B.L.M. | BUREAU OF LAND MANAGEMENT |
| B.O.R. | BUREAU OF RECLAMATION |
| B.I.A. | BUREAU OF INDIAN AFFAIRS |
| U.S.A.C.E. | UNITED STATES ARMY |
| | CORPS OF ENGINEERS |
| | WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES |
| W.D.N.R. | |
| FOUND | NOT FOUND |
| SECTION CORNER (AS NOTED) | --- |
| SECTION CORNER ON A TOWNSHIP OR RANGE LINE (AS NOTED) | --- |
| QUARTER CORNER (AS NOTED) | --- |
| QUARTER CORNER ON A TOWNSHIP OR RANGE LINE (AS NOTED) | --- |
| MEANDER CORNER (AS NOTED) | --- |
| MONUMENT (AS NOTED) | --- |

MAP PROJECTION / BASIS OF BEARING

HORIZONTAL DATUM: NAD 83/1991 ADJUSTMENT
 VERTICAL DATUM: NGVD 1928
 PROJECTION: WASHINGTON STATE COORDINATE SYSTEM-NORTH ZONE
 GEOID: GEOID 99 (CONUS)

BEARINGS ARE BASED ON THE WASHINGTON STATE COORDINATE SYSTEM, NORTH ZONE. DERIVED FROM GPS OBSERVATIONS. THE DISTANCES SHOWN ON THIS MAP HAVE BEEN PROJECTED TO THE WASHINGTON STATE PLANE COORDINATE GRID. MULTIPLY THE DISTANCES SHOWN BY A FACTOR OF 1.0000912 TO OBTAIN THE ACTUAL GROUND DISTANCE.

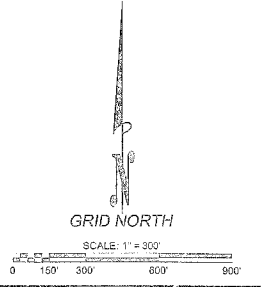
META DATA AS DERIVED BY GPS OBSERVATIONS ON A BRASS CAP IN CONCRETE AT THE INTERSECTION OF THE EAST-WEST CENTERLINE OF SECTION 3 WITH THE PROJECT BOUNDARY OF THE WELLS HYDROELECTRIC PROJECT ON THE RIGHT BANK OF THE COLUMBIA RIVER SHOWN HEREON, IS AS FOLLOWS:

LATITUDE: N 48° 02' 30.0166"
 LONGITUDE: W 119° 41' 02.0074"
 ELLIPSOID HEIGHT: 730.56'
 ELEVATION: 794.18'
 CONVERGENCE ANGLE: 0° 51' 21"
 COMBINED SCALE FACTOR: 0.99999819

NOTE 1. REFERENCE RECORD OF SURVEY RECORDED UNDER AUDITOR'S FILE NUMBERS 3122715 A THRU F.

SEE SHEET 44

ALL LAND WITHIN PROJECT BOUNDARY OWNED BY PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY (UNLESS OTHERWISE NOTED)



Erlandsen
 SURVEYORS & ENGINEERS

1800 20th Street
 Wenatchee, WA 98801
 (509) 662-3333
 (509) 662-4100
 (509) 662-2502
 (509) 754-3308

DRAWN BY: DNG LAYOUT: GSHWEE-41
 DATE: 6/22/2005 FILE NO: T29-R25-303
 SCALE: 1" = 300' JOB NO: 95520.00 TOLL FREE: (800) 732-7142

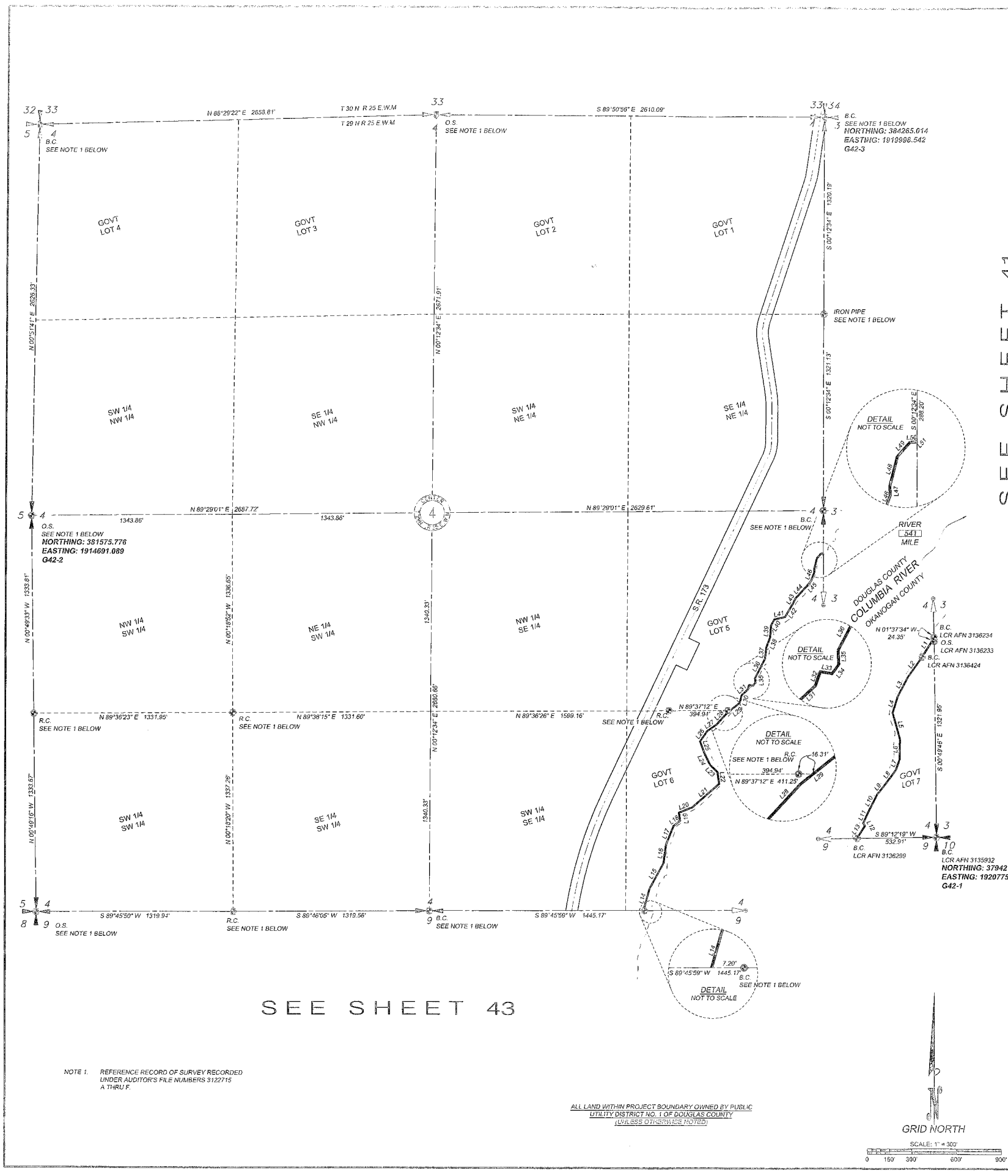
T. 29 N. R. 25 E. W.M.
 SECTION 3
 DOUGLAS & OKANOGAN COUNTIES

SURVEYOR'S CERTIFICATE:
 I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREON WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON, AND I BEING THE ENGINEER, THE ACCURACY REQUIREMENTS OF THE CODE OF FEDERAL REGULATIONS 101.741-21

ROGER ERLANDSEN
 PROFESSIONAL LAND SURVEYOR
 STATE OF WASHINGTON CERTIFICATE NO. 21589

PROJECT BOUNDARY & LOCATION MAP
 WELLS HYDROELECTRIC PROJECT
 PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
 EAST WENATCHEE, WASHINGTON

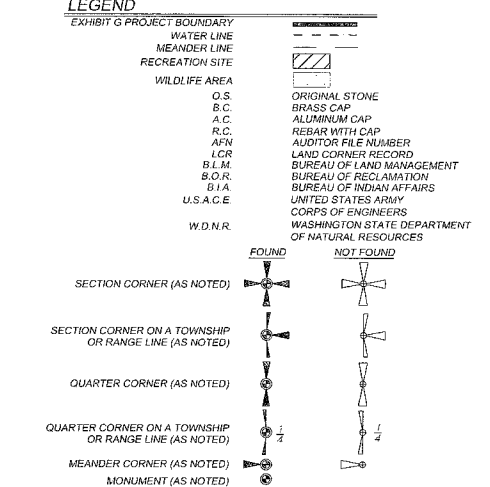
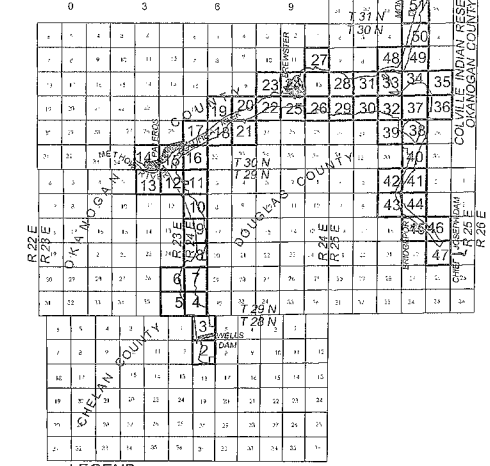
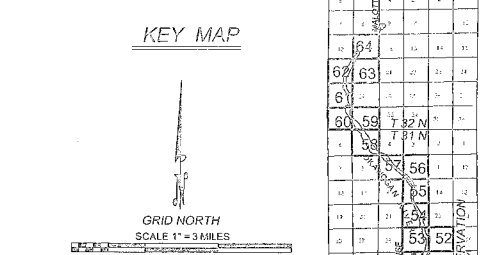
EXHIBIT G, SHEET 41 OF 64 FERC PROJECT NO. 2149



SEE SHEET 41

SEE SHEET 43

| LINE | BEARING | LENGTH |
|------|---------------|---------|
| L1 | S 31°39'01" W | 155.24' |
| L2 | S 34°53'34" W | 162.87' |
| L3 | S 27°40'23" W | 148.16' |
| L4 | S 18°48'16" W | 116.38' |
| L5 | S 15°51'51" E | 182.50' |
| L6 | S 00°49'23" W | 138.23' |
| L7 | S 19°54'12" W | 75.31' |
| L8 | S 38°10'27" W | 120.93' |
| L9 | S 38°01'16" W | 84.64' |
| L10 | S 27°14'02" W | 128.11' |
| L11 | S 23°34'31" W | 86.27' |
| L12 | S 29°55'32" E | 20.79' |
| L13 | S 31°30'08" W | 98.98' |
| L14 | N 15°41'04" E | 153.77' |
| L15 | N 28°28'37" E | 185.27' |
| L16 | N 07°19'05" E | 125.24' |
| L17 | N 21°46'59" E | 135.58' |
| L18 | N 51°37'53" E | 56.23' |
| L19 | N 08°36'22" W | 58.27' |
| L20 | N 68°19'38" E | 94.13' |
| L21 | N 48°23'35" E | 241.93' |
| L22 | N 06°21'07" W | 80.82' |
| L23 | N 48°59'29" W | 88.60' |
| L24 | N 25°52'39" W | 68.09' |
| L25 | N 20°19'50" W | 84.76' |
| L26 | N 34°00'41" E | 84.66' |
| L27 | N 54°49'20" E | 76.84' |
| L28 | N 42°33'09" E | 113.43' |
| L29 | N 51°18'08" E | 89.29' |
| L30 | N 13°01'53" E | 52.83' |
| L31 | N 47°03'36" E | 55.08' |
| L32 | N 18°58'04" E | 33.34' |
| L33 | S 80°24'59" E | 27.16' |
| L34 | N 35°20'30" E | 25.52' |
| L35 | N 03°08'26" W | 31.04' |
| L36 | N 26°59'59" E | 145.26' |
| L37 | N 06°49'51" E | 77.20' |
| L38 | N 19°23'56" E | 72.98' |
| L39 | N 04°16'32" E | 79.18' |
| L40 | N 28°46'41" E | 47.28' |
| L41 | N 76°49'46" E | 73.42' |
| L42 | N 30°33'49" E | 105.26' |
| L43 | N 25°33'21" E | 39.87' |
| L44 | N 42°38'41" E | 114.79' |
| L45 | N 38°49'11" E | 44.73' |
| L46 | N 19°24'04" E | 65.04' |
| L47 | N 05°16'16" W | 18.10' |
| L48 | N 13°58'19" E | 69.22' |
| L49 | N 41°01'31" E | 42.66' |
| L50 | N 87°14'10" E | 14.54' |
| L51 | N 41°25'17" E | 2.00' |



BEARINGS ARE BASED ON THE WASHINGTON STATE COORDINATE SYSTEM, NORTH ZONE, DERIVED FROM GPS OBSERVATIONS. THE DISTANCES SHOWN ON THIS MAP HAVE BEEN PROJECTED TO THE WASHINGTON STATE PLANE COORDINATE GRID. MULTIPLY THE DISTANCES SHOWN BY A FACTOR OF 1.0009249 TO OBTAIN THE ACTUAL GROUND DISTANCE.

META DATA AS DERIVED BY GPS OBSERVATIONS AT THE EAST QUARTER CORNER OF SECTION 4 SHOWN HEREON IS AS FOLLOWS:

LATITUDE: N 48° 02' 25.8432"
 LONGITUDE: W 119° 41' 25.3126"
 ELLIPSOID HEIGHT: 745.21'
 ELEVATION: 808.70'
 CONVERGENCE ANGLE: 0° 51' 03"
 COMBINED SCALE FACTOR: 0.99980782

Erlandsen
 SURVEYORS & ENGINEERS
 4080 680-5329
 CHELAN WA 98820
 (509) 693-4188
 (509) 591-2562
 (509) 750-0306

Drawn By: DMO LAYOUT: GSEHE1-42
 DATE: 8/22/2009 FILE NO: 129-R25-901
 SCALE: 1" = 300' JOB NO: 95530-60 TOLL FREE: (800) 732-7142

**T. 29 N. R. 25 E.W.M.
 SECTION 4
 DOUGLAS AND OKANOGAN COUNTIES**

SURVEYOR'S CERTIFICATE:
 I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREON WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON, AND THAT I AM A LICENSED SURVEYOR IN THE STATE OF WASHINGTON UNDER THE CODE OF FEDERAL REGULATIONS 18CFR41.11

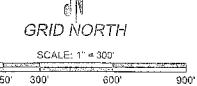
RODGER ERLANDSEN
 PROFESSIONAL LAND SURVEYOR
 STATE OF WASHINGTON CERTIFICATE NO. 23339

PROJECT BOUNDARY & LOCATION MAP
WELLS HYDROELECTRIC PROJECT
 PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
 EAST WENATCHEE, WASHINGTON

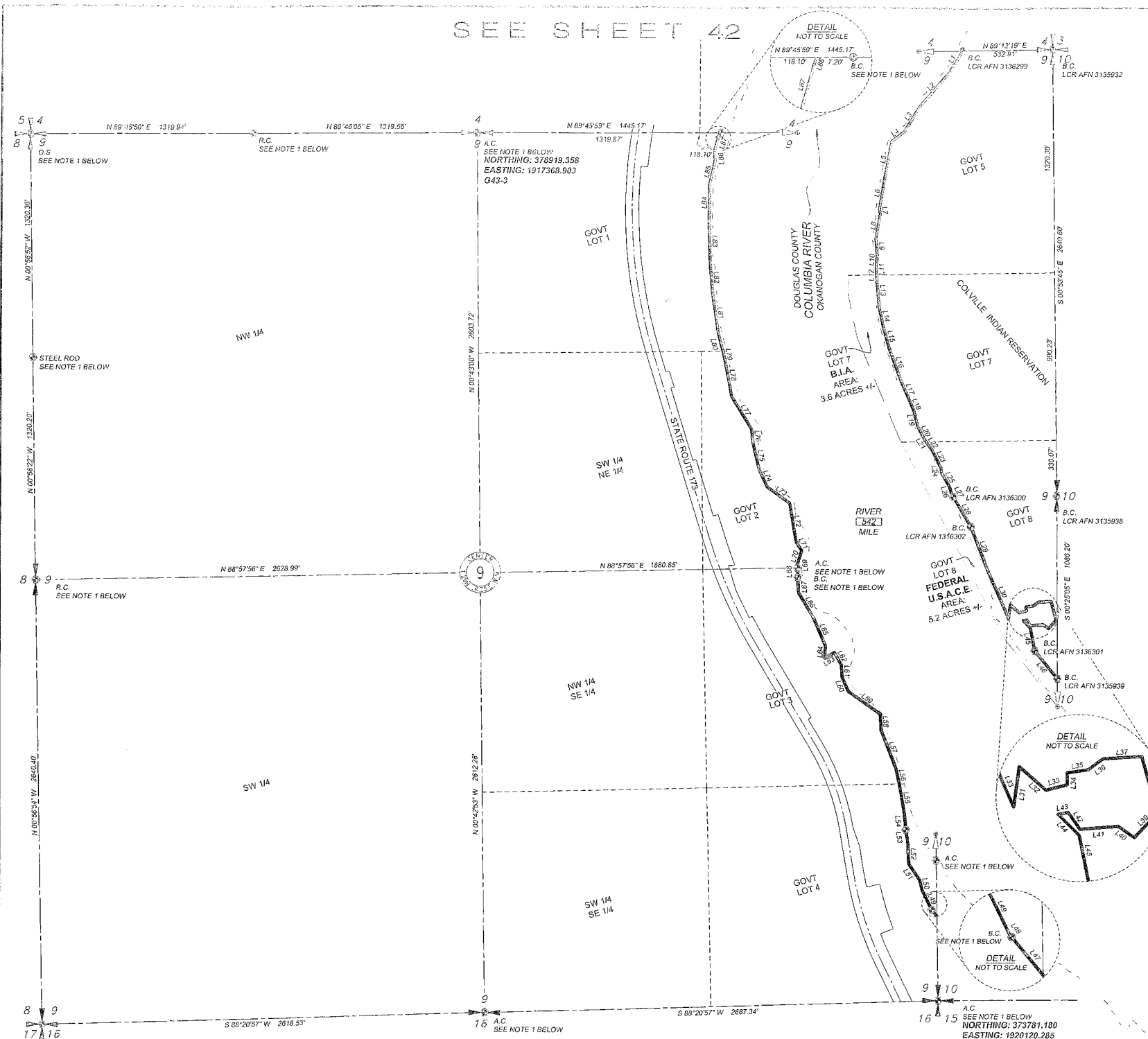
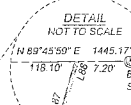
EXHIBIT G, SHEET 42 OF 64 FERC PROJECT NO. 2149

NOTE 1. REFERENCE RECORD OF SURVEY RECORDED UNDER AUDITOR'S FILE NUMBERS 3122715 A THRU F.

ALL LAND WITHIN PROJECT BOUNDARY OWNED BY PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY (UNLESS OTHERWISE NOTED)

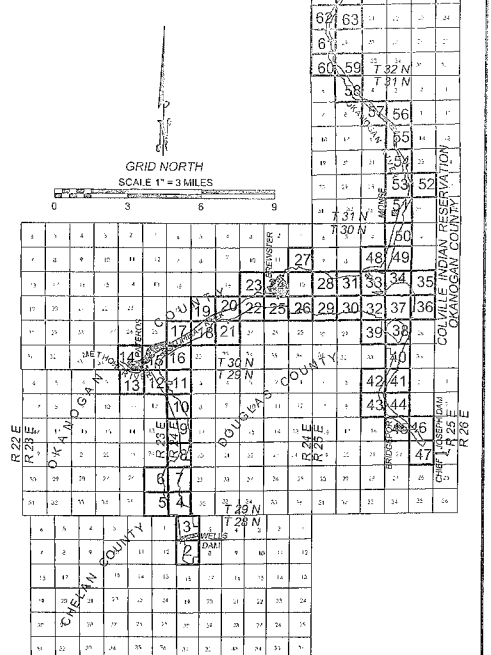


SEE SHEET 42



| LINE | BEARING | LENGTH |
|------|---------------|---------|
| L1 | S 31°29'54" E | 151.89' |
| L2 | S 40°52'31" W | 251.97' |
| L3 | S 21°10'55" W | 173.60' |
| L4 | S 51°39'07" W | 39.07' |
| L5 | S 10°26'19" W | 222.50' |
| L6 | S 09°02'47" W | 179.77' |
| L7 | S 08°00'05" E | 30.84' |
| L8 | S 09°30'25" W | 148.02' |
| L9 | S 03°03'47" E | 95.54' |
| L10 | S 04°43'35" W | 53.59' |
| L11 | S 02°03'00" E | 44.26' |
| L12 | S 04°28'57" E | 12.61' |
| L13 | S 04°29'00" E | 186.90' |
| L14 | S 12°17'34" E | 131.11' |
| L15 | S 15°54'31" E | 116.94' |
| L16 | S 20°11'42" E | 210.69' |
| L17 | S 24°01'55" E | 133.05' |
| L18 | S 22°51'00" E | 61.98' |
| L19 | S 13°53'53" E | 93.56' |
| L20 | S 28°08'22" E | 92.95' |
| L21 | S 36°35'58" E | 9.81' |
| L22 | S 36°35'58" E | 61.43' |
| L23 | S 26°30'28" E | 119.14' |
| L24 | S 08°58'32" E | 30.79' |
| L25 | S 29°27'07" E | 92.72' |
| L26 | S 17°05'24" E | 43.38' |
| L27 | S 30°37'19" E | 19.59' |
| L28 | S 30°35'52" E | 207.02' |
| L29 | S 21°14'40" E | 274.55' |
| L30 | S 23°44'38" E | 312.03' |
| L31 | N 07°50'06" E | 80.92' |
| L32 | S 48°40'05" E | 70.60' |
| L33 | N 75°25'59" E | 43.12' |
| L34 | N 00°43'37" W | 23.65' |
| L35 | N 81°29'35" E | 41.69' |
| L36 | N 53°20'38" E | 36.54' |
| L37 | N 86°08'49" E | 75.94' |
| L38 | S 15°43'16" W | 116.49' |
| L39 | S 43°06'19" W | 66.85' |
| L40 | N 54°33'16" W | 39.31' |
| L41 | S 85°39'38" W | 75.74' |
| L42 | N 34°53'15" W | 40.04' |
| L43 | S 79°33'27" W | 20.48' |
| L44 | N 45°10'46" W | 58.60' |
| L45 | S 11°17'30" E | 140.63' |
| L46 | S 39°10'33" E | 212.71' |
| L47 | N 39°49'34" W | 48.85' |
| L48 | N 39°49'49" W | 0.60' |
| L49 | N 25°50'06" W | 130.11' |
| L50 | N 13°29'05" W | 59.86' |
| L51 | N 34°27'32" W | 115.25' |
| L52 | N 02°11'37" W | 116.55' |
| L53 | N 09°04'12" W | 87.83' |
| L54 | N 05°09'32" W | 98.11' |
| L55 | N 09°50'41" W | 174.54' |
| L56 | N 12°28'10" W | 97.81' |
| L57 | N 21°20'13" W | 242.51' |
| L58 | N 02°47'40" W | 97.68' |
| L59 | N 54°51'39" W | 230.66' |
| L60 | N 23°17'35" W | 93.21' |
| L61 | N 03°21'25" W | 71.40' |
| L62 | N 29°20'31" W | 88.22' |
| L63 | S 58°14'35" W | 63.98' |
| L64 | N 00°59'02" E | 73.97' |
| L65 | N 22°51'03" W | 161.13' |
| L66 | N 31°10'36" W | 172.56' |
| L67 | N 02°42'38" W | 90.43' |
| L68 | N 02°42'35" W | 56.74' |
| L69 | N 02°42'35" W | 18.23' |
| L70 | N 16°02'29" E | 88.35' |
| L71 | N 30°39'18" W | 84.45' |
| L72 | N 09°34'58" W | 228.50' |
| L73 | N 54°04'19" W | 154.38' |
| L74 | N 24°57'35" W | 113.44' |
| L75 | N 13°11'24" W | 153.54' |
| L76 | N 06°47'46" W | 90.44' |
| L77 | N 31°39'41" W | 226.83' |
| L78 | N 10°52'25" W | 246.29' |
| L79 | N 10°52'29" W | 4.78' |
| L80 | N 14°56'15" W | 129.95' |
| L81 | N 05°26'16" W | 243.43' |
| L82 | N 04°53'38" W | 177.65' |
| L83 | N 01°42'04" W | 254.31' |
| L84 | N 00°13'51" E | 205.11' |
| L85 | N 12°11'00" E | 153.30' |
| L86 | N 04°13'35" W | 55.77' |
| L87 | N 15°41'03" E | 108.57' |
| L88 | N 15°41'04" E | 0.65' |

KEY MAP



LEGEND

| | |
|---|--|
| EXHIBIT G PROJECT BOUNDARY | --- |
| WATER LINE | --- |
| MEANDER LINE | --- |
| RECREATION SITE | --- |
| WILDLIFE AREA | --- |
| G.S. | ORIGINAL STONE |
| B.C. | BRASS CAP |
| A.C. | ALUMINUM CAP |
| R.C. | REBAR WITH CAP |
| AFN | AUDITOR FILE NUMBER |
| LCR | LAND CORNER RECORD |
| B.L.M. | BUREAU OF LAND MANAGEMENT |
| B.R. | BUREAU OF RECLAMATION |
| B.I.A. | BUREAU OF INDIAN AFFAIRS |
| U.S.A.C.E. | UNITED STATES ARMY CORPS OF ENGINEERS |
| W.D.N.R. | WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES |
| FOUND | + |
| NOT FOUND | + |
| SECTION CORNER (AS NOTED) | + |
| SECTION CORNER ON A TOWNSHIP OR RANGE LINE (AS NOTED) | + |
| QUARTER CORNER (AS NOTED) | + |
| QUARTER CORNER ON A TOWNSHIP OR RANGE LINE (AS NOTED) | + |
| MEANDER CORNER (AS NOTED) | + |
| MONUMENT (AS NOTED) | + |

MAP PROJECTION / BASIS OF BEARING

UNITS: U.S. SURVEY FEET
 HORIZONTAL DATUM: NAD 83/1991 ADJUSTMENT
 VERTICAL DATUM: NGVD 1929
 PROJECTION: WASHINGTON STATE COORDINATE SYSTEM-NORTH ZONE
 GEOID: GEOID 99 (CONUS)

BEARINGS ARE BASED ON THE WASHINGTON STATE COORDINATE SYSTEM NORTH ZONE, DERIVED FROM GPS OBSERVATIONS. THE DISTANCES SHOWN ON THIS MAP HAVE BEEN PROJECTED TO THE WASHINGTON STATE PLANE COORDINATE GRID. MULTIPLY THE DISTANCES SHOWN BY A FACTOR OF 1.00009139 TO OBTAIN THE ACTUAL GROUND DISTANCE.

META DATA AS DERIVED BY GPS OBSERVATIONS ON A BRASS CAP AT THE INTERSECTION OF THE EAST-WEST CENTERLINE OF SECTION 9 WITH THE WELLS HYDROELECTRIC PROJECT BOUNDARY ON THE LEFT BANK OF THE COLUMBIA RIVER SHOWN HEREON, IS AS FOLLOWS:
 LATITUDE: N 48° 01' 41.37" 9269"
 LONGITUDE: W 119° 41' 37.1473"
 ELLIPSOID HEIGHT: 730.00'
 ELEVATION: 793.45'
 CONVERGENCE ANGLE: 0° 50' 55"
 COMBINED SCALE FACTOR: 0.99990862

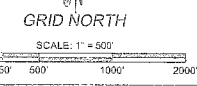
A.C. SEE NOTE 1 BELOW
 NORTHING: 373628.335
 EASTING: 1914816.618
 G43-2

A.C. SEE NOTE 1 BELOW
 NORTHING: 373781.180
 EASTING: 1920120.285
 G43-1

ALL LAND WITHIN PROJECT BOUNDARY OWNED BY PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY (UNLESS OTHERWISE NOTED)

TOTAL B.I.A. AREA: 3.6 ACRES +/-
 TOTAL U.S.A.C.E. AREA: 5.2 ACRES +/-

NOTE 1. REFERENCE RECORD OF SURVEY RECORDED UNDER AUDITOR'S FILE NUMBERS 3133715 A THRU F.



Erlandsen
 SURVEYORS & ENGINEERS
 1500 1st Ave. SE, Everett, WA 98201
 (360) 835-3339
 (360) 835-3338
 (360) 835-3339
 (360) 835-3339

DATE: 6.02.2009
 SCALE: 1" = 500'

LAYOUT: GSHBET-43
 FILE NO: F29-R25-S09
 JOB NO: 95550-00
 TOLL FREE: 800-732-7442

T. 29 N. R. 25 E. W.M.
 SECTION 9
 OKANOGAN AND DOUGLAS COUNTIES

SURVEYOR'S CERTIFICATE:
 I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREON WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON, FROM THE PLATS OF THE CODE OF FEDERAL REGULATIONS 18CFR741.

ROGER ERLANDSEN
 PROFESSIONAL LAND SURVEYOR
 STATE OF WASHINGTON CERTIFICATE NO. 23589

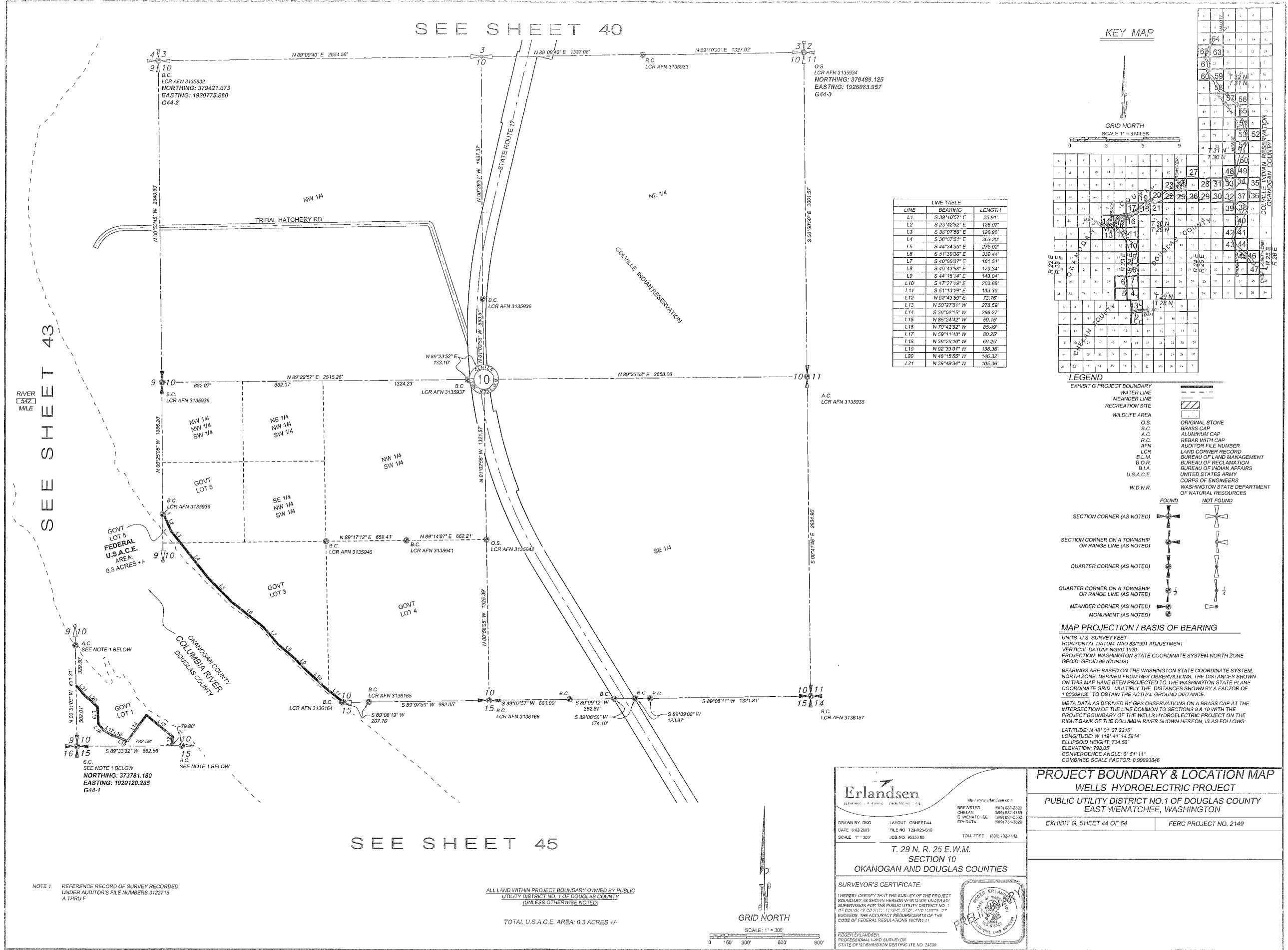
PROJECT BOUNDARY & LOCATION MAP
 WELLS HYDROELECTRIC PROJECT
 PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
 EAST WENATCHEE, WASHINGTON

EXHIBIT G, SHEET 43 OF 64
 FERC PROJECT NO. 2149

SEE SHEET 40

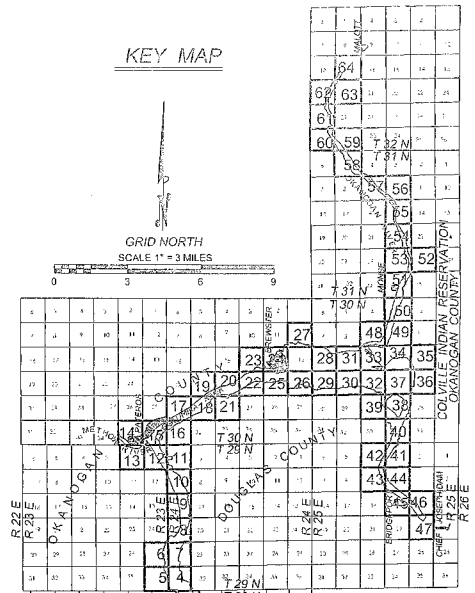
SEE SHEET 43

SEE SHEET 45



LINE TABLE

| LINE | BEARING | LENGTH |
|------|-----------------|---------|
| L1 | S 39° 10' 57" E | 25.91' |
| L2 | S 23° 42' 52" E | 128.07' |
| L3 | S 38° 07' 56" E | 128.96' |
| L4 | S 38° 07' 51" E | 363.20' |
| L5 | S 44° 24' 55" E | 278.02' |
| L6 | S 51° 39' 05" E | 338.44' |
| L7 | S 40° 00' 37" E | 161.51' |
| L8 | S 49° 43' 58" E | 179.34' |
| L9 | S 44° 15' 14" E | 143.04' |
| L10 | S 47° 27' 19" E | 203.88' |
| L11 | S 51° 13' 19" E | 193.39' |
| L12 | N 02° 43' 59" E | 73.78' |
| L13 | N 52° 27' 51" W | 278.59' |
| L14 | S 38° 02' 15" W | 268.27' |
| L15 | N 65° 24' 42" W | 90.15' |
| L16 | N 70° 42' 52" W | 85.49' |
| L17 | N 59° 11' 48" W | 80.25' |
| L18 | N 39° 25' 10" W | 69.25' |
| L19 | N 02° 33' 07" W | 138.36' |
| L20 | N 48° 15' 55" W | 146.32' |
| L21 | N 39° 49' 34" W | 105.36' |



LEGEND

| | |
|---|-----|
| EXHIBIT G PROJECT BOUNDARY | --- |
| WATER LINE | --- |
| MEANDER LINE | --- |
| RECREATION SITE | --- |
| WILDLIFE AREA | --- |
| ORIGINAL STONE | --- |
| BRASS CAP | --- |
| ALUMINUM CAP | --- |
| REBAR WITH CAP | --- |
| AUDITOR FILE NUMBER | --- |
| LAND CORNER RECORD | --- |
| BUREAU OF LAND MANAGEMENT | --- |
| BUREAU OF RECLAMATION | --- |
| BUREAU OF INDIAN AFFAIRS | --- |
| UNITED STATES ARMY | --- |
| CORPS OF ENGINEERS | --- |
| WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES | --- |
| FOUND | --- |
| NOT FOUND | --- |
| SECTION CORNER (AS NOTED) | --- |
| SECTION CORNER ON A TOWNSHIP OR RANGE LINE (AS NOTED) | --- |
| QUARTER CORNER (AS NOTED) | --- |
| QUARTER CORNER ON A TOWNSHIP OR RANGE LINE (AS NOTED) | --- |
| MEANDER CORNER (AS NOTED) | --- |
| MONUMENT (AS NOTED) | --- |

MAP PROJECTION / BASIS OF BEARING

UNITS: U.S. SURVEY FEET
 HORIZONTAL DATUM: NAD 83/1991 ADJUSTMENT
 VERTICAL DATUM: NAVD 1989
 PROJECTION: WASHINGTON STATE COORDINATE SYSTEM-NORTH ZONE
 GEOID: GEOID 95 (CONUS)

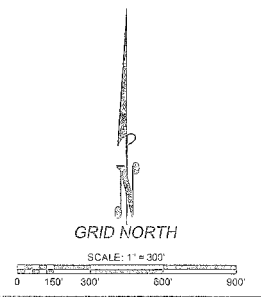
BEARINGS ARE BASED ON THE WASHINGTON STATE COORDINATE SYSTEM, NORTH ZONE, DERIVED FROM GPS OBSERVATIONS. THE DISTANCES SHOWN ON THIS MAP HAVE BEEN PROJECTED TO THE WASHINGTON STATE PLANE COORDINATE GRID. MULTIPLY THE DISTANCES SHOWN BY A FACTOR OF 1.00000156 TO OBTAIN THE ACTUAL GROUND DISTANCE.

META DATA AS DERIVED BY GPS OBSERVATIONS ON A BRASS CAP AT THE INTERSECTION OF THE LINE COMMON TO SECTIONS 9 & 10 WITH THE PROJECT BOUNDARY OF THE WELLS HYDROELECTRIC PROJECT ON THE RIGHT BANK OF THE COLUMBIA RIVER SHOWN HEREON, IS AS FOLLOWS:
 LATITUDE: N 46° 01' 27.2215"
 LONGITUDE: W 119° 41' 14.5914"
 ELLIPSOID HEIGHT: 734.56'
 ELEVATION: 788.05'
 CONVERGENCE ANGLE: 0° 51' 11"
 COMBINED SCALE FACTOR: 0.99990846

NOTE 1: REFERENCE RECORD OF SURVEY RECORDED UNDER AUDITOR'S FILE NUMBERS 3122715 A THRU F

ALL LAND WITHIN PROJECT BOUNDARY OWNED BY PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY (UNLESS OTHERWISE NOTED)

TOTAL U.S.A.C.E. AREA: 0.3 ACRES +/-



Erlandsen
 SURVEYORS & ENGINEERS, L.L.C.
 1500 N. 10TH ST. SUITE 100
 WENATCHEE, WA 98856
 (509) 662-4100
 (509) 662-4108
 (509) 662-4102
 (509) 734-3006

DRAWN BY: DMK LAYOUT: OSHEET-44
 DATE: 02-20-09 FILE NO: T29-N25-910
 SCALE: 1" = 300' JOB NO: 95530-00 TOLL FREE: (800) 132-7142

T. 29 N. R. 25 E.W.M. SECTION 10 OKANOGAN AND DOUGLAS COUNTIES

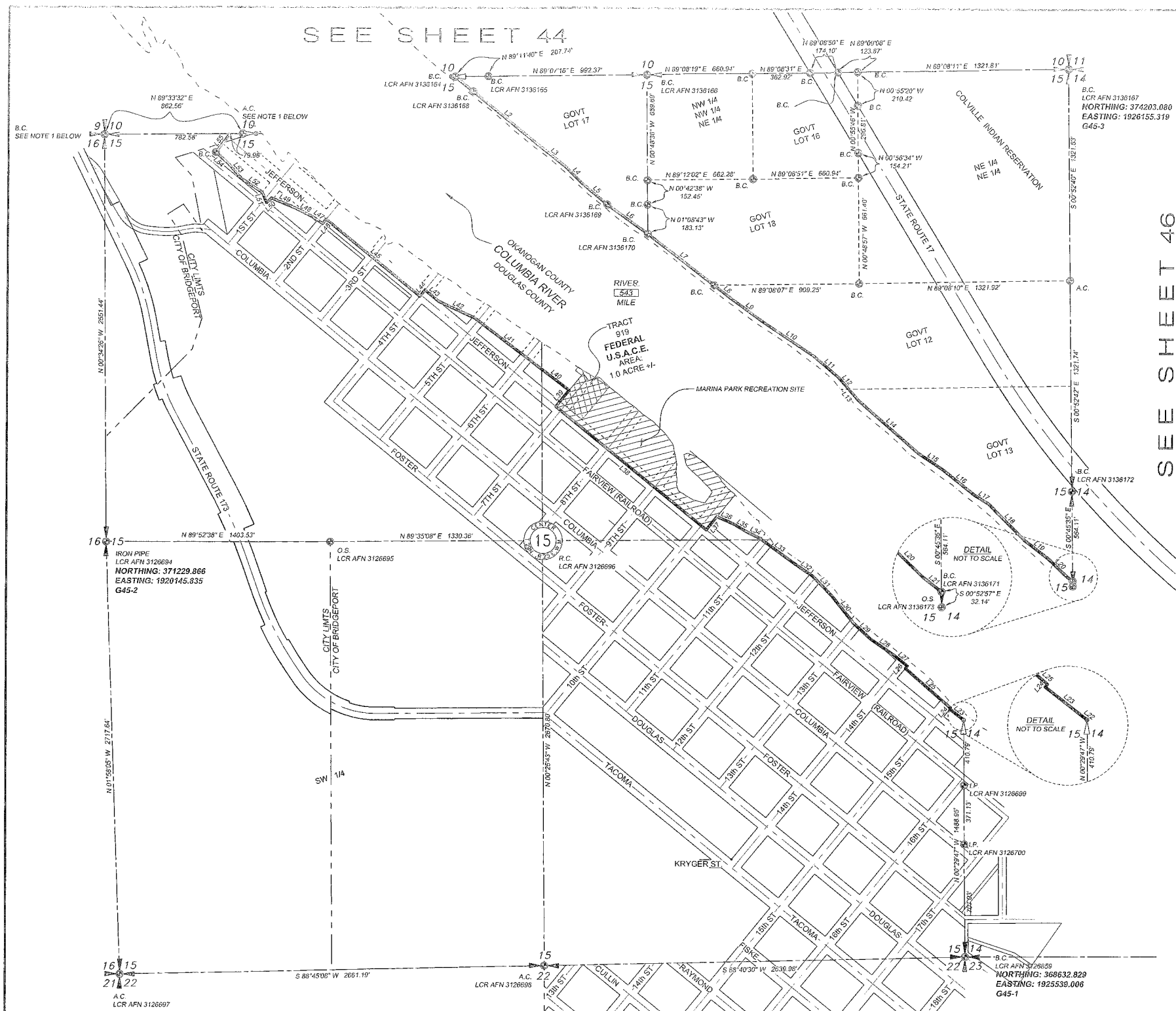
SURVEYOR'S CERTIFICATE:
 I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREON WAS DONE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON, AND THAT IT EXCEEDS THE ACCURACY REQUIREMENTS OF THE CODE OF FEDERAL REGULATIONS 102.71-11

ROGER ERLANDSEN
 PROFESSIONAL LAND SURVEYOR
 STATE OF WASHINGTON CERTIFICATE NO. 23539

PROJECT BOUNDARY & LOCATION MAP
WELLS HYDROELECTRIC PROJECT
 PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
 EAST WENATCHEE, WASHINGTON

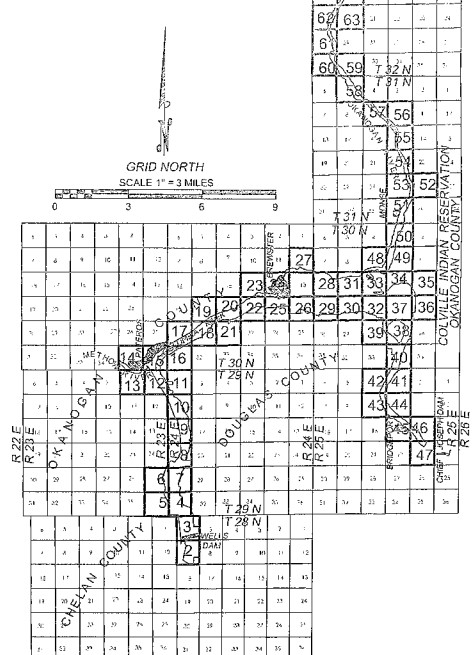
EXHIBIT G, SHEET 44 OF 64 FERC PROJECT NO. 2149

SEE SHEET 44



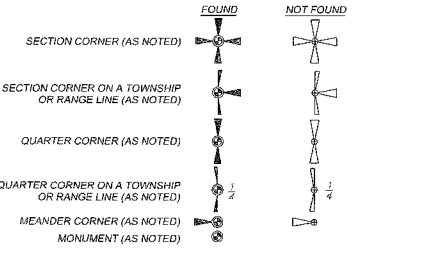
| LINE | BEARING | LENGTH |
|------|---------------|----------|
| L1 | S 51°11'05" E | 146.65' |
| L2 | S 51°02'06" E | 517.14' |
| L3 | S 51°43'32" E | 235.35' |
| L4 | S 44°44'03" E | 128.82' |
| L5 | S 49°56'31" E | 218.51' |
| L6 | S 51°34'28" E | 315.89' |
| L7 | S 52°30'31" E | 525.10' |
| L8 | S 52°13'11" E | 127.86' |
| L9 | S 54°12'50" E | 265.23' |
| L10 | S 56°13'54" E | 377.18' |
| L11 | S 49°34'50" E | 205.34' |
| L12 | S 40°59'31" E | 84.83' |
| L13 | S 11°17'30" E | 82.11' |
| L14 | S 48°49'29" E | 305.88' |
| L15 | S 56°15'41" E | 184.38' |
| L16 | S 51°29'37" E | 258.32' |
| L17 | S 57°54'33" E | 104.05' |
| L18 | S 44°43'21" E | 320.02' |
| L19 | S 51°53'14" E | 189.83' |
| L20 | S 45°58'00" E | 156.28' |
| L21 | S 51°58'54" E | 50.24' |
| L22 | N 51°49'15" W | 2.73' |
| L23 | N 51°49'21" W | 108.11' |
| L24 | N 39°13'49" E | 7.44' |
| L25 | N 48°43'46" W | 380.21' |
| L26 | N 39°13'49" E | 19.05' |
| L27 | N 50°46'12" W | 107.90' |
| L28 | N 55°38'32" W | 180.27' |
| L29 | N 47°28'53" W | 143.15' |
| L30 | N 38°42'25" W | 230.98' |
| L31 | N 44°23'42" W | 185.61' |
| L32 | N 56°08'43" W | 132.89' |
| L33 | N 53°47'57" W | 274.79' |
| L34 | N 64°26'28" W | 83.12' |
| L35 | N 59°25'32" W | 109.55' |
| L36 | N 66°22'57" W | 107.17' |
| L37 | S 39°13'42" W | 107.28' |
| L38 | N 59°40'09" W | 1219.88' |
| L39 | N 39°13'45" E | 130.89' |
| L40 | N 52°49'48" W | 247.68' |
| L41 | N 52°58'18" W | 501.28' |
| L42 | N 65°20'21" W | 249.35' |
| L43 | N 50°48'09" W | 110.13' |
| L44 | S 39°13'49" W | 50.00' |
| L45 | N 50°46'11" W | 759.92' |
| L46 | S 39°13'49" W | 35.00' |
| L47 | N 56°15'49" W | 76.76' |
| L48 | N 63°19'11" W | 124.44' |
| L49 | N 67°38'35" W | 159.57' |
| L50 | S 47°55'28" W | 42.92' |
| L51 | N 22°49'05" W | 70.59' |
| L52 | N 57°28'51" W | 156.70' |
| L53 | N 41°09'55" W | 125.03' |
| L54 | N 47°51'46" W | 105.77' |
| L55 | N 37°13'59" E | 144.85' |

KEY MAP



LEGEND

| | |
|--|-----|
| EXHIBIT G PROJECT BOUNDARY | --- |
| WATER LINE | --- |
| MEANDER LINE | --- |
| RECREATION SITE | --- |
| WILDLIFE AREA | --- |
| O.S. | --- |
| B.C. | --- |
| A.C. | --- |
| R.C. | --- |
| AFN | --- |
| LCR | --- |
| B.L.M. | --- |
| B.O.R. | --- |
| B.I.A. | --- |
| U.S.A.C.E. | --- |
| W.D.N.R. | --- |
| ORIGINAL STONE | --- |
| GRASS CAP | --- |
| ALUMINUM CAP | --- |
| REBAR WITH CAP | --- |
| AUDITOR FILE NUMBER | --- |
| LAND CORNER RECORD | --- |
| BUREAU OF LAND MANAGEMENT | --- |
| BUREAU OF RECLAMATION | --- |
| BUREAU OF INDIAN AFFAIRS | --- |
| UNITED STATES ARMY | --- |
| CORPS OF ENGINEERS | --- |
| WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES | --- |



MAP PROJECTION / BASIS OF BEARING

UNITS: U.S. SURVEY FEET
 HORIZONTAL DATUM: NAD 83/1981 ADJUSTMENT
 VERTICAL DATUM: NGVD 1929
 PROJECTION: WASHINGTON STATE COORDINATE SYSTEM-NORTH ZONE
 GEOID: GEOID 99 (CONUS)

BEARINGS ARE BASED ON THE WASHINGTON STATE COORDINATE SYSTEM, NORTH ZONE, DERIVED FROM GPS OBSERVATIONS. THE DISTANCES SHOWN ON THIS MAP HAVE BEEN PROJECTED TO THE WASHINGTON STATE PLANE COORDINATE GRID. MULTIPLY THE DISTANCES SHOWN BY A FACTOR OF 1.00009187 TO OBTAIN THE ACTUAL GROUND DISTANCE.

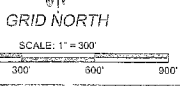
META DATA AS DERIVED BY GPS OBSERVATIONS AT THE CENTER QUARTER CORNER OF SECTION 15 SHOWN HEREON, IS AS FOLLOWS:

LATITUDE: N 48° 00' 42.9794"
 LONGITUDE: W 119° 40' 45.3497"
 ELLIPSOID HEIGHT: 748.96'
 ELEVATION: 812.48'
 CONVERGENCE ANGLE: 0° 51' 33"
 COMBINED SCALE FACTOR: 0.99990614

NOTE 1: REFERENCE RECORD OF SURVEY RECORDED UNDER AUDITOR'S FILE NUMBERS 3122715 A THRU F.

