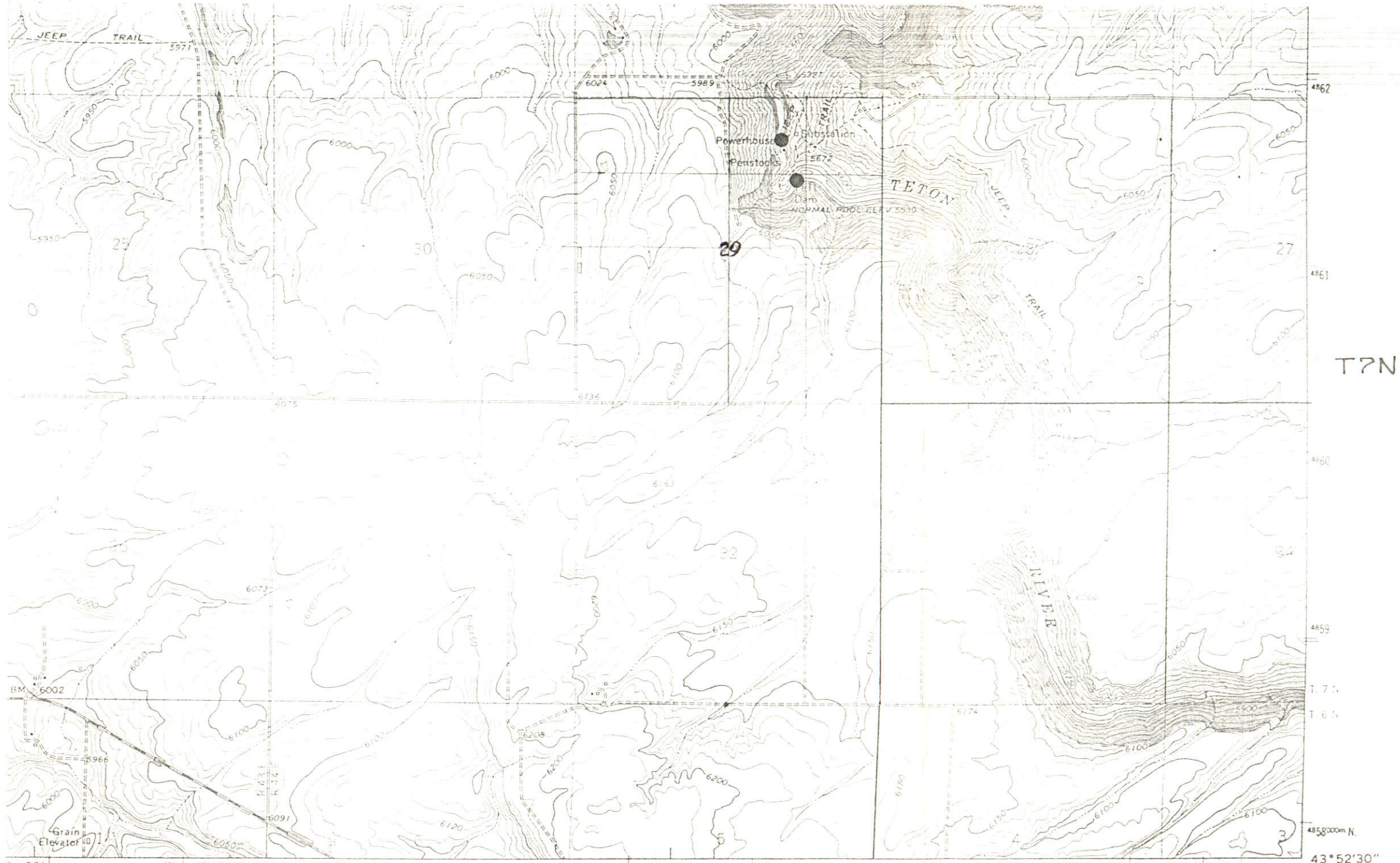


DETAIL MAP FOR THE "FELT POWER PLANT"

Charles Lee Dawsey
(Applicant)
assistant Manager

DRUMMOND, IDAHO

AFFIDAVIT OF PUBLICATION

State of Idaho)
) ss
County of Teton)

I, Anne Hatch
being first duly sworn depose and say that I am the Secretary
of the Teton Valley News, a newspaper as defined by Idaho Codes Annotated, Section 58-106, as amended, and that said newspaper is a weekly newspaper printed and published at Driggs, in Teton County, Idaho, having a general circulation in said county, and that said newspaper has been printed in said county for more that 78 consecutive weeks prior to the first publication of the attached notice, advertisement or publication of

amended application
22-7351

And affiant further says that said attached notice, advertisement or publication, as per clipping attached, was published in said newspaper, in the regular and entire issue thereof, and not in any supplement issure thereof, for 2 consecutive issues thereof; first publication having been made on the 10 day of Jan., 1985 and last publication on the 17 day of Jan., 1985

And affiant further says that at the times herein mentioned said newspaper was made up of at least eight pages of at least five columns each, printed from type matter, of at least sixteen inches deep.

Anne Hatch

Subscribed in my presence and sworn to before me this 17 day of Jan. 19 85

(SEAL) Notary Public for the state of Idaho, residence and postoffice address, Driggs, Idaho.

Ronda Hammer

My Commission expires
9/29 19 86

NOTICE OF AMENDED APPLICATION FOR WATER PERMIT 22-7351

Notice is hereby given that Application for Permit No. 22-7351 in the name of Fall River Rural Electric Cooperative, Inc. was filed for the diversion of 300.0 cfs of water from Teton River tributary to Snake River, with point of diversion within the SW¼NW¼, Sec. 29, T. 7N, R. 44E, B.M., Teton County; to be used from Jan. 1 to Dec. 31 for power purposes within the NW¼NE¼, Sec. 29, T. 7N, R. 44E, B.M.

The applicant now proposes to amend Application No. 22-7351, requesting the point of diversion be changed to within the SW¼NE¼, Sec. 29, T. 7N, R. 44E, B.M., Teton County.

Any protest to the proposed amending of the application must be filed with the Idaho Department of Water Resources, 150 Shoup, Suite 15, Idaho Falls, ID 83402 on or before January 28, 1985.

A. Kenneth Dunn
Director

Published in the Teton Valley News January 10 and 17, 1985.

RECEIVED
JAN 18 1985
Department of Water Resources
Eastern District Office

MICROFILMED

AFFIDAVIT OF PUBLICATION

State of Idaho)
) ss
County of Teton)

I, Sharyn Hastings, being first duly sworn depose and say that I am the Secretary of the Teton Valley News, a newspaper as defined by Idaho Codes Annotated, Section 58-106, as amended, and that said newspaper is a weekly newspaper printed and published at Driggs, in Teton County, Idaho, having a general circulation in said county, and that said newspaper has been printed in said county for more that 78 consecutive weeks prior to the first publication of the attached notice, advertisement or publication of

Fall River 22-7351
Charles Parrish 22-7352

And affiant further says that said attached notice, advertisement or publication, as per clipping attached, was published in said newspaper, in the regular and entire issue thereof, and not in any supplement issure thereof, for 2 consecutive issues thereof; first publication having been made on the 2 day of Apr., 1981 and last publication on the 9 day of Apr., 1981.

And affiant further says that at the times herein mentioned said newspaper was made up of at least eight pages of at least five columns each, printed from type matter, of at least sixteen inches deep.

Sharyn Hastings

Subscribed in my presence and sworn to before me this 13th day of April, 1981.

(SEAL) Notary Public for the state of Idaho, residence and postoffice address, Driggs, Idaho.

Mildred C Nielsen

My Commission expires

July 7, 1982

NOTICE OF APPLICATION FOR WATER RIGHT

Notice is hereby given that the following application(s) have been submitted for permit to appropriate the public waters of the State of Idaho:

22-7351 okw

FALL RIVER RURAL ELECTRIC COOP. INC.

P.O. Box 617, Ashton, ID 83420.

Source: TETON RIVER tributary to SNAKE RIVER

Date Filed: 03/18/1981.

Amount: 300.00 CFS

Diversion Point: SWNW Sec 29 T 07N R 44E, TETON co.

Use: POWER (300.00 CFS) from 01/01 to 12/31.

Place of Use: NWNE Sec 29 T 07N R 44 E

Diversion Means: FELT POWER PLANT.

22-7352 ok

PARRISH, CHARLES M.

Parrish Lane Ranch, P. O. Box 41, Victor, ID 83455

Source: GROUNDWATER

Date Filed: 03/24/1981

Amount: 6.12 CFS

Diversion Point: SWNE Sec 30 T 04N R 46E NENE Sec 35 T 04N R 45E, TETON Co.

Use: IRRIGATION (6.12 CFS) from 06/01 to 10/01.

Place of Use: SWNE SWNW SENW NESW NWSW NWSE Sec 30 T 04N R 46E SENE NESE SESE Sec 25 T 04N R 45E NWNE SWNE Sec 36 T 04N R 45E FOR 306 ACRES.

Diversion Means: WELL & PUMP.

If issued, the permit(s) will be subject to all prior water rights. Protests against the granting of any permit must be filed with the Director of the Idaho Department of Water Resources, 150 Shoup Ave., Idaho Falls, Idaho 83401 on or before APRIL 20, 1981.

C. STEPHEN ALLRED
Director

Published in the Teton Valley News April 2 & 9, 1981.

RECEIVED
APR 15
Department of Water Resources
Eastern District Office

MICROFILMED

Form 219
6/86

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No. 22-7351

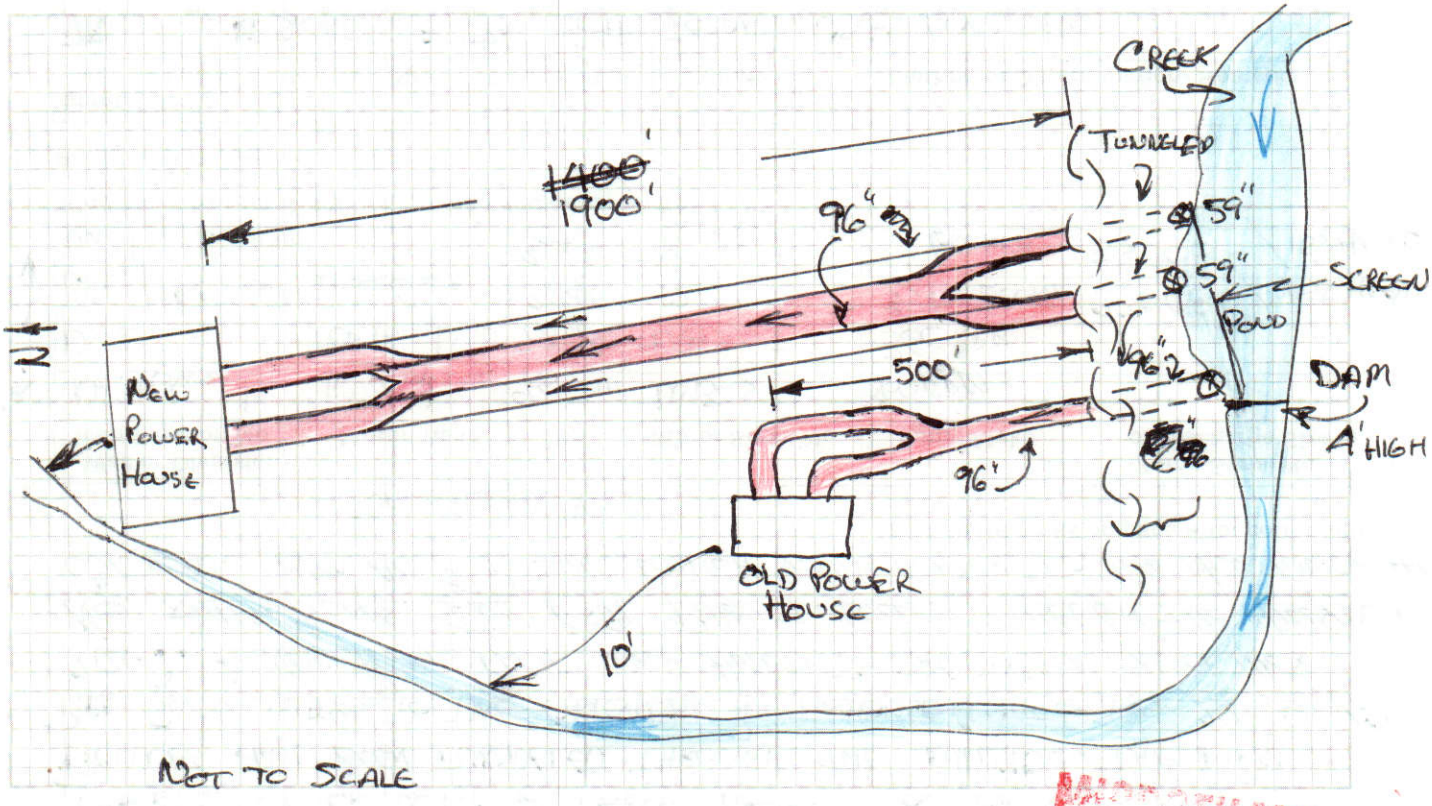
1. Owner: FALL RIVER RURAL ELECTRIC COOP., INC. Phone No. 652-7431
   Current Address: P.O. BOX AE, ASHTON, ID. 83420
2. Accompanied by: ZANE LARSON EXAM. DATE: 9-OCT-1987
   Address: Box 111 Tetonia Phone No. 456-2364
   Relationship to Permit Holder: PLANT MANAGER
3. Source: TETON RIVER tributary to SNAKE RIVER

B. OVERLAP REVIEW

1. Other water rights with same place of use: ~~22-0606, 2123, 2126,~~ 7482A / 7487
   ☐ Copies Attached
2. Other water rights with same point of diversion: 22-0606, 2123, 2126, 7482 A/B / 7487
   ☐ Copies Attached ☐ Copies of Field Exam's Attached

C. SYSTEM DESCRIPTION

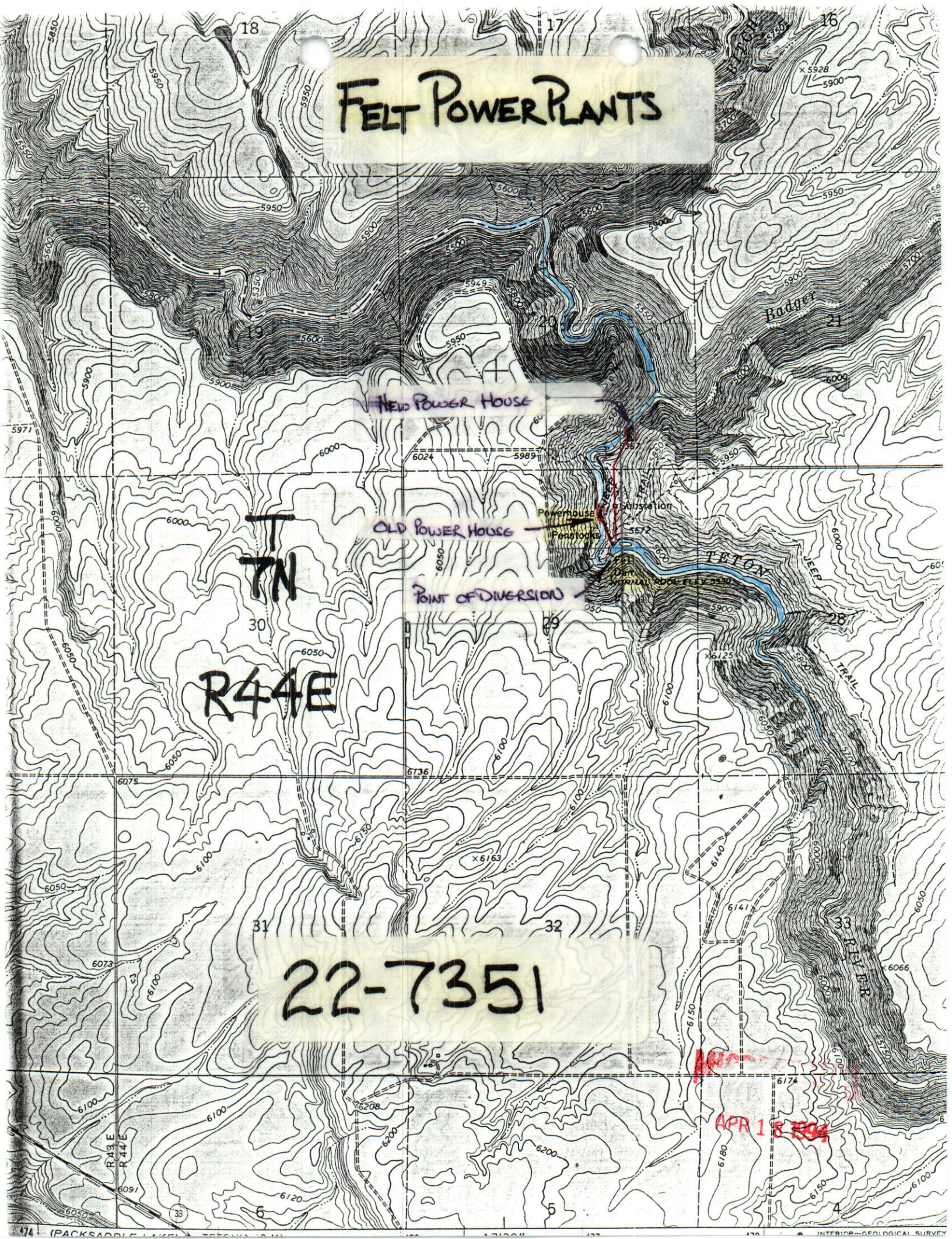
1. **Diversion System Diagram:** Indicate all major components and distances between components. Indicate weir size/ditch size/pipe i.d. as applicable. ☑ Alternative diagram attached



Scale: 1" = _____.

2. ☑ Copy of U.S.G.S. Quadrangle Attached
   Showing location(s) of point(s) of diversion and place(s) of use (required).
   ☐ Aerial Photo Attached
   (required for irrigation of 10 acres or more)
   ☑ Photo of Diversion and System Attached
   (required for all but single household domestic groundwater, and stockwater.

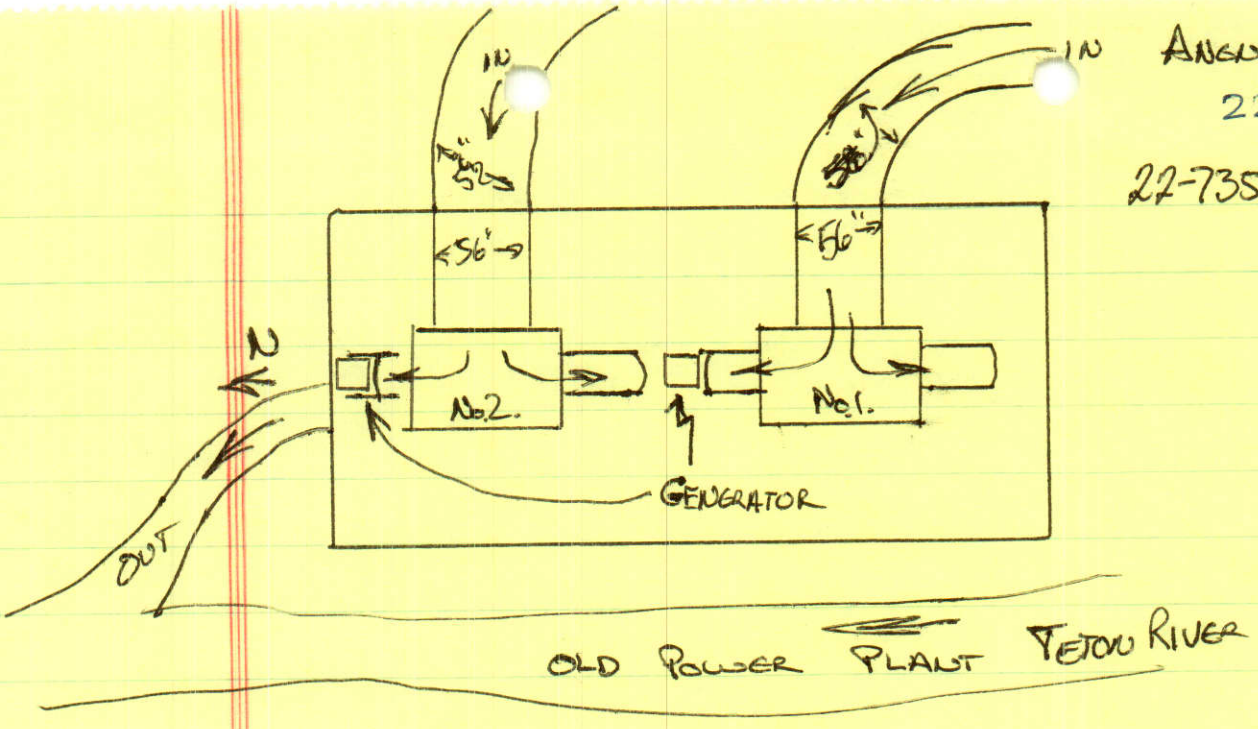
RECEIVED
APR 18 1994


FELT POWER PLANTS
NEW POWER HOUSE
OLD POWER HOUSE
POINT OF DIVERSION
Powerhouse
Penstocks
Substation
TETON
Badger
T
7N
R44E
22-7351
APR 18
R43E
R44E

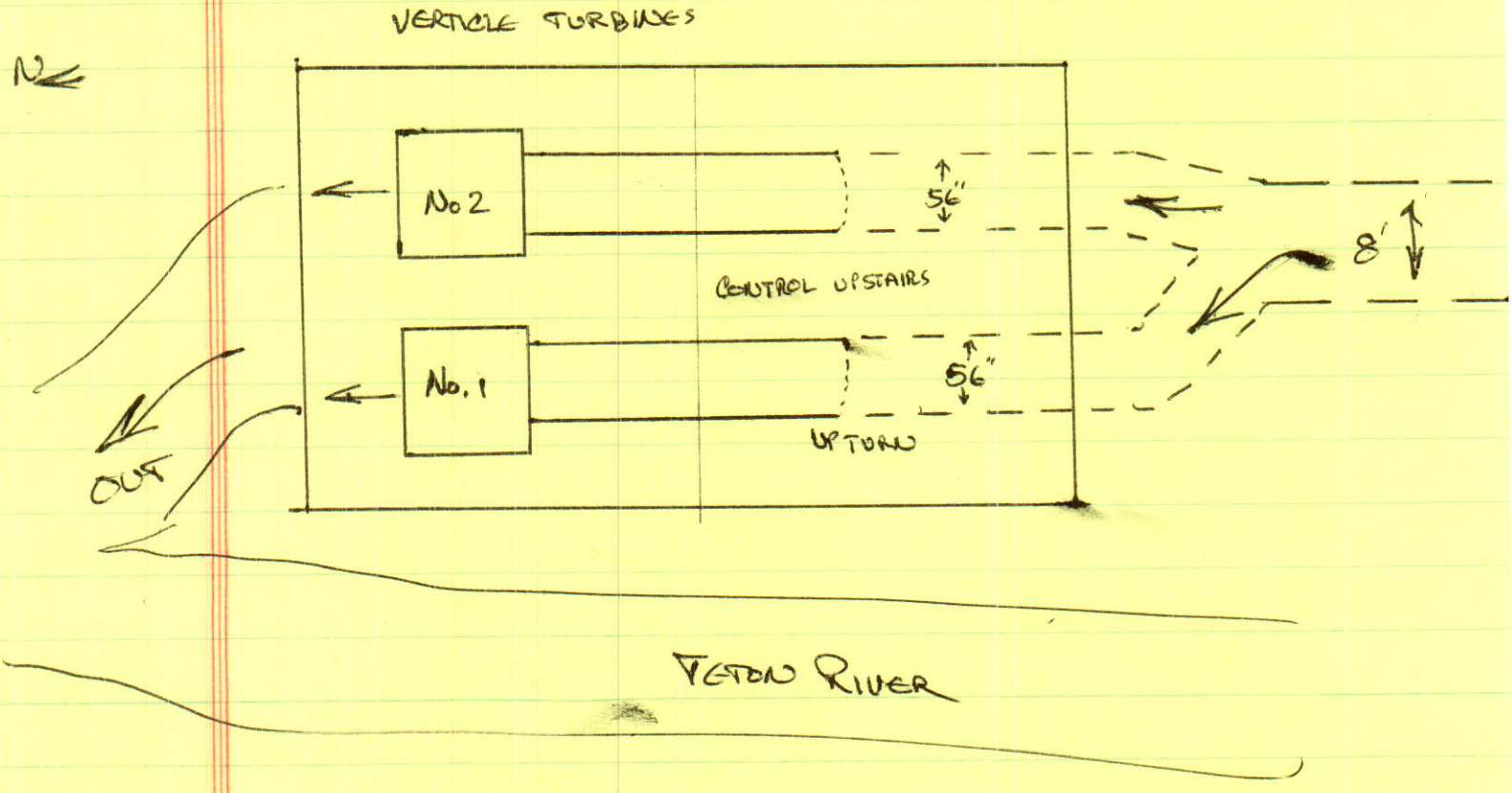
ANGUDUM TO GRAMS

22-7351

22-7351/7482/7487



NEW POWER PLANT



NOT TO SCALE

APR 18 1994

22-7351





APR 18 1994





22-7351

RECEIVED
APR 18 1994

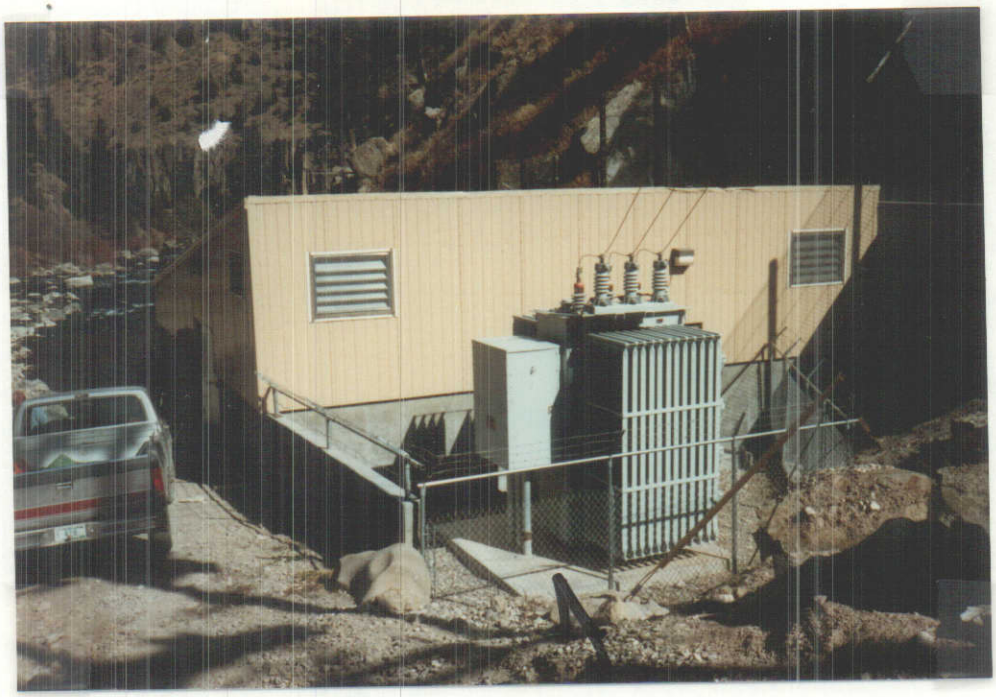


NEW PLANT PIPELINE



22-7351

NEW POWER PLANT

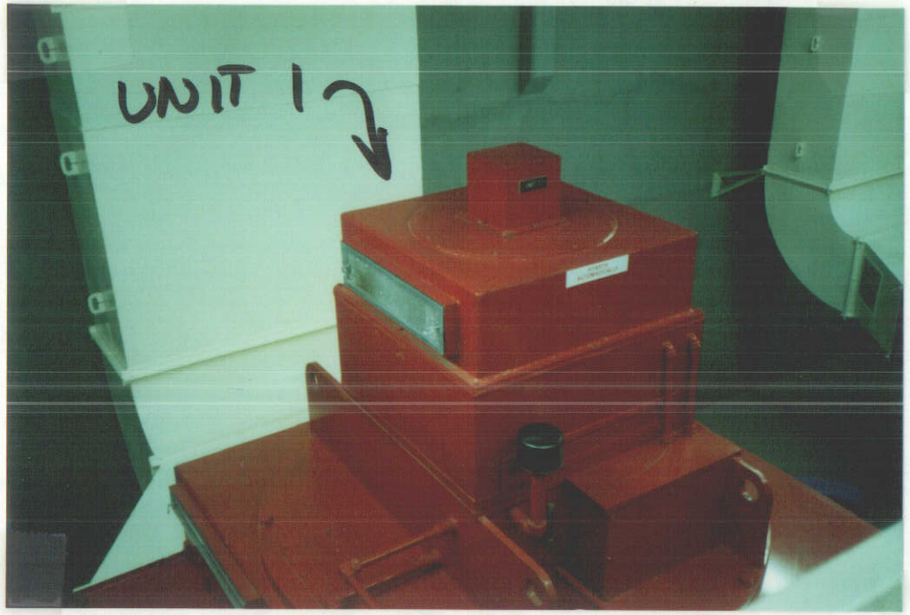




APR 18 1994

22-7351

NEW POWER PLANT TURBINES.

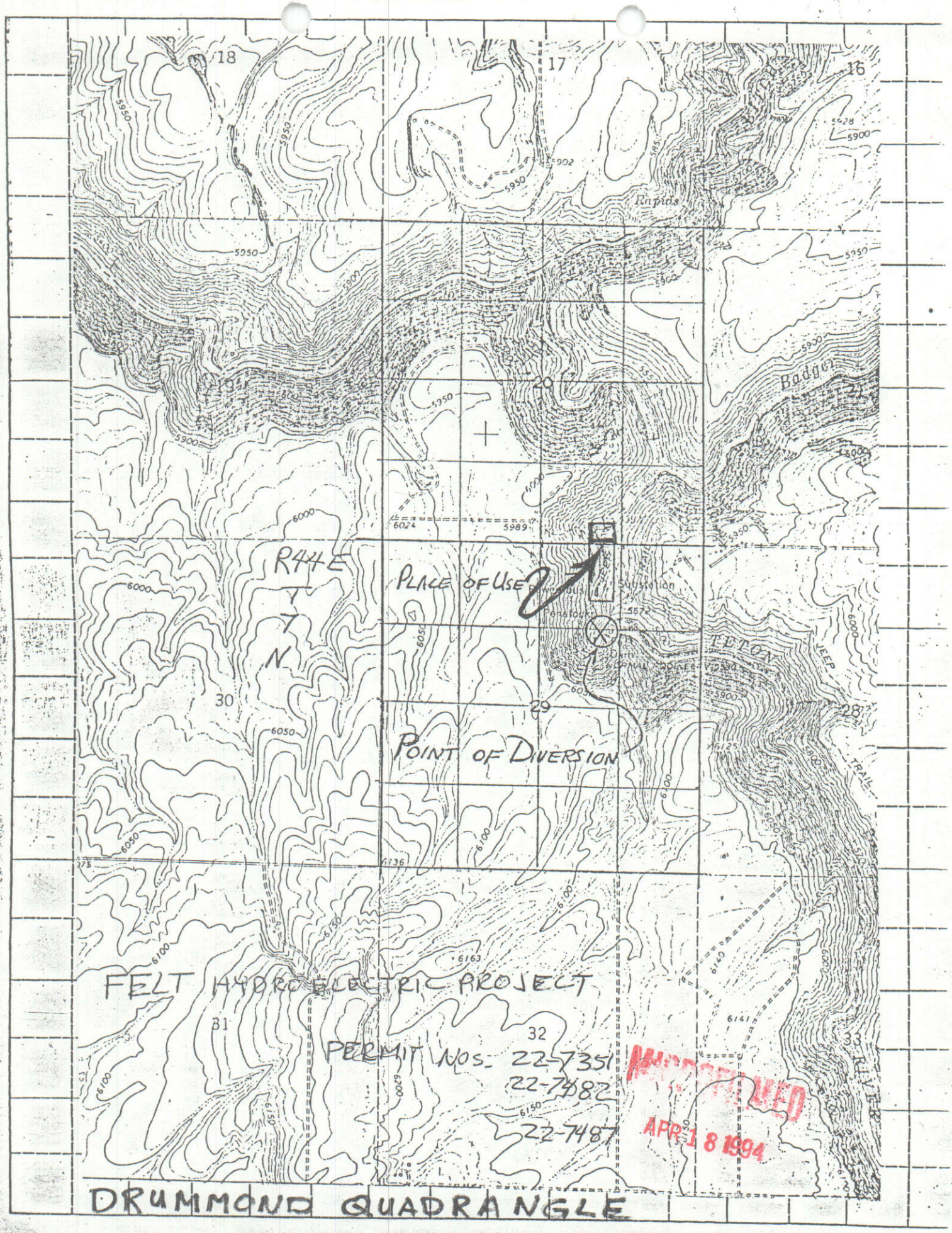


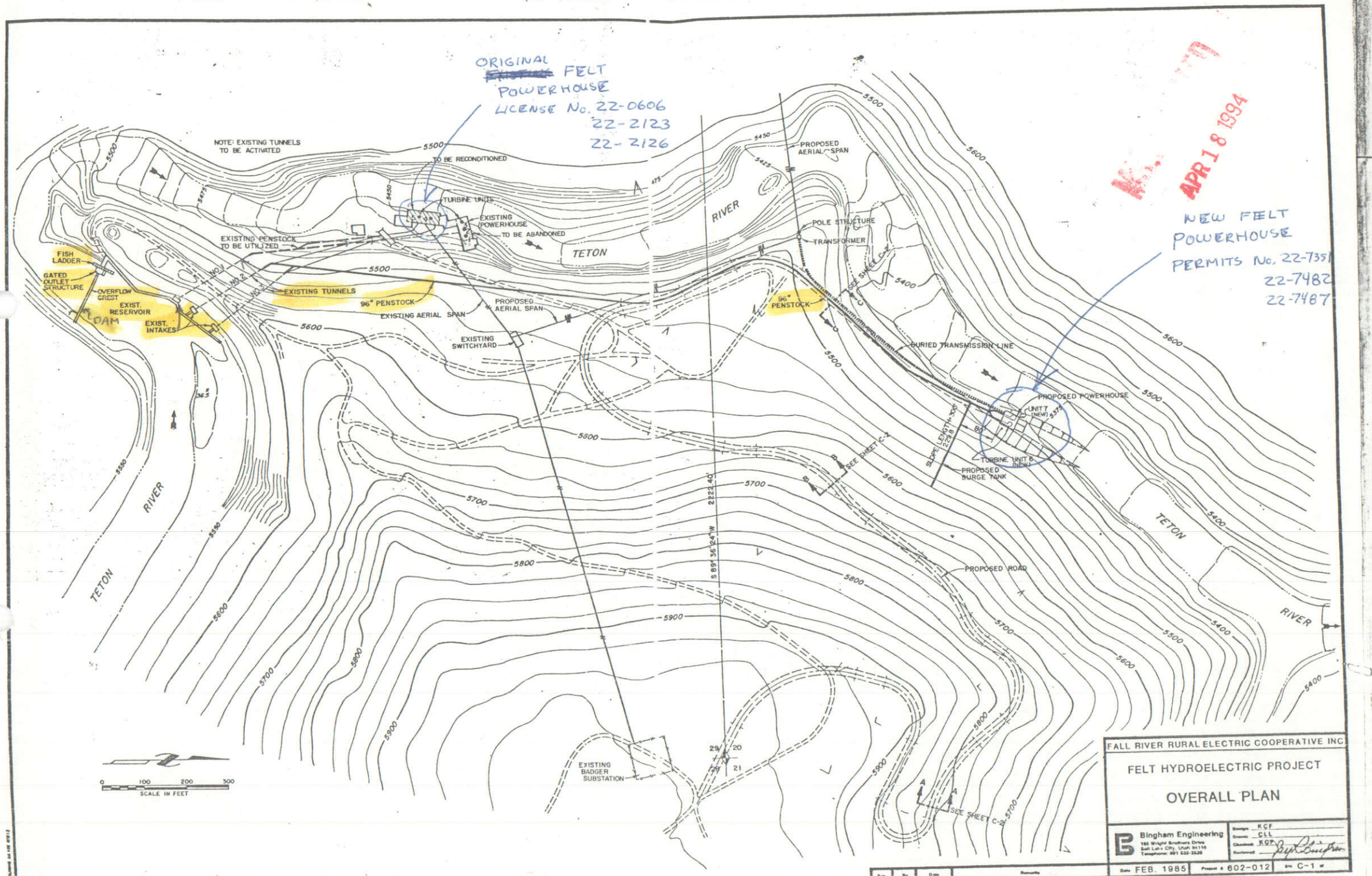


APR 18 1994

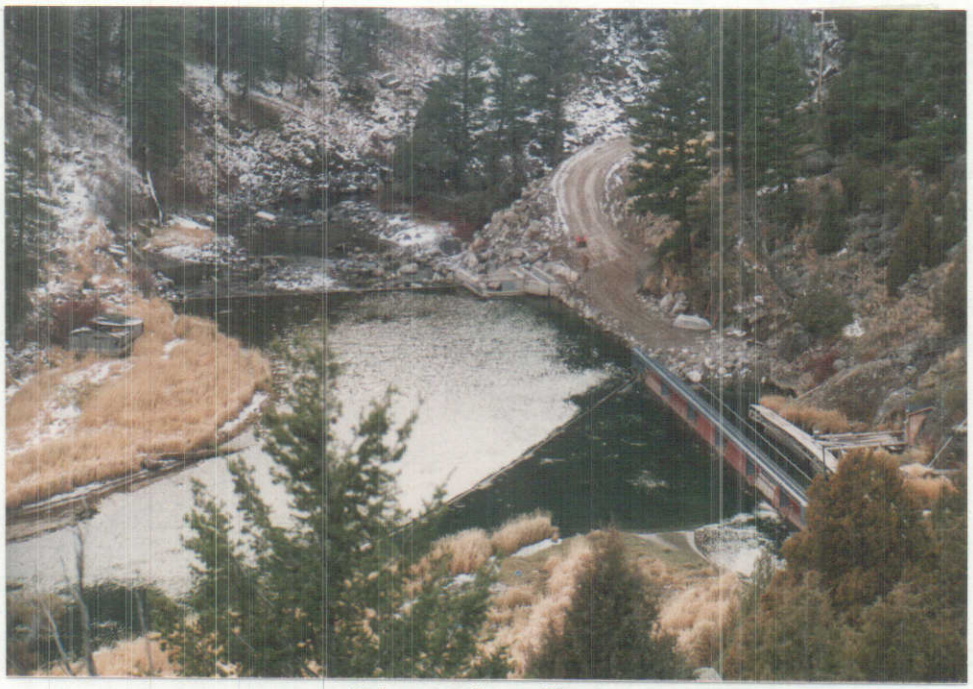




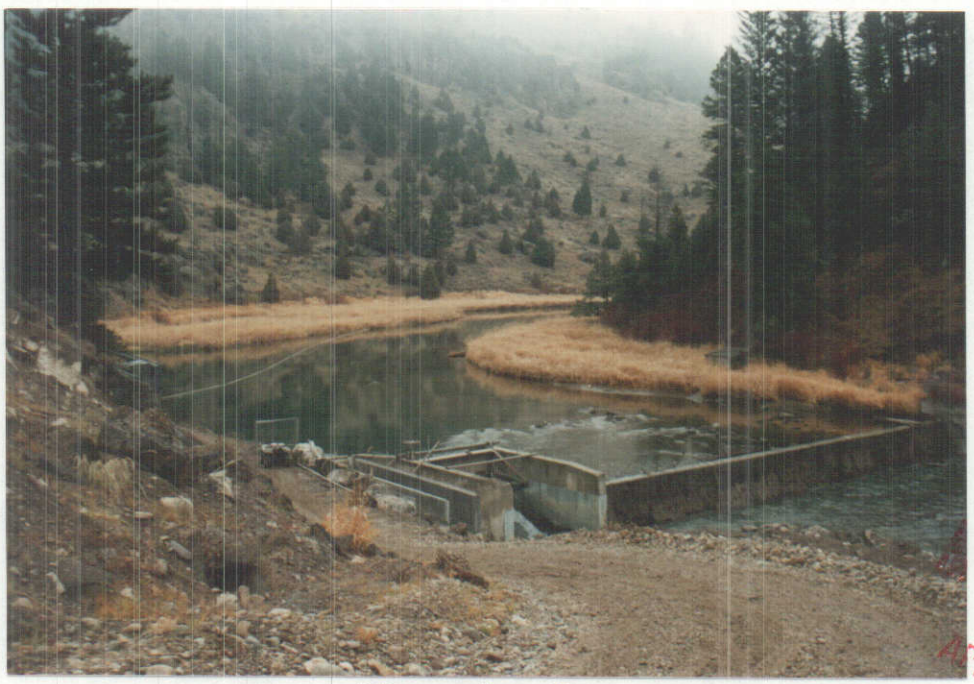

18
17
16
Rapids
Badger
20
21
R44E
T
7
N
PLACE OF USE
Substation
Powerhouse
TETON
JEEP
TRAIL
30
29
28
POINT OF DIVERSION
FELT HYDROELECTRIC PROJECT
31
32
33
PERMIT Nos. 22-7351
22-7482
22-7487
RECEIVED
APR 18 1994
DRUMMOND QUADRANGLE