ALL LAND WITHIN PROJECT BOUNDARY OWNED BY PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY (UNLESS OTHERWISE NOTED)

TOTAL U.S.A.C.E. AREA: 1.0 ACRE +/-



Erlandsen
 SURVEYORS & ENGINEERS

1100 1ST AVENUE, SUITE 200
 BEND, OR 97701
 (503) 338-3320
 (503) 622-4128
 (503) 964-2522
 (503) 754-3200

DRAWN BY: DMC LAYOUT: GSH/ET-AS
 DATE: 8/31/2009 FILE NO: 129-R25-615
 SCALE: 1" = 300' JOB NO: 95530.00 TOLL FREE: (800) 732-7442

T. 29 N. R. 25 E. W.M.
 SECTION 15
 OKANOGAN AND DOUGLAS COUNTIES

SURVEYOR'S CERTIFICATE:
 I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREON WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON AND I HEREBY DECLARE THE ACCURACY REQUIREMENTS OF THE CODE OF FEDERAL REGULATIONS 102FR4.41

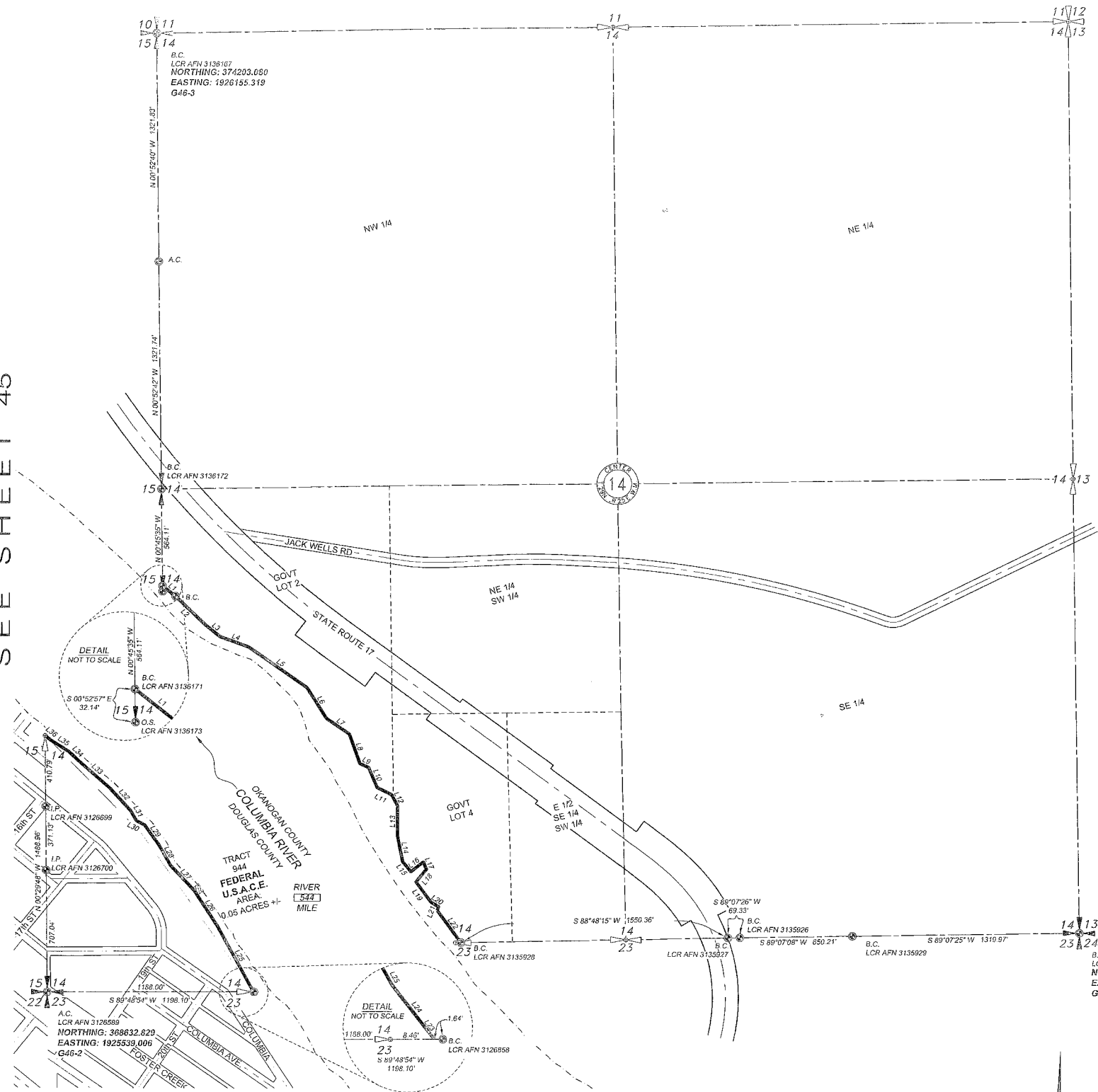
RODER ERLANDSEN
 PROFESSIONAL LAND SURVEYOR
 STATE OF WASHINGTON CERTIFICATE NO. 27899

PROJECT BOUNDARY & LOCATION MAP
 WELLS HYDROELECTRIC PROJECT
 PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
 EAST WENATCHEE, WASHINGTON

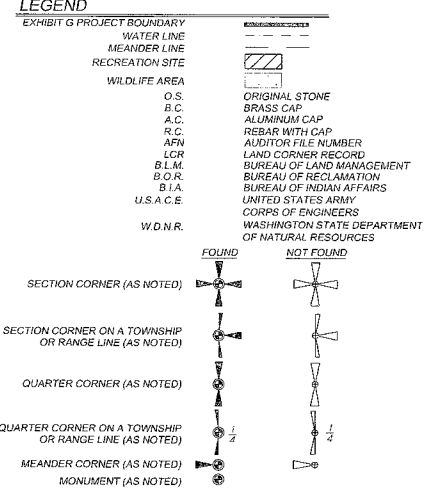
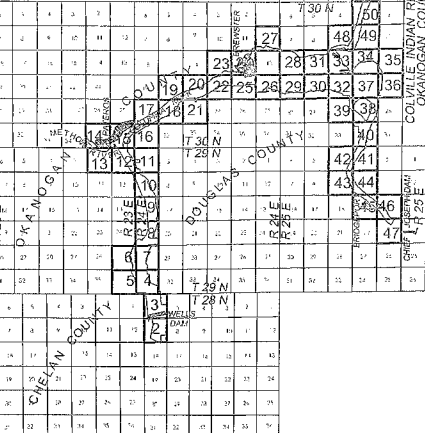
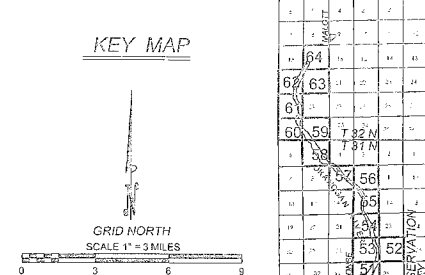
EXHIBIT G, SHEET 45 OF 64 FERC PROJECT NO. 2149

SEE SHEET 45

SEE SHEET 47



| LINE | BEARING | LENGTH |
|------|---------------|---------|
| L1 | S 51°58'15" E | 96.22' |
| L2 | S 48°10'05" E | 244.49' |
| L3 | S 51°33'48" E | 106.28' |
| L4 | S 70°18'32" E | 176.38' |
| L5 | S 55°02'37" E | 473.96' |
| L6 | S 32°04'33" E | 213.14' |
| L7 | S 55°45'00" E | 160.96' |
| L8 | S 19°51'18" E | 181.52' |
| L9 | S 64°14'21" E | 56.14' |
| L10 | S 22°47'44" E | 125.14' |
| L11 | S 63°27'00" E | 92.87' |
| L12 | S 28°52'30" E | 75.41' |
| L13 | S 00°00'45" W | 177.58' |
| L14 | S 11°15'44" E | 146.10' |
| L15 | S 38°59'59" E | 75.62' |
| L16 | N 52°00'10" E | 91.67' |
| L17 | S 23°14'17" E | 45.88' |
| L18 | S 39°15'33" W | 95.20' |
| L19 | S 36°29'20" E | 145.05' |
| L20 | S 59°03'49" E | 51.69' |
| L21 | S 19°09'03" W | 23.04' |
| L22 | S 38°28'21" E | 231.36' |
| L23 | N 38°01'46" W | 2.37' |
| L24 | N 38°01'32" W | 10.90' |
| L25 | N 28°37'00" W | 419.01' |
| L26 | N 33°15'42" W | 250.20' |
| L27 | N 43°30'07" W | 198.38' |
| L28 | N 29°30'01" W | 141.43' |
| L29 | N 38°01'57" W | 140.59' |
| L30 | N 62°50'16" W | 32.78' |
| L31 | N 29°43'51" W | 85.86' |
| L32 | N 42°26'10" W | 175.79' |
| L33 | N 48°46'52" W | 253.26' |
| L34 | N 46°07'50" W | 66.55' |
| L35 | N 57°34'45" W | 119.09' |
| L36 | N 51°49'15" W | 46.94' |



MAP PROJECTION / BASIS OF BEARING
 HORIZONTAL DATUM: NAD 83/1981 ADJUSTMENT
 VERTICAL DATUM: NGVD 1929
 PROJECTION: WASHINGTON STATE COORDINATE SYSTEM-NORTH ZONE
 GEOID: GEOID 99 (CONUS)
 BEARINGS ARE BASED ON THE WASHINGTON STATE COORDINATE SYSTEM, NORTH ZONE, DERIVED FROM GPS OBSERVATIONS. THE DISTANCES SHOWN ON THIS MAP HAVE BEEN PROJECTED TO THE WASHINGTON STATE PLANE COORDINATE GRID. MULTIPLY THE DISTANCES SHOWN BY A FACTOR OF 1.00009120 TO OBTAIN THE ACTUAL GROUND DISTANCE.
 META DATA AS DERIVED BY GPS OBSERVATIONS ON THE BRASS CAP AT THE INTERSECTION OF THE LINE COMMON TO SECTIONS 14 & 15 WITH THE PROJECT BOUNDARY OF THE WELLS HYDROELECTRIC PROJECT ON THE RIGHT BANK OF THE COLUMBIA RIVER SHOWN HEREON, IS AS FOLLOWS:
 LATITUDE: N 48° 00' 40.6499"
 LONGITUDE: W 119° 39' 56.5273"
 ELLIPSOID HEIGHT: 735.46'
 ELEVATION: 799.02'
 CONVERGENCE ANGLE: 0° 52' 10"
 COMBINED SCALE FACTOR: 0.99990881

Erlandsen
 SURVEYORS & ENGINEERS
 1000 1ST AVE S.E. SUITE 100
 BELLEVUE, WA 98003
 (206) 835-3339
 (206) 835-3338
 (206) 835-3337
 (206) 835-3336

DESIGNED BY: DWG LAYOUT: OSHERET-40
 DATE: 6-02-2009 FILE NO: 128-425-514
 SCALE: 1" = 300' JCS NO: 95630-00 TOLL FREE: (800) 332-7442

T. 29 N. R. 25 E.W.M. SECTION 14 OKANOGAN AND DOUGLAS COUNTIES

SURVEYOR'S CERTIFICATE:
 I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREON WAS MADE EXHIBIT G SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON, BY A CERTIFIED SURVEYOR WHO HAS COMPLIED WITH THE REQUIREMENTS OF THE CODE OF FEDERAL REGULATIONS 16CFR34.41

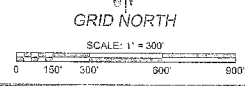
HENDER CIVIL AND LAND SURVEYOR
 STATE OF WASHINGTON CERTIFICATE NO. 23539

PROJECT BOUNDARY & LOCATION MAP
WELLS HYDROELECTRIC PROJECT
 PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
 EAST WENATCHEE, WASHINGTON

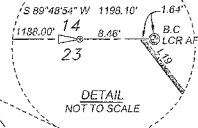
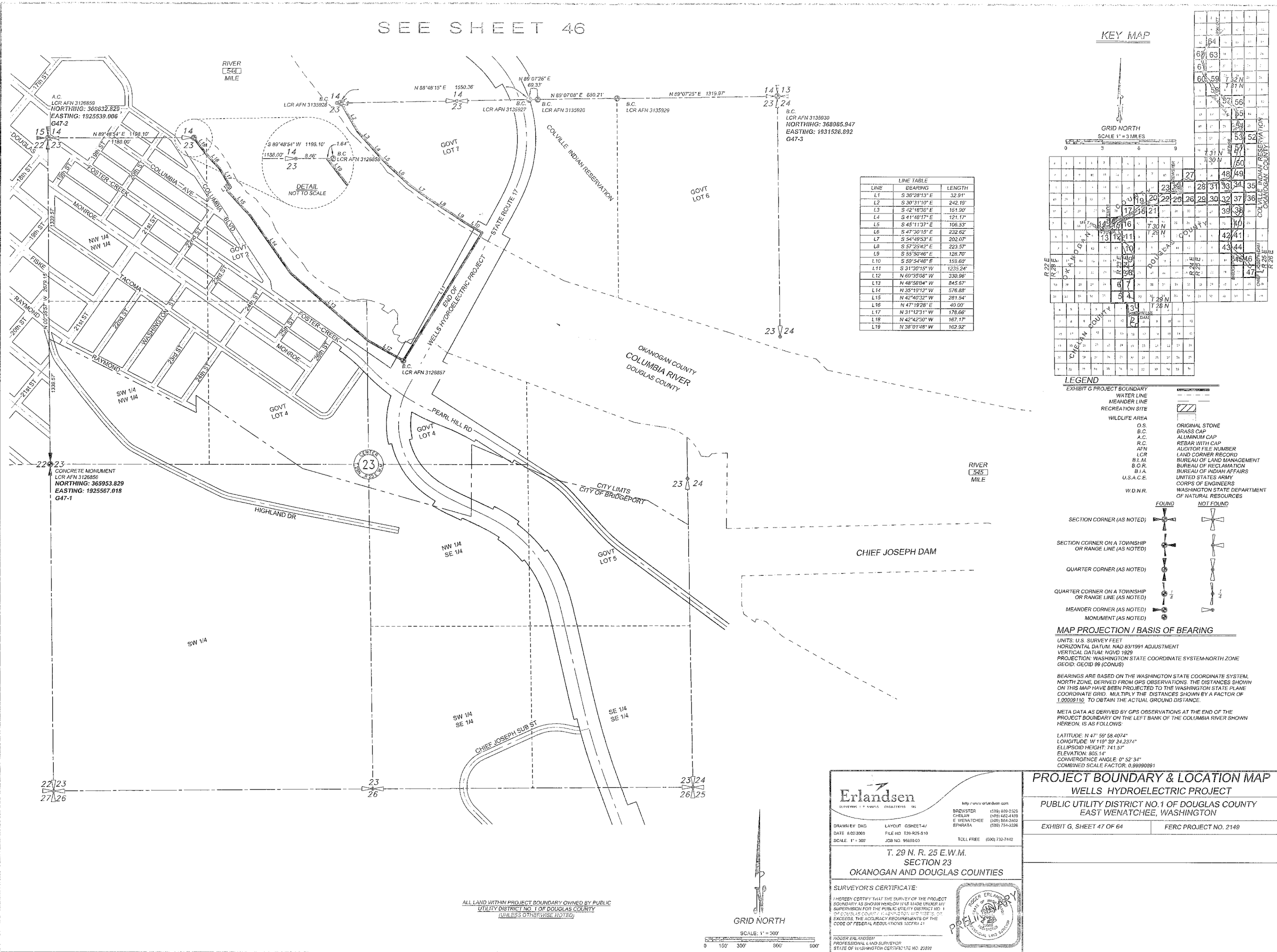
EXHIBIT G, SHEET 46 OF 64 FERC PROJECT NO. 2149

ALL LAND WITHIN PROJECT BOUNDARY OWNED BY PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY (UNLESS OTHERWISE NOTED)

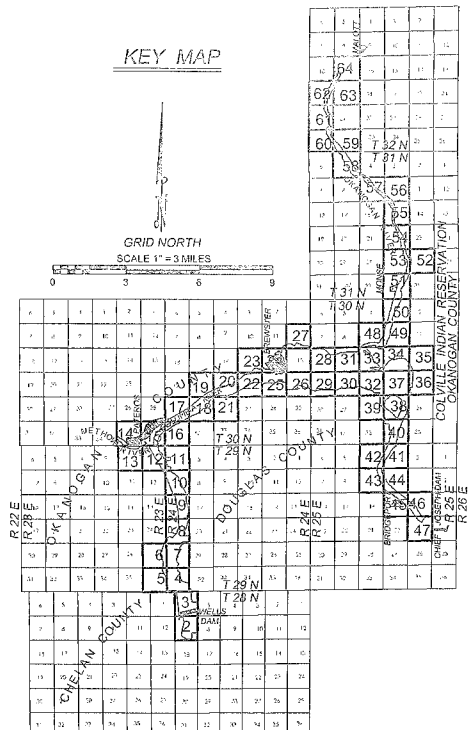
TOTAL U.S.A.C.E. AREA: 0.05 ACRES +/-



SEE SHEET 46



| LINE | BEARING | LENGTH |
|------|---------------|----------|
| L1 | S 38°28'13" E | 32.91' |
| L2 | S 30°31'10" E | 242.19' |
| L3 | S 42°18'38" E | 161.90' |
| L4 | S 41°48'17" E | 121.17' |
| L5 | S 45°11'37" E | 106.33' |
| L6 | S 47°30'15" E | 232.62' |
| L7 | S 54°49'53" E | 202.07' |
| L8 | S 57°25'42" E | 223.57' |
| L9 | S 55°50'46" E | 128.70' |
| L10 | S 59°54'46" E | 159.60' |
| L11 | S 31°30'15" W | 1235.24' |
| L12 | N 69°35'08" W | 330.96' |
| L13 | N 48°36'04" W | 845.67' |
| L14 | N 35°19'12" W | 576.88' |
| L15 | N 42°40'32" W | 281.54' |
| L16 | N 47°19'28" E | 40.00' |
| L17 | N 31°12'31" W | 178.66' |
| L18 | N 42°42'30" W | 167.17' |
| L19 | N 38°01'48" W | 162.92' |



LEGEND

| | |
|----------------------------|--|
| EXHIBIT G PROJECT BOUNDARY | --- |
| WATER LINE | --- |
| MEANDER LINE | --- |
| RECREATION SITE | --- |
| WILDLIFE AREA | --- |
| D.S. | ORIGINAL STONE |
| B.C. | BRASS CAP |
| A.C. | ALUMINUM CAP |
| R.C. | REBAR WITH CAP |
| AFN | AUDITOR FILE NUMBER |
| LCR | LAND CORNER RECORD |
| B.L.M. | BUREAU OF LAND MANAGEMENT |
| B.O.R. | BUREAU OF RECLAMATION |
| B.I.A. | BUREAU OF INDIAN AFFAIRS |
| U.S.A.C.E. | UNITED STATES ARMY |
| | CORPS OF ENGINEERS |
| W.D.N.R. | WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES |

| | |
|---|---|
| FOUND | NOT FOUND |
| SECTION CORNER (AS NOTED) | SECTION CORNER (AS NOTED) |
| SECTION CORNER ON A TOWNSHIP OR RANGE LINE (AS NOTED) | SECTION CORNER ON A TOWNSHIP OR RANGE LINE (AS NOTED) |
| QUARTER CORNER (AS NOTED) | QUARTER CORNER (AS NOTED) |
| QUARTER CORNER ON A TOWNSHIP OR RANGE LINE (AS NOTED) | QUARTER CORNER ON A TOWNSHIP OR RANGE LINE (AS NOTED) |
| MEANDER CORNER (AS NOTED) | MEANDER CORNER (AS NOTED) |
| MONUMENT (AS NOTED) | MONUMENT (AS NOTED) |

MAP PROJECTION / BASIS OF BEARING

UNITS: U.S. SURVEY FEET

HORIZONTAL DATUM: NAD 83/1991 ADJUSTMENT

VERTICAL DATUM: NGVD 1929

PROJECTION: WASHINGTON STATE COORDINATE SYSTEM-NORTH ZONE GEOID: GEOID 99 (CONUS)

BEARINGS ARE BASED ON THE WASHINGTON STATE COORDINATE SYSTEM, NORTH ZONE, DERIVED FROM GPS OBSERVATIONS. THE DISTANCES SHOWN ON THIS MAP HAVE BEEN PROJECTED TO THE WASHINGTON STATE PLANE COORDINATE GRID. MULTIPLY THE DISTANCES SHOWN BY A FACTOR OF 1.0008110 TO OBTAIN THE ACTUAL GROUND DISTANCE.

META DATA AS DERIVED BY GPS OBSERVATIONS AT THE END OF THE PROJECT BOUNDARY ON THE LEFT BANK OF THE COLUMBIA RIVER SHOWN HEREON, IS AS FOLLOWS:

LATITUDE: N 47° 59' 58.4074"

LONGITUDE: W 119° 39' 24.2374"

ELLIPSOID HEIGHT: 741.57'

ELEVATION: 805.14'

CONVERGENCE ANGLE: 0° 52' 34"

COMBINED SCALE FACTOR: 0.99990891

Erlandsen

ENGINEERS & SURVEYORS

1100 N. 29th St. Ste. 200
Spokane, WA 99205
Phone: (509) 838-2500
Fax: (509) 838-2502
www.erlandsen.com

DRAWN BY: DMO
DATE: 8/23/2006
SCALE: 1" = 300'

LAYOUT: OSHEET-47
FILE NO: 129-R25-S10
JOB NO: 96889-03
TOLL FREE: (800) 732-7412

REGISTERED PROFESSIONAL LAND SURVEYOR
STATE OF WASHINGTON CERTIFICATE NO. 21899

T. 29 N. R. 25 E.W.M.
SECTION 23
OKANOGAN AND DOUGLAS COUNTIES

SURVEYOR'S CERTIFICATE:

I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREON WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON, AND THAT I EXCEEDED THE ACCURACY REQUIREMENTS OF THE CODE OF FEDERAL REGULATIONS 10CFR 1.11

PROJECT BOUNDARY & LOCATION MAP

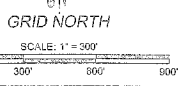
WELLS HYDROELECTRIC PROJECT

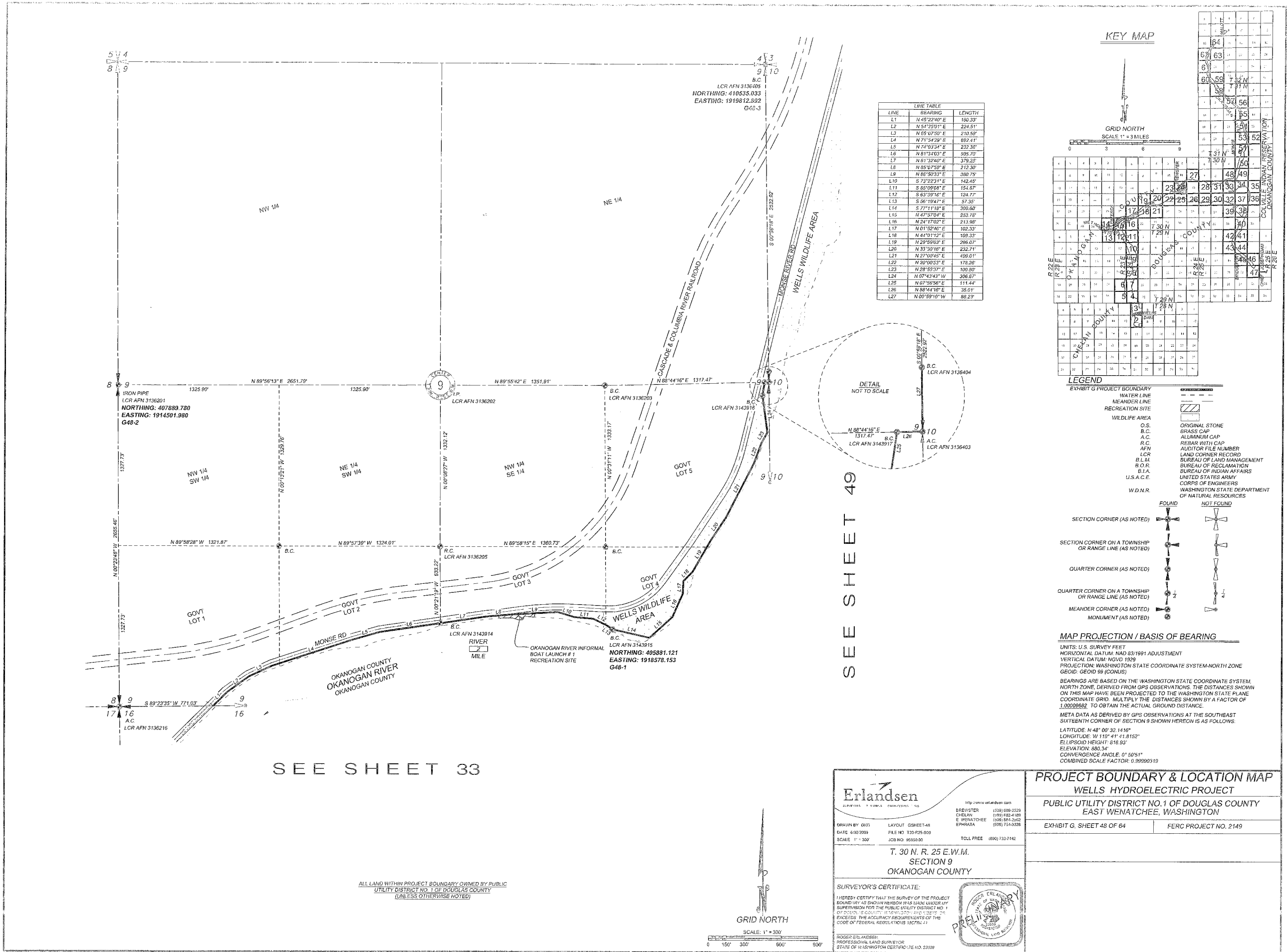
PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
EAST WENATCHEE, WASHINGTON

EXHIBIT G, SHEET 47 OF 64

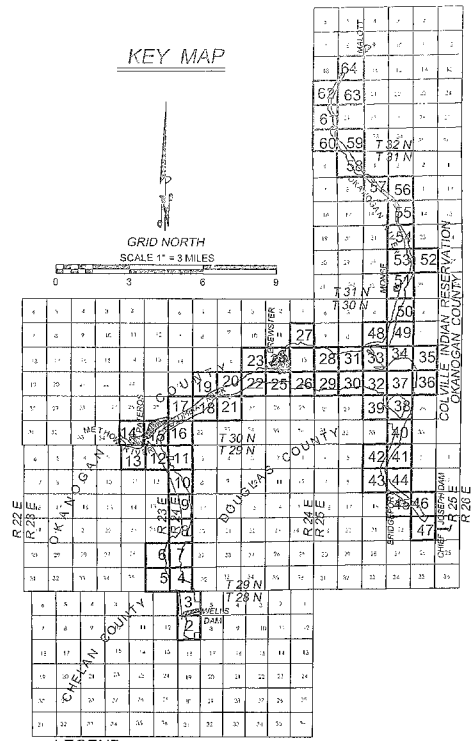
FERC PROJECT NO. 2149

ALL LAND WITHIN PROJECT BOUNDARY OWNED BY PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY (UNLESS OTHERWISE NOTED)





| LINE | BEARING | LENGTH |
|------|-----------------|---------|
| L1 | N 45° 22' 40" E | 160.33' |
| L2 | N 54° 25' 01" E | 224.51' |
| L3 | N 65° 07' 50" E | 210.58' |
| L4 | N 71° 34' 29" E | 692.41' |
| L5 | N 74° 03' 34" E | 232.35' |
| L6 | N 81° 34' 03" E | 505.70' |
| L7 | N 81° 32' 40" E | 379.25' |
| L8 | N 85° 07' 39" E | 212.30' |
| L9 | N 85° 50' 33" E | 380.75' |
| L10 | S 73° 22' 11" E | 142.45' |
| L11 | S 85° 09' 08" E | 154.67' |
| L12 | S 83° 59' 16" E | 124.77' |
| L13 | S 56° 19' 47" E | 57.35' |
| L14 | S 77° 11' 18" E | 309.60' |
| L15 | N 47° 52' 04" E | 233.75' |
| L16 | N 24° 17' 02" E | 213.50' |
| L17 | N 01° 52' 46" E | 102.33' |
| L18 | N 42° 01' 12" E | 109.33' |
| L19 | N 29° 59' 03" E | 266.07' |
| L20 | N 33° 39' 16" E | 232.71' |
| L21 | N 27° 00' 45" E | 458.01' |
| L22 | N 20° 00' 53" E | 178.26' |
| L23 | N 28° 55' 37" E | 100.80' |
| L24 | N 07° 43' 43" W | 306.67' |
| L25 | N 07° 55' 56" E | 111.44' |
| L26 | N 88° 44' 16" E | 35.01' |
| L27 | N 00° 59' 10" W | 88.23' |



- LEGEND**
- EXHIBIT G PROJECT BOUNDARY
 - WATER LINE
 - MEANDER LINE
 - RECREATION SITE
 - WILDLIFE AREA
 - O.S. ORIGINAL STONE
 - B.C. BRASS CAP
 - A.C. ALUMINUM CAP
 - R.C. REBAR WITH CAP
 - AFN AUDITOR FILE NUMBER
 - LCR LAND CORNER RECORD
 - B.L.M. BUREAU OF LAND MANAGEMENT
 - B.O.R. BUREAU OF RECLAMATION
 - B.I.A. BUREAU OF INDIAN AFFAIRS
 - U.S.A.C.E. UNITED STATES ARMY CORPS OF ENGINEERS
 - W.D.N.R. WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES
- SECTION CORNER (AS NOTED)
- SECTION CORNER ON A TOWNSHIP OR RANGE LINE (AS NOTED)
- QUARTER CORNER (AS NOTED)
- QUARTER CORNER ON A TOWNSHIP OR RANGE LINE (AS NOTED)
- MEANDER CORNER (AS NOTED)
- MONUMENT (AS NOTED)

MAP PROJECTION / BASIS OF BEARING

UNITS: U.S. SURVEY FEET
 HORIZONTAL DATUM: NAD 83/1991 ADJUSTMENT
 VERTICAL DATUM: NGVD 1929
 PROJECTION: WASHINGTON STATE COORDINATE SYSTEM-NORTH ZONE
 GEOID: GEOID 99 (CONUS)

BEARINGS ARE BASED ON THE WASHINGTON STATE COORDINATE SYSTEM, NORTH ZONE, DERIVED FROM GPS OBSERVATIONS. THE DISTANCES SHOWN ON THIS MAP HAVE BEEN PROJECTED TO THE WASHINGTON STATE PLANE COORDINATE GRID. MULTIPLY THE DISTANCES SHOWN BY A FACTOR OF 1.0000582 TO OBTAIN THE ACTUAL GROUND DISTANCE.

META DATA AS DERIVED BY GPS OBSERVATIONS AT THE SOUTHEAST SIXTEENTH CORNER OF SECTION 9 SHOWN HEREON IS AS FOLLOWS:
 LATITUDE: N 48° 06' 32.1416"
 LONGITUDE: W 119° 41' 41.8152"
 ELLIPSOID HEIGHT: 616.93'
 ELEVATION: 850.34'
 CONVERGENCE ANGLE: 0° 50' 51"
 COMBINED SCALE FACTOR: 0.99980315

SEE SHEET 49

SEE SHEET 33

Erlandsen
 SURVEYORS & ENGINEERS

DRAWN BY: GMS LAYOUT: DSHEET-48
 DATE: 6/20/2009 FILE NO: 130-R25-809
 SCALE: 1" = 300' JOB NO: 9550300 TOLL FREE: (800) 733-7142

T. 30 N. R. 25 E.W.M.
 SECTION 9
 OKANOGAN COUNTY

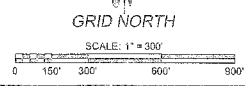
SURVEYOR'S CERTIFICATE:
 I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AND MEANDER LINES WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON, AND THAT THE DISTANCES EXCEEDED THE ACCURACY REQUIREMENTS OF THE CODE OF FEDERAL REGULATIONS 19CFR 1.11

ROGER ERLANDSEN
 PROFESSIONAL LAND SURVEYOR
 STATE OF WASHINGTON CERTIFICATE NO. 23399

PROJECT BOUNDARY & LOCATION MAP
 WELLS HYDROELECTRIC PROJECT
 PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
 EAST WENATCHEE, WASHINGTON

EXHIBIT G, SHEET 48 OF 64 FERC PROJECT NO. 2149

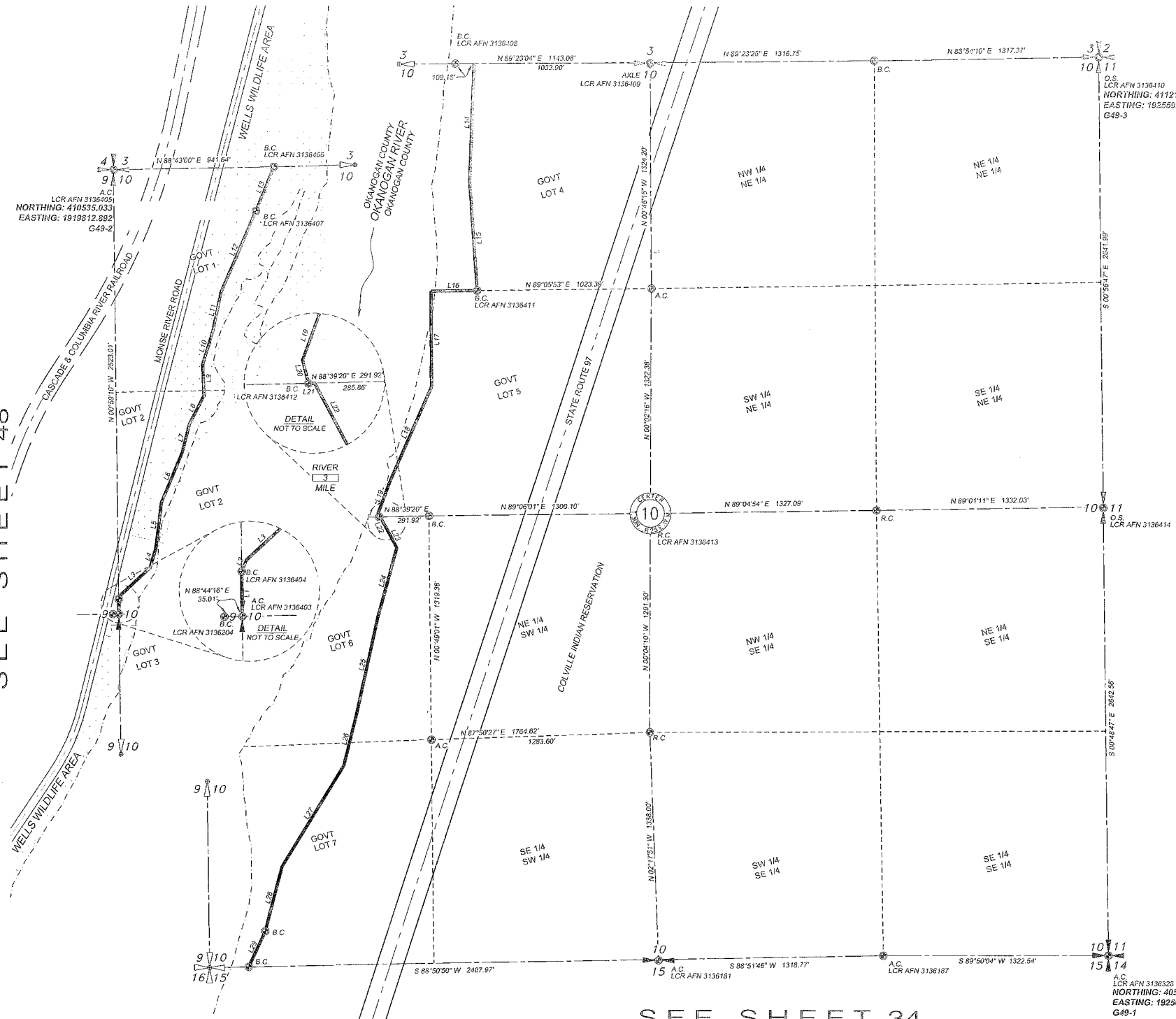
ALL LAND WITHIN PROJECT BOUNDARY OWNED BY PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY (UNLESS OTHERWISE NOTED)



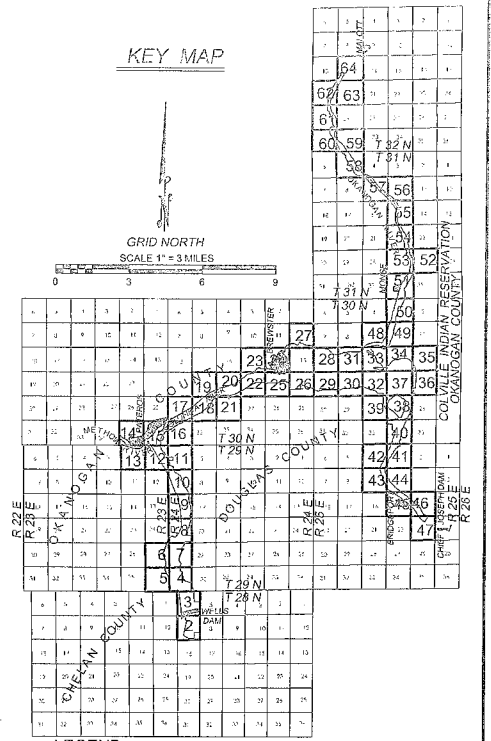
SEE SHEET 50

SEE SHEET 48

SEE SHEET 34



| LINE | BEARING | LENGTH |
|------|---------------|---------|
| L1 | N 00°59'10" W | 88.23' |
| L2 | N 22°55'04" E | 24.57' |
| L3 | N 48°34'45" E | 238.66' |
| L4 | N 18°10'02" E | 127.92' |
| L5 | N 06°40'20" E | 288.14' |
| L6 | N 22°17'51" E | 316.22' |
| L7 | N 13°55'35" E | 173.14' |
| L8 | N 26°33'19" E | 191.51' |
| L9 | N 02°49'27" W | 162.92' |
| L10 | N 18°42'01" E | 207.75' |
| L11 | N 11°23'13" E | 230.81' |
| L12 | N 22°56'00" E | 518.59' |
| L13 | N 21°55'15" E | 279.13' |
| L14 | S 01°42'07" W | 689.60' |
| L15 | S 04°22'05" E | 641.64' |
| L16 | S 89°05'33" W | 270.40' |
| L17 | S 00°35'59" E | 562.76' |
| L18 | S 23°23'56" W | 611.84' |
| L19 | S 19°56'37" W | 193.75' |
| L20 | S 14°27'38" E | 23.84' |
| L21 | N 88°39'20" E | 6.06' |
| L22 | S 28°14'58" E | 73.71' |
| L23 | S 28°14'50" E | 132.36' |
| L24 | S 15°00'58" W | 420.31' |
| L25 | S 12°07'31" W | 591.26' |
| L26 | S 13°47'30" W | 306.66' |
| L27 | S 31°29'51" W | 685.43' |
| L28 | S 14°27'31" W | 382.92' |
| L29 | S 24°40'11" W | 231.52' |



LEGEND

| | |
|----------------------------|--|
| EXHIBIT G PROJECT BOUNDARY | |
| WATER LINE | |
| MEANDER LINE | |
| RECREATION SITE | |
| WILDLIFE AREA | |
| O.S. | ORIGINAL STONE |
| B.C. | BRASS CAP |
| A.C. | ALUMINUM CAP |
| R.C. | REBAR WITH CAP |
| AFN | AUDITOR FILE NUMBER |
| LCR | LAND CORNER RECORD |
| B.L.M. | BUREAU OF LAND MANAGEMENT |
| B.O.R. | BUREAU OF RECLAMATION |
| B.I.A. | BUREAU OF INDIAN AFFAIRS |
| U.S.A.C.E. | UNITED STATES ARMY CORPS OF ENGINEERS |
| W.D.N.R. | WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES |

| | | | | | |
|---|--|-------|--|-----------|--|
| SECTION CORNER (AS NOTED) | | FOUND | | NOT FOUND | |
| SECTION CORNER ON A TOWNSHIP OR RANGE LINE (AS NOTED) | | | | | |
| QUARTER CORNER (AS NOTED) | | | | | |
| QUARTER CORNER ON A TOWNSHIP OR RANGE LINE (AS NOTED) | | | | | |
| MEANDER CORNER (AS NOTED) | | | | | |
| MONUMENT (AS NOTED) | | | | | |

MAP PROJECTION / BASIS OF BEARING

UNITS: U.S. SURVEY FEET
 HORIZONTAL DATUM: NAD 83/1981 ADJUSTMENT
 VERTICAL DATUM: NGVD 1929
 PROJECTION: WASHINGTON STATE COORDINATE SYSTEM-NORTH ZONE
 GRID: GEOID 99 (CONUS)
 BEARINGS ARE BASED ON THE WASHINGTON STATE COORDINATE SYSTEM NORTH ZONE, DERIVED FROM GPS OBSERVATIONS. THE DISTANCES SHOWN ON THIS MAP HAVE BEEN PROJECTED TO THE WASHINGTON STATE PLANE COORDINATE GRID. MULTIPLY THE DISTANCES SHOWN BY A FACTOR OF 1.0000239 TO OBTAIN THE ACTUAL GROUND DISTANCE.
 META DATA AS DERIVED BY GPS OBSERVATIONS ON A BRASS CAP AT THE INTERSECTION OF THE EAST-WEST CENTERLINE OF SECTION 10 WITH THE PROJECT BOUNDARY OF THE WELLS HYDROELECTRIC PROJECT SHOWN HEREON IS AS FOLLOWS:
 LATITUDE: N 48° 06' 50.8373"
 LONGITUDE: W 119° 40' 59.1358"
 ELLIPSOID HEIGHT: 724.02'
 ELEVATION: 797.39'
 CONVERGENCE ANGLE: 0° 51' 23"
 COMBINED SCALE FACTOR: 0.99980763

Erlandsen
 SURVEYORS & ENGINEERS
 1100 N. 10TH ST. SUITE 200
 SPOKANE, WA 99201
 (509) 325-3110

DRAWN BY: DMC LAYOUT: GSHERT-09
 DATE: 6/20/2009 FILE NO: T33-R25-S10
 SCALE: 1" = 300' JOB NO: 66693-00 TOLL FREE: (800) 732-7442

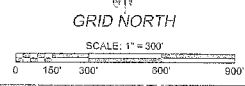
T. 30 N. R. 25 E.W.M.
 SECTION 10
 OKANOGAN COUNTY

SURVEYOR'S CERTIFICATE:
 I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREON WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON, AND I CERTIFY THAT I EXCEEDED THE ACCURACY REQUIREMENTS OF THE CODE OF FEDERAL REGULATIONS 19CFR 41.102.
 ROGER ERLANDSEN
 PROFESSIONAL LAND SURVEYOR
 STATE OF WASHINGTON CERTIFICATE NO. 23892

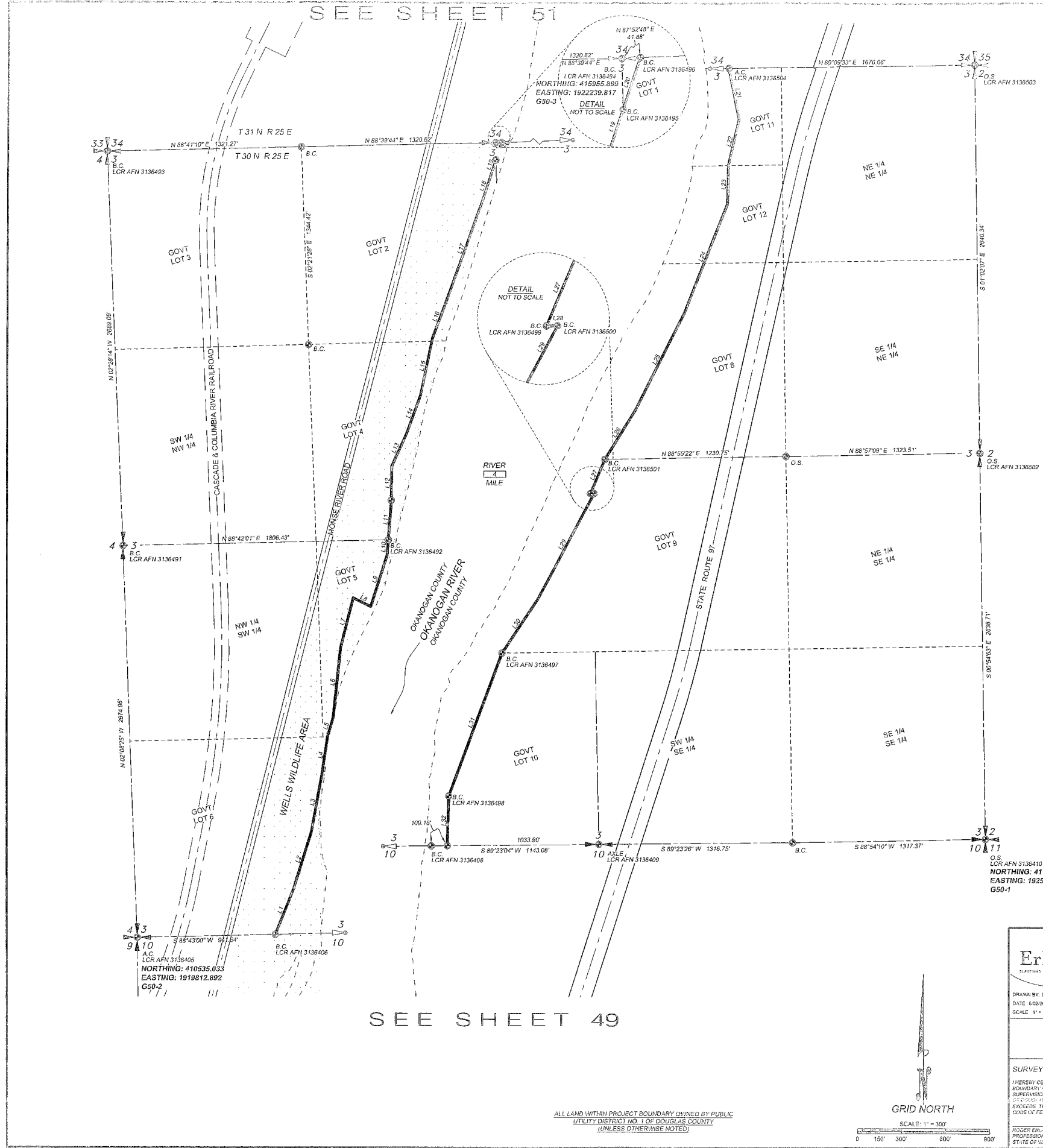
PROJECT BOUNDARY & LOCATION MAP
 WELLS HYDROELECTRIC PROJECT
 PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
 EAST WENATCHEE, WASHINGTON

EXHIBIT G, SHEET 49 OF 64 FERC PROJECT NO. 2149

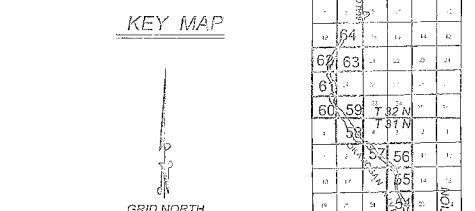
ALL LAND WITHIN PROJECT BOUNDARY OWNED BY PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY (UNLESS OTHERWISE NOTED)



SEE SHEET 51



| LINE | BEARING | LENGTH |
|------|---------------|----------|
| L1 | N 21°55'28" E | 329.87' |
| L2 | N 17°21'51" E | 412.29' |
| L3 | N 10°20'50" E | 397.58' |
| L4 | N 08°26'08" E | 258.50' |
| L5 | N 15°43'32" E | 137.25' |
| L6 | N 05°00'25" E | 479.51' |
| L7 | N 14°05'32" E | 351.07' |
| L8 | S 63°34'26" E | 137.97' |
| L9 | N 17°25'51" E | 371.58' |
| L10 | N 04°05'30" E | 101.96' |
| L11 | N 04°05'32" E | 271.22' |
| L12 | N 00°53'18" E | 234.56' |
| L13 | N 24°14'01" E | 240.19' |
| L14 | N 19°46'43" E | 280.43' |
| L15 | N 11°41'24" E | 387.75' |
| L16 | N 20°11'58" E | 282.14' |
| L17 | N 10°37'34" E | 691.11' |
| L18 | N 17°42'31" E | 214.70' |
| L19 | N 18°04'51" E | 87.09' |
| L20 | N 18°07'24" E | 124.09' |
| L21 | S 11°42'26" E | 355.03' |
| L22 | S 12°59'58" W | 320.41' |
| L23 | S 09°34'55" W | 257.72' |
| L24 | S 21°12'34" W | 758.33' |
| L25 | S 26°34'18" W | 740.50' |
| L26 | S 31°33'58" W | 397.12' |
| L27 | S 22°51'16" W | 263.48' |
| L28 | N 88°56'14" E | 25.01' |
| L29 | S 27°50'31" W | 816.56' |
| L30 | S 33°27'12" W | 443.18' |
| L31 | S 20°21'32" W | 1041.79' |
| L32 | S 01°42'32" W | 339.90' |



| GRID NORTH | | SCALE 1" = 3 MILES | |
|------------|----|--------------------|----|
| 1 | 2 | 3 | 4 |
| 5 | 6 | 7 | 8 |
| 9 | 10 | 11 | 12 |
| 13 | 14 | 15 | 16 |
| 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 |
| 25 | 26 | 27 | 28 |
| 29 | 30 | 31 | 32 |
| 33 | 34 | 35 | 36 |
| 37 | 38 | 39 | 40 |
| 41 | 42 | 43 | 44 |
| 45 | 46 | 47 | 48 |
| 49 | 50 | 51 | 52 |
| 53 | 54 | 55 | 56 |
| 57 | 58 | 59 | 60 |
| 61 | 62 | 63 | 64 |

- LEGEND**
- EXHIBIT G PROJECT BOUNDARY
 - WATER LINE
 - MEANDER LINE
 - RECREATION SITE
 - WILDLIFE AREA
 - O.S.
 - B.C.
 - A.C.
 - R.C.
 - AFN
 - LCR
 - B.L.M.
 - B.O.R.
 - B.I.A.
 - U.S.A.C.E.
 - W.D.N.R.
 - WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES
 - ORIGINAL STONE
 - BRASS CAP
 - ALUMINUM CAP
 - REBAR WITH CAP
 - AUXILIARY FILE NUMBER
 - LAND CORNER RECORD
 - BUREAU OF LAND MANAGEMENT
 - BUREAU OF RECLAMATION
 - BUREAU OF INDIAN AFFAIRS
 - UNITED STATES ARMY
 - CORPS OF ENGINEERS
- SECTION CORNER (AS NOTED)**
- SECTION CORNER ON A TOWNSHIP OR RANGE LINE (AS NOTED)**
- QUARTER CORNER (AS NOTED)**
- QUARTER CORNER ON A TOWNSHIP OR RANGE LINE (AS NOTED)**
- MEANDER CORNER (AS NOTED)**
- MONUMENT (AS NOTED)**

MAP PROJECTION / BASIS OF BEARING

UNITS: U.S. SURVEY FEET
 HORIZONTAL DATUM: NAD 83/1991 ADJUSTMENT
 VERTICAL DATUM: NAVD 1989
 PROJECTION: WASHINGTON STATE COORDINATE SYSTEM-NORTH ZONE
 GEOID: GEOID 99 (CONUS)

BEARINGS ARE BASED ON THE WASHINGTON STATE COORDINATE SYSTEM NORTH ZONE, DERIVED FROM GPS OBSERVATIONS. THE DISTANCES SHOWN ON THIS MAP HAVE BEEN PROJECTED TO THE WASHINGTON STATE PLANE COORDINATE GRID. MULTIPLY THE DISTANCES SHOWN BY A FACTOR OF 1.0000255 TO OBTAIN THE ACTUAL GROUND DISTANCE.

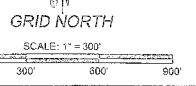
META DATA AS DERIVED BY GPS OBSERVATIONS ON A BRASS CAP AT THE INTERSECTION OF THE EAST-WEST CENTERLINE OF SECTION 3 WITH THE PROJECT BOUNDARY OF THE WELLS HYDROELECTRIC PROJECT ON THE RIGHT BANK OF THE OKANOGAN RIVER SHOWN HEREON, IS AS FOLLOWS:
 LATITUDE: N 48° 07' 37.8953"
 LONGITUDE: W 118° 40' 55.0864"
 ELLIPSOID HEIGHT: 727.65'
 ELEVATION: 789.34'
 CONVERGENCE ANGLE: 0° 51' 25"
 COMBINED SCALE FACTOR: 0.99990746

LCR AFN 3136405
 NORTHING: 410535.033
 EASTING: 1919812.892
 G50-2

O.S.
 LCR AFN 3136410
 NORTHING: 411211.495
 EASTING: 1925592.357
 G50-1

SEE SHEET 49

ALL LAND WITHIN PROJECT BOUNDARY OWNED BY PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY (UNLESS OTHERWISE NOTED)



Erlandsen
 SURVEYORS & ENGINEERS

DRAWN BY: DKS LAYOUT: OSHER1-00
 DATE: 6/02/2009 FILE NO: T30-R25-S03
 SCALE: 1" = 300' JOB NO: 95650.00 TOLL FREE: (800) 732-7142

T. 30 N. R. 25 E.W.M.
 SECTION 3
 OKANOGAN COUNTY

SURVEYOR'S CERTIFICATE

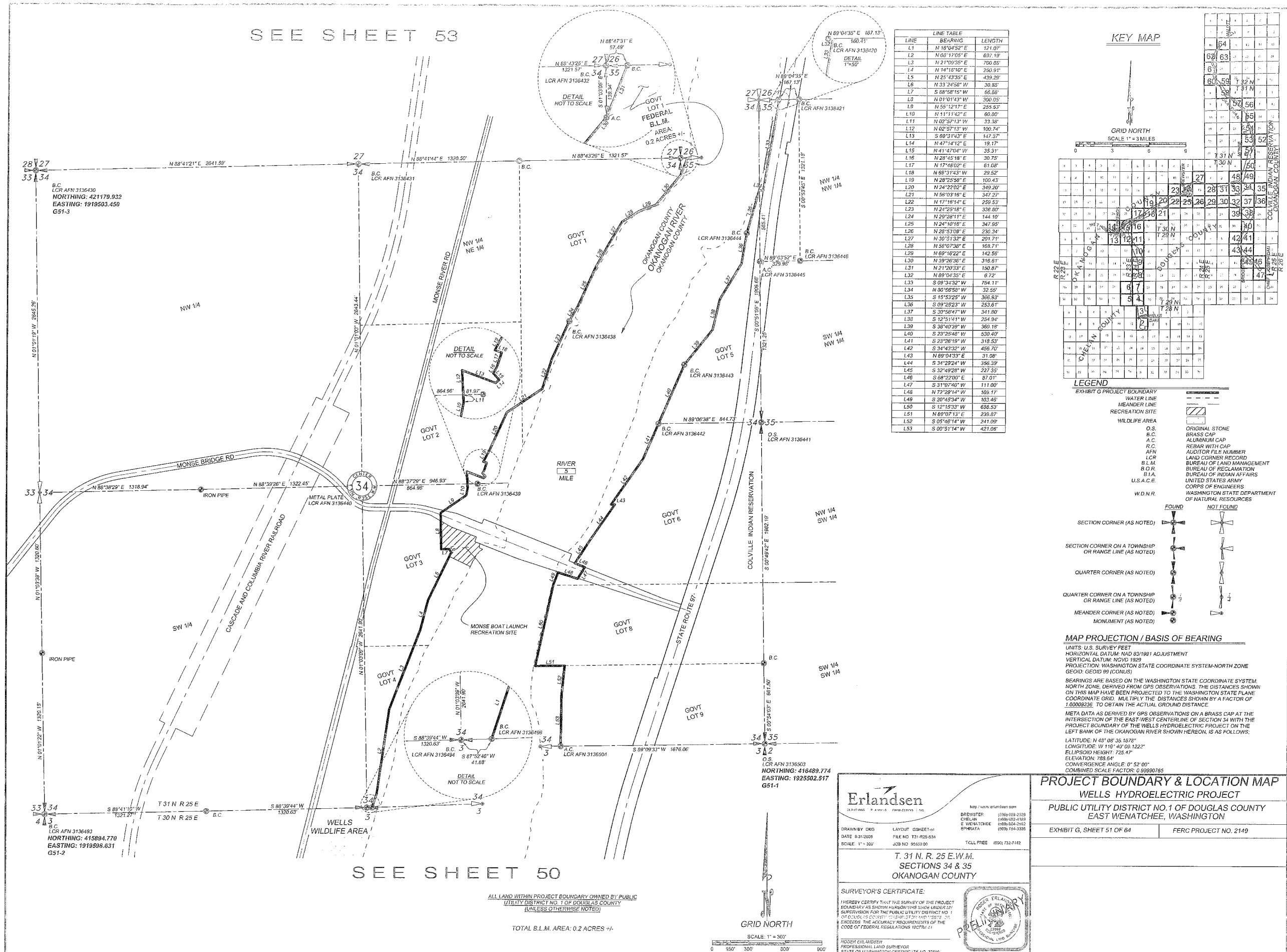
I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREOF WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON, AND THAT THE SAME EXCEEDS THE ACCURACY REQUIREMENTS OF THE CODES OF FEDERAL REGULATIONS (CFR) 41.