ORIGINAL FELT POWERHOUSE
LICENSE No. 22-0606
22-2123
22-2126
APR 18 1994
NEW FELT POWERHOUSE
PERMITS No. 22-7351
22-7482
22-7487
NOTE: EXISTING TUNNELS TO BE ACTIVATED
TO BE RECONDITIONED
TURBINE UNITS
EXISTING POWERHOUSE
TO BE ABANDONED
EXISTING PENSTOCK TO BE UTILIZED
FISH LADDER
GATED OUTLET STRUCTURE
OVERFLOW CREST
EXIST. RESERVOIR
DAM
EXIST. INTAKES
NO. 1
NO. 2
NO. 3
EXISTING TUNNELS
96" PENSTOCK
EXISTING AERIAL SPAN
PROPOSED AERIAL SPAN
EXISTING SWITCHYARD
PROPOSED AERIAL SPAN
POLE STRUCTURE
TRANSFORMER
96" PENSTOCK
BURIED TRANSMISSION LINE
PROPOSED POWERHOUSE
UNIT 7 (NEW) 6375
TURBINE UNIT 8 (NEW)
PROPOSED SURGE TANK
SURGE LENGTH = 90'
229.8'
SEE SHEET C-2
SEE SHEET C-2
SEE SHEET C-2
PROPOSED ROAD
EXISTING BADGER SUBSTATION
S 89° 36' 24" W
2222.40'
RIVER
TETON
SCALE IN FEET
0 100 200 300
FALL RIVER RURAL ELECTRIC COOPERATIVE INC.
FELT HYDROELECTRIC PROJECT
OVERALL PLAN
Bingham Engineering
Design KCF
Drawn CLL
Checked KCF
Approved
Date FEB. 1985
Project # 602-012
Dwg. C-1

Permit No. 22-7351
22-7482
22-7487



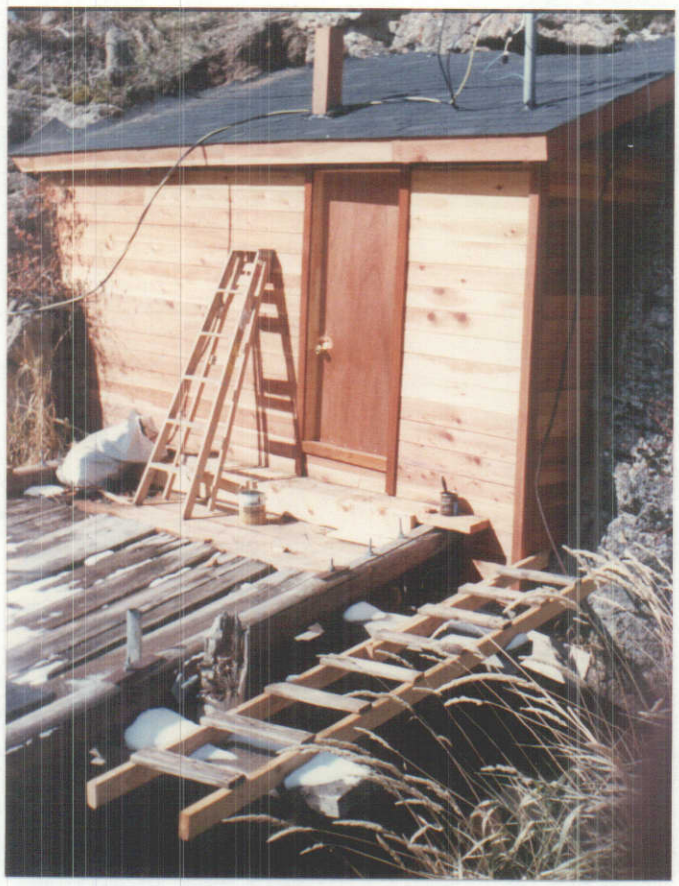
Diversion Dam
(Looking Downstream)
Tunnel intakes are on right side of photo beyond trash racks.
(Note protective building over visible intake.)



Diversion Dam
(Looking Upstream)

APR 18 1994

Permit No. 22-7351
22-7482
22-7487



Tunnel Intake Protective Building



Tunnel Intake Protective Building

APR 18 1994

Permit No. 22-7351
22-7482
22-7487



New Felt Powerhouse
(Looking Downstream)



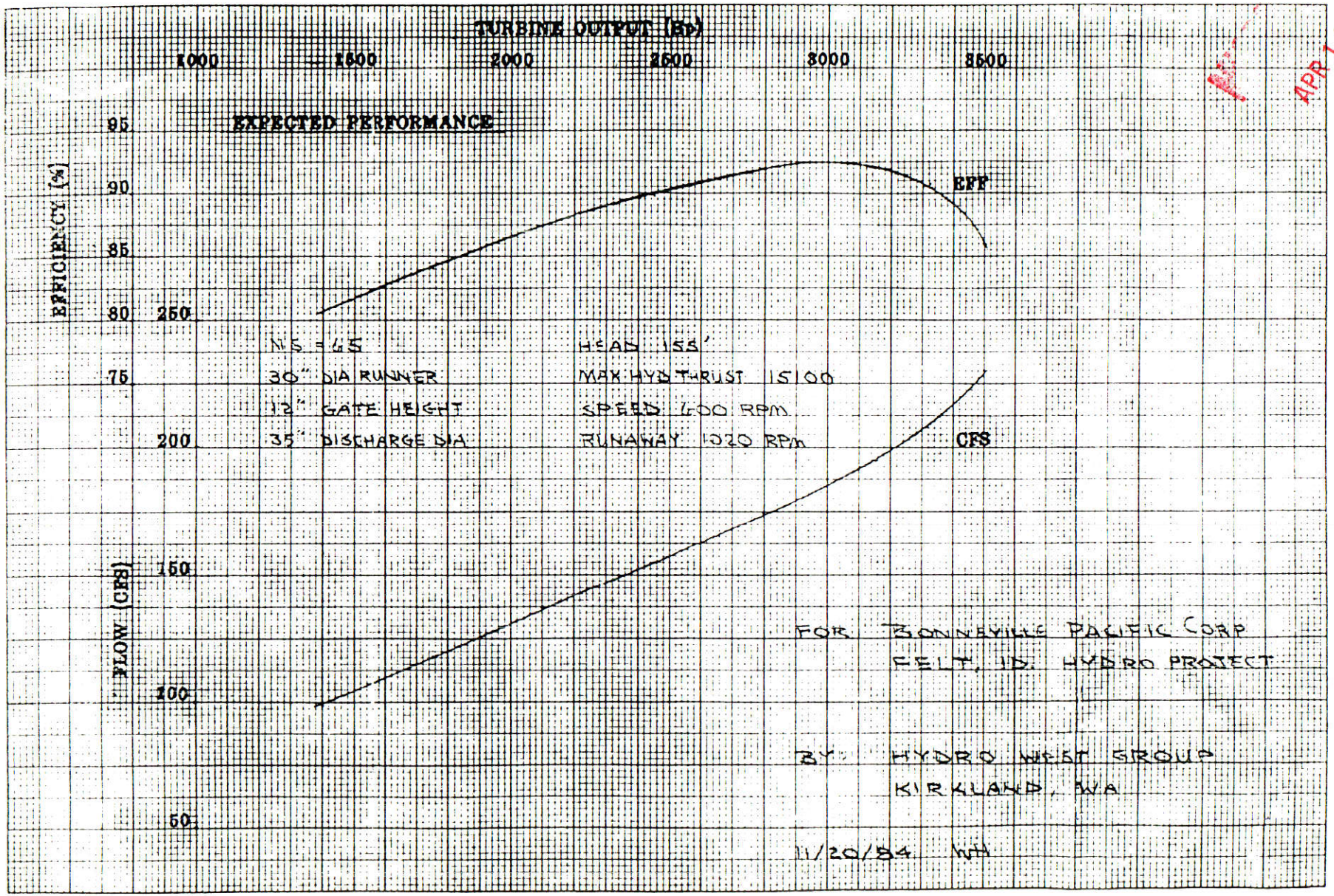
New Felt Powerhouse
(Looking Upstream)

APPROVED
APR 18 1994

PERMIT Nos. 22-7351
22-7482
22-7487

FELT HYDROELECTRIC PROJECT

APR 18 1994



MICROFILMED

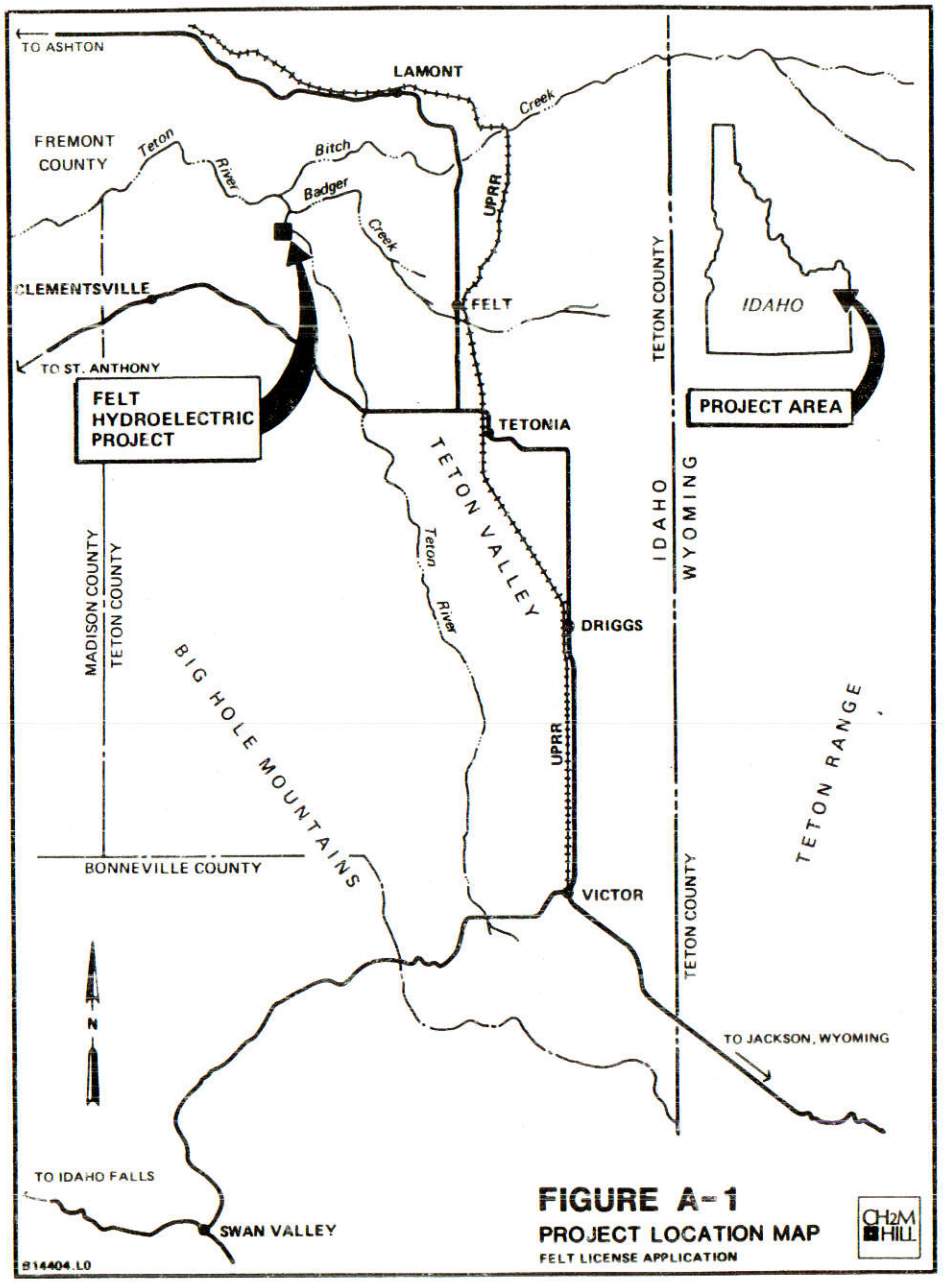
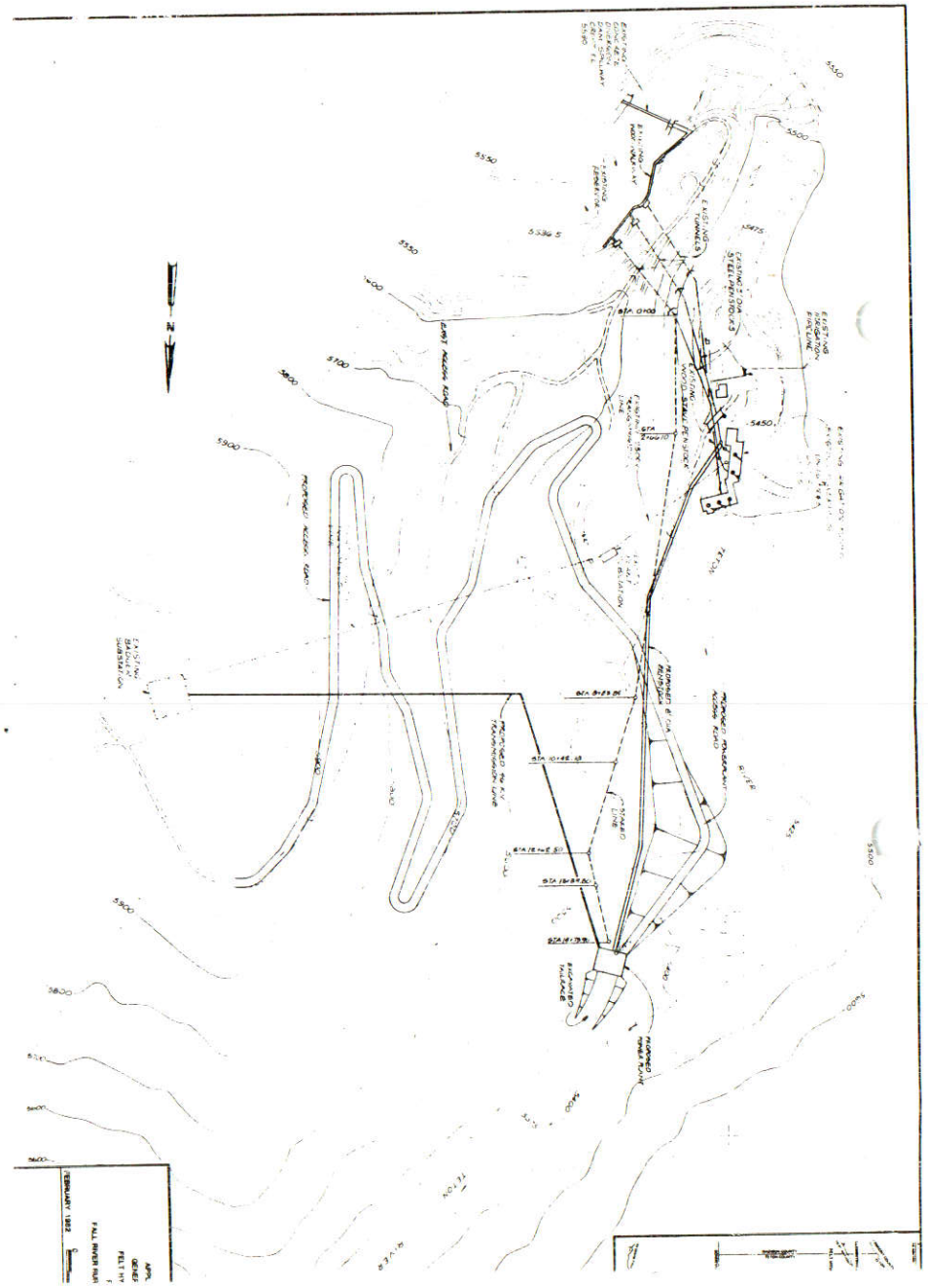


FIGURE A-1
PROJECT LOCATION MAP
FELT LICENSE APPLICATION

CH2M HILL



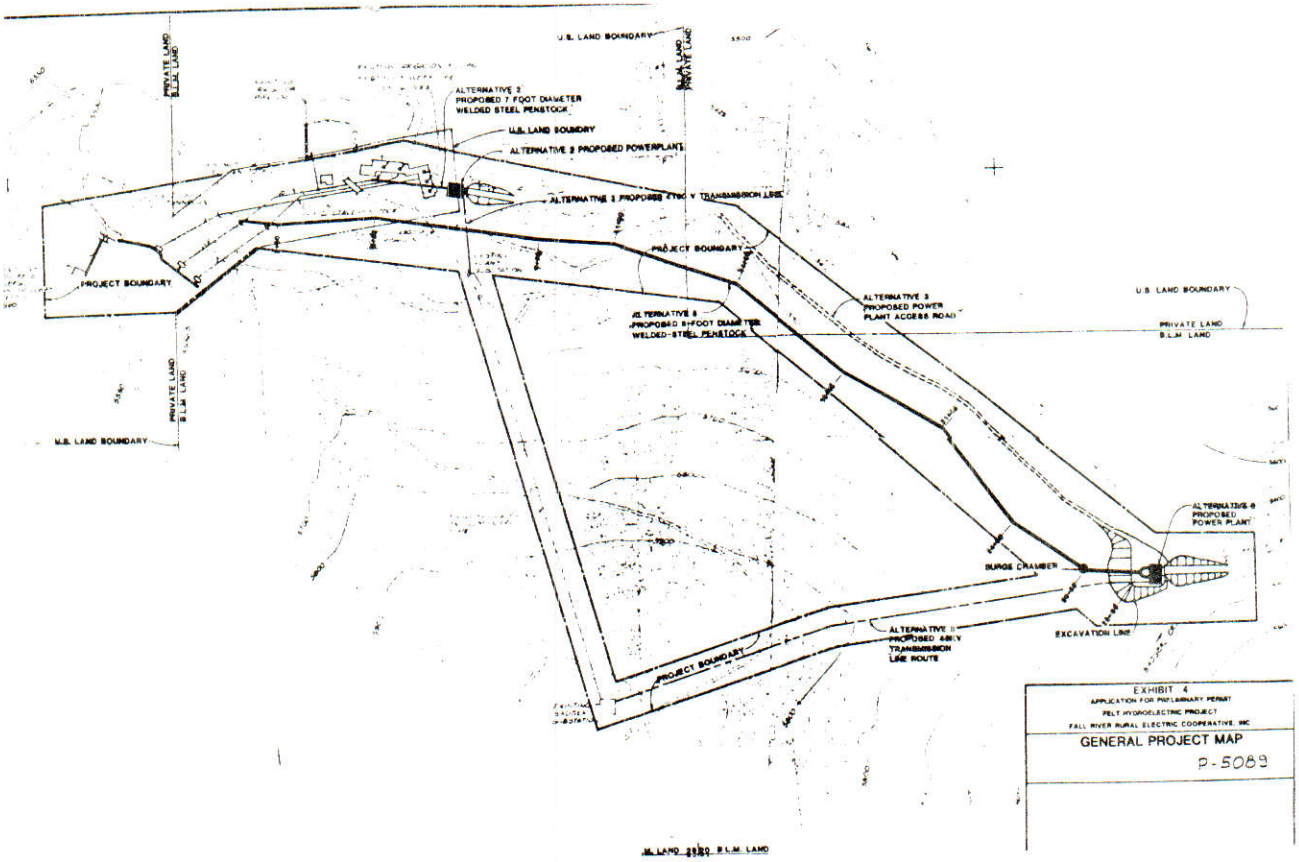


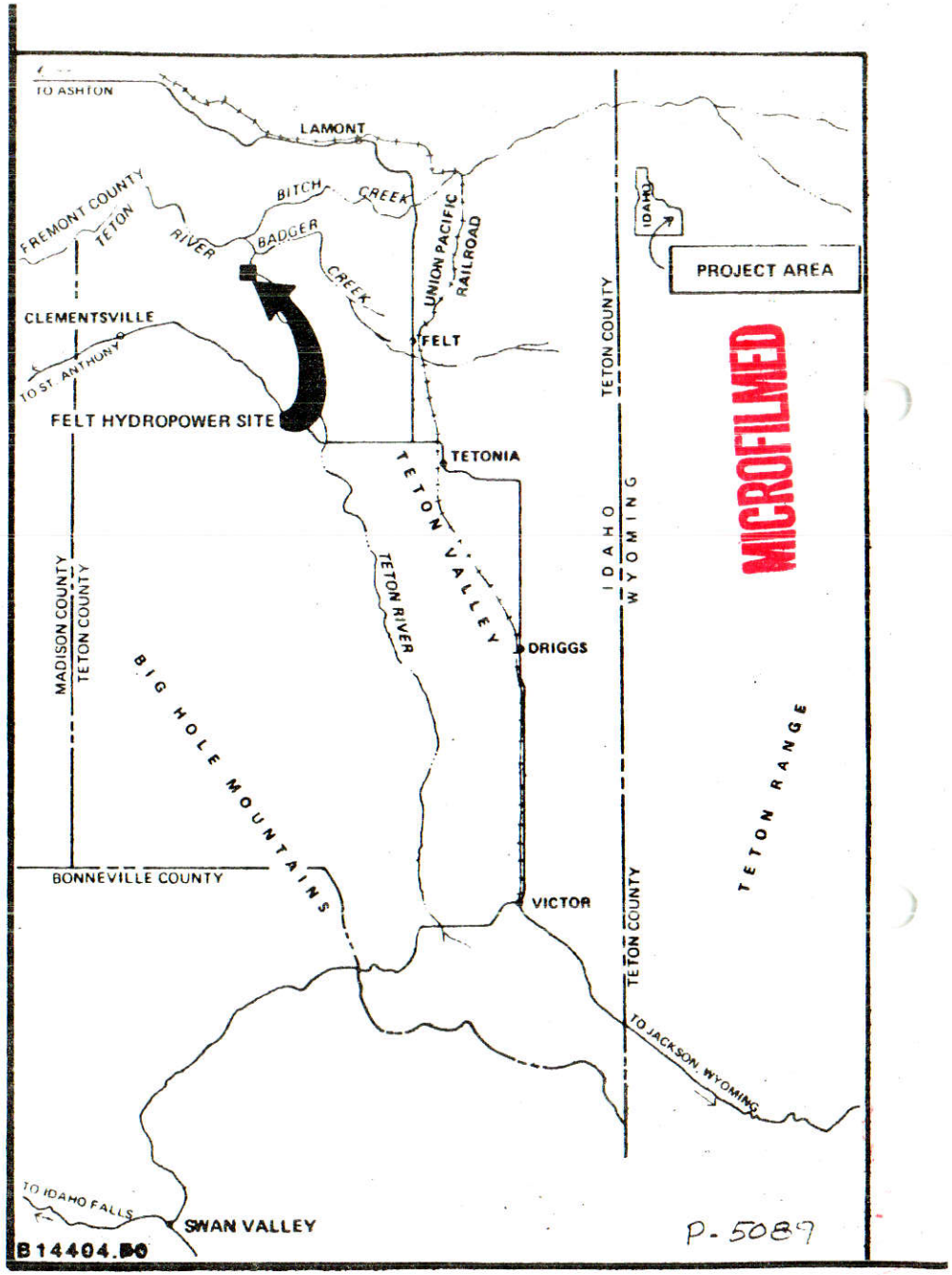
EXHIBIT 4
APPLICATION FOR PRELIMINARY PERMIT
PELT HYDROELECTRIC PROJECT
FALL RIVER RURAL ELECTRIC COOPERATIVE, INC

GENERAL PROJECT MAP

P-5089

to: Fred E. Springer, Chief, Applications Branch, Division of Hydropower Licensing, Federal Energy Regulatory Commission, Room 208 RB at the above address. A copy of any notice of intent, competing application, or petition to intervene must also be served upon each representative of the Applicant specified in the first paragraph of this notice.

Kenneth F. Plumb
Secretary



MICROFILMED

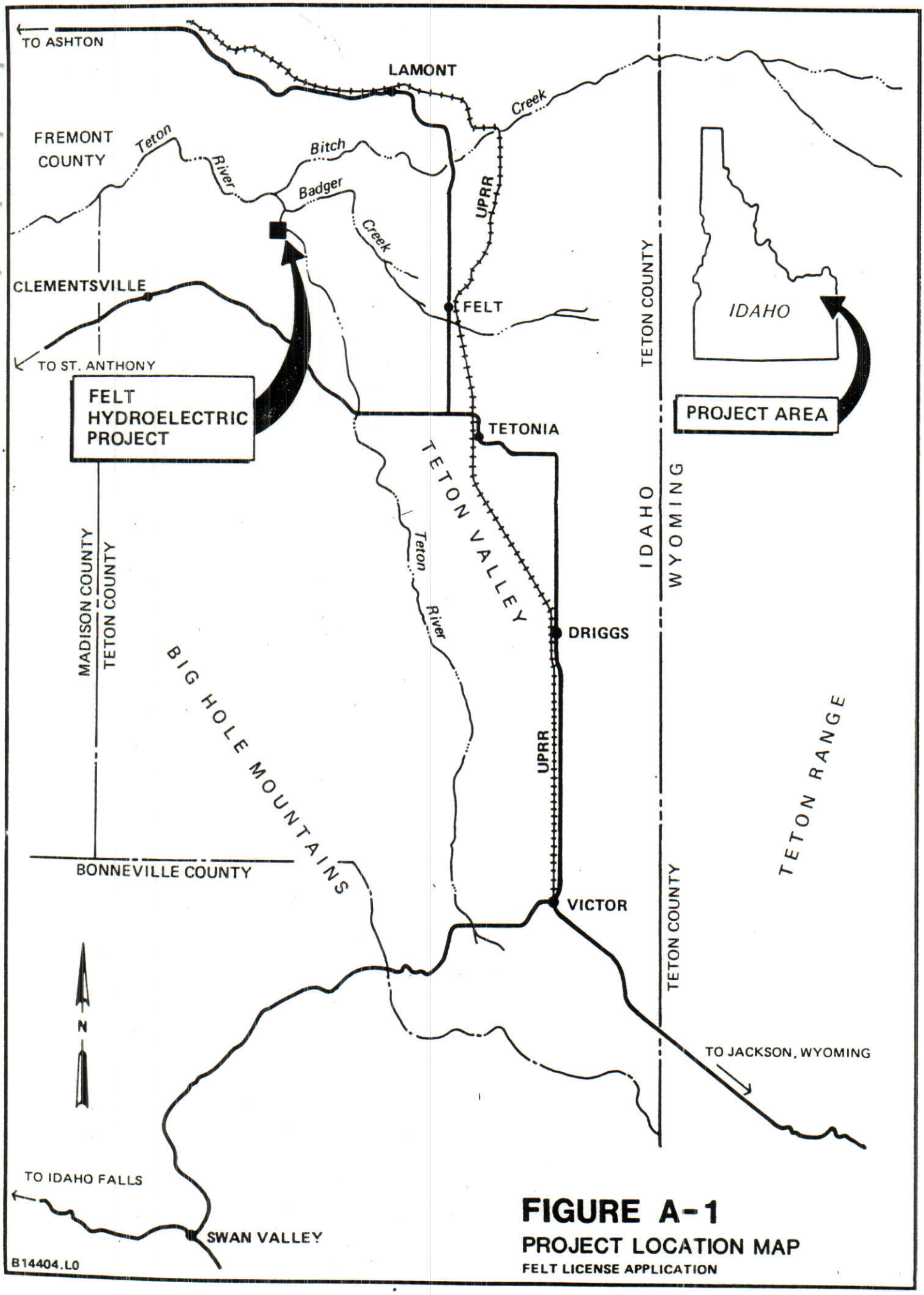
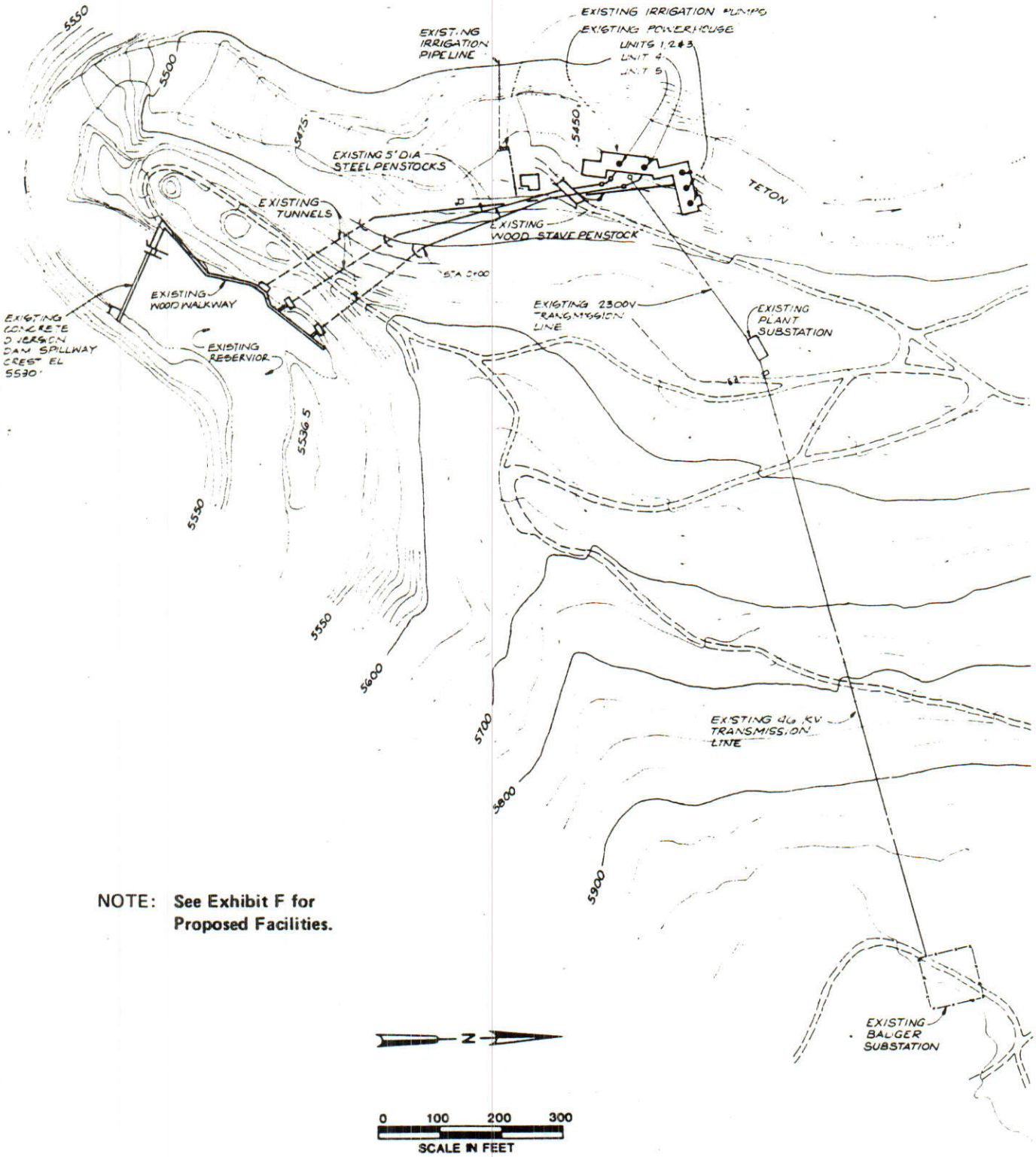