ROGER ERANDSEN
 PROFESSIONAL LAND SURVEYOR
 STATE OF WASHINGTON CERTIFICATE NO. 23539

PROJECT BOUNDARY & LOCATION MAP
 WELLS HYDROELECTRIC PROJECT
 PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
 EAST WENATCHEE, WASHINGTON

EXHIBIT G, SHEET 50 OF 64 FERC PROJECT NO. 2149

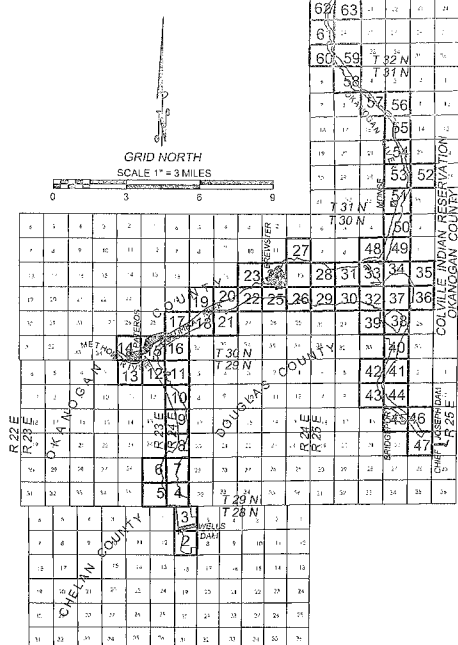
SEE SHEET 53



LINE TABLE

| LINE | BEARING | LENGTH |
|------|---------------|---------|
| L1 | N 18°04'52" E | 121.07' |
| L2 | N 02°17'05" E | 697.19' |
| L3 | N 21°09'35" E | 700.66' |
| L4 | N 14°18'10" E | 290.91' |
| L5 | N 25°43'35" E | 439.29' |
| L6 | N 33°24'56" W | 50.85' |
| L7 | S 88°58'15" W | 65.25' |
| L8 | N 01°01'43" W | 300.05' |
| L9 | N 55°12'17" E | 255.53' |
| L10 | N 11°14'42" E | 60.80' |
| L11 | N 02°57'13" W | 33.38' |
| L12 | N 02°57'13" W | 100.74' |
| L13 | S 69°31'43" E | 147.37' |
| L14 | N 47°14'12" E | 19.17' |
| L15 | N 41°47'04" W | 35.31' |
| L16 | N 28°45'18" E | 30.75' |
| L17 | N 17°48'02" E | 61.68' |
| L18 | N 69°31'43" W | 29.52' |
| L19 | N 28°25'58" E | 100.43' |
| L20 | N 24°22'02" E | 349.20' |
| L21 | N 56°03'16" E | 347.27' |
| L22 | N 17°16'14" E | 289.53' |
| L23 | N 24°25'18" E | 332.82' |
| L24 | N 29°28'11" E | 144.10' |
| L25 | N 24°10'16" E | 347.95' |
| L26 | N 28°53'08" E | 230.34' |
| L27 | N 30°51'32" E | 201.71' |
| L28 | N 58°07'38" E | 168.71' |
| L29 | N 69°16'22" E | 142.56' |
| L30 | N 39°26'36" E | 316.81' |
| L31 | N 21°20'33" E | 150.87' |
| L32 | N 89°04'35" E | 6.72' |
| L33 | S 08°34'32" W | 754.11' |
| L34 | N 80°56'58" W | 32.55' |
| L35 | S 15°52'25" W | 366.63' |
| L36 | S 09°25'23" W | 253.61' |
| L37 | S 30°58'47" W | 341.80' |
| L38 | S 12°51'11" W | 254.94' |
| L39 | S 38°40'39" W | 369.18' |
| L40 | S 23°25'48" W | 520.40' |
| L41 | S 23°26'16" W | 318.53' |
| L42 | S 34°43'32" W | 456.70' |
| L43 | N 89°04'35" E | 31.08' |
| L44 | S 34°29'24" W | 356.39' |
| L45 | S 32°49'28" W | 227.35' |
| L46 | S 68°27'00" E | 97.91' |
| L47 | S 31°07'40" W | 111.00' |
| L48 | N 72°28'14" W | 169.17' |
| L49 | S 20°45'34" W | 103.46' |
| L50 | S 12°15'33" W | 688.53' |
| L51 | N 89°07'13" E | 239.87' |
| L52 | S 05°46'14" W | 241.09' |
| L53 | S 00°51'14" W | 421.08' |

KEY MAP



- LEGEND**
- EXHIBIT G PROJECT BOUNDARY
 - WATER LINE
 - MEANDER LINE
 - RECREATION SITE
 - WILDLIFE AREA
 - O.S.
 - B.C.
 - A.C.
 - R.C.
 - AFN
 - LCR
 - B.L.M.
 - B.O.R.
 - B.I.A.
 - U.S.A.C.E.
 - W.D.N.R.
 - ORIGINAL STONE
 - BRASS CAP
 - ALUMINUM CAP
 - REBAR WITH CAP
 - AUDITOR FILE NUMBER
 - LAND CORNER RECORD
 - BUREAU OF LAND MANAGEMENT
 - BUREAU OF RECLAMATION
 - BUREAU OF INDIAN AFFAIRS
 - UNITED STATES ARMY
 - CORPS OF ENGINEERS
 - BUREAU OF INDIAN AFFAIRS
 - U.S.A.C.E.
 - WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES
 - FOUND
 - NOT FOUND
 - SECTION CORNER (AS NOTED)
 - SECTION CORNER ON A TOWNSHIP OR RANGE LINE (AS NOTED)
 - QUARTER CORNER (AS NOTED)
 - QUARTER CORNER ON A TOWNSHIP OR RANGE LINE (AS NOTED)
 - MEANDER CORNER (AS NOTED)
 - MONUMENT (AS NOTED)

MAP PROJECTION / BASIS OF BEARING

UNITS: U.S. SURVEY FEET
 HORIZONTAL DATUM: NAD 83/1981 ADJUSTMENT
 VERTICAL DATUM: NGVD 1929
 PROJECTION: WASHINGTON STATE COORDINATE SYSTEM-NORTH ZONE
 GEOID: GEOID 89 (CONUS)
 BEARINGS ARE BASED ON THE WASHINGTON STATE COORDINATE SYSTEM, NORTH ZONE, DERIVED FROM GPS OBSERVATIONS. THE DISTANCES SHOWN ON THIS MAP HAVE BEEN PROJECTED TO THE WASHINGTON STATE PLANE COORDINATE GRID. MULTIPLY THE DISTANCES SHOWN BY A FACTOR OF 1.0008236 TO OBTAIN THE ACTUAL GROUND DISTANCE.
 META DATA AS DERIVED BY GPS OBSERVATIONS ON A BRASS CAP AT THE INTERSECTION OF THE EAST-WEST CENTERLINE OF SECTION 34 WITH THE PROJECT BOUNDARY OF THE WELLS HYDROELECTRIC PROJECT ON THE LEFT BANK OF THE OKANOGAN RIVER SHOWN HEREON, IS AS FOLLOWS:
 LATITUDE: N 49° 08' 35.1878"
 LONGITUDE: W 119° 40' 08.1222"
 ELLIPSOID HEIGHT: 725.47'
 ELEVATION: 788.64'
 CONVERGENCE ANGLE: 0° 52' 00"
 COMBINED SCALE FACTOR: 0.99990765

B.C.
 LCR AFN 3136430
 NORTHING: 421179.932
 EASTING: 1919503.450
 G51-3

B.C.
 LCR AFN 3136493
 NORTHING: 415894.770
 EASTING: 1919596.831
 G51-2

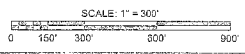
O.S.
 LCR AFN 3136503
 NORTHING: 416489.774
 EASTING: 1925502.517
 G51-1

SEE SHEET 50

ALL LAND WITHIN PROJECT BOUNDARY OWNED BY PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY (UNLESS OTHERWISE NOTED)

TOTAL B.L.M. AREA: 0.2 ACRES +/-

GRID NORTH



Erlandsen
 SURVEYING & CONSULTING SERVICES, LLC
 2077 W. 10TH AVE. SUITE 200
 BEND, OR 97701
 TEL: 503-325-3338
 FAX: 503-325-3339
 WWW.ERLANDSEN.COM

DRAWN BY: DMK
 DATE: 8-31-2009
 SCALE: 1" = 300'

LAYOUT: DSHEET-01
 FILE NO: T31-R25-G51
 JOB NO: 95550-00
 TOLL FREE: (800) 732-7452

T. 31 N. R. 25 E. W.M.
 SECTIONS 34 & 35
 OKANOGAN COUNTY

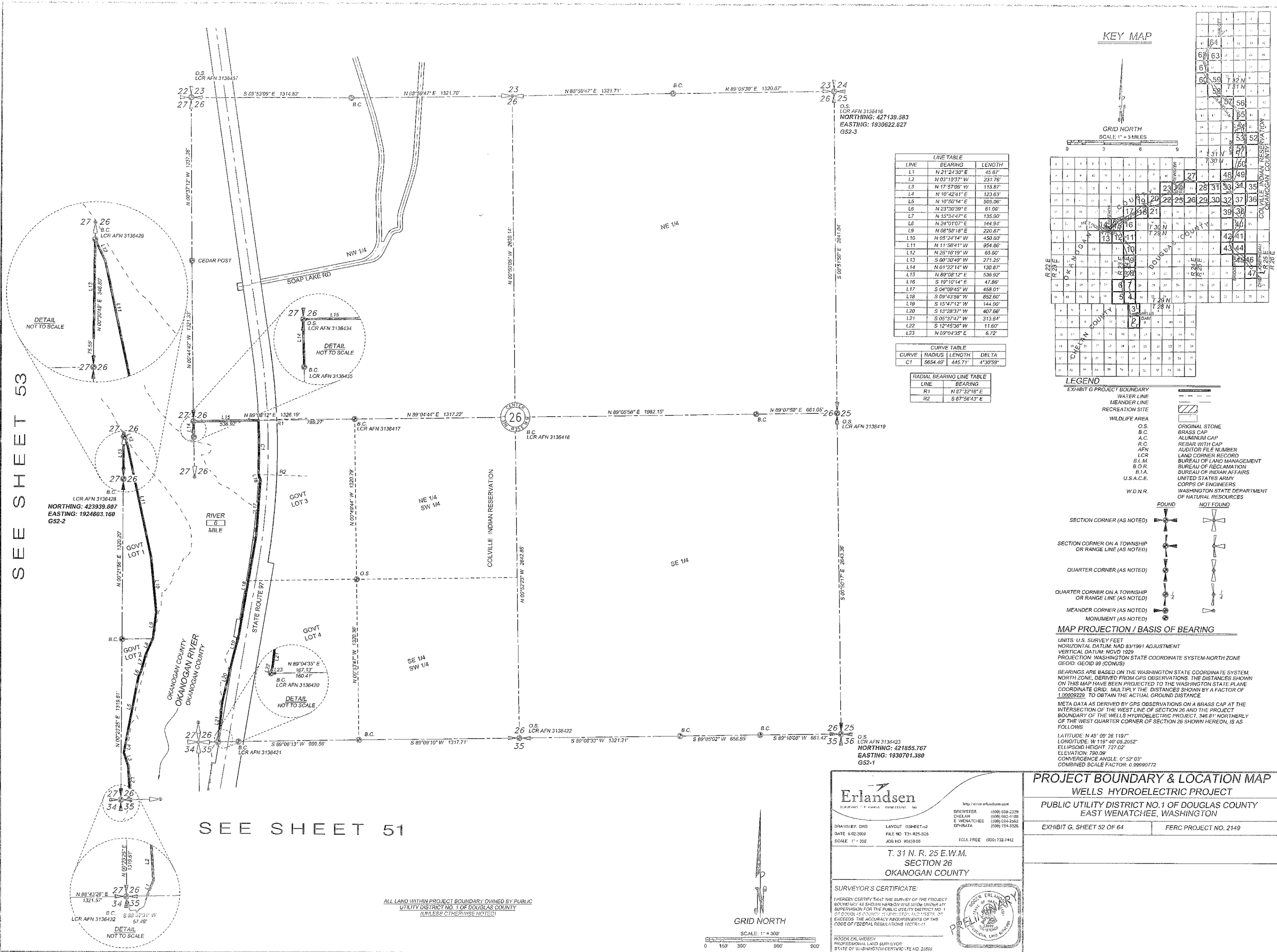
SURVEYOR'S CERTIFICATE:
 I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREON WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON, AND I CERTIFY THAT I EXCEEDED THE ACCURACY REQUIREMENTS OF THE CODE OF FEDERAL REGULATIONS 19CFR 1.11

PROJECT BOUNDARY & LOCATION MAP
 WELLS HYDROELECTRIC PROJECT
 PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
 EAST WENATCHEE, WASHINGTON

EXHIBIT G, SHEET 51 OF 64
 FERC PROJECT NO. 2149

SEE SHEET 53

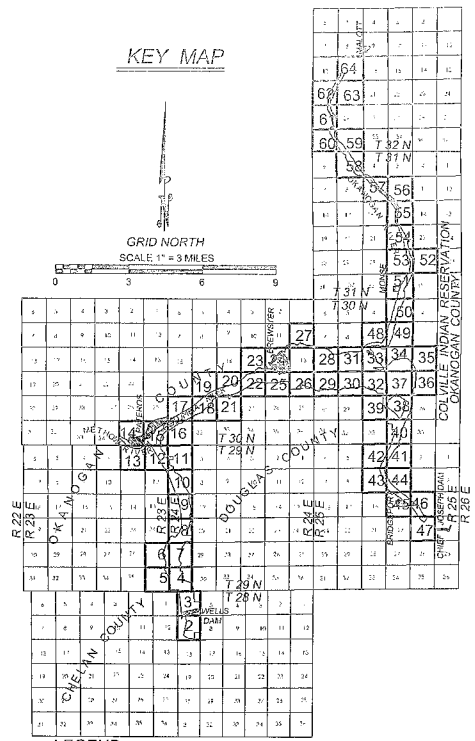
SEE SHEET 51



| LINE | BEARING | LENGTH |
|------|---------------|---------|
| L1 | N 21°24'30" E | 45.67' |
| L2 | N 03°19'37" W | 231.76' |
| L3 | N 17°57'06" W | 118.87' |
| L4 | N 10°42'41" E | 123.63' |
| L5 | N 10°50'14" E | 505.06' |
| L6 | N 23°36'39" E | 81.66' |
| L7 | N 15°34'42" E | 135.90' |
| L8 | N 24°10'07" E | 144.94' |
| L9 | N 08°58'18" E | 220.87' |
| L10 | N 05°24'14" W | 450.60' |
| L11 | N 11°56'41" W | 854.86' |
| L12 | N 25°16'19" W | 65.60' |
| L13 | S 00°30'48" W | 271.25' |
| L14 | N 01°22'14" W | 130.87' |
| L15 | N 89°08'12" E | 338.92' |
| L16 | S 19°10'14" E | 47.86' |
| L17 | S 04°09'45" W | 458.01' |
| L18 | S 09°43'59" W | 852.60' |
| L19 | S 15°47'12" W | 144.00' |
| L20 | S 13°28'37" W | 407.66' |
| L21 | S 05°37'47" W | 313.64' |
| L22 | S 12°45'36" W | 11.60' |
| L23 | N 69°10'43" E | 6.72' |

| CURVE | RADIUS | LENGTH | DELTA |
|-------|----------|---------|----------|
| C1 | 5654.48' | 445.71' | 4°30'58" |

| LINE | BEARINGS |
|------|---------------|
| R1 | N 27°32'16" E |
| R2 | S 87°56'43" E |



- LEGEND**
- EXHIBIT G PROJECT BOUNDARY
 - WATER LINE
 - MEANDER LINE
 - RECREATION SITE
 - WILDLIFE AREA
 - O.S. ORIGINAL STONE
 - B.C. BRASS CAP
 - A.C. ALUMINUM CAP
 - R.C. REBAR WITH CAP
 - AFN AUDITOR FILE NUMBER
 - LCR LAND CORNER RECORD
 - B.L.M. BUREAU OF LAND MANAGEMENT
 - B.O.R. BUREAU OF RECLAMATION
 - B.I.A. BUREAU OF INDIAN AFFAIRS
 - U.S.A.C.E. UNITED STATES ARMY CORPS OF ENGINEERS
 - W.D.N.R. WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES

- MAP PROJECTION / BASIS OF BEARING**
- UNITS: U.S. SURVEY FEET
 HORIZONTAL DATUM: NAD 83/1991 ADJUSTMENT
 VERTICAL DATUM: NGVD 1929
 PROJECTION: WASHINGTON STATE COORDINATE SYSTEM-NORTH ZONE
 GEOID: GEOID 99 (CONUS)
- BEARINGS ARE BASED ON THE WASHINGTON STATE COORDINATE SYSTEM, NORTH ZONE, DERIVED FROM GPS OBSERVATIONS. THE DISTANCES SHOWN ON THIS MAP HAVE BEEN PROJECTED TO THE WASHINGTON STATE PLANE COORDINATE GRID. MULTIPLY THE DISTANCES SHOWN BY A FACTOR OF 1.0000220 TO OBTAIN THE ACTUAL GROUND DISTANCE.
- META DATA AS DERIVED BY GPS OBSERVATIONS ON A BRASS CAP AT THE INTERSECTION OF THE WEST LINE OF SECTION 26 AND THE PROJECT BOUNDARY OF THE WELLS HYDROELECTRIC PROJECT, 346.81' NORTHERLY OF THE WEST QUARTER CORNER OF SECTION 26 SHOWN HEREON, IS AS FOLLOWS:
- LATITUDE: N 45° 09' 26.119"
 LONGITUDE: W 119° 40' 05.2052"
 ELLIPSOID HEIGHT: 727.02'
 ELEVATION: 780.09'
 CONVERGENCE ANGLE: 0° 52' 03"
 COMBINED SCALE FACTOR: 0.99990772

PROJECT BOUNDARY & LOCATION MAP
 WELLS HYDROELECTRIC PROJECT
 PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
 EAST WENATCHEE, WASHINGTON

EXHIBIT G, SHEET 52 OF 64 FERC PROJECT NO. 2149

Erlandsen
 SURVEYORS & ENGINEERS, INC.
 1111 W. WENATCHEE AVENUE
 WENATCHEE, WA 98855
 (509) 838-2370
 (509) 832-4108
 (509) 834-2562
 (509) 714-3206

DRAWN BY: DMG LAYOUT: GSHHEIT-02
 DATE: 8/02/2008 FILE NO: T31-R25-026
 SCALE: 1" = 300' JOB NO: 05510-00 TOLL FREE: (800) 132-7442

T. 31 N. R. 25 E.W.M.
 SECTION 26
 OKANOGAN COUNTY

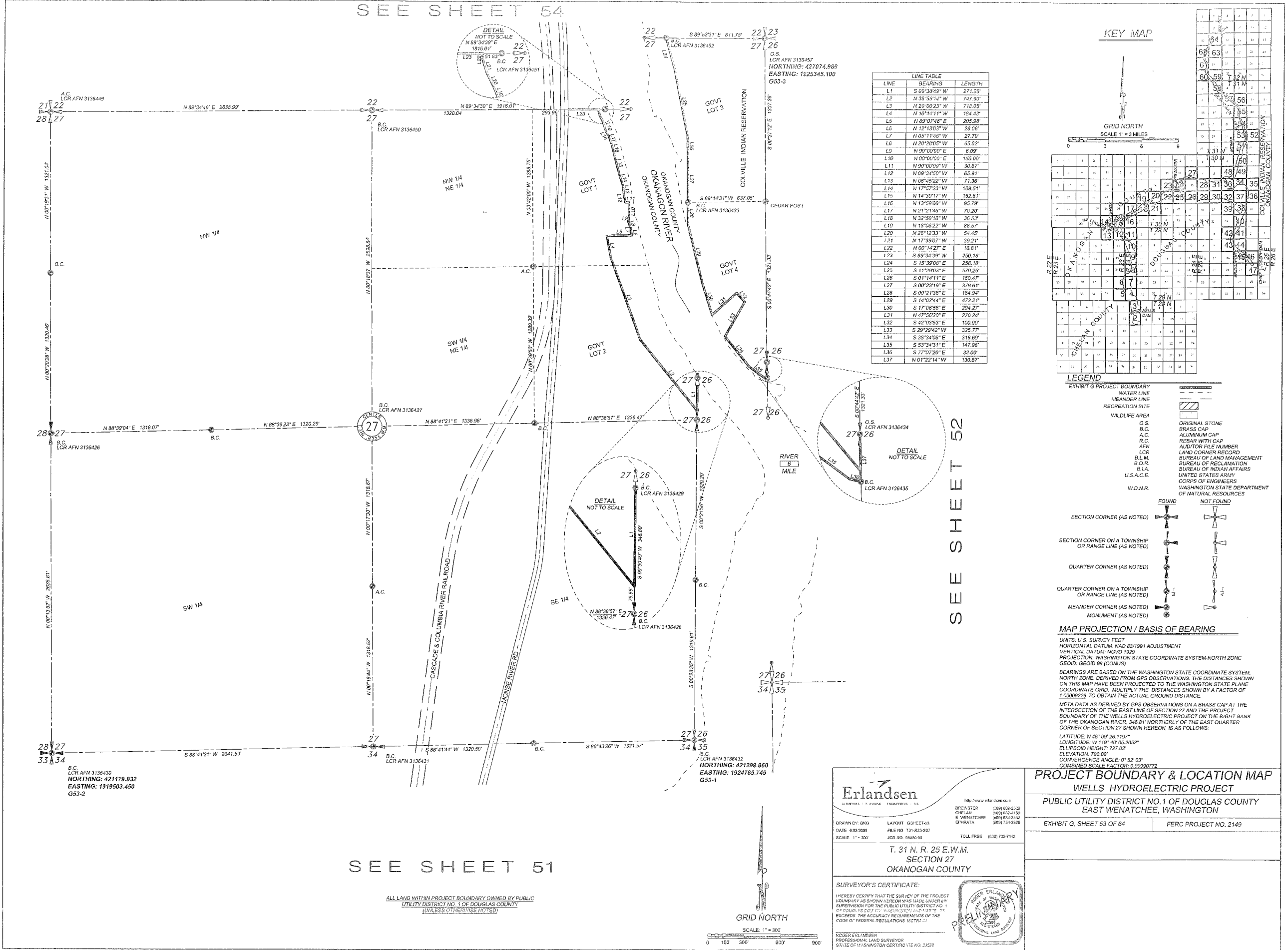
SURVEYOR'S CERTIFICATE:
 I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREBY WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON, AND THAT IT COMPLETES THE ACCURACY REQUIREMENTS OF THE CODE OF FEDERAL REGULATIONS 102FR1.11

ROGER ERLANDSEN
 PROFESSIONAL LAND SURVEYOR
 STATE OF WASHINGTON CERTIFICATE NO. 23859

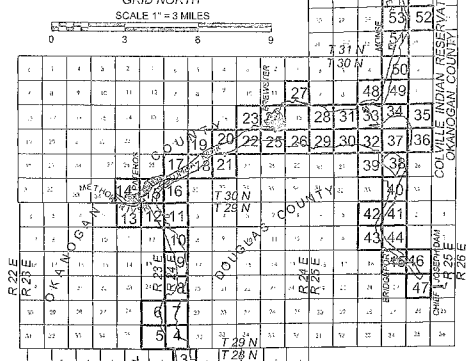
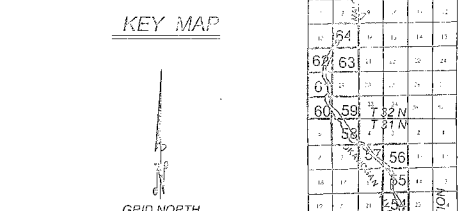
PROJECT BOUNDARY & LOCATION MAP
 WELLS HYDROELECTRIC PROJECT
 PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
 EAST WENATCHEE, WASHINGTON

EXHIBIT G, SHEET 52 OF 64 FERC PROJECT NO. 2149

SEE SHEET 54



| LINE | BEARING | LENGTH |
|------|---------------|---------|
| L1 | S 00°30'49" W | 271.25' |
| L2 | N 38°55'14" W | 747.93' |
| L3 | N 20°00'23" W | 710.05' |
| L4 | N 10°44'11" W | 184.43' |
| L5 | N 89°07'48" E | 205.86' |
| L6 | N 12°13'03" W | 28.06' |
| L7 | N 05°11'48" W | 27.79' |
| L8 | N 20°28'05" W | 65.82' |
| L9 | N 90°00'00" E | 6.09' |
| L10 | N 00°00'00" E | 155.00' |
| L11 | N 90°00'00" W | 30.87' |
| L12 | N 09°34'50" W | 65.91' |
| L13 | N 05°45'22" W | 71.36' |
| L14 | N 17°57'23" W | 109.51' |
| L15 | N 14°39'17" W | 132.81' |
| L16 | N 13°59'00" W | 85.73' |
| L17 | N 21°21'46" W | 70.20' |
| L18 | N 32°50'16" W | 36.53' |
| L19 | N 13°05'22" W | 86.57' |
| L20 | N 28°12'33" W | 54.45' |
| L21 | N 17°39'07" W | 39.21' |
| L22 | N 00°14'27" E | 16.81' |
| L23 | S 89°34'39" W | 250.18' |
| L24 | S 13°39'03" E | 236.18' |
| L25 | S 11°29'03" E | 570.25' |
| L26 | S 01°14'11" E | 160.47' |
| L27 | S 00°23'19" E | 379.61' |
| L28 | S 00°13'08" E | 184.94' |
| L29 | S 14°02'44" E | 472.21' |
| L30 | S 17°06'38" E | 284.27' |
| L31 | N 47°56'20" E | 270.24' |
| L32 | S 42°03'53" E | 160.00' |
| L33 | S 29°29'42" W | 325.77' |
| L34 | S 38°34'08" E | 316.69' |
| L35 | S 53°34'31" E | 147.96' |
| L36 | S 77°07'20" E | 32.00' |
| L37 | N 01°22'14" W | 130.87' |



MAP PROJECTION / BASIS OF BEARING

UNITS: U.S. SURVEY FEET
 HORIZONTAL DATUM: NAD 83/1981 ADJUSTMENT
 VERTICAL DATUM: NGVD 1929
 PROJECTION: WASHINGTON STATE COORDINATE SYSTEM-NORTH ZONE
 GRID: GRID 99 (CONUS)

BEARINGS ARE BASED ON THE WASHINGTON STATE COORDINATE SYSTEM, NORTH ZONE, DERIVED FROM GPS OBSERVATIONS. THE DISTANCES SHOWN ON THIS MAP HAVE BEEN PROJECTED TO THE WASHINGTON STATE PLANE COORDINATE GRID. MULTIPLY THE DISTANCES SHOWN BY A FACTOR OF 1.0008229 TO OBTAIN THE ACTUAL GROUND DISTANCE.

META DATA AS DERIVED BY GPS OBSERVATIONS ON A BRASS CAP AT THE INTERSECTION OF THE EAST LINE OF SECTION 27 AND THE PROJECT BOUNDARY OF THE WELLS HYDROELECTRIC PROJECT ON THE RIGHT BANK OF THE OKANOGAN RIVER, 346.81' NORTHERLY OF THE EAST QUARTER CORNER OF SECTION 27 SHOWN HEREON, IS AS FOLLOWS:

LATITUDE: N 48° 09' 26.1157"
 LONGITUDE: W 119° 40' 05.2052"
 ELLIPSOID HEIGHT: 727.02'
 ELEVATION: 790.09'
 CONVERGENCE ANGLE: 0° 52' 03"
 COMBINED SCALE FACTOR: 0.9998072

B.C.
LCR AFN 3136449

B.C.
LCR AFN 3136426

B.C.
LCR AFN 3136430
NORTHING: 421179.932
EASTING: 1919503.450
G53-2

SEE SHEET 51

ALL LAND WITHIN PROJECT BOUNDARY OWNED BY PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY (UNLESS OTHERWISE NOTED)

Erlandsen
 SURVEYORS & ENGINEERS - U.S.

http://www.erlandson.com
 BROOKSTER (509) 886-2255
 CHELAN (509) 885-4100
 WENATCHEE (509) 884-2252
 GRAYS HARBOR (509) 724-3326

DRAWN BY: DMD LAYOUT: GSHEET-01
 DATE: 6/02/2008 FILE NO: T31-R25-927
 SCALE: 1" = 300' JOB NO: 65650.00 TOLL FREE: (800) 732-7442

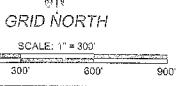
T. 31 N. R. 25 E.W.M.
 SECTION 27
 OKANOGAN COUNTY

SURVEYOR'S CERTIFICATE:
 I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREON WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON, AND THAT I AM A LICENSED SURVEYOR IN THE STATE OF WASHINGTON UNDER THE CODE OF FEDERAL REGULATIONS (39 CFR) 21.

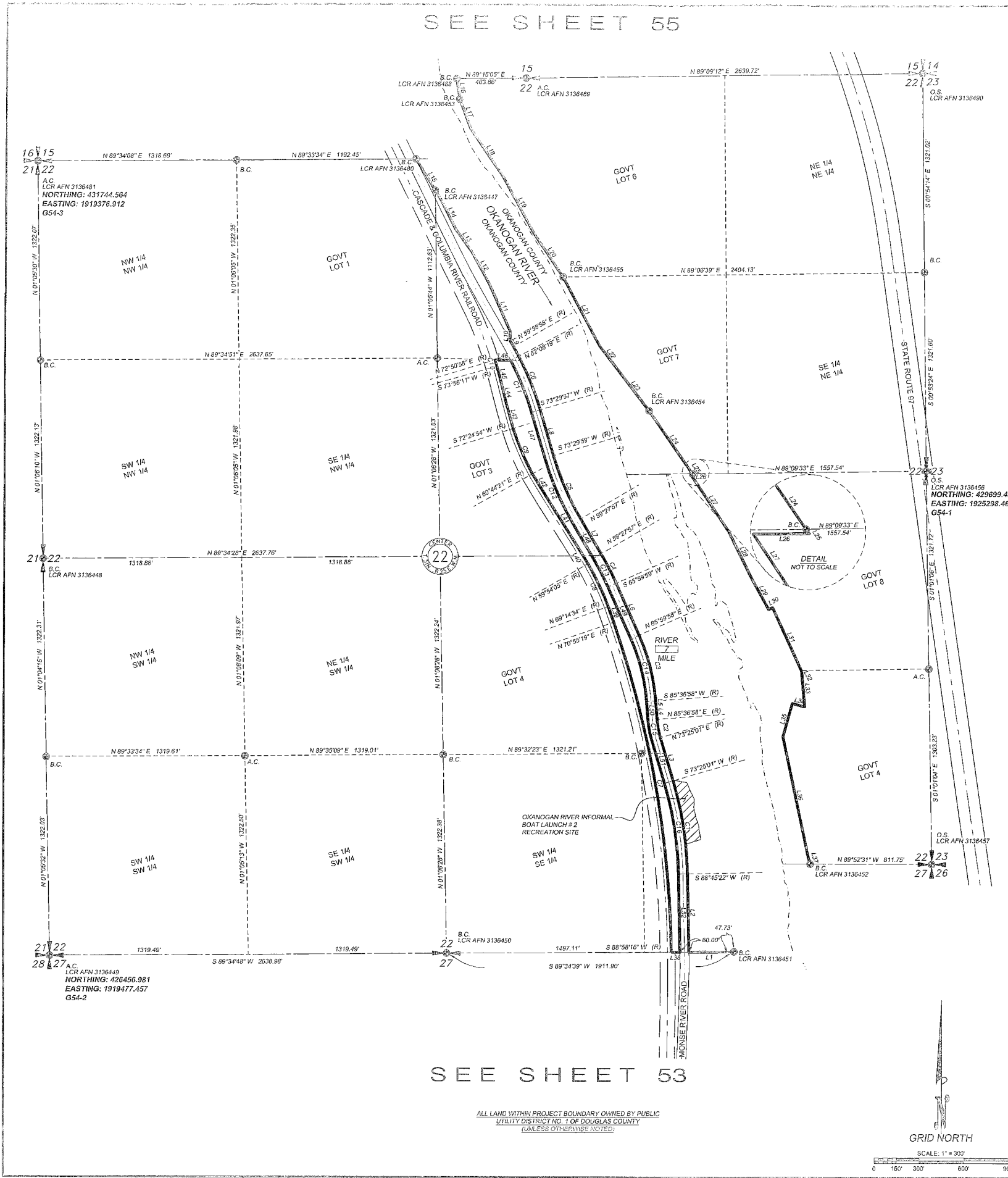
ROGER ERLANDSEN
 PROFESSIONAL LAND SURVEYOR
 STATE OF WASHINGTON CERTIFICATE NO. 21589

PROJECT BOUNDARY & LOCATION MAP
 WELLS HYDROELECTRIC PROJECT
 PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
 EAST WENATCHEE, WASHINGTON

EXHIBIT G, SHEET 53 OF 64 FERC PROJECT NO. 2149



SEE SHEET 55

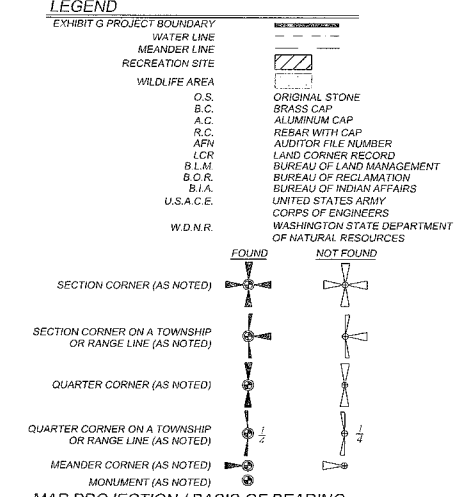
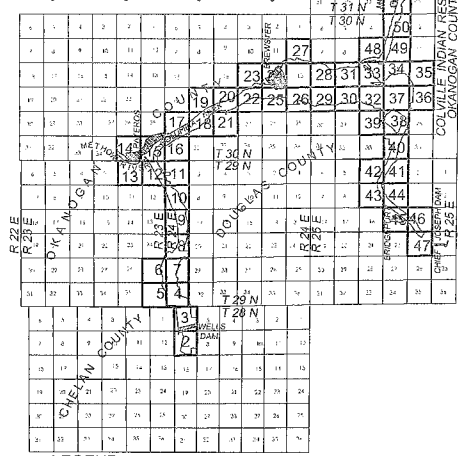
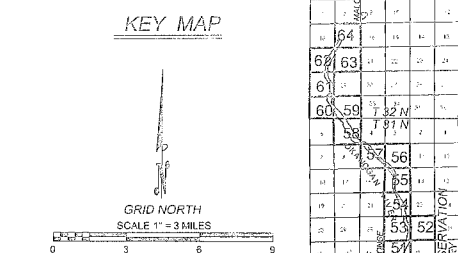


LINE TABLE

| LINE | BEARING | LENGTH |
|------|---------------|---------|
| L1 | S 89°34'38" W | 250.19' |
| L2 | N 01°14'36" W | 515.85' |
| L3 | N 18°34'59" W | 300.02' |
| L4 | N 04°23'02" W | 26.20' |
| L5 | N 04°23'02" W | 26.20' |
| L6 | N 24°00'02" W | 379.39' |
| L7 | N 30°32'02" W | 269.69' |
| L8 | N 16°30'02" W | 318.60' |
| L9 | N 30°01'02" W | 48.69' |
| L10 | N 01°38'41" E | 58.16' |
| L11 | N 24°10'09" E | 342.43' |
| L12 | N 28°02'17" W | 251.91' |
| L13 | N 36°01'54" W | 186.18' |
| L14 | N 26°44'00" W | 206.17' |
| L15 | N 31°57'15" E | 325.08' |
| L16 | S 09°08'41" E | 137.79' |
| L17 | S 20°49'46" E | 211.08' |
| L18 | S 34°47'32" E | 384.41' |
| L19 | S 20°01'59" E | 424.73' |
| L20 | S 34°03'11" E | 353.34' |
| L21 | S 28°24'58" E | 522.01' |
| L22 | S 37°31'15" E | 171.41' |
| L23 | S 37°31'15" E | 369.58' |
| L24 | S 34°37'00" E | 508.87' |
| L25 | S 34°36'57" E | 1.10' |
| L26 | S 89°18'23" W | 12.38' |
| L27 | S 31°19'09" W | 174.31' |
| L28 | S 26°13'04" E | 330.91' |
| L29 | S 28°24'37" E | 252.39' |
| L30 | N 61°32'26" E | 30.00' |
| L31 | S 24°43'09" E | 462.41' |
| L32 | S 28°24'34" E | 3.64' |
| L33 | S 04°52'02" E | 241.18' |
| L34 | N 14°18'55" W | 84.98' |
| L35 | S 15°43'02" W | 229.88' |
| L36 | S 11°52'52" E | 813.10' |
| L37 | S 15°30'09" E | 54.59' |
| L38 | S 89°34'38" W | 56.88' |
| L39 | N 19°38'22" W | 112.86' |
| L40 | N 31°35'20" W | 130.48' |
| L41 | N 32°20'20" W | 381.00' |
| L42 | N 31°19'09" W | 174.31' |
| L43 | N 15°31'39" W | 174.31' |
| L44 | N 14°30'24" W | 128.90' |
| L45 | N 15°01'39" W | 125.34' |
| L46 | S 88°27'39" E | 105.56' |
| L47 | S 16°30'02" E | 318.60' |
| L48 | S 30°32'02" W | 269.69' |
| L49 | S 24°00'02" E | 379.39' |
| L50 | S 04°23'02" E | 122.89' |
| L51 | S 18°34'55" E | 300.02' |
| L52 | S 01°14'36" E | 516.89' |

CURVE TABLE

| CURVE | RADIUS | LENGTH | DELTA |
|-------|----------|----------|-----------|
| C1 | 2350.00' | 629.14' | 15°20'21" |
| C2 | 585.00' | 124.55' | 12°11'57" |
| C3 | 1327.26' | 454.42' | 18°37'00" |
| C4 | 1939.86' | 221.22' | 8°32'02" |
| C5 | 1879.86' | 460.45' | 14°02'02" |
| C6 | 1939.86' | 457.62' | 13°30'59" |
| C7 | 7111.37' | 2240.21' | 18°02'57" |
| C8 | 1934.86' | 315.48' | 9°20'29" |
| C9 | 1812.02' | 326.50' | 11°40'33" |
| C10 | 2316.83' | 43.95' | 1°05'13" |
| C11 | 1879.86' | 373.83' | 11°23'38" |
| C12 | 1939.86' | 475.14' | 14°02'02" |
| C13 | 1879.86' | 214.37' | 6°32'01" |
| C14 | 1267.26' | 433.88' | 19°37'00" |
| C15 | 645.00' | 137.33' | 12°11'57" |
| C16 | 2299.00' | 613.08' | 15°20'21" |



SEE SHEET 53

ALL LAND WITHIN PROJECT BOUNDARY OWNED BY PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY (UNLESS OTHERWISE NOTED)

Erlandsen
 SURVEYORS & ENGINEERS

DRAWN BY: DMO LAYOUT: GSH01-04
 DATE: 6/30/2009 FILE NO: T31-R25-932
 SCALE: 1" = 300' JOB NO: 95550.00 TOLL FREE: (800) 732-7442

T. 31 N. R. 25 E. W. M.
 SECTION 22
 OKANOGAN COUNTY

SURVEYOR'S CERTIFICATE:
 I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREON WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON, AND I CERTIFY THAT I EXCEEDED THE ACCURACY REQUIREMENTS OF THE CODE OF FEDERAL REGULATIONS 10CFR1.41

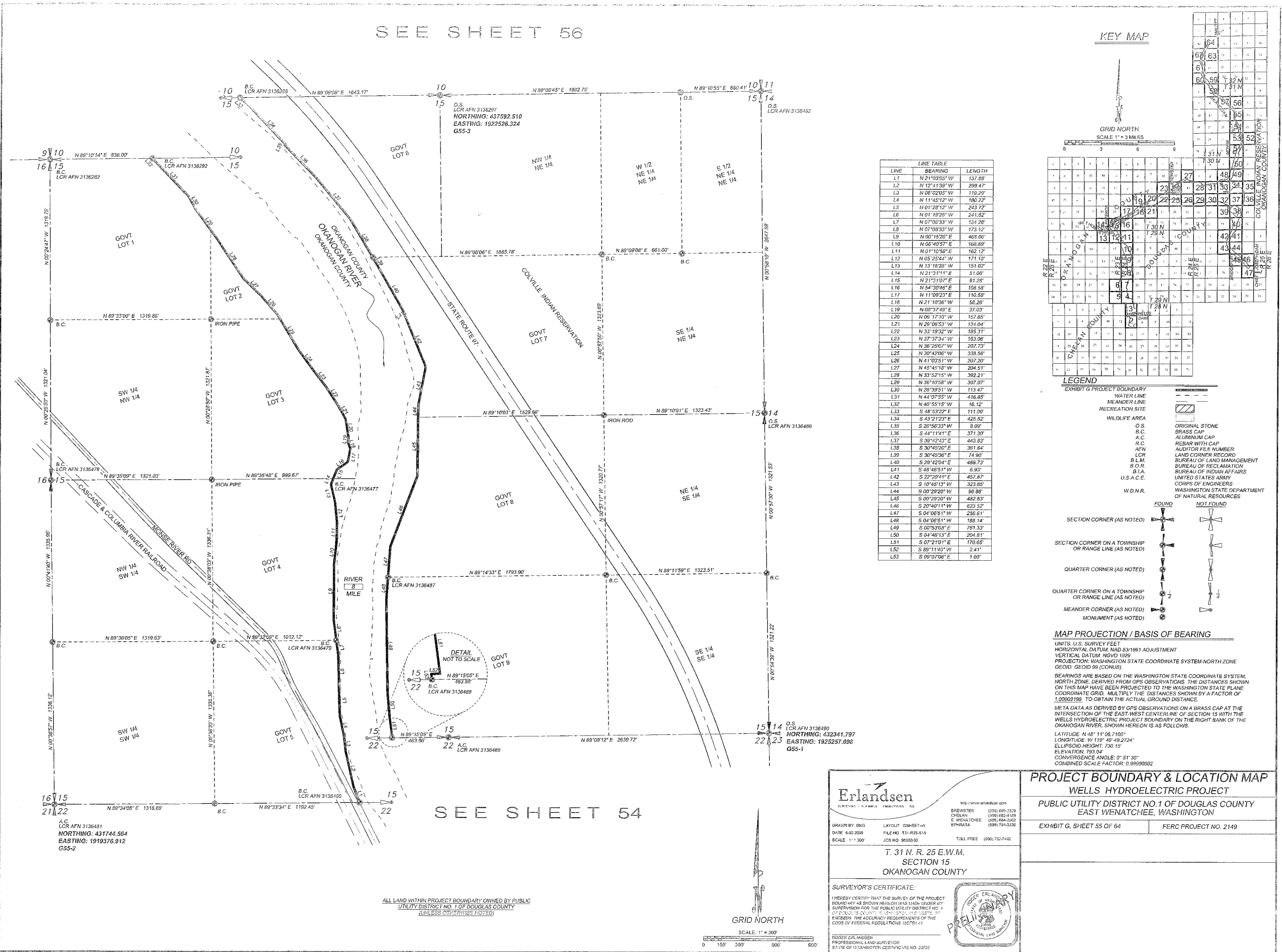
ROSEB. ERLANDSEN
 PROFESSIONAL LAND SURVEYOR
 STATE OF WASHINGTON CERTIFICATE NO. 23599

PROJECT BOUNDARY & LOCATION MAP
 WELLS HYDROELECTRIC PROJECT
 PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
 EAST WENATCHEE, WASHINGTON

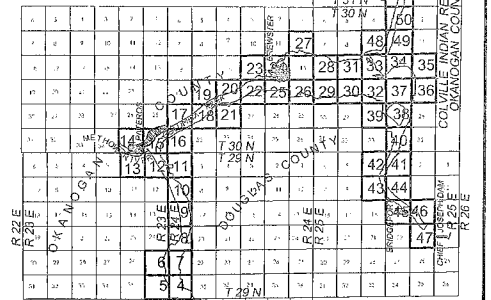
EXHIBIT G, SHEET 54 OF 64 FERC PROJECT NO. 2149

SEE SHEET 56

KEY MAP



| LINE | BEARING | LENGTH |
|------|---------------|--------|
| L1 | N 21°03'05\"W | 137.85 |
| L2 | N 12°41'39\"W | 289.47 |
| L3 | N 08°02'05\"W | 119.29 |
| L4 | N 11°45'12\"W | 180.22 |
| L5 | N 01°28'17\"W | 243.72 |
| L6 | N 01°19'28\"W | 241.82 |
| L7 | N 07°08'33\"W | 134.28 |
| L8 | N 07°08'33\"W | 173.12 |
| L9 | N 00°15'28\"E | 468.66 |
| L10 | N 08°40'57\"E | 168.89 |
| L11 | N 01°10'58\"E | 162.12 |
| L12 | N 05°25'44\"W | 171.10 |
| L13 | N 13°18'28\"W | 151.02 |
| L14 | N 21°31'11\"E | 51.06 |
| L15 | N 21°31'07\"E | 81.28 |
| L16 | N 54°00'48\"E | 108.58 |
| L17 | N 11°09'23\"E | 110.68 |
| L18 | N 21°10'36\"W | 58.28 |
| L19 | N 09°37'49\"E | 37.03 |
| L20 | N 09°17'10\"W | 157.85 |
| L21 | N 28°08'53\"W | 134.04 |
| L22 | N 33°19'32\"W | 185.37 |
| L23 | N 37°37'34\"W | 183.06 |
| L24 | N 38°29'07\"W | 207.73 |
| L25 | N 30°42'06\"W | 338.58 |
| L26 | N 41°03'51\"W | 207.20 |
| L27 | N 48°40'18\"W | 204.51 |
| L28 | N 35°52'15\"W | 392.21 |
| L29 | N 38°10'59\"W | 307.07 |
| L30 | N 28°39'51\"W | 113.47 |
| L31 | N 44°07'55\"W | 416.85 |
| L32 | N 40°55'15\"W | 16.12 |
| L33 | S 48°53'22\"E | 111.00 |
| L34 | S 43°21'23\"E | 425.52 |
| L35 | S 28°56'33\"W | 8.09 |
| L36 | S 24°11'41\"E | 371.30 |
| L37 | S 30°42'42\"E | 443.83 |
| L38 | S 30°49'20\"E | 381.84 |
| L39 | S 30°45'36\"E | 74.90 |
| L40 | S 29°42'04\"E | 489.73 |
| L41 | S 48°48'51\"W | 6.93 |
| L42 | S 22°20'41\"E | 457.87 |
| L43 | S 10°45'13\"W | 323.85 |
| L44 | S 00°29'20\"W | 98.58 |
| L45 | S 00°29'20\"W | 482.83 |
| L46 | S 20°40'11\"W | 623.52 |
| L47 | S 04°06'51\"W | 256.61 |
| L48 | S 04°06'51\"W | 188.14 |
| L49 | S 00°53'03\"E | 781.33 |
| L50 | S 04°46'13\"E | 204.81 |
| L51 | S 07°21'50\"E | 170.65 |
| L52 | S 89°11'50\"W | 2.41 |
| L53 | S 89°07'08\"E | 1.60 |



- LEGEND**
- EXHIBIT G PROJECT BOUNDARY
 - WATER LINE
 - MEANDER LINE
 - RECREATION SITE
 - WILDLIFE AREA
 - O.S. ORIGINAL STONE
 - R.C. BRASS CAP
 - A.C. ALUMINUM CAP
 - R.C. REBAR WITH CAP
 - AFN AUDITOR FILE NUMBER
 - LCR LAND CORNER RECORD
 - B.L.M. BUREAU OF LAND MANAGEMENT
 - B.C.R. BUREAU OF RECLAMATION
 - B.I.A. BUREAU OF INDIAN AFFAIRS
 - U.S.A.C.E. UNITED STATES ARMY CORPS OF ENGINEERS
 - W.D.N.R. WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES

- SECTION CORNER (AS NOTED)**
- SECTION CORNER ON A TOWNSHIP OR RANGE LINE (AS NOTED)**
- QUARTER CORNER (AS NOTED)**
- QUARTER CORNER ON A TOWNSHIP OR RANGE LINE (AS NOTED)**
- MEANDER CORNER (AS NOTED)**
- MONUMENT (AS NOTED)**

MAP PROJECTION / BASIS OF BEARING

UNITS: U.S. SURVEY FEET

HORIZONTAL DATUM: NAD 83/1981 ADJUSTMENT

VERTICAL DATUM: NGVD 1929

PROJECTION: WASHINGTON STATE COORDINATE SYSTEM-NORTH ZONE

GRID: GRID 39 (CONUS)

BEARINGS ARE BASED ON THE WASHINGTON STATE COORDINATE SYSTEM, NORTH ZONE, DERIVED FROM GPS OBSERVATIONS. THE DISTANCES SHOWN ON THIS MAP HAVE BEEN PROJECTED TO THE WASHINGTON STATE PLANE COORDINATE GRID. MULTIPLY THE DISTANCES SHOWN BY A FACTOR OF 1.0000189 TO OBTAIN THE ACTUAL GROUND DISTANCE.

META DATA AS DERIVED BY GPS OBSERVATIONS ON A BRASS CAP AT THE INTERSECTION OF THE EAST-WEST CENTERLINE OF SECTION 15 WITH THE WELLS HYDROELECTRIC PROJECT BOUNDARY ON THE RIGHT BANK OF THE OKANOGAN RIVER, SHOWN HEREON IS AS FOLLOWS:

LATITUDE: N 48° 11' 06.7180"

LONGITUDE: W 119° 49' 43.2724"

ELLIPSOID HEIGHT: 730.15'

ELEVATION: 793.04'

CONVERGENCE ANGLE: 0° 51' 30"

COMBINED SCALE FACTOR: 0.99990002

SEE SHEET 54

AC LCR AFN 3136481
NORTHING: 431744.564
EASTING: 1919376.912
G55-2

ALL LAND WITHIN PROJECT BOUNDARY OWNED BY PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY (UNLESS OTHERWISE NOTED)

Erlandsen
SURVEYORS & ENGINEERS, PLLC

DRAWING BY: GNO
DATE: 6-20-2008
SCALE: 1" = 300'

LAYOUT: OSW/ET-05
FILE NO: 131-R25-915
JOB NO: 96500-00

BREWSTER: (509) 489-2529
CHILMAN: (509) 482-4109
WENATCHEE: (509) 884-2362
BETHUNA: (509) 754-3338

TOLL FREE: (800) 732-7442

T. 31 N. R. 25 E.W.M.
SECTION 15
OKANOGAN COUNTY

SURVEYOR'S CERTIFICATE:

I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREON WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON, AND I AM A LICENSED SURVEYOR IN THE STATE OF WASHINGTON. I HAVE REVIEWED THE ACCURACY REQUIREMENTS OF THE CODE OF FEDERAL REGULATIONS 18CFR 1.11

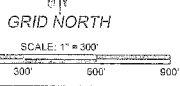
RODGER ERLANDSEN
PROFESSIONAL LAND SURVEYOR
STATE OF WASHINGTON CERTIFICATE NO. 23520

PROJECT BOUNDARY & LOCATION MAP
WELLS HYDROELECTRIC PROJECT

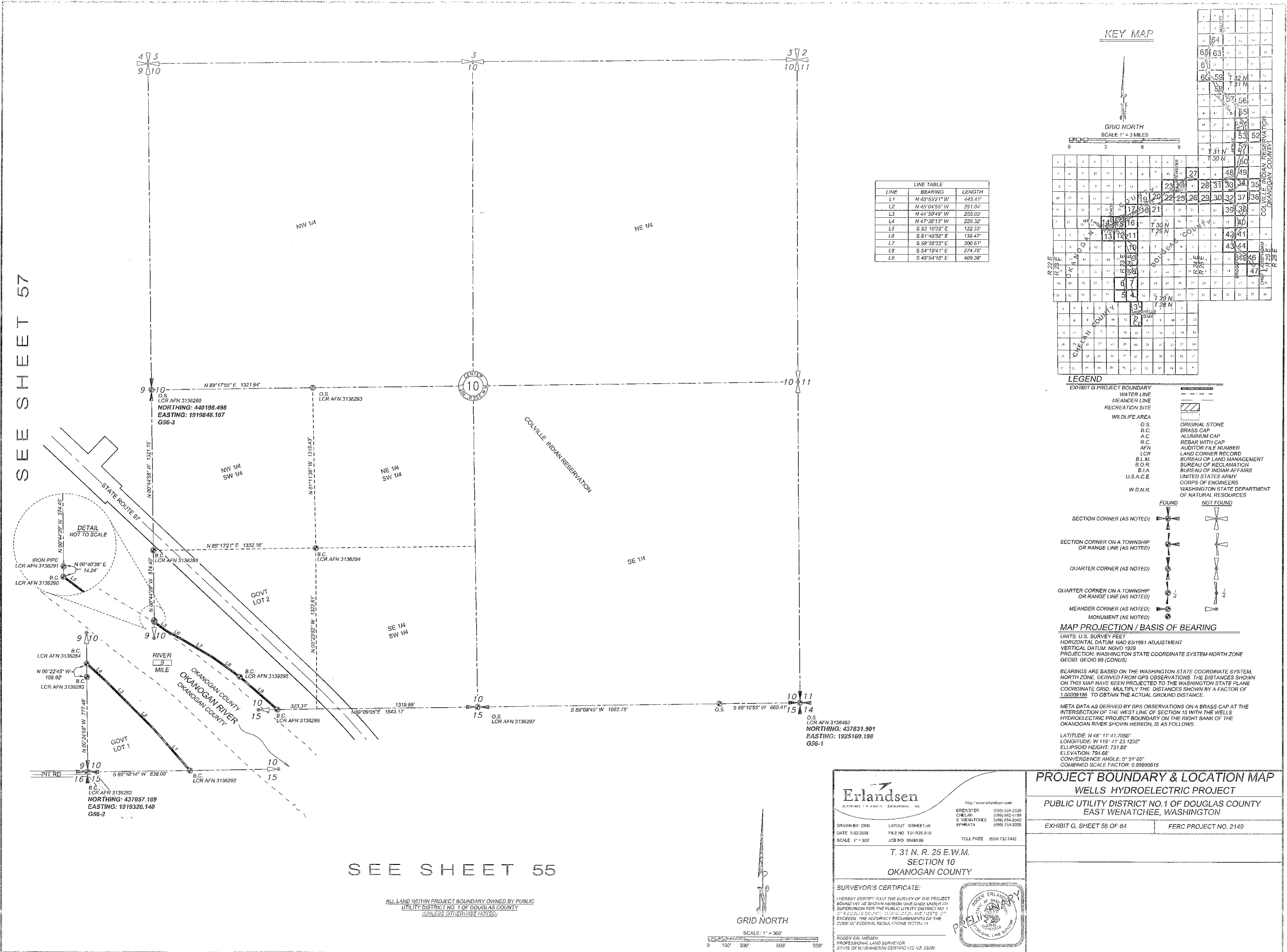
PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
EAST WENATCHEE, WASHINGTON

EXHIBIT G, SHEET 55 OF 64

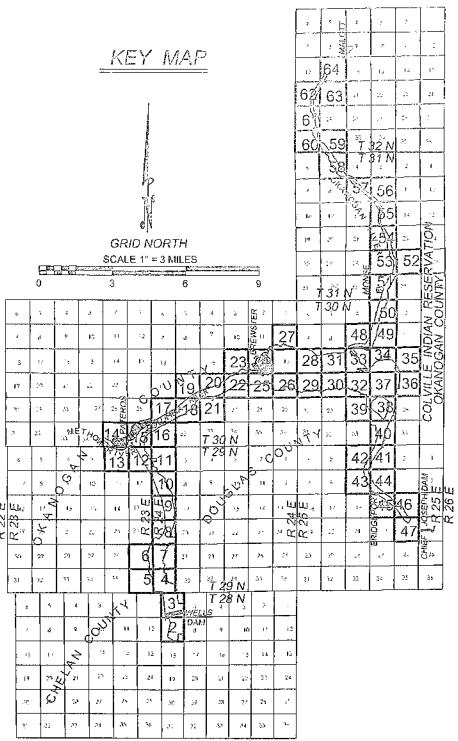
FERC PROJECT NO. 2149



SEE SHEET 57



| LINE | BEARING | LENGTH |
|------|-----------------|---------|
| L1 | N 40° 52' 21" W | 443.41' |
| L2 | N 45° 04' 55" W | 291.04' |
| L3 | N 44° 39' 49" W | 255.03' |
| L4 | N 47° 38' 13" W | 223.32' |
| L5 | S 53° 10' 32" E | 122.33' |
| L6 | S 61° 49' 58" E | 138.47' |
| L7 | S 59° 28' 33" E | 300.61' |
| L8 | S 54° 19' 41" E | 274.78' |
| L9 | S 48° 54' 10" E | 409.38' |



LEGEND

| | |
|----------------------------|--|
| EXHIBIT G PROJECT BOUNDARY | --- |
| WATER LINE | --- |
| MEANDER LINE | --- |
| RECREATION SITE | --- |
| WILDLIFE AREA | --- |
| O.S. | ORIGINAL STONE |
| B.C. | BRASS CAP |
| A.C. | ALUMINUM CAP |
| R.C. | REBAR WITH CAP |
| AFN | AUDITOR FILE NUMBER |
| LCR | LAND CORNER RECORD |
| B.L.M. | BUREAU OF LAND MANAGEMENT |
| B.O.R. | BUREAU OF RECLAMATION |
| B.I.A. | BUREAU OF INDIAN AFFAIRS |
| U.S.A.C.E. | UNITED STATES ARMY |
| | CORPS OF ENGINEERS |
| W.D.N.R. | WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES |

MAP PROJECTION / BASIS OF BEARING

UNITS: U.S. SURVEY FEET
 HORIZONTAL DATUM: NAD 83/1981 ADJUSTMENT
 VERTICAL DATUM: NGVD 1985
 PROJECTION: WASHINGTON STATE COORDINATE SYSTEM-NORTH ZONE
 GEOID: GEOID 88 (CONUS)

BEARINGS ARE BASED ON THE WASHINGTON STATE COORDINATE SYSTEM, NORTH ZONE, DERIVED FROM GPS OBSERVATIONS. THE DISTANCES SHOWN ON THIS MAP HAVE BEEN PROJECTED TO THE WASHINGTON STATE PLANE COORDINATE GRID. MULTIPLY THE DISTANCES SHOWN BY A FACTOR OF 1.00009186 TO OBTAIN THE ACTUAL GROUND DISTANCE.

META DATA AS DERIVED BY GPS OBSERVATIONS ON A BRASS CAP AT THE INTERSECTION OF THE WEST LINE OF SECTION 10 WITH THE WELLS HYDROELECTRIC PROJECT BOUNDARY ON THE RIGHT BANK OF THE OKANOGAN RIVER SHOWN HEREON, IS AS FOLLOWS:

LATITUDE: N 48° 11' 41.7056"
 LONGITUDE: W 119° 41' 23.1235"
 ELLIPSOID HEIGHT: 731.88'
 ELEVATION: 794.68'
 CONVERGENCE ANGLE: 0° 51' 05"
 COMBINED SCALE FACTOR: 0.99999015

SECTION CORNER (AS NOTED)

SECTION CORNER ON A TOWNSHIP OR RANGE LINE (AS NOTED)

QUARTER CORNER (AS NOTED)

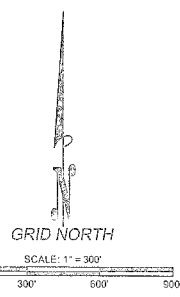
QUARTER CORNER ON A TOWNSHIP OR RANGE LINE (AS NOTED)

MEANDER CORNER (AS NOTED)

MONUMENT (AS NOTED)

SEE SHEET 55

ALL LAND WITHIN PROJECT BOUNDARY OWNED BY PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY UNLESS OTHERWISE NOTED



Erlandson
 SURVEYORS & ENGINEERS, PLLC
 10000 1st Avenue, Everett, WA 98203
 TEL: 425-255-1100 FAX: 425-255-1101
 WWW.ERLANDSON.COM

DRAWN BY: DKO LAYOUT: GSHBET-66
 DATE: 04-20-08 FILE NO: T31-R25-S15
 SCALE: 1" = 300' JOB NO: 05593-00 TOLL FREE: (800) 732-7442

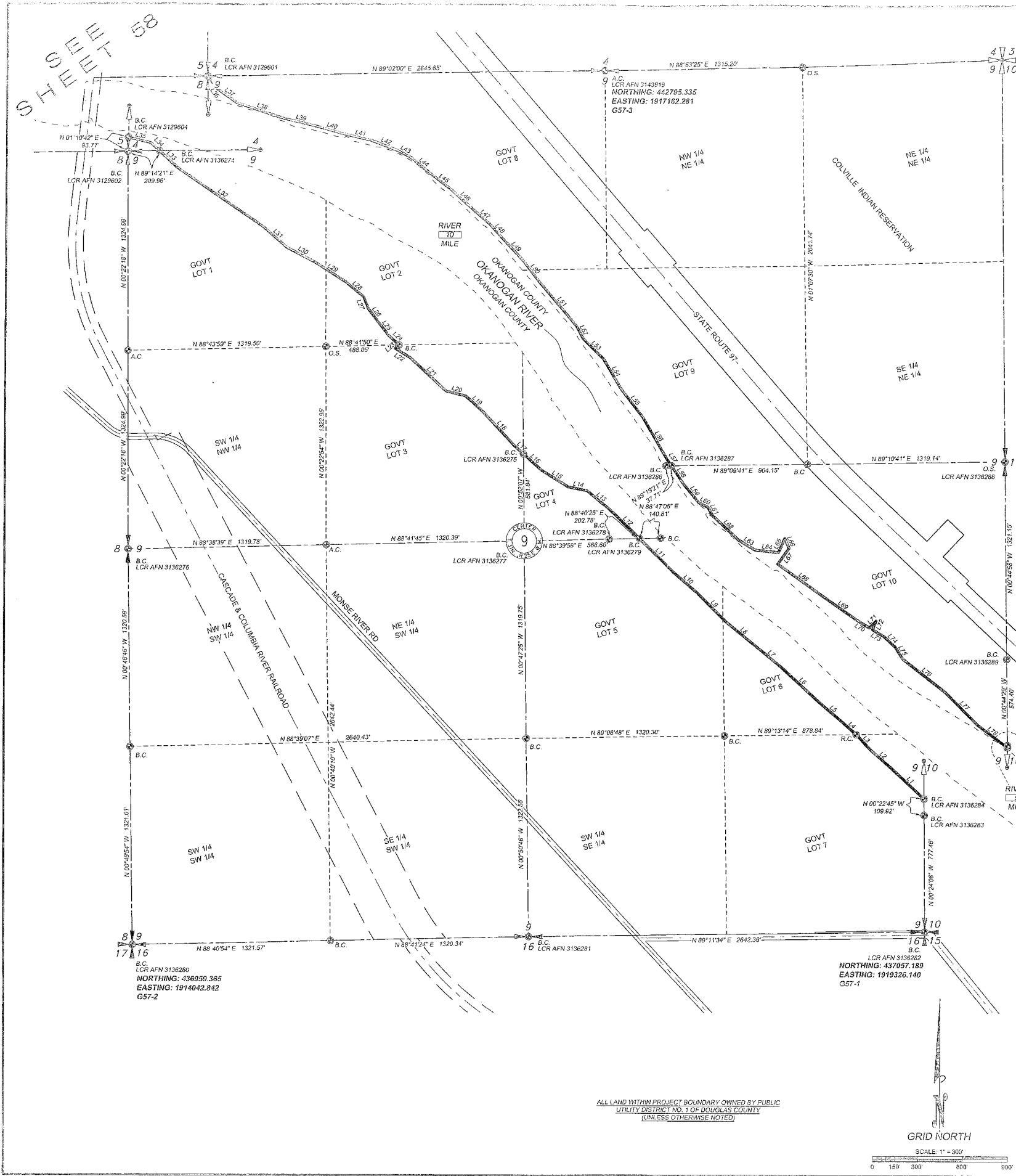
T. 31 N. R. 25 E.W.M. SECTION 10 OKANOGAN COUNTY

SURVEYOR'S CERTIFICATE:
 I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREON WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, THIS SURVEY AND THESE NOTES EXCEEDS THE ACCURACY REQUIREMENTS OF THE CODE OF FEDERAL REGULATIONS, 36CFR 11.11

ROGER ER. LANDSON
 PROFESSIONAL LAND SURVEYOR
 STATE OF WASHINGTON CERTIFICATE NO. 33296

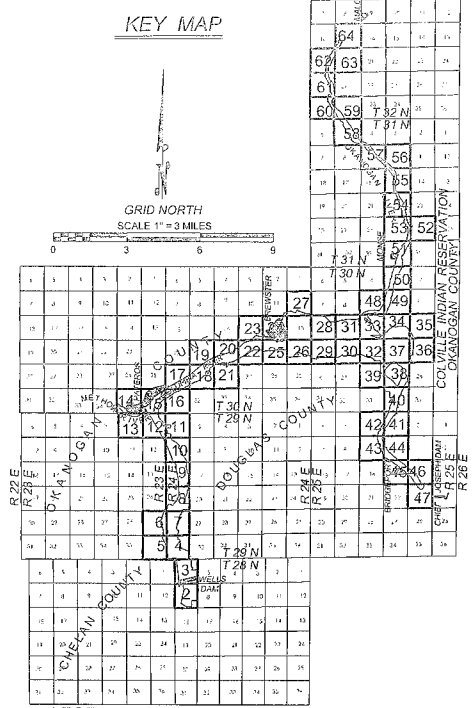
PROJECT BOUNDARY & LOCATION MAP
WELLS HYDROELECTRIC PROJECT
 PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
 EAST WENATCHEE, WASHINGTON

EXHIBIT G, SHEET 56 OF 64 FERC PROJECT NO. 2149



SEE SHEET 56

| LINE | BEARING | LENGTH |
|------|---------------|---------|
| L1 | N 47°07'09" W | 311.38' |
| L2 | N 48°32'27" W | 174.28' |
| L3 | N 43°23'30" W | 136.79' |
| L4 | N 38°18'17" W | 126.40' |
| L5 | N 49°45'58" W | 203.30' |
| L6 | N 47°21'10" W | 351.17' |
| L7 | N 50°37'18" W | 202.85' |
| L8 | N 50°32'15" W | 271.32' |
| L9 | N 44°46'34" W | 284.45' |
| L10 | N 49°12'18" W | 203.70' |
| L11 | N 45°10'25" W | 235.69' |
| L12 | N 45°59'01" W | 272.68' |
| L13 | N 50°32'46" W | 202.35' |
| L14 | N 78°26'05" W | 128.08' |
| L15 | N 58°09'16" W | 210.15' |
| L16 | N 48°08'11" W | 163.43' |
| L17 | N 48°05'55" W | 80.45' |
| L18 | N 43°04'13" W | 310.37' |
| L19 | N 47°55'06" W | 154.08' |
| L20 | N 75°59'37" W | 135.80' |
| L21 | N 47°21'47" W | 322.46' |
| L22 | N 57°47'33" W | 122.27' |
| L23 | N 47°52'21" E | 33.03' |
| L24 | N 48°22'31" W | 90.52' |
| L25 | N 37°30'06" W | 126.45' |
| L26 | N 37°03'44" W | 100.54' |
| L27 | N 22°20'19" W | 87.19' |
| L28 | N 50°38'53" W | 155.66' |
| L29 | N 57°18'47" W | 241.54' |
| L30 | N 62°19'48" W | 211.64' |
| L31 | N 49°17'18" W | 212.71' |
| L32 | N 55°48'43" W | 692.58' |
| L33 | N 47°17'04" W | 163.49' |
| L34 | N 47°17'04" W | 79.35' |
| L35 | N 78°03'14" W | 154.33' |
| L36 | S 36°37'44" E | 107.00' |
| L37 | S 55°38'25" E | 161.33' |
| L38 | S 71°51'02" E | 333.00' |
| L39 | S 78°30'05" E | 213.70' |
| L40 | S 74°53'28" E | 210.40' |
| L41 | S 76°42'00" E | 175.30' |
| L42 | S 68°58'27" E | 181.08' |
| L43 | S 63°38'05" E | 96.00' |
| L44 | S 51°05'08" E | 191.97' |
| L45 | S 53°08'09" E | 154.43' |
| L46 | S 48°23'49" E | 215.12' |
| L47 | S 49°07'26" E | 142.18' |
| L48 | S 42°10'30" E | 123.00' |
| L49 | S 40°18'11" E | 202.50' |
| L50 | S 37°11'20" E | 102.15' |
| L51 | S 40°34'21" E | 380.09' |
| L52 | S 27°27'00" E | 94.70' |
| L53 | S 45°40'06" E | 190.21' |
| L54 | S 30°45'01" E | 233.68' |
| L55 | S 37°30'50" E | 240.49' |
| L56 | S 30°23'43" E | 325.85' |
| L57 | S 33°51'44" E | 48.42' |
| L58 | S 33°48'28" E | 153.79' |
| L59 | S 39°33'51" E | 153.83' |
| L60 | S 64°17'55" E | 67.08' |
| L61 | S 29°20'03" E | 68.07' |
| L62 | S 46°56'41" E | 234.92' |
| L63 | S 58°23'29" E | 128.02' |
| L64 | S 63°59'37" E | 157.49' |
| L65 | N 23°47'39" E | 103.24' |
| L66 | S 24°07'28" E | 71.50' |
| L67 | S 35°20'13" W | 129.91' |
| L68 | S 54°40'04" E | 384.29' |
| L69 | S 55°12'57" E | 263.85' |
| L70 | S 58°52'03" E | 100.02' |
| L71 | N 44°44'22" E | 63.86' |
| L72 | S 22°52'54" W | 62.47' |
| L73 | S 53°53'03" E | 91.45' |
| L74 | S 47°11'10" E | 100.85' |
| L75 | S 32°01'43" E | 96.42' |
| L76 | S 52°09'33" E | 380.81' |
| L77 | S 44°33'14" E | 306.99' |
| L78 | S 53°03'22" E | 248.29' |



LEGEND

| | | | |
|----------------------------|---|-----------------------------|---|
| EXHIBIT G PROJECT BOUNDARY | — | ORIGINAL STONE | — |
| WATER LINE | — | BRASS CAP | — |
| MEANDER LINE | — | ALUMINUM CAP | — |
| RECREATION SITE | — | REBAR WITH CAP | — |
| WILDLIFE AREA | — | AUDITOR FILE NUMBER | — |
| | | LAND CORNER RECORD | — |
| | | BUREAU OF LAND MANAGEMENT | — |
| | | BUREAU OF RECLAMATION | — |
| | | BUREAU OF INDIAN AFFAIRS | — |
| | | UNITED STATES ARMY | — |
| | | CORPS OF ENGINEERS | — |
| | | WASHINGTON STATE DEPARTMENT | — |
| | | OF NATURAL RESOURCES | — |
| | | W.D.N.R. | — |

| | | | | | |
|---|---|-------|---|-----------|---|
| SECTION CORNER (AS NOTED) | — | FOUND | — | NOT FOUND | — |
| SECTION CORNER ON A TOWNSHIP OR RANGE LINE (AS NOTED) | — | | | | |
| QUARTER CORNER (AS NOTED) | — | | | | |
| QUARTER CORNER ON A TOWNSHIP OR RANGE LINE (AS NOTED) | — | | | | |
| MEANDER CORNER (AS NOTED) | — | | | | |
| MONUMENT (AS NOTED) | — | | | | |

MAP PROJECTION / BASIS OF BEARING

UNITS: U.S. SURVEY FEET
 HORIZONTAL DATUM: NAD 83/1981 ADJUSTMENT
 VERTICAL DATUM: NGVD 1929
 PROJECTION: WASHINGTON STATE COORDINATE SYSTEM-NORTH ZONE
 GEOID: GEOID 99 (CONUS)

BEARINGS ARE BASED ON THE WASHINGTON STATE COORDINATE SYSTEM, NORTH ZONE, DERIVED FROM GPS OBSERVATIONS. THE DISTANCES SHOWN ON THIS MAP HAVE BEEN PROJECTED TO THE WASHINGTON STATE PLANE COORDINATE GRID. MULTIPLY THE DISTANCES SHOWN BY A FACTOR OF 1.00009144 TO OBTAIN THE ACTUAL GROUND DISTANCE.

META DATA AS DERIVED BY GPS OBSERVATIONS ON THE MOST WESTERLY BRASS CAP ON THE EAST-WEST CENTERLINE OF SECTION 9 ON THE LEFT BANK OF THE OKANOGAN RIVER SHOWN HEREON, IS AS FOLLOWS:

LATITUDE: N 48° 12' 03.8785"
 LONGITUDE: W 119° 41' 48.2108"
 ELLIPSOID HEIGHT: 726.30'
 ELEVATION: 768.04'
 CONVERGENCE ANGLE: 0° 50' 48"
 COMBINED SCALE FACTOR: 0.99990857

Erlandson
 PROFESSIONAL LAND SURVEYOR
 STATE OF WASHINGTON CERTIFICATE NO. 23279

Map: www.erlandson.com
 REGISTERED: (909) 488-2529
 CREW: (909) 488-4188
 E. WENATCHEE: (509) 884-2802
 OPH/ATA: (909) 754-3326

DRAWN BY: DHD LAYOUT: GSHEET-01
 DATE: 6/02/2008 FILE NO: T31-R25-809
 SCALE: 1" = 300' JOB NO: 95650.00 TOLL FREE: (800) 732-7142

**T. 31 N. R. 25 E. W.M.
 SECTIONS 4 & 9
 OKANOGAN COUNTY**

SURVEYOR'S CERTIFICATE:
 I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREON WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON, AND THAT I AM A LICENSED PROFESSIONAL LAND SURVEYOR IN THE STATE OF WASHINGTON. THE ACCURACY REQUIREMENTS OF THE CODE OF FEDERAL REGULATIONS APPLY.

PROJECT BOUNDARY & LOCATION MAP
 WELLS HYDROELECTRIC PROJECT

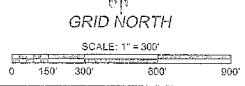
PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
 EAST WENATCHEE, WASHINGTON

EXHIBIT G, SHEET 57 OF 64 FERC PROJECT NO. 2149

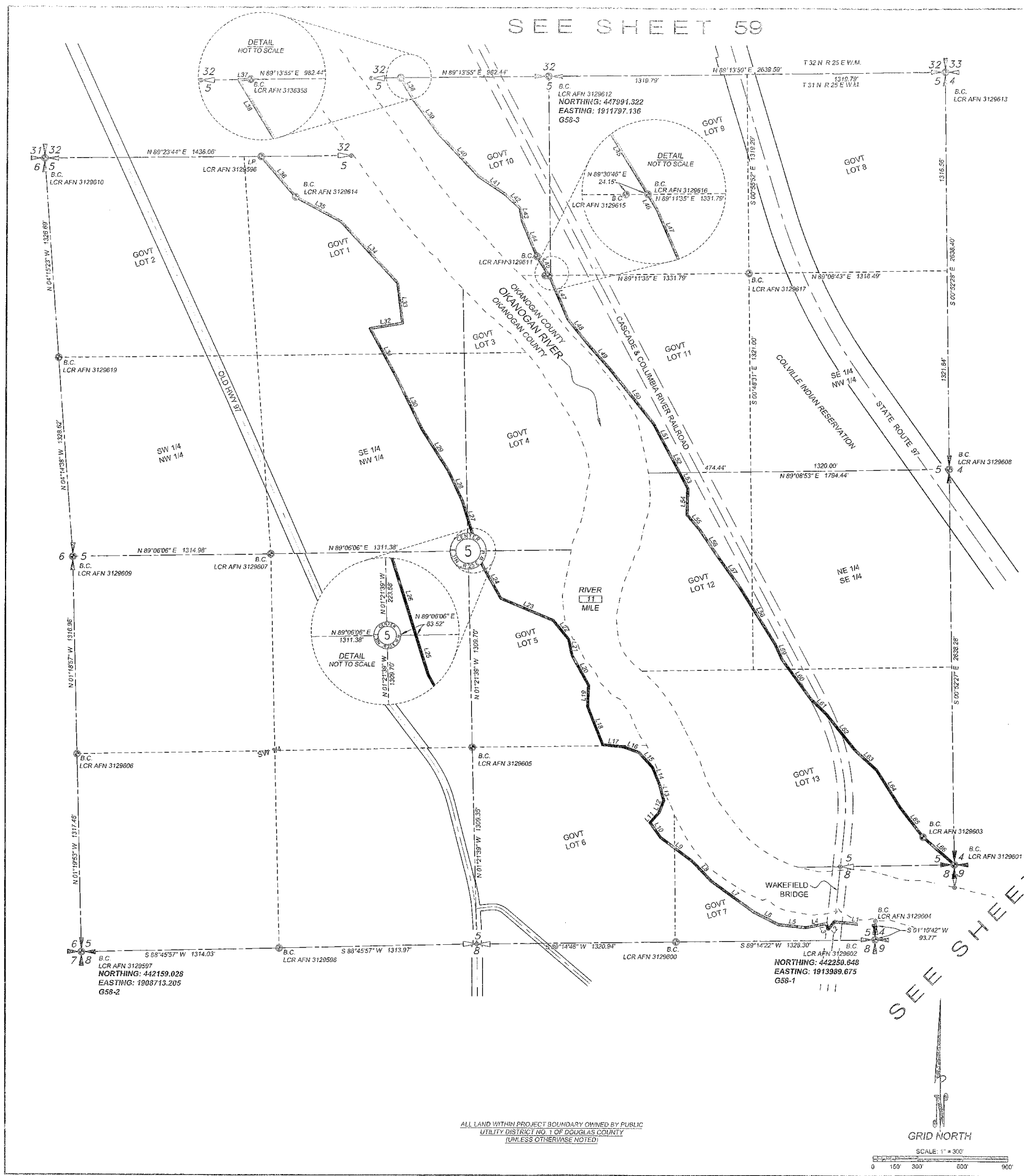
B.C.
 LCR AFN 3136280
 NORTHING: 436959.385
 EASTING: 1914042.842
 G57-2

B.C.
 LCR AFN 3136282
 NORTHING: 437057.189
 EASTING: 1919326.140
 G57-1

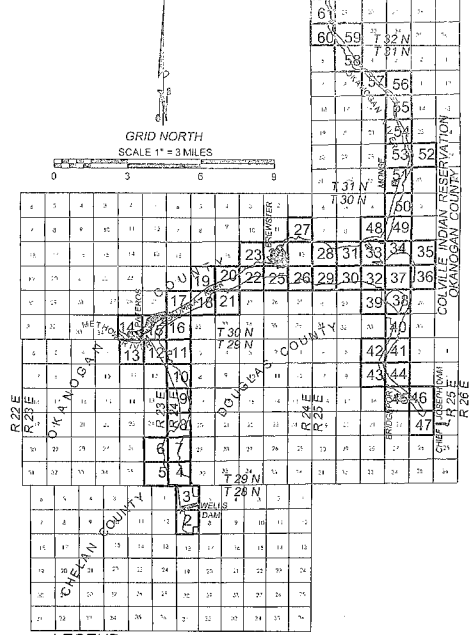
ALL LAND WITHIN PROJECT BOUNDARY OWNED BY PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY (UNLESS OTHERWISE NOTED)



SEE SHEET 59



| LINE | BEARINGS | LENGTH |
|------|---------------|--------|
| L1 | N 84°37'20" W | 278.04 |
| L2 | S 37°01'52" W | 62.03 |
| L3 | N 20°00'09" W | 40.37 |
| L4 | S 79°07'55" W | 140.75 |
| L5 | N 84°12'00" W | 181.70 |
| L6 | N 62°58'13" W | 182.89 |
| L7 | N 54°10'51" W | 348.25 |
| L8 | N 43°52'41" W | 103.16 |
| L9 | N 53°14'53" W | 264.44 |
| L10 | N 35°17'44" W | 121.27 |
| L11 | N 41°21'34" E | 90.77 |
| L12 | N 20°56'02" E | 85.26 |
| L13 | N 14°51'03" W | 108.59 |
| L14 | N 22°19'54" W | 125.62 |
| L15 | N 42°02'27" W | 132.31 |
| L16 | N 70°00'45" W | 108.68 |
| L17 | N 83°55'47" W | 140.38 |
| L18 | N 21°42'39" W | 272.58 |
| L19 | N 02°26'13" E | 142.15 |
| L20 | N 29°00'35" W | 227.83 |
| L21 | N 11°58'24" W | 108.93 |
| L22 | N 39°08'09" W | 163.60 |
| L23 | N 67°19'26" W | 378.60 |
| L24 | N 29°20'47" W | 259.26 |
| L25 | N 17°10'30" W | 93.28 |
| L26 | N 17°10'30" W | 120.58 |
| L27 | N 17°10'40" W | 224.72 |
| L28 | N 24°56'00" W | 230.10 |
| L29 | N 32°23'18" W | 320.81 |
| L30 | N 26°16'30" W | 376.25 |
| L31 | N 28°08'23" W | 379.58 |
| L32 | N 80°08'21" E | 218.00 |
| L33 | N 07°06'57" W | 269.09 |
| L34 | N 43°03'03" W | 556.86 |
| L35 | N 61°36'39" W | 343.52 |
| L36 | N 40°45'29" W | 352.27 |
| L37 | S 29°13'55" W | 2.57 |
| L38 | S 31°24'29" E | 173.76 |
| L39 | S 36°55'10" E | 277.83 |
| L40 | S 43°31'46" E | 390.82 |
| L41 | S 56°24'59" E | 211.03 |
| L42 | S 47°48'26" E | 132.49 |
| L43 | S 09°56'42" E | 87.04 |
| L44 | S 23°08'37" E | 265.37 |
| L45 | S 31°41'58" E | 149.18 |
| L46 | S 31°43'05" E | 20.20 |
| L47 | S 23°28'50" E | 296.78 |
| L48 | S 38°59'34" E | 199.03 |
| L49 | S 41°13'46" E | 238.72 |
| L50 | S 38°45'33" E | 461.64 |
| L51 | S 28°07'14" E | 190.84 |
| L52 | S 28°00'39" E | 170.38 |
| L53 | S 28°00'39" E | 118.99 |
| L54 | S 01°36'04" W | 175.25 |
| L55 | S 40°18'32" E | 129.04 |
| L56 | S 34°17'54" E | 239.49 |
| L57 | S 35°55'35" E | 213.50 |
| L58 | S 31°53'57" E | 482.93 |
| L59 | S 24°03'56" E | 109.91 |
| L60 | S 36°03'54" E | 325.52 |
| L61 | S 45°50'51" E | 146.85 |
| L62 | S 38°36'54" E | 307.99 |
| L63 | S 47°09'26" E | 194.53 |
| L64 | S 32°18'31" E | 295.37 |
| L65 | S 37°41'50" E | 248.33 |
| L66 | S 48°35'46" E | 278.58 |



LEGEND

| | |
|----------------------------|--|
| EXHIBIT G PROJECT BOUNDARY | --- |
| WATER LINE | ~~~~~ |
| MEANDER LINE | - - - - - |
| RECREATION SITE | ▨ |
| WILDLIFE AREA | ▤ |
| D.S. | ORIGINAL STONE |
| B.C. | BRASS CAP |
| A.C. | ALUMINUM CAP |
| R.C. | REBAR WITH CAP |
| A.F.N. | AUDITOR FILE NUMBER |
| LCR | LAND CORNER RECORD |
| B.L.M. | BUREAU OF LAND MANAGEMENT |
| B.O.R. | BUREAU OF RECLAMATION |
| B.I.A. | BUREAU OF INDIAN AFFAIRS |
| U.S.A.C.E. | UNITED STATES ARMY CORPS OF ENGINEERS |
| W.D.N.R. | WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES |

SECTION CORNER (AS NOTED)

| | |
|---|-----------|
| FOUND | NOT FOUND |
| SECTION CORNER ON A TOWNSHIP OR RANGE LINE (AS NOTED) | |
| QUARTER CORNER (AS NOTED) | |
| QUARTER CORNER ON A TOWNSHIP OR RANGE LINE (AS NOTED) | |
| MEANDER CORNER (AS NOTED) | |
| MONUMENT (AS NOTED) | |

MAP PROJECTION / BASIS OF BEARING

UNITS: U.S. SURVEY FEET
 HORIZONTAL DATUM: NAD 83/1981 ADJUSTMENT
 VERTICAL DATUM: NGVD 1929
 PROJECTION: WASHINGTON STATE COORDINATE SYSTEM-NORTH ZONE
 GEOID: GEOID 99 (CONUS)

BEARINGS ARE BASED ON THE WASHINGTON STATE COORDINATE SYSTEM, NORTH ZONE, DERIVED FROM GPS OBSERVATIONS. THE DISTANCES SHOWN ON THIS MAP HAVE BEEN PROJECTED TO THE WASHINGTON STATE PLANE COORDINATE GRID. MULTIPLY THE DISTANCES SHOWN BY A FACTOR OF 1.0002158 TO OBTAIN THE ACTUAL GROUND DISTANCE.

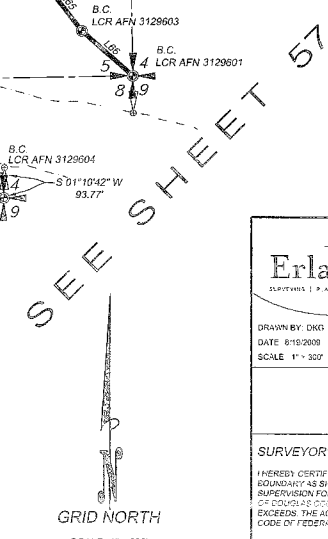
META DATA AS DERIVED BY GPS OBSERVATIONS ON A BRASS CAP AT THE INTERSECTION OF THE NORTH LINE OF GOVERNMENT LOT 11 WITH THE WELLS HYDROELECTRIC PROJECT BOUNDARY ON THE LEFT BANK OF THE OKANOGAN RIVER SHOWN HEREON, IS AS FOLLOWS:

LATITUDE: N 48° 13' 08.9041"
 LONGITUDE: W 119° 43' 12.1491"
 ELLIPSOID HEIGHT: 739.81'
 ELEVATION: 802.34'
 CONVERGENCE ANGLE: 0° 49' 44"
 COMBINED SCALE FACTOR: 0.99990843

B.C. LCR AFN 3129597
 NORTHING: 442159.028
 EASTING: 1908713.205
 G58-2

B.C. LCR AFN 3129602
 NORTHING: 442250.848
 EASTING: 1913989.675
 G58-1

ALL LAND WITHIN PROJECT BOUNDARY OWNED BY PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY (UNLESS OTHERWISE NOTED)



Erlandsen
 SURVEYORS & ENGINEERS
 1111 11th St. SE
 PULLMAN, WA 99163
 (509) 468-2535
 (509) 468-4103
 (509) 468-2502
 (509) 468-3336

DRAWN BY: DND LAYOUT: OSHEE1-58
 DATE: 8/18/2008 FILE NO: 131-H25-005
 SCALE: 1" = 300' JOB NO: 96580-00 TOLL PRIC: 6030 732-7412

T. 31 N. R. 25 E.W.M.
 SECTION 5
 OKANOGAN COUNTY

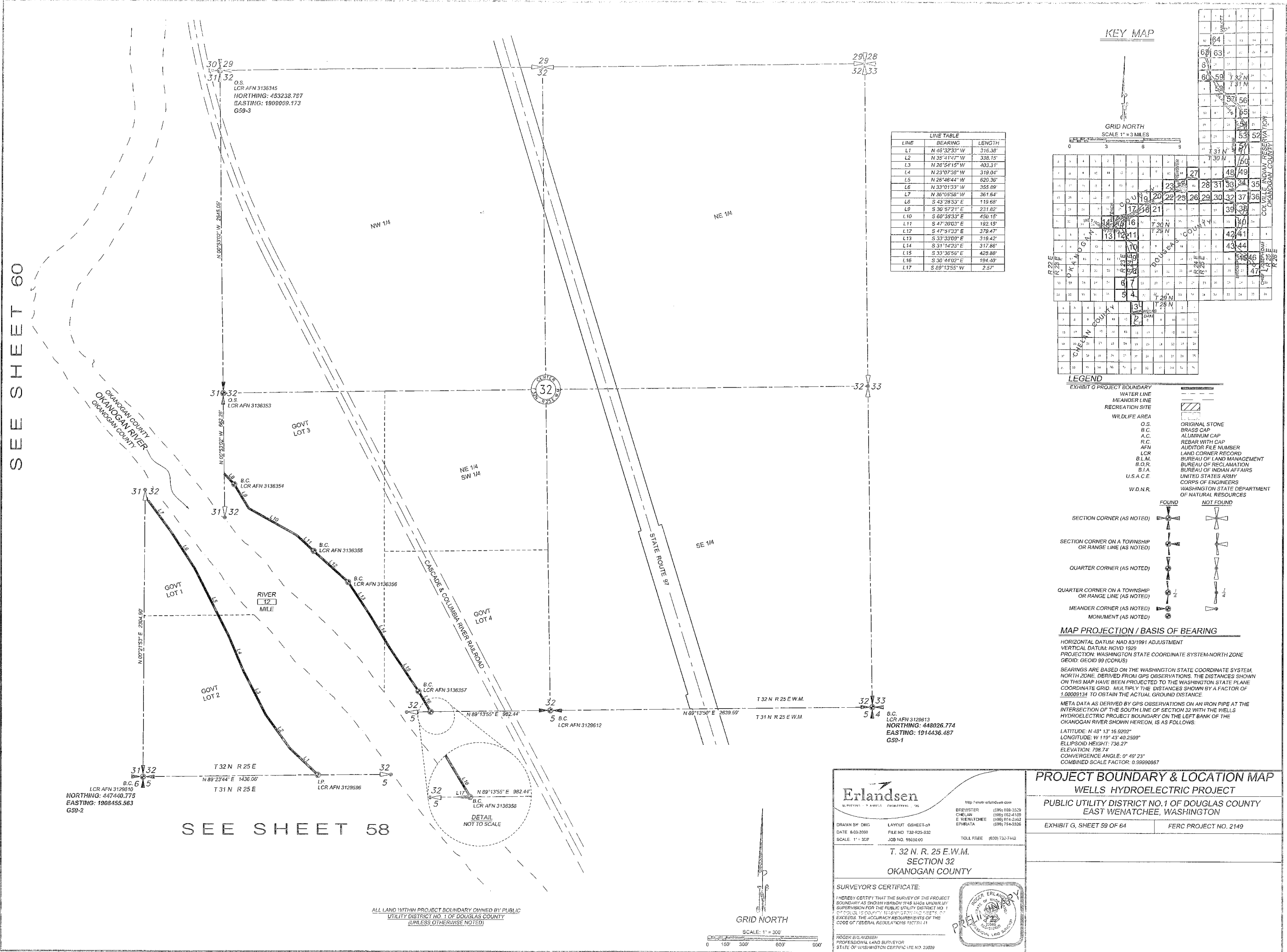
SURVEYOR'S CERTIFICATE:
 I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREON WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON, AND THAT I EXCEEDED THE ACCURACY REQUIREMENTS OF THE CODE OF FEDERAL REGULATIONS 10CFR91.11

RODGER ERLANDSEN
 PROFESSIONAL LAND SURVEYOR
 STATE OF WASHINGTON CERTIFICATE NO. 23589

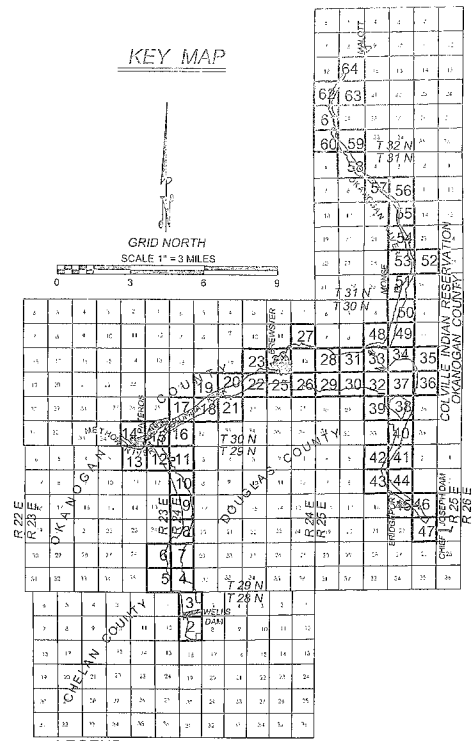
PROJECT BOUNDARY & LOCATION MAP
 WELLS HYDROELECTRIC PROJECT
 PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
 EAST WENATCHEE, WASHINGTON

EXHIBIT G, SHEET 58 OF 64 FERC PROJECT NO. 2149

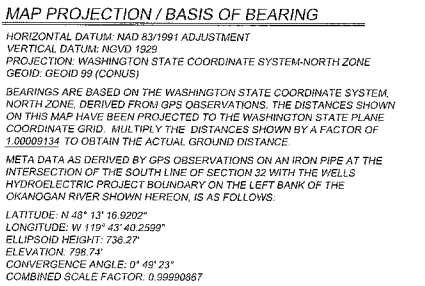
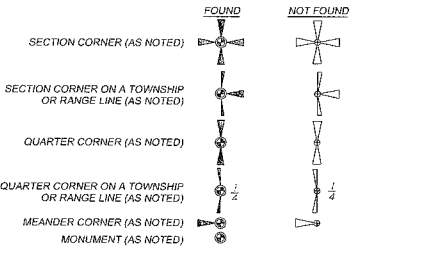
SEE SHEET 60



| LINE | BEARING | LENGTH |
|------|---------------|--------|
| L1 | N 46°32'33" W | 316.38 |
| L2 | N 35°41'47" W | 338.15 |
| L3 | N 28°54'15" W | 403.31 |
| L4 | N 23°07'58" W | 318.04 |
| L5 | N 25°46'44" W | 620.36 |
| L6 | N 33°01'53" W | 355.29 |
| L7 | N 36°09'58" W | 361.64 |
| L8 | S 43°28'53" E | 119.66 |
| L9 | S 30°57'21" E | 231.82 |
| L10 | S 60°35'33" E | 450.15 |
| L11 | S 47°20'03" E | 192.15 |
| L12 | S 47°31'03" E | 379.47 |
| L13 | S 33°30'09" E | 319.42 |
| L14 | S 31°14'23" E | 317.86 |
| L15 | S 33°36'56" E | 428.88 |
| L16 | S 30°44'02" E | 194.40 |
| L17 | S 89°13'55" W | 2.57 |



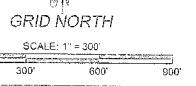
- LEGEND**
- EXHIBIT G PROJECT BOUNDARY
 - WATER LINE
 - MEANDER LINE
 - RECREATION SITE
 - WILDLIFE AREA
 - O.S. ORIGINAL STONE
 - R.C. BRASS CAP
 - A.C. ALUMINUM CAP
 - R.C. REBAR WITH CAP
 - AFN AUDITOR FILE NUMBER
 - LCR LAND CORNER RECORD
 - B.L.M. BUREAU OF LAND MANAGEMENT
 - B.O.R. BUREAU OF RECLAMATION
 - B.I.A. BUREAU OF INDIAN AFFAIRS
 - U.S.A.C.E. UNITED STATES ARMY CORPS OF ENGINEERS
 - W.D.N.R. WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES



LCR AFN 3129810
 NORTHING: 447440.775
 EASTING: 1908455.583
 G59-2

SEE SHEET 58

ALL LAND WITHIN PROJECT BOUNDARY OWNED BY PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY (UNLESS OTHERWISE NOTED)



Erlandsen
 SURVEYING & ENGINEERING, INC.
 http://www.erlandsen.com

DRAWN BY: DMG LAYOUT: OSHEET-09
 DATE: 03-20-09 FILE NO: 132-R25-832
 SCALE: 1" = 300' JOB NO: 95650-01 TOLL FREE: (800) 732-7442

T. 32 N. R. 25 E. W. M.
 SECTION 32
 OKANOGAN COUNTY

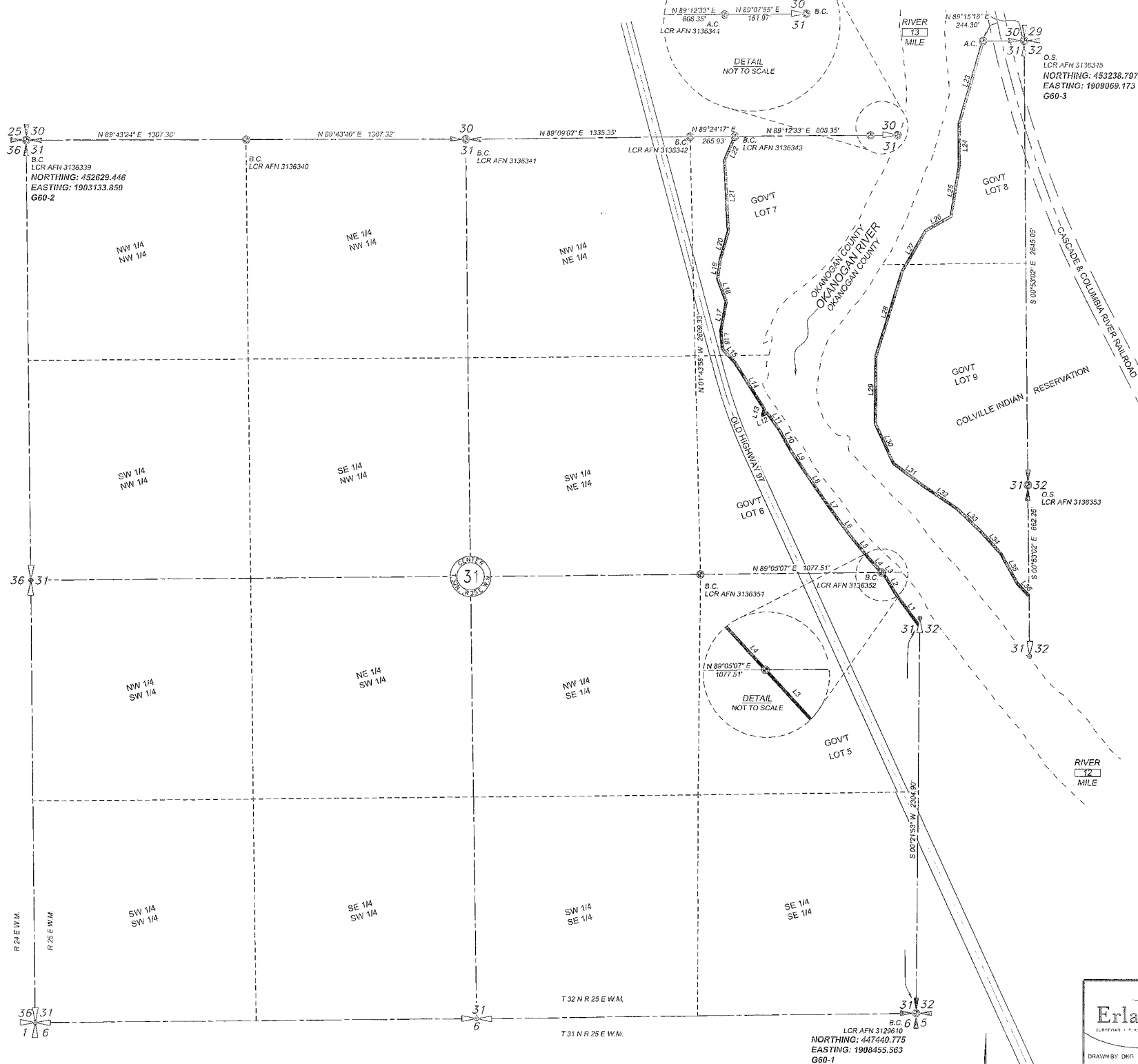
SURVEYOR'S CERTIFICATE:
 I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREBY WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON, AND THAT I EXCEEDED THE ACCURACY REQUIREMENTS OF THE CODES OF FEDERAL REGULATIONS 1927.1-11

ROGER ERLANDSEN
 PROFESSIONAL LAND SURVEYOR
 STATE OF WASHINGTON CERTIFICATE NO. 23899

PROJECT BOUNDARY & LOCATION MAP
 WELLS HYDROELECTRIC PROJECT
 PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
 EAST WENATCHEE, WASHINGTON

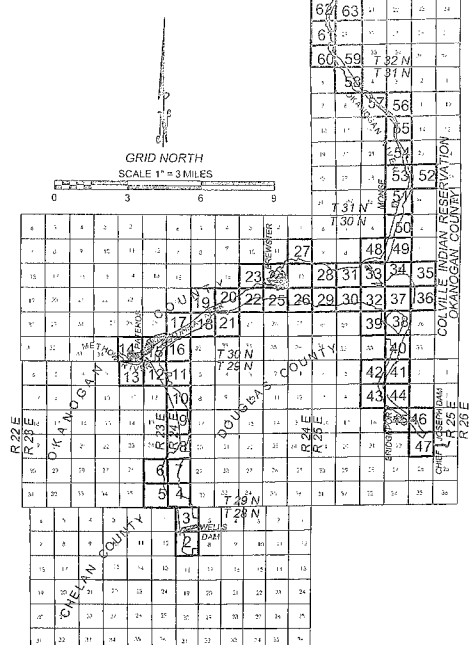
EXHIBIT G, SHEET 59 OF 64 FERC PROJECT NO. 2149

SEE SHEET 61



| LINE | BEARING | LENGTH |
|------|--------------|---------|
| L1 | N 38°05'56\" | 252.48' |
| L2 | N 30°57'38\" | 158.84' |
| L3 | N 42°22'23\" | 37.57' |
| L4 | N 42°27'10\" | 109.80' |
| L5 | N 39°35'42\" | 168.84' |
| L6 | N 37°21'52\" | 135.26' |
| L7 | N 35°31'52\" | 159.08' |
| L8 | N 34°48'43\" | 211.25' |
| L9 | N 33°32'17\" | 120.22' |
| L10 | N 29°22'29\" | 146.83' |
| L11 | N 36°13'14\" | 122.89' |
| L12 | S 63°13'27\" | 30.35' |
| L13 | N 16°10'52\" | 37.89' |
| L14 | N 32°22'03\" | 330.31' |
| L15 | N 42°50'28\" | 109.55' |
| L16 | N 04°24'14\" | 111.03' |
| L17 | N 10°13'42\" | 179.83' |
| L18 | N 20°30'13\" | 146.02' |
| L19 | N 07°11'01\" | 119.13' |
| L20 | N 15°28'53\" | 171.60' |
| L21 | N 03°14'49\" | 423.81' |
| L22 | N 22°31'14\" | 151.82' |
| L23 | S 15°45'24\" | 508.29' |
| L24 | S 00°29'31\" | 255.47' |
| L25 | S 08°47'23\" | 380.86' |
| L26 | S 60°21'36\" | 174.59' |
| L27 | S 29°41'19\" | 275.56' |
| L28 | S 16°56'32\" | 527.85' |
| L29 | S 00°17'34\" | 403.99' |
| L30 | S 24°41'31\" | 260.84' |
| L31 | S 52°54'48\" | 215.56' |
| L32 | S 58°05'40\" | 254.37' |
| L33 | S 40°14'38\" | 195.57' |
| L34 | S 42°11'09\" | 177.59' |
| L35 | S 28°50'29\" | 202.72' |
| L36 | S 43°28'53\" | 102.85' |

KEY MAP



- LEGEND**
- EXHIBIT G PROJECT BOUNDARY
 - WATER LINE
 - MEANDER LINE
 - RECREATION SITE
 - WILDLIFE AREA
 - O.S. ORIGINAL STONE
 - B.C. BRASS CAP
 - A.C. ALUMINUM CAP
 - R.C. REBAR WITH CAP
 - AFN AUDITOR FILE NUMBER
 - LCR LAND CORNER RECORD
 - B.L.M. BUREAU OF LAND MANAGEMENT
 - S.D.C. BUREAU OF RECLAMATION
 - B.I.A. BUREAU OF INDIAN AFFAIRS
 - U.S.A.C.E. UNITED STATES ARMY CORPS OF ENGINEERS
 - W.D.N.R. WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES
- FOUND** **NOT FOUND**
- SECTION CORNER (AS NOTED)
 - SECTION CORNER ON A TOWNSHIP OR RANGE LINE (AS NOTED)
 - QUARTER CORNER (AS NOTED)
 - QUARTER CORNER ON A TOWNSHIP OR RANGE LINE (AS NOTED)
 - MEANDER CORNER (AS NOTED)
 - MONUMENT (AS NOTED)

MAP PROJECTION / BASIS OF BEARING

UNITS: U.S. SURVEY FEET
 HORIZONTAL DATUM: NAD 83/1991 ADJUSTMENT
 VERTICAL DATUM: NGVD 1929
 PROJECTION: WASHINGTON STATE COORDINATE SYSTEM-NORTH ZONE
 GEOID: GEOID 99 (CONUS)

BEARINGS ARE BASED ON THE WASHINGTON STATE COORDINATE SYSTEM, NORTH ZONE, DERIVED FROM GPS OBSERVATIONS. THE DISTANCES SHOWN ON THIS MAP HAVE BEEN PROJECTED TO THE WASHINGTON STATE PLANE COORDINATE GRID. MULTIPLY THE DISTANCES SHOWN BY A FACTOR OF 1.00009122 TO OBTAIN THE ACTUAL GROUND DISTANCE.