FIGURE A-1

PROJECT LOCATION MAP

FELT LICENSE APPLICATION

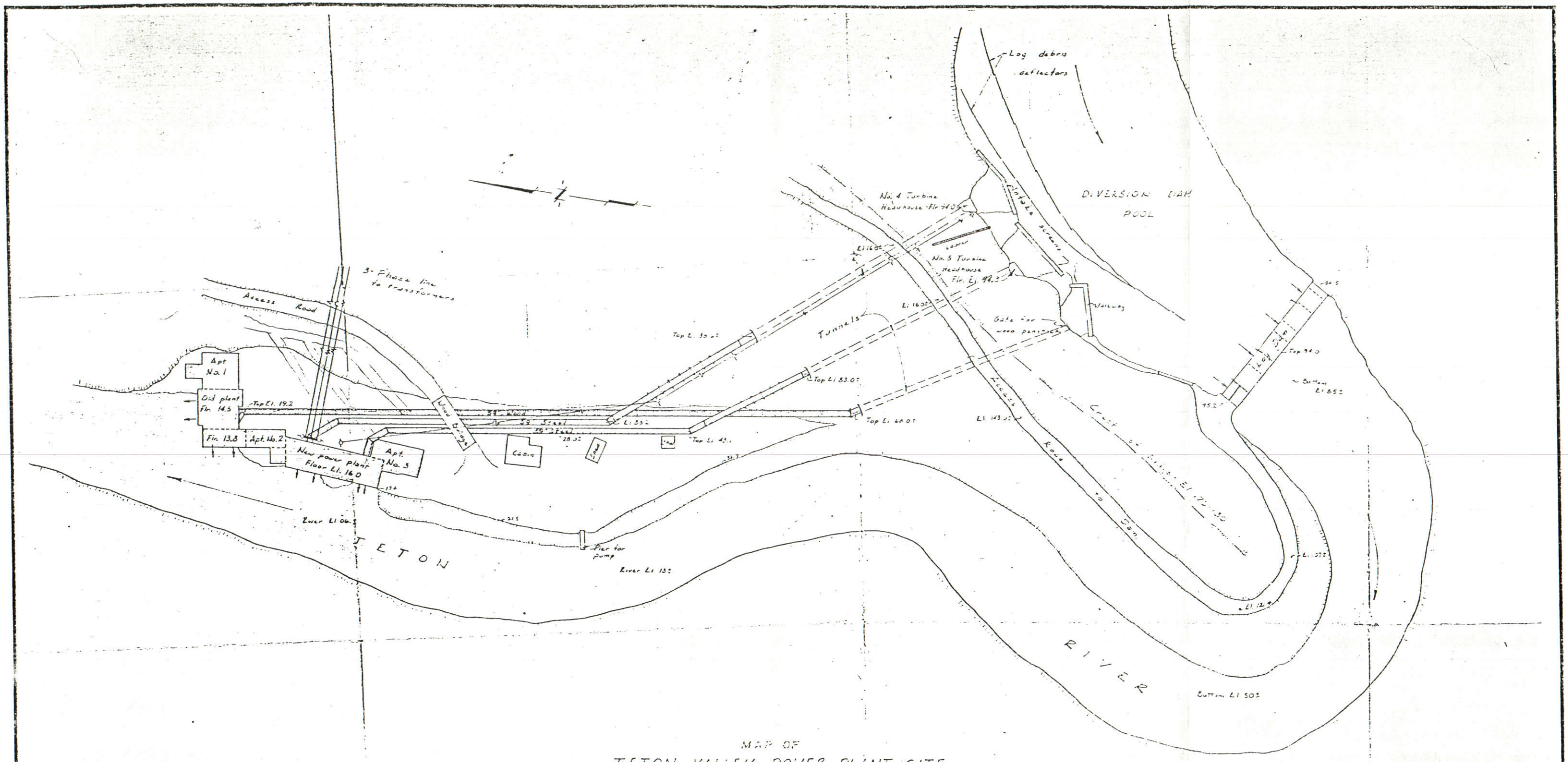


NOTE: **See Exhibit F for Proposed Facilities.**

FIGURE A-2
EXISTING FACILITIES PLAN

FELT LICENSE APPLICATION

B14404.L0

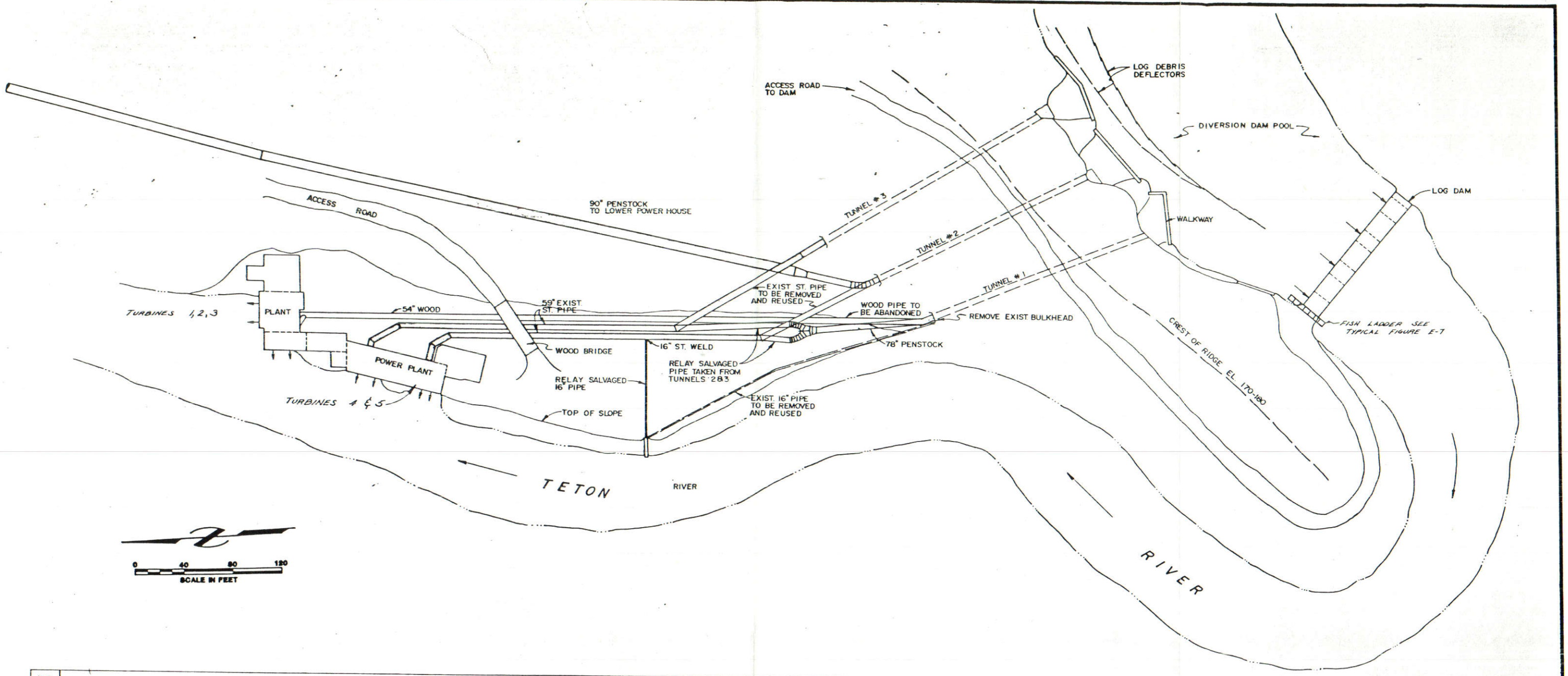


MAP OF

TETON VALLEY POWER PLANT SITE

Scale: 1" = 40'

FIGURE A-2
EXISTING



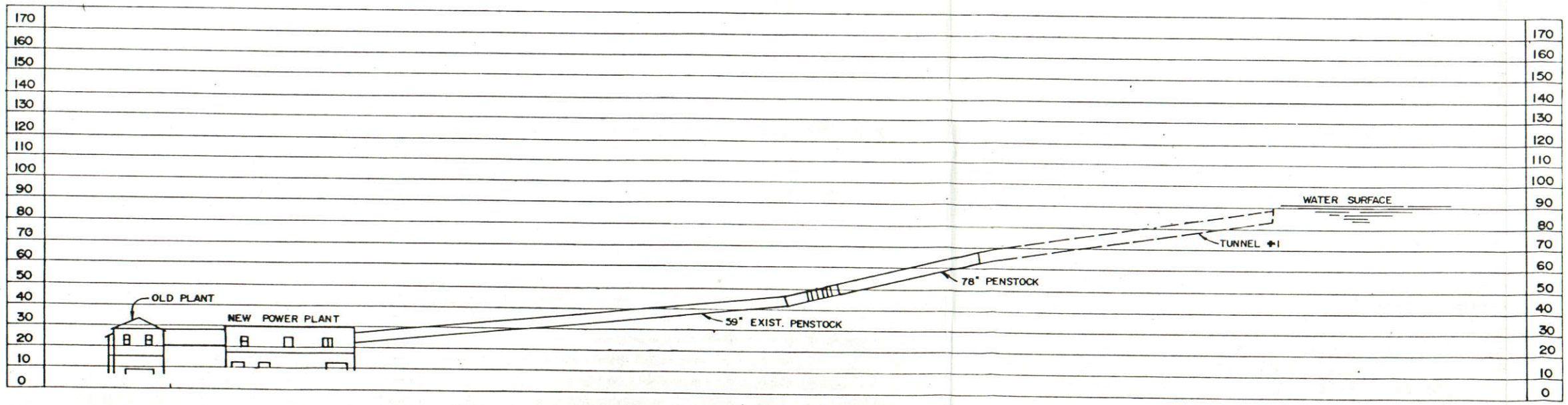


FIGURE A-2-B

AMENDED

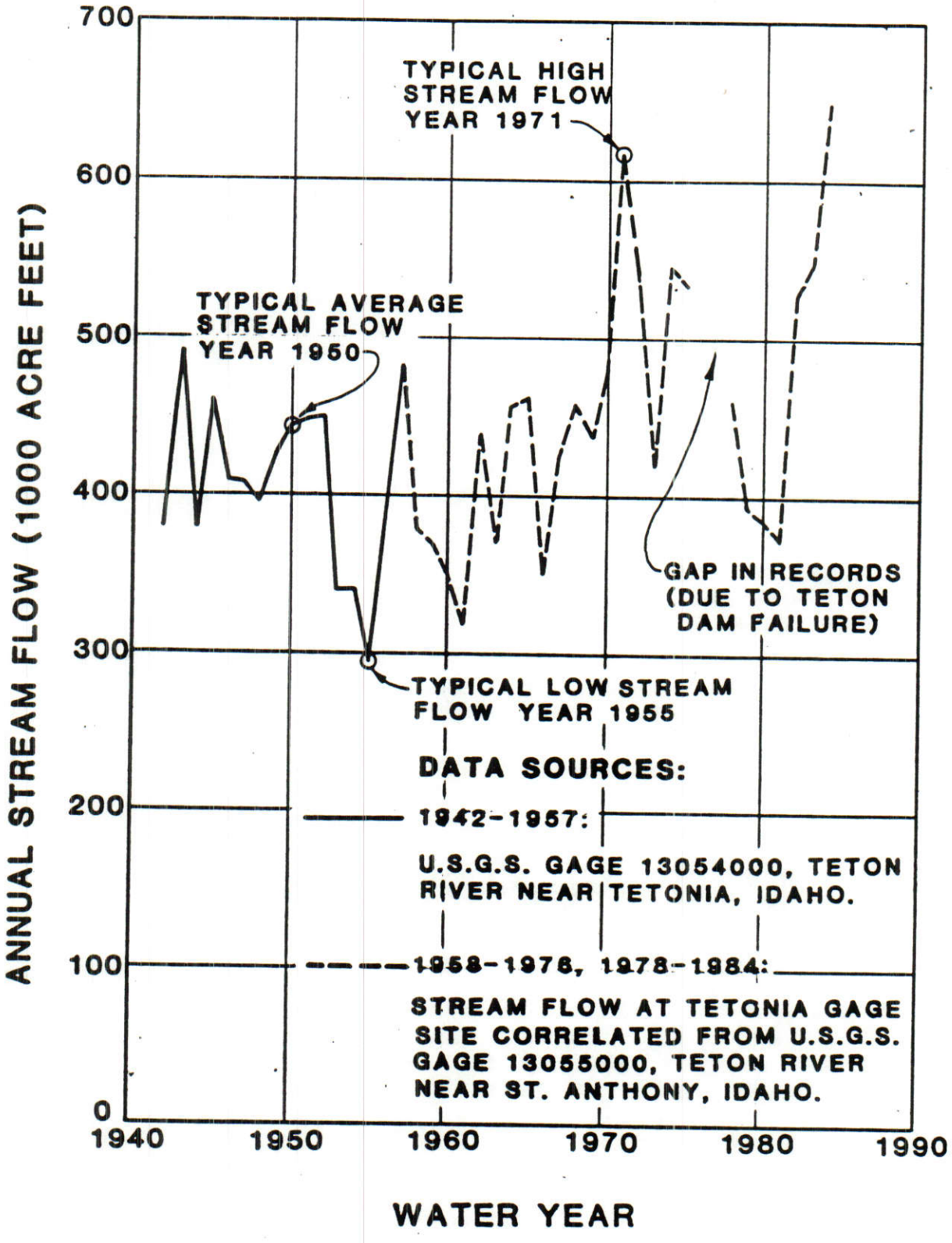
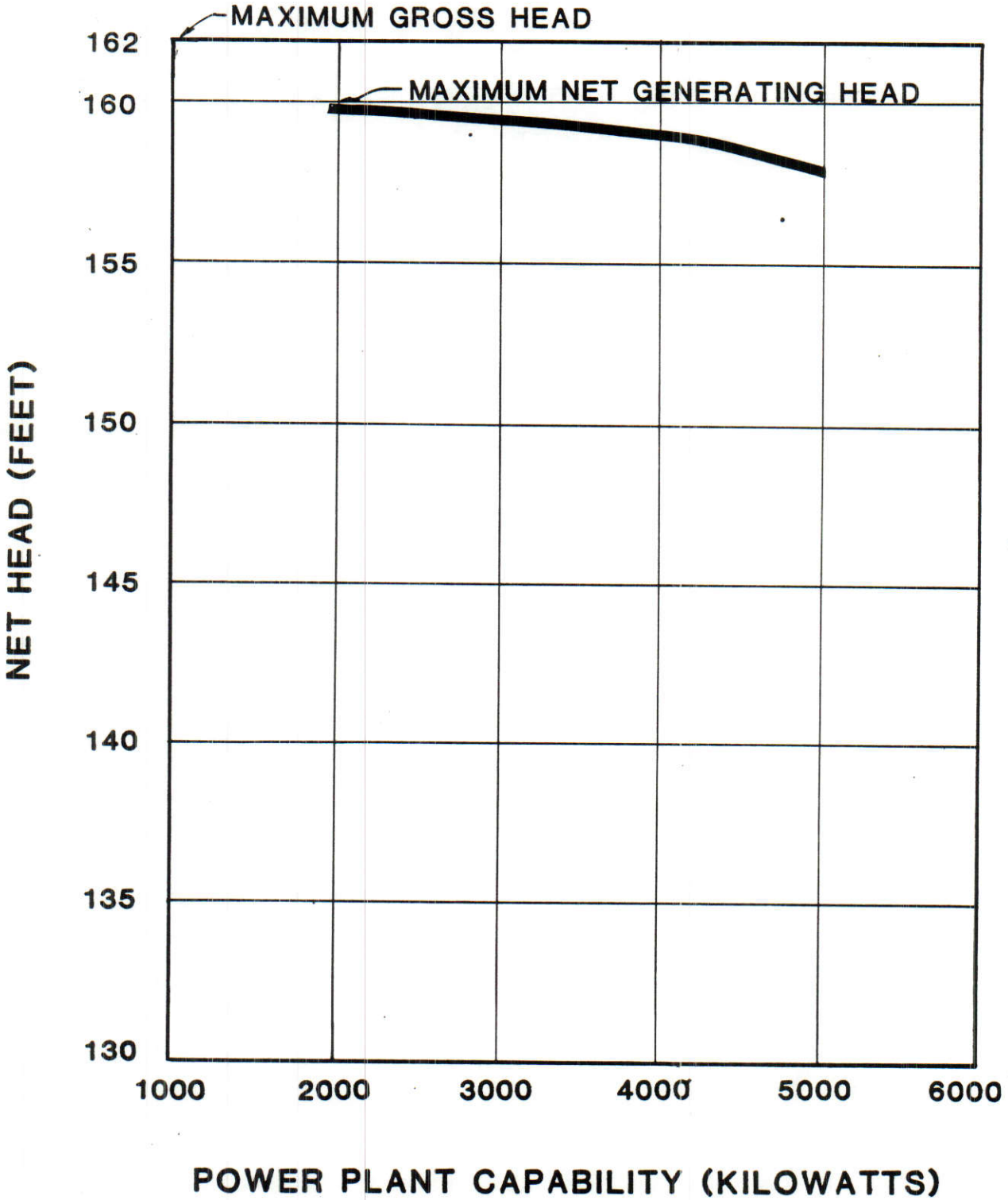


FIGURE B-2

ANNUAL RUN-OFF IN THE TETON RIVER
ABOVE THE FELT HYDROPOWER SITE



HEAD VS CAPABILITY

FIGURE B-5

FELT

COMBINED TURBINE-GENERATOR EFFICIENCY CURVES

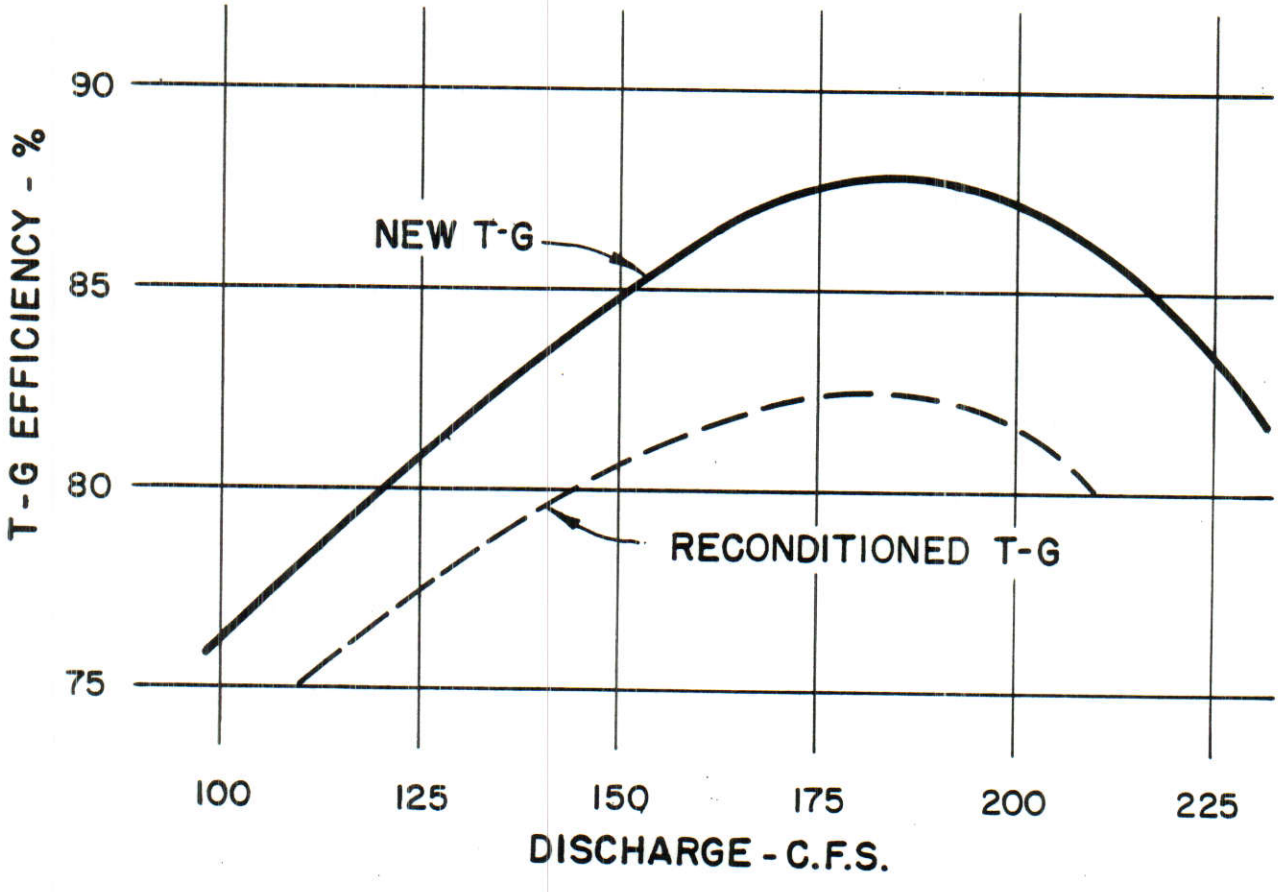
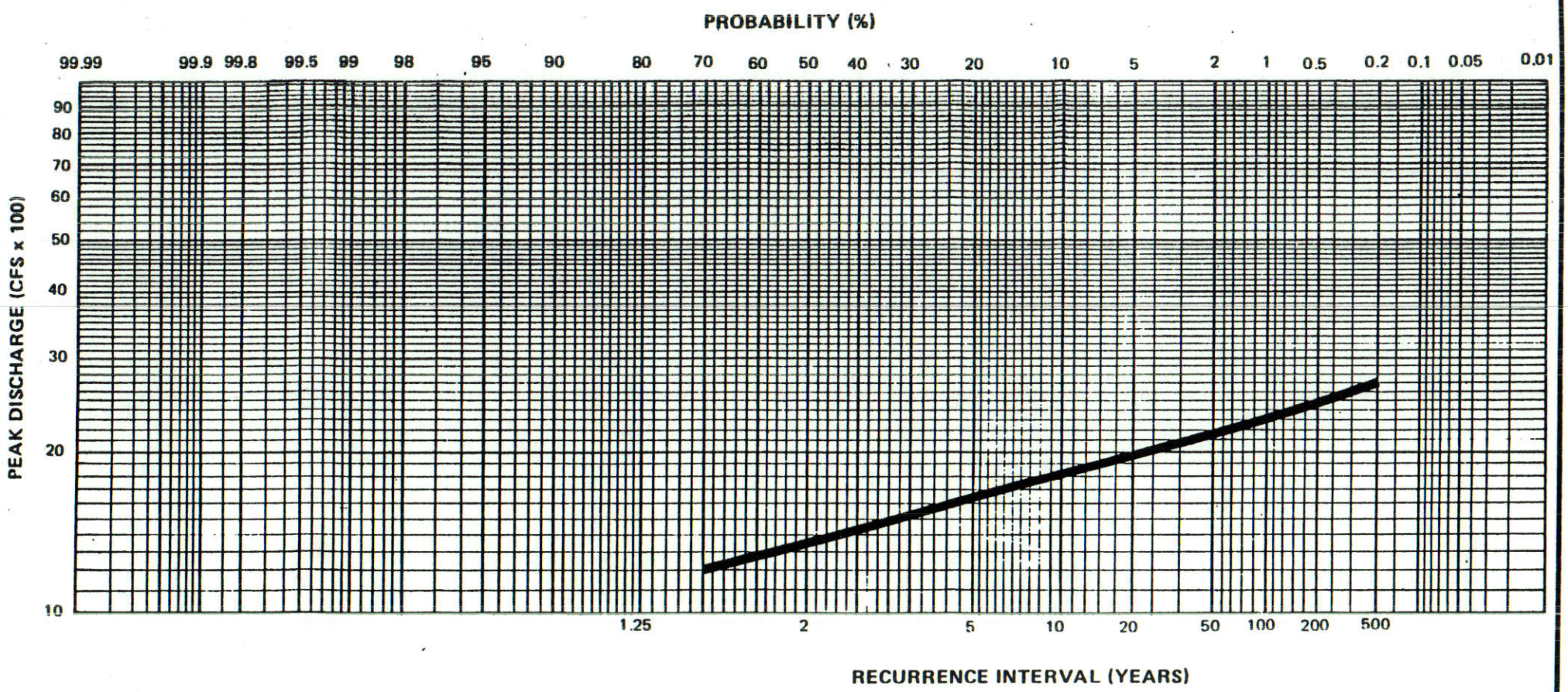


FIGURE B-5-A



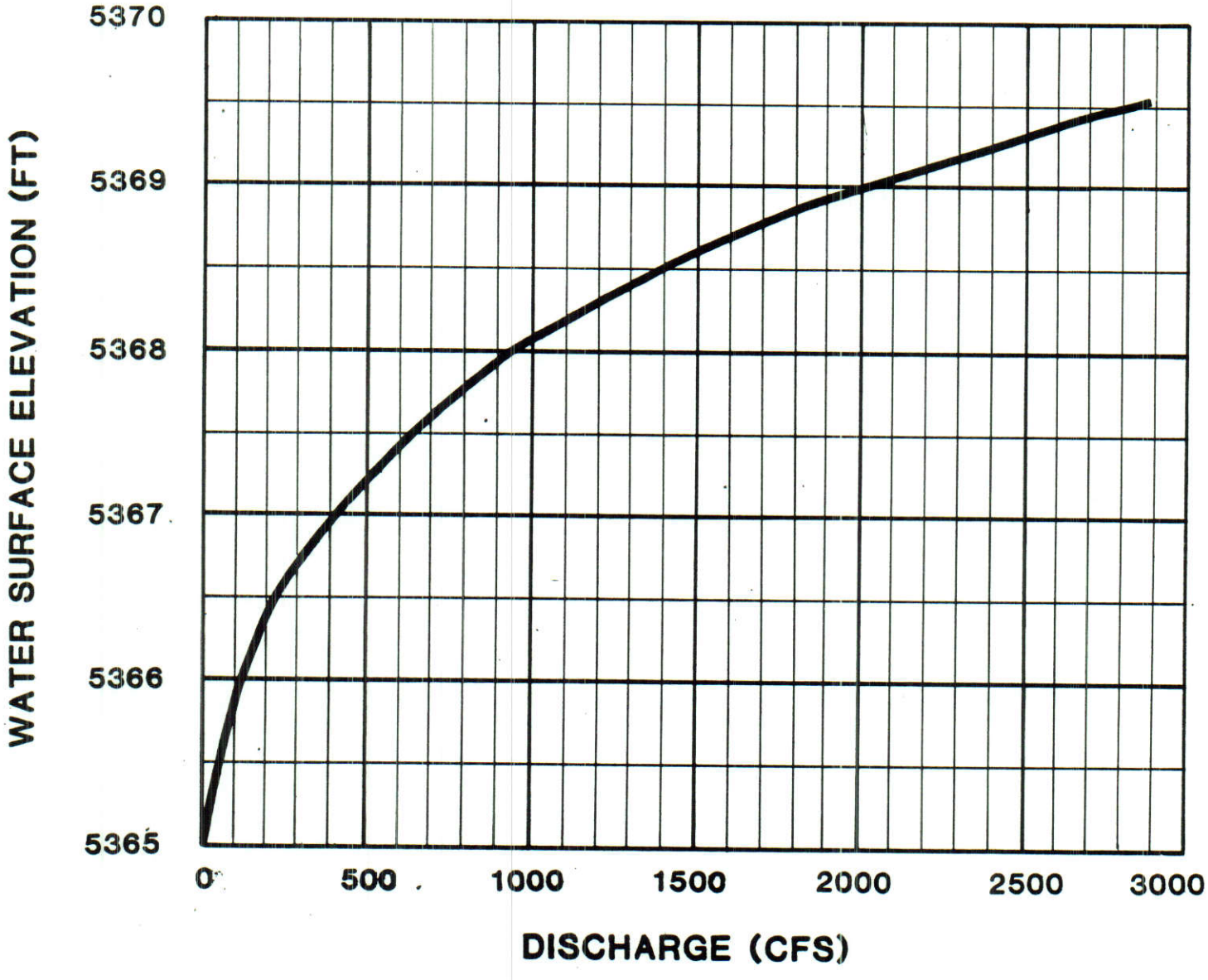
FELT HYDROELECTRIC PROJECT
FLOOD FREQUENCY CURVE
TETON RIVER NEAR TETONIA
DA = 471
PERIOD OF RECORD - 22 YEARS

FIGURE B-6

FLOOD FREQUENCY

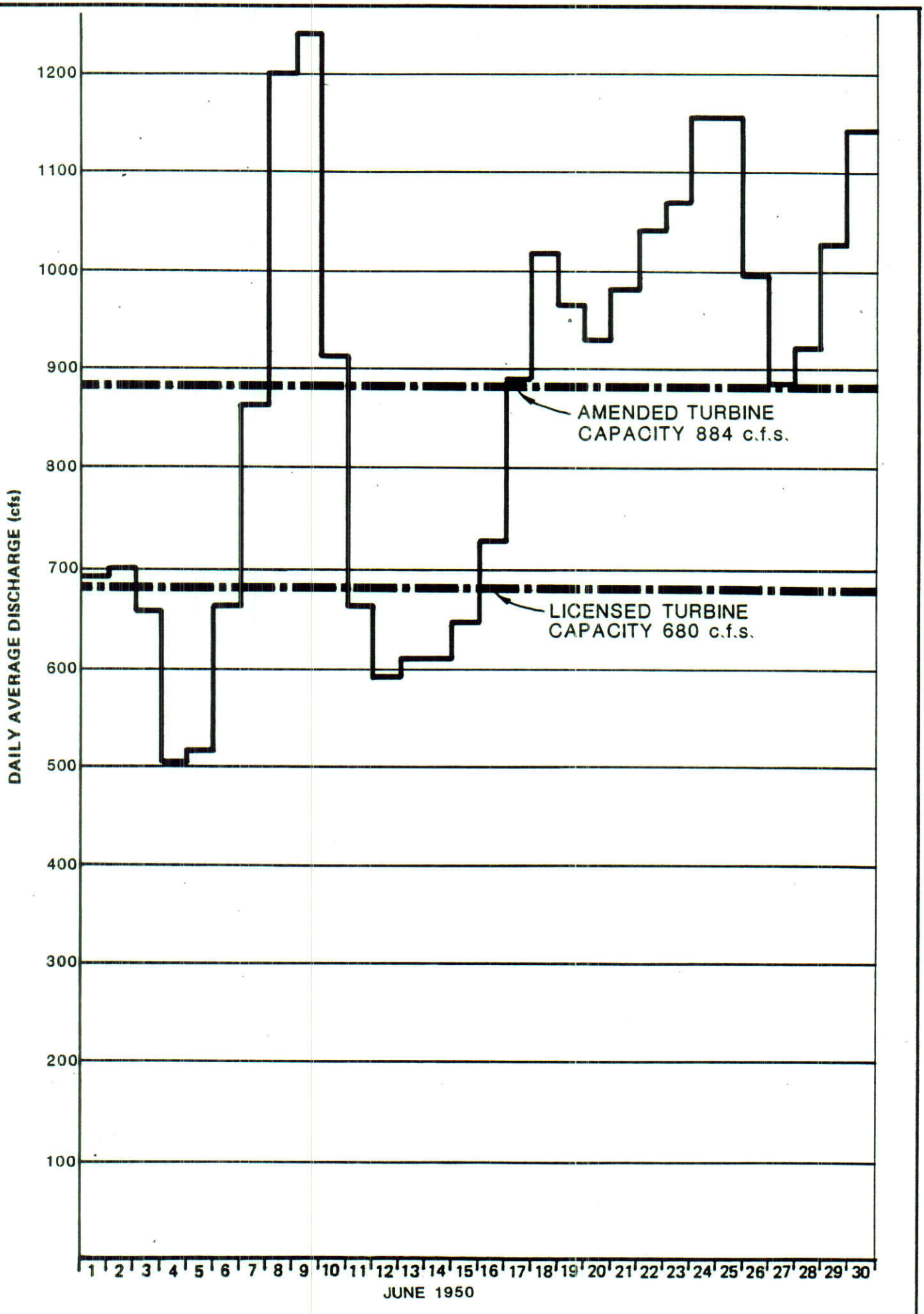
FELT LICENSE APPLICATION

B14404.L0



TETON RIVER STAGE VS
DISCHARGE AT POWER PLANT SITE

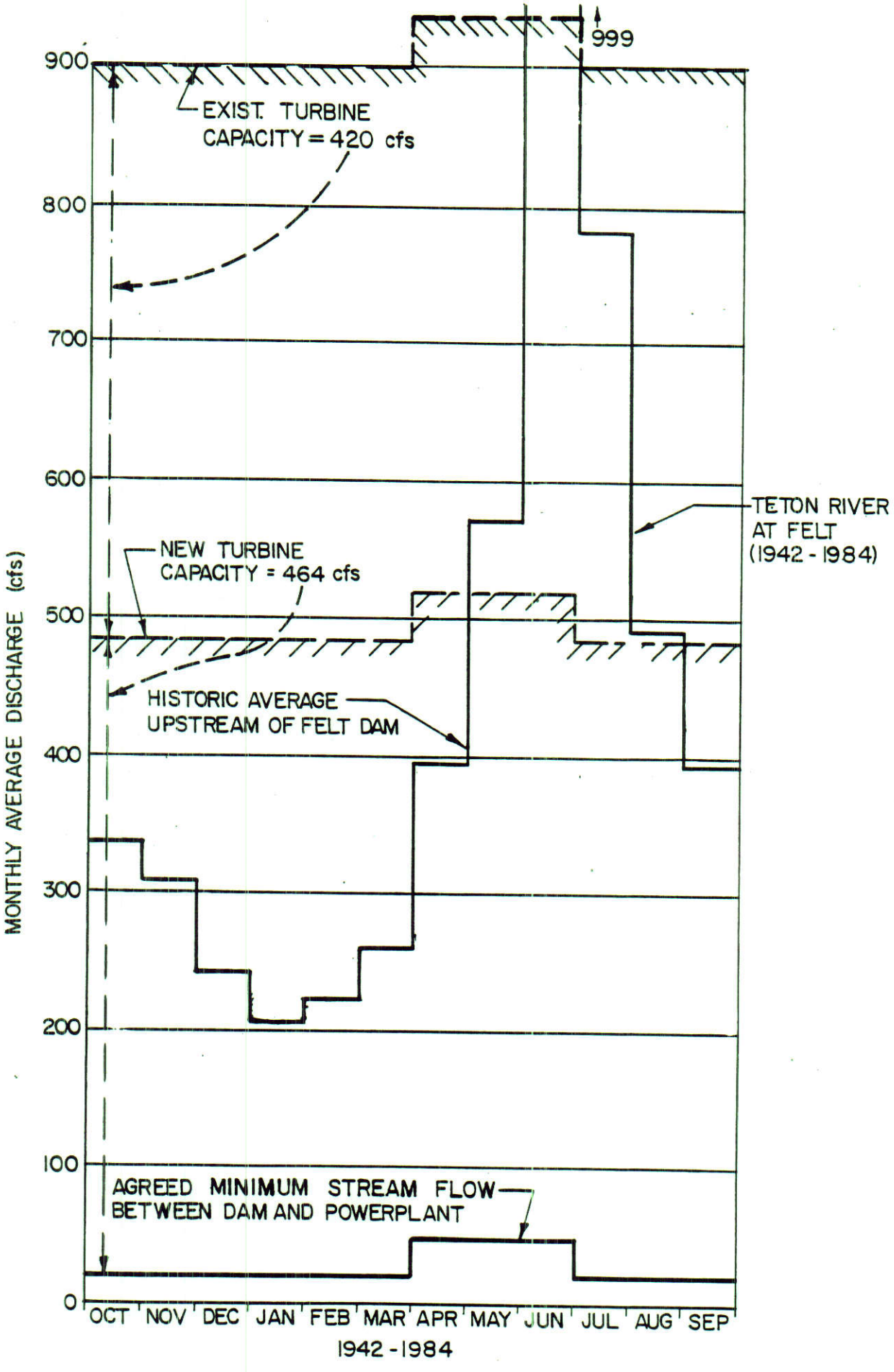
FIGURE B-7



DATA SOURCE:
U.S.G.S. Gage 13054000, Teton River Near Tetonia, Idaho

DAILY DISCHARGE WATER YEAR 1950

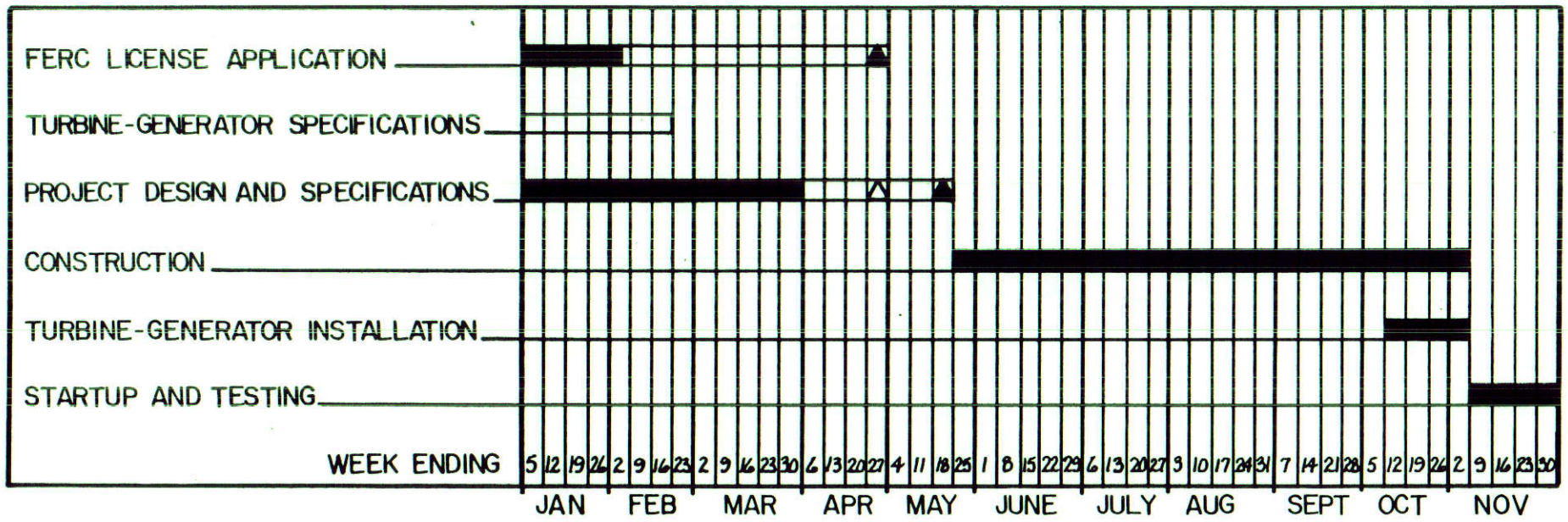
FIGURE B-8



AVERAGE MONTHLY DISCHARGE IN THE FELT HYDROELECTRIC PROJECT AREA

FELT LICENSE APPLICATION

FIGURE B-9



LEGEND

- ENGINEERING OR CONSTRUCTION ACTIVITY
- PROCESSING OR ADVERTISING PERIOD
- BID OPENING
- APPROVAL OR CONTRACT AWARD

PROJECT SCHEDULE

FIGURE C-1

EXISTING PENSTOCK TO BE UPGRADED
EXIST. POWERHOUSE
TETON RIVER
EXIST. TUNNELS
EXIST. RESERVOIR
EXIST. INTAKES
90" PENSTOCK
EXIST. SUBSTATION
PROPOSED AERIAL SPAN
PROPOSED AERIAL SPAN
POLE STRUCTURE
TRANSFORMER
BURIED TRANSMISSION LINE
90" PENSTOCK
PROPOSED POWERHOUSE
PROPOSED SURGE PIPE
PROPOSED ROAD
TETON R
S 89°36'24"W 2240'
0 100 200 300
SCALE IN FEET