META DATA AS DERIVED BY GPS OBSERVATIONS ON A BRASS CAP AT THE INTERSECTION OF THE EAST-WEST CENTERLINE OF SECTION 31 WITH THE WELLS HYDROELECTRIC PROJECT BOUNDARY ON THE RIGHT BANK OF THE OKANOGAN RIVER SHOWN HEREON, IS AS FOLLOWS:

LATITUDE: N 48° 13' 42.9567\"
 LONGITUDE: W 119° 44' 04.0889\"
 ELLIPSOID HEIGHT: 738.58\"
 ELEVATION: 800.55\"
 CONVERGENCE ANGLE: 0° 49' 05\"
 COMBINED SCALE FACTOR: 0.99990878

SEE SHEET 59

Erlandson
 SURVEYORS & ENGINEERS, PLLC
 10000 1st Avenue, Everett, WA 98203
 (425) 835-4188
 (425) 835-2562
 (425) 751-3305

DRAWN BY: DMG LAYOUT: OSHEE140
 DATE: 6/03/2009 FILE NO: 132-R25-S31
 SCALE: 1" = 300' JOB NO: 90550.00 TOLL FREE: (800) 732-7442

**T. 32 N. R. 25 E. W.M.
 SECTION 31
 OKANOGAN COUNTY**

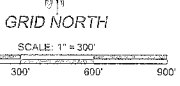
SURVEYOR'S CERTIFICATE:
 I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREON WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON, AND THAT I AM A LICENSED SURVEYOR IN THE STATE OF WASHINGTON. THE ACCURACY REQUIREMENTS OF THE CODE OF FEDERAL REGULATIONS 100FR.11

NOEL ERLANDSON
 PROFESSIONAL LAND SURVEYOR
 STATE OF WASHINGTON CERTIFICATE NO. 23580

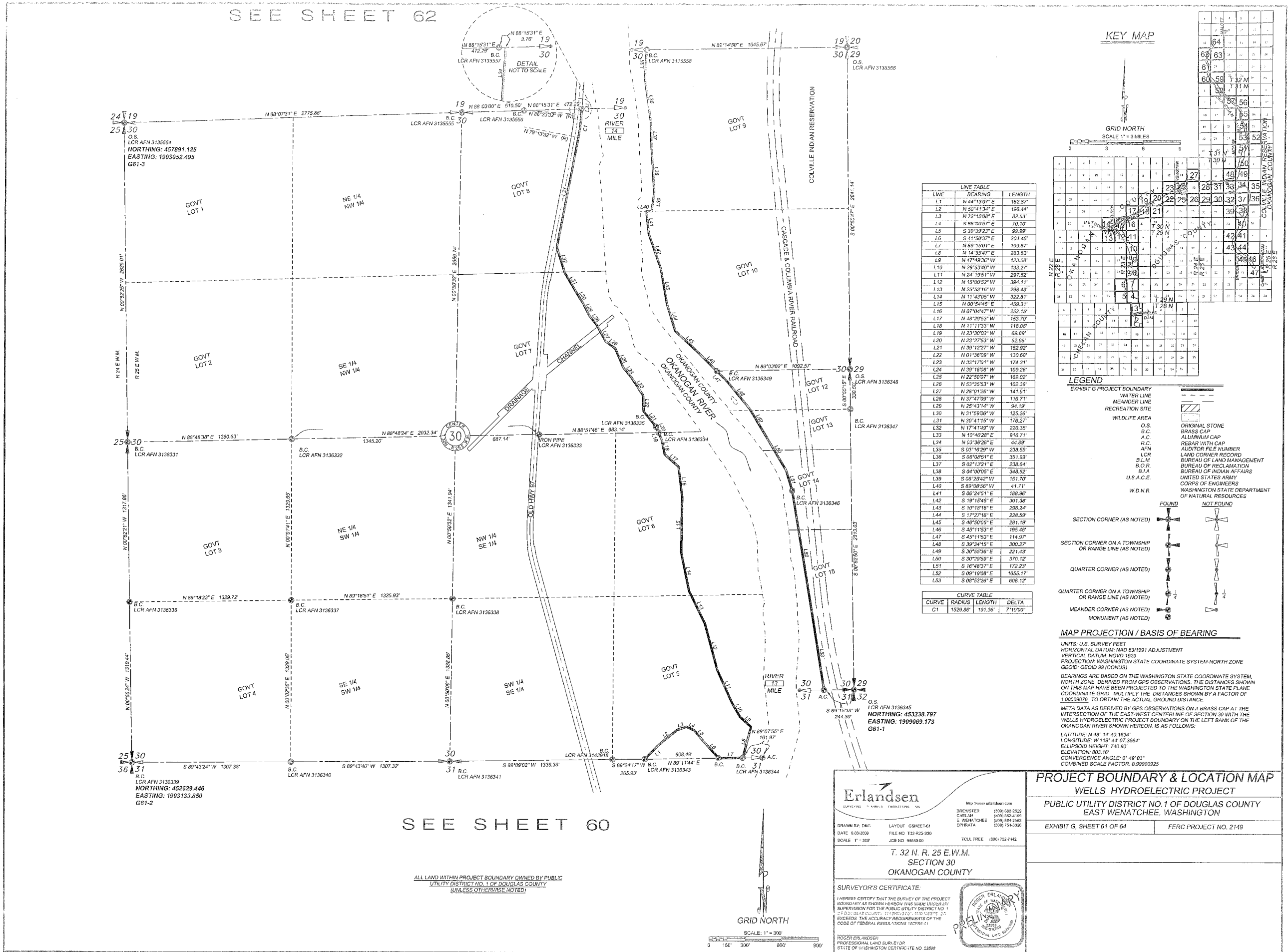
PROJECT BOUNDARY & LOCATION MAP
WELLS HYDROELECTRIC PROJECT
 PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
 EAST WENATCHEE, WASHINGTON

EXHIBIT G, SHEET 60 OF 64 FERC PROJECT NO. 2149

ALL LAND WITHIN PROJECT BOUNDARY OWNED BY PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY (UNLESS OTHERWISE NOTED)



SEE SHEET 62



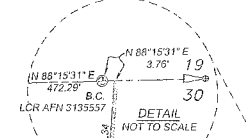
24 19
25 30
O.S.
LCR AFN 3135554
NORTHING: 457891.125
EASTING: 1903052.495
G61-3

25 30
B.C.
LCR AFN 3136331

25 30
36 31
B.C.
LCR AFN 3136339
NORTHING: 452629.446
EASTING: 1903133.850
G61-2

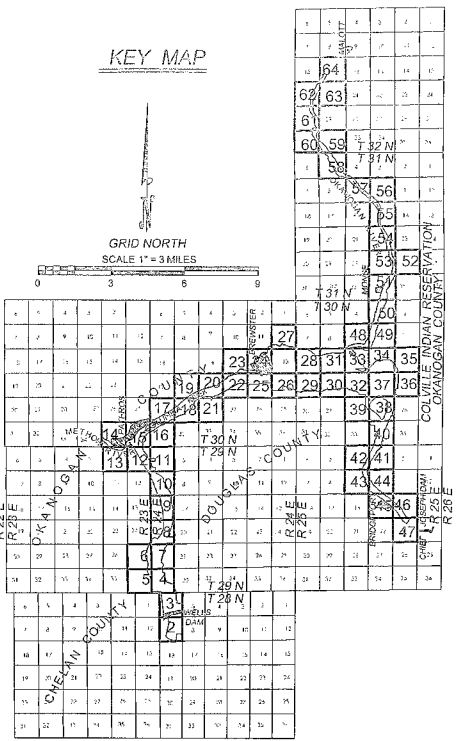
SEE SHEET 60

ALL LAND WITHIN PROJECT BOUNDARY OWNED BY PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY (UNLESS OTHERWISE NOTED)



| LINE | BEARING | LENGTH |
|------|---------------|----------|
| L1 | N 44°13'07" E | 162.87' |
| L2 | N 50°41'34" E | 196.44' |
| L3 | N 72°15'08" E | 82.53' |
| L4 | S 86°50'57" E | 70.10' |
| L5 | S 39°19'23" E | 90.99' |
| L6 | S 41°50'37" E | 204.45' |
| L7 | N 89°15'01" E | 159.87' |
| L8 | N 14°55'47" E | 263.63' |
| L9 | N 47°49'36" W | 123.58' |
| L10 | N 29°53'40" W | 133.27' |
| L11 | N 24°19'51" W | 297.52' |
| L12 | N 15°05'52" W | 394.11' |
| L13 | N 25°53'16" W | 298.43' |
| L14 | N 11°43'05" W | 322.61' |
| L15 | N 00°54'45" E | 459.31' |
| L16 | N 07°04'47" W | 252.15' |
| L17 | N 48°29'53" W | 153.70' |
| L18 | N 11°11'33" W | 118.05' |
| L19 | N 23°30'24" W | 63.69' |
| L20 | N 23°27'53" W | 52.93' |
| L21 | N 39°12'27" W | 162.52' |
| L22 | N 01°38'09" W | 130.69' |
| L23 | N 33°17'01" W | 174.31' |
| L24 | N 39°16'08" W | 109.26' |
| L25 | N 22°50'07" W | 169.02' |
| L26 | N 53°35'53" W | 102.36' |
| L27 | N 28°01'26" W | 141.91' |
| L28 | N 37°47'09" W | 116.71' |
| L29 | N 25°43'14" W | 94.19' |
| L30 | N 31°59'06" W | 125.26' |
| L31 | N 30°41'15" W | 176.27' |
| L32 | N 17°41'49" W | 220.35' |
| L33 | N 10°46'28" E | 916.71' |
| L34 | N 03°36'28" E | 44.89' |
| L35 | S 03°16'29" W | 239.55' |
| L36 | S 08°08'51" E | 351.92' |
| L37 | S 02°13'21" E | 238.64' |
| L38 | S 04°00'05" E | 348.52' |
| L39 | S 08°25'42" W | 151.70' |
| L40 | S 89°08'58" W | 41.71' |
| L41 | S 05°24'51" E | 188.96' |
| L42 | S 19°15'45" E | 301.36' |
| L43 | S 10°18'18" E | 285.24' |
| L44 | S 17°27'16" E | 228.59' |
| L45 | S 46°50'05" E | 281.19' |
| L46 | S 45°11'53" E | 195.48' |
| L47 | S 45°11'53" E | 114.92' |
| L48 | S 39°34'15" E | 300.27' |
| L49 | S 30°55'06" E | 221.43' |
| L50 | S 30°29'59" E | 370.12' |
| L51 | S 16°48'37" E | 172.23' |
| L52 | S 09°19'08" E | 1055.17' |
| L53 | S 00°52'26" E | 608.12' |

| CURVE | RADIUS | LENGTH | DELTA |
|-------|----------|---------|----------|
| C1 | 1529.85' | 191.36' | 7°10'00" |



- LEGEND**
- EXHIBIT G PROJECT BOUNDARY
 - WATER LINE
 - MEANDER LINE
 - RECREATION SITE
 - WILDLIFE AREA
 - O.S. ORIGINAL STONE
 - B.C. BRASS CAP
 - A.C. ALUMINUM CAP
 - R.C. REBAR WITH CAP
 - AFN AUDITOR FILE NUMBER
 - LCR LAND CORNER RECORD
 - B.L.M. BUREAU OF LAND MANAGEMENT
 - B.O.R. BUREAU OF RECLAMATION
 - B.I.A. BUREAU OF INDIAN AFFAIRS
 - U.S.A.C.E. UNITED STATES ARMY CORPS OF ENGINEERS
 - W.D.N.R. WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES
- SECTION CORNER (AS NOTED)
- SECTION CORNER ON A TOWNSHIP OR RANGE LINE (AS NOTED)
- QUARTER CORNER (AS NOTED)
- QUARTER CORNER ON A TOWNSHIP OR RANGE LINE (AS NOTED)
- MEANDER CORNER (AS NOTED)
- MONUMENT (AS NOTED)

MAP PROJECTION / BASIS OF BEARING

UNITS: U.S. SURVEY FEET
 HORIZONTAL DATUM: NAD 83/1991 ADJUSTMENT
 VERTICAL DATUM: NGVD 1929
 PROJECTION: WASHINGTON STATE COORDINATE SYSTEM-NORTH ZONE
 GEOID: GEOID 99 (CONUS)
 BEARINGS ARE BASED ON THE WASHINGTON STATE COORDINATE SYSTEM, NORTH ZONE, DERIVED FROM GPS OBSERVATIONS. THE DISTANCES SHOWN ON THIS MAP HAVE BEEN PROJECTED TO THE WASHINGTON STATE PLANE COORDINATE GRID. MULTIPLY THE DISTANCES SHOWN BY A FACTOR OF 1.0000976 TO OBTAIN THE ACTUAL GROUND DISTANCE.
 META DATA AS DERIVED BY GPS OBSERVATIONS ON A BRASS CAP AT THE INTERSECTION OF THE EAST-WEST CENTERLINE OF SECTION 30 WITH THE WELLS HYDROELECTRIC PROJECT BOUNDARY ON THE LEFT BANK OF THE OKANOGAN RIVER SHOWN HEREON, IS AS FOLLOWS:
 LATITUDE: N 48° 14' 40.1634"
 LONGITUDE: W 115° 44' 07.3664"
 ELLIPSOID HEIGHT: 740.93'
 ELEVATION: 803.16'
 CONVERGENCE ANGLE: 0° 49' 03"
 COMBINED SCALE FACTOR: 0.99909925

Erlandsen
 SURVEYORS & ENGINEERS, INC.
 1100 1/2 N. 25th St., Suite 100, Wenatchee, WA 98801
 (509) 825-2525
 (509) 825-2100
 (509) 825-2402
 (509) 754-3338

DATE: 6/25/2009
 SCALE: 1" = 300'

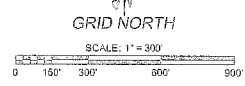
T. 32 N. R. 25 E.W.M. SECTION 30 OKANOGAN COUNTY

SURVEYOR'S CERTIFICATE
 I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREON WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON, AND I CERTIFY THAT I AM A LICENSED SURVEYOR IN THE STATE OF WASHINGTON AND I AM A MEMBER OF THE NATIONAL SOCIETY OF PROFESSIONAL LAND SURVEYORS.

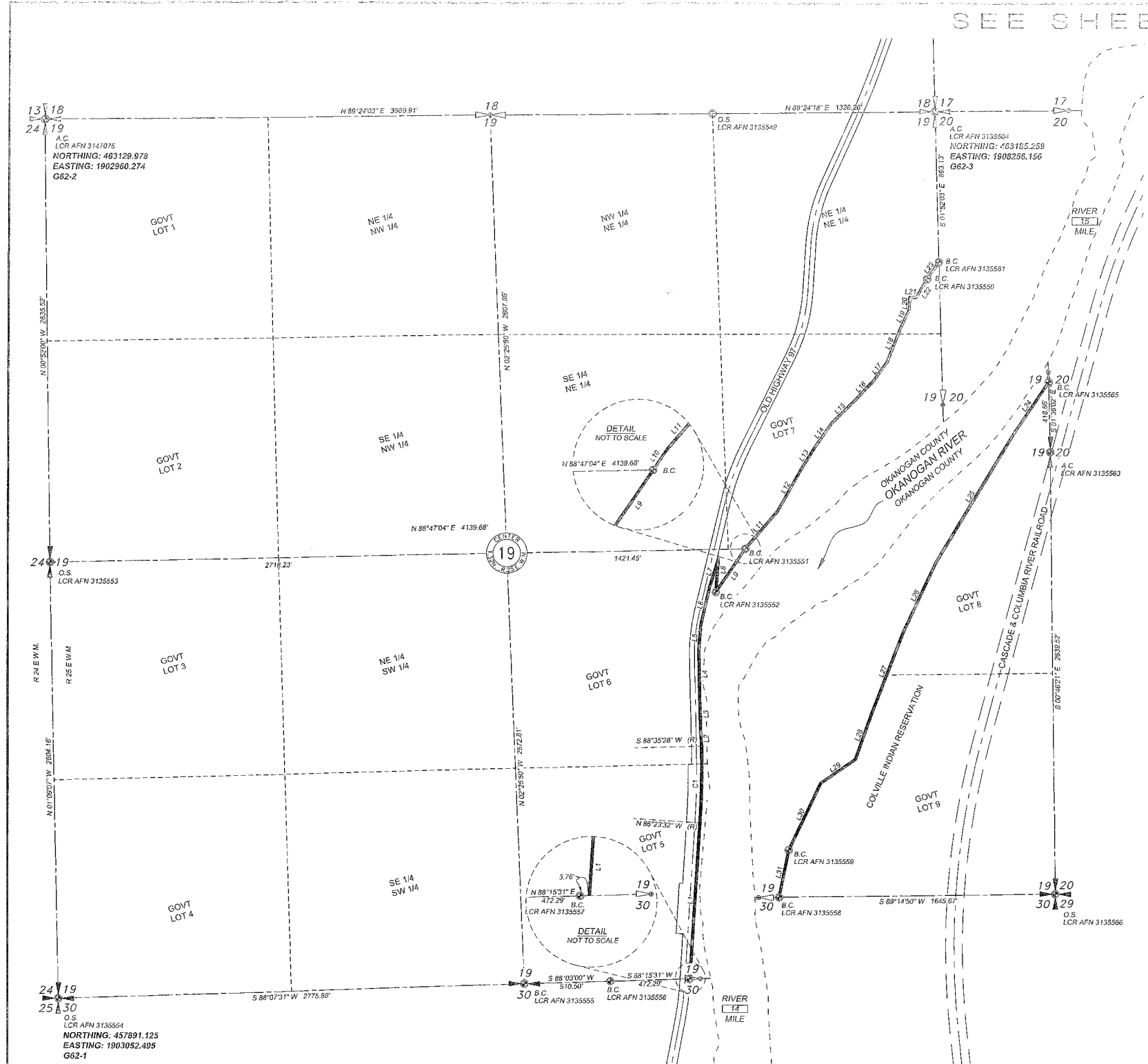
ROGER ERLANDSEN
 PROFESSIONAL LAND SURVEYOR
 STATE OF WASHINGTON CERTIFICATE NO. 23809

PROJECT BOUNDARY & LOCATION MAP
 WELLS HYDROELECTRIC PROJECT
 PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
 EAST WENATCHEE, WASHINGTON

EXHIBIT G, SHEET 61 OF 64 FERC PROJECT NO. 2149



SEE SHEET 64

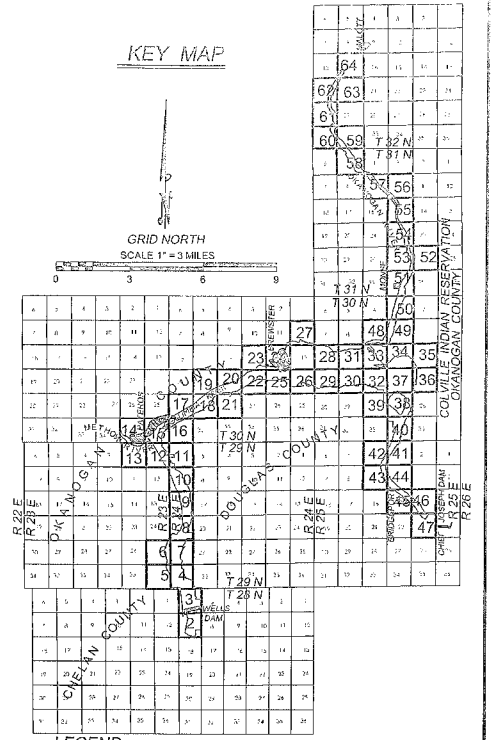


LINE TABLE

| LINE | BEARING | LENGTH |
|------|---------------|---------|
| L1 | N 03°38'29" E | 932.32' |
| L2 | N 02°15'28" W | 96.74' |
| L3 | N 01°39'54" W | 185.88' |
| L4 | N 01°18'02" W | 287.35' |
| L5 | N 04°20'04" E | 155.88' |
| L6 | N 12°50'10" E | 232.71' |
| L7 | N 17°20'38" E | 173.68' |
| L8 | S 04°10'52" W | 186.58' |
| L9 | N 34°05'01" E | 312.17' |
| L10 | N 34°05'00" E | 9.87' |
| L11 | N 40°38'17" E | 283.94' |
| L12 | N 20°13'27" E | 295.33' |
| L13 | N 31°33'17" E | 142.96' |
| L14 | N 34°48'34" E | 177.94' |
| L15 | N 44°58'47" E | 193.48' |
| L16 | N 43°13'57" E | 164.69' |
| L17 | N 38°05'23" E | 132.50' |
| L18 | N 21°39'46" E | 220.13' |
| L19 | N 24°57'38" E | 123.20' |
| L20 | N 00°11'53" E | 70.23' |
| L21 | N 88°28'44" E | 40.38' |
| L22 | N 30°29'27" E | 126.20' |
| L23 | N 34°48'34" E | 122.48' |
| L24 | S 35°41'12" W | 378.73' |
| L25 | S 30°59'42" W | 891.33' |
| L26 | S 24°50'17" W | 457.68' |
| L27 | S 21°11'01" W | 523.65' |
| L28 | S 19°15'26" W | 289.91' |
| L29 | S 65°27'17" W | 249.71' |
| L30 | S 25°20'45" W | 441.09' |
| L31 | S 11°30'24" W | 288.49' |

CURVE TABLE

| CURVE | RADIUS | LENGTH | DELTA |
|-------|----------|---------|----------|
| C1 | 5226.52' | 457.88' | 5°01'00" |



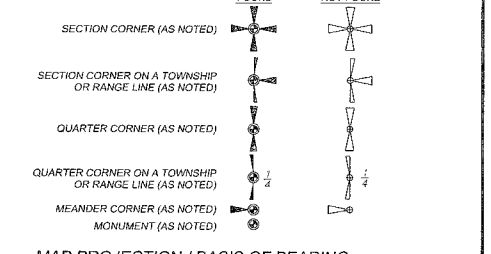
LEGEND

EXHIBIT G PROJECT BOUNDARY

- WATER LINE
- MEANDER LINE
- RECREATION SITE
- WILDLIFE AREA
- O.S.
- B.C.
- A.C.
- R.C.
- AFN
- LCR
- B.L.M.
- B.O.R.
- B.I.A.
- U.S.A.C.E.
- W.D.N.R.

ORIGINAL STONE

- BRASS CAP
- ALUMINUM CAP
- REBAR WITH CAP
- AUDITOR FILE NUMBER
- LAND CORNER RECORD
- BUREAU OF LAND MANAGEMENT
- BUREAU OF RECLAMATION
- BUREAU OF INDIAN AFFAIRS
- UNITED STATES ARMY
- CORPS OF ENGINEERS
- WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES



MAP PROJECTION / BASIS OF BEARING

UNITS: U.S. SURVEY FEET
 HORIZONTAL DATUM: NAD 83/1981 ADJUSTMENT
 VERTICAL DATUM: NGVD 1929
 PROJECTION: WASHINGTON STATE COORDINATE SYSTEM-NORTH ZONE
 GEOID: GEOID 99 (CONUS)

BEARINGS ARE BASED ON THE WASHINGTON STATE COORDINATE SYSTEM, NORTH ZONE, DERIVED FROM GPS OBSERVATIONS. THE DISTANCES SHOWN ON THIS MAP HAVE BEEN PROJECTED TO THE WASHINGTON STATE PLANE COORDINATE GRID. MULTIPLY THE DISTANCES SHOWN BY A FACTOR OF 1.00009020 TO OBTAIN THE ACTUAL GROUND DISTANCE.

META DATA AS DERIVED BY GPS OBSERVATIONS ON A BRASS CAP ON THE LINE COMMON TO SECTIONS 19 & 20, AT ITS INTERSECTION WITH THE WELLS HYDROELECTRIC PROJECT BOUNDARY ON THE LEFT BANK OF THE OKANOGAN RIVER SHOWN HEREON, IS AS FOLLOWS:

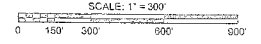
LATITUDE: N 48° 15' 56.4321"
 LONGITUDE: W 119° 43' 51.2932"
 ELLIPSOID HEIGHT: 742.89'
 ELEVATION: 804.70'
 CONVERGENCE ANGLE: 0° 45' 15"
 COMBINED SCALE FACTOR: 0.99999981

SEE SHEET 61

SEE SHEET 63

ALL LAND WITHIN PROJECT BOUNDARY OWNED BY PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY (UNLESS OTHERWISE NOTED)

GRID NORTH



Erlandson
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http://www.erlandson.com

BRUNSWICK (509) 433-2325
 CHELAN (509) 432-1186
 E. WENATCHEE (509) 834-2462
 EPHRATA (509) 754-3338

DRAWN BY: DKO LAYOUT: QSHBET-43
 DATE: 5/18/2016 FILE NO: 132-025-519
 SCALE: 1" = 300' JOB NO: 95858-03 TOLL FREE: (800) 732-7442

T. 32 N. R. 25 E.W.M.
 SECTION 19
 OKANOGAN COUNTY

SURVEYOR'S CERTIFICATE:

I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREON WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON, AND THAT IT MEETS OR EXCEEDS THE ACCURACY REQUIREMENTS OF THE CODE OF FEDERAL REGULATIONS (30CFR 17).

ROGER ERLANDSON
 PROFESSIONAL LAND SURVEYOR
 STATE OF WASHINGTON CERTIFICATE NO. 23369

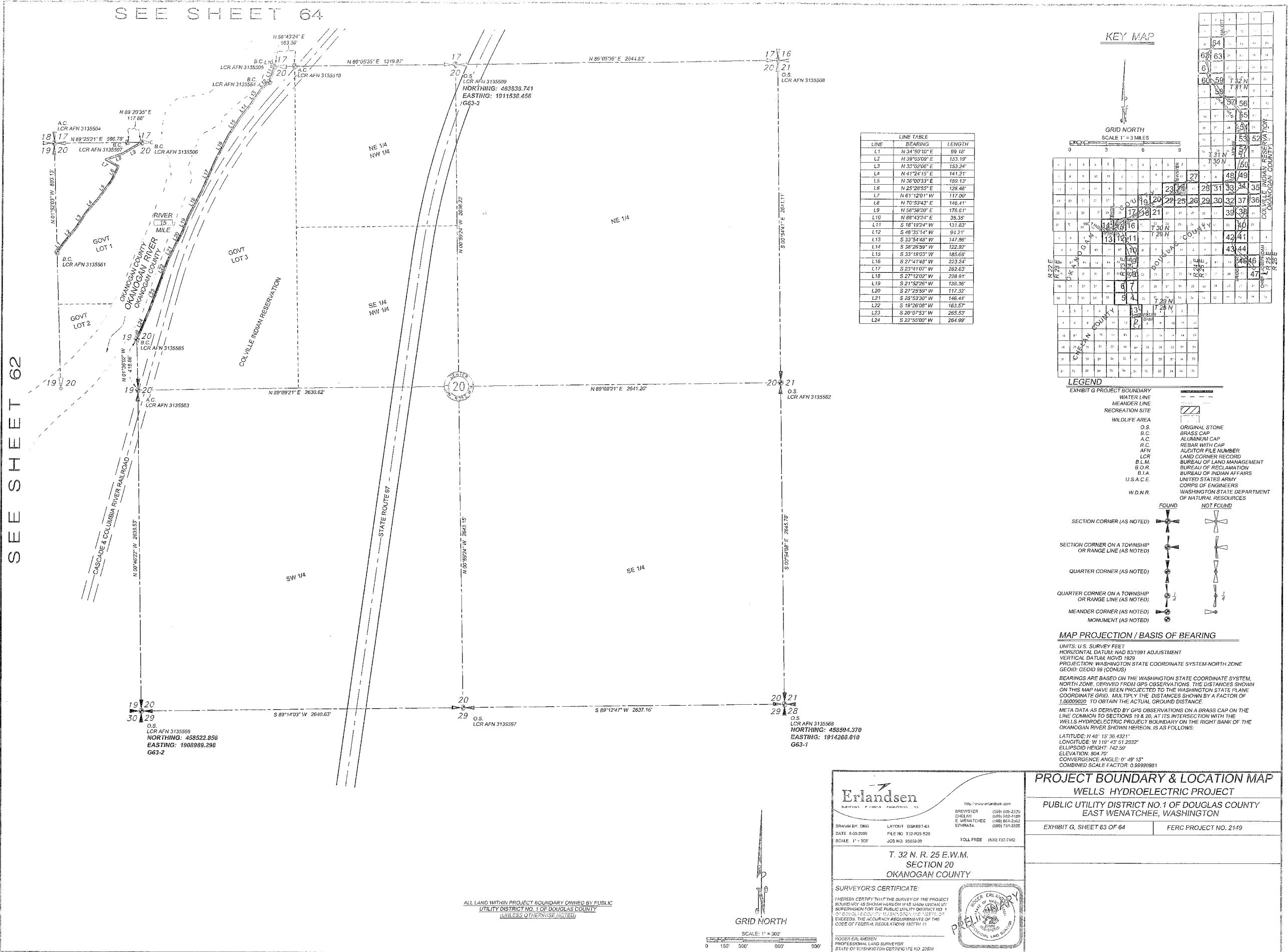
PROJECT BOUNDARY & LOCATION MAP
 WELLS HYDROELECTRIC PROJECT
 PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
 EAST WENATCHEE, WASHINGTON

EXHIBIT G, SHEET 62 OF 64

FERC PROJECT NO. 2149

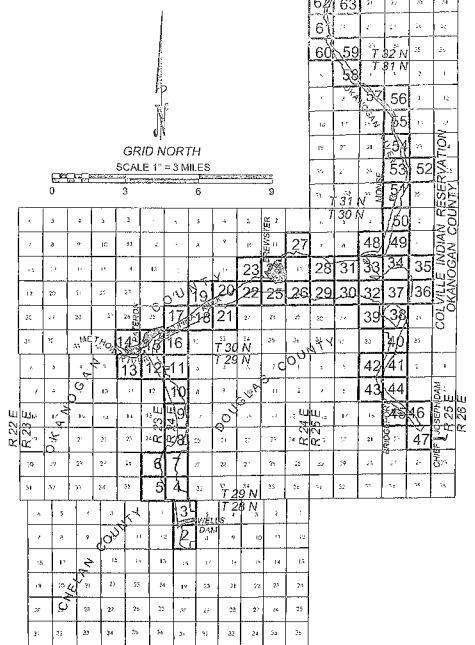
SEE SHEET 64

SEE SHEET 62



| LINE | BEARING | LENGTH |
|------|---------------|---------|
| L1 | N 34°50'10" E | 99.18' |
| L2 | N 39°03'09" E | 153.19' |
| L3 | N 33°02'06" E | 153.24' |
| L4 | N 41°24'15" E | 141.21' |
| L5 | N 30°00'31" E | 169.73' |
| L6 | N 25°28'55" E | 126.46' |
| L7 | N 61°12'01" W | 117.00' |
| L8 | N 70°33'43" E | 146.41' |
| L9 | N 58°58'20" E | 176.61' |
| L10 | N 88°43'24" E | 36.35' |
| L11 | S 18°19'24" W | 131.83' |
| L12 | S 48°35'14" W | 94.21' |
| L13 | S 33°54'48" W | 147.96' |
| L14 | S 38°26'35" W | 122.92' |
| L15 | S 33°19'03" W | 185.66' |
| L16 | S 27°41'48" W | 223.24' |
| L17 | S 23°41'07" W | 262.63' |
| L18 | S 27°12'02" W | 228.91' |
| L19 | S 21°52'26" W | 136.36' |
| L20 | S 27°25'35" W | 117.32' |
| L21 | S 23°53'30" W | 146.44' |
| L22 | S 19°28'08" W | 163.57' |
| L23 | S 20°07'53" W | 265.53' |
| L24 | S 22°55'00" W | 264.99' |

KEY MAP



- LEGEND**
- EXHIBIT G PROJECT BOUNDARY
 - WATER LINE
 - MEANDER LINE
 - RECREATION SITE
 - WILDLIFE AREA
 - O.S. ORIGINAL STONE
 - B.C. BRASS CAP
 - A.C. ALUMINUM CAP
 - R.C. REBAR WITH CAP
 - AFN AUDITOR FILE NUMBER
 - LCR LAND CORNER RECORD
 - B.L.M. BUREAU OF LAND MANAGEMENT
 - B.O.R. BUREAU OF RECLAMATION
 - B.I.A. BUREAU OF INDIAN AFFAIRS
 - U.S.A.C.E. UNITED STATES ARMY
 - W.D.N.R. CORPS OF ENGINEERS
 - WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES

- FOUND NOT FOUND**
- SECTION CORNER (AS NOTED)
 - SECTION CORNER ON A TOWNSHIP OR RANGE LINE (AS NOTED)
 - QUARTER CORNER (AS NOTED)
 - QUARTER CORNER ON A TOWNSHIP OR RANGE LINE (AS NOTED)
 - MEANDER CORNER (AS NOTED)
 - MONUMENT (AS NOTED)

MAP PROJECTION / BASIS OF BEARING

UNITS: U.S. SURVEY FEET
 HORIZONTAL DATUM: NAD 83/1991 ADJUSTMENT
 VERTICAL DATUM: NAVD 1929
 PROJECTION: WASHINGTON STATE COORDINATE SYSTEM-NORTH ZONE
 GEOID: GEOID 98 (CONUS)

BEARINGS ARE BASED ON THE WASHINGTON STATE COORDINATE SYSTEM, NORTH ZONE. DISTANCES SHOWN ON THIS MAP HAVE BEEN PROJECTED TO THE WASHINGTON STATE PLANE COORDINATE GRID. MULTIPLY THE DISTANCES SHOWN BY A FACTOR OF 1.00000020 TO OBTAIN THE ACTUAL GROUND DISTANCE.

META DATA AS DERIVED BY GPS OBSERVATIONS ON A BRASS CAP ON THE LINE COMMON TO SECTIONS 19 & 20, AT ITS INTERSECTION WITH THE WELLS HYDROELECTRIC PROJECT BOUNDARY ON THE RIGHT BANK OF THE OKANOGAN RIVER SHOWN HEREON, IS AS FOLLOWS:

LATITUDE: N 48° 15' 36.4321"
 LONGITUDE: W 119° 45' 51.2932"
 ELLIPSOID HEIGHT: 742.59'
 ELEVATION: 804.70'
 CONVERGENCE ANGLE: 0° 49' 15"
 COMBINED SCALE FACTOR: 0.99999981

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 http://www.erlandson.com

DRAWN BY: DMG LAYOUT: GMSHEET-61 BREVETTER (509) 888-2575
 DATE: 6/03/2009 FILE NO: 132-R25-929 CHELANT (509) 852-4189
 SCALE: 1" = 300' JOB NO: 36550.09 TOLL FREE: (800) 732-7442 ENWATA (509) 862-2662 (509) 794-3328

T. 32 N. R. 25 E.W.M.
 SECTION 20
 OKANOGAN COUNTY

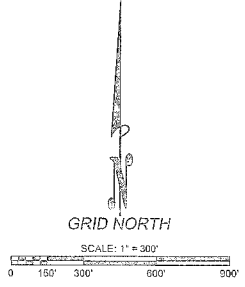
SURVEYOR'S CERTIFICATE:
 I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREON WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON, AND THAT THE ACCURACY OF THE SURVEY EXCEEDS THE ACCURACY REQUIREMENTS OF THE CODE OF FEDERAL REGULATIONS (33CFR) 21

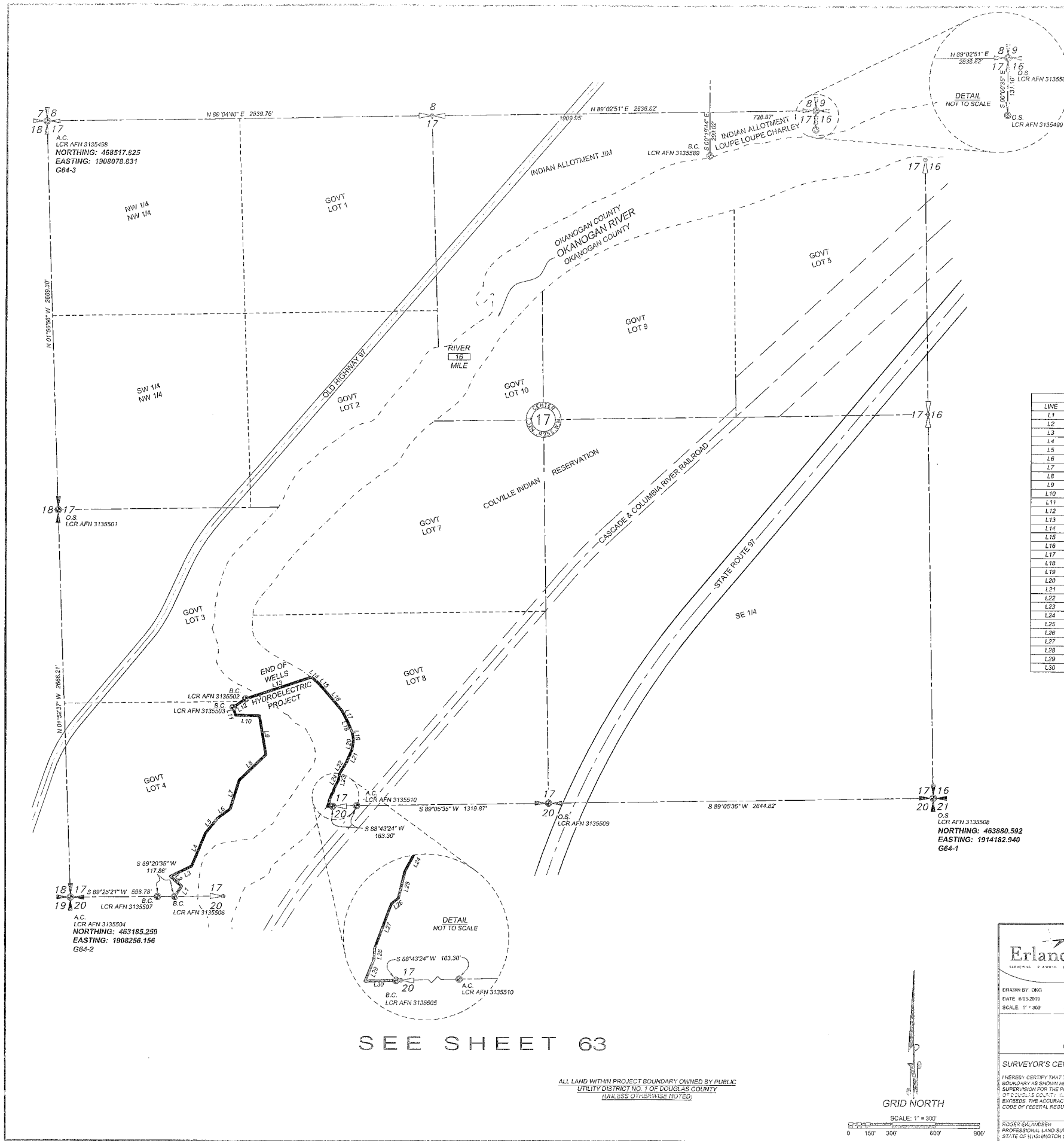
ROGER ERLANDSON
 PROFESSIONAL LAND SURVEYOR
 STATE OF WASHINGTON CERTIFICATE NO. 23599

PROJECT BOUNDARY & LOCATION MAP
 WELLS HYDROELECTRIC PROJECT
 PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
 EAST WENATCHEE, WASHINGTON

EXHIBIT G, SHEET 63 OF 64 FERC PROJECT NO. 2149

ALL LAND WITHIN PROJECT BOUNDARY OWNED BY PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY UNLESS OTHERWISE NOTED

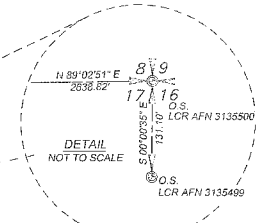
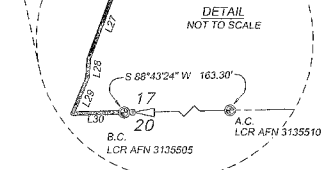




7 8
15 17
A.C.
LCR AFN 3135498
NORTHING: 468517.825
EASTING: 1908078.831
G64-3

18 17
O.S.
LCR AFN 3135501

18 17
19 20
A.C.
LCR AFN 3135504
NORTHING: 463185.258
EASTING: 1908258.156
G64-2

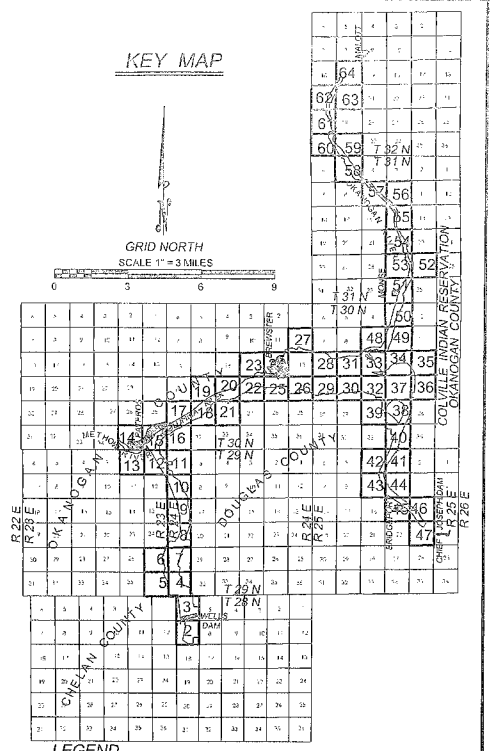
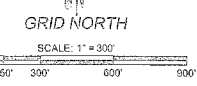


| LINE | BEARING | LENGTH |
|------|---------------|---------|
| L1 | N 33°25'57" E | 84.88' |
| L2 | N 48°43'23" W | 101.62' |
| L3 | N 64°03'38" E | 161.01' |
| L4 | N 22°35'42" E | 246.61' |
| L5 | N 39°08'26" E | 133.44' |
| L6 | N 53°37'43" E | 107.03' |
| L7 | N 17°00'49" E | 206.02' |
| L8 | N 45°57'10" E | 255.11' |
| L9 | N 09°19'42" W | 270.24' |
| L10 | N 68°29'47" W | 164.59' |
| L11 | N 16°27'46" W | 56.01' |
| L12 | N 55°31'08" E | 102.57' |
| L13 | N 71°41'17" E | 479.18' |
| L14 | S 47°57'18" E | 64.68' |
| L15 | S 41°18'34" E | 50.62' |
| L16 | S 40°14'08" E | 195.74' |
| L17 | S 26°58'21" E | 94.12' |
| L18 | S 22°45'39" E | 73.57' |
| L19 | S 10°10'28" E | 51.45' |
| L20 | S 09°03'57" W | 65.21' |
| L21 | S 23°29'33" W | 98.09' |
| L22 | S 30°08'18" W | 89.48' |
| L23 | S 10°56'33" W | 47.56' |
| L24 | S 28°14'14" W | 59.87' |
| L25 | S 13°32'38" W | 31.63' |
| L26 | S 52°13'06" W | 10.19' |
| L27 | S 20°27'48" W | 54.54' |
| L28 | S 04°20'49" W | 13.02' |
| L29 | S 22°28'41" W | 26.48' |
| L30 | N 05°43'24" E | 35.38' |

17 16
20 21
O.S.
LCR AFN 3135508
NORTHING: 463880.592
EASTING: 1914182.940
G64-1

SEE SHEET 63

ALL LAND WITHIN PROJECT BOUNDARY OWNED BY PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY UNLESS OTHERWISE NOTED



LEGEND

| | |
|----------------------------|--|
| EXHIBIT G PROJECT BOUNDARY | --- |
| WATER LINE | --- |
| MEANDER LINE | --- |
| RECREATION SITE | --- |
| WILDLIFE AREA | --- |
| O.S. | ORIGINAL STONE |
| B.C. | BRASS CAP |
| A.C. | ALUMINUM CAP |
| R.C. | REBAR WITH CAP |
| AFN | AUDITOR FILE NUMBER |
| LCR | LAND CORNER RECORD |
| B.L.M. | BUREAU OF LAND MANAGEMENT |
| B.O.R. | BUREAU OF RECLAMATION |
| B.I.A. | BUREAU OF INDIAN AFFAIRS |
| U.S.A.C.E. | UNITED STATES ARMY |
| U.S.A.C.E. | CORPS OF ENGINEERS |
| W.D.N.R. | WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES |

MAP PROJECTION / BASIS OF BEARING

UNITS: U.S. SURVEY FEET
HORIZONTAL DATUM: NAD 83/1991 ADJUSTMENT
VERTICAL DATUM: NAVD 1929
PROJECTION: WASHINGTON STATE COORDINATE SYSTEM-NORTH ZONE
GEOID: GEOID 99 (CONUS)

BEARINGS ARE BASED ON THE WASHINGTON STATE COORDINATE SYSTEM, NORTH ZONE, DERIVED FROM GPS OBSERVATIONS. THE DISTANCES SHOWN ON THIS MAP HAVE BEEN PROJECTED TO THE WASHINGTON STATE PLANE COORDINATE GRID. MULTIPLY THE DISTANCES SHOWN BY A FACTOR OF 1.00009826 TO OBTAIN THE ACTUAL GROUND DISTANCE.

META DATA AS DERIVED BY GPS OBSERVATIONS ON A BRASS CAP AT THE INTERSECTION OF THE SOUTH LINE OF SECTION 17 WITH THE PROJECT BOUNDARY OF THE WELLS HYDROELECTRIC PROJECT ON THE LEFT BANK OF THE OKANOGAN RIVER SHOWN HEREON, IS AS FOLLOWS:
LATITUDE: N 48° 15' 58.3142"
LONGITUDE: W 118° 42' 34.3637"
ELLIPSOID HEIGHT: 745.37'
ELEVATION: 807.45'
CONVERGENCE ANGLE: 0° 49' 27"
COMBINED SCALE FACTOR: 0.99990995

Erlandsen
SURVEYORS & ENGINEERS, INC.

BRUNNENBY: 0800 LAYOUT: 05/08/21
DATE: 6/03/2019 FILE NO: 122-025-517
SCALE: 1" = 300' JOB NO: 95560.00 TOLL FREE: (800) 732-7442

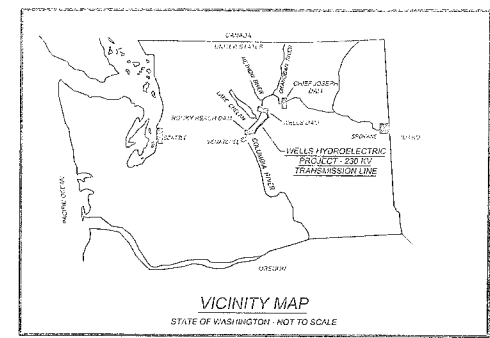
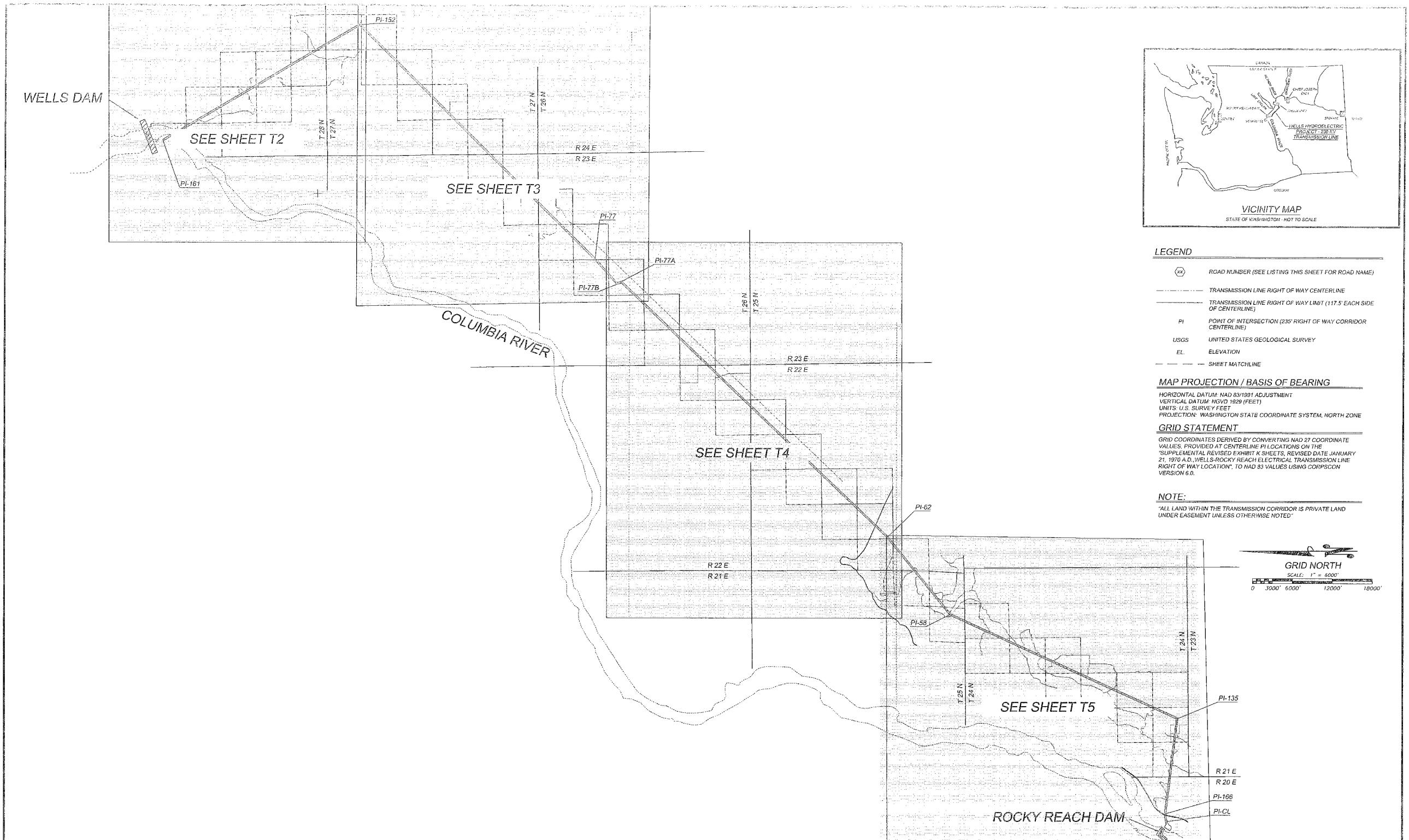
T. 32 N. R. 25 E. W. M.
SECTION 17
OKANOGAN COUNTY

SURVEYOR'S CERTIFICATE:
I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREON WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON, IN ACCORDANCE WITH THE ACTUAL REQUIREMENTS OF THE CODE OF FEDERAL REGULATIONS 102.75-1.

RODNEY GALAMBOS
PROFESSIONAL LAND SURVEYOR
STATE OF WASHINGTON CERTIFICATE NO. 23569

PROJECT BOUNDARY & LOCATION MAP
WELLS HYDROELECTRIC PROJECT
PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
EAST WENATCHEE, WASHINGTON

EXHIBIT G, SHEET 64 OF 64 FERC PROJECT NO. 2149



- LEGEND**
- ROAD NUMBER (SEE LISTING THIS SHEET FOR ROAD NAME)
 - TRANSMISSION LINE RIGHT OF WAY CENTERLINE
 - TRANSMISSION LINE RIGHT OF WAY LIMIT (117.5' EACH SIDE OF CENTERLINE)
 - POINT OF INTERSECTION (235' RIGHT OF WAY CORRIDOR CENTERLINE)
 - UNITED STATES GEOLOGICAL SURVEY
 - ELEVATION
 - SHEET MATCHLINE

MAP PROJECTION / BASIS OF BEARING

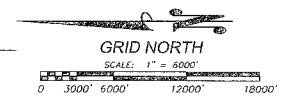
HORIZONTAL DATUM: NAD 83/1981 ADJUSTMENT
 VERTICAL DATUM: MVD 1929 (FEET)
 UNITS: U.S. SURVEY FEET
 PROJECTION: WASHINGTON STATE COORDINATE SYSTEM, NORTH ZONE

GRID STATEMENT

GRID COORDINATES DERIVED BY CONVERTING NAD 27 COORDINATE VALUES, PROVIDED AT CENTERLINE PI LOCATIONS ON THE 'SUPPLEMENTAL REVISED EXHIBIT K SHEETS, REVISED DATE JANUARY 21, 1970 A.D., WELLS-ROCKY REACH ELECTRICAL TRANSMISSION LINE RIGHT OF WAY LOCATION', TO NAD 83 VALUES USING CORPSCON VERSION 6.0.

NOTE:

'ALL LAND WITHIN THE TRANSMISSION CORRIDOR IS PRIVATE LAND UNDER EASEMENT UNLESS OTHERWISE NOTED'



Erlandsen
 SURVEYORS & ENGINEERS
 1100 N. 10TH AVE. SUITE 100
 WENATCHEE, WA 98856
 (509) 646-2529
 (509) 646-4188
 (509) 646-2502
 (509) 755-3325

http://www.erlandsen.com
 DRAWN BY: EBO LAYOUT: T1
 DATE: 6/10/2008 FILE NO: TRANSMISSION
 SCALE: 1"=6000' JOB NO: 98550-00 TOLL FREE: (800) 732-7142

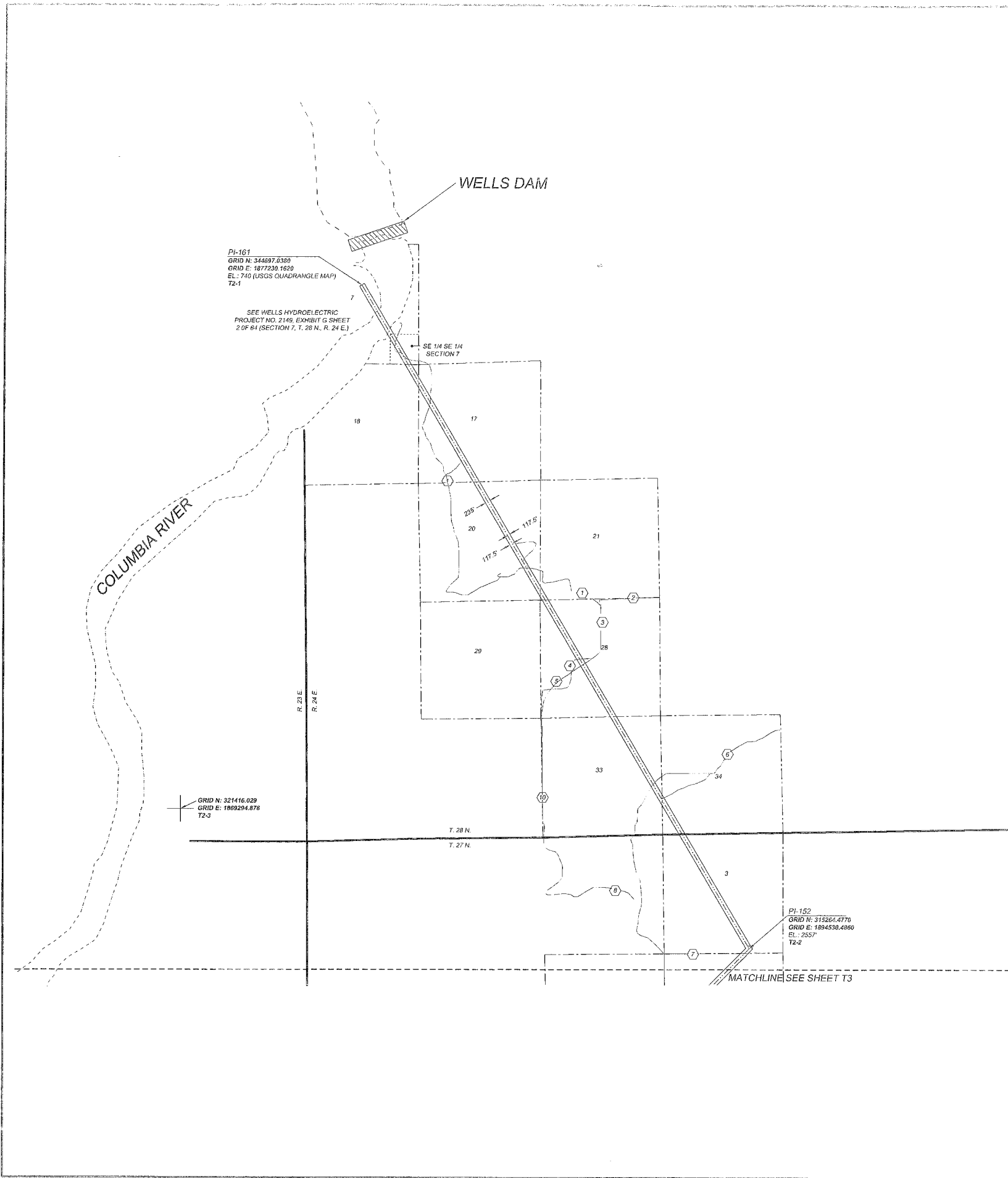
WELLS HYDROELECTRIC PROJECT
230 KV TRANSMISSION LINE
WELLS DAM TO DOUGLAS SWITCH YARD

SURVEYOR'S CERTIFICATE:
 I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREON WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON, IN ACCORDANCE WITH THE ACCURACY REQUIREMENTS OF THE CODE OF FEDERAL REGULATIONS 18CFR101.11.

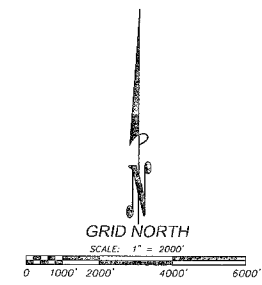
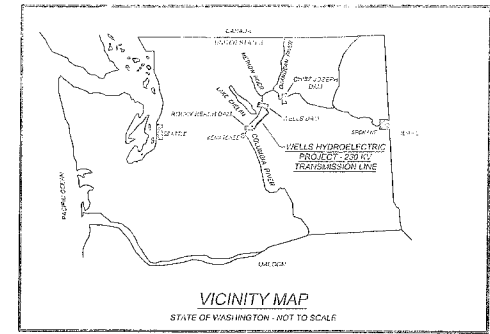
ROGER ERLANDSEN
 PROFESSIONAL LAND SURVEYOR
 STATE OF WASHINGTON CERTIFICATE NO. 23789

PROJECT BOUNDARY & LOCATION MAP
WELLS HYDROELECTRIC PROJECT
PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
EAST WENATCHEE, WASHINGTON

EXHIBIT G, SHEET T1 OF T5 FERC PROJECT NO. 2149



| ROAD # | ROAD NAME |
|--------|---|
| 1 | PEACH ROAD NORTHWEST |
| 2 | 20 ROAD NORTHWEST |
| 3 | C 1/2 ROAD NORTHWEST |
| 4 | 19 1/2 ROAD NORTHWEST |
| 5 | C 3/4 ROAD NORTHWEST |
| 6 | 19 ROAD NORTHWEST |
| 7 | LESLIE ROAD NORTHWEST |
| 8 | C ROAD NORTHWEST |
| 9 | 16 ROAD NORTHWEST/PIONEER SCHOOL ROAD NORTHWEST |
| 10 | D ROAD NORTHWEST |



- LEGEND**
- (X) ROAD NUMBER (SEE LISTING THIS SHEET FOR ROAD NAME)
 - TRANSMISSION LINE RIGHT OF WAY CENTERLINE
 - TRANSMISSION LINE RIGHT OF WAY LIMIT (117.5' EACH SIDE OF CENTERLINE)
 - PI POINT OF INTERSECTION (235' RIGHT OF WAY CORRIDOR CENTERLINE)
 - USGS UNITED STATES GEOLOGICAL SURVEY
 - EL ELEVATION
 - - - SHEET MATCHLINE
 - - - SECTION LINE (FROM USGS QUADRANGLE MAP)

MAP PROJECTION / BASIS OF BEARING
 HORIZONTAL DATUM: NAD 83/1991 ADJUSTMENT
 VERTICAL DATUM: NGVD 1929 (FEET)
 UNITS: U.S. SURVEY FEET
 PROJECTION: WASHINGTON STATE COORDINATE SYSTEM, NORTH ZONE

GRID STATEMENT
 GRID COORDINATES DERIVED BY CONVERTING NAD 27 COORDINATE VALUES PROVIDED AT CENTERLINE PI LOCATIONS ON THE "SUPPLEMENTAL REVISED EXHIBIT K SHEETS, REVISED DATE JANUARY 21, 1970 A.D., WELLS ROCKY REACH ELECTRICAL TRANSMISSION LINE RIGHT OF WAY LOCATION" TO NAD 83 VALUES USING CORPSCON VERSION 6.0.