FIGURE E-2
DETAILED PROJECT LOCATION MAP

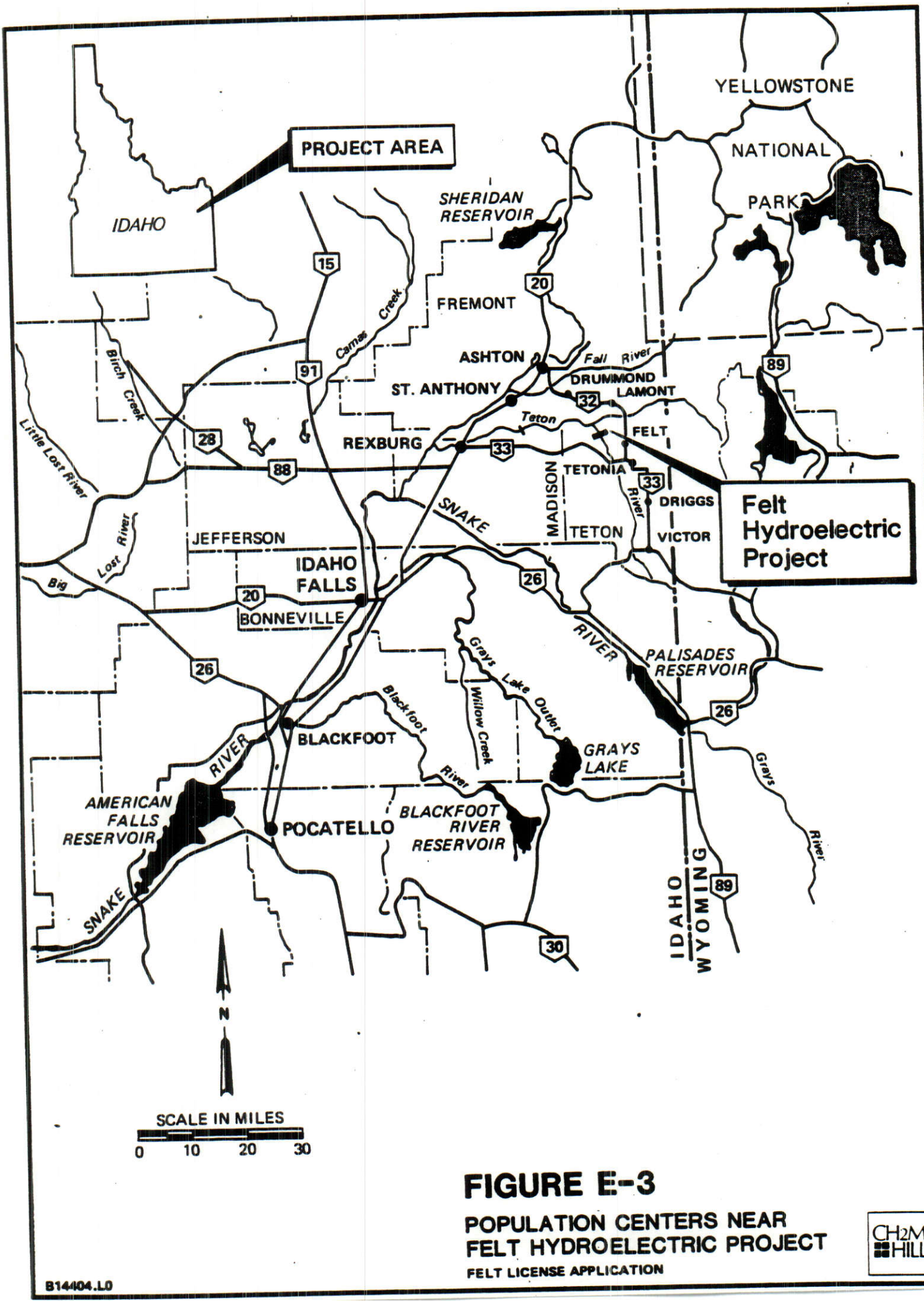


FIGURE E-3

POPULATION CENTERS NEAR FELT HYDROELECTRIC PROJECT

FELT LICENSE APPLICATION

CH2M HILL

B144104.L0

EXIST. POWERHOUSE

TETON RIVER

PROPOSED AERIAL SPAN

POLE STRUCTURE TRANSFORMER

BURIED TRANSMISSION LINE

EXISTING ROAD TO BE UPGRADED

EXIST. TUNNELS

90" PENSTOCK

EXIST RESERVOIR

EXIST. INTAKES

EXIST. SUBSTATION

PROPOSED AERIAL SPAN

90" PENSTOCK

PROPOSED POWERHOUSE

PROPOSED SURGE PIPE

PROPOSED ROAD

SEE SHEET F-2

SEE SHEET F-2

TETON R.

5550

5500

5600

5450

5425

5400

5375

5350

5325

5300

5275

5250

5225

5200

5175

5150

5100

5800

5900

5700

0 100 200 300

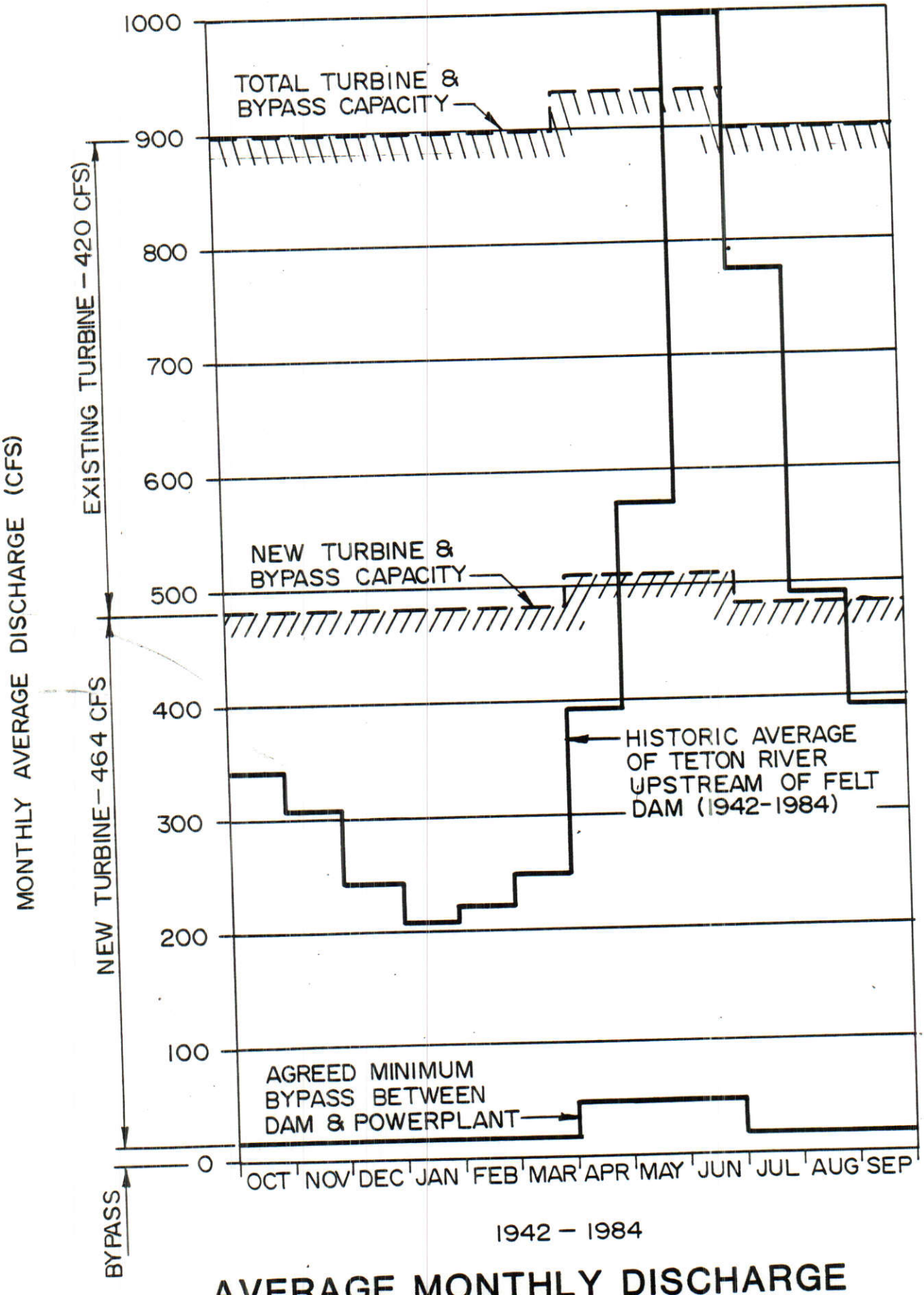
SCALE IN FEET

LEGEND

- RIPARIAN
- LODGEPOLE PINE
- JUNIPER/SAGEBRUSH/GRASS
- SAGEBRUSH/GRASS/ROCK

VEGETATION COVER TYPES

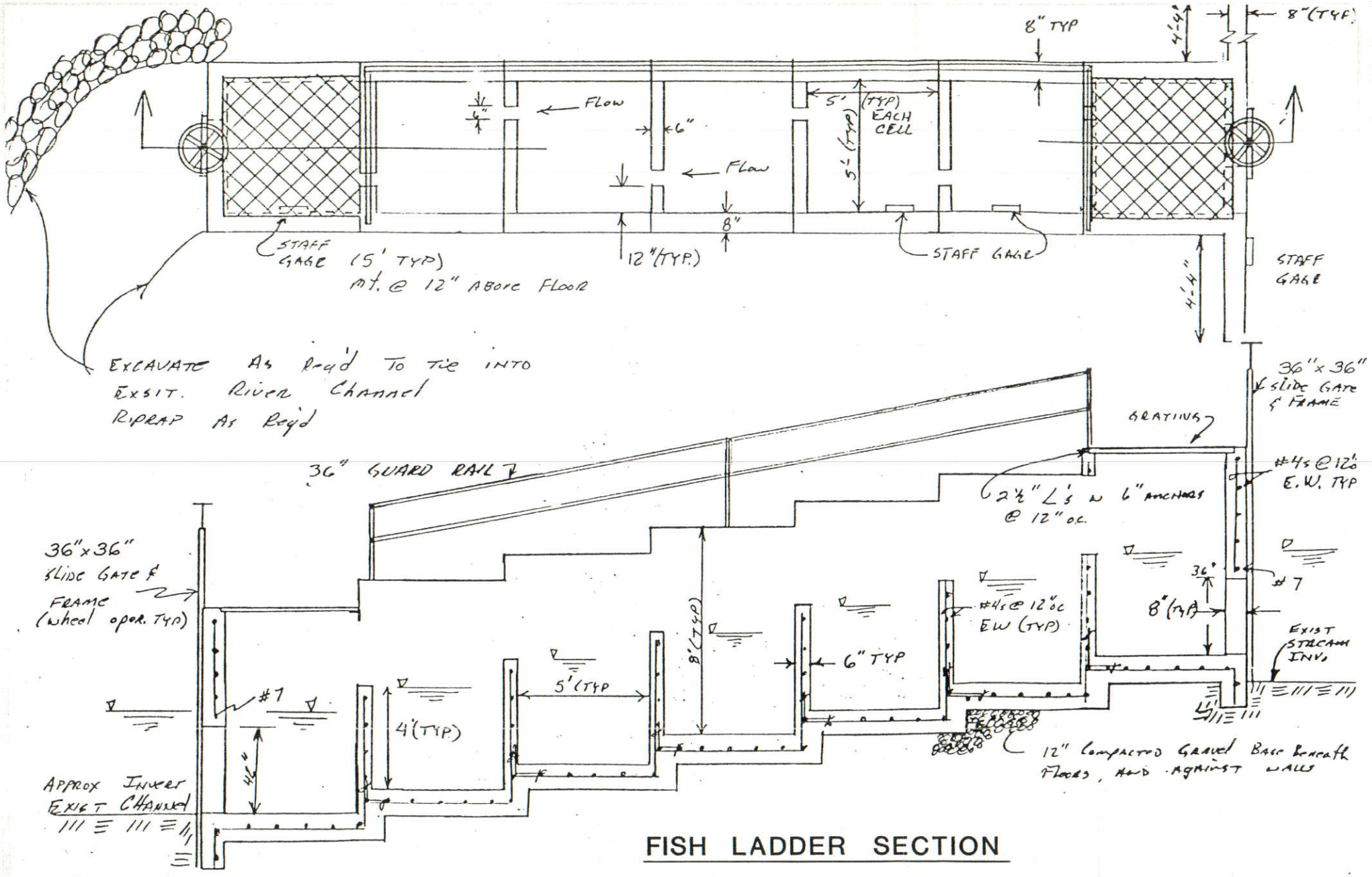
FIGURE E-4



AVERAGE MONTHLY DISCHARGE IN THE FELT HYDROELECTRIC PROJECT AREA

FELT LICENSE APPLICATION

FIGURE E-6



FISH LADDER SECTION

SCALE 1"=5'

FIGURE E-7

TYPICAL FISH LADDER SECTION

EXISTING PENSTOCK TO BE UPGRADED

EXIST. POWERHOUSE

TETON RIVER

EXIST. RESERVOIR

EXIST. TUNNELS

90" PENSTOCK

EXIST. INTAKES

EXIST. SUBSTATION

PROPOSED AERIAL SPAN

PROPOSED AERIAL SPAN

POLE STRUCTURE
TRANSFORMER

SEE SHEET F-2

BURIED TRANSMISSION LINE

90" PENSTOCK

PROPOSED POWERHOUSE

PROPOSED SURGE PIPE

SEE SHEET F-2

PROPOSED ROAD

SEE SHEET F-2

S 89°36'24" W

2222.40'

223'

TETON R.

5550 5500 5475 5450 5425 5400 5375 5536.5 5600 5700 5800 5900

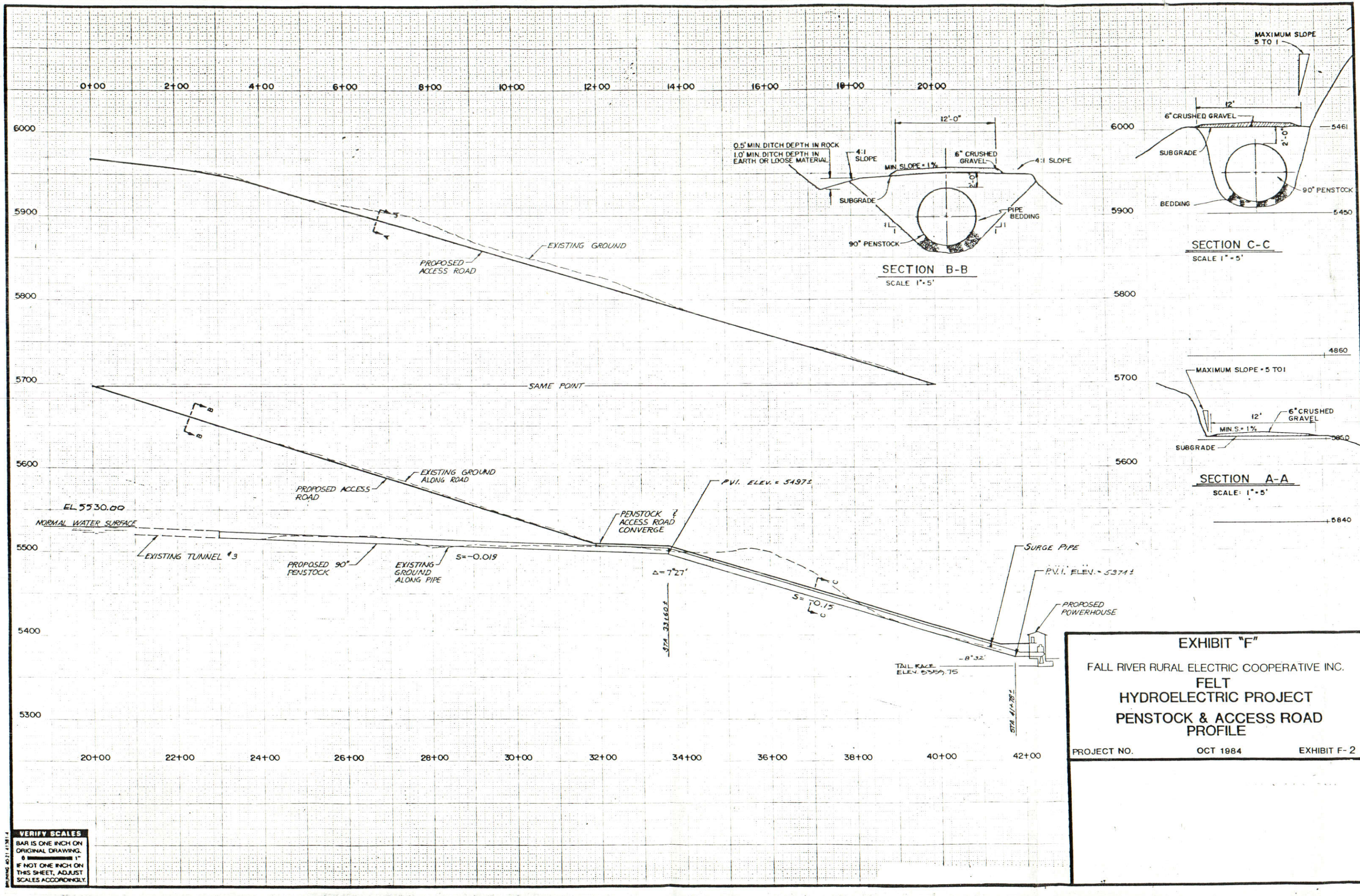
0 100 200 300
SCALE IN FEET

EXHIBIT "F"

FALL RIVER RURAL ELECTRIC COOPERATIVE INC.

FELT
HYDROELECTRIC PROJECT
PLAN

PROJECT NO | OCTOBER 1984 | EXHIBIT F-1



VERIFY SCALES

BAR IS ONE INCH ON ORIGINAL DRAWING.

0 ——— 1"

IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

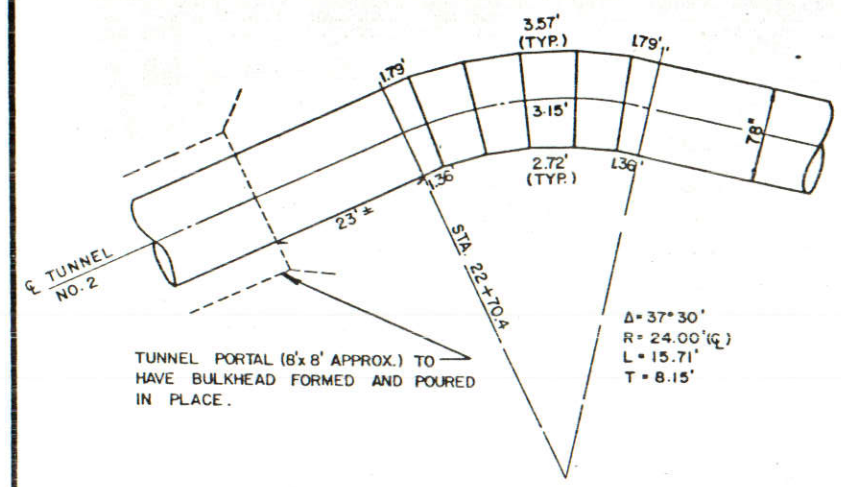
EXHIBIT "F"

FALL RIVER RURAL ELECTRIC COOPERATIVE INC.

FELT HYDROELECTRIC PROJECT

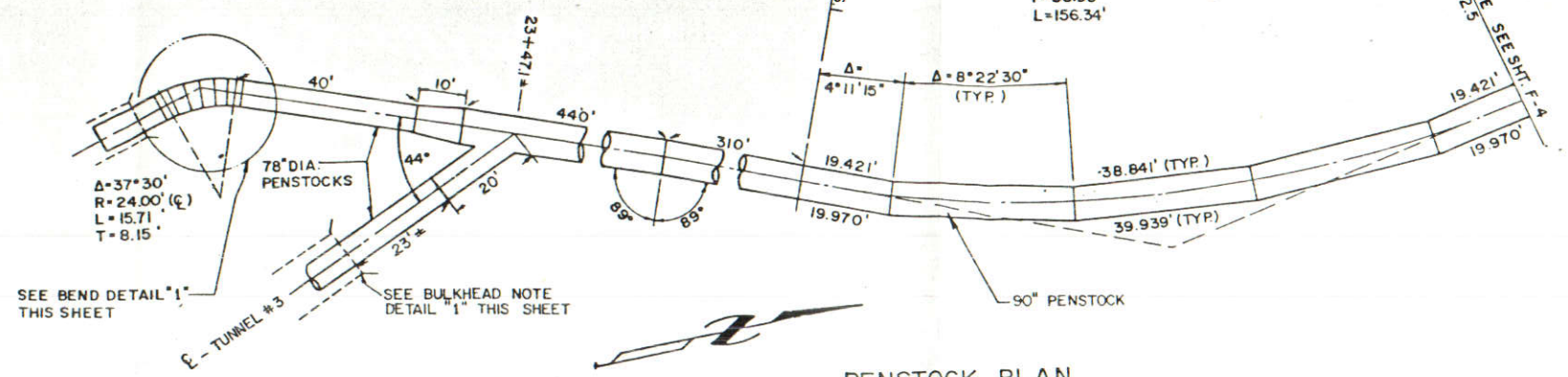
PENSTOCK & ACCESS ROAD PROFILE

PROJECT NO. | OCT 1984 | EXHIBIT F-2



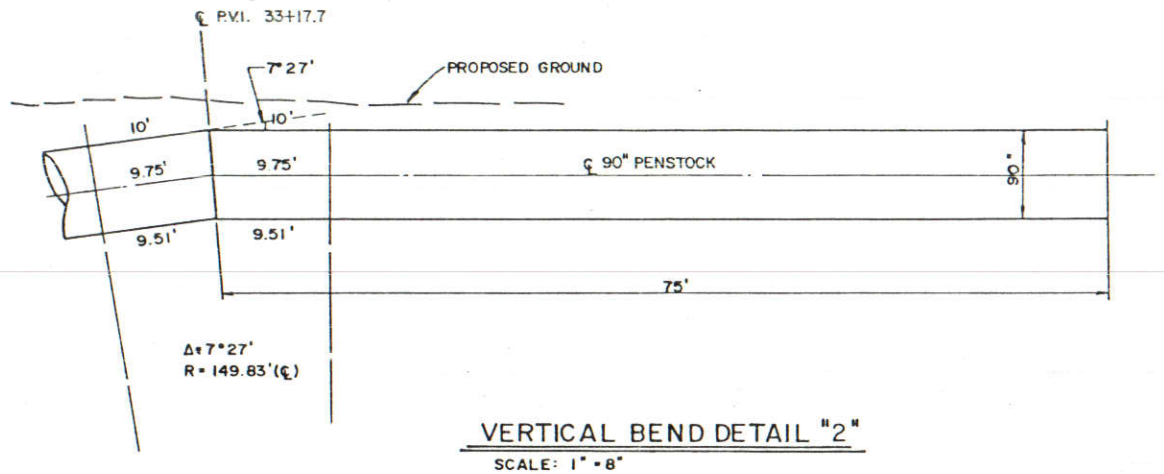
BEND DETAIL "1"

SCALE: 1"=6'



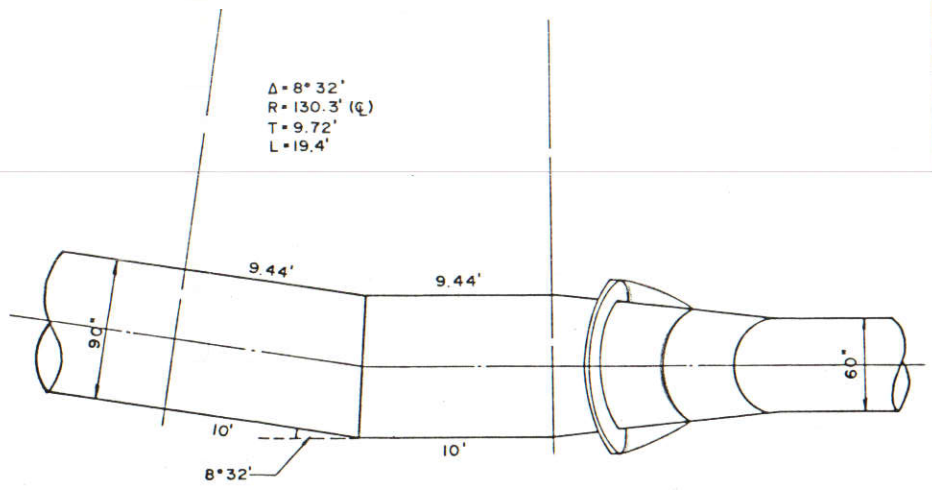
PENSTOCK PLAN

SCALE: 1"=20'



VERTICAL BEND DETAIL "2"

SCALE: 1"=8'



VERTICAL BEND DETAIL "3"

SCALE: 1"=5'

SECTION OF SURGE PIPE D-D

SCALE: 1"=20'

EXHIBIT "F"

FALL RIVER RURAL ELECTRIC COOPERATIVE INC.

FELT

HYDROELECTRIC PROJECT

PENSTOCK & SURGE PIPE

PROJECT NO | JAN 1985 | EXHIBIT F-3

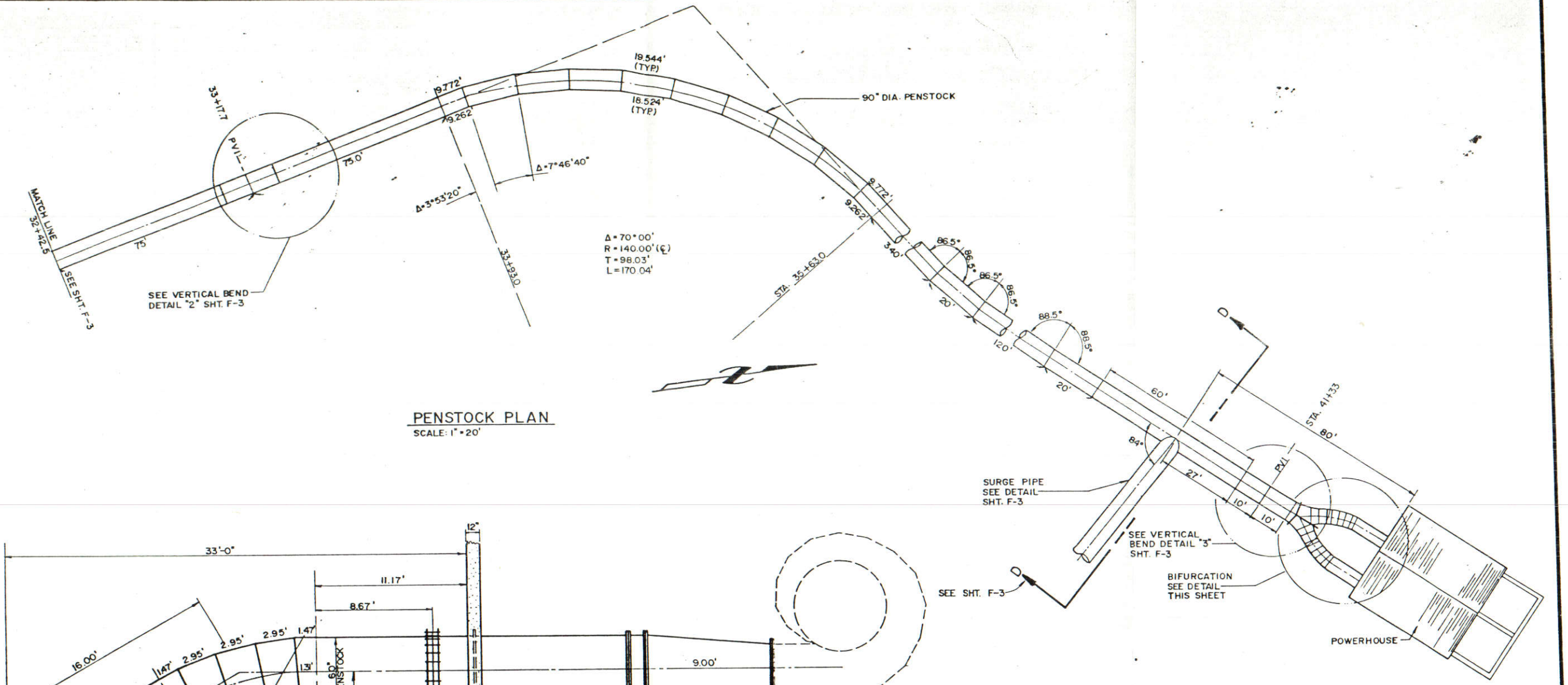
VERIFY SCALES

BAR IS ONE INCH ON ORIGINAL DRAWING.

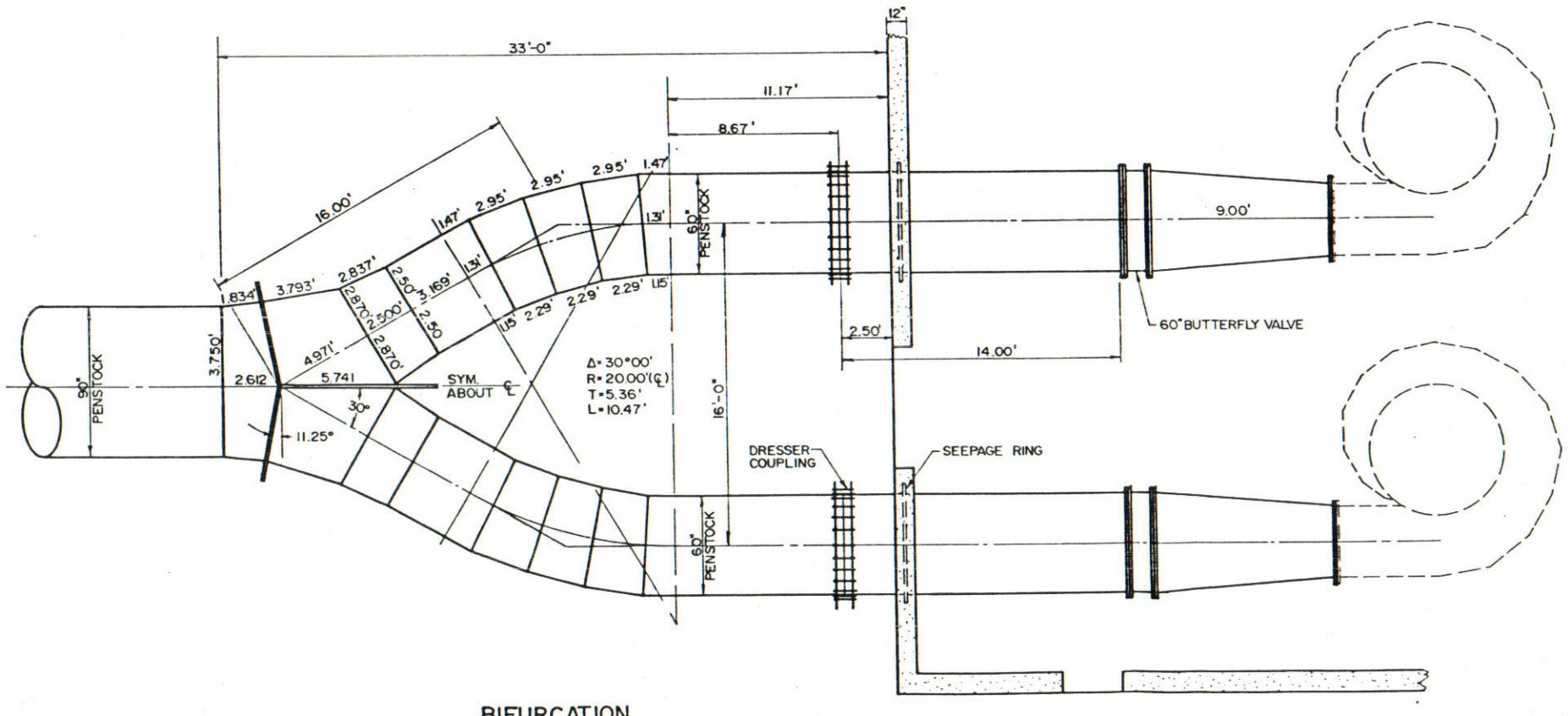
0 ——— 1"

IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

LARSON'S DRAFTING SYSTEMS 88X18



PENSTOCK PLAN
SCALE: 1" = 20'



BIFURCATION
SCALE-1"=4'

EXHIBIT "F"

FALL RIVER RURAL ELECTRIC COOPERATIVE INC.

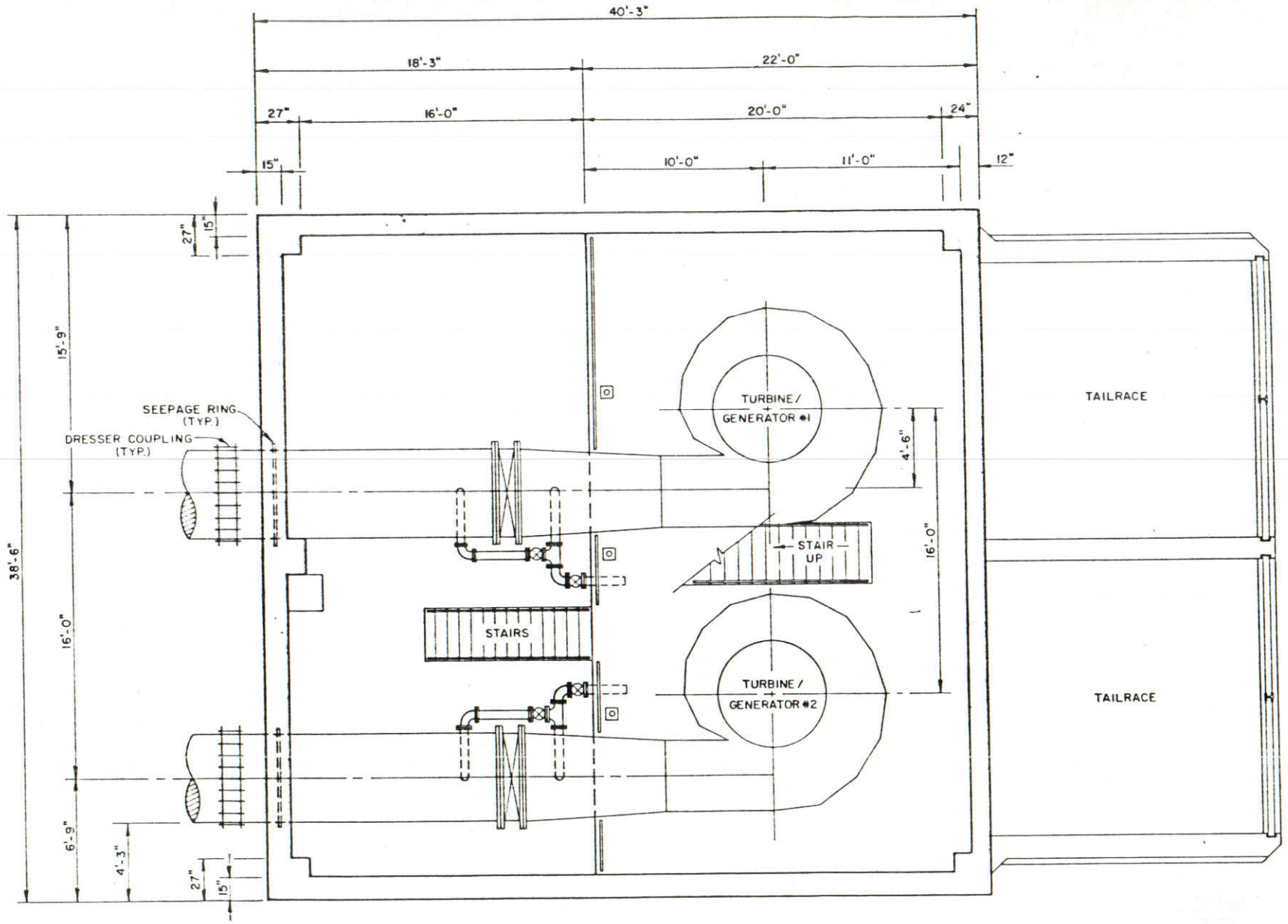
FELT HYDROELECTRIC PROJECT

PENSTOCK & BIFURCATION

PROJECT NO JAN 1985 EXHIBIT F-4

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 —— 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

LADRUM'S DRAFTING SYSTEMS 20X10



TURBINE DECK / VALVE BAY - PLAN

SCALE : 1" = 4'

EXHIBIT "F"

FALL RIVER RURAL ELECTRIC COOPERATIVE INC.

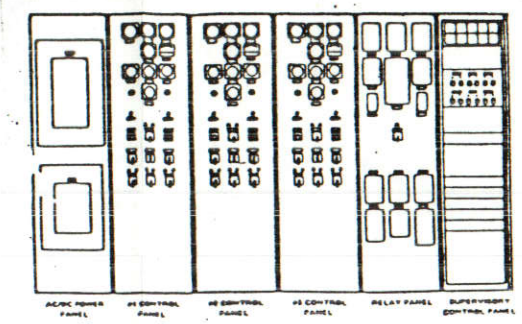
FELT
HYDROELECTRIC PROJECT
POWERHOUSE

TURBINE DECK/VALVE BAY - PLAN

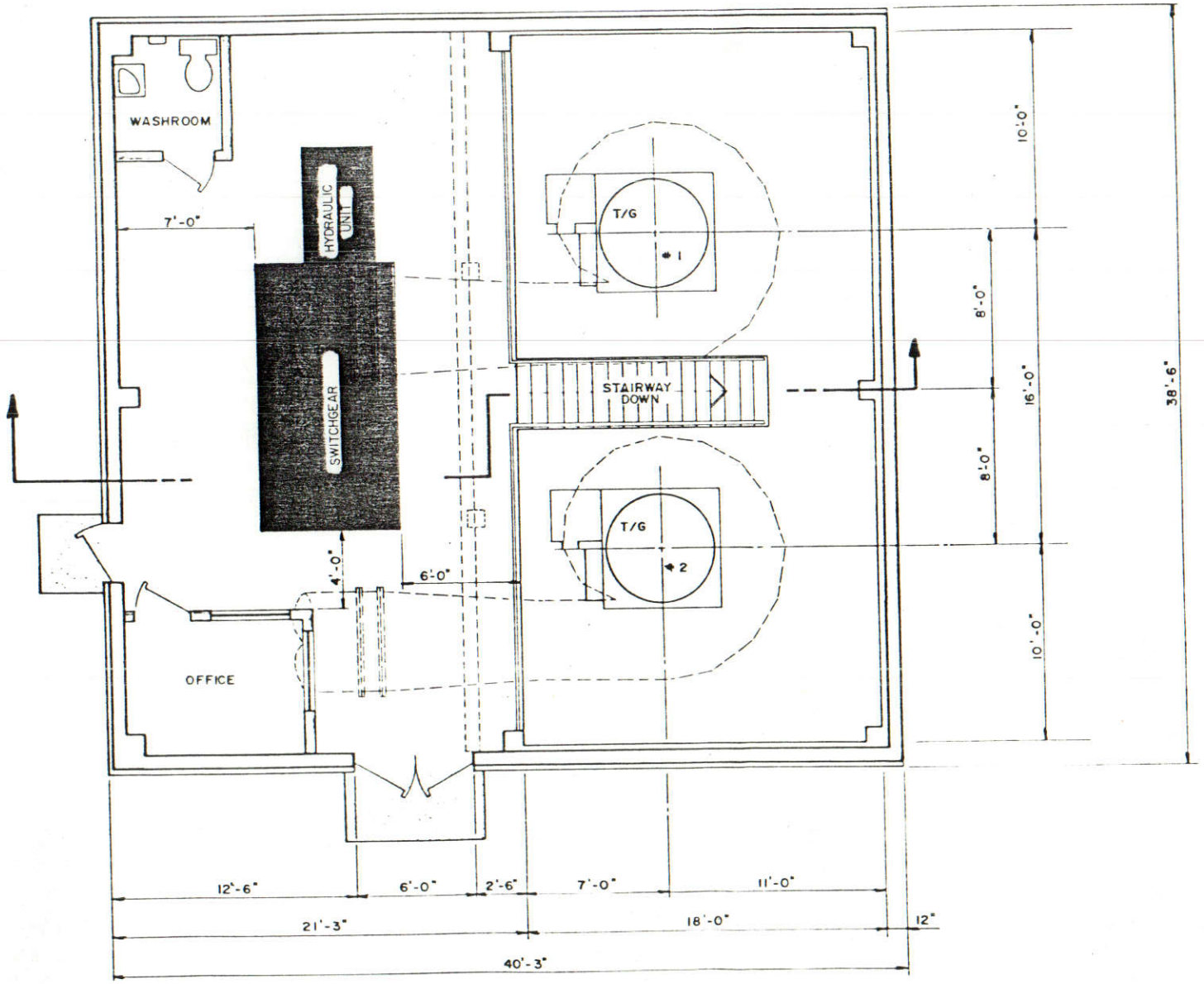
PROJECT NO. OCT 1984 EXHIBIT F- 5

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 —— 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 —— 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY



CONTROL PANEL
NTS



SWITCHGEAR DECK – PLAN
SCALE: 1" = 4'

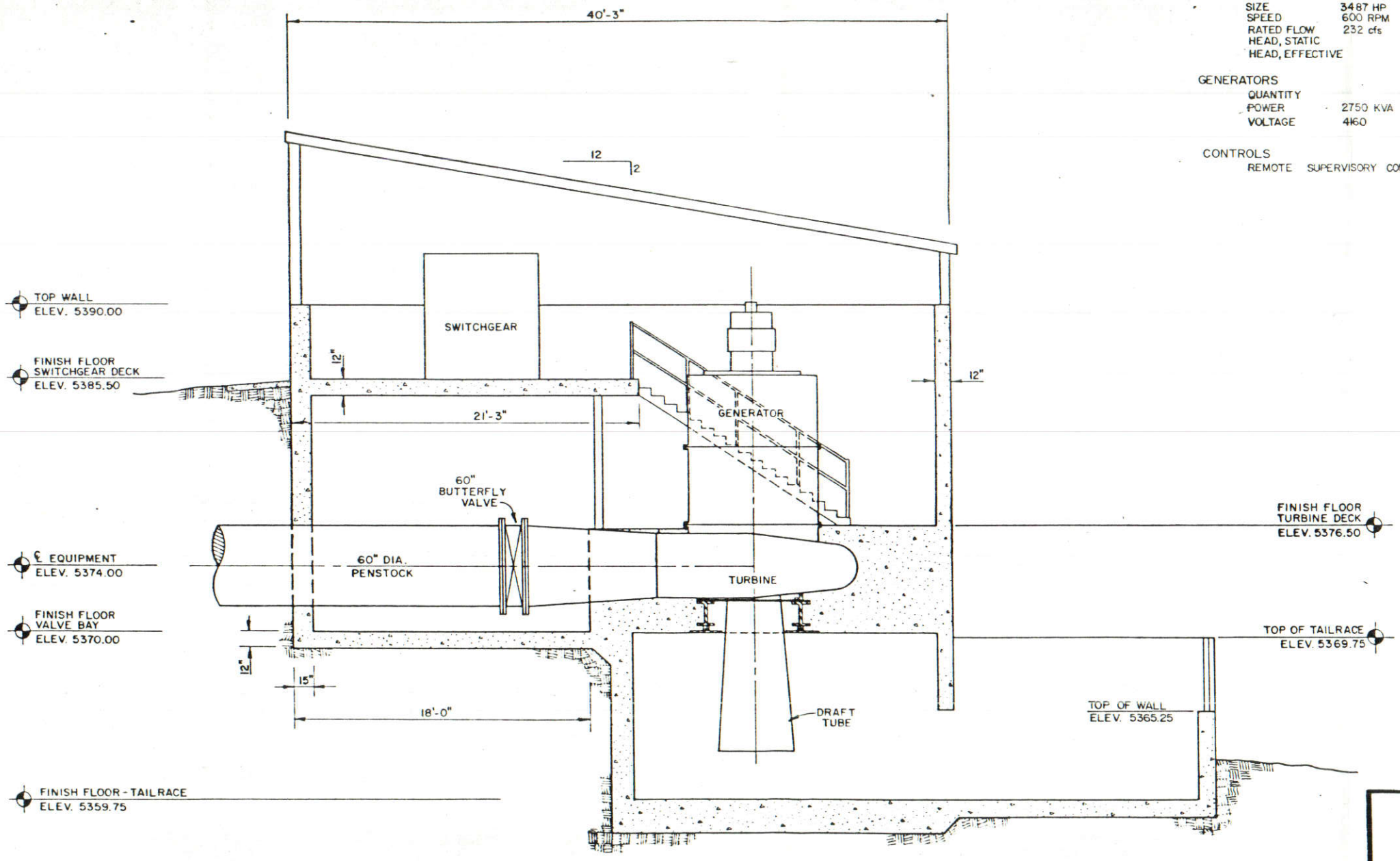
EXHIBIT "F"

FALL RIVER RURAL ELECTRIC COOPERATIVE INC.

FELT
HYDROELECTRIC PROJECT
POWERHOUSE
SWITCHGEAR DECK – PLAN

PROJECT NO. | OCT 1984 | EXHIBIT F- 6

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 ——— 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY



SECTION

SCALE: 1"=4'

EQUIPMENT SPECIFICATIONS

		EACH	TOTAL
TURBINE			
	QUANTITY		2
	SIZE	3487 HP	6975 HP
	SPEED	600 RPM	
	RATED FLOW	232 cfs	464 cfs
	HEAD, STATIC		158 ft.
	HEAD, EFFECTIVE		154 ft.
GENERATORS			
	QUANTITY		2
	POWER	2750 KVA	5500 KVA
	VOLTAGE	4160	

CONTROLS

REMOTE SUPERVISORY CONTROL

EXHIBIT "F"

FALL RIVER RURAL ELECTRIC COOPERATIVE INC.

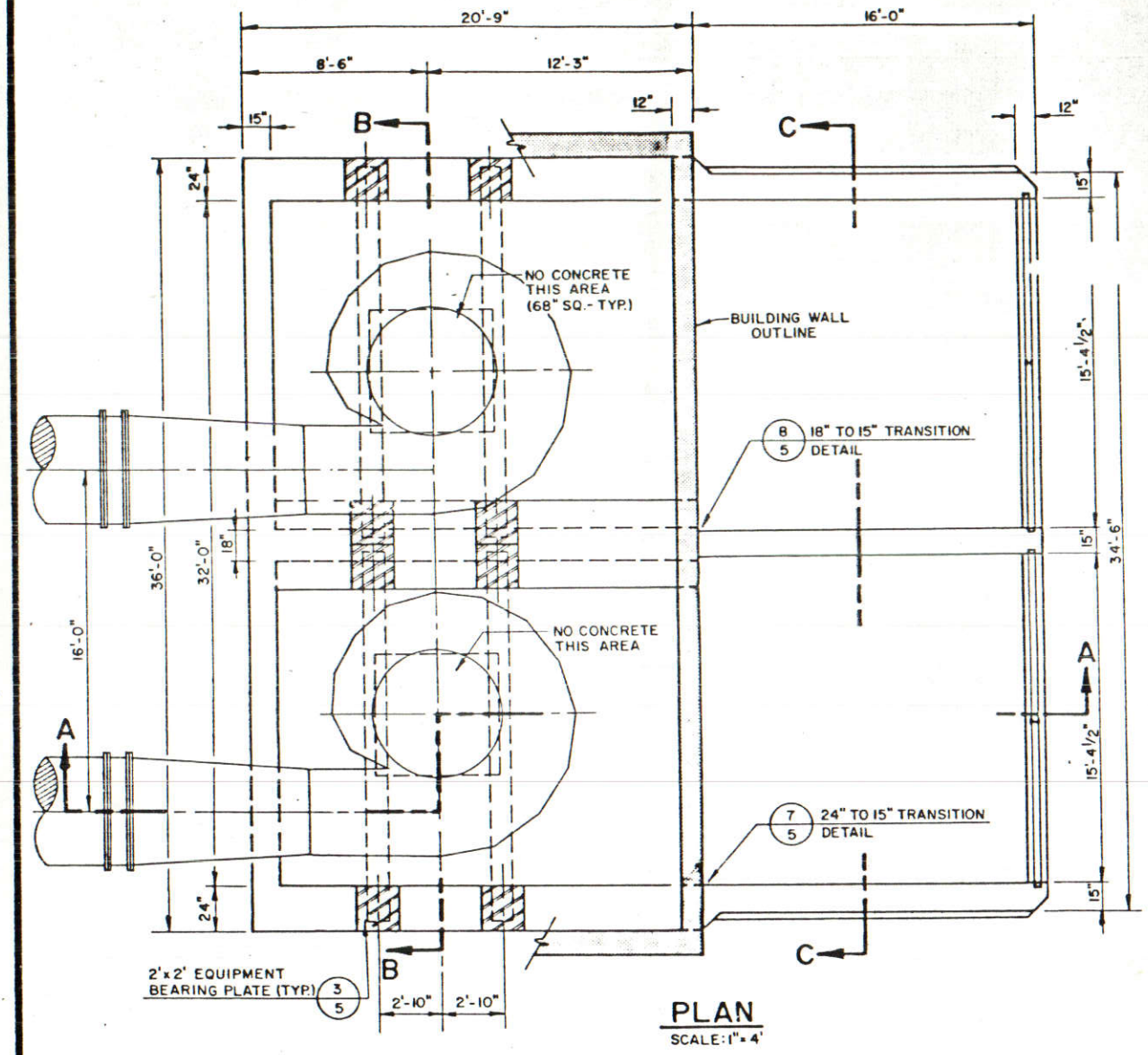
FELT
HYDROELECTRIC PROJECT

POWERHOUSE SECTION

PROJECT NO. | OCT 1984 | EXHIBIT F- 7

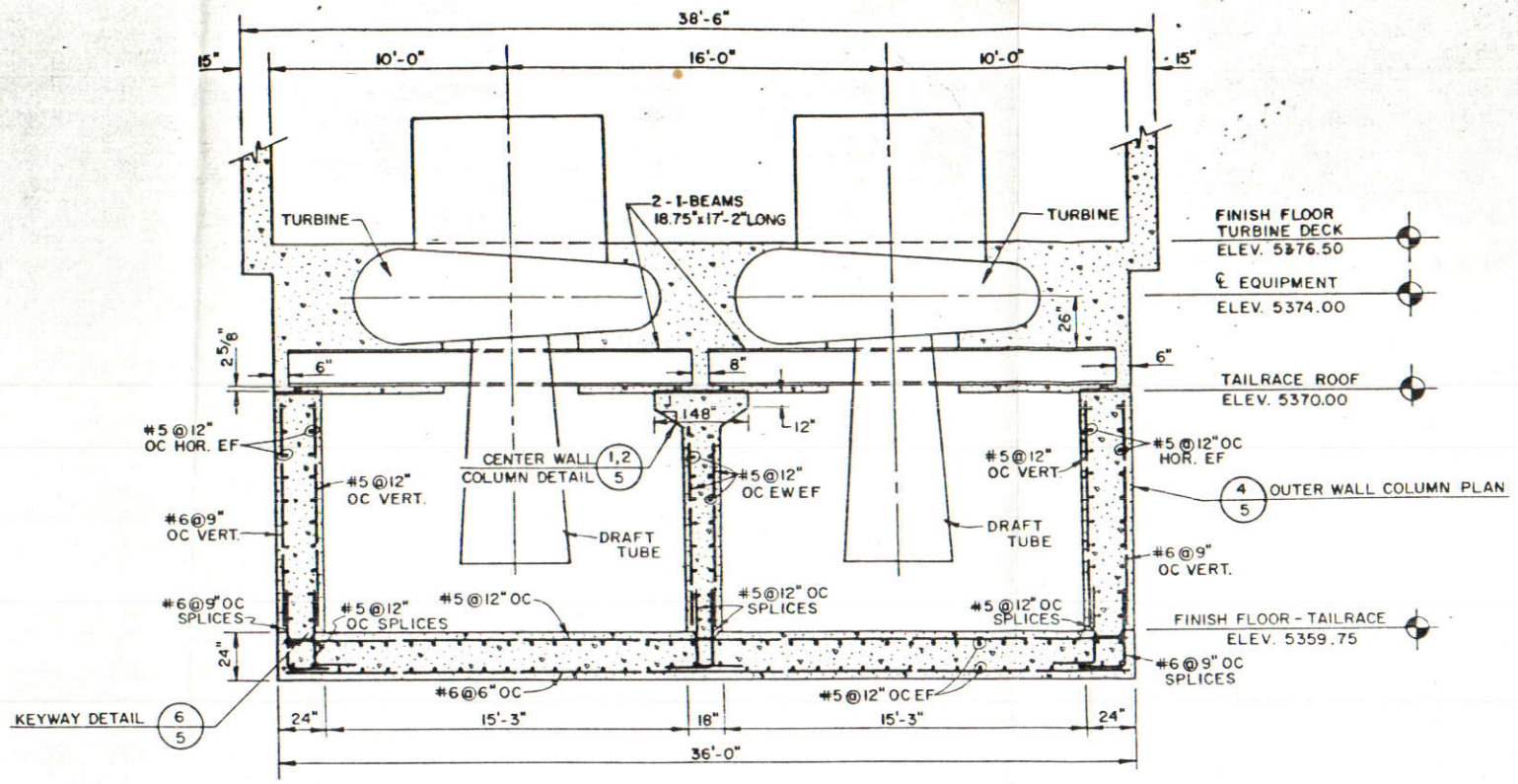
VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 ——— 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 ——— 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY



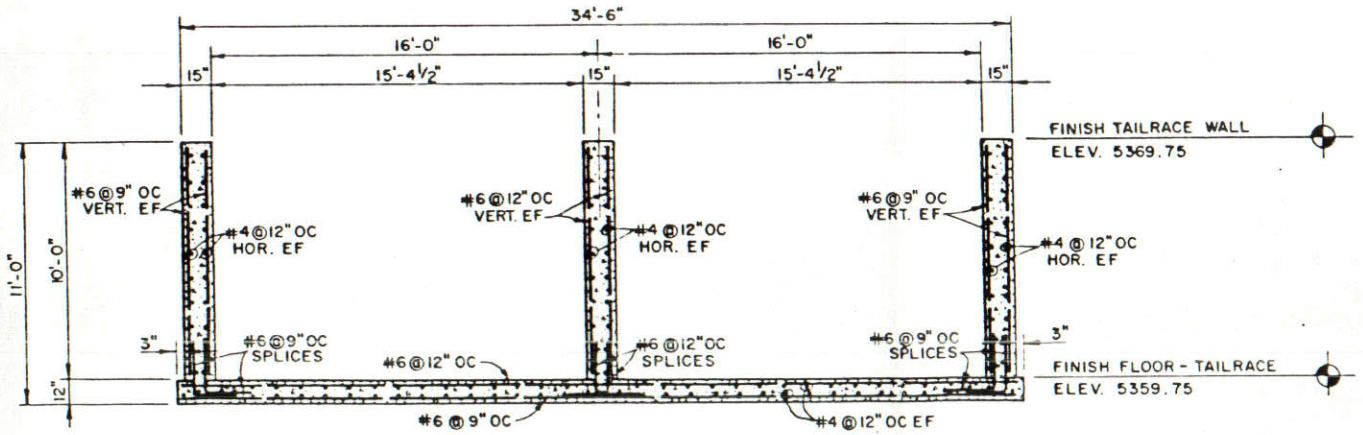
PLAN

SCALE: 1" = 4'



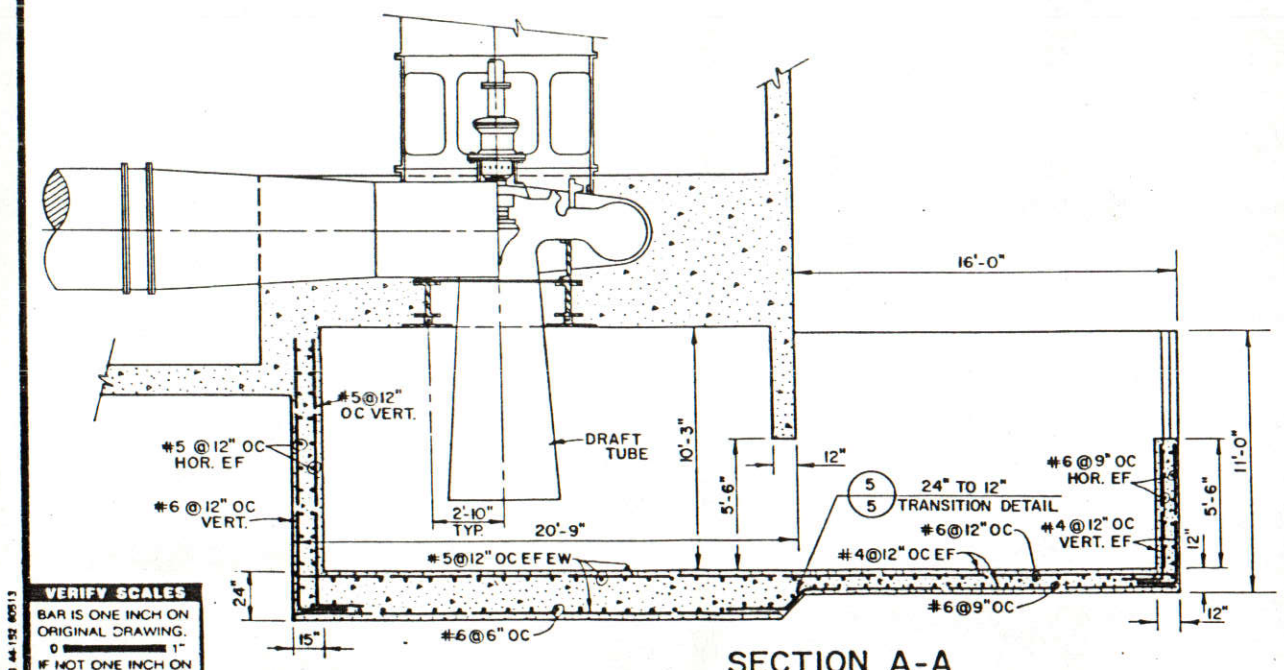
SECTION B-B

SCALE: 1" = 4'



SECTION C-C

SCALE: 1" = 4'



SECTION A-A

SCALE: 1" = 4'

GENERAL NOTES

1 - CONSTRUCT TAILRACE ON COMPACTED NATIVE MATERIAL OR GRANULAR BASE MATERIAL COMPACTED TO 95% T-99 PROCTOR DENSITY.

2 - REFER TO INDEX SHEET FOR TYPICAL CONCRETE REINFORCING REQUIREMENTS.

3 - DETAILS SHOW TAILRACE REINFORCING. COORDINATE THIS REINFORCING WITH TURBINE DECK FLOOR REINFORCEMENT.

4 - REFER TO HYDRO WEST DRAWING FOR ADDITIONAL BASE FRAME DETAILS.

VERIFY SCALES

BAR IS ONE INCH ON ORIGINAL DRAWING.
0 —— 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

EXHIBIT "F"

FALL RIVER RURAL ELECTRIC COOPERATIVE INC.

FELT HYDROELECTRIC PROJECT

POWERHOUSE

TAILRACE - PLAN & SECTIONS

PROJECT NO. | OCT 1984 | EXHIBIT F-8

EXISTING TUNNELS

EXISTING RESERVOIR

EXIST. INTAKES

EXIST POWER PLANT

TETON RIVER

PROPOSED 90" PENSTOCK

B-5

B-4

B-3

B-2

B-1

STA 8+83.84

STA 10+42.13

STA 12+62.50

STA 13+39.80

STA 14+73.90

AERIAL SPAN

AERIAL SPAN

PROPOSED METER, TRANSFORMER AND POLE STRUCTURE

BURIED TRANSMISSION LINE

PROPOSED POWERHOUSE

80'

223'

℄ 90" SURGE PIPE

PROPOSED ROAD

S 89°36'24" W

2222.90'

5550

5500

5475

5450

5425

5600

5400

5700

5800

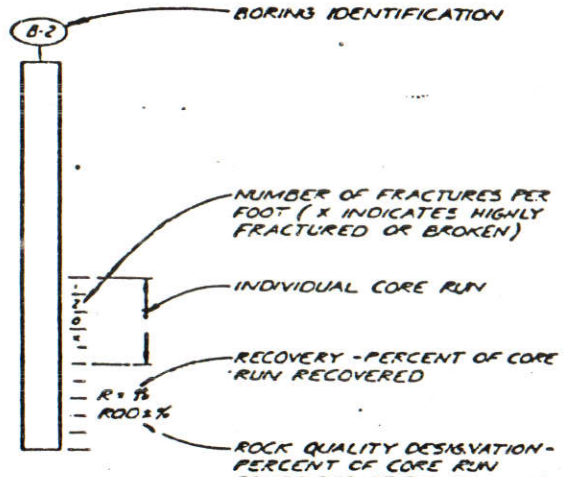
5900

5355

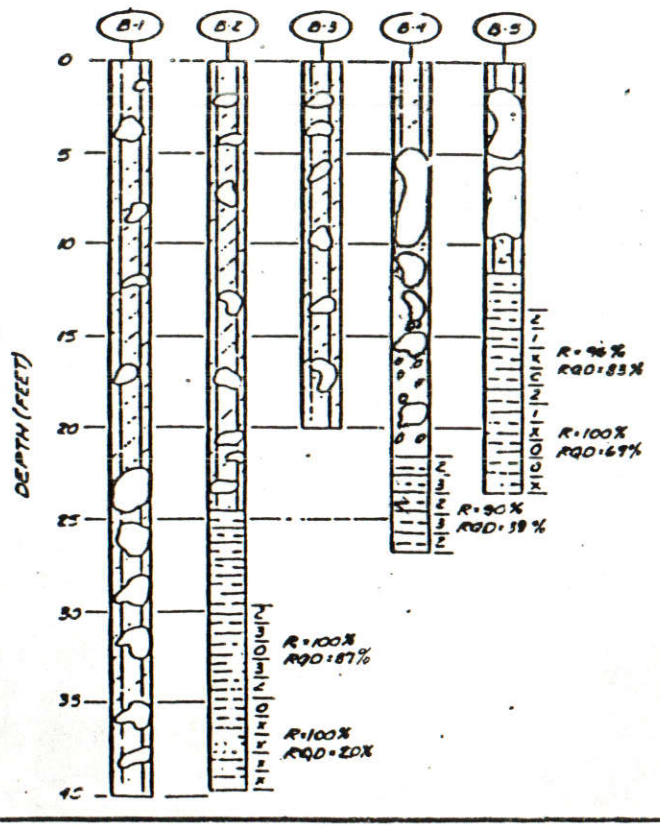
5340

5536.5

BORING LOG LEGEND



BORING LOGS



0 100 200 300

SCALE IN FEET

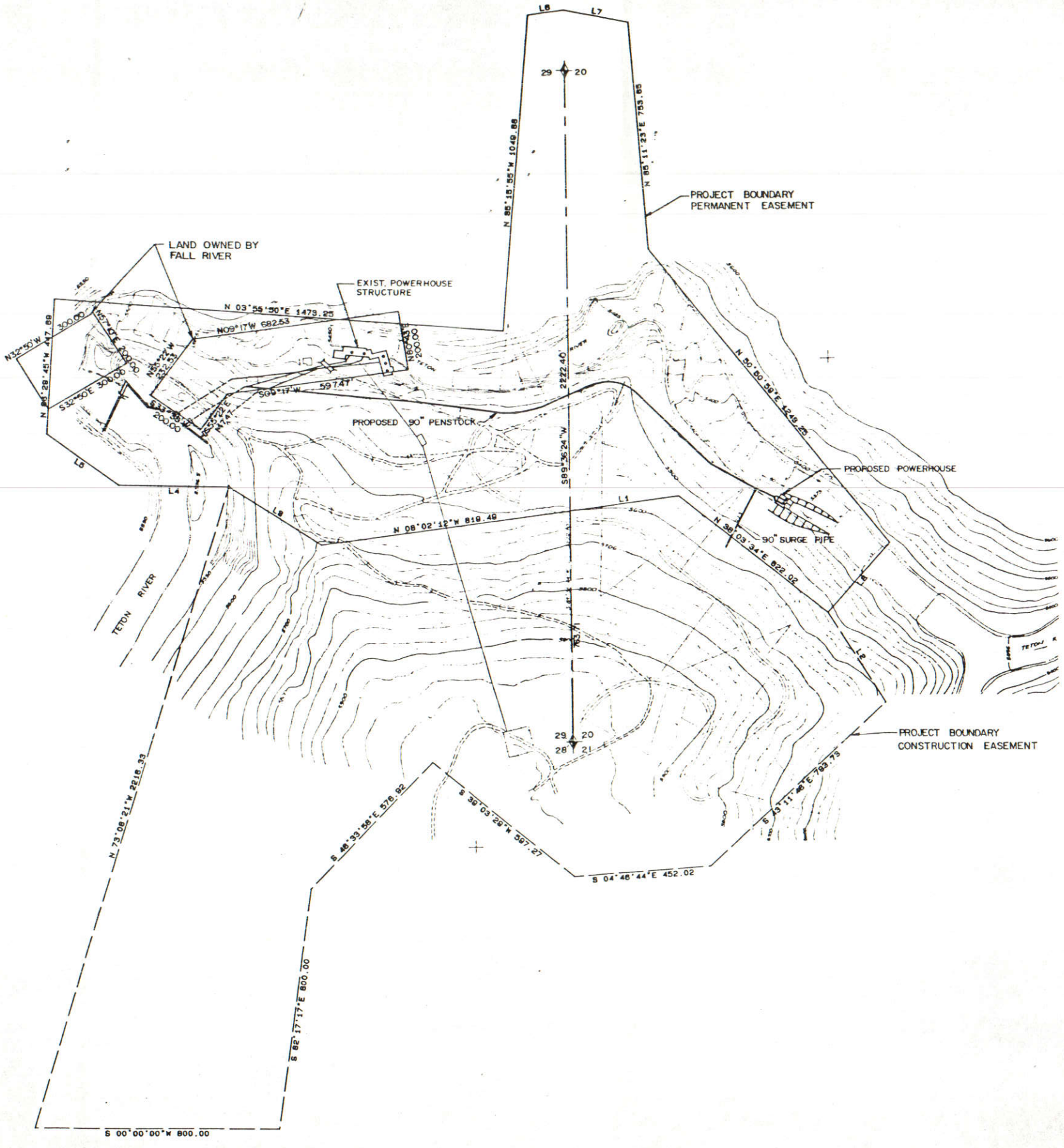
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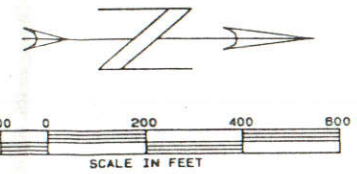
FALL RIVER RURAL ELECTRIC COOPERATIVE INC.