NOTE:
 ALL LAND WITHIN THE TRANSMISSION CORRIDOR IS PRIVATE LAND UNDER EASEMENT UNLESS OTHERWISE NOTED

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http://www.erlandsen.com

DRAWN BY: EBG LAYOUT: T3
 DATE: 6-10-2009 FILE NO: TRANSMISSION
 SCALE: 1"=2000' JOB NO: 06550.00 TOLL FREE: (206) 732-7142

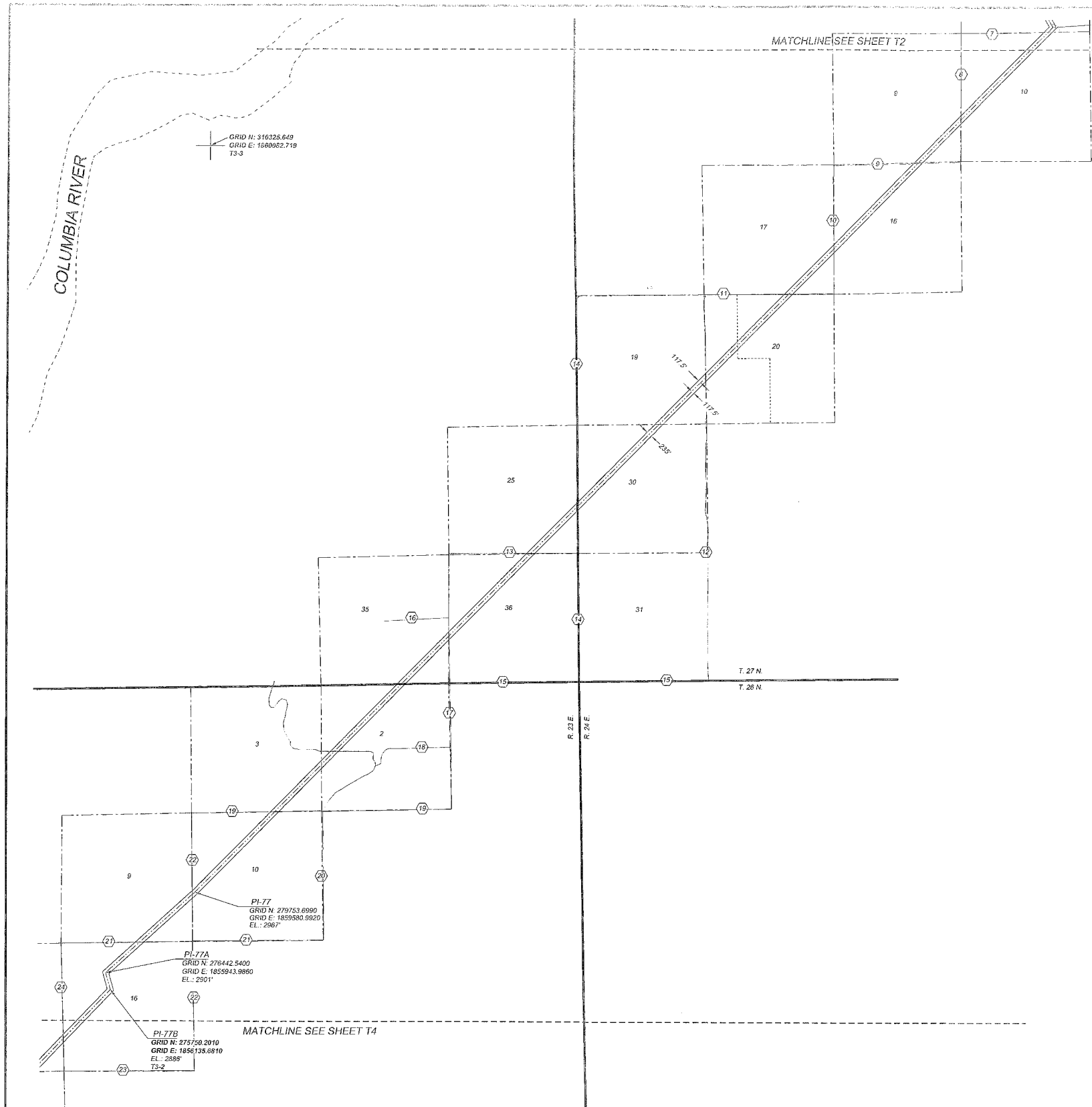
WELLS HYDROELECTRIC PROJECT
 230 KV TRANSMISSION LINE
 WELLS DAM TO DOUGLAS SWITCH YARD

SURVEYOR'S CERTIFICATE:
 I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREON WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON, AND ACCORDING TO THE ACCURACY REQUIREMENTS OF THE CODE OF FEDERAL REGULATIONS (33CFR11.11)

ROGER ERLANDSEN
 PROFESSIONAL LAND SURVEYOR
 STATE OF WASHINGTON CERTIFICATE NO. 23699

PROJECT BOUNDARY & LOCATION MAP
 WELLS HYDROELECTRIC PROJECT
 PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
 EAST WENATCHEE, WASHINGTON

EXHIBIT G, SHEET T2 OF T5 FERC PROJECT NO. 2149



PI-152
 GRID N: 315264.4770
 GRID E: 1894530.4880
 EL.: 2857
 T3-1

GRID N: 316325.649
 GRID E: 1880922.719
 T3-5

PI-77
 GRID N: 279753.8980
 GRID E: 1859580.9820
 EL.: 2867

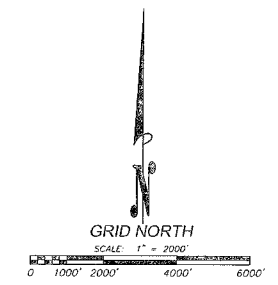
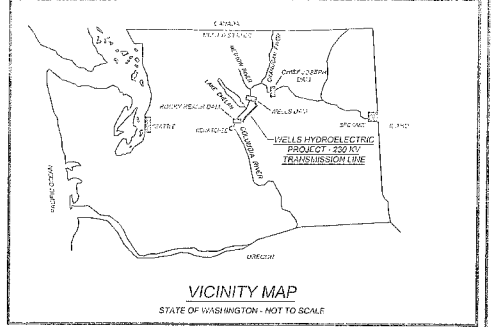
PI-77A
 GRID N: 276442.5400
 GRID E: 1859943.8880
 EL.: 2901

PI-77B
 GRID N: 275750.2910
 GRID E: 1856135.6810
 EL.: 2885
 T3-2

MATCHLINE SEE SHEET T2

MATCHLINE SEE SHEET T4

| ROAD # | ROAD NAME |
|--------|---|
| 7 | LESLIE ROAD NORTHWEST |
| 8 | C ROAD NORTHWEST |
| 9 | 18 ROAD NORTHWEST / PIONEER SCHOOL ROAD NORTHWEST |
| 10 | D ROAD NORTHWEST |
| 11 | MUD SPRINGS ROAD NORTHWEST |
| 12 | E ROAD NORTHWEST / CHRISTENSON ROAD NORTHWEST |
| 13 | 13 ROAD NORTHWEST |
| 14 | LOGAN ROAD NORTHWEST |
| 15 | 12 ROAD NORTHWEST |
| 16 | 12 1/2 ROAD NORTHWEST |
| 17 | LAMJOINE ROAD NORTHWEST |
| 18 | 11 1/2 ROAD NORTHWEST |
| 19 | ROAD 11 NORTHWEST / CLMSTEAD ROAD NORTHWEST |
| 20 | H ROAD NORTHWEST |
| 21 | 10 ROAD NORTHWEST |
| 22 | PIERCE ROAD NORTHWEST |
| 23 | ROAD 9 NORTHWEST |
| 24 | GIBSON ROAD NORTHWEST |



- LEGEND**
- ROAD NUMBER (SEE LISTING THIS SHEET FOR ROAD NAME)
 - TRANSMISSION LINE RIGHT OF WAY CENTERLINE
 - TRANSMISSION LINE RIGHT OF WAY LIMIT (117.5' EACH SIDE OF CENTERLINE)
 - POINT OF INTERSECTION (235' RIGHT OF WAY CORRIDOR CENTERLINE)
 - UNITED STATES GEOLOGICAL SURVEY
 - ELEVATION
 - SHEET MATCHLINE
 - SECTION LINE (FROM USGS QUADRANGLE MAP)

MAP PROJECTION / BASIS OF BEARING
 HORIZONTAL DATUM: NAD 83/1991 ADJUSTMENT
 VERTICAL DATUM: NGVD 1929 (FEET)
 UNITS: U.S. SURVEY FEET
 PROJECTION: WASHINGTON STATE COORDINATE SYSTEM, NORTH ZONE

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NOTE:
 ALL LAND WITHIN THE TRANSMISSION CORRIDOR IS PRIVATE LAND UNDER EASEMENT UNLESS OTHERWISE NOTED

Erlandsen
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DIRTYBY: EBG LAYOUT: Y1
 DATE: 5/10/2009 FILE NO: TRANSMISSION
 SCALE: 1"=2000' JOB NO: 05540-09 TOLL FREE: (800) 732-7442

BREWSTER (509) 829-2026
 CHILAN (509) 824-1100
 E. WIENACHEE (509) 824-2402
 EPHWATA (509) 753-3326

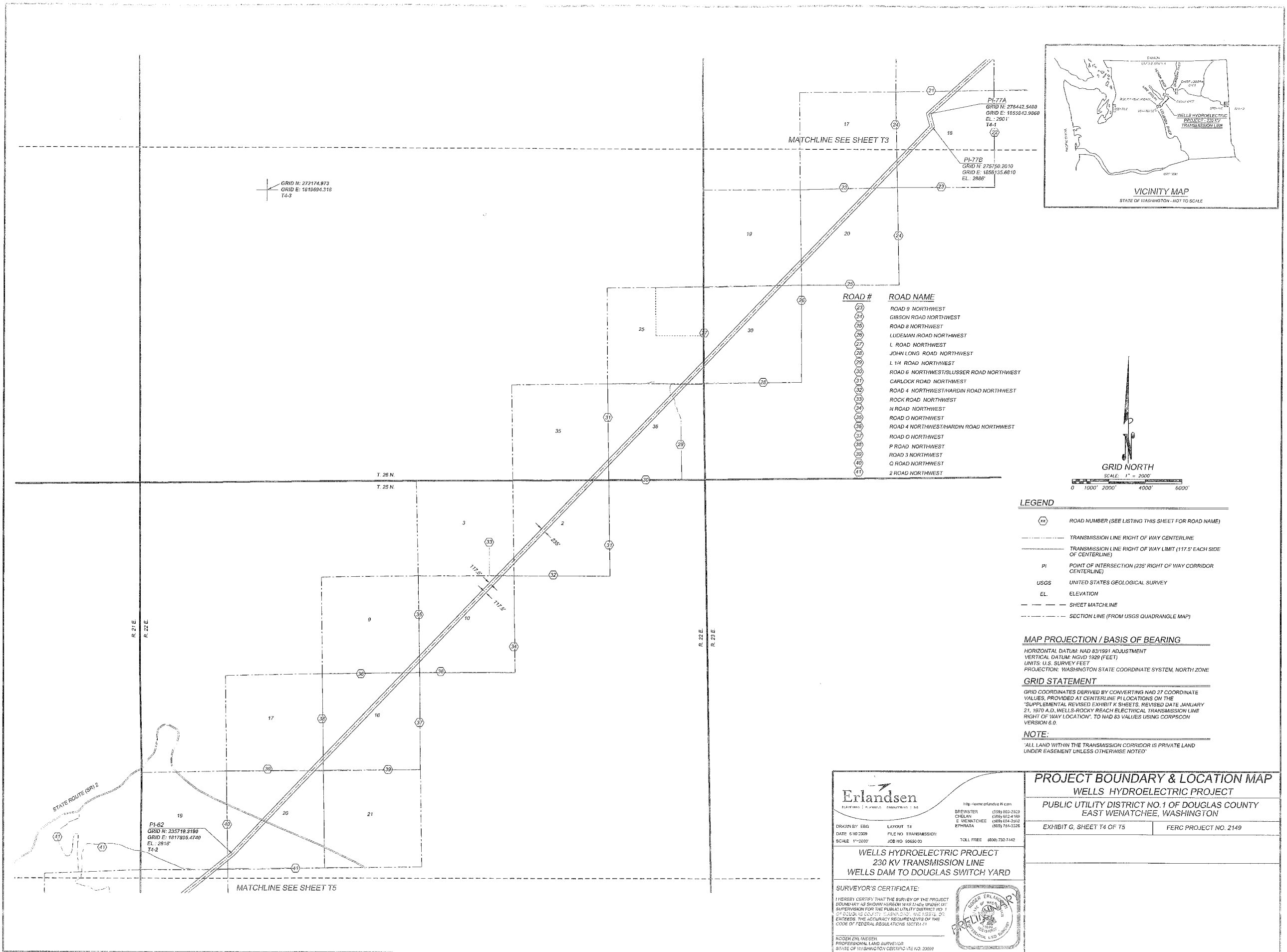
WELLS HYDROELECTRIC PROJECT
230 KV TRANSMISSION LINE
WELLS DAM TO DOUGLAS SWITCH YARD

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 I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREON WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON, AND THE SAME IS IN ACCORDANCE WITH THE ACCURACY REQUIREMENTS OF THE CODE OF FEDERAL REGULATIONS 102.761-11.

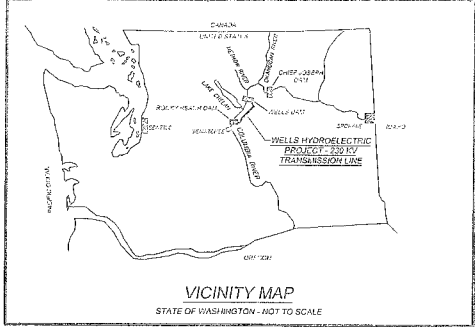
ROGER ERLANDSEN
 PROFESSIONAL LAND SURVEYOR
 STATE OF WASHINGTON CERTIFICATE NO. 23529

PROJECT BOUNDARY & LOCATION MAP
WELLS HYDROELECTRIC PROJECT
 PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
 EAST WENATCHEE, WASHINGTON

EXHIBIT G, SHEET T3 OF T5 FERC PROJECT NO. 2149



GRID N: 272174.973
 GRID E: 1815694.518
 T4-S



| ROAD # | ROAD NAME |
|--------|---|
| 23 | ROAD 9 NORTHWEST |
| 24 | GIBSON ROAD NORTHWEST |
| 25 | ROAD 8 NORTHWEST |
| 26 | LUDEMAN ROAD NORTHWEST |
| 27 | L ROAD NORTHWEST |
| 28 | JOHN LONG ROAD NORTHWEST |
| 29 | L 1/4 ROAD NORTHWEST |
| 30 | ROAD 6 NORTHWEST/SLUSSER ROAD NORTHWEST |
| 31 | CARLOCK ROAD NORTHWEST |
| 32 | ROAD 4 NORTHWEST/HARDIN ROAD NORTHWEST |
| 33 | ROCK ROAD NORTHWEST |
| 34 | N ROAD NORTHWEST |
| 35 | ROAD O NORTHWEST |
| 36 | ROAD 4 NORTHWEST/HARDIN ROAD NORTHWEST |
| 37 | ROAD O NORTHWEST |
| 38 | P ROAD NORTHWEST |
| 39 | ROAD 3 NORTHWEST |
| 40 | Q ROAD NORTHWEST |
| 41 | 2 ROAD NORTHWEST |

- LEGEND**
- ROAD NUMBER (SEE LISTING THIS SHEET FOR ROAD NAME)
 - TRANSMISSION LINE RIGHT OF WAY CENTERLINE
 - TRANSMISSION LINE RIGHT OF WAY LIMIT (117.5' EACH SIDE OF CENTERLINE)
 - POINT OF INTERSECTION (235' RIGHT OF WAY CORRIDOR CENTERLINE)
 - UNITED STATES GEOLOGICAL SURVEY
 - ELEVATION
 - SHEET MATCHLINE
 - SECTION LINE (FROM USGS QUADRANGLE MAP)

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NOTE:
 ALL LAND WITHIN THE TRANSMISSION CORRIDOR IS PRIVATE LAND UNDER EASEMENT UNLESS OTHERWISE NOTED

STATE ROUTE (SR) 2

PI-62
 GRID N: 235719.3190
 GRID E: 1817925.4740
 EL: 2818'
 T4-S

Erlandsen
 SURVEYORS & ENGINEERS
 1100 N. 10TH AVE. SUITE 100
 BELLINGHAM, WA 98225
 TEL: (360) 732-7142
 FAX: (360) 732-7143
 WWW.ERLANDSEN.COM

DRAWN BY: EBG LAYOUT: T4
 DATE: 6/16/2009 FILE NO: TRANSMISSION01
 SCALE: 1"=2000' JOB NO: 55550.00 TOLL FREE: (800) 732-7142

**WELLS HYDROELECTRIC PROJECT
 230 KV TRANSMISSION LINE
 WELLS DAM TO DOUGLAS SWITCH YARD**

SURVEYOR'S CERTIFICATE:
 I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREON WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON, AND THAT IT DOES EXCEED THE ACCURACY REQUIREMENTS OF THE CODE OF FEDERAL REGULATIONS SECTION 171.

ROGER DAN MESSER
 PROFESSIONAL LAND SURVEYOR
 STATE OF WASHINGTON CERTIFICATE NO. 23550

PROJECT BOUNDARY & LOCATION MAP
WELLS HYDROELECTRIC PROJECT
 PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY
 EAST WENATCHEE, WASHINGTON

EXHIBIT G, SHEET T4 OF T5 FERC PROJECT NO. 2149

| ROAD # | ROAD NAME |
|--------|----------------------|
| 42 | REDFIELD ROAD |
| 43 | MELVIN ROAD |
| 44 | ROAD 3 SOUTHWEST |
| 45 | 3 3/4 ROAD SOUTHWEST |
| 46 | T 3/4 ROAD SOUTHWEST |
| 47 | U ROAD SOUTHWEST |
| 48 | RAINEY ROAD |
| 49 | BLUE GRADE ROAD |

GRID N: 219117.633
GRID E: 1781236.181
TS-3

MATCHLINE SEE SHEET T4

PI-62
GRID N: 233719.3190
GRID E: 1817895.4740
EL.: 2810'

PI-58
GRID N: 226331.8240
GRID E: 1805276.6730
EL.: 2882'
TS-1

PI-168
GRID N: 194180.9820
GRID E: 1776355.5050
EL.: 738'

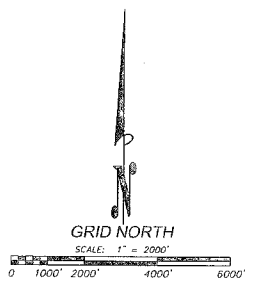
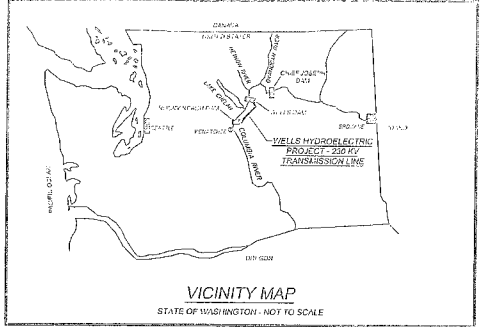
PI-135
GRID N: 192388.2550
GRID E: 1799894.3980
EL.: 3415'
TS-2

PI-CL
GRID N: 193894.8720
GRID E: 1775175.2010
EL.: 730' (USGS QUADRANGLE MAP)

DOUGLAS SWITCH YARD
GRID N: 193826.4124
GRID E: 1774861.9261
TS-3
(VALUES CALCULATED PER REFERENCED EXHIBIT K FROM PI-CL & PI-168)

NOTE:
THE SECTION LINES IN TOWNSHIP 24 AND 23 NORTH RANGE 20 EAST ARE NOT DEPICTED ON THE USGS QUADRANGLE MAPS, AND THEREFORE ARE NOT DEPICTED HEREON.

FEDERAL-BUREAU OF LAND MANAGEMENT
NE 1/4 SW 1/4
SECTION 23
AREA: 7.1 ACRES +/-
(WITHIN RIGHT-OF-WAY)



- LEGEND**
- ROAD NUMBER (SEE LISTING THIS SHEET FOR ROAD NAME)
 - TRANSMISSION LINE RIGHT OF WAY CENTERLINE
 - TRANSMISSION LINE RIGHT OF WAY LIMIT (117.5' EACH SIDE OF CENTERLINE)
 - POINT OF INTERSECTION (235' RIGHT OF WAY CORRIDOR CENTERLINE)
 - UNITED STATES GEOLOGICAL SURVEY
 - ELEVATION
 - SHEET MATCHLINE
 - SECTION LINE (FROM USGS QUADRANGLE MAP)

MAP PROJECTION / BASIS OF BEARING
HORIZONTAL DATUM: NAD 83/1981 ADJUSTMENT
VERTICAL DATUM: NGVD 1929 (FEET)
UNITS: U.S. SURVEY FEET
PROJECTION: WASHINGTON STATE COORDINATE SYSTEM, NORTH ZONE

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NOTE:
"ALL LAND WITHIN THE TRANSMISSION CORRIDOR IS PRIVATE LAND UNDER EASEMENT UNLESS OTHERWISE NOTED"

Erlandsen
SURVEYORS & ENGINEERS REGISTERED IN WA
help: www.erlandsen.com

BREWSTER (509) 848-2328
CIBULAN (509) 854-4163
E. WENATCHEE (509) 884-2302
ETWINGATA (509) 754-3328

DRAWN BY: ERG LAYOUT: TS
DATE: 6/30/2008 FILE NO: TRANSMISSION
SCALE: 1"=2000' JOB NO: 95650.00 TOLL FREE: (800) 732-7142

**WELLS HYDROELECTRIC PROJECT
230 KV TRANSMISSION LINE
WELLS DAM TO DOUGLAS SWITCH YARD**

SURVEYOR'S CERTIFICATE:
I HEREBY CERTIFY THAT THE SURVEY OF THE PROJECT BOUNDARY AS SHOWN HEREON WAS MADE UNDER MY SUPERVISION FOR THE PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY, WASHINGTON, AND I AM A LICENSED SURVEYOR IN THE STATE OF WASHINGTON. THE ACCURACY REQUIREMENTS OF THE CODE OF FEDERAL REGULATIONS 101CFR41.41

ROSEY ENLANSSEN
PROFESSIONAL LAND SURVEYOR
STATE OF WASHINGTON CERTIFICATE NO. 33589

| | |
|---|-----------------------|
| PROJECT BOUNDARY & LOCATION MAP | |
| WELLS HYDROELECTRIC PROJECT | |
| PUBLIC UTILITY DISTRICT NO. 1 OF DOUGLAS COUNTY EAST WENATCHEE, WASHINGTON | |
| EXHIBIT G, SHEET T5 OF T5 | FERC PROJECT NO. 2149 |

**WELLS HYDROELECTRIC PROJECT
FERC NO. 2149**

DRAFT LICENSE APPLICATION

**EXHIBIT H - PLANS AND ABILITY OF APPLICANT TO OPERATE THE
PROJECT**



Prepared by:
Public Utility District No. 1 of Douglas County
1151 Valley Mall Parkway
East Wenatchee, WA 98802
www.douglaspud.org/relicensing

December 2009

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EXHIBIT H - PLANS AND ABILITY OF APPLICANT TO OPERATE THE PROJECT

The following excerpt from the Code of Federal Regulations (CFR) at 18 CFR § 5.18(c) describes the required content of this Exhibit.

- (i) *Information to be supplied by all applicants. All Applicants for a new license under this part must file the following information with the Commission:*
 - (A) *A discussion of the plans and ability of the applicant to operate and maintain the project in a manner most likely to provide efficient and reliable electric service, including efforts and plans to:*
 - (1) *Increase capacity or generation at the project;*
 - (2) *Coordinate the operation of the project with any upstream or downstream water resource projects; and*
 - (3) *Coordinate the operation of the project with the applicant's or other electrical systems to minimize the cost of production.*
 - (B) *A discussion of the need of the applicant over the short and long term for the electricity generated by the project, including:*
 - (1) *The reasonable costs and reasonable availability of alternative sources of power that would be needed by the applicant or its customers, including wholesale customers, if the applicant is not granted a license for the project;*
 - (2) *A discussion of the increase in fuel, capital, and any other costs that would be incurred by the applicant or its customers to purchase or generate power necessary to replace the output of the licensed project, if the applicant is not granted a license for the project;*
 - (3) *The effect of each alternative source of power on:*
 - (i) *The applicant's customers, including wholesale customers;*
 - (ii) *The applicant's operating and load characteristics; and*
 - (iii) *The communities served or to be served, including any reallocation of costs associated with the transfer of a license from the existing licensee.*
 - (C) *The following data showing need and the reasonable cost and availability of alternative sources of power:*
 - (1) *The average annual cost of the power produced by the project, including the basis for that calculation;*
 - (2) *The projected resources required by the applicant to meet the applicant's capacity and energy requirements over the short and long term including:*
 - (i) *Energy and capacity resources, including the contributions from the applicant's generation, purchases, and load modification measures (such as conservation, if considered as a resource), as separate components of the total resources required;*
 - (ii) *A resource analysis, including a statement of system reserve margins to be maintained for energy and capacity;*
 - (iii) *If load management measures are not viewed as resources, the effects of such measures on the projected capacity and energy requirements indicated separately;*
 - (iv) *For alternative sources of power, including generation of additional power at existing facilities, restarting deactivated units, the purchase of power off-system, the construction or purchase and operation of a new power plant, and load management measures such as conservation: The*

total annual cost of each alternative source of power to replace project power; the basis for the determination of projected annual cost; and a discussion of the relative merits of each alternative, including the issues of the period of availability and dependability of purchased power, average life of alternatives, relative equivalent availability of generating alternatives, and relative impacts on the applicant's power system reliability and other system operating characteristics; and the effect on the direct providers (and their immediate customers) of alternate sources of power.

- (D) *If an applicant uses power for its own industrial facility and related operations, the effect of obtaining or losing electricity from the project on the operation and efficiency of such facility or related operations, its workers, and the relate community.*
- (E) *If an applicant is an Indian tribe applying for a license for a project located on the tribal reservation, a statement of the need of such Indian tribe for electricity generated by the project to foster the purposes of the reservation.*
- (F) *A comparison of the impact on the operations and planning of the applicant's transmission system of receiving or not receiving the project license, including:*
 - (1) *An analysis of the effects of any resulting redistribution of power flows on line loading (with respect to applicable thermal, voltage, or stability limits), line losses, and necessary new construction of transmission facilities or upgrading of existing facilities, together with the cost impact of these effects;*
 - (2) *An analysis of the advantages that the applicant's transmission system would provide in the distribution of the project's power; and*
 - (3) *Detailed single-line diagrams, including existing system facilities identified by name and circuit number, that show system transmission elements in relation to the project and other principal interconnected system elements. Power flow and loss data that represent system operating conditions may be appended if applicants believe such data would be useful to show that the operating impacts described would be beneficial.*
- (G) *If the applicant has plans to modify existing project facilities or operations, a statement of the need for, or usefulness of, the modifications, including at least a reconnaissance-level study of the effect and projected costs of the proposed plans and any alternate plans, which in conjunction with other developments in the area would conform with a comprehensive plan for improving or developing the waterway and for other beneficial public uses as defined in Section 10(a)(1) of the Federal Power Act.*
- (H) *If the applicant has no plans to modify existing project facilities or operations, at least a reconnaissance level study to show that the project facilities or operations in conjunction with other developments in the area would conform with a comprehensive plan for improving or developing the waterway and for other beneficial public uses as defined in Section 10(a)(1) of the Federal Power Act.*
- (I) *A statement describing the applicant's financial and personnel resources to meet its obligations under a new license, including specific information to demonstrate that the applicant's personnel are adequate in number and training to operate and maintain the project in accordance with the provisions of the license.*
- (J) *If an applicant proposes to expand the project to encompass additional lands, a statement that the applicant has notified, by certified mail, property owners on the*

- additional lands to be encompassed by the project and governmental agencies and subdivisions likely to be interested in or affected by the proposed expansion.*
- (K) *The applicant's electricity consumption efficiency improvement program, as defined under Section 10(a)(2)(C) of the Federal Power Act, including:*
 - (1) *A statement of the applicant's record of encouraging or assisting its customers to conserve electricity and a description of its plans and capabilities for promoting electricity conservation by its customers; and*
 - (2) *A statement describing the compliance of the applicant's energy conservation programs with any applicable regulatory requirements.*
 - (L) *The names and mailing addresses of every Indian tribe with land on which any part of the proposed project would be located or which the applicant reasonably believes would otherwise be affected by the proposed project.*
- (ii) *Information to be provided by an applicant licensee. An existing licensee that applies for a new license must provide:*
- (A) *The information specified in paragraph (c)(1) of this section.*
 - (B) *A statement of measures taken or planned by the licensee to ensure safe management, operation, and maintenance of the project, including:*
 - (1) *A description of existing and planned operation of the project during flood conditions;*
 - (2) *A discussion of any warning devices used to ensure downstream public safety;*
 - (3) *A discussion of any proposed changes to the operation of the project or downstream development that might affect the existing Emergency Action Plan, as described in subpart C of part 12 of this chapter, on file with the Commission;*
 - (4) *A description of existing and planned monitoring devices to detect structural movement or stress, seepage, uplift, equipment failure, or water conduit failure, including a description of the maintenance and monitoring programs used or planned in conjunction with the devices; and*
 - (5) *A discussion of the project's employee safety and public safety record, including the number of lost-time accidents involving employees and the record of injury or death to the public within the project boundary.*
 - (C) *A description of the current operation of the project, including any constraints that might affect the manner in which the project is operated.*
 - (D) *A discussion of the history of the project and record of programs to upgrade the operation and maintenance of the project.*
 - (E) *A summary of any generation lost at the project over the last five years because of unscheduled outages, including the cause, duration, and corrective action taken.*
 - (F) *A discussion of the licensee's record of compliance with the terms and conditions of the existing license, including a list of all incidents of noncompliance, their disposition, and any documentation relating to each incident.*
 - (G) *A discussion of any actions taken by the existing licensee related to the project which affects the public.*
 - (H) *A summary of the ownership and operating expenses that would be reduced if the project license were transferred from the existing licensee.*
 - (I) *A statement of annual fees paid under part I of the Federal Power Act for the use of any Federal or Indian lands included within the project boundary.*

1.0 EFFICIENT AND RELIABLE ELECTRIC SERVICE

Pursuant to 18 CFR § 5.18(c), the Federal Energy Regulatory Commission (FERC) requires the Public Utility District No. 1 of Douglas County (Douglas PUD) to provide certain information concerning its plans and abilities to operate, maintain, and improve the Wells Hydroelectric Project (Project) in support of its application for a new license. Also required is a description of Douglas PUD's record of operating and managing the Wells Project under the current license.

1.1 Efficiency and Reliability

Douglas PUD has consistently demonstrated its capability to manage, operate, and maintain the Wells Project in a manner that delivers efficient, reliable electricity at low cost and with an outstanding record of environmental stewardship. One example of Douglas PUD's commitment to efficient and reliable operation of the Project is its long-term participation in the Mid-Columbia Hourly Coordination Agreement (HCA), which is described in greater detail in Section 1.3. This Agreement governs the use of water on an hourly and short-term basis among seven mid-Columbia dams to make the most efficient use of water, generating units, and physical characteristics of the associated reservoirs while meeting the needs of the associated environmental resources. The HCA provides flexibility and coordination of project generation through centralized scheduling, thus ensuring cooperation among five different project owners on the Columbia River for public benefit. Reliability is also demonstrated through the consistent achievement of greater than 96 percent generating unit availability at the Wells Project, even though the plant has 10 individual units and a relatively high plant factor (64 percent). The availability of the Project is discussed further in Section 16.0. Douglas PUD has investigated and implemented efficiency improvements in generation at the Wells Project over the past 25 years, and continues to invest in efficiency and reliability improvements at the Project.

Related to demonstrating a record of environmental stewardship, the Wells Project is currently configured with the most efficient juvenile salmon bypass system on the mainstem Columbia River, with a juvenile fish bypass efficiency exceeding 92.0 percent for juvenile downstream migrating Chinook, sockeye and steelhead and a juvenile Project survival¹ rate of 96.2 percent for Chinook and steelhead (Skalski et al. 1996; Bickford et al., 2001).

In 2004, Douglas PUD entered into a long-term agreement to resolve all Project-related impacts to anadromous salmonids. The Wells Anadromous Fish Agreement and Habitat Conservation Plan (HCP) contain measures to protect all five species of anadromous salmonids found at the Wells Project. The objective of the Wells HCP is to achieve no net impact (NNI) for each Plan Species (spring Chinook, summer/fall Chinook, sockeye, steelhead, and coho). A major feature of the Wells HCP is what is termed a "phased implementation plan" to achieve the survival standards. The Wells HCP has three phases within the phased implementation plan. Following the completion of the three-year monitoring and evaluation program in Phase I, the Wells HCP Coordinating Committee determined that the pertinent survival standards had been achieved.

¹ Juvenile Project survival is defined in the Wells HCP (Section 13.14) as the measurement of survival for juvenile Plan Species (spring Chinook, summer/fall Chinook, steelhead, sockeye and coho) over 95% of each species outmigration from tributary mouths and through the Project's reservoir, forebay, dam and tailrace including direct, indirect and delayed mortality, wherever it may occur and can be measured (as it relates to the Wells Project) given the available mark-recapture technology.

Having achieved the survival standards during Phase I, the Wells Project proceeded directly to Phase III. In February 2005, the Wells HCP Coordinating Committee determined that the Wells Project had achieved Phase III (Standard Achieved) for spring Chinook and steelhead, and Phase III (Additional Juvenile Studies) for summer/fall Chinook and sockeye. In December 2007, the Wells HCP Coordinating Committee determined that the Wells Project had achieved Phase III (Additional Juvenile Studies) for coho. Through the implementation of the Wells HCP, all Project-related effects to anadromous salmonids have been fully mitigated through the achievement of NNI.

1.2 Increase in Capacity or Generation

Douglas PUD's most recent load growth projection is 4.07 percent annual average through operating year 2027-2028 (Pacific Northwest Utilities Conference Committee [PNUCC] [2007] through 2017, extrapolated to 2028). Douglas PUD has no current plans to increase capacity or generation at the Project and intends to meet projected load growth within the Douglas PUD service territory by retaining a greater percentage of the Project power that is currently sold to other utilities. Increased capacity at the Wells Project is not currently economically feasible because the Project's existing installed hydraulic capacity exceeds Columbia River flows over 95 percent of the time in all months except May and June, and 84 percent of the time in those months, based on long-term hydrology (see Exhibit B).

Douglas PUD will continue to investigate the potential for improvements to increase power generation under the next license, and will assess options for increases in turbine efficiency within the existing hydraulic capacity of the Wells Project.

1.3 Coordination of Wells Operation with Other Water Resources Projects

The Wells Project is a part of the mid-Columbia River system, and the Project's current operations can best be understood within the context of the operation of that entire system. In total, seven hydroelectric developments constitute the mid-Columbia River system. The furthest upstream facility in this chain is Grand Coulee. With a maximum turbine hydraulic capacity exceeding 280,000 cubic feet per second (cfs) and an active storage volume of 5.2 million acre-feet (MAF), the Grand Coulee operations largely define the mid-Columbia River flow regime, and especially the flow regime at the Wells Project.

Just downstream of the Grand Coulee development is the Chief Joseph Hydroelectric Project, with an installed nameplate capacity of 2,069 megawatts (MW) and a turbine hydraulic capacity of about 213,000 cfs. Both Grand Coulee and Chief Joseph are federally-owned facilities, with their power scheduling and daily production being managed by the Bonneville Power Administration (BPA). The Wells Project is located immediately below the Chief Joseph development and flows at Wells are essentially controlled by the discharges from the upstream federal facilities.

The Wells Project is operated in a coordinated manner with other regional hydroelectric projects through the following treaties and agreements.

1.3.1 Mid-Columbia Hourly Coordination Agreement

In 1972, the owners of the seven dams of the mid-Columbia River system and their power purchasers entered into the Agreement for Hourly Coordination of Projects on the Mid-Columbia River. The agreement calls for a coordinated operation of the seven dams.

The HCA was the result of discussions among all the affected parties. In general, the parties agreed to coordinate the operation of the projects to achieve the following objectives:

1. Coordinate the hydraulic operation of the projects for the purpose of optimizing the amount of energy from the available water consistent with the need to: (1) adjust the total actual generation to match the total requested generation, and (2) operate within all power and non-power requirements;
2. Provide flexibility and coordinated scheduling of Project generation through centralized scheduling, and the use of composite scheduling and accounting procedures;
3. Minimize unnecessary changes in Project generation to avoid frequent unit starts and stops; and
4. Reduce the amount of fluctuation in river flow that could otherwise occur without such coordination.

A total of 17 northwest utilities receive a share of the output from the mid-Columbia system. The HCA requires that the power and non-power constraints of the individual projects be recognized in the coordination process. A goal of the HCA is to reduce the extent and rate of fluctuations in river levels as flow moves downstream from Grand Coulee to Chief Joseph and from Chief Joseph Dam to Wells, Rocky Reach, Rock Island, Wanapum, and Priest Rapids dams.

The HCA was originally signed for a one-year experimental period from July 1, 1972 to June 30, 1973. Twelve parties representing the federal government, the three mid-Columbia Public Utility Districts (PUDs), and all of the power purchasers at that time signed the original agreement. Several one-year agreements were entered into until a 10-year contract was signed on July 1, 1977. At the end of that term, another 10-year contract was signed, extending the arrangement through June 30, 1997. In 1997, a new 20-year renewal agreement was signed extending the term of the agreement through November 1, 2017. Douglas PUD has executed the renewal agreement.

Each day the non-federal Hourly Coordination participants provide an estimated schedule of desired generation from the lower five projects. The federal project operators provide an estimate of water expected to be discharged from Grand Coulee and Chief Joseph. Central River Control located in Ephrata, Washington, and then determines an estimated operation schedule for the following day based on anticipated flows from the federal projects, reservoir levels, and load. Central River Control sends the schedule to each of the five PUD owned projects. Each project then pre-schedules its operation, including hourly generation, for the following day based on Central River Control's estimated operation schedule.

During real-time operation, each non-federal project sends Central River Control an uncoordinated load request signal every four seconds. Based on the sum of these load requests, Central River Control's computer system determines the allocation of generation required to

meet both load demand and non-power constraints for the system. Central River Control operators use power generation characteristics and reservoir target elevations to establish desired generation and discharges. For example, during reverse load factoring (RLF) at Priest Rapids Dam for compliance with the Hanford Reach Fall Chinook Protection Program, maximum and minimum power settings are used to limit flow during the day, and a target elevation is used to lower pool levels and increase flow at night.

More recently, Grand Coulee and Chief Joseph collectively have been providing much of the load-following responsibility for the entire federal system in the Pacific Northwest. The imposition of requirements to maintain turbine operations within the 1 percent of best efficiency range at all lower Columbia and Snake River dams and a 1-foot reservoir level fluctuation limitation for the federal projects on the lower Snake River, as required by the 2008 Biological Opinion (BO) related to the operation of the Federal Columbia River Power System (FCRPS) (National Marine Fisheries Service [NMFS] 2008), has limited the load-following capability of much of the federal power system. These requirements have resulted in a significant shift of load-following to Grand Coulee and Chief Joseph, which tends to increase flow fluctuations and decrease flow predictability in the mid-Columbia River.

1.3.2 Pacific Northwest Coordination Agreement

On April 7, 1997, Douglas PUD entered into the 1997 Pacific Northwest Coordination Agreement (PNCA) between and among numerous federal agencies and northwest utilities. Operations under this agreement began on August 1, 2003, and its term extends until September 15, 2024. The 1997 PNCA helps manage reservoir systems by maintaining the independence of each hydroelectric facility while achieving maximum beneficial use of the river. The various projects work cooperatively toward meeting overall load requirements by mutually supporting each other's operations. The 1997 PNCA maintains the efficient use of water by recognizing and integrating both non-power and power requirements as water travels downstream. The 1997 PNCA is a successor to the PNCA that Douglas PUD entered into in 1964.

1.3.3 Canadian Entitlement Allocation Extension Agreement (1997)

On April 7, 1997, Douglas PUD entered into the Canadian Entitlement Allocation Extension Agreement with BPA. This agreement defined the portion of Canadian Entitlement allocated to the Wells Project through 2024, which is the minimum remaining term of The Columbia River Treaty. The Columbia River Treaty between the United States (U.S.) and Canada was signed in 1961 to help ensure the cooperative development of the Columbia River basin by regulating seasonal flows that enable downstream projects to produce additional power. Since the Wells Project benefits from the storage dams and improved stream flow authorized under The Columbia River Treaty, compensation in the form of capacity and energy is made to Canada. The Canadian Entitlement Allocation Extension Agreement is a successor of the original agreement, entered into in 1964.

1.3.4 Vernita Bar Settlement Agreement (1988) and Hanford Reach Fall Chinook Protection Program Agreement (2004)

On February 16, 1988, Douglas PUD entered into the Vernita Bar Settlement Agreement between and among Public Utility District No. 2 of Grant County (Grant PUD), Public Utility District No. 1 of Chelan County (Chelan PUD), BPA, NMFS, Washington Department of Fish and Wildlife (WDFW), Confederated Tribes of the Colville Reservation (CCT), Confederated Tribes and Bands of the Yakama Nation (YN), the Confederated Tribes of the Umatilla Indian Reservation (CUR), and the Oregon Department of Fish and Wildlife (ODFW). The agreement resulted from extensive negotiations with the aforementioned agencies and tribes in an effort to protect salmon spawning on the Vernita Bar in the Columbia River downstream of the Priest Rapids Project. The agreement attempts to achieve an appropriate balance between power production and the protection of fall Chinook salmon by identifying certain minimum flows to be maintained below Priest Rapids Dam during adult spawning, incubation, and emergence. The term of the Vernita Bar Settlement Agreement was for the remainder of the initial license term for the Priest Rapids Project plus the term(s) of any annual license(s) issued thereafter.

The successor agreement to the Vernita Bar Agreement, the Hanford Reach Fall Chinook Protection Program Agreement, was submitted to the FERC by Grant PUD on April 19, 2004 and approved in April 2008. The parties to this agreement include Grant PUD, Chelan PUD, Douglas PUD, NMFS, U.S. Fish and Wildlife Service (USFWS), WDFW, CCT, YN, and the BPA. The agreement is designed to extend until the end of the new license term for the Priest Rapids Project. It sets forth the obligations of the three PUDs and BPA related to protection of fall Chinook salmon spawning, rearing, and outmigration in the Hanford Reach of the mid-Columbia River. The Wells Project is the uppermost non-federal project participating in these agreements.

1.3.5 Power Loss from Wells Project Encroachment on Chief Joseph Dam (1968)

On August 26, 1968, Douglas PUD and the U.S. Army Corps of Engineers (COE) entered into an agreement for Power Loss from Wells Project Encroachment on Chief Joseph Dam (Encroachment Agreement). The Encroachment Agreement compensated the federal government for the encroachment of the Wells Project on the tailwater of Chief Joseph Dam. The term of the Encroachment Agreement extends for the duration of the Wells Project license (May 31, 2012). The agreement was supplemented on September 27, 1982 when the FERC approved raising the elevation of the Wells Reservoir from elevation 779 to 781 feet. Power losses from encroachment are calculated on an hourly basis and transferred to the federal system. Over the period 2002 through 2006, this amounted to approximately 8 percent of the annual average output of the Wells Project.

1.3.6 Hanford Minimum Flows Operational Consistency with Priest Rapids Article 45

Article 33 of the FERC license prohibits the operation of the Wells Project in such a way as would prevent the licensee of the downstream Priest Rapids Project from meeting its obligation to provide a minimum flow of 36 thousand cubic feet per second (kcfs) to the Hanford Works of the Atomic Energy Commission (now the U.S. Department of Energy), located at the

downstream end of the Hanford Reach of the Columbia River. Meeting this requirement is part of the planning and flow management provisions of the mid-Columbia HCA.

1.3.7 Lost Valley Storage Replacement

Article 34 of the FERC license requires that each year, before the beginning of the flood runoff, the COE District Engineer in charge of the locality shall inform Douglas PUD of the storage space to be provided in the Wells Project reservoir to compensate approximately for valley storage that may be expected to be lost during the ensuing flood season. Douglas PUD, without cost to the U.S., must provide this storage space in accordance with specific procedures. It is assumed that this requirement will be maintained in the new license term.

1.4 Coordination of Operation with Electrical Systems

As demonstrated in Section 1.3, the Wells Project operates in a highly-coordinated manner within the Northwest Power Pool; and even more specifically, the Wells Project is operated in close coordination with the BPA and Grant and Chelan PUDs. The nature of the Mid-Columbia HCA serves to reduce spill and to maintain reservoir levels to the benefit of increased power generation at the participating projects. This results in minimized cost of power production at the Wells Project.

2.0 NEED FOR PROJECT ELECTRICITY

Incentives for using clean energy from the Wells Project include local economic benefits, reduced air and greenhouse gas emissions, and a more secure domestic source of energy. As of 2005, Washington State relies on hydropower for more than 60 percent of its electricity. The Northwest Power and Conservation Council estimates that in the next 20 years, the Pacific Northwest will need to add nearly 7,000 MW of power resources, an approximately 40 percent increase to existing power supplies (Northwest Power and Conservation Council 2005).

Douglas PUD was organized in 1936 by the people of Douglas County to become one of the first non-profit, locally-owned electric distribution systems in Washington State. In order to provide the modern conveniences of electricity to rural customers at the lowest possible costs, Douglas PUD acquired over 400 miles of existing power lines from investor-owned utilities during the 1940s and began operations in 1945. Douglas PUD currently serves over 18,000 electric customers in Douglas County with low-cost electricity, 53.7 percent of which is provided by the Wells Project. The power is utilized for residential, commercial, irrigation, and other purposes within Douglas County. Output from the Wells Project also serves the greater Pacific Northwest region as it is sold to Puget Sound Energy, Inc. (PSE), Portland General Electric Company (PGE), PacifiCorp, Avista Corporation, Public Utility District No. 1 of Okanogan County (Okanogan PUD), and the CCT.

Regional electric loads peak during the winter months for heating and lighting purposes and during summer months for home air conditioning and irrigation pump usage. Douglas PUD predicts that the load growth in Douglas County based on residential and commercial customers will continue to significantly increase in the years ahead. The most recent load growth projection is 4.07 percent annual average increase through operating year 2027-2028 (PNUCC [2007] through 2017, extrapolated to 2028).

2.1 Costs and Availability of Alternative Sources of Power

The Wells Project provides reliable, flexible, and affordable electricity to Douglas County and the Pacific Northwest region. To truly be considered an alternative to the Project's energy supply, any alternative must deliver equivalent benefits in terms of flexibility, reliability, cost-security, and operating characteristics including providing spinning reserves, non-spinning reserves, automatic generation control, and other valuable ancillary benefits. However, no other non-hydro large-scale generating resources can provide the full suite of generation benefits equivalent to those provided by the Wells Project.

If the Project's license is not renewed, the Wells plant output would need to be replaced with an alternative source. The likely alternative would be the construction of an integrated gasification combined-cycle (IGCC) plant with a 15 percent wind component to meet Washington's Initiative 937, which was approved by the citizens of Washington State in 2006. This initiative places load service and conservation requirements on utilities serving 25,000 or more customers. It requires that 3 percent of a utility's load be served from renewable resources by 2012, 9 percent by 2016, and 15 percent by 2020. Although Douglas PUD is not currently a qualifying utility as defined by the Energy Independence Act, by 2018 the customer base for Douglas PUD will likely exceed 25,000 customers, qualifying Douglas PUD for the requirements of the Energy Independence Act.

2.1.1 Integrated Gasification Combined-Cycle Plant

If Douglas PUD is not granted a new license for the Wells Project, the likely alternative source for an equivalent energy supply would be a mix of 85 percent power from an IGCC plant and 15 percent from a wind plant. IGCC plants are emerging as an alternative to traditional coal-fired systems as they are able to meet new emissions requirements. IGCC gasification processes "clean" heavy fuels and convert them into high-value fuel for gas turbines. If denied a new license, Douglas PUD would need to construct an IGCC plant that includes a carbon capture and storage system. Wallula Resource Recovery LLC recently purchased a 759-acre site in western Walla Walla County and proposed to build a \$2.2 billion IGCC plant that would generate a power output of 600 to 700 MW. In addition to the initial construction cost of the IGCC plant, Douglas PUD would need to purchase coal as the coal is pulverized and gasified onsite to create synthetic gas (syngas). The syngas fuels are fed into the combustion turbines in the plant to generate electricity. Natural gas is also utilized as a backup fuel in IGCC plants.

Replacing Wells Project generation with an IGCC plant would be extremely costly. Coupled with the cost of natural gas and coal needed for operation of the plant, the annual operating cost is likely to steadily increase. The construction and operation of an IGCC plant would dramatically increase generation costs as presented in Table 2.2-1 below.

2.1.2 Wind Power

In addition to the power generated from an IGCC plant, Douglas PUD would likely also pursue a 15 percent contribution of power from a wind generation facility. Wind power development has increased in the Northwest in recent years. Douglas PUD has been active in wind power development and owns 15.4 percent of the output (9.8 MW share) from the Nine Canyon Wind Project. The Nine Canyon Wind Project consists of 49 turbines capable of producing 63.7 MW of electricity. Douglas PUD is one of 10 project participants in the Nine Canyon Wind Project. Wind energy costs approximately 3.5 cents per kilowatt-hour (kWh) to produce (after a 1.7 cent Federal Renewable Energy Production Incentive), which is slightly higher than traditional resources.

Wind, however, does not have the reliability or dispatchability of hydroelectric power. Utilizing wind as a source of power presents a substantial amount of risk for a utility because it is intermittent (non-firm) and cannot be relied upon to be available when electricity is needed. Wind energy cannot be stored for large-scale applications (battery systems render it cost prohibitive), and wind cannot provide load-following. Wind is an intermittent electricity generator and does not provide power on an “as-needed” basis; therefore, it does not compare favorably with operating a hydropower generation facility. Daily scheduling of wind resources is problematic. The ability to predict hourly production from wind resources a day or week in advance is extremely difficult at best and the fluctuations within any hour require extensive firming-up of the wind resource which factors in as an added cost of production.

2.2 Increased Costs to Replace the Project

If Douglas PUD is not granted a new license for the Wells Project, the PUD would consider alternative sources of power and would have to construct an IGCC plant to be operated together with a 15 percent wind component in order to meet Washington’s renewable resources requirements.

Table 2.2-1 Equivalent generation using available alternative power sources.

| Power Source | Installed Capacity (MW) | Plant Factor | Firm Power Equivalent (MW) | Cost of Alternative Power (\$/MWh) | Average Annual Generation (MWh) |
|--|-------------------------|--------------|----------------------------|------------------------------------|---------------------------------|
| Wells Project | 774 | .64 | 498 | | 4,364,959 |
| Alternative Power Sources meeting Washington State Renewable Standards | | | | | |
| IGCC | 565 | .75 | 424 | \$70 | 3,710,000 |
| Wind Farm | 375 | .20 | 75 | \$130 | 655,000 |

The above estimate was compiled using information from the Department of Energy (DOE) and recent projects in Washington State for wind resources, an on-going study for the California Public Utilities Commission (CPUC), and a proposed IGCC project in Washington (Energy and Environmental Economics, Inc. 2007; DOE 2008; Energy Northwest 2006). The following factors were used to calculate the cost of alternative power:

- Financing Term - 30 years
- Capital Recovery Factor - 9 percent
- Coal Fuel Cost for the IGCC Plant - \$2.56 / MMBTU
- Fixed O&M Cost for the IGCC Plant - \$46.11/kW-yr
- Variable O&M Cost for the IGCC Plant - \$4.50/MWh
- O&M Cost for Wind Resources - \$52/MWh

Using these estimates, the cost of providing an amount of energy equivalent to the Wells output using a combination of IGCC and wind technology is \$345 million per year for a combined cost of alternative power of \$79/megawatt-hour (MWh) in 2008 dollars.

2.3 Effects of Alternative Sources of Power

2.3.1 Effects on Customers

Agriculture is the foundation of the Douglas County economy. The low elevation areas have generally been developed as orchard land. The plateau region of Douglas County contains wheat and other grain crops. The area's prime soil, climate conditions, and abundant supply of irrigation water produce substantial crops of wheat, apples, barley, alfalfa, and sweet cherries. The three county regions of Douglas, Chelan, and Okanogan produce approximately 50 percent of the apple crop in Washington State. Wheat is another significant commodity; Douglas County alone contains approximately 8 percent of the wheat acreage in the state. Although the economy is based primarily on agriculture, it is also supported by industry. As of 2008, approximately 11,570 people lived in East Wenatchee, which is the major urban commercial center of Douglas County, which recorded an estimated population of 37,000 in 2008. Major private employers in the East Wenatchee and Wenatchee urban area include Stemilt Growers, ALCOA, Pacific Aerospace & Electronics, and Tree Top, Inc. As of 2007, the per capita personal income of Douglas County was \$24,047 (State of Washington Office of Financial Management 2009).

Douglas PUD has a responsibility to provide its customers with reliable electrical service in a cost-efficient manner. To achieve this responsibility, Douglas PUD's power generation profile includes a 2.77 percent share of Chelan PUD's Rocky Reach Project output and a 15.4 percent share of Energy Northwest's Nine Canyon Wind Project output. Douglas PUD's right to purchase output from the Rocky Reach Project will increase from 2.77 to 5.54 percent in 2011. In addition to these purchases, Douglas PUD participates in a power exchange agreement with Avista Energy. Table 2.3-1 presents a comparison of monthly electric bills in Washington demonstrating Douglas PUD's commitment to providing low-cost energy to its customers-owners.

Table 2.3-1 Comparative 2007 Washington State monthly electric bills.¹

| | Residential | | Commercial ² | | Industrial ² | |
|--------------------------|---------------|---------------|-------------------------|---------------|-------------------------|---------------|
| | 1,000 kWh | 2,000 kWh | 30 kW, 9,000 kWh | | 400 kW, 150,000 kWh | |
| | Summer Season | Winter Season | Summer Season | Winter Season | Summer Season | Winter Season |
| Douglas PUD | \$26 | \$45 | \$175 | \$175 | \$3,133 | \$3,133 |
| Washington Cities | | | | | | |
| City of Centralia | 67 | 124 | 603 | 603 | 9,324 | 9,324 |
| Tacoma | 70 | 134 | 597 | 597 | 7,247 | 7,247 |
| City of Seattle | 70 | 142 | 503 | 503 | 7,417 | 7,417 |
| Washington PUDs | | | | | | |
| Chelan County | 29 | 56 | 229 | 229 | 4,380 | 4,380 |
| Clark Public Utilities | 80 | 154 | 651 | 821 | 8,384 | 9,149 |
| Grant County | 47 | 81 | 355 | 355 | 3,708 | 3,708 |
| Mason County No. 1 | 77 | 139 | 625 | 625 | 9,931 | 9,931 |
| Snohomish County | 77 | 159 | 614 | 614 | 9,318 | 10,661 |

¹ Computed from the rate schedules provided by or found on the websites of the utilities listed. There are some variations in rate schedules and rate classification of the various utilities.

² Assumes power delivered is three-phase where available. Delivery voltage varies.

Douglas PUD is currently undergoing a rate adjustment process. This will increase the baseline cost of energy by 6 percent in 2010 and another 6 percent in 2011. Despite this increase, Douglas PUD's rates will continue to be lower than other rates in Washington State.

Douglas PUD utilizes the Wells Project to provide electric service to over 18,000 local customer accounts in Douglas County. Power is utilized for residential, commercial, irrigation, and other purposes within Douglas County. In addition to serving the community, output serves the greater Pacific Northwest region as it is also sold to PSE, PGE, PacifiCorp, Avista Corporation, Okanogan PUD, and the CCT. Table 2.3-2 presents a tabular listing of the power purchasers for the Wells Project.

Table 2.3-2 Power Purchasers for the Wells Project.

| Power Purchaser | Contractual Right | Expiration |
|------------------------------|---|---|
| Colville Confederated Tribes | 4.5%/5.5% ¹ | Through August 31, 2018/September 1, 2018 - life of Project under District license ² |
| Okanogan PUD | 8% ³ + surplus/ 8% ³ + 30% ⁴ | Through August 31, 2018 ⁵ /September 1, 2018 - life of Project under District license |
| PSE | 31.3 percent ³ | Through August 31, 2018 ⁵ |
| PGE | 20.3 percent ³ | Through August 31, 2018 ⁵ |
| PacifiCorp | 6.9 percent ³ | Through August 31, 2018 ⁵ |
| Avista | 3.5 percent ³ | Through August 31, 2018 ⁵ |

¹ of the output from the Wells Project at the full cost of production.