FELT
HYDROELECTRIC PROJECT

BORING LOCATION & LOGS

PROJECT NO | OCTOBER 1984 | EXHIBIT F-9





LINE	BEARING	DISTANCE
1	N 08°02'12"W	365.38
2	N 57°48'57"E	349.48
3	N 32°08'42"E	358.76
4	S 00°42'17"W	380.18
5	S 35°26'33"W	289.22
6	N 08°21'20"W	118.00
7	N 10°42'28"E	218.00
8	S 48°45'13"E	307.23

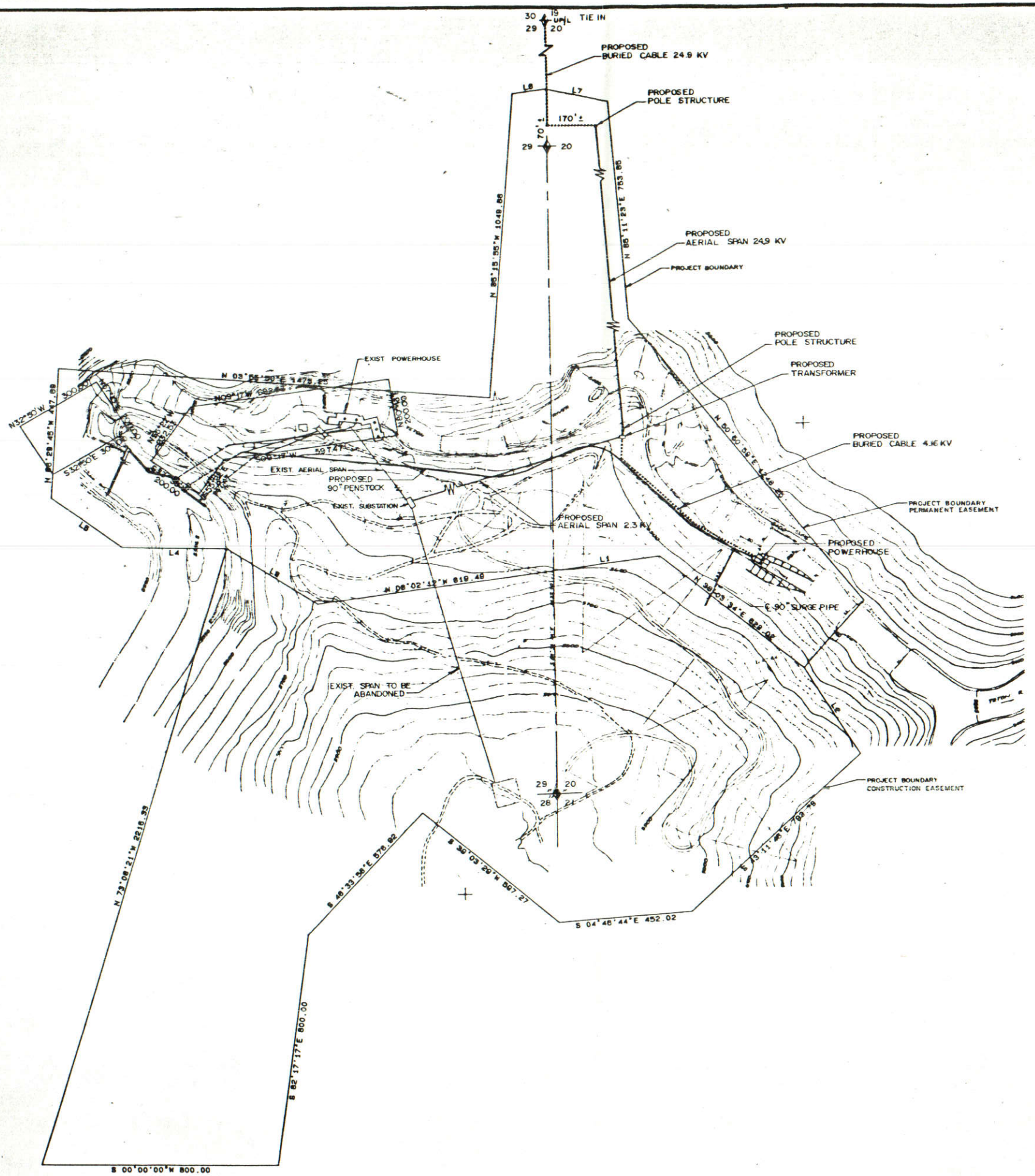
EXHIBIT "G"

FELT
HYDROELECTRIC PROJECT

PROJECT BOUNDARY

PROJECT NO. JANUARY 1985 EXHIBIT G-1

LABRUM & DRAFTING SYSTEMS 28416



200 100 0 200 400 800

SCALE IN FEET

LINE	BEARING	DISTANCE
1	N 08°02'12"W	385.38
2	N 57°46'57"E	349.48
3	N 32°06'42"E	359.76
4	S 00°42'17"W	380.16
5	S 35°26'33"W	289.22
6	N 08°21'20"W	118.00
7	N 10°42'26"E	218.00
8	S 48°45'13"E	307.23

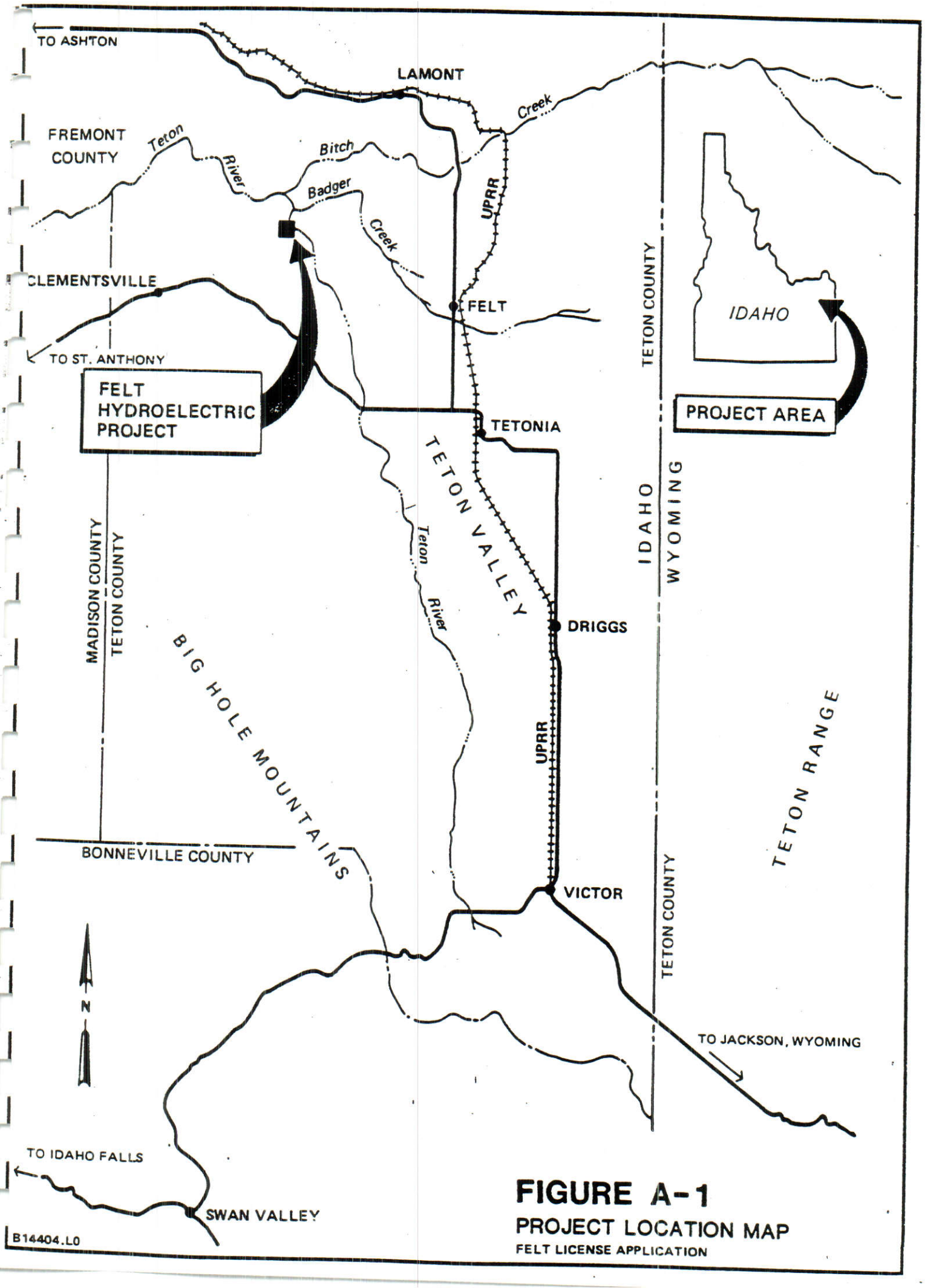
EXHIBIT "G"

FALL RIVER RURAL ELECTRIC COOPERATIVE INC

FELT HYDROELECTRIC PROJECT

TRANSMISSION MAP

PROJECT NO. JANUARY 1985 EXHIBIT G-2

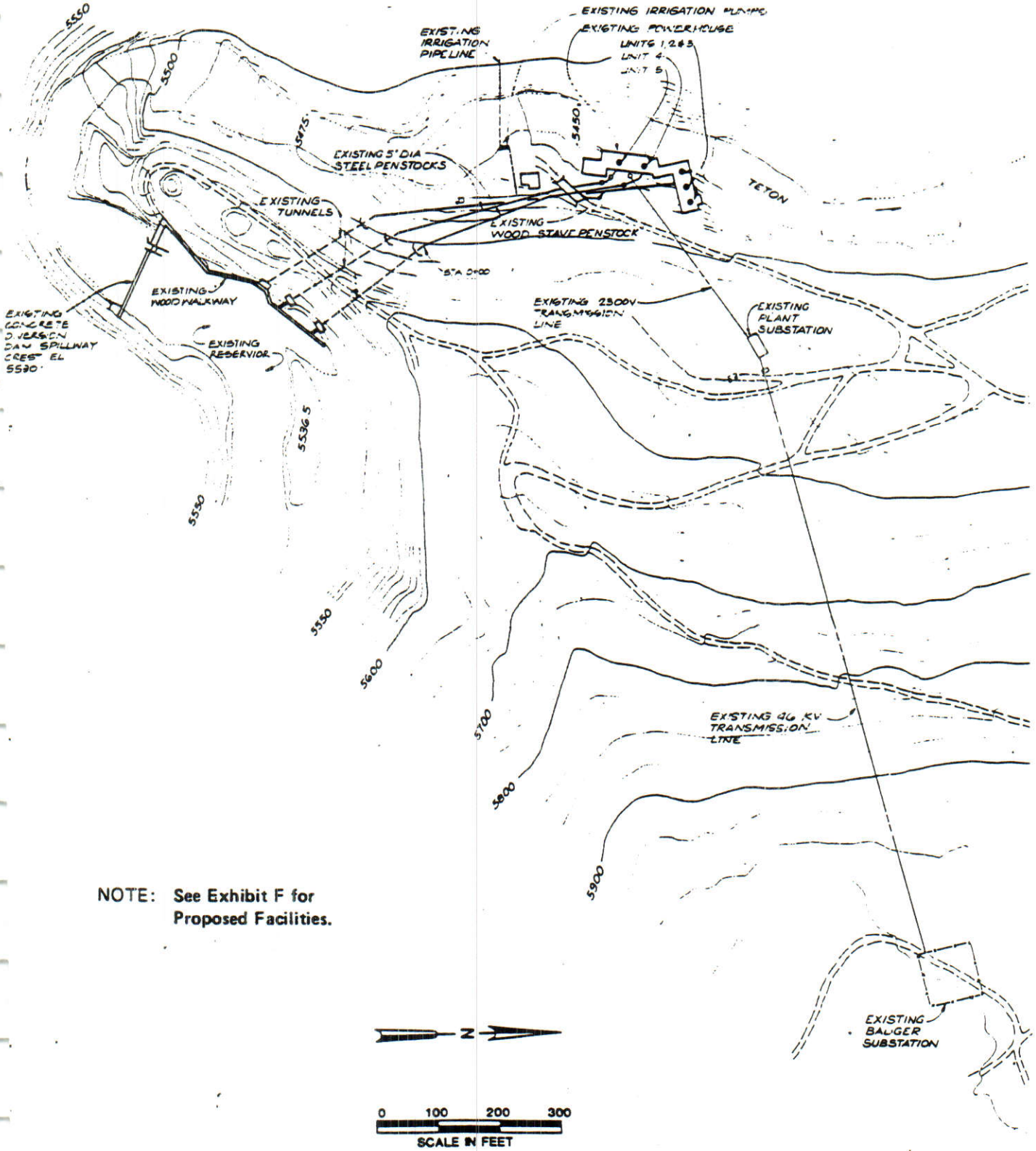


B14404.L0

FIGURE A-1

PROJECT LOCATION MAP

FELT LICENSE APPLICATION



NOTE: **See Exhibit F for Proposed Facilities.**

FIGURE A-2
EXISTING FACILITIES PLAN

FELT LICENSE APPLICATION

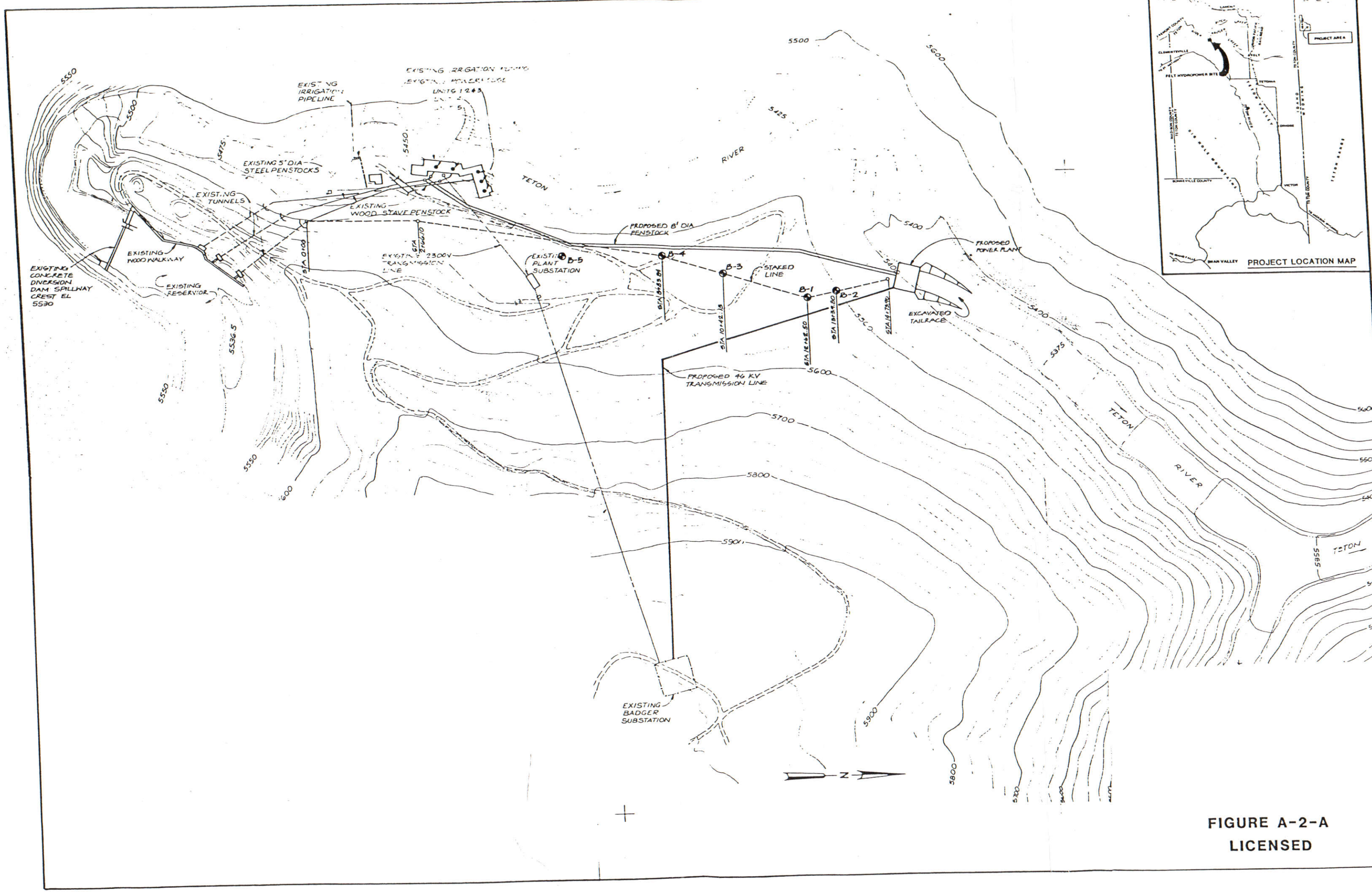
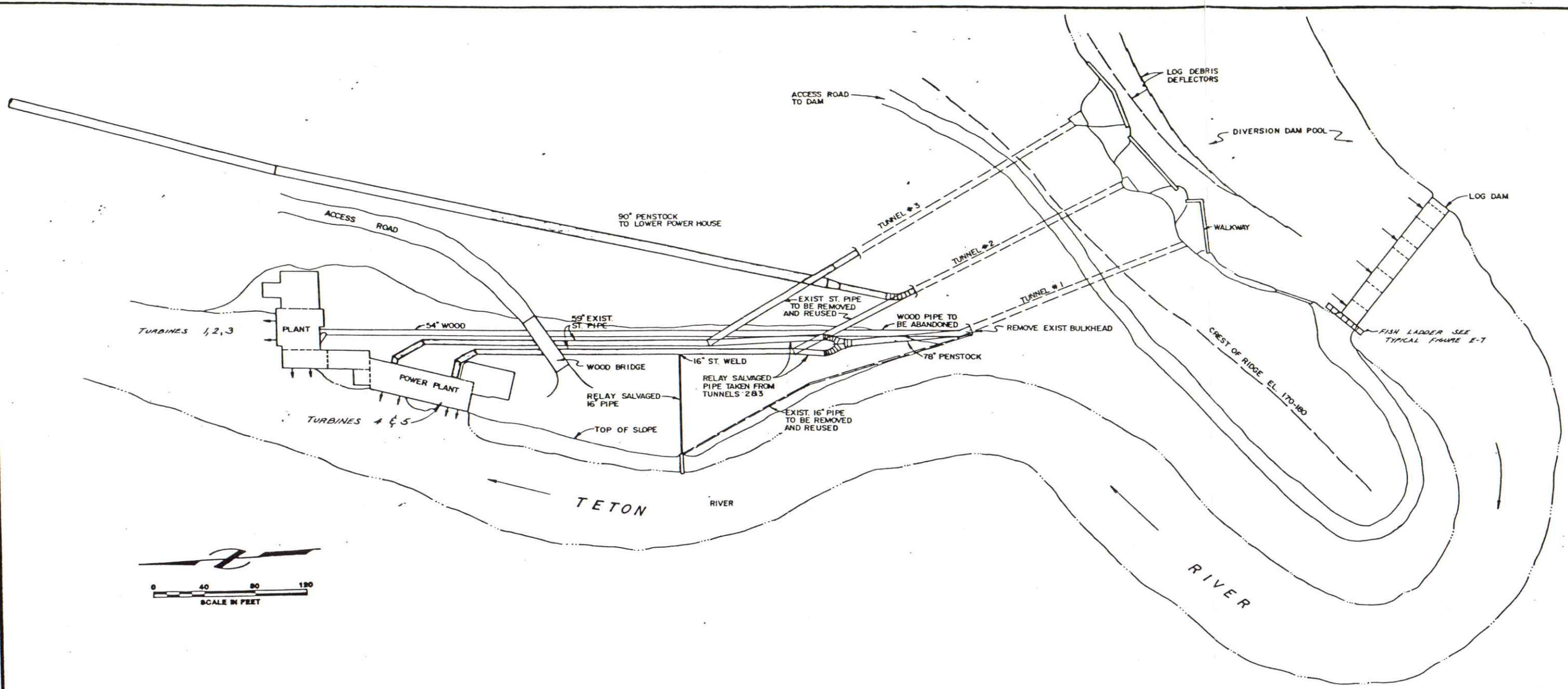


FIGURE A-2-A
LICENSED



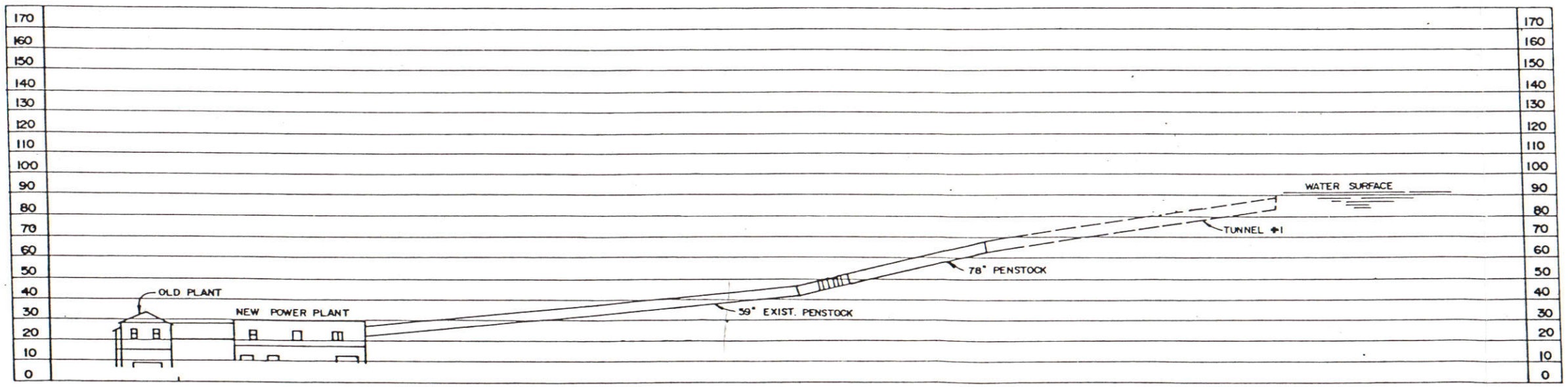


FIGURE A-2-B

AMENDED

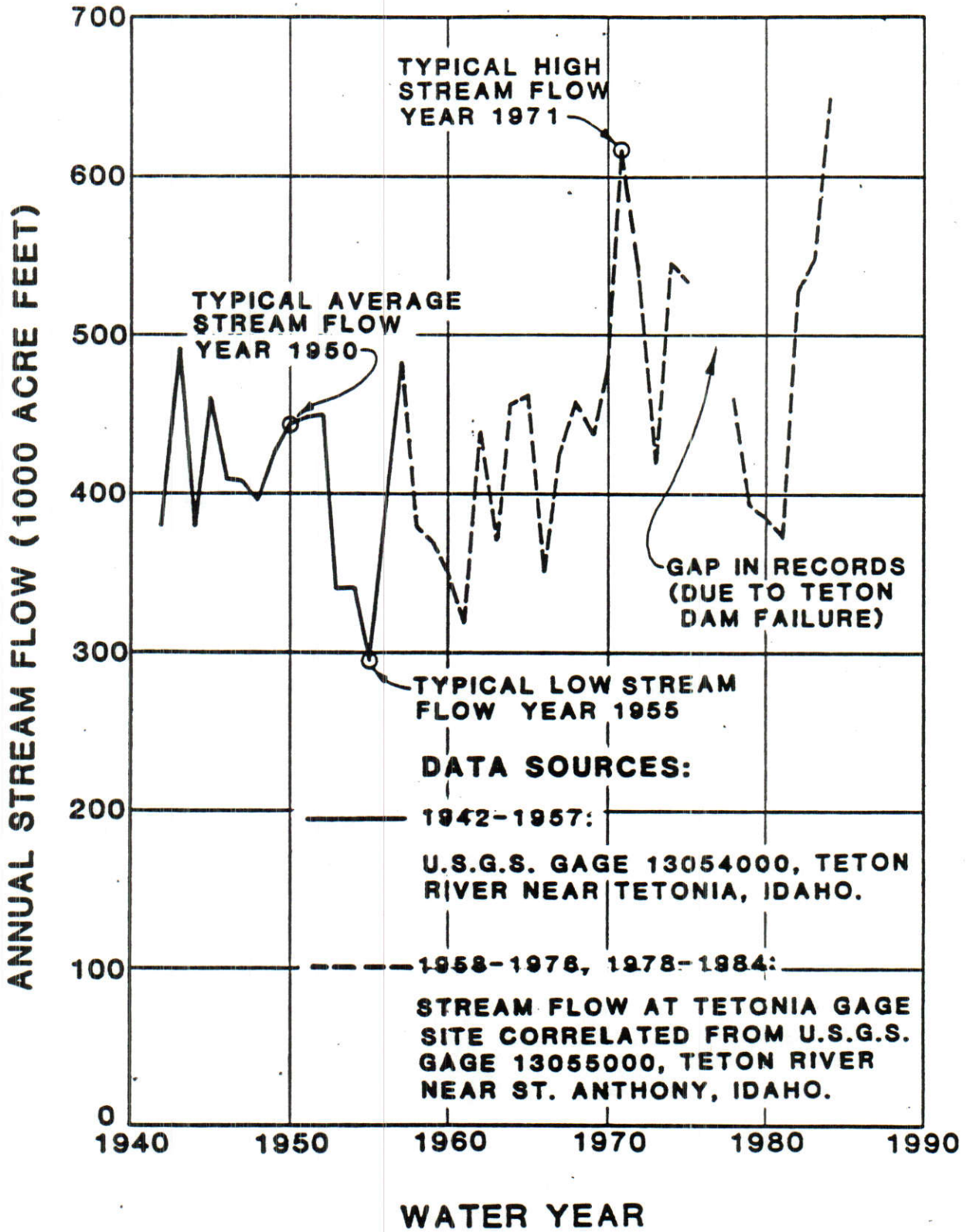
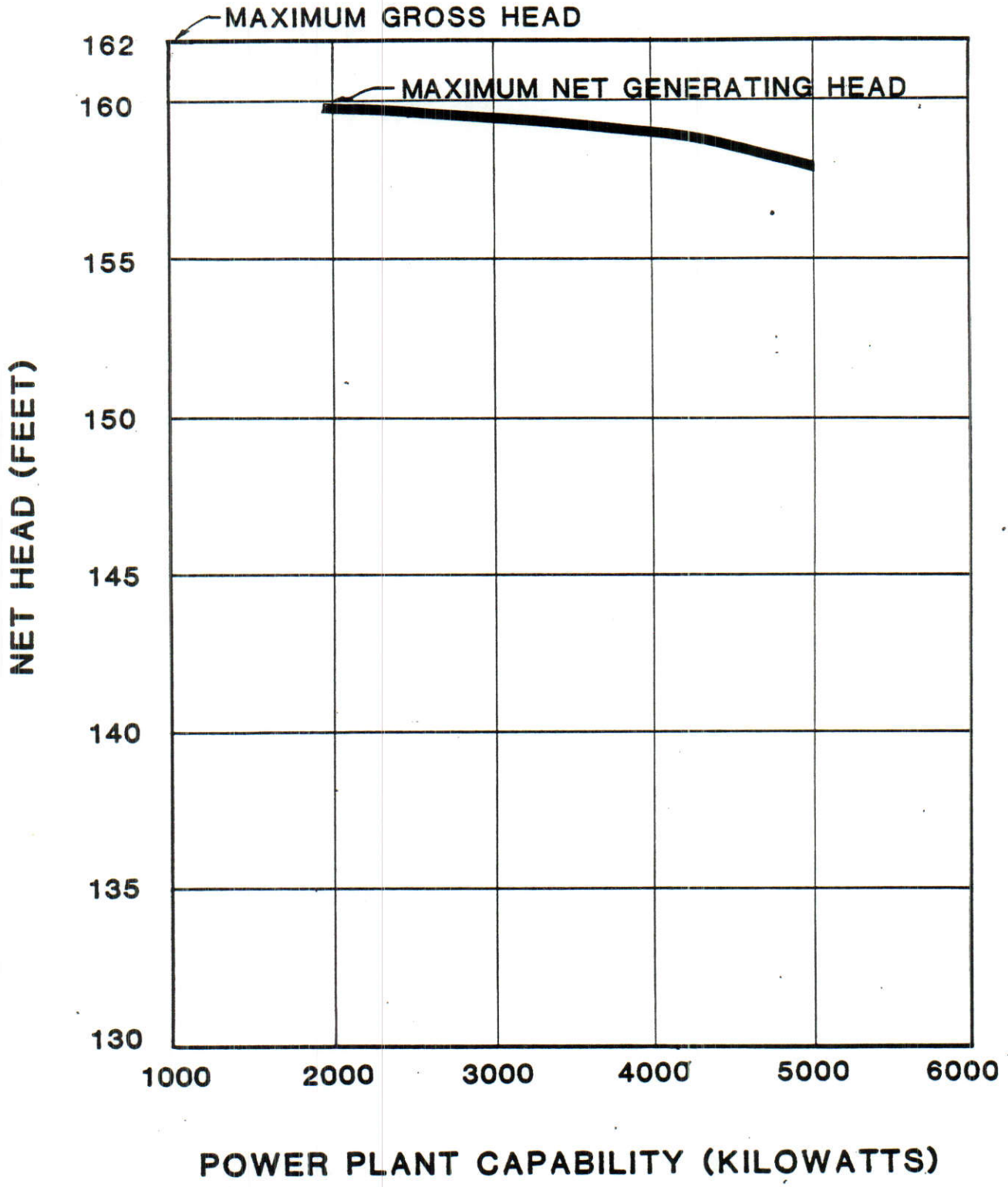


FIGURE B-2

ANNUAL RUN-OFF IN THE TETON RIVER ABOVE THE FELT HYDROPOWER SITE



HEAD VS CAPABILITY

FELT

COMBINED TURBINE-GENERATOR EFFICIENCY CURVES

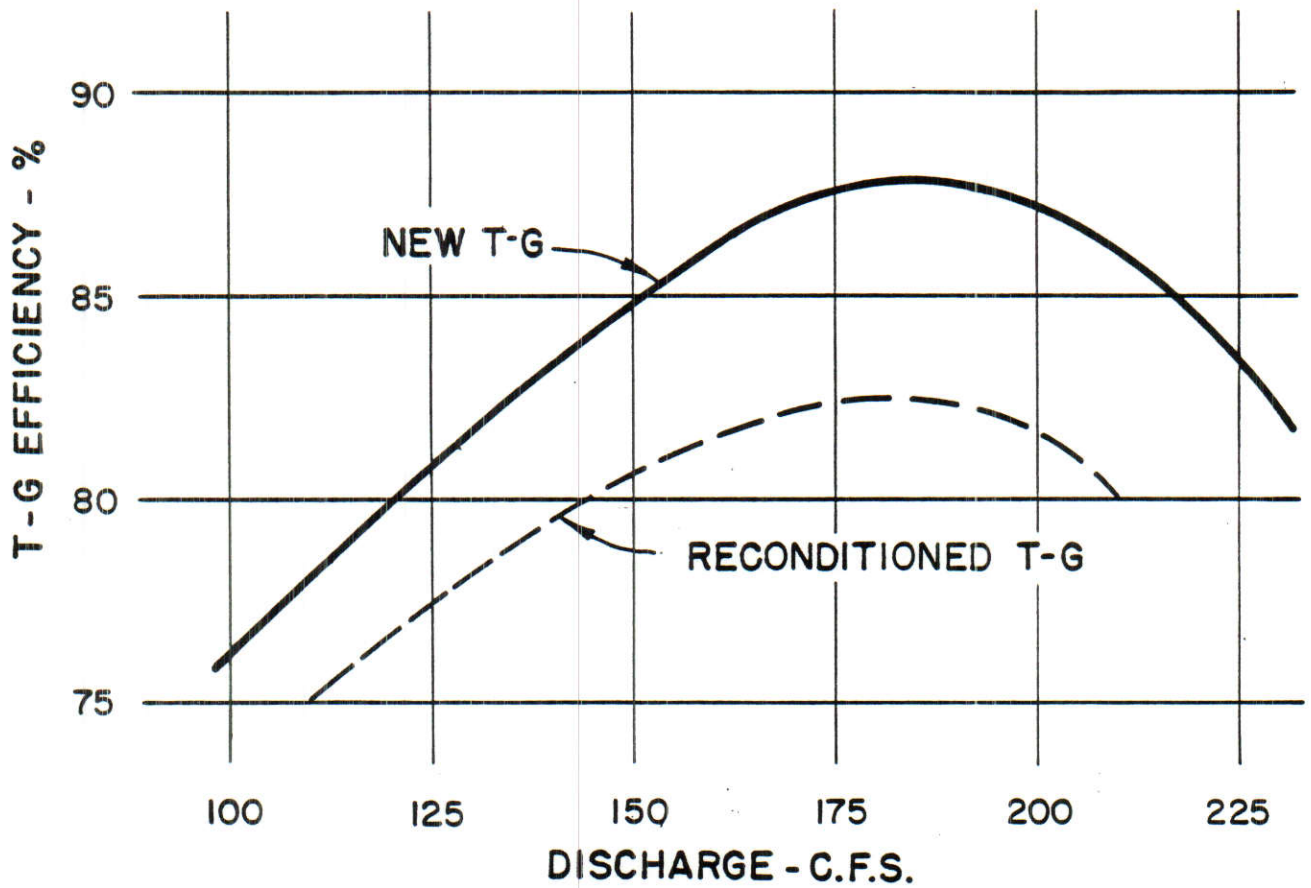
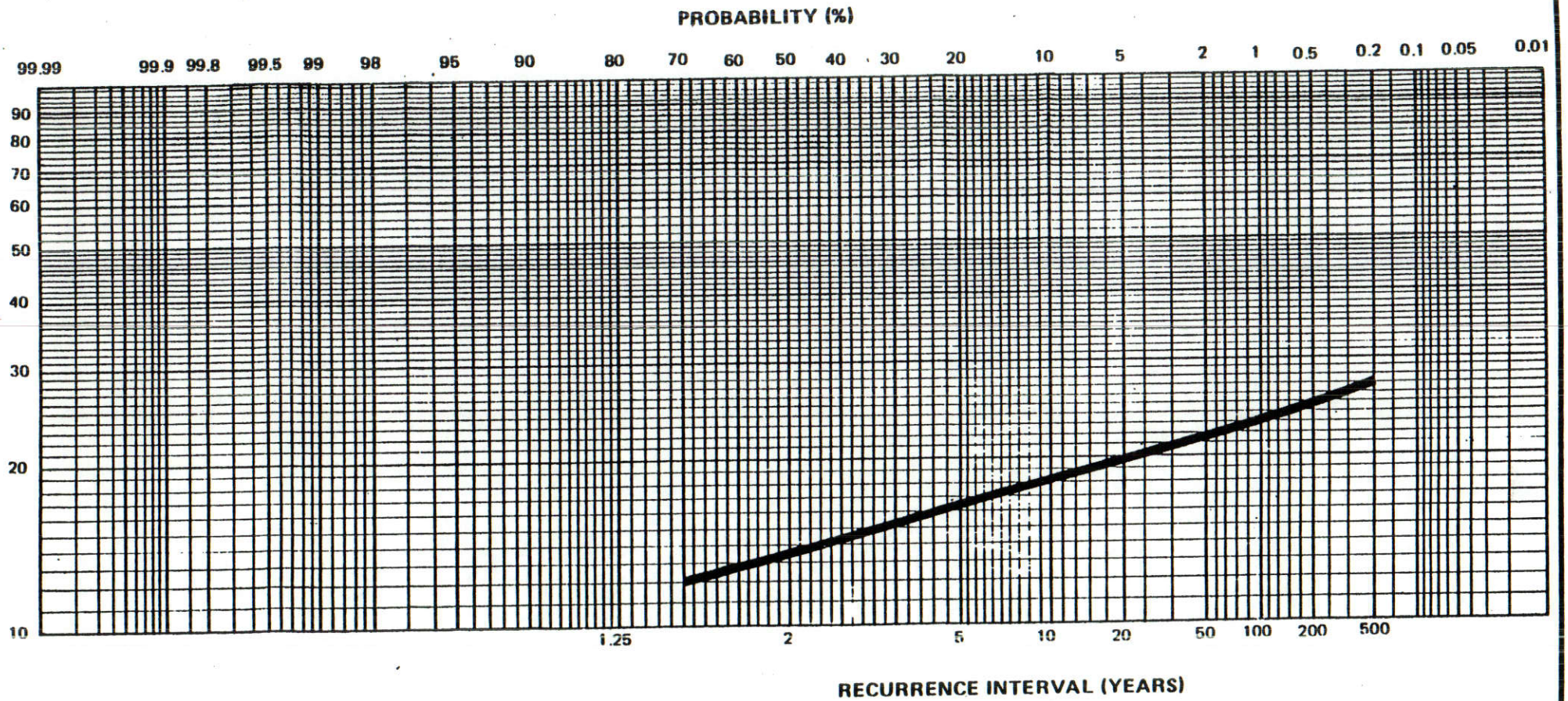


FIGURE B-5-A



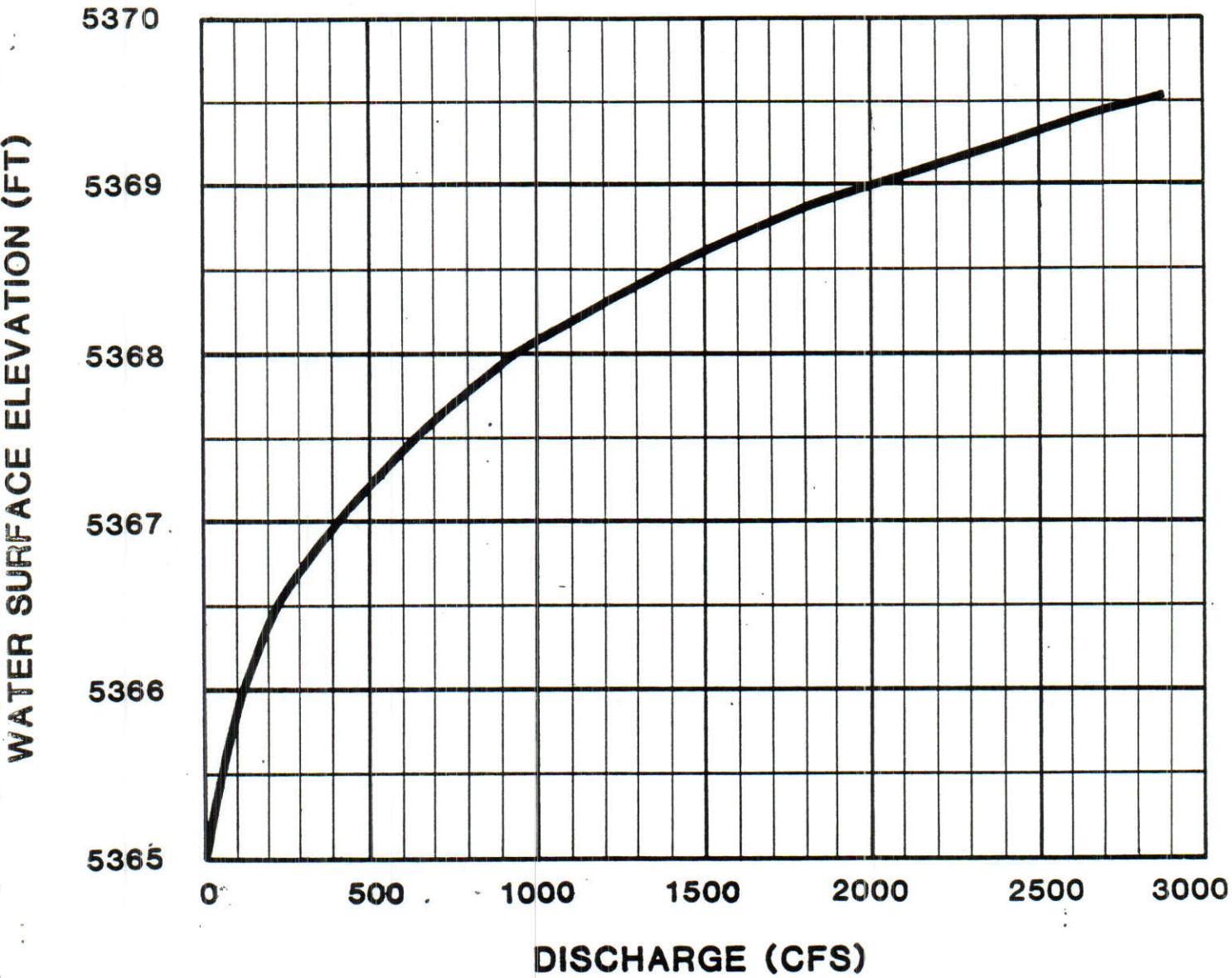
FELT HYDROELECTRIC PROJECT
FLOOD FREQUENCY CURVE
TETON RIVER NEAR TETONIA
DA = 471
PERIOD OF RECORD - 22 YEARS

FIGURE B-6

FLOOD FREQUENCY

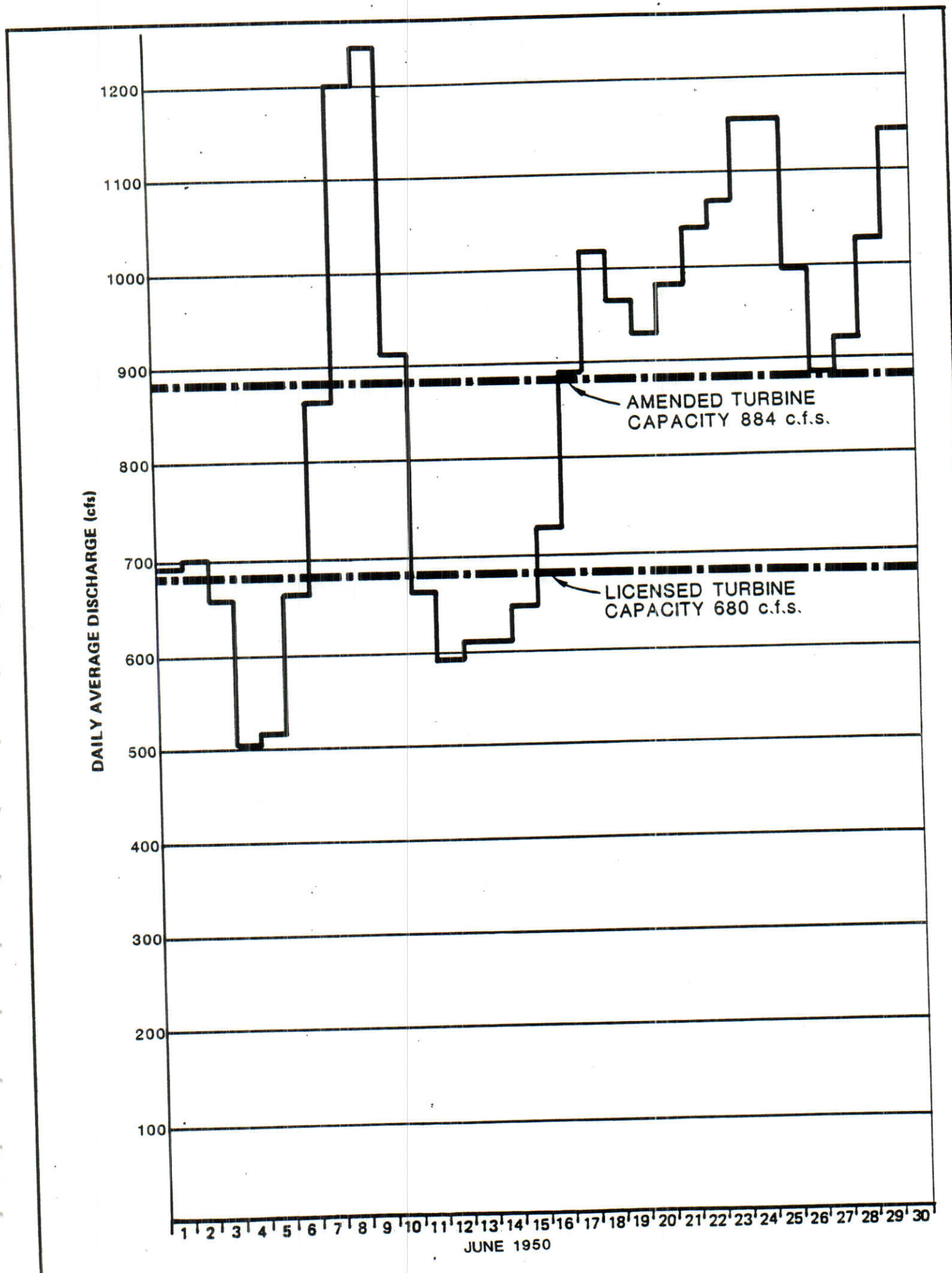
FELT LICENSE APPLICATION

04.L0



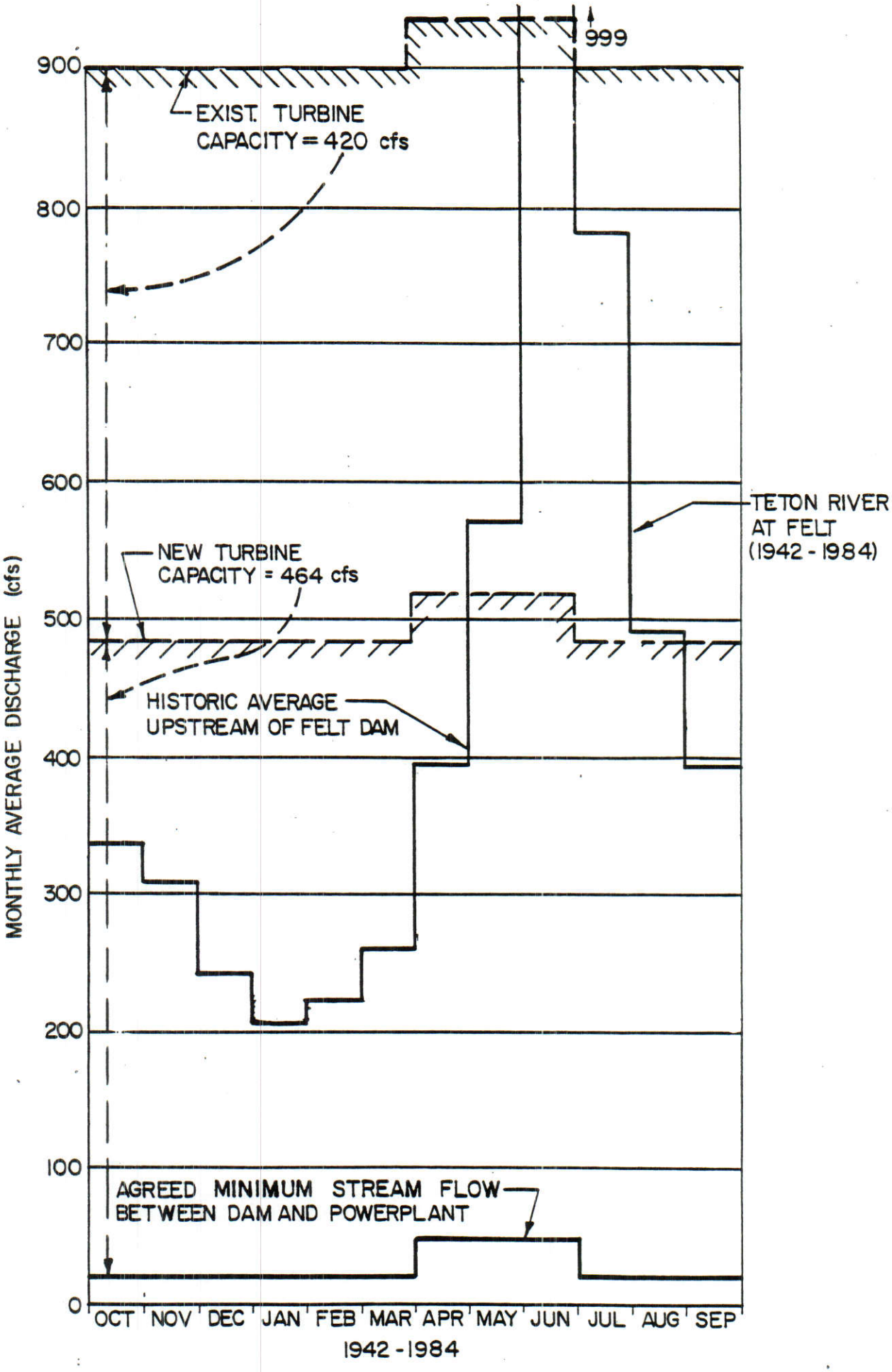
TETON RIVER STAGE VS
DISCHARGE AT POWER PLANT SITE

FIGURE B-7



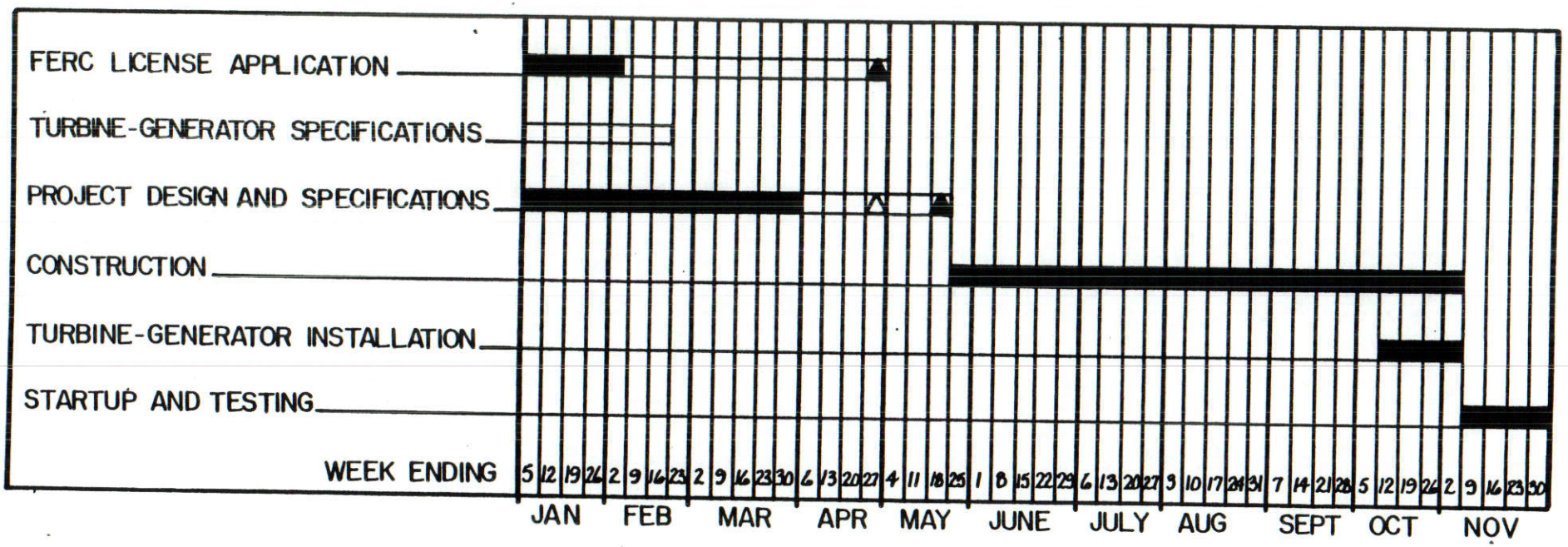
DATA SOURCE:

DAILY DISCHARGE



AVERAGE MONTHLY DISCHARGE IN THE FELT HYDROELECTRIC PROJECT AREA

FELT LICENSE APPLICATION FIGURE B-9



LEGEND

- ENGINEERING OR CONSTRUCTION ACTIVITY
- PROCESSING OR ADVERTISING PERIOD
- BID OPENING
- APPROVAL OR CONTRACT AWARD

PROJECT SCHEDULE

FIGURE C-1

EXISTING PENSTOCK TO BE UPGRADED
EXIST. POWERHOUSE
TETON RIVER
PROPOSED AERIAL SPAN
POLE STRUCTURE TRANSFORMER
EXIST. TUNNELS
EXIST. RESERVOIR
90" PENSTOCK
EXIST. INTAKES
EXIST. SUBSTATION
PROPOSED AERIAL SPAN
BURIED TRANSMISSION LINE
90" PENSTOCK
PROPOSED POWERHOUSE
PROPOSED SURGE PIPE
PROPOSED ROAD
TETON R.
S 89°36'24" W
5550
5500
5475
5450
5425
5600
5400
5536.5
5375
5700
5800
5900
5955
SCALE IN FEET
100
200
300

FIGURE E-2
DETAILED PROJECT LOCATION MAP

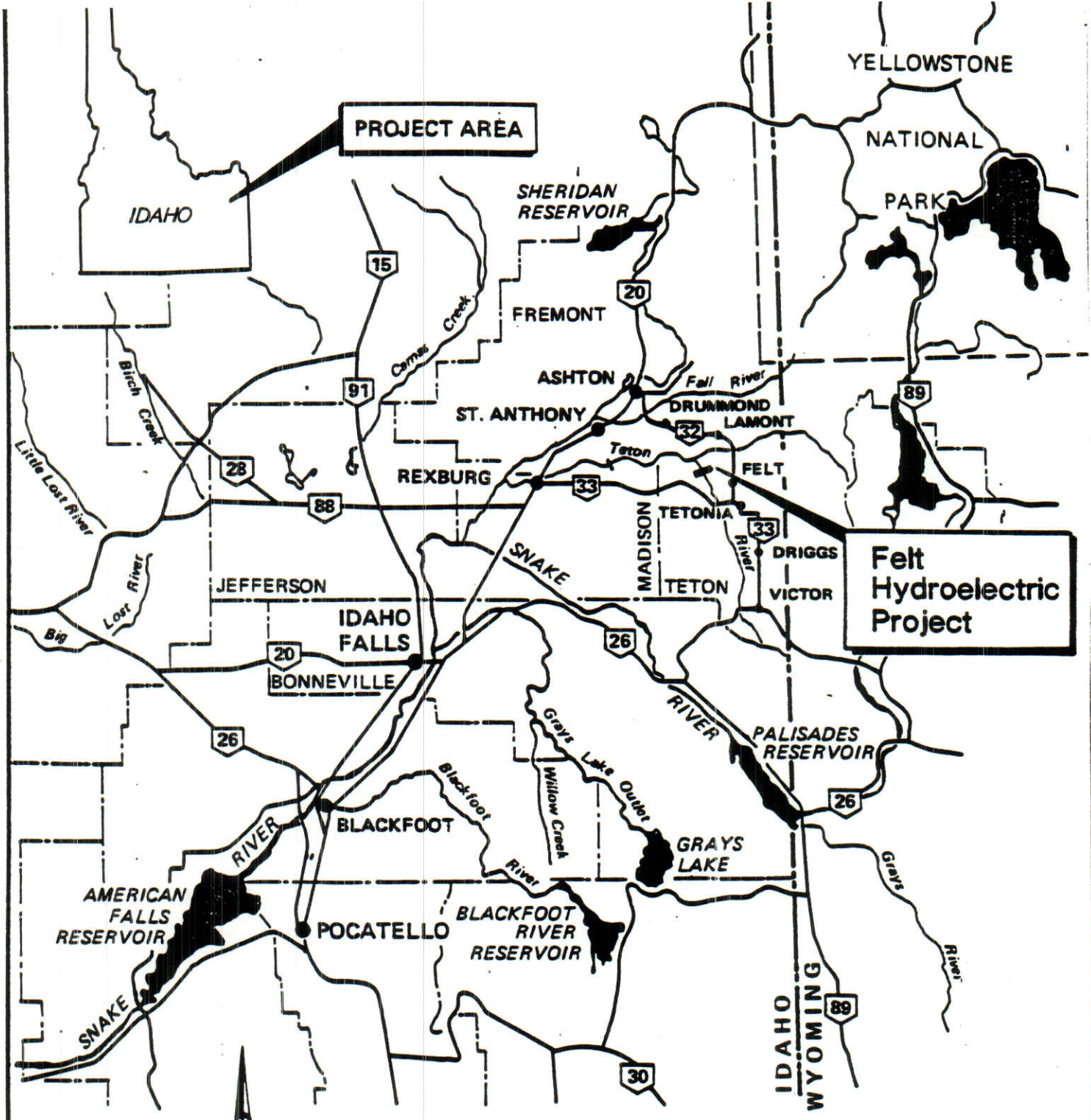
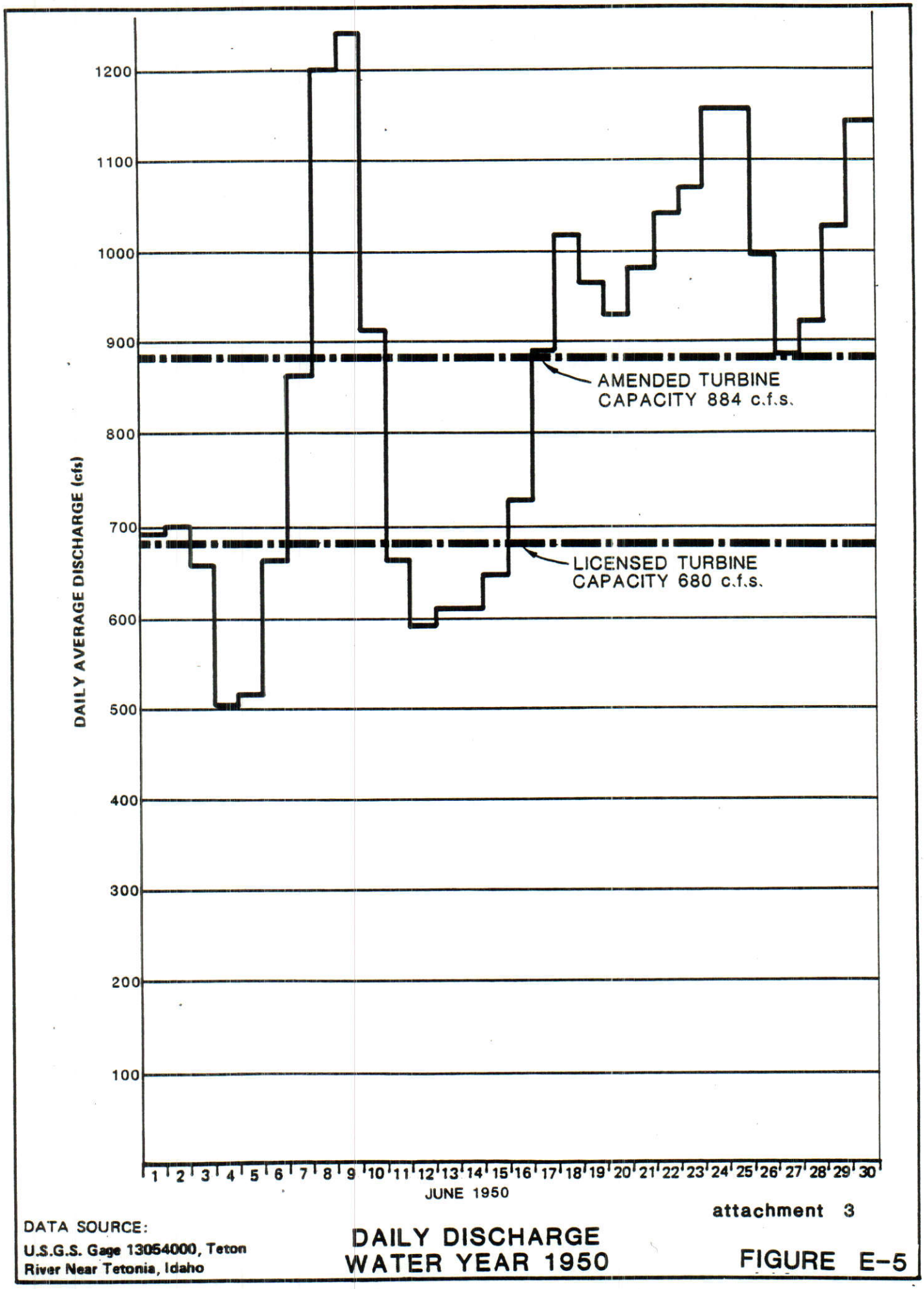


FIGURE E-3

POPULATION CENTERS NEAR FELT HYDROELECTRIC PROJECT

FELT LICENSE APPLICATION

B14404.L0

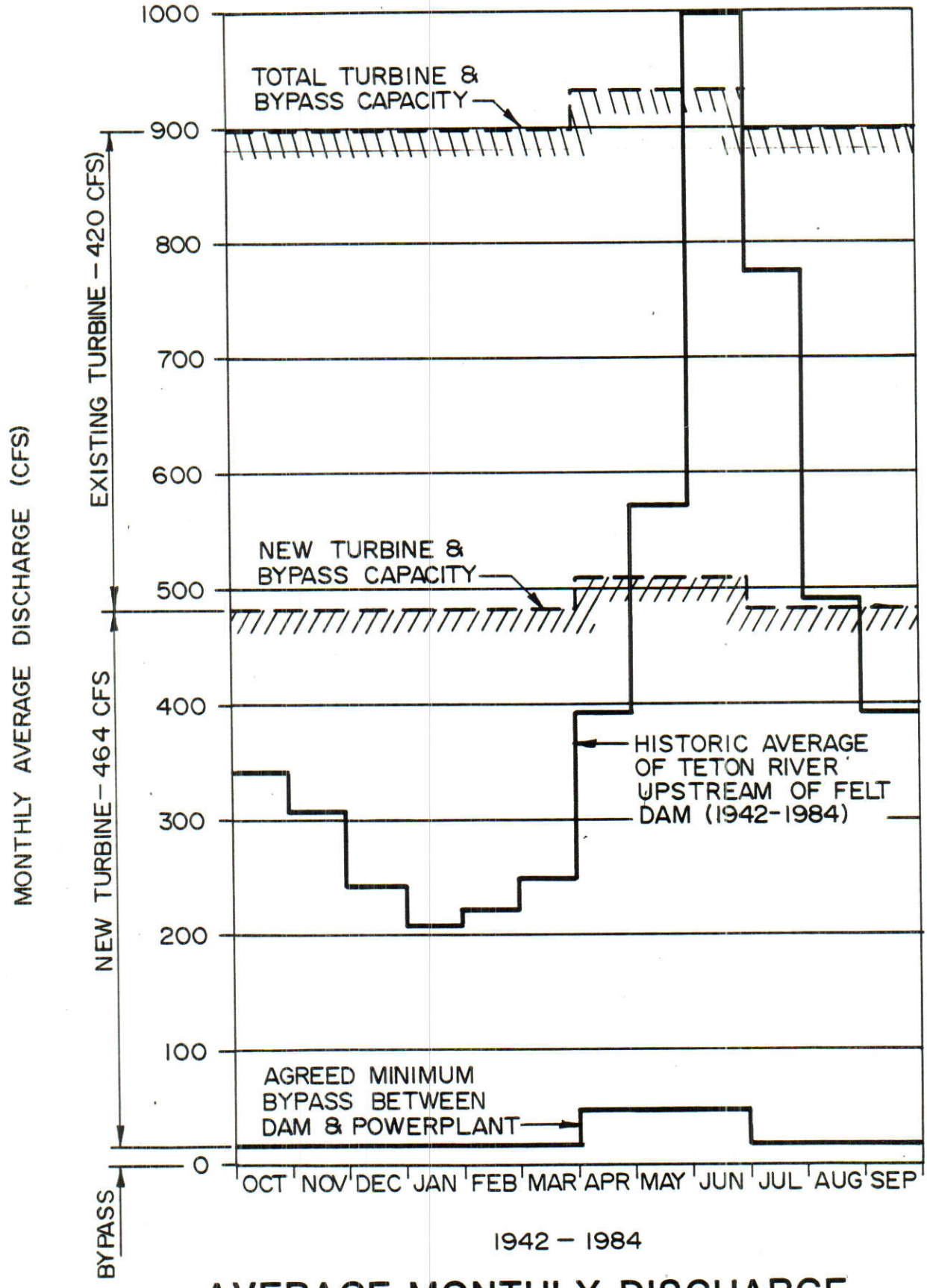


attachment 3

DATA SOURCE:
U.S.G.S. Gage 13054000, Teton River Near Tetonia, Idaho

DAILY DISCHARGE WATER YEAR 1950

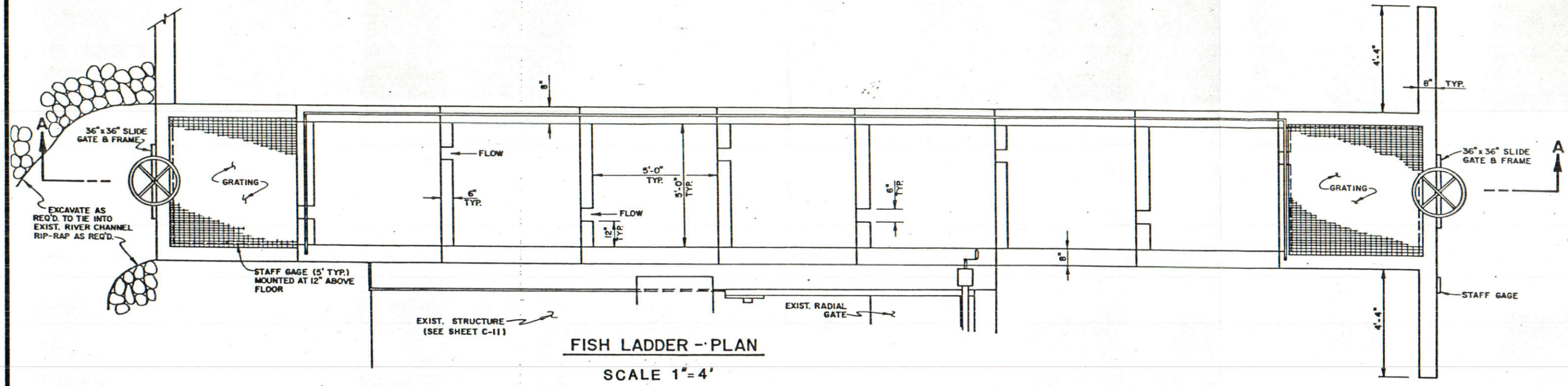
FIGURE E-5



AVERAGE MONTHLY DISCHARGE IN THE FELT HYDROELECTRIC PROJECT AREA

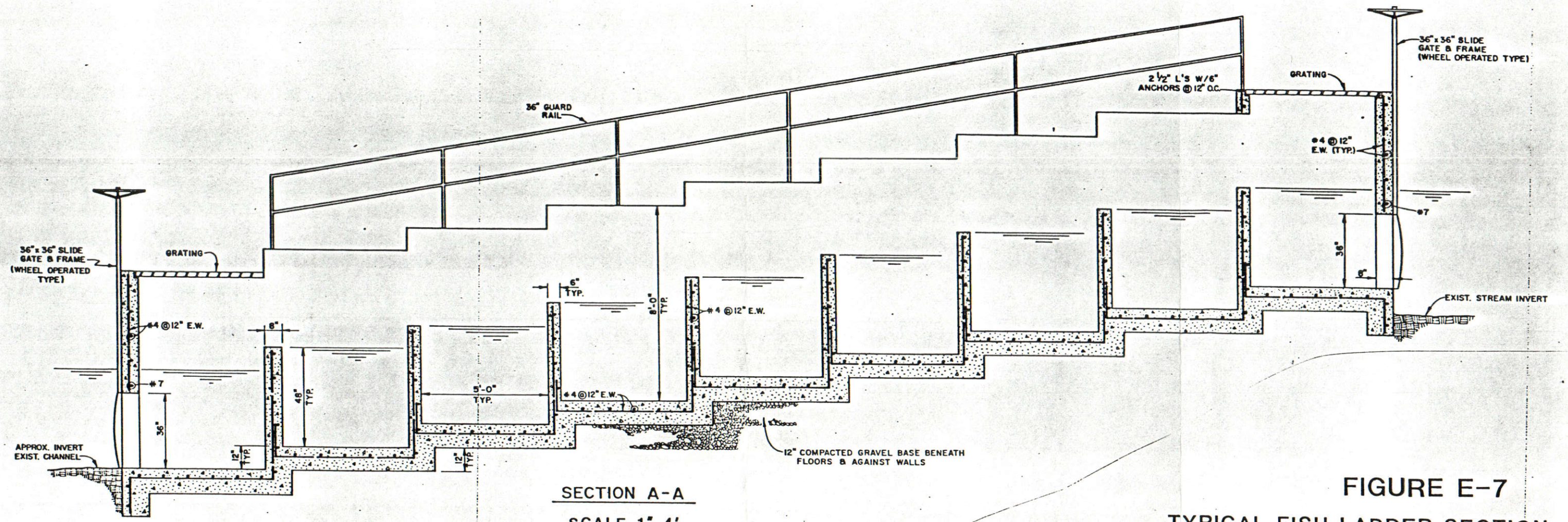
FELT LICENSE APPLICATION

FIGURE E-6



FISH LADDER - PLAN

SCALE 1"=4'



SECTION A-A

SCALE 1"=4'

FIGURE E-7

TYPICAL FISH LADDER SECTION

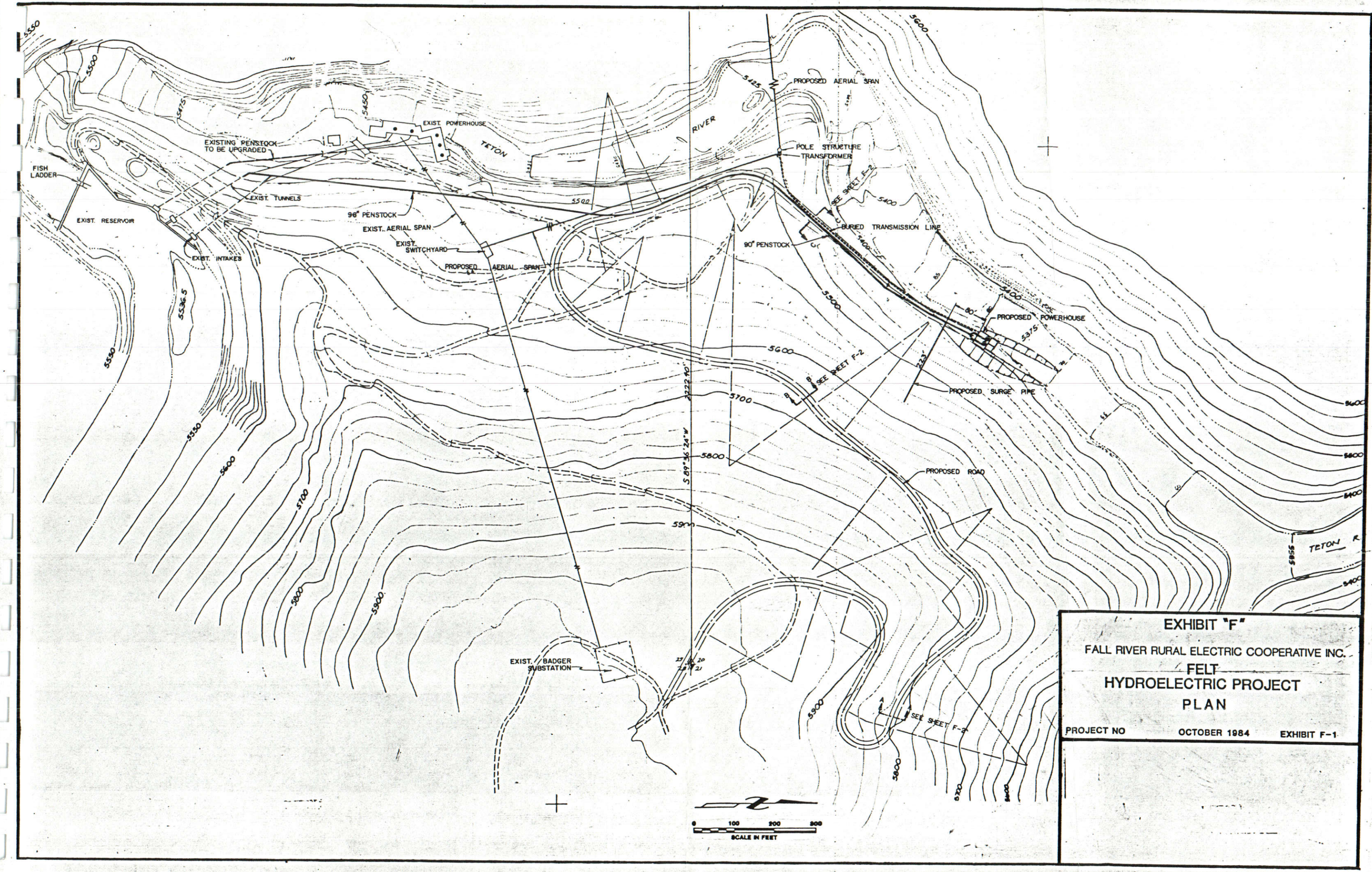
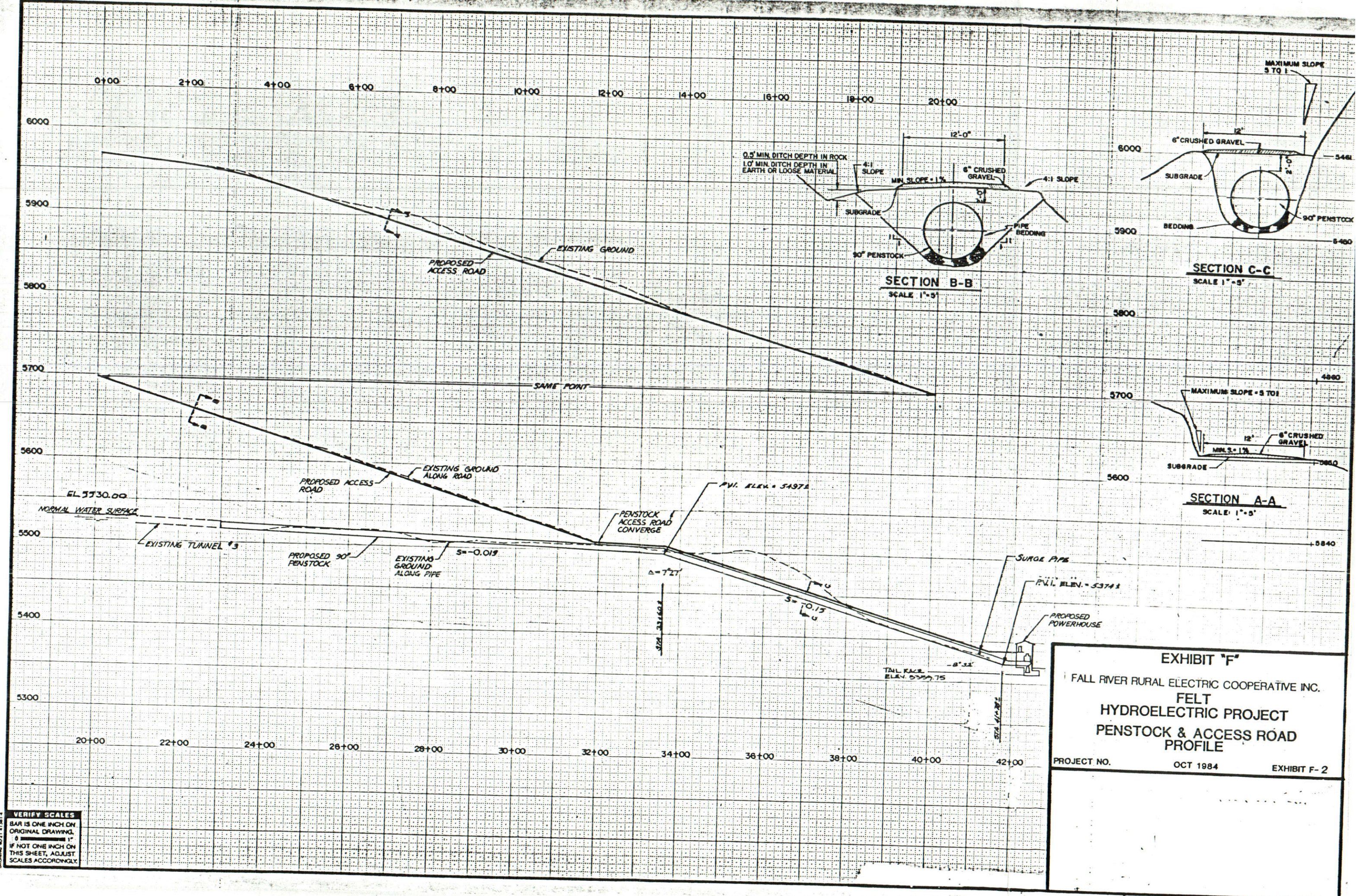


EXHIBIT "F"

FALL RIVER RURAL ELECTRIC COOPERATIVE INC.

FELT
HYDROELECTRIC PROJECT
PLAN

PROJECT NO | OCTOBER 1984 | EXHIBIT F-1



VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

BRUNING 40-21 41361-4

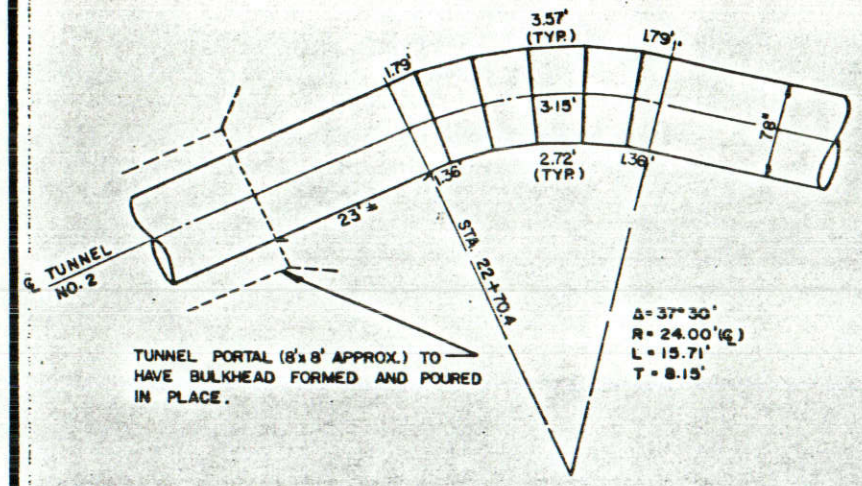
EXHIBIT "F"

FALL RIVER RURAL ELECTRIC COOPERATIVE INC.