² The proportion of output the CCT are entitled to purchase at cost is currently 4.5 percent through 2018 when it will increase to 5.5 percent.

³ of the output of the Wells Project, less the amount purchased by the CCT, at the full cost of production.

⁴ of the output of the Wells Project, less the amount purchased by the CCT, at two times the full cost of production.

⁵ or such later date as all bonds pertaining to the original construction financing are paid in full.

Alternatives to Project power will most likely have significant impacts on the local and regional economy, since alternative sources are much more costly, as indicated in Section 2.2 above. Replacing the Wells Project's average annual production of 4,364,959 MWh (1989 to 2007) with an alternative source of power would increase equivalent generation costs substantially, resulting in higher electricity costs for consumers and an increased vulnerability due to future power supply instability.

2.3.2 Effects on Operating and Load Characteristics

The Wells Project is Douglas PUD's primary generating asset; therefore, loss of Project power and operational flexibility would have direct effects on its electric system. Hydropower is flexible and thus suited to meeting the last increment of load on a system. Hydropower is the best suited of all energy resources to meet the second-by-second load variations of a utility. Without hydropower as a resource, Douglas PUD would be required to contract load regulation services as it would be unable to balance its instantaneous loads and resources.

The major sources of power supply to Douglas PUD are the Wells Project and a 2.77 percent share of Rocky Reach Project output from Chelan PUD. Additionally, the Electric Distribution System receives power and energy from a share of the output from Energy Northwest's Nine Canyon Wind Project, a small District-owned photovoltaic "solar" array, and a long-term exchange of firm power with Avista Energy, Inc. Douglas PUD had a contract with the BPA to purchase 50 MW of excess federal power at a fixed rate; however, this contract expired on March 31, 2006, and the BPA is no longer offering this type of long-term contract. Douglas PUD's right to purchase output from the Rocky Reach Project will increase from 2.77 to 5.54 percent in 2011.

In 2005, Douglas PUD received 53.7 percent of its total energy supply from the Wells Project, 32.0 percent from BPA, 12.6 percent from Rocky Reach, and 1.7 percent from the Nine Canyon Wind Project and District solar resources, and no energy under the long-term exchange with Avista Energy. In 2006, Douglas PUD received approximately 66.3 percent of its total energy supply from the Wells Project, 15.5 percent from Rocky Reach, 9.8 percent from BPA, 6.3 percent from Avista Energy, and 2.1 percent from the Nine Canyon Wind Project and solar resources.

The most recent load growth projection for the Wells Project is 4.07 percent through operating year 2027-2028. It is expected Douglas PUD's load-following capacity characteristics would be negatively impacted by increasing purchases of non-firm renewable power.

2.3.3 Effects on the Communities Served

Douglas PUD utilizes the Wells Project to provide electric service to over 18,000 local customer accounts. The power delivered is utilized for residential, commercial, irrigation, and other purposes within Douglas County. Wells Project output serves the greater Pacific Northwest region as it is also sold to PSE, PGE, PacifiCorp, Avista Corporation, Okanogan PUD, and the CCT.

Agriculture provides the economic base of Douglas County. The area produces substantial crops of wheat, apples, barley, alfalfa, and sweet cherries due to the county's supply of electricity to

operate irrigation pumps and favorable soil and climate conditions. The county is also supported by industry in the Wenatchee metropolitan area. During the 12-month period ending December 31, 2005, residential customers accounted for 18 percent of Douglas PUD revenues from the sale of electricity, commercial customers 8 percent, irrigation customers 2 percent, other retail customers 2 percent, wholesale sales to Okanogan PUD 5 percent, and other wholesale customers 65 percent.

Replacing the Wells Project generation with currently-available alternative sources would raise power costs to all Douglas PUD's customers including the communities directly served by Douglas PUD and by the purchasers of power from the Wells Project. Low-cost power is vital to the economic well-being of the county and the Pacific Northwest. An increase in the cost of electricity would cause a significant adverse economic impact to some customers.

3.0 COST OF PRODUCTION AND ALTERNATIVE SOURCES OF POWER

3.1 Average Annual Cost of Power

Douglas PUD developed an estimate of the average annual All-In Cost (AIC) of owning and operating the Wells Project under the anticipated terms of a new license. The AIC was developed through an analysis of three major areas of cost including Historic Power Costs, future costs associated with the prudent repair and replacement of major equipment and infrastructure (Future R&R Costs), and costs associated with the implementation of the proposed protection, mitigation and enhancement (PM&E) measures contained within Douglas PUD's license application.

The AIC of the Project as proposed to be operated under a new license is \$58.9 million per year based on a 50-year license term or \$16.93 /MWh, using the 2003-2007 average annual generation for sale of 3,479,200 MWh. The corresponding cost based on a 30-year license term is \$64.3 million per year or \$18.49/MWh. Using the Project's 2003-2007 average net generation of 4,077,400 MWh/yr, the cost of Project power would be \$14.45/MWh over a 50-year license term and \$15.78/MWh over a 30-year license term. These costs do not include the cost of the Off-License Settlement Agreement (Table 4.0-14 in Exhibit D).

3.2 Projected Power Costs

The actual Historic Power Costs of owning and operating the Wells Project can be found in Table 3.0-1 in Exhibit D. During fiscal years ending 2003 to 2007, the average Historic Power Cost of the Wells Project was \$34.1 million per year. Projected Operating Costs are based upon the continuation of the annual Historic Power Costs less the costs of HCP measures, which are included as part of the Proposed PM&E Costs (Section 4.0 in Exhibit D). Projected Operating Costs are estimated to be \$30.4 million per year (\$34.1 million Historic Power Cost less \$9.6 million HCP costs and escalated to 2012 dollars at 4.4 percent).

Average annual generation available for sale from the Wells Project was 3,479,200 MWh for the years 2003 through 2007. This output is the generation at the Wells Project after deducting station use, Project transmission line losses, Chief Joseph encroachment compensation,

allocation to Canadian Entitlement pursuant to the Allocation Extension Agreement, and commitment pursuant to the Colville Power Sales Contract. Average annual generation for sale averaged 85 percent of net generation (Table 3.0-2 in Exhibit D). Based on the amount of generation available for sale during the 2003 to 2007 period, the average Historic Power Cost of energy generated by the Wells Project was \$9.81/MWh under the current license conditions. For the same 2003 to 2007 period, the average cost of the Project's net generation of 4,077,400 MWh/yr was \$8.37/MWh.

3.4 Future R&R Costs

Future R&R Costs include the prudent repair, replacement, and refurbishment of major equipment and infrastructure associated with power generation at the Wells Project. These costs were developed based upon a site-specific analysis of the useful life of various parts of the Project coupled with industry standard costs associated with the replacement of major pieces of infrastructure (Devine Tarbell & Associates, Inc. [DTA] 2008). Over the 50-year term of the new license, Douglas PUD expects to spend \$782 million, an estimated \$15.6 million annually, in Future R&R Costs (Table 4.0-1 in Exhibit D). Over a new license term of 30 years, Douglas PUD expects to spend \$626 million in Future R&R Costs.

3.5 Proposed PM&E Costs

Douglas PUD's Proposed PM&E Costs include costs associated with implementation of the HCP, Aquatic Settlement Agreement, terrestrial and cultural resources management plans (Wildlife and Botanical, Avian Protection, Recreation and Historic Properties), and Douglas PUD's Land Use Policy. For the fiscal years ending 2003 to 2007, the average annual cost of implementing the HCP measures was \$9.6 million.

Future costs of implementing the HCP measures include the repair and refurbishment of major components of the fish ladder and JBS, future adult fish passage and juvenile fish run-timing studies, and the future implementation of fish passage and survival studies. Over a new license term of 50 years, continuation of the HCP measures is estimated to cost \$477.5 million (\$9.55 million per year). Over a new license term of 30 years, continuation of HCP measures is estimated to cost \$287.5 million (Table 4.0-2 in Exhibit D).

Since 2004, there have been new developments related to the HCP that will require implementation of additional measures during the term of the new license. Hatchery Genetics Management Plans (HGMPs) are currently under development and are expected to require extensive modifications to the Wells and Methow hatcheries. The anticipated future construction of the Chief Joseph Hatchery will require additional mitigation for spring and summer/fall Chinook. Over a new license term of 50 years, implementation of the new HCP measures is estimated to cost an additional \$72.5 million. Over a new license term of 30 years, implementation of the new HCP measures estimated to cost \$46.2 million (Table 4.0-3 in Exhibit D).

The total 50-year cost of existing and new HCP measures is estimated to be \$550 million with an average annual cost estimated to be \$11 million (\$9.55 million future cost of HCP measures plus \$1.45 million future cost of new HCP measures). The total 30-year average cost of existing and

new HCP measures is estimated to be \$333.6 million with an average annual cost of existing and new HCP measures estimated to be \$11.1 million.

In addition to the proposed HCP costs, Douglas PUD has also developed cost estimates associated with the implementation of the proposed Aquatic Settlement Agreement, terrestrial resources management plans (Wildlife and Botanical, Avian Protection, Recreation, and Historic Properties), and Douglas PUD's Land Use Policy. Over the term of a 50-year license, the cost of these additional relicensing measures will be \$93.6 million (\$1.87 million per year). Over the term of a 30-year license these measures are expected to cost \$58.4 million (\$1.95 million per year) (Tables 4.0-4 to 4.0-14 in Exhibit D).

Combining the costs associated with all of the PM&E measures proposed for the Wells Project license, the total Proposed PM&E Cost will be \$643.6 million (\$12.9 million per year) and \$392.1 million (\$13.1 million per year) for a 50- or 30-year license term, respectively. This does not include the cost of the Off-License Settlement Agreement (Table 4.0-15).

3.6 Projected Resources to Meet Requirements

Douglas PUD's 1995 Integrated Resource Plan (IRP), and subsequent periodic updates, provide a full analysis of supply-side and demand-side resource options and expected load growth. The most recent update was completed in December 2007 (Douglas PUD 2007). While Douglas PUD was not required to adopt an IRP, the locally-elected board of commissioners determined that a full analysis of the District's supply-side and demand-side resource options and expected load growth was in the best interest of Douglas County residents.

In 2001, Douglas PUD served approximately 16,800 customers using 503,500 MWh of energy annually. By the end of 2006, the total number of customers was 17,400, using 576,200 MWh of energy annually representing over a 14 percent increase in demand during the five-year period. Both residential and commercial customers represented the same proportion of customers in 2001 as they did in 2006, with 63 and 25 percent, respectively. Douglas PUD predicts that the load growth in Douglas County based on residential and commercial customers will continue to gradually increase in the years ahead (Douglas PUD 2007).

Through August 2018, 62 percent of Wells Project net output, after satisfying an obligation to offer 4.5 percent of the net output to the CCT, is obligated in power sales contracts with four power purchasers. Eight percent of net output is allocated to Okanogan PUD, leaving 30 percent of net generation available to meet Douglas PUD's load. At the expiration of the power sales contracts, Douglas PUD will have access to a greater portion of the output of the Wells Project for use within Douglas County. These additional resources are more than sufficient to meet both projected demand and system reserve margins after 2018, and still provide surplus power to allow Douglas PUD to enter into new long-term power sales agreements. In the interim, Douglas PUD entered into an inter-utility power exchange with Avista in 2000. The agreement authorized Douglas PUD to exchange approximately 1.9 million MWh of power and energy at a fixed, level exchange rate with Avista between 2000 and 2017. The agreement called for Douglas PUD to deliver firm power to Avista through 2006. Thereafter, Avista is returning a like amount of firm power to Douglas PUD through 2017. The firm power is now being returned to Douglas PUD and will continue through 2017. This exchange has secured the firm resources

necessary to accommodate the anticipated near-term residential and commercial growth in Douglas County.

Douglas PUD is also investigating the development of wind energy as another potential option to help meet future load requirements, as noted earlier in this Exhibit. In the long term, if Douglas PUD did not receive a new FERC license for the Wells Project, Douglas PUD would be required to meet its energy needs through the construction of new generating assets, i.e., an IGCC plant coupled with a 15 percent component of wind power, as discussed earlier in Section 2.

3.6.1 Load Management Measures as Resources

Douglas PUD implements demand-side management through cost-assistance programs with emphasis on weatherization. Douglas PUD currently implements two programs related to home weatherization, the “Zero Interest Loan Pilot Project” and the “Matchmaker Program” (Douglas PUD 2007). Both projects are designed to acquire cost-effective, demand-side resources through conservation efforts.

Under the pilot project, Douglas PUD offers qualifying residential customers “zero interest loans” to install weatherization measures in accordance with the most current Washington State uniform building codes. Customers utilize the loans to increase insulation levels, wrap warm air ducts, and replace energy-inefficient windows. In 2006, Douglas PUD increased the maximum amount available to each participant to \$4,500. Customers obtain bids for the installation of weatherization measures and select an independent contractor of their choice. Upon completion of the work and inspection by a Douglas PUD engineer, eligible customers receive a maximum loan amount of \$4,500. The goal of the project is to process a total of 60 customer loans per year. Many customers choose to complete home weatherization projects well in excess of the \$4,500 zero interest loan limit, which results in even greater demand-side savings to Douglas PUD.

Douglas PUD contracts with the Chelan-Douglas Community Action Council to implement its “Matchmaker Program”. This program is similar to the Zero Interest Loan Pilot Project except that it is targeted to low-income residential customers and is eligible for matching funds from the state and other entities. From 2002 to 2007, Douglas PUD contributed a total of \$170,000 toward the Matchmaker Program, with a current annual allocation of \$40,000 (Douglas PUD 2007).

Douglas PUD electric rates are determined by comparing the projected long-term electricity need in Douglas County to the projected long-term operating and capital costs. Because the Wells Project is Douglas PUD’s primary generating resource, and because surplus firm power is sold at the cost of production under long-term contracts to wholesale buyers, it is unlikely any load management program could result in a significant reduction in either short- or long-term resources needed to meet capacity and energy requirements for the Project’s power.

3.7 Alternative Sources of Power

In most years in the Northwest, there is, at least seasonally, a surplus of hydroelectricity. However, this surplus is non-firm power and availability is highly variable. Utilities dependent upon the Northwest’s hydroelectric systems make power supply plans and subsequent decisions

based on reasonably conservative estimates of river flows. Flows in excess of this conservative estimate produce “non-firm” energy, which cannot be relied upon to materialize from one year to the next. In the Northwest, if actual flows are close to the conservative “firm” estimate, there is likely to be a shortage of electricity in the region and utilities may be required to import more expensive power from outside of the region.

As discussed earlier in Section 2.0, alternative sources of power would most likely be obtained through the construction of an IGCC plant coupled with a 15 percent component of wind power to meet Washington State renewable portfolio standards. The total cost of this alternative source of power, including energy and capacity, is estimated to be \$345 million annually, or roughly \$79/MWh.

4.0 EFFECT ON INDUSTRIAL FACILITY

The Licensee is a municipal utility and thus does not use the Project power for its own industrial facility. Therefore, this item is not applicable.

5.0 INDIAN TRIBE NEED FOR ELECTRICITY

This provision is not directly applicable to Douglas PUD; Douglas PUD is not an Indian tribe. However, the Wells Project is partially located on the Colville Indian Reservation and the CCT receive an allocation of Project power pursuant to the Colville Power Sales Contract (Table 2.3-2).

6.0 EFFECT ON TRANSMISSION SYSTEM

6.1 Effects of Redistribution of Power Flows

Douglas PUD utilizes two 230 kV transmission lines, 43 miles in length, and one 115 kV transmission line, 10 miles in length, to deliver power from the Wells Project to its primary distribution switchyards. Douglas PUD has 868.1 miles of overhead distribution line and 323.2 miles of underground distribution line serving over 18,000 customers in Douglas County. The effects of redistribution of power flows would force Douglas PUD, in the near term, to purchase replacement power at a considerably greater cost than Project power. The costs of replacement power would include transmission wheeling costs to deliver power to Douglas PUD’s primary distribution switchyards. In the long term, Douglas PUD would need to construct a source of equivalent replacement power, most likely an IGCC plant.

6.2 Advantages of Licensee’s System

Douglas PUD’s transmission system is adequate to accommodate the Wells Project’s power output. No transmission line upgrades are necessary to continue to operate the Project or serve local and regional power needs if Douglas PUD is granted a new operating license. The Wells Project provides reliable and cost-effective power to support community development and quality of life within Douglas PUD’s service territory.

6.3 Single-Line Diagram

Figure 6.3-1 is a single-line diagram of the Wells Project depicting existing facilities and other principal interconnected system elements.

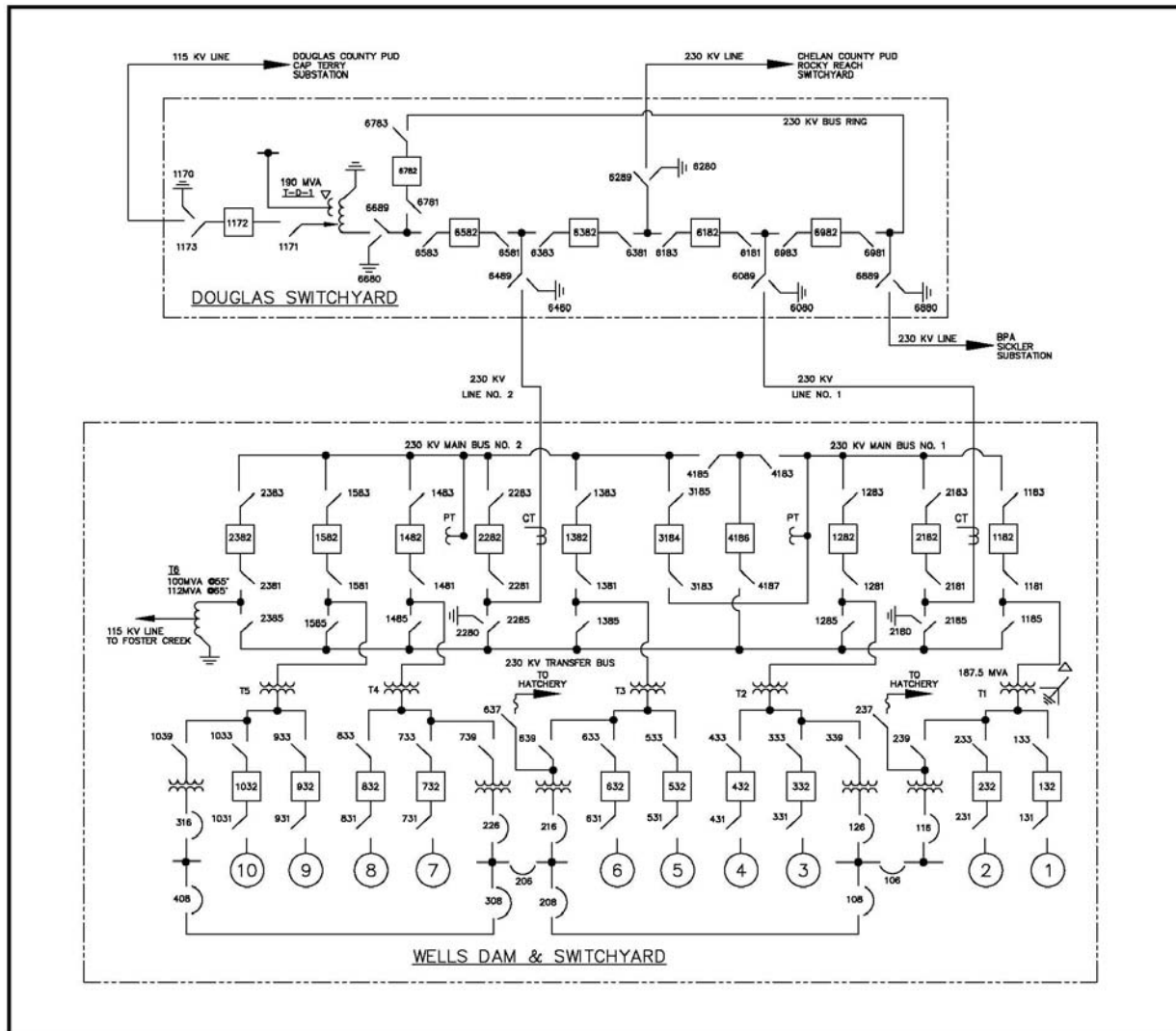


Figure 6.3-1 Single-line diagram.

7.0 MODIFICATIONS CONFORMING WITH COMPREHENSIVE PLANS

Douglas PUD intends to operate the Project in a similar manner during the next license period, incorporating the terms of settlements and agreements as described in Exhibits B and E. No new future power development of the Project or major modifications to Project features are proposed by Douglas PUD for implementation under the term of the new license, other than renovation, replacement, and maintenance activities, as needed. However, the continued implementation of the Wells HCP, a FERC-recognized comprehensive plan, will require additional investment in facilities under the term of the next license. The Wells HCP outlines a schedule for meeting and maintaining NNI for all Plan Species throughout the 50-year term of the agreement. NNI consists of two components: (1) a 91 percent combined adult and juvenile Wells Project survival

standard achieved by measures implemented within the Project; and (2) up to 9 percent compensation for unavoidable Wells Project-related mortalities. Compensation to meet NNI is provided through a hatchery and a tributary program under which 7 percent compensation is provided through hatchery production and 2 percent compensation is provided through the funding of enhancements to tributary habitats that support plan species. HCP implementation is discussed in further detail in Exhibit B; HCP costs are detailed in Exhibit D. Douglas PUD estimates full implementation of the HCP over the term of a new 50-year operating license will cost approximately \$550 million.

8.0 PROJECT CONFORMANCE WITH COMPREHENSIVE PLANS

This section discusses Comprehensive Plans relevant to the Wells Project. Section 10(a)(2) of the Federal Power Act (FPA) requires the FERC to consider the extent to which a project is consistent with federal or state comprehensive plans for improving, developing, or conserving a waterway or waterways affected by a project. Douglas PUD has reviewed the FERC's Revised List of Comprehensive Plans dated November 2008 and identified the following plans as topically or geographically relevant to the Wells Project relicensing.

The Wells Project, as it is now operated, and as it is proposed to be operated under this license application, is in conformance with all relevant comprehensive plans.

National Marine Fisheries Service. 2002. Anadromous Fish Agreement and Habitat Conservation Plan: The Wells Hydroelectric Project (FERC Project No. 2149). U.S. Department of Commerce. March 26, 2002.

The objective of the HCP is to achieve NNI for each Plan Species affected by the Project and to maintain the same for the duration of the Agreement. NNI consists of two components: (1) 91 percent Combined Adult and Juvenile Project Survival achieved by Project improvement measures implemented within the geographic area of the Project; and (2) 9 percent compensation for Unavoidable Project Mortality provided through hatchery and tributary programs, with 7 percent compensation provided through hatchery programs and 2 percent compensation provided through tributary programs. As explained in section 3.3.2.4 of Exhibit E, the Project is fully consistent with the terms of the HCP.

Washington Interagency Committee for Outdoor Recreation. 2002. An Assessment of Outdoor Recreation in Washington State: A State Comprehensive Outdoor Recreation Planning Document 2002-2007. Olympia, Washington.

The Washington State Comprehensive Outdoor Recreation Planning (SCORP) Document developed by the Interagency Committee for Outdoor Recreation (IAC) (now referred to as the Recreation and Conservation Office [RCO]) in 2002 is a statewide survey of recreation participation in Washington State. It is intended to inform decision-makers about issues and opportunities associated with outdoor recreation. The document provides information on the following:

- participation (demand) of state residents in recreation activities;
- an inventory (supply) focusing on public lands available for recreation purposes;
- a recreation needs analysis based on the previous supply and demand studies;
- recommendations to address recreation needs;
- a review of funding sources that have been and could be used for recreation land management; and
- strategic options and actions to implement the recommended strategy available to the state as they seek to provide recreation opportunities.

Specific SCORP data for Washington indicate that trail-based linear opportunities, such as walking, bicycling, and hiking, continue to be popular. These activities continue to be the recreation activities that most people participate in. Specific SCORP recommendations for non-federal hydropower projects include: enhance trails and paths for walking and bicycling, manage dispersed shoreline camping, improve access for on-water recreation, and improve opportunities for non-consumptive interaction with nature including fish and wildlife. The license holder should also provide maintenance and operation assistance on recreation lands and facilities. Douglas PUD's Recreation Action Plans (1987, 1992, 1997, 2002, and 2007) and proposed Recreation Management Plan are consistent with issues identified in the SCORP by providing recreational opportunities, enhancing existing facilities and assisting with the maintenance and operation of Wells Project recreation facilities.

Washington Interagency Committee for Outdoor Recreation. 1991. Washington State Trails Plan: Policy and Action Document. Tumwater, Washington.

This document describes goals, policies, and key issues surrounding existing and future trail-based recreation in the state. Recommendations for local agencies include emphasizing trail construction with connections to city, county, and regional trail systems; seeking opportunities for trails in utility corridors; and incorporating trails as facilities in transportation planning, as well as park and recreation planning. Douglas PUD has developed over 17 access sites and use areas along both sides of the Wells Reservoir and up the Methow and Okanogan rivers. Parks and recreational facilities have been developed along the Wells Reservoir in Pateros, Brewster, and Bridgeport, including trails in both Pateros and Brewster. Douglas PUD's Recreation Action Plans (1987, 1992, 1997, 2002, and 2007) and proposed Recreation Management Plan are consistent with goals, policies, and issues identified in the Washington State Trails Plan.

Washington Interagency Committee for Outdoors Recreation. 1995. State of Washington Outdoor Recreation and Habitat: Assessment and Policy Plan, 1995-2001. Tumwater, Washington.

In 1994, Washington State's IAC, currently known as the Washington State RCO, gathered public opinion on outdoor recreation and habitat issues to develop a state-wide recreation plan. The IAC conducted surveys of public land managers and private citizens to gather perspectives on recreational issues. The information collected reflected a public interest for outdoor recreation settings that are safe, natural, and emphasize water access. Douglas PUD has developed over 17 access sites and use areas along the Wells Reservoir and up the Methow and Okanogan rivers. These facilities developed by Douglas PUD supports the public's opinions expressed in the 1995 Voices of Washington public opinion on outdoor recreation issues; therefore, the Wells Project is consistent with the interests reflected in this plan.

Northwest Power and Conservation Planning Council. 2005. The Fifth Northwest Electric Power and Conservation Plan. Council Document 2005-07. Portland, Oregon.

The Northwest Power and Conservation Council (NPCC or Council) is required to develop a 20-year power plan under the Pacific Northwest Electric Power Planning and Conservation Act (NWPPCA) to assure the region of an adequate, efficient, economical, and reliable power system. The Plan was developed after the 2000-2001 western electricity crisis, which consisted of extremely high wholesale power prices with threats of blackouts that persisted for almost a year. From the electricity crisis came new generation (small- and large-scale conventional generation), load reduction through efficiency improvements, demand reduction, and changes in operations of the hydroelectric system. The fifth plan addresses future uncertainties, identifies realistic resource alternatives, analyzes the costs and risks that arise from the interaction of resource choices and uncertain futures, and lays out a flexible strategy for managing those costs and risks. Demand has been reduced significantly in response to the recent electricity price increases and forecasts of future demand growth are lower in the Fifth Northwest Electric Power and Conservation Plan.

The northwest region's electricity supply is dominated by hydroelectric power (approximately 52 percent). Consistent with the Council's plan, Douglas PUD's License Application is a balanced proposal that takes into account the need for power, energy conservation, and Project effects on environmental resources.

Northwest Power and Conservation Planning Council. 2003. Mainstem Amendments to the Columbia River Basin Fish & Wildlife Program. Council Document 2003-11. Portland, Oregon.

Under the NWPPCA the Council is also required to develop a program to protect, mitigate, and enhance fish and wildlife of the Columbia River basin affected by the development and operation of the basin's hydroelectric facilities while at the same time ensuring the Pacific Northwest an adequate, efficient, economical, and reliable power supply. This document includes biological objectives and priorities for the mainstem Columbia and Snake rivers and both overarching and specific area strategies. These biological objectives and strategies are designed to benefit fish and wildlife in the mainstem Columbia and Snake rivers. The NPCC stated that the operators of Grand Coulee Dam and the mid-Columbia dams should take steps to further reduce flow

fluctuations that affect fall Chinook spawning and rearing in the Hanford Reach. Douglas PUD incorporates the objectives and strategies of the Mainstem Amendments to the Columbia River Basin Fish and Wildlife Program in the operation of the Wells Project. The Wells Project is operated in accordance with a number of mitigation and enhancement plans related to fish and wildlife including the Hanford Reach Fall Chinook Protection Program Agreement and the Anadromous Fish Agreement and HCP.

Northwest Power and Conservation Council. 2000. Columbia River Basin Fish and Wildlife Program. Portland, Oregon

This document, currently included in the August 2009 FERC List of Comprehensive Plans, has been superseded by:

Northwest Power and Conservation Council. 2009. Columbia River Basin Fish and Wildlife Program. Portland, Oregon.

In 2009, NPCC revised the Columbia River Basin Fish and Wildlife Program. The amendments were directed primarily at federal agencies with responsibilities for the FCRPS, but the NPCC recommended collaborative actions involving state fish and wildlife agencies, Indian tribes, and non-federal dam operators. The 2009 Program emphasizes implementation of fish and wildlife projects based on needs identified in locally-developed sub-basin management plans (these plans are included in the program) and also on actions described in federal BOs on hydropower operations, hatcheries, and harvest, Endangered Species Act (ESA) recovery plans, and the 2008 Fish Accords. The measures contained in Douglas PUD's License Application are consistent with the goals and objectives of this comprehensive plan.

Northwest Power and Conservation Planning Council. 1988. Protected Areas Amendments and Response to Comments. Document 88-22. Portland, Oregon.

The Protected Areas Amendments Document was prepared in an effort to rebuild fish and wildlife populations that had been affected by hydroelectric development. The Council derived its authority from the NWPPA, which required the Council to develop a program to "protect, mitigate, and enhance fish and wildlife, including related spawning grounds and habitat." The final protected areas proposal is a formal amendment to the Council's Columbia River Basin Fish and Wildlife Program (covering the Columbia River basin) and to the Northwest Power Plan.

The Wells Project is not subject to this comprehensive plan as the Amendment "does not apply to any hydroelectric facility or its existing impoundment that had as of August 10, 1988, been licensed or exempted from licensing by the Federal Energy Regulatory Commission (or) the relicensing of such hydroelectric facility or its existing impoundment." Although not subject to the Amendment, the Wells Project has entered into a number of settlements and agreements aimed at preserving and enhancing fisheries and wildlife.

State of Washington. State of Oregon. State of Idaho. Confederated Tribes of the Warm Springs Reservation of Oregon. Confederated Tribes of the Umatilla Indian Reservation. Nez Perce Tribe. Confederated Tribes and Bands of the Yakama Indian Nation. Settlement Agreement pursuant to the September 1, 1983 Order of the U.S. District Court for Grant PUD of Oregon in Case No. 68-513. Columbia River Anadromous Fish Restoration Plan. Portland, Oregon. November 1987.

An agreement between Indian tribes and state and federal agencies that resulted from the United States v. Oregon, Civil No. 68-513, 302 F. Supp. 899 (9th Cir. 1969) is a key comprehensive plan for management of anadromous fish in the Columbia River. The purpose of the Columbia River Anadromous Fish Management Plan is to set guidelines for the management, harvest, hatchery production, and rebuilding of Columbia River basin salmonid stocks. The plan sets escapement goals for anadromous salmonid runs returning to the Columbia River. Douglas PUD's proposed Anadromous Fish Agreement and HCP is complimentary to the Columbia River Anadromous Fish Management Plan because the HCP contributes hatchery fish that are counted towards meeting the plan's regional escapement goals.

Washington State Department of Community Development. Office of Archeology and Historic Preservation. 1987. Resource Protection Planning Process- PaleoIndian study unit. Olympia, Washington.

The PaleoIndian Study Unit is part of a collection of prehistoric resource study units established to identify, evaluate, and protect archaeological resources throughout Washington State. The document is a Resource Protection Planning Identification Component for the PaleoIndian Period, summarizing current knowledge of the archaeological resources of the PaleoIndian study unit throughout Washington State ranging from 11,850 to 7,900 before present (B.P.). Archaeological investigations in eastern Washington and the mid-Columbia area have resulted in a rich accumulation of data. Results of that data search indicate that archaeological resources are relatively abundant and widely distributed throughout the state.

The Study Unit contains three components—an identification component, evaluation component, and protection component. The identification component is proposed to be ongoing and subject to revision under evolving circumstances. Archaeological sites are evaluated based on criteria defined by the Secretary of the Interior. Protection relates to those properties that are determined to be significant through identification and evaluation.

Douglas PUD has conducted intensive archaeological surveys, thoroughly documenting archaeological resources of the Wells Project. Douglas PUD entered into a data sharing agreement with the Washington Department of Archaeology and Historic Preservation (DAHP, formerly the Office of Archaeology and Historic Preservation), through which information regarding archaeological resources is shared in order to better manage the resources. The DAHP is a signatory to a programmatic agreement for future management of Wells Project archaeological resources, and Douglas PUD has developed a Historic Properties Management Plan (HPMP) for implementation under the next license in consultation with the DAHP, the FERC, and the CCT. The data sharing program with DAHP as well as the archaeological surveys conducted by Douglas PUD and development of a HPMP for continued long-term management of historic properties is consistent with the planning document.

Resource Protection Planning Process - mid-Columbia Study Unit. Washington Department of Community Development. Office of Archaeology and Historic Preservation. 1987.

The mid-Columbia Study Unit is part of a collection of prehistoric resource study units established to identify, evaluate, and protect archaeological resources throughout Washington State. The document is a Resource Protection Planning Identification Component, summarizing current knowledge of the archaeological resources of the mid-Columbia Study Unit. Archaeological investigations in eastern Washington and the mid-Columbia area have resulted in a rich accumulation of data. Results of that data search indicate that archaeological resources are relatively abundant and widely distributed throughout the state.

The Study Unit contains three components—an identification component, evaluation component, and protection component. The identification component is proposed to be ongoing and subject to revision under evolving circumstances. Archaeological sites are evaluated based on criteria defined by the Secretary of the Interior. Protection relates to those properties that are determined to be significant through identification and evaluation.

Douglas PUD has conducted intensive archaeological surveys, thoroughly documenting archaeological resources of the Wells Project. Douglas PUD entered into a data sharing agreement with the Washington Department of Archaeology and Historic Preservation (DAHP, formerly the Office of Archaeology and Historic Preservation), through which information regarding archaeological resources is shared in order to better manage the resources. The DAHP is a signatory to a programmatic agreement for future management of Wells Project archaeological resources, and Douglas PUD has developed a Historic Properties Management Plan (HPMP) for implementation under the next license in consultation with the DAHP, the FERC, and the CCT. The data sharing program with DAHP as well as the archaeological surveys conducted by Douglas PUD and development of a HPMP for continued long-term management of historic properties is consistent with the planning document.

Washington State Department of Community Development. Office of Archeology and Historic Preservation. 1987. A Resource Protection Planning Process Identification Component for the Eastern Washington Protohistoric Study Unit. Olympia, Washington.

The Protohistoric Study Unit is part of a collection of prehistoric resource study units established to identify, evaluate, and protect archaeological resources throughout Washington State. The document is a Resource Protection Planning Identification Component for the Protohistoric Period, summarizing current knowledge of the archaeological resources of the Protohistoric Study Unit throughout Washington State ranging from 1700 A.D. to historic times. Archaeological investigations in eastern Washington and the mid-Columbia area have resulted in a rich accumulation of data. Results of that data search indicate that archaeological resources are relatively abundant and widely distributed throughout the state.

The Study Unit contains three components—an identification component, evaluation component, and protection component. The identification component is proposed to be ongoing and subject to revision under evolving circumstances. Archaeological sites are evaluated based on criteria defined by the Secretary of the Interior. Protection relates to those properties that are determined to be significant through identification and evaluation.

Douglas PUD has conducted intensive archaeological surveys, thoroughly documenting archaeological resources of the Wells Project. Douglas PUD entered into a data sharing agreement with the DAHP, through which information regarding archaeological resources is shared in order to better manage the resources. The DAHP is a signatory to a programmatic agreement for future management of Wells Project archaeological resources, and Douglas PUD has developed a HPMP for implementation under the next license in consultation with the DAHP, the FERC, and the CCT. The data sharing program with DAHP as well as the archaeological surveys conducted by Douglas PUD and development of a HPMP for continued long-term management of historic properties is consistent with the planning document.

Washington State Department of Ecology. 1994. State Wetlands Integration Strategy. Olympia, Washington.

The State Wetlands Integration Strategy grant funded two separate components: (1) four local government demonstration projects; and (2) six work groups. The four demonstration projects were established to test specific wetland management strategies while the six work groups each addressed one of the following wetlands topics: Regulatory Reform, Planning, Technical Aspects of Wetlands, Economics, Education, and Non-Regulatory Actions. A total of 47 recommendations were developed by the six work groups. Many of the recommendations with State Wetlands Integration Strategy were directed at state agencies to improve consistency relating to wetland policies, coordination among the agencies, and communication with the public.

The Wells Project is not directly affected by the goals and recommendations of this report because the purposes of State Wetlands Integration Strategy are to clarify and simplify the wetland planning and permitting process. However, the proposed Shoreline Management Plan is consistent with the Washington State Department of Ecology's (Ecology) Shorelands and Water Resources Program.

Washington State Department of Fisheries. 1987. Hydroelectric Project Assessment Guidelines. Olympia, Washington.

This document, currently included in the August 2009 FERC List of Comprehensive Plans, has been superseded by:

Washington State Department of Fish and Wildlife. 1995. Hydroelectric Project Assessment Guidelines. Olympia, Washington.

The Hydroelectric Project Assessment Guidelines (Guidelines) were developed to assist hydropower project proponents in developing a license or exemption application to the FERC. The Guidelines explain the WDFW management goals and provide specific instructions for conducting fish and wildlife studies pertinent to a proposed project. In these guidelines, the WDFW established a goal of "no net loss" of existing potential habitat production. Douglas PUD's proposals in this License Application are consistent with these guidelines and have been developed to provide a high level of protection and mitigation for unavoidable losses. In particular, the goal of the Anadromous Fish Agreement and HCP is to provide no net impact to anadromous salmonids affected by the Wells Project.

Washington State Department of Natural Resources. 1987. State of Washington Natural Heritage Plan. Olympia, Washington.

This document, currently included in the August 2009 FERC List of Comprehensive Plans, has been superseded by:

Washington State Department of Natural Resources. 2007. State of Washington Natural Heritage Plan. Olympia, Washington.

The State of Washington Natural Heritage Plan, most recently updated in 2007, was developed as a tool to help guide conservation in the state. The plan focuses on developing and maintaining an information system of the state's biodiversity, sharing information with agencies and organizations for environmental assessment and land management purposes, and using the information to help guide conservation actions. The Program uses two systems to prioritize species and ecosystems—one for overall conservation action, and one specifically for including species and ecosystems within the statewide system of natural areas. The Natural Heritage Program has no direct regulatory authority as the conservation status assigned to species and ecosystems is advisory only.

In this License Application, Douglas PUD's proposed Wildlife and Botanical Management Plan and Land Use Policy contain specific PM&E measures to address potential Project related impacts on rare, threatened, or endangered (RTE) plant species, which are consistent with the State of Washington Natural Heritage Plan.

Washington State Energy Office. 1992. Washington State Hydropower Development/Resource Protection Plan. Olympia, Washington.

The Washington Hydropower Development/Resource Protection Plan constitutes the state's plan under Section 10(a) of the FPA. This plan, which became effective in January 1993, applies to new hydropower development at sites that do not have existing hydropower generation. This plan does not apply to projects that were currently generating power or undergoing relicensing when this plan became effective; therefore, it is not applicable to the Wells Project.

U.S. Fish and Wildlife Service. Undated. Fisheries USA: The Recreational Fisheries Policy of the U.S. Fish and Wildlife Service. Washington, D.C.

The Recreational Fisheries Policy defines the USFWS's stewardship role in the management of the U.S.'s recreational fishery resources. The USFWS is committed to promoting and enhancing freshwater, anadromous, and coastal fishery resources for long-term public benefit. This commitment is outlined by the following policies:

1. preserve, restore, and enhance fish populations and their habitats;
2. promote recreational fishing on USFWS and other lands to provide the public with a high-quality recreational experience;
3. ensure that recommendations concerning recreational fisheries potentials and opportunities are included as part of appropriate field studies and management assistance efforts performed by the USFWS on non-USFWS waters;
4. serve as an active partner with other federal governmental agencies, states, tribes, conservation organizations, and the public in developing recreational fisheries programs;
5. promote the conservation and enhancement of the Nation's recreational fisheries through the USFWS's grant in aid programs; and
6. improve and expand quantifiable economic valuations of the Nation's recreational fisheries to demonstrate the importance of this resource to the health and welfare of our society and to the Nation's economy.

To accomplish these policies, the USFWS developed the following goals and strategies:

1. effect the preservation and/or increased productivity of fishery resources;
2. ensure and enhance the quality, quantity, and diversity of recreational fishing opportunities;
3. develop and enhance partnerships between governments and the private sector for conserving and managing recreational fisheries; and
4. cooperate and maintain a healthy recreational fisheries industry.

The Recreational Fisheries Policy serves to affirm the USFWS's commitment to the Nation's fisheries resource. The HCP, approved by the FERC in 2004, addresses Project-related impacts to spring Chinook, summer/fall Chinook, steelhead, sockeye, and coho and provides ESA coverage for these species. The measures within this HCP are consistent with the policies outlined in the Recreational Fisheries Policy because the HCP works to preserve and enhance fish populations and habitat. In addition, implementation of the suite of measures contained within the management plans of the Aquatic Settlement Agreement is consistent with the goals and strategies of this plan.

Washington Department of Ecology. 1977. Water Resources Management Program-Methow River Basin. Olympia, Washington.

The Water Resources Management Program for the Methow River basin provides state management policies on water resources in the Methow River basin. Its purpose is to provide a basis for making decisions on future water resource allocation and use. The document contains public concerns and factual findings with water resource management policies based on these findings. The management policy section provides for the protection of existing water rights,

allows for further irrigation, establishes base flows at flow control stations along the Methow River system, and indicates preference among uses. The preferences of beneficial use are as follows beginning with top priority: existing rights (which includes tribal use of Methow River), domestic use, base flows, irrigation and agricultural industry uses, and other consumptive and non-consumptive uses. Hydroelectric power production is a beneficial designated use according to the State Water Resources Act of 1971. Hydropower is defined as a non-consumptive use in this plan. This plan emphasizes that existing water rights are the highest priority of beneficial use preferences for management of surface water resources of the Methow River. The Wells Project does not exercise any consumptive water rights on the Methow River, and is in compliance with this comprehensive plan.

Washington Department of Ecology. 1978 Water Resources Management Program-Okanogan River Basin. Olympia, Washington.

The Water Resources Management Program for the Okanogan River basin provides state management policies on water resources in the Okanogan River basin. Its purpose is to provide a basis for making decisions on future water resource allocation and use. The document contains public concerns and factual findings with water resource management policies based on these findings. The management policy section provides for the protection of existing water rights, allows for further irrigation, establishes base flows at flow control stations along the Okanogan River system, and indicates preference among uses. The preferences of beneficial use in descending priority order are: existing rights, domestic use, base flows, irrigation and agricultural industry uses, and other consumptive and non-consumptive uses. Hydroelectric power production is a beneficial designated use according to the State Water Resources Act of 1971. Hydropower is defined as a non-consumptive use in this plan. The Wells Project does not exercise any consumptive water rights on the Okanogan River, and is in compliance with this comprehensive plan.

Washington Department of Ecology. 1986. Application of Shoreline Management to Hydroelectric Developments. Olympia, Washington.

This document is intended to function as an informal reference guide for cities and counties in processing substantial shoreline development permits, and for the modification of local shoreline master programs where those programs more directly address hydroelectric developments. The document encourages cities and counties to adopt local shoreline master programs that comprehensively address proposed hydropower projects and associated state permitting requirements. The document is broken into three sections: application of the shoreline management substantial development permit system to hydroelectric development; guidance for the refinement of local master programs to address hydroelectric developments; and suggested formats for local shoreline master programs. Technically, this comprehensive plan is not applicable to the Wells Project since it is designed to serve as a guidance document for cities and counties and not the Applicant.

Washington Department of Game. 1987. Strategies for Washington's Wildlife. Olympia, Washington.

This 1987 Plan includes strategies to retain healthy, natural fish, and wildlife populations in Washington State. The Wildlife Plan is divided into five wildlife programs—big game, upland game, waterfowl, furbearers, and nongame wildlife. Each wildlife program identifies problems and strategies facing each grouping. These programs are prioritized and include the following:

- **Top Priority (intensive effort to meet goals):** nongame threatened, endangered, and sensitive species; steelhead, lowland lakes trout, warmwater fish and resident streams and beaver ponds; pheasant; Eastside elk; mule deer; Westside elk; black-tailed and white-tailed deer; waterfowl; and the urban wildlife program.
- **Mid-Priority (basic effort to meet goals):** nongame monitor species; alpine lakes; bighorn sheep; black bear; chukar and huns; cougar; forest grouse; furbearers; mountain goat; sage and sharp-tailed grouse; searun cutthroat and Dolly Varden trout; and quail.
- **Low Priority (goals should be met):** all other nongame species; doves; game farm birds; moose; band-tailed pigeon; rabbits and hares; and turkey.

Although these strategies are dated, Douglas PUD believes the Wells Project is consistent with the strategies and goals listed in the Strategies for Washington's Wildlife as demonstrated by Douglas PUD's Anadromous Fish Agreement and HCP, Aquatic Settlement Agreement, other proposed PM&E measures and various on- and off-license conservation agreements associated with the Wells Project.

Washington Department of Natural Resources. 1997. Final Habitat Conservation Plan. Olympia, Washington.

The Washington State Department of Natural Resources (DNR) Habitat Conservation Plan is a multi-species long-term plan designed to address state trust land management issues related to compliance with the federal ESA. The Plan guides DNR management of approximately 1.6 million acres of forested state trust lands within the range of the northern spotted owl located west of the crest of the Cascade Mountains, as well as DNR lands within the range of the northern spotted owl on the eastern slopes of the Cascades. The conservation strategies listed in the DNR Habitat Conservation Plan applies to lands the DNR manages. The Wells Project does not contain lands being managed under the DNR Habitat Conservation Plan; therefore, this plan is not applicable to the Wells Project.

U.S. Fish and Wildlife Service, Canadian Wildlife Service, U.S. Department of the Interior. 1986. North American Waterfowl Management Plan.

The North American Waterfowl Management Plan, updated in 1998, expands on the 1986 Plan seeking to restore waterfowl populations in Canada, the U.S., and Mexico to levels recorded during the 1970s, which was considered a benchmark decade for waterfowl. The plan outlines the following three visions to advance waterfowl conservation:

1. ensure that Plan implementation is guided by biologically-based planning and is refined through on-going evaluation;
2. define the landscape conditions needed to sustain waterfowl and other wetland-associated species. Participate in the development of conservation, economic, management, and social policies and programs that affect the ecological health of these landscapes; and
3. collaborate with other conservation efforts and reach out to other sectors and communities to form alliances.

These visions are designed to improve the status of North America's waterfowl, promote sustainable landscapes, and broaden partnerships on a variety of levels including international, national, regional, and local. The Wells Project contains significant waterfowl habitat. In particular, the Wells Reservoir provides regionally-important winter habitat for waterfowl. The Wells Project contains significant waterfowl habitat which will be protected through the implementation of the proposed Land Use Policy. Measures contained within Douglas PUD's Wildlife and Botanical Management Plan and Off-License Settlement Agreement are expected to provide significant benefits to waterfowl populations consistent with the North American Waterfowl Management Plan.

National Marine Fisheries Service, Seattle, Washington. Pacific Fishery Management Council, Portland, Oregon. 1978. Fishery management plan for commercial and recreational salmon fisheries off the coasts of Washington, Oregon, and California commencing in 1978. Department of Commerce. March 1978.

and

Pacific Fishery Management Council. 1988. Eighth Amendment to the Fishery Management Plan for Commercial and Recreational Salmon Fisheries off the Coasts of Washington, Oregon, and California. Portland, Oregon.

The Management Plan for Commercial and Recreational Salmon Fisheries off the Coasts of Washington, Oregon, and California works to assure that Pacific salmon, along with other fish and wildlife resources, receive equal treatment related to water and land resource development. The Pacific Fishery Management Council works with various agencies and tribes to assess habitat conditions and develop comprehensive restoration plans. The Eighth Amendment to the Fishery Management Plan for Commercial and Recreational Salmon Fisheries off the Coasts of Washington, Oregon, and California presents and analyzes two main issues: (1) incorporation of habitat considerations in the Fishery Management Plan; and (2) temporary adjustments for access to the fishery for vessels denied harvest opportunity by unsafe weather or ocean conditions. The habitat issue in the Eighth Amendment addressed the need for information in the Fishery Management Plan regarding the significance of habitat and the impacts of habitat changes on the

salmon resource and fishery. Additional information is expected to provide more effective and timely guidance in the protection and enhancement of salmon habitat for stocks under Council jurisdiction. The second issue allows for the consideration of adjustments for vessel access denied harvest opportunity by unsafe weather or ocean conditions. Douglas PUD's Anadromous Fish Agreement and HCP is consistent with the Eighth Amendment to the Fishery Management Plan for Commercial and Recreational Salmon Fisheries off the Coasts of Washington, Oregon, and California. The HCP addresses Project-related impacts to spring Chinook, summer/fall Chinook, steelhead, sockeye, and coho. The HCP provides ESA coverage for all of the permit species (spring Chinook, summer/fall Chinook, sockeye, and steelhead).

Nationwide Rivers Inventory. National Park Service, January 1982.

The Nationwide Rivers Inventory (NRI) of 1982 was the initial survey of the nation's rivers conducted to identify segments meeting the minimum criteria for further study and/or potential inclusion into the National Wild and Scenic Rivers System (NWSRS). Currently, the NRI list includes more than 3,400 free-flowing river segments "that are believed to possess one or more outstandingly remarkable natural or cultural values judged to be of more than local or regional significance." Of these, approximately 166 rivers have been designated under the NWSRS.

The Columbia River within the Wells Project Boundary is not included on the current NRI list. However, the 55 mile segment of the Columbia River from Priest Rapids Dam downstream to Lake Wallula, known as the Hanford Reach, was included on the 1982 NRI listing for its fisheries, wildlife and cultural values. This reach has not been designated under the NWSRS. Although this reach is outside the Project Boundary, the Wells Project is operated to protect the resources of the Hanford Reach, notably the fishery. Douglas PUD has entered into a number of agreements that protect the fishery resources of the Hanford Reach, including the Vernita Bar Settlement Agreement (1988) and Hanford Reach Fall Chinook Protection Program Agreement (2004), and the Anadromous Fish Agreement and Habitat Conservation Plan (HCP) (2004). The 64 mile segment of the Methow River from the Okanogan National Forest Boundary to the Wells Project has also been included on the NRI list for its scenic, recreational, fish and wildlife resources. However, this segment has not been designated under the NWSRS. The 2004 HCP includes provisions to protect and enhance the fishery of the Methow River, and Douglas PUD provided recreational access to the Methow River.

No segments of the Okanogan River are included in the NRI or NWSRS.

In summary, although no sections of the Columbia or Methow rivers have been designated under the NWSRS, there are segments of both river listed on the NRI. Although these segments are outside the Wells Project Boundary, the current and future operation of the Wells Project, consistent with several agreements including the HCP, enhances the fishery of these segments, provides recreational access to the Methow River, and does not adversely affect the scenic, cultural or wildlife values of the NRI listed segments.

Statute Establishing the State Scenic River System, Chapter 79.72 RCW, State of Washington, 1977; Washington State Scenic River Assessment and Scenic Rivers Program Report. Washington State Parks and Recreation Commission. 1988.

The Washington State Scenic Rivers system is a program, similar to the NWSRS discussed above, which recognizes river segments that have “outstanding natural, scenic, historic, ecological, and recreational values of present and future benefit to the public.” There are four rivers designated under the program – Skykomish, Beckler, Tye, and Little Spokane. No sections of the Columbia, Methow and Okanogan rivers are listed as Washington State Scenic Rivers.

Instream Resource Protection Program for the Mainstem Columbia River in Washington State. Washington Department of Ecology. 1982.

This program, administered by the Washington Department of Ecology, was initiated to protect and insure the viability of the instream resource values associated with the mainstem of the Columbia River through establishment of minimum flows and conservation and efficiency fundamentals relating to out-of-stream uses and values. WAC 173-563-020(3) states that: “Nothing in this chapter shall affect existing water rights, riparian, appropriative, or otherwise existing on the effective date of this chapter, including existing rights relating to the operation of any navigation, hydroelectric, or water storage reservoir or related facilities. This exemption includes rights embodied in all water rights permits and certificates existing on the effective date of this Program. As such, the program does not apply to the Wells Project. However, the Wells Project is operated to protect instream resources of the Columbia River and all of the PM&E measures proposed in this License Application will directly or indirectly benefit such resources.

9.0 FINANCIAL AND PERSONNEL RESOURCES

9.1 Financial Resources

The Applicant’s principal interests are to operate the Wells Project in a safe and reliable manner and provide Douglas County with electric service at the lowest cost consistent with meeting obligations to the public and environment. The Project’s past performance demonstrates that Douglas PUD has the financial resources to meet the operation, maintenance, and capital requirements of the Project. Douglas PUD’s net investment (book value) in the Wells Project is \$178,107,778 as of August 31, 2007.

Construction of the Wells Project was financed through the sale of \$184,000,000 of revenue bonds. In 1963, Douglas PUD issued bonds for the purpose of financing the construction of the initial design of the Wells Project, which provided for seven turbine generating units. The three additional units added in 1965 were financed with the proceeds of the 1965 bonds. Following the initial construction bonding, numerous revenue bonds have been issued to fund capital construction, settlements, and other expenditures.

Since 2003, the Wells Project has maintained ratings from Moody's and Standard and Poor's of Aa2 and AA, respectively, recognizing the solid financial status of the Project.

Currently, the Series 1999A Bonds, Series 2005A Bonds and Series 2005B Bonds are the only debt of the Wells Project extending beyond September 1, 2018.

Douglas PUD typically funds its renewals, replacements, additions, betterments, and improvements to the Wells Project from revenues received from the Power Purchasers and the Douglas PUD Electric Distribution System. Capitalized costs funded by Wells Project revenues are paid from the Reserve and Contingency Fund. Annual capital costs paid from the Reserve and Contingency Fund for the five years ended August 31, 2007, averaged approximately \$1,140,000. Certain major additions and extraordinary renewals and replacements have been provided from the proceeds of Wells Project bonds issued for such purposes. Funding for all capital improvements within the next five years is expected to come from Wells Project revenues and bond proceeds.

Any reduction in Project generation would likely be replaced by energy produced from a mixture of fossil fuel and renewable generation both of which average much higher in cost relative to Columbia River hydroelectric generation rates. Douglas PUD is authorized to set retail rates and charges for retail electric energy and services. Douglas PUD is not subject to the rate-making jurisdiction and control of the Washington Utilities and Transportation Commission or any other federal, state, or local agency authorized to set rates and charges for electric energy and services. Douglas PUD's board of elected commissioners sets rates following public hearings and input.

9.2 Personnel Resources

Douglas PUD's employees are responsible for the operation and maintenance of the Wells Project, including ensuring compliance with obligations under the current license. Douglas PUD has operated and maintained the Project in a safe and efficient manner since its construction in the early 1960s. Its performance during this term has demonstrated Douglas PUD's ability to operate the Project in a safe manner in accordance with the license terms and conditions.

As of January 2008, Douglas PUD employs a total of 177 employees including administrative, craft, management, and professional personnel. Table 9.2-1 details the number of Douglas PUD employees by project and job category.

Table 9.2-1 Wells Project personnel resources.

| Project | Administrative | Craft | Management | Professional | Total |
|--------------|----------------|-------|------------|--------------|-------|
| Wells | 34 | 47 | 5 | 16 | 102 |
| Distribution | 21 | 30 | 8 | 16 | 75 |
| Total | 55 | 77 | 13 | 32 | 177 |

Training is valued at Douglas PUD. Douglas PUD offers 12 safety training programs yearly including all Occupational Safety and Health Association (OSHA) and Washington State-required training. These training sessions are open to all employees of Douglas PUD. Employee training programs in 2008 consisted of the following topics:

- First Aid/CPR/Automated External Defibrillator Material Handling
- Fall Protection
- Hearing Fork Lift Review
- Fire Extinguishers and Heat Stress
- Right to Know/MSDS, Man Lifts and Platforms
- Respirators and SCBAs
- Confined Spaces and Rescues
- Toxic and Hazardous Materials
- Drug, Alcohol, and Cancer Awareness
- Hand and Portable Power Tools
- Floor Openings, Ramps, and Walkways

Additionally, health and wellness programs are provided for all office, management, and technical staff as requested.

10.0 PROJECT EXPANSION NOTIFICATION

Douglas PUD has conducted extensive surveys of ownership and tract boundaries in the Project area. Based upon the results of these surveys and inventories, Douglas PUD is proposing to expand the Project Boundary to include all lands that have the potential to be affected by the Wells Project's 50-year erosion potential. Douglas PUD has already purchased in fee title all but one of the tracts of land being proposed for inclusion within the Project Boundary related to erosion around the Wells Reservoir. The owners of the one remaining tract have been notified and negotiations for fee simple ownership have been initiated.

Douglas PUD is also proposing to expand the Project Boundary to include the waterfront parks located within the cities of Pateros, Brewster, and Bridgeport.

11.0 ELECTRICITY CONSUMPTION EFFICIENCY IMPROVEMENT PROGRAM

11.1 Customer Energy Efficiency Program

Douglas PUD has an excellent record of encouraging and assisting its customers in conserving electricity. Below are summaries of energy conservation programs, low-income, and other socioeconomic-oriented programs sponsored by Douglas PUD designed primarily to provide customers with cost-effective assistance to encourage the conservation of electricity.

11.1.1 Energy Conservation Programs

11.1.1.1 Energy Matchmaker Low-Income Weatherization Program

Douglas PUD contracts with the Chelan-Douglas Community Action Council to implement its “Matchmaker Program”. This program is targeted to low-income residential customers and is eligible for matching funds from the state and other entities. From 2002 to 2007, Douglas PUD contributed a total of \$170,000 toward the Matchmaker Program, with a current annual allocation of \$40,000 (Douglas PUD 2007).

11.1.1.2 Zero Interest Loan Pilot Project

Under the Zero Interest Loan Pilot Project, Douglas PUD offers qualifying residential customers “zero interest loans” to install weatherization measures in accordance with the most current Washington State uniform building codes. Customers utilize the loans to increase insulation levels, wrap warm air ducts, and replace energy-inefficient windows. In 2006, Douglas PUD increased the maximum amount available to each participant to \$4,500. Customers obtain bids for the installation of weatherization measures and select an independent contractor of their choice. Upon completion of the work and inspection by a Douglas PUD engineer, eligible customers receive a maximum loan amount of \$4,500. The goal of the project is to process a total of 60 customer loans per year. Many customers choose to complete home weatherization projects well in excess of the \$4,500 zero interest loan limit, which results in even greater demand-side savings to Douglas PUD.

11.1.2 Low-Income and other Socioeconomic-Oriented Programs

11.1.2.1 Energy Matchmaker Low-Income Weatherization Program

Douglas PUD provides \$40,000 annually to the Chelan-Douglas Community Action Council, which is matched by state funds, to provide grants to low-income customers for home weatherization and rehabilitation of substandard housing.

11.1.2.2 K-8 Education Funding

Douglas PUD provides funding annually to the North Central Educational Service District to provide educational curriculum for every kindergarten through eighth grade student in Douglas County. North Central Educational Service District’s classes pertain to electrical generation, electric distribution, conservation, safety, and wise use of water resources.

11.1.2.3 Electric Utility Rural Economic Development Revolving Fund

Douglas PUD is able to receive a revenue tax credit annually in the amount up to \$25,000 when it provides funding to rural communities for projects “designed to achieve job creation or business retention, to add or upgrade non-electrical infrastructure, to add or upgrade health and safety facilities, to accomplish energy and water use efficiency improvements, including renewable energy development, or to add or upgrade emergency services” up to a maximum of \$50,000 (Revised Code of Washington [RCW] 82.16). The fund awarded grants totaling \$50,000 in 2007.

11.2 Compliance with Regulatory Requirements

Douglas PUD is a municipal corporation and political subdivision of Washington State. Douglas PUD's legal responsibilities and authorities are exercised by a Board of Commissioners comprised of three publicly elected members. As such, Douglas PUD is not subject to the jurisdiction of the Washington Utilities and Transportation Commission. As a locally-managed public utility, Douglas PUD plans and implements conservation programs on its own.

Article 8, Section 7 of the Washington State Constitution prohibits Douglas PUD from making gifts of public funds. The Washington State Supreme Court in *Tacoma v. Taxpayers*, 109 Wn. 2d 679 (1987) held that to pursue conservation as an electrical resource purchase, the municipality must be able to demonstrate that: (1) the conservation resource acquired is necessary to meet the utility's existing or future energy needs; (2) that there is an intent to purchase electricity; and 3) that studies have been undertaken to demonstrate the proposed energy conservation is cost effective. Douglas PUD has applied, and complied with, these criteria in undertaking the various conservation programs discussed in Section 11.1.

12.0 INDIAN TRIBE NAMES AND MAILING ADDRESSES

This section provides the names and mailing addresses of Native American groups that may be affected by the Project.

Confederated Tribes of the Colville Reservation
P.O. Box 150
Nespelem, WA 99155

Confederated Tribes and Bands of the Yakama Nation
P.O. Box 151
Toppenish, WA 98948-0151

13.0 SAFE MANAGEMENT, OPERATION, AND MAINTENANCE

Safe management, operation, and maintenance at the Wells Project are top priorities of Douglas PUD. Safety features are designed to minimize risks to the community, public, operating personnel, environment, and physical plant. In an effort to protect the public, unescorted public access is not allowed on the hydrocombine, East Embankment, or forebay debris boom. The dam is attended at all times and monitored 24 hours per day by Douglas PUD's Dispatch Center located in East Wenatchee, Washington, 50 miles south of Wells Dam. In compliance with the FERC license requirements for the Wells Project, Douglas PUD maintains rigorous dam safety, operations and maintenance, and emergency preparedness programs. These programs include Part 12D Independent Consultant Safety Inspections, Dam Safety Surveillance and Monitoring Plan (DSSMP), annual Dam Safety Surveillance and Monitoring Reports (DSSMR), Potential Failure Mode Analysis (PFMA), FERC safety inspections, FERC environmental inspections, Public Safety Plan, Emergency Action Plan (EAP) exercises, and employee safety programs.

All Wells Project facilities are maintained to ensure safe and reliable operation. On at least a weekly schedule, the control room operators make a complete embankment inspection including

looking for indications of sink holes, wet surfaces, and any signs of piping. In the powerhouse, operators record drainage gallery flow looking for significant changes in gallery flow and increases and decreases in sediment accumulation and testing the water level alarms. All of the piezometers on the East Embankment are read twice a year, providing information on the pore water pressure in the embankment. Six of the piezometers are fitted with automated transducers that provide continuous readouts to control room operators. Settlement and alignment monuments on the powerhouse and embankments are surveyed once a year to monitor any movements. Powerhouse uplift pressures are measured on an annual basis. Two seismographs, located on the East Embankment and on the east abutment, are monitored continually by the U.S. Geological Survey (USGS) to record any earthquake activity in the area of the dam. Inclinometers, located in the East Embankment, are read periodically and provide information on any movement of the diaphragm cutoff wall in the embankment. Security cameras are also used to monitor operational conditions to ensure safe maintenance of the Project. A complete description of the dam safety surveillance and monitoring equipment and procedures as related to safe maintenance and operations is provided in the DSSMP, which is updated periodically.

13.1 Operating During Flood Conditions

13.1.1 Non-Emergency Action Plan Events

Article 34 of the FERC license for the Wells Project includes an operating provision to compensate for lost valley storage during the flood season. Each year, prior to the beginning flood runoff, the District Engineer of the COE, is to inform Douglas PUD of the storage space to be provided in the Wells Project reservoir to compensate for valley storage that may be expected to be lost during the ensuing flood season. Douglas PUD is required to provide this storage at no cost to the U.S. in accordance with the following general procedures:

- (i) The amount of storage space to be provided by Douglas PUD will vary from zero acre-feet for a forecasted peak flow of 500,000 second-feet at The Dalles, Oregon, to approximately 125,000 acre-feet for a forecasted peak flow of 1,100,000 second-feet at The Dalles, the forecasted flows to be as regulated by storage existing at the time of the original license. To the extent feasible, and in order to minimize the duration of the drawdown of the Wells Reservoir for valley storage replacement, the drawdown will be ordered by the District Engineer not earlier than two weeks before the predicted date on which the observed flow at The Dalles is forecasted to equal or exceed 500,000 cfs, and refill will be directed by the District Engineer generally within one week after voluntary filling of Grand Coulee Reservoir for flood control purposes is initiated.
- (ii) Detailed procedures for use of the valley storage replacement in the Wells Reservoir will be included in a regulation manual to be prepared by the District Engineer.

13.1.2 Emergency Action Plan Events

Douglas PUD maintains an EAP for the Wells Project in accordance with the FERC's Engineering Guidelines. The EAP includes plant operating directives, definition of supervisor-in-charge hierarchy, and communications flowcharts to be followed during an emergency at the Wells Project. The primary purpose of the EAP is to define the requirements needed to warn the public, public safety agencies, downstream dam operators, and property owners in the event of an imminent (Condition A) or potential (Condition B) sudden release of water caused by an

accident to or a failure of Wells Dam (or upstream projects). The EAP is, and will continue to be, reviewed annually, with respect to conditions both upstream and downstream of the Project that may necessitate changes in the plan. Implementation of the plan requires cooperation and clear communication among different agencies. Douglas PUD will continue to work in coordination with these officials to ensure that the plan is responsive to any change in uses or conditions below or in the vicinity of the Project.

13.2 Warning Devices for Downstream Public Safety

Annual reviews of Wells Project flood inundation maps and wave crest profiles indicate that no permanent year-round habitations needing special notification, except the Wells Hatchery, are located immediately downstream of the Project. The Wells Hatchery is located just downstream of the West Embankment. The hatchery incubation and administration building is occupied during normal working hours and has the potential to be occupied during the evening. The operators at the Wells Project will notify the hatchery building occupants if a potential emergency condition develops in accordance with the Wells Project EAP. The EAP calls for notifications to the public at seasonal habitations such as formal campgrounds and other recreational facilities at parks (boat launches, docks, etc.) to be performed by local emergency management agencies. Parks with camping and other boating facilities are identified in the EAP along with phone numbers for the facilities.

To further ensure public safety, warning signs are provided at locations downstream of the powerhouse where changes in Project operations have potential to quickly alter water levels. These signs read “DANGER, RIVER FLOW SUBJECT TO RAPID CHANGE - AREA UNSAFE FOR PUBLIC USE.”

13.3 Operational Changes that Might Affect the EAP

No operational changes are proposed that might affect the existing EAP at the Wells Project. Douglas PUD is unaware of any downstream development that might affect the EAP. Each year, as part of the updating of the Wells EAP, an inspection is made to identify any new structures downstream of the Project that might require provisions for special notifications in an emergency condition at the Wells Project.

13.4 Monitoring Devices

A variety of monitoring devices are utilized at the Wells Project to ensure dam safety. A survey of settlement and alignment points is performed annually to detect structural movement of the powerhouse and embankments. Piezometers are installed in the East Embankment to monitor pore water pressure in the embankment and its foundation. Other instrumentation is used to monitor uplift pressures at the powerhouse contact with bedrock and to measure drainage from the foundation drain holes and to monitor ground motions during seismic activity at the dam. The instrumentation is monitored and reviewed on a periodic basis, or continually, depending on the instrument. A special set of instrumentation readings will be taken following an unusual event such as an earthquake. A detailed description of Project instrumentation, together with monitoring methods and frequencies, is contained in the DSSMP. Two DSSMRs are prepared at the end of each year. They contain the data, data plots, and an evaluation of the data for the Uplift Monitoring Program and for the Annual Evaluation of Instrumentation Data.

High-water level alarms are located at strategic locations in the powerhouse to detect potential flooding. High-water levels will activate a common alarm panel located in the control room and an individual alarm panel located on the 705 level at Unit 5. Additionally, operators make a walk-through inspection of the entire powerhouse, including the lower galleries, on a daily basis checking for leakage and other unusual conditions, and a complete inspection of the powerhouse, including testing of the water level alarms, on a weekly basis. A daily walk-through inspection is also performed for the spillways and the switchyard. A complete inspection of the embankments and spillways occurs on a weekly basis. A complete description of the dam safety surveillance and monitoring equipment and procedures is provided in the DSSMP.

13.5 Employee Safety and Public Safety Record

Douglas PUD keeps a record of all reported accidents that occur within the Wells Project Boundary involving both employees and the public. These accidents are discussed below for employee safety and public safety.

13.5.1 Employee Safety

Employee safety and training are leading priorities of Douglas PUD. Douglas PUD provides a safety program that meets Washington State's WAC 296-45-065 training requirements for qualified electrical workers. Through the safety program, Douglas PUD offers 12 safety training programs yearly including all OSHA and Washington State-required yearly training, and training required on a regular basis. These training sessions are open to all employees of Douglas PUD. Additionally, health and wellness programs are offered to all staff as part of Douglas PUD's Wellness Program. Employee training programs in 2008 were detailed previously in Section 9.2.

Table 13.5-1 compiles information from Annual OSHA Forms 300A—a summary of work-related injuries and illnesses from years 2001 to 2007 and OSHA Forms 200 with information from years 1983 to 2000. As indicated by Table 13.5-1, the number of cases with days resulting in loss of work has steadily decreased from 1983 to 2007 signifying the importance of safety at the Wells Project.

Table 13.5-1 Summary of Wells Project employee work-related injuries and illnesses.

| Year | Number of Deaths | Number of Cases with Days away from Work | Total Number of Days Away from Work | Number of Days of Job Transfer or Restriction | Number of Other Recordable Cases | Annual Average Number of Employees | Total Hours Worked by all Employees |
|------|------------------|--|-------------------------------------|---|----------------------------------|------------------------------------|-------------------------------------|
| 2007 | 0 | 1 | 2 | 0 | 3 | 100 | 215,626 |
| 2006 | 0 | 1 | 14 | 21 | 6 | 98 | 180,343 |
| 2005 | 0 | 0 | 0 | 14 | 3 | 100 | 185,159 |
| 2004 | 0 | 2 | 111 | 0 | 12 | 95 | 164,535 |
| 2003 | 0 | 2 | 0 | 34 | 2 | 90 | 166,233 |
| 2002 | 0 | 1 | 0 | 5 | 11 | 91 | 167,436 |
| 2001 | 0 | 0 | 0 | 0 | 1 | - | - |
| 2000 | 0 | 2 | 42 | 0 | 2 | - | - |
| 1999 | 0 | 0 | 0 | 0 | 4 | - | - |
| 1998 | 0 | 1 | 20 | 0 | 4 | - | - |
| 1997 | 0 | 1 | 2 | 0 | 2 | - | - |
| 1996 | 0 | 1 | 4 | 0 | 6 | - | - |
| 1995 | 0 | 1 | 3 | 0 | 4 | - | - |
| 1994 | 0 | 1 | 15 | 0 | 5 | - | - |
| 1993 | 0 | 0 | 0 | 0 | 1 | - | - |
| 1992 | 0 | 4 | 5 | 0 | 11 | - | - |
| 1991 | 0 | 5 | 11 | 0 | 8 | - | - |
| 1990 | 0 | 2 | 3 | 0 | 4 | - | - |
| 1989 | 0 | 4 | 10 | 0 | 7 | - | - |
| 1988 | 0 | 6 | 293 | 0 | 8 | - | - |
| 1987 | 0 | 8 | 501 | 0 | 13 | - | - |
| 1986 | 0 | 8 | 172 | 0 | 9 | - | - |
| 1985 | 0 | 4 | 13 | 0 | 10 | - | - |
| 1984 | 0 | 5 | 214 | 0 | 11 | - | - |
| 1983 | 0 | 3 | 3.5 | 0 | 12 | - | - |

13.5.2 Public Safety

Douglas PUD has an excellent public safety record considering the extent of the Project lands and waters. Douglas PUD maintains and makes available to the public a Public Safety Plan for the Wells Project as the Project is accessible by the public. This Plan identifies the public safety devices at the Wells Dam and the Reservoir. The major public uses of lands and water within the Wells Project area are for fishing, hunting, and boating.

Public use of Wells Dam consists of visitors using the overlook off the right abutment of the dam and visiting the fish hatchery located downstream from the west embankment. Fishing is popular above and below the dam with boat and shore anglers.

The Wells Reservoir is frequented by water skiers and fishermen with visits peaking in the summer months. The towns of Pateros, Brewster, and Bridgeport have parks, boat launches, docks, and designated swimming areas adjacent to the Wells Reservoir. These three towns have both placed and maintain buoys and signs at the swimming areas. Water skiers frequent the reservoir and activity is expected to continue to increase.

Wells Reservoir is an important waterfowl habitat. The WDFW erected goose nesting tubs consisting of vertical pipe with a metal tub attached to the end of the pipe along the shoreline and

in shallow offshore areas. The pipe is wrapped with reflective tape for public notification. Constructed rock groins in the Methow River area of the reservoir are marked by buoys and warning signs for the public.

Table 13.5-2 lists incidents occurring within the Project Boundary resulting in injuries or fatalities to a member of the public since 1991. None of the fatalities have been directly related to the Project operation.

Table 13.5-2 Serious injuries and fatalities occurring within the Wells Project Boundary (1991-2008).

| Date | Location | Description |
|------------------|--|---|
| July 3, 2009 | Marina Park | Apparent drowning |
| August 2, 2008 | Marina Park | Apparent drowning |
| July 28, 2008 | Upper Okanogan River | Cause of death unknown, found along reservoir shoreline on Okanogan River |
| May 5, 2006 | Columbia River at Pateros | Apparent drowning in the Okanogan River upstream of the Wells Project reservoir |
| January 5, 2004 | Columbia River, 20 river miles upstream of Wells Dam | Apparent drowning or death by hypothermia |
| March 30, 2002 | Columbia River near Brewster, approximately 14 miles upstream of Wells Dam | Apparent drowning |
| June 29, 2000 | Columbia Cove Park, 14 miles upstream of Wells Dam | Apparent drowning |
| July 2, 1997 | Intersection of Methow and Columbia rivers at Peninsula Park, 8 river miles upstream of Wells Dam. | Injury to neck while diving in shallow water |
| August 14, 1995 | Upstream end of Wells Reservoir, 28.5 river miles upstream of Wells Dam | Apparent drowning |
| October 16, 1993 | Washburn Island, 21 river miles upstream of Wells Dam | Death by heart attack |
| July 14, 1991 | Upstream of Wells Dam | Apparent drowning |
| June 26, 1991 | Three-quarters miles north of Wells Dam at the Bert Stennis Orchard | Apparent drowning |

14.0 CURRENT OPERATION

The Project is operated in accordance with the existing license requirements. The Wells Project is a part of a coordinated system of hydroelectric projects located on the Columbia River and the Project's current operations can best be understood within the context of the operation of that entire system. In total, the operations of seven hydroelectric developments are coordinated in accordance with the terms of the Mid-Columbia HCA. The furthest upstream facility in this scheme is Grand Coulee. With a maximum turbine hydraulic capacity exceeding 280,000 cfs and an active storage volume of 5.2 MAF, the Grand Coulee operations largely define the mid-Columbia River flow regime, and especially the flow regime at the Wells Project.

Just downstream of the Grand Coulee development is the Chief Joseph Dam and power plant, with an installed capacity exceeding 2,069 MW and a turbine hydraulic capacity of about 213,000 cfs. Both Grand Coulee and Chief Joseph are federally-owned facilities, with their power scheduling and daily production being managed by the BPA. The Wells Project is located immediately downstream of the Chief Joseph development. Because the Wells Project has

modest storage capacity and operates as a run-of-river project, the flows at Wells are generally dictated by the discharges from the upstream federal facilities.

The Wells Project currently operates via an automatic generation control set-point signal from the Supervisory Control and Data Acquisition (SCADA) system located in Douglas PUD's System Operations Center in East Wenatchee, Washington. This signal is based on the predicted generation needed at the Wells Project and is coordinated with the needs of the six other hydro projects on the mid-Columbia River. This set-point signal is dynamic (4-second cycle time) and establishes the expected generation of the Wells Project including losses. The signal is used to drive the Wells Project Load Controller. The Load Controller maintains a portion of the total set-point generation on each generating unit that is assigned to it for control. A unit is said to be on joint load control if it is controlled by the Load Controller. A unit may be online and loaded to an assigned static generation level if it is not on joint load control. The plant operator is responsible for determining when to bring additional units online and which units should be dedicated to joint load control. When units are on joint load control, their output is automatically controlled to maintain the set-point for the entire plant in addition to any units that may be online but not on joint load control. The local plant operator must start and stop units.

The daily operation of the Wells Project is influenced by the following factors: (a) FERC license requirements; (b) natural stream flows; (c) regulation of upstream storage reservoirs in the U.S. and Canada; (d) regulation of water releases from upstream power projects on an hourly basis to meet changing power demands; (e) actions in response to fish, wildlife, and other environmental regulations; and (f) variable power demands within Douglas and Okanogan counties and under long-term power sales contracts. The operating agreements that place constraints on the manner in which the Project is operated are summarized below.

14.1 Mid-Columbia Hourly Coordination Agreement

In 1972, the owners of the seven dams of the mid-Columbia River system and their power purchasers entered into the Agreement for Hourly Coordination of Projects on the mid-Columbia River. The agreement calls for a coordinated operation of the seven dams.

The HCA was the result of discussions among all the affected parties. In general, the parties agreed to coordinate the operation of the projects to achieve the following objectives:

1. coordinate the hydraulic operation of the projects for the purpose of optimizing the amount of energy from the available water consistent with the need to: (1) adjust the total actual generation to match the total requested generation, and (2) operate within all power and non-power requirements;
2. provide flexibility and coordinated scheduling of project generation through centralized scheduling, and the use of composite scheduling and accounting procedures;
3. minimize unnecessary changes in project generation to avoid frequent unit starts and stops; and
4. reduce the amount of fluctuation in river flow that could otherwise occur without such coordination.

A total of 17 northeast utilities receive a share of the output from the mid-Columbia system. The HCA requires that the power and non-power constraints of the individual projects be recognized in the coordination process. A goal of the HCA is to reduce the extent and rate of fluctuations in river levels as flow moves downstream from Grand Coulee to Chief Joseph, and from Chief Joseph Dam to Wells, Rocky Reach, Rock Island, Wanapum, and Priest Rapids dams.

The HCA was originally signed for a one-year experimental period from July 1, 1972 to June 30, 1973. Twelve parties representing the federal government, the three mid-Columbia PUDs, and all of the power purchasers at that time signed the original agreement. Several one-year agreements were entered into until a 10-year contract was signed on July 1, 1977. At the end of that term, another 10-year contract was signed, extending the arrangement through June 30, 1997. In 1997, a new 20-year renewal agreement was signed extending the term of the agreement through November 1, 2017. Douglas PUD has executed the renewal agreement.

Each day, the non-federal Hourly Coordination participants provide an estimated schedule of desired generation from the lower five projects. The federal project operators provide an estimate of water expected to be discharged from Grand Coulee and Chief Joseph. Central River Control located in Ephrata, Washington, then determines an estimated operation schedule for the following day based on anticipated flows from the federal projects, reservoir levels, and load. Central River Control sends the schedule to each of the five lower projects. Each project then pre-schedules its operation, including hourly generation, for the following day based on Central River Control's estimated operation schedule.

During real-time operation, each non-federal project sends Central River Control an uncoordinated load request signal every four seconds. Based on the sum of these load requests, Central River Control's computer system determines the allocation of generation required to meet both load demand and non-power constraints for the system. Central River Control operators use power generation characteristics and reservoir target elevations to establish desired generation and discharges. For example, during RLF at Priest Rapids Dam for compliance with the Hanford Reach Fall Chinook Protection Program, maximum and minimum power settings are used to limit flow during the day, and a target elevation is used to lower pool levels and increase flow at night.

More recently, Grand Coulee and Chief Joseph collectively have been providing much of the load-following responsibility for the entire federal system in the Pacific Northwest. The imposition of requirements to maintain turbine operations within the 1 percent of best efficiency range at all lower Columbia and Snake River dams and a 1-foot reservoir level fluctuation limitation for the federal projects on the lower Snake River, as required by the 2008 BO related to the operation of the FCRPS (NMFS 2008), has limited the load-following capability of much of the federal power system. These requirements have resulted in an apparent shift of load following to Grand Coulee and Chief Joseph, which tends to increase flow fluctuations and decrease flow predictability in the mid-Columbia River.

14.2 Pacific Northwest Coordination Agreement

On April 7, 1997, Douglas PUD entered into the 1997 PNCA between and among numerous federal agencies and northwest utilities. Operations under this agreement began on August 1, 2003, and its term extends until September 15, 2024. The 1997 PNCA helps manage reservoir

systems by maintaining the independence of each hydroelectric facility while achieving maximum beneficial use of the river. The various projects work cooperatively toward meeting overall load requirements by mutually supporting each other's operations. The 1997 PNCA maintains the efficient use of water by recognizing and integrating both non-power and power requirements as water travels downstream. The 1997 PNCA is a successor to the PNCA that Douglas PUD entered into in 1964.

14.3 Canadian Entitlement Allocation Extension Agreement (1997)

On April 7, 1997, Douglas PUD entered into the Canadian Entitlement Allocation Extension Agreement with BPA. This agreement defined the portion of Canadian Entitlement allocated to the Wells Project through 2024, which is the minimum remaining term of The Columbia River Treaty. The Columbia River Treaty between the U.S. and Canada was signed in 1961 to help ensure the cooperative development of the Columbia River basin by regulating seasonal flows that enable downstream projects to produce additional power. Since the Wells Project benefits from the storage dams and improved stream flow authorized under The Columbia River Treaty, compensation in the form of capacity and energy is made to Canada. The Canadian Entitlement Allocation Extension Agreement is a successor of the original agreement entered into in 1964.

14.4 Vernita Bar Settlement Agreement (1988) and Hanford Reach Fall Chinook Protection Program Agreement (2004)

On February 16, 1988, Douglas PUD entered into the Vernita Bar Settlement Agreement between and among Grant PUD, Chelan PUD, BPA, NMFS, WDFW, CCT, YN, CUR, and ODFW. The agreement resulted from extensive negotiations with the aforementioned agencies and tribes in an effort to protect salmon spawning on the Vernita Bar in the Columbia River downstream of the Priest Rapids Project. The agreement attempts to achieve an appropriate balance between power production and the protection of fall Chinook salmon by identifying certain minimum flows to be maintained below Priest Rapids Dam during adult spawning, incubation, and emergence. The term of the Vernita Bar Settlement Agreement was for the remainder of the initial license term for the Priest Rapids Project plus the term(s) of any annual license(s) issued thereafter.

The successor agreement to the Vernita Bar Agreement, the Hanford Reach Fall Chinook Protection Program Agreement, was submitted to the FERC by Grant PUD on April 19, 2004, and approved in April 2008. The parties to this agreement include Grant PUD, Chelan PUD, Douglas PUD, NMFS, USFWS, WDFW, CCT, YN, and BPA. The agreement is designed to extend until the end of the new license term for the Priest Rapids Project. It sets forth the obligations of the three PUDs and BPA related to protection of fall Chinook salmon spawning, rearing, and outmigration in the Hanford Reach of the mid-Columbia River. The Wells Project is the uppermost non-federal project participating in these agreements.

14.5 Power Loss from Wells Project Encroachment on Chief Joseph Dam (1968)

On August 26, 1968, Douglas PUD and COE entered into an agreement for Power Loss from Encroachment Agreement. The Encroachment Agreement compensated the federal government for the encroachment of the Wells Project on the tailwater of Chief Joseph Dam. The term of the Encroachment Agreement extends for the duration of the Wells Project license (May 31, 2012). The agreement was supplemented on September 27, 1982, when the FERC approved raising the elevation of the Wells Reservoir from elevation 779 to 781 feet. Power losses from encroachment are calculated on an hourly basis and transferred to the federal system. Over the period 2002 through 2006, this amounted to approximately 8 percent of the annual average output of the Wells Project.

14.6 Settlement Agreement with Wells Project Power Purchasers (1989)

On May 15, 1989, Douglas PUD entered into a settlement agreement with its four Power Purchasers. This agreement was negotiated to settle an arbitration relating to the sale of Wells Project output. The agreement is effective through August 31, 2018. Under the agreement, Douglas PUD must offer certain temporarily-available, non-firm energy to the Power Purchasers under pricing structures which are subject to annual adjustments. Pursuant to the agreement, power returned to Douglas PUD under a 1983 supplemental agreement with Okanogan PUD was returned to the Power Purchasers except for power needed for Douglas PUD's load. Power actually returned to the Power Purchasers was subsequently withdrawn by Douglas PUD in accordance with the terms of the agreement.

14.7 Anadromous Fish Agreement and Habitat Conservation Plan (2004)

On June 21, 2004, the FERC approved the HCP. The HCP represents the culmination of over 10 years of negotiations. Entities that have signed the HCP (HCP Signatory Parties) include NMFS, USFWS, WDFW, CCT, YN, the Power Purchasers, and Douglas PUD. The HCP is the first hydropower HCP in the nation for anadromous salmon and steelhead. The HCP is a 50-year agreement that the FERC approved as an amendment to the Wells Project license in 2004. The HCP addresses all Project-related impacts to spring Chinook, summer/fall Chinook, steelhead, sockeye and coho, collectively referred to as Plan Species. With respect to Plan Species, the HCP Signatory Parties have agreed to be supportive of Douglas PUD's long-term license application(s) to the FERC, filed during the term of the HCP. The HCP also provides ESA coverage for all of the incidental take permit (ITP) species (spring Chinook, summer/fall Chinook, sockeye, and steelhead), and is intended to constitute the HCP Signatory Parties' terms, conditions, and recommendations for Plan Species under Sections 10(a), 10(j) and 18 of the FPA, the Fish and Wildlife Coordination Act, the Essential Fish Habitat (EFH) provisions of the Magnuson-Stevens Fishery Conservation and Management Act, the Pacific Northwest Electric Power Planning and Conservation Act (NWPPCA), and Title 77 of the RCW.

14.8 Settlement Agreement with the Colville Confederated Tribes (2005)

On November 1, 2004, Douglas PUD and the CCT executed a Settlement Agreement to resolve all claims regarding any Section 10(e) payments to the CCT for the term of the original license and any new FERC license arising from the use of lands within the Wells Project Boundary. Pursuant to the Settlement Agreement, Douglas PUD and the CCT also executed a Power Sales Contract (CCT Power Sales Contract) and a Power Sales Service Agreement. Beginning April 1, 2005, Douglas PUD is obligated to offer to the CCT, 4.5 percent of the output of the Wells Project through August 31, 2018, and 5.5 percent thereafter, at the cost of production, for so long as Douglas PUD holds a license for the Wells Project.

On November 23, 2004, Douglas PUD, the CCT and the Power Purchasers filed a request with the FERC for approval of: (1) the Settlement Agreement resolving all claims involving annual charges for the use of Indian lands for the Wells Project; and (2) the CCT Power Sales Contract that extends beyond the license term pursuant to Section 22 of the FPA. On February 11, 2005, the FERC issued an order approving the Settlement Agreement, amending the license, and approving the CCT Power Sales Contract for the period extending through the term of any new license issued upon expiration of the existing license. Article 46 was amended to provide that compensation to the CCT pursuant to the terms of the Settlement Agreement and the CCT Power Sales Contract constitutes payment in full for the Project's use of tribal lands within the Colville Reservation. In addition, the order provides that for the purposes of any new license issued upon expiration of the existing license, all annual charges under Section 10(e) of the FPA that accrue during the term of the new license for the use of tribal lands, to the extent such lands were included in the Wells Project Boundary on the effective date of the Settlement Agreement, shall be deemed satisfied by fulfillment of the applicable terms of the Settlement Agreement and the CCT Power Sales Contract.

14.9 Power Sales Contracts with Power Purchasers

Douglas PUD has executed contracts with the Power Purchasers (Power Sales Contracts) for the sale of 62 percent of Wells Project output (Table 2.3-2).

In 2005, Douglas PUD entered into a settlement with the CCT (CCT Power Sales Contract) pursuant to which Douglas PUD is obligated to sell to the CCT 4.5 percent of the output of the Wells Project through August 31, 2018, and 5.5 percent thereafter. The CCT Power Sales Contract reduces the amount of energy available to Douglas PUD and the Power Purchasers pro rata. Unlike the other purchasers, the CCT are not obligated to pay if the Wells Project is not operating or operable.

During each contract year, each Power Purchaser is obligated to pay its share of Wells Project annual power costs. Annual power costs for each contract year are estimated in advance and are payable on a monthly basis. The Power Sales Contracts state that such payments are to be made whether or not the Wells Project is then operable or operating.

On January 17, 1997, the FERC issued an order granting approval of the Power Sales Contracts under Section 22 of the FPA. The Power Sales Contracts extend beyond the term of the current Wells License.

14.10 Power Sales Contract and Memorandum of Understanding with Okanogan PUD

In addition to the Power Sales Contracts described above, in 1963, Douglas PUD entered into a contract with Okanogan PUD for the sale of electricity to Okanogan PUD of up to 8/38ths of the Wells Project output that the Douglas PUD Electric Distribution System is entitled to under the Power Sales Contracts. Currently, this is equivalent to 8 percent of the Wells Project output less the CCT Power Sales Agreement pro rata reduction. Okanogan PUD is required to make payments under the Okanogan PUD contract whether or not the Wells Project is operable or operating. The term of the Okanogan PUD contract extends until all of the costs incurred by Douglas PUD for the acquisition and construction of the Wells Project have been discharged in full but no later than August 31, 2018. At that time, except for the CCT Power Sales Contract, Okanogan PUD is entitled to an undivided 8 percent interest in the Wells Project.

14.11 Hanford Minimum Flows Operational Consistency with Priest Rapids Article 45

Article 33 of the FERC license prohibits the operation of the Wells Project in such a way as would prevent the licensee of the downstream Priest Rapids Project from meeting its obligation to provide a minimum flow of 36 kcfs to the Hanford Works of the Atomic Energy Commission (now the U.S. DOE), located at the downstream end of the Hanford Reach. Meeting this requirement is part of the planning and flow management provisions of the mid-Columbia HCA.

14.12 Lost Valley Storage Replacement

Article 34 of the FERC license requires that each year, before the beginning of the flood runoff, the District Engineer of the COE in charge of the locality shall inform Douglas PUD of the storage space to be provided in the Wells Project reservoir to compensate approximately for valley storage that may be expected to be lost during the ensuing flood season. Douglas PUD, without cost to the U.S., must provide this storage space in accordance with specific procedures. It is assumed that this requirement will be maintained in the new license term.

14.13 Measures Related to the Two-Foot Pool Raise

On April 26, 1981, Douglas PUD filed an application for a license amendment to raise the elevation of the Wells Reservoir from 779 to 781 feet. On September 3, 1982, the FERC issued an order amending the license and added 10 license articles (Articles 49 through 58) as part of its order. These articles included measures to protect cultural resources and recreation facilities, improve wildlife management facilities, compensate the COE for lost generation of Chief Joseph Dam, and undertake various Project safety reviews. Douglas PUD will be maintaining the current normal maximum pool elevation of 781 feet as approved by the September 23, 1982 order and compliance with the ten added license articles.

14.14 Douglas PUD Land Use Policy

Douglas PUD is responsible for land use and shoreline management within the Wells Project Boundary. The waters and shoreline features of the Wells Project provide important habitat for many species of fish, wildlife, and plants. Multiple resource management plans, including the HCP, Wildlife and Botanical Management Plan (WBMP), HPMP, and Recreation Management Plan (RMP) contain relevant guidance related to land use and shoreline management. Douglas PUD's Land Use Policy guides the management and protection of all Wells Project lands. The goal of Douglas PUD's Land Use Policy is to integrate the various resource concerns affecting shoreline uses including compliance with the FERC license for the Wells Project, HCP, and all required permits from federal, state, and local jurisdictions.

An important feature of Douglas PUD's Land Use Policy is a prohibition on new docks and piers, outside the city limits of Pateros, Brewster, and Bridgeport. This restriction is implemented to facilitate attainment of the HCP's NNI standard for Plan Species.

15.0 HISTORY OF THE PROJECT

The Wells Project was constructed between 1963 and 1967. On July 12, 1962, the Federal Power Commission (FPC), the predecessor to the FERC, granted Douglas PUD a 50-year license to construct and operate the Wells Project. The initial design and license for the Wells Project called for the installation of seven turbine-generator units. Construction of the Wells Project began in the fall of 1963. On February 2, 1965, the FPC approved Douglas PUD's application to amend the original license to include three additional generating units. Commercial operation of the originally-designed seven-unit Wells Project began on September 1, 1967. The three additional units were in commercial operation by January 24, 1969.

Douglas PUD filed an application for a license amendment on April 26, 1981, to raise the normal maximum elevation of the Wells Reservoir from 779 to 781 feet mean sea level (MSL). The FERC issued an order amending the license on September 23, 1982, and added Articles 49 to 58 in response to the application. Wells Dam currently has 10 generating units with an installed nameplate capacity of 774,300 kW and a maximum capacity of 840,000 kW. The Project includes a forebay, reservoir, tailrace, switchyard, high-voltage transmission lines, recreation facilities, and lands within the Wells Project Boundary.

From 1987 through 1990, all 10 of the original Allis-Chalmers turbine runners were replaced with new, high-efficiency turbine runners manufactured by Fuji Electric. Recent modifications consist of the construction in 1992 of a diaphragm cutoff wall through the East Embankment to the bedrock in order to repair a sinkhole discovered in 1990. Governor upgrades were completed in 2000 for all 10 units. Additional monitoring equipment was installed and since repaired, no additional seepage has been detected. Replacement of the original substations, manufactured by the Federal Pacific Electric Company, was completed in 2004. Additionally, the Federal Pacific Electric Company circuit breakers and breaker panels in each substation were replaced with breakers manufactured by Asea Brown Boveri Ltd (ABB). In 2005, the generator winding and core of Unit No. 1 was damaged beyond repair by an electrical fault. The generator was rebuilt and returned to service. A contract has been awarded to rebuild the remaining nine generators and to refurbish all 10 turbines over a period of eight years. A debris boom was installed at the Project in early 2009 to replace the safety boom. The boom extends approximately 1,100 feet

into the forebay and helps protect the Project from floating debris flushed down the river, primarily during spring floods.

In addition to Project construction, Douglas PUD funded the construction of the Wells and Methow fish hatcheries. The Wells Hatchery is located adjacent to Wells Dam and was constructed in 1967. The Wells Hatchery consists of a 6,100-foot-long spawning channel with portions of the channel modified to hold adults and juveniles, numerous above-ground and in-ground raceways, four earthen rearing ponds, a centralized incubation, cold storage and administration building, vehicle storage building, a spawning building, and a separate set of residences for hatchery personnel. The hatchery produces summer/fall Chinook, summer steelhead, and rainbow trout.

The construction of the Methow Hatchery in 1992 was funded by Douglas PUD as a result of a Long-Term Fish Settlement Agreement to mitigate for unavoidable juvenile fish passage losses at the Wells Project. The Methow Hatchery consists of 12 covered production raceways, three covered adult raceways, and a centralized incubation, early rearing, administrative, and hatchery maintenance building. This facility also contains one on-site acclimation pond, two satellite acclimation ponds, and a set of residences for hatchery personnel. The Methow Hatchery produces up to 550,000 yearling spring Chinook annually. Douglas PUD funded and maintains a fish trapping facility on the Twisp River to provide broodstock for their hatchery programs.

Construction of the Wells Project's juvenile fish bypass system was completed in 1989. The bypass system was developed to guide downstream migrating fish away from the turbines and through the spillways. The bypass system has a fish passage efficiency rate of 92.0 percent for spring migrating salmon and steelhead and 96.2 percent for summer migrating Chinook salmon (Skalski et al. 1996). The Wells Project juvenile fish bypass system is the most efficient system on the mainstem Columbia River. Since the completion of the fish bypass system, Douglas PUD has conducted three years of juvenile survival studies at Wells Dam. Results from these studies have shown an average survival rate of 96.2 percent for yearling Chinook and steelhead (Bickford et al. 1999; 2000; 2001). More recently, adult PIT-tag survival estimates from the 2008 annual HCP report indicate adult survival passing upstream through the Wells Project is greater than 98 percent (Douglas PUD and Anchor Environmental 2009).

Wells Dam also has two adult fish ladders, one on each end of the hydrocombine. These ladders facilitate the upstream movement of migrating fish through Wells Dam. The two fish ladders at Wells Dam are conventional staircase-type fish ladders with 73 pools. Both fish ladders are equipped with adult passive integrated transponder (PIT) tag detection devices, used to passively interrogate each fish for a PIT-tag while the fish are passing upstream through the fish ladder. Once a tag is detected, the system records the presence and unique tag code for that fish as it ascends the fish ladder. Pool 64 of both fishway ladders contains facilities for counting fish. The main features of the counting facility include a counting room, an observation window into the fish ladder, a telescoping gate to guide the fish closer to the observation window, a light panel, and a bypass gate to control the flow and velocity past the observation window. Video records of fish passage are collected continuously starting on May 1 and continuing through November 15. At Pool 40, each of the two fish ladders has provisions for sorting and trapping various species of fish. The west ladder sorting facility allows for selected fish to travel through a flume to a holding pond at the Wells Hatchery. The east ladder sorting facility allows fish to travel to a holding container where they can be anesthetized, netted, and placed in transportation

containers to be moved to appropriate hatchery facilities or to be sampled and released back into the ladder upstream of the trap. The fisheries' agencies and tribes currently develop species-specific broodstock collection protocols at the beginning of each season in consultation with the HCP's Hatchery Committee.

Douglas PUD has worked cooperatively with various state and federal fisheries agencies to develop the first hydropower HCP in the nation for anadromous salmon and steelhead. The plan commits Douglas PUD to a 50-year program ensuring that the Wells Project has NNI on mid-Columbia salmon and steelhead runs. To accomplish NNI, a combination of juvenile and adult fish passage measures are being implemented at the dam as well as production and evaluation of hatchery production and habitat restoration work in tributary streams upstream of the Wells Project. As of April 2005, the Wells HCP has been signed by the NMFS, USFWS, WDFW, CCT, YN, Douglas PUD, and the Power Purchasers. The FERC approved the Wells HCP in June 2004.

16.0 GENERATION LOST OVER THE LAST FIVE YEARS

High Project reliability is illustrated by the Wells Project's availability factor of greater than 96 percent. A summary of unscheduled outages from 2002 through 2007 at the Wells Project is presented in Table 16.0-1. Individual review of these cases indicates that the amount of lost generation was minimal as generation was shifted to the remaining available generating units.

Table 16.0-1 Summary of unscheduled outages 2002 to 2007.

| Date | Duration (hours) | Cause | Corrective Action Taken |
|--------------------------|-------------------------|-----------------------------|--------------------------------------|
| 07/12/2007 to 07/13/2007 | 28.0 | Water in Thrust Bearing | Repaired leaking thrust bearing seal |
| 03/18 2007 to 03/19/2007 | 32.6 | Water in Thrust Bearing | Repaired leaking thrust bearing seal |
| 07/05/2007 to 07/07/2007 | 55 | Water in Thrust Bearing | Repaired leaking thrust bearing seal |
| 05/08/2006 to 05/09/2006 | 34.1 | Water in Thrust Bearing | Repaired leaking thrust bearing seal |
| 02/12/2005 to 06/28/2006 | 12,026.9 | Generator Coil fault/Rewind | Rewound generator |
| 11/09/2005 to 11/11/2005 | 47.3 | Water in Thrust Bearing | Repaired leaking thrust bearing seal |
| 07/09/2005 to 07/10/2005 | 36.6 | Packing Box Repair | Repaired and returned to service |
| 11/21/2005 to 11/23/2005 | 57.5 | Water in Thrust Bearing | Repaired leaking thrust bearing seal |
| 10/05/2005 to 10/18/2005 | 314.1 | Rotor Pole Replacement | Replaced Rotor Pole |
| 07/17/2005 to 07/19/2005 | 43.4 | Packing Box Repair | Repaired and returned to service |
| 02/01/2004 to 02/02/2004 | 41.0 | Water in Thrust Bearing | Repaired leaking thrust bearing seal |
| 11/08/2004 to 11/09/2004 | 32.8 | Water in Thrust Bearing | Repaired leaking thrust bearing seal |
| 04/09/2004 to 04/15/2004 | 131.8 | Water in Thrust Bearing | Repaired leaking thrust bearing seal |
| 01/28/2004 to 01/31/2004 | 92.4 | Thrust Bearing Oil Cooler | Repaired cooler |
| 08/16/2003 to 08/17/2003 | 26.5 | T-1 Lighting Arrester | Replaced failed Lightning Arrester |
| 08/16/2003 to 08/17/2003 | 26.5 | T-1 Lighting Arrester | Replaced failed Lightning Arrester |
| 08/16/2003 to 08/18/2003 | 47 | T-1 Lighting Arrester | Replaced failed Lightning Arrester |
| 08/16/2003 to 08/18/2003 | 47 | T-1 Lighting Arrester | Replaced failed Lightning Arrester |
| 12/06/2003 to 12/10/2003 | 92.7 | Water in thrust bearing | Repaired leaking thrust bearing seal |
| 01/09/2002 to 01/10/2002 | 32.1 | MOOG valve replacement | Replaced valve |

17.0 COMPLIANCE WITH TERMS AND CONDITIONS OF LICENSE

Douglas PUD has demonstrated consistent compliance with the terms of the existing license articles and associated agreements for the Wells Project. There have been no recurring instances of non-compliance throughout the term of the Wells Project license. Since obtaining its license to operate the Wells Project, Douglas PUD has received only one notice from the FERC regarding a license violation. In a letter dated August 31, 1988, the FERC notified Douglas PUD of a violation of Article 41 of the license which requires an annual progress report of the Wells Wildlife Mitigation Program. Douglas PUD replied to the FERC on September 13, 1988 to

emphasize that the WDFW, who prepares the report for Douglas PUD, has “found it very difficult to complete these reports prior to June 1 of each year.” In response to this letter, the FERC responded on February 16, 1989 notifying Douglas PUD that “the language in the article may not necessarily require that an annual report be filed by June 1 of each year.” On February 24, 1989, the FERC issued an Order Modifying License Article “requiring the filing of an annual progress report of the licensee’s wildlife mitigation program no later than October 1 of each year.” Therefore, this instance of alleged non-compliance has been clarified, and the issue related to filing of the annual report has been resolved.

18.0 ACTIONS AFFECTING THE PUBLIC

The Wells Project provides clean, efficient, reliable, and cost-effective hydroelectric power. The price for electricity delivered in Douglas County from the Wells Project is significantly less than the average nationwide wholesale price of power. Douglas PUD has funded a variety of projects providing and enhancing recreational access to the Wells Project as well as protecting the natural environment. Currently, the Project provides the most successful juvenile fish bypass system on the Columbia River. Douglas PUD plans to participate financially in the construction of a white sturgeon hatchery and rearing facility to be built and jointly funded by the three mid-Columbia PUDs. Douglas PUD also has several other plans for the Project area including the construction of new interpretive exhibits located at the Wells Dam Overlook, the rebuilding of the Wells and Methow fish hatcheries, and the construction of new recreational facilities throughout the Wells Project.

Douglas PUD worked with various state and federal fisheries agencies to develop the first hydropower HCP in the nation for anadromous salmon and steelhead. The plan commits Douglas PUD to a 50-year program ensuring that the Wells Project has NNI on mid-Columbia salmon and steelhead runs. To accomplish this goal, a combination of juvenile and adult fish passage measures are being implemented at the dam as well as off-site hatchery programs, evaluations, and habitat restoration work in tributary streams upstream of the Wells Dam. The HCP, approved by the FERC in 2004, addresses Project-related impacts to spring Chinook, summer/fall Chinook, steelhead, sockeye, and coho and provides ESA coverage for these species.

In addition to conservation benefits, many of the measures within the HCP, the Aquatic Settlement Agreement directly benefits the angling public. Douglas PUD currently provides funding for the operation and maintenance of two hatcheries, the Wells Fish Hatchery and the Methow Fish Hatchery, and three acclimation ponds. The Wells Fish Hatchery is located immediately adjacent to Wells Dam. The Methow Fish Hatchery is located approximately 51 miles up the Methow River. All three acclimation ponds are associated with the Methow Hatchery Complex and are used to acclimate spring Chinook. Both of the fish hatchery facilities are funded by Douglas PUD and operated by the WDFW. Together, the hatcheries produce approximately three million juvenile salmon and steelhead annually, which are released into the Methow, Okanogan, and Columbia rivers. Douglas PUD has also reached an off-license settlement with WDFW, which will ensure continued rearing and release of 20,000 pounds of rainbow trout to be planted into lakes within Okanogan and Douglas counties for the enjoyment of the angling public.

Douglas PUD has demonstrated its commitment to developing and enhancing recreational access to the Wells Project lands and waters by developing over 17 access sites and usage areas along both sides of the reservoir and up the Methow and Okanogan rivers. The Wells Reservoir is a recreation resource for both local residents and tourists. Visitors frequent the Wells Project primarily in the summer to enjoy the many recreation opportunities available, including boating, fishing, hiking, and camping. Sportsmen also frequent the area during the fall and winter months to fish for steelhead and to hunt for waterfowl, upland birds, and deer. Douglas PUD also provides public access to the Wells Dam Overlook, which features educational exhibits.

Douglas PUD has developed parks and recreation facilities along the Reservoir in the cities of Pateros, Brewster, and Bridgeport. Douglas PUD assisted in the funding and developing of the existing parks and recreational facilities adjacent to the Project in the city of Pateros including Peninsula Park, Memorial Park, tennis courts, two concrete boat launches, parking areas, a fish cleaning station, and restrooms. Douglas PUD assisted in funding and developing recreational facilities in the city of Brewster, including Columbia Cove Park and a waterfront trail. Columbia Cove Park features a boat launch, boat docks, three covered picnic shelters, restroom facilities, a playground, swimming beach, lawn area, vehicle parking, and a basketball court. The city of Bridgeport received funding from Douglas PUD to develop Marina Park adjacent to the Wells Reservoir. Marina Park features a covered picnic shelter, gazebo, playground equipment, swimming beach, lawn area, vehicle parking, restrooms, fish cleaning station, walking pathway, two boat launches, two boat docks, and an RV campground.

Douglas PUD is a responsible steward of wildlife resources in the Project area, which provides habitat to a variety of wildlife species. Douglas PUD and the WDFW entered into an Agreement on July 15, 1974, for wildlife mitigation, which included Douglas PUD funding the acquisition and development of the Wells Wildlife Area (WWA). The WWA consists of six Habitat Management Units totaling over 8,200 acres. Additional wildlife mitigation is provided at the Cassimer Bar Wildlife Area located within the Project Boundary on the Colville Indian Reservation.

Douglas PUD is dedicated to stewardship of wildlife, and through this agreement, and additional voluntary supplemental funding to WDFW, has developed wildlife habitat and opportunities for public wildlife-oriented recreation. Douglas PUD has reached an off-license settlement with WDFW, which will ensure continued stewardship of the WWA lands during the next license term.

Douglas PUD is subject to a variety of state and city taxes. Taxes paid by Douglas PUD positively affect the public as state taxes are deposited into general funds and city taxes are directed back to the city. Taxes apply to Douglas PUD's electric generation system, Douglas PUD's electric distribution system, or both systems.

19.0 OWNERSHIP AND OPERATING EXPENSE REDUCTIONS IF THE PROJECT LICENSE WERE TRANSFERRED

If the Project license were transferred to another entity, Douglas PUD's cost of operating and maintaining the Project would be eliminated. These expenses are estimated at \$34 million in 2007 dollars. Cost of replacement power, from any source, would greatly exceed Douglas PUD's current cost of operating and maintaining the Project.

20.0 ANNUAL FEES FOR FEDERAL OR INDIAN LANDS

20.1 Lands of the Confederated Tribes of the Colville Reservation

On February 11, 2005, the FERC issued an order approving the Settlement Agreement reached between Douglas PUD and the CCT. Under the settlement, a one-time payment was agreed upon in addition to purchasing the land originally, to pay the CCT for use of Indian lands. The payment under the Colville Settlement consisted of three parts: (1) \$13.5 million cash payment (made on July 6, 2005); (2) Purchase of Colville land with a book value of \$958,140 (transfer made in 2005); and (3) Agreement to sell to the CCT 4.5 percent of the output of the Wells Project through August 30, 2018, and 5.5 percent thereafter, at cost.

20.2 Federal Lands

Douglas PUD owns over 2,400 acres of the 2,664 acres of land adjacent to the Wells Reservoir within the Project Boundary. Within the Project Boundary, there are small, scattered parcels of federal land. The BLM administers the majority of these lands, holding title to 10 tracts of land totaling approximately 234 acres within Wells Project. Other tracts within the Project Boundary are administered by either the COE or the U.S. Department of the Interior (DOI). There are no U.S. Forest Service (USFS) or USFWS lands within the Wells Project Boundary. Effective March 2009, federal legislation authorized sale by BLM to Douglas PUD of all BLM lands within the Wells Project Boundary. Once this sale is completed, Douglas PUD will own over 99 percent of all lands within the Wells Project Boundary.

The Wells Project pays an annual fee to the FERC for use of federal Lands which varies annually. Payment for the period October 1, 2006 to September 30, 2007 was \$3,664. Payment for the prior year was \$3,442. This annual fee will decrease once the BLM land transfer is completed.

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