FELT HYDROELECTRIC PROJECT

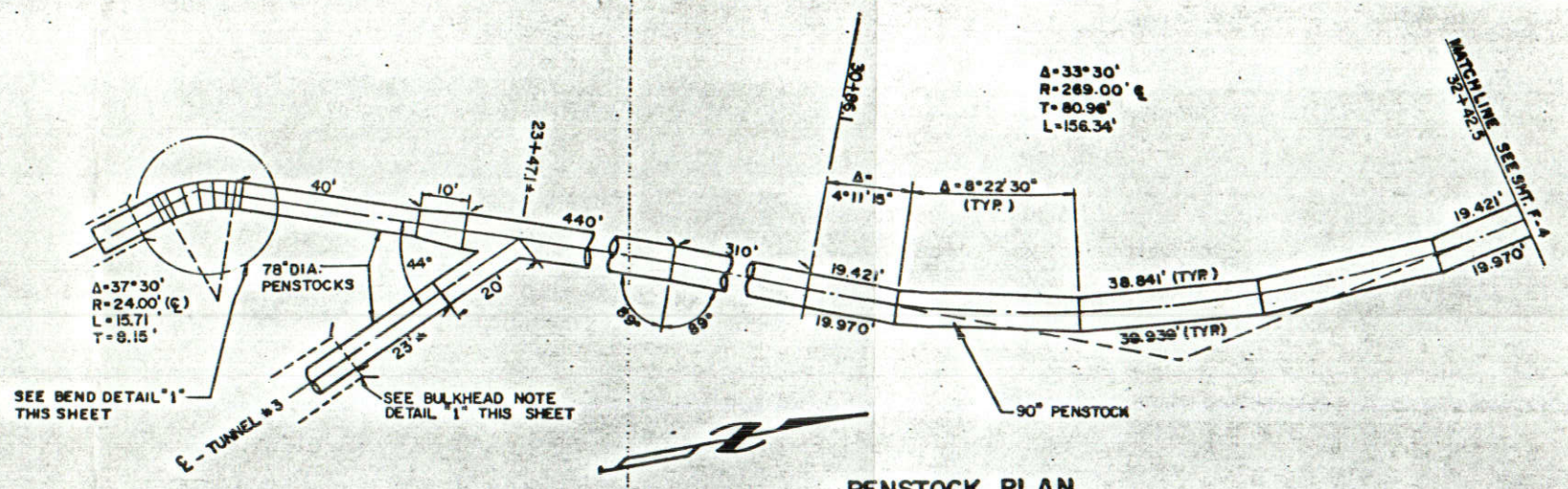
PENSTOCK & ACCESS ROAD PROFILE

PROJECT NO. | OCT 1984 | EXHIBIT F-2



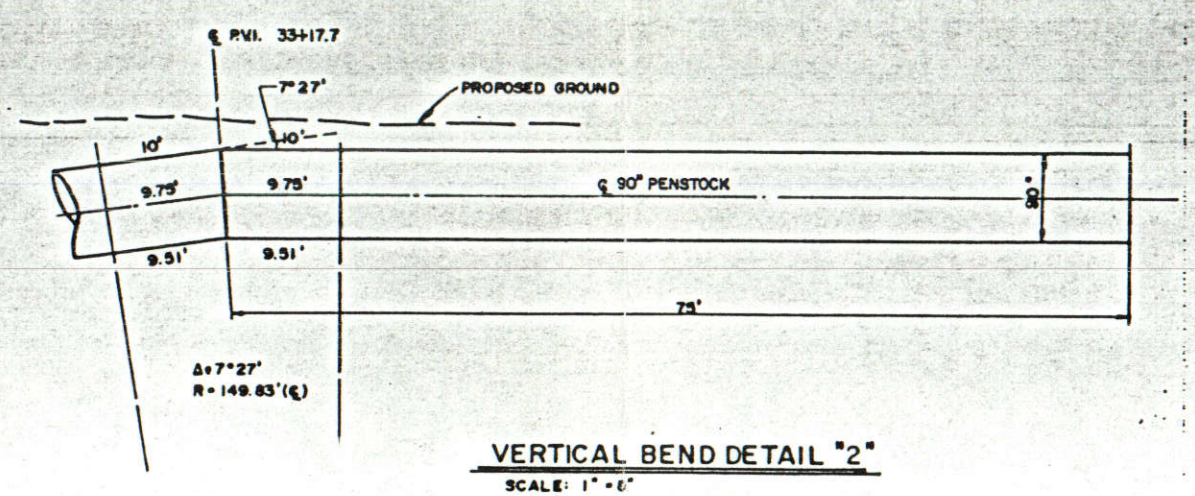
BEND DETAIL "1"

SCALE: 1"=6'



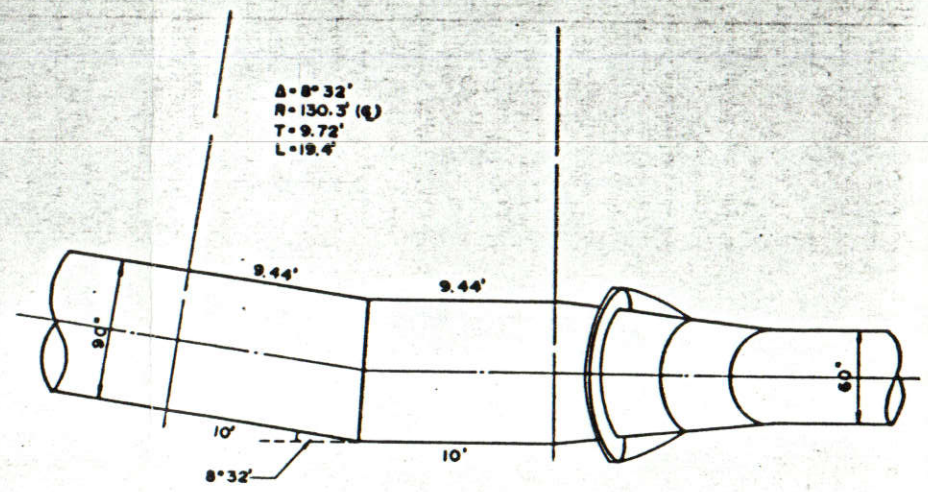
PENSTOCK PLAN

SCALE: 1"=20'



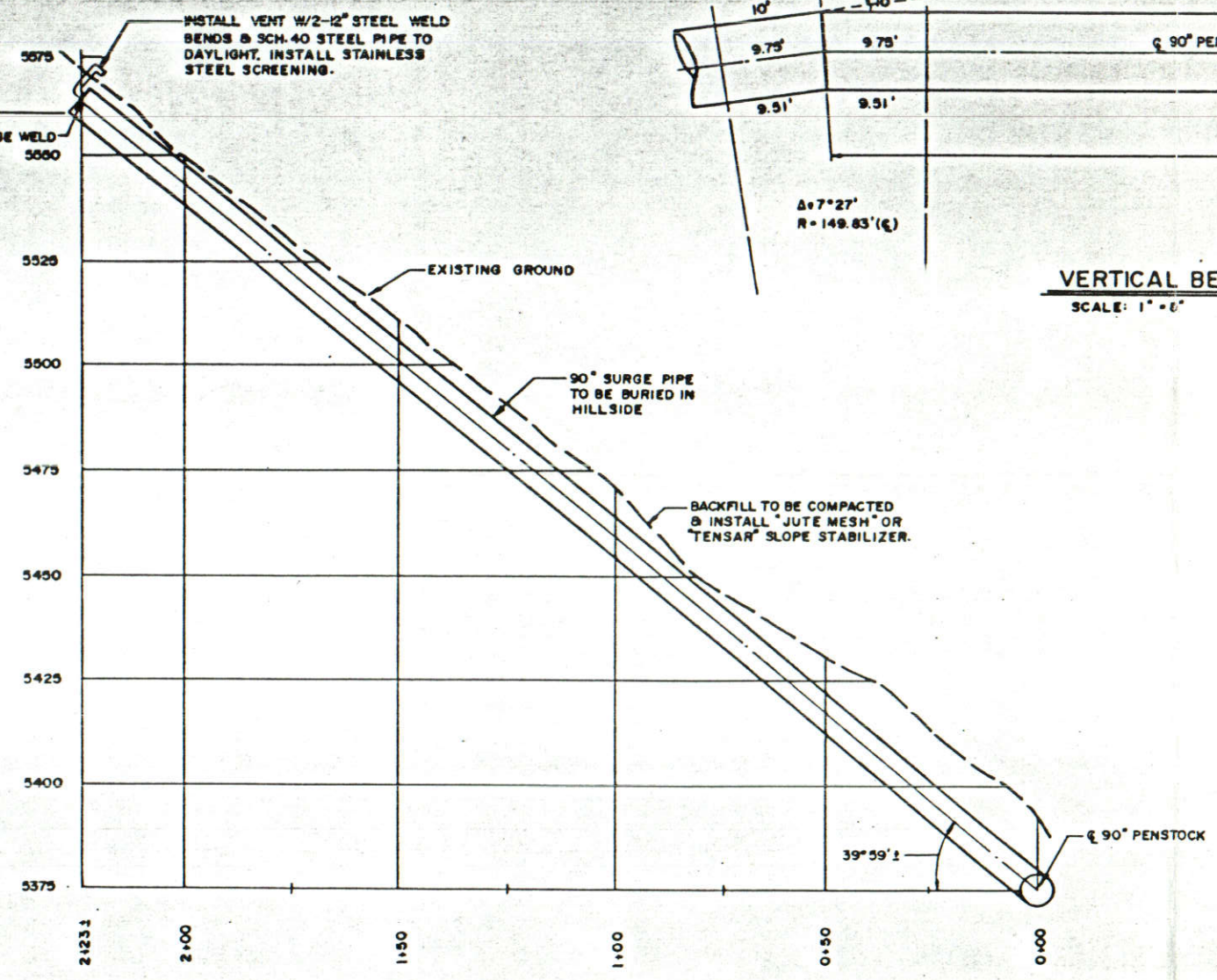
VERTICAL BEND DETAIL "2"

SCALE: 1"=6'



VERTICAL BEND DETAIL "3"

SCALE: 1"=5'



SECTION OF SURGE PIPE D-D

SCALE: 1"=20'

EXHIBIT "F"

FALL RIVER RURAL ELECTRIC COOPERATIVE INC.

FELT

HYDROELECTRIC PROJECT

PENSTOCK & SURGE PIPE

PROJECT NO | JAN 1985 | EXHIBIT F-3

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

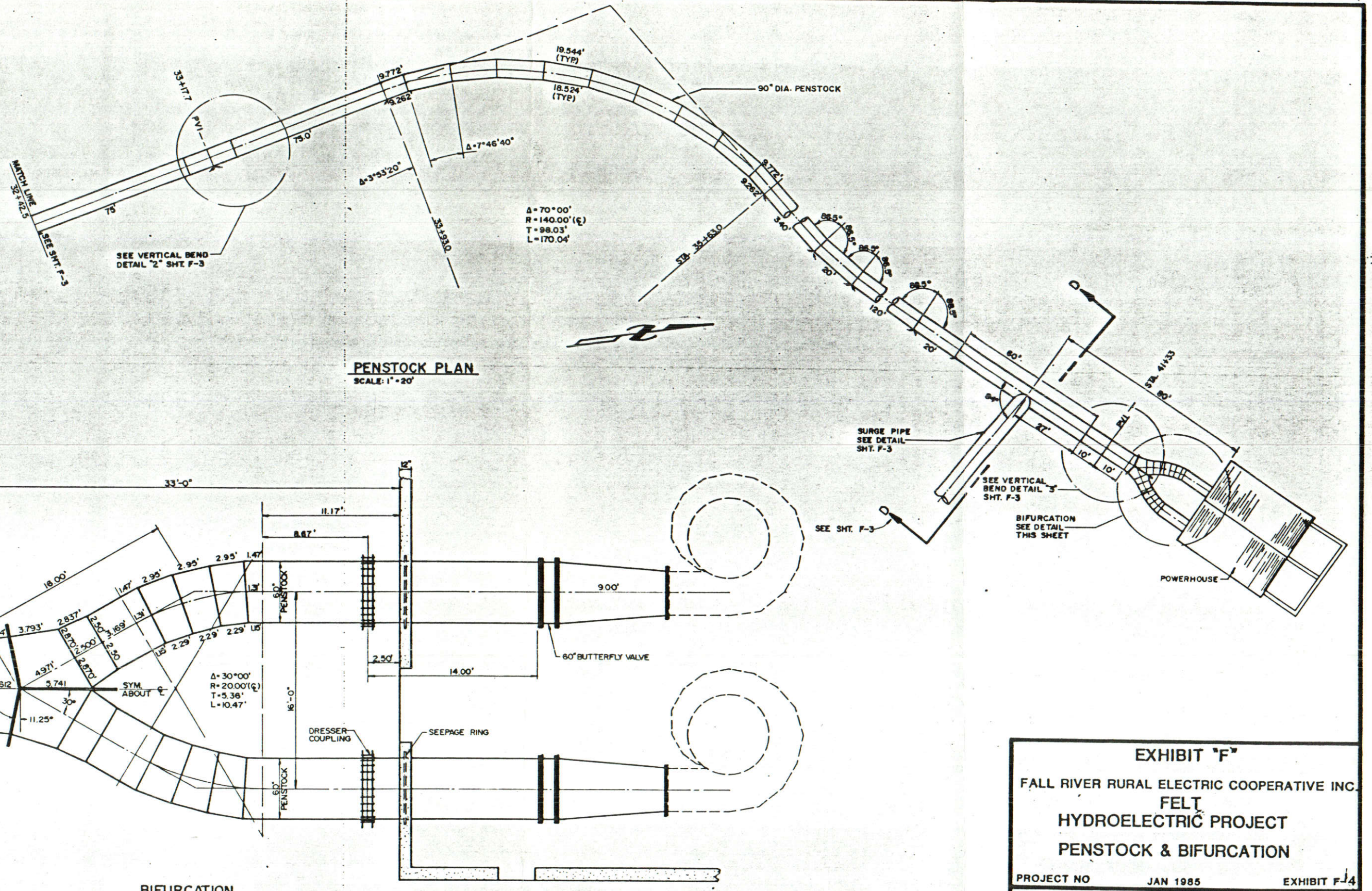


EXHIBIT "F"

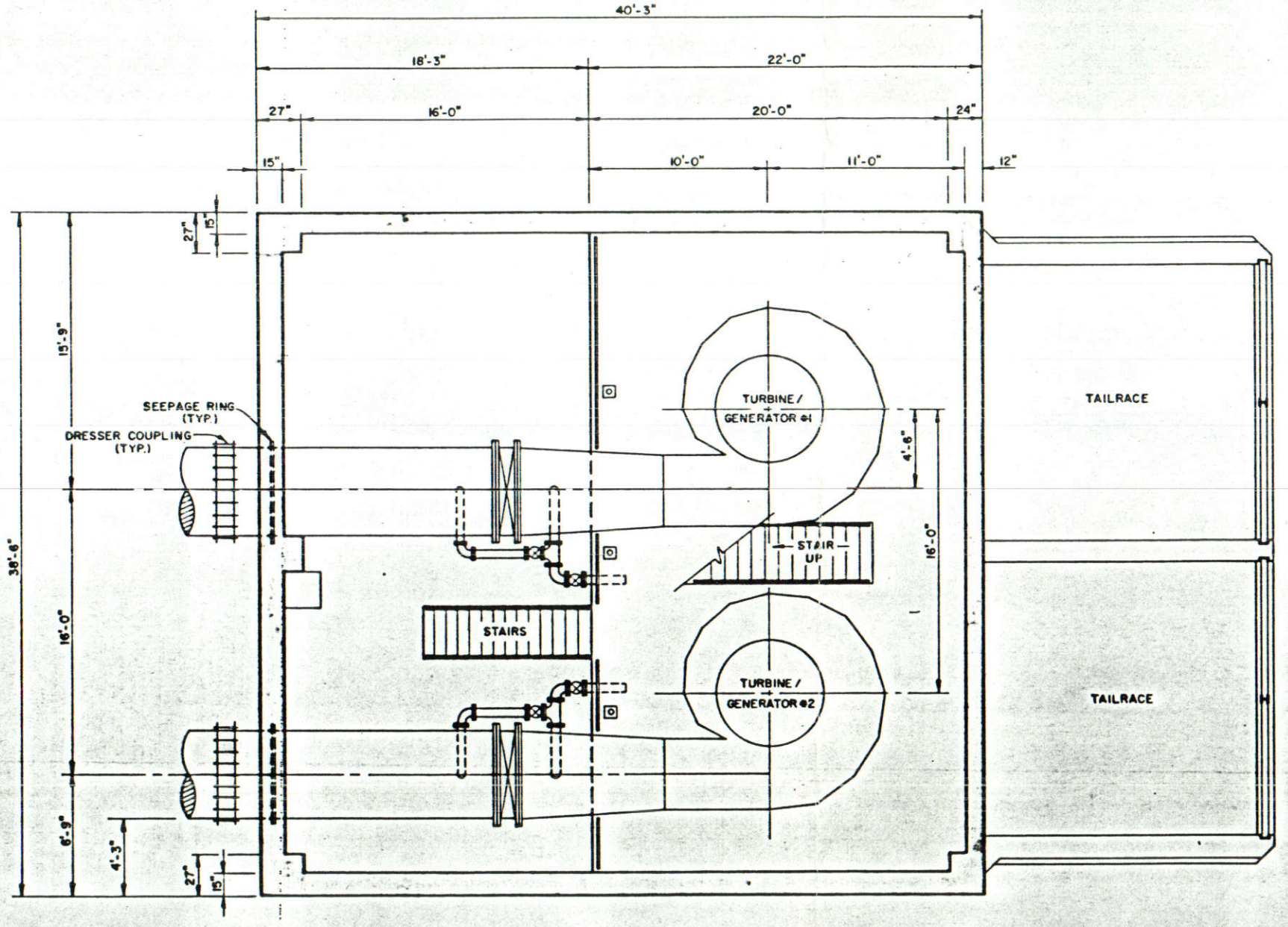
FALL RIVER RURAL ELECTRIC COOPERATIVE INC.

FELT
HYDROELECTRIC PROJECT

PENSTOCK & BIFURCATION

PROJECT NO JAN 1985 EXHIBIT F-4

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.



TURBINE DECK / VALVE BAY - PLAN

SCALE: 1" = 4'

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 ——— 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

EXHIBIT "F"

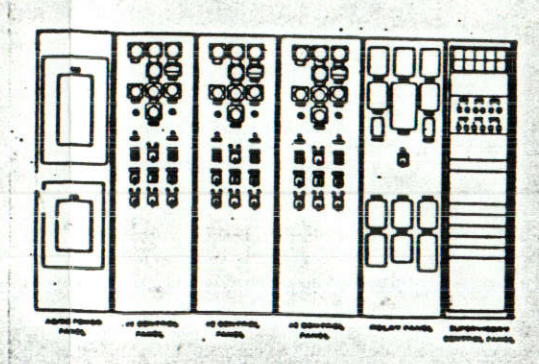
FALL RIVER RURAL ELECTRIC COOPERATIVE INC.

FELT
HYDROELECTRIC PROJECT
POWERHOUSE

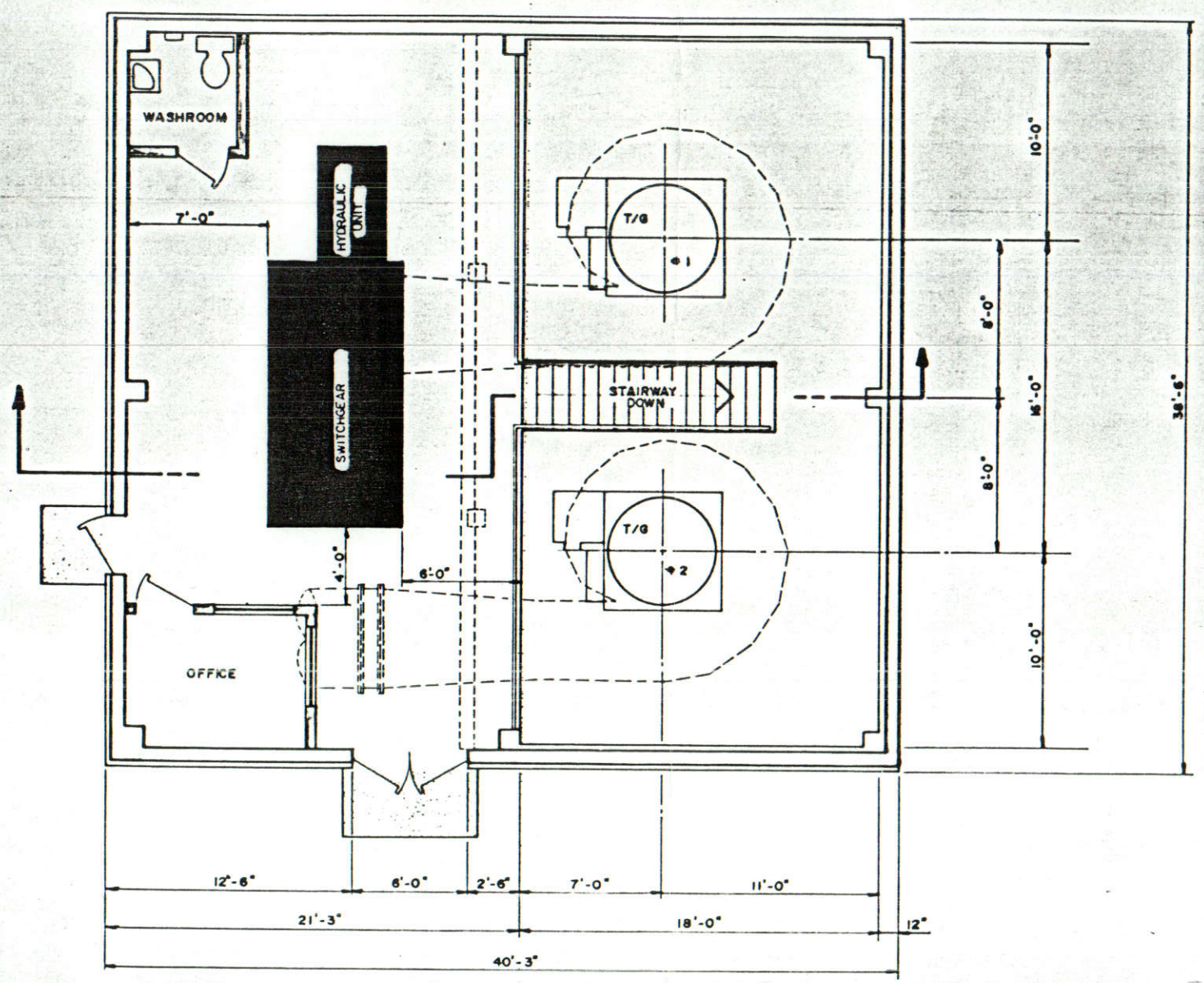
TURBINE DECK/VALVE BAY - PLAN

PROJECT NO. OCT 1984 EXHIBIT F- 5

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 ——— 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY



CONTROL PANEL
NTS.



SWITCHGEAR DECK – PLAN

SCALE: 1" = 4'

EXHIBIT "F"

FALL RIVER RURAL ELECTRIC COOPERATIVE INC.

FELT
HYDROELECTRIC PROJECT
POWERHOUSE
SWITCHGEAR DECK – PLAN

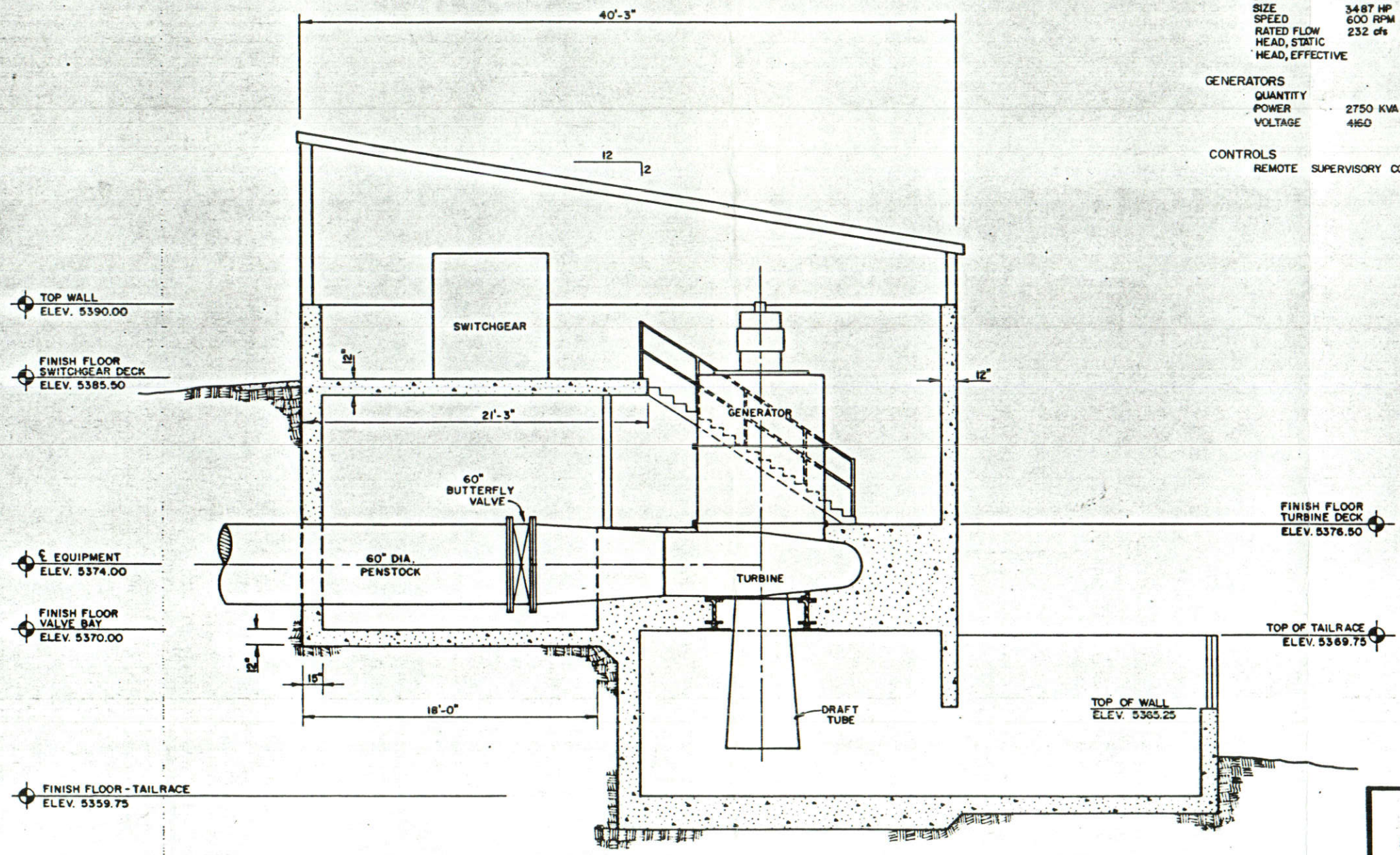
PROJECT NO. | OCT 1984 | EXHIBIT F- 6

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 ——— 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

EQUIPMENT SPECIFICATIONS

		EACH	TOTAL
TURBINE			
	QUANTITY		2
	SIZE	3487 HP	6975 HP
	SPEED	600 RPM	
	RATED FLOW	232 cfs	464 cfs
	HEAD, STATIC		158 ft.
	HEAD, EFFECTIVE		154 ft.
GENERATORS			
	QUANTITY		2
	POWER	2750 KVA	5500 KVA
	VOLTAGE	4160	

CONTROLS
REMOTE SUPERVISORY CONTROL



SECTION
SCALE: 1"=4'

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 ——— 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 ——— 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

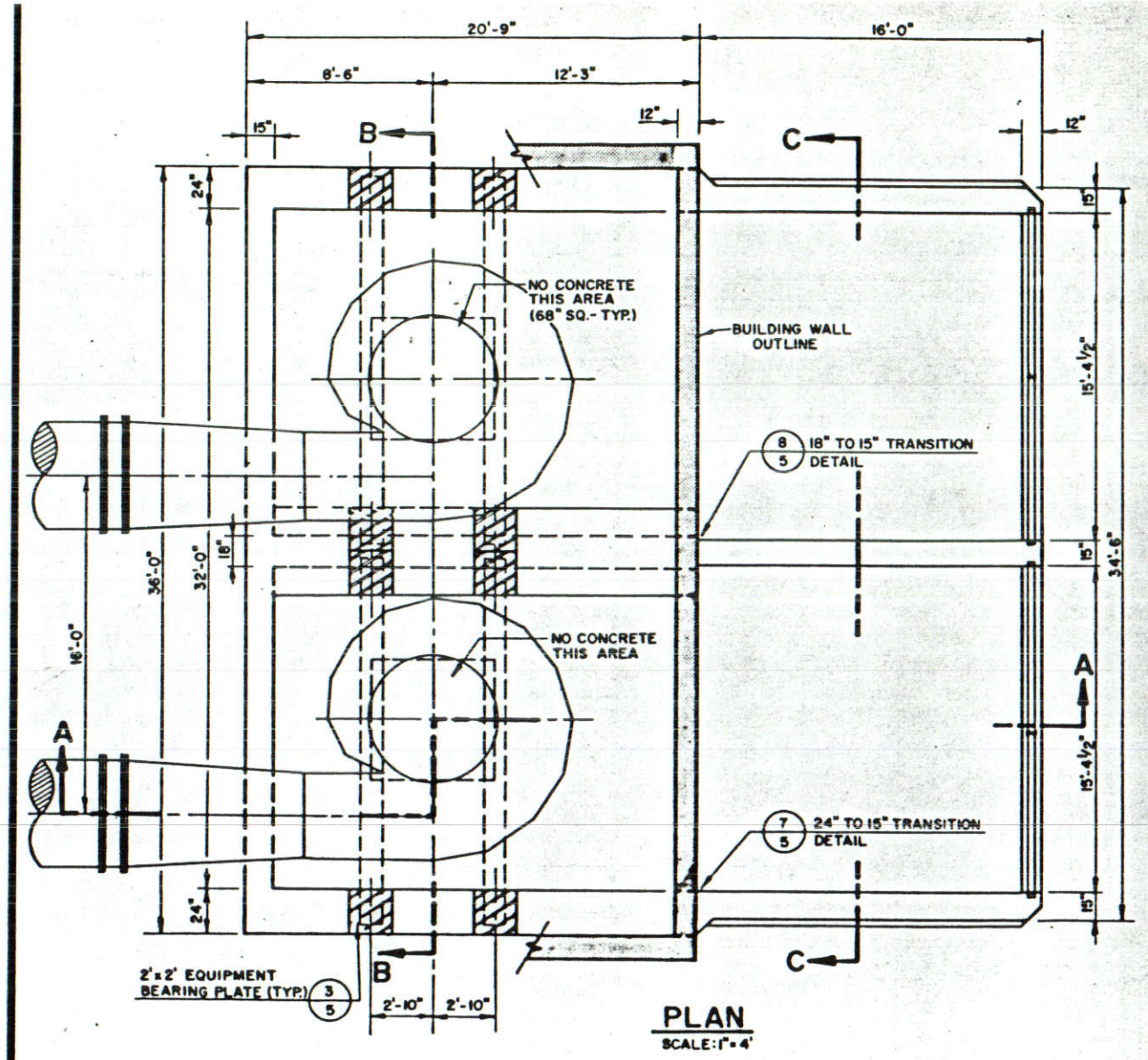
EXHIBIT "F"

FALL RIVER RURAL ELECTRIC COOPERATIVE INC.

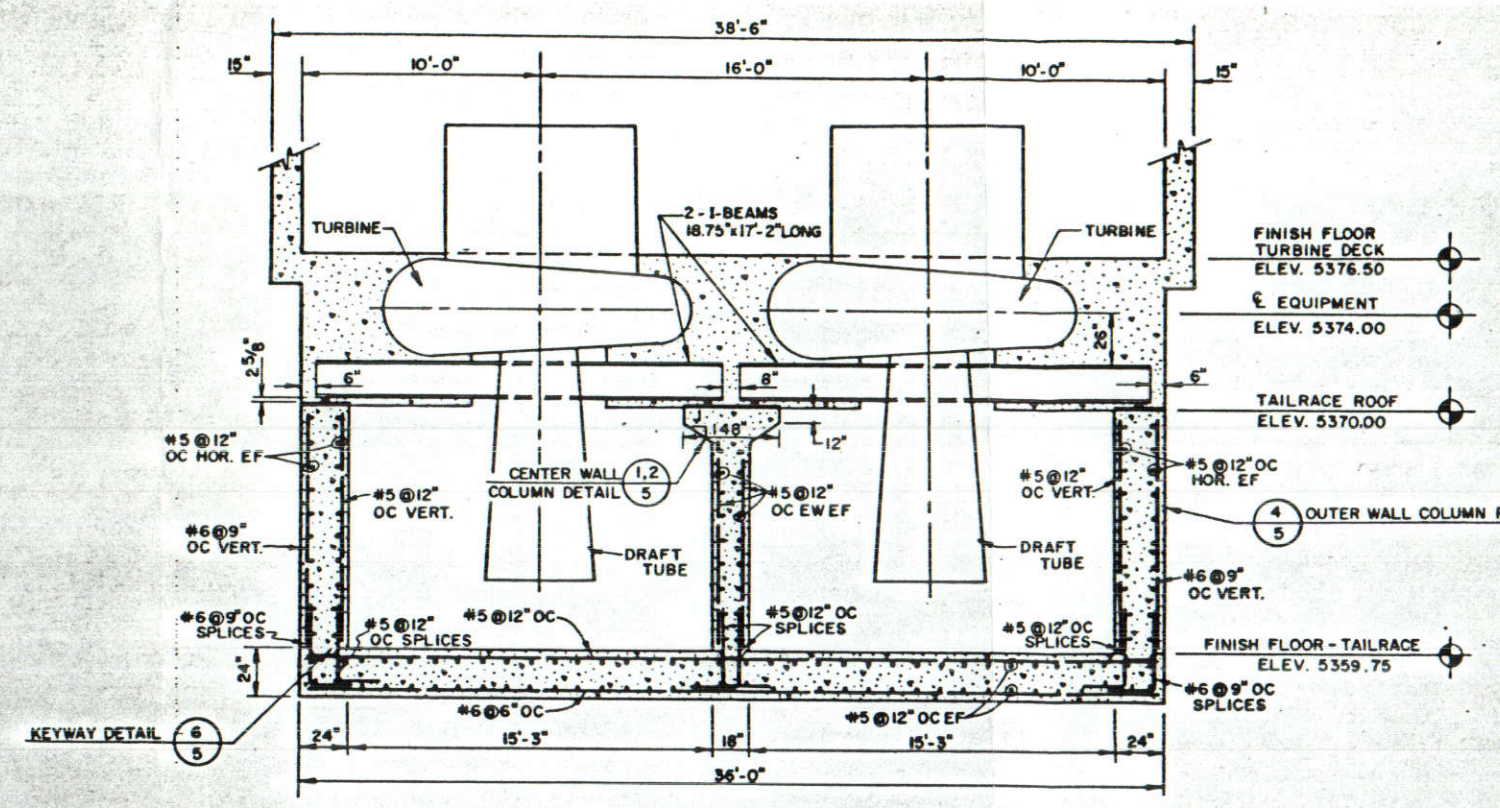
FELT HYDROELECTRIC PROJECT

POWERHOUSE SECTION

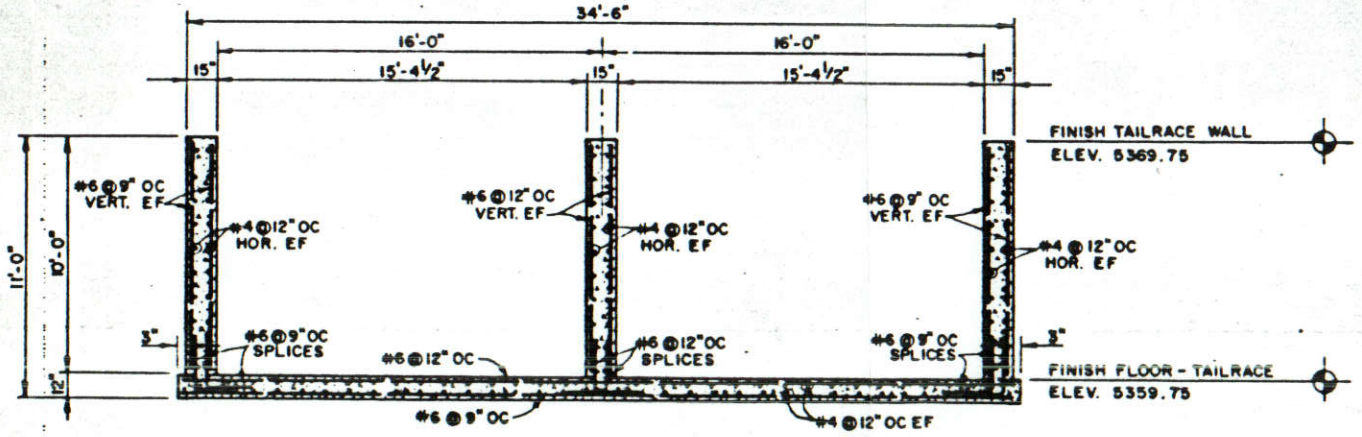
PROJECT NO. | OCT 1984 | EXHIBIT F- 7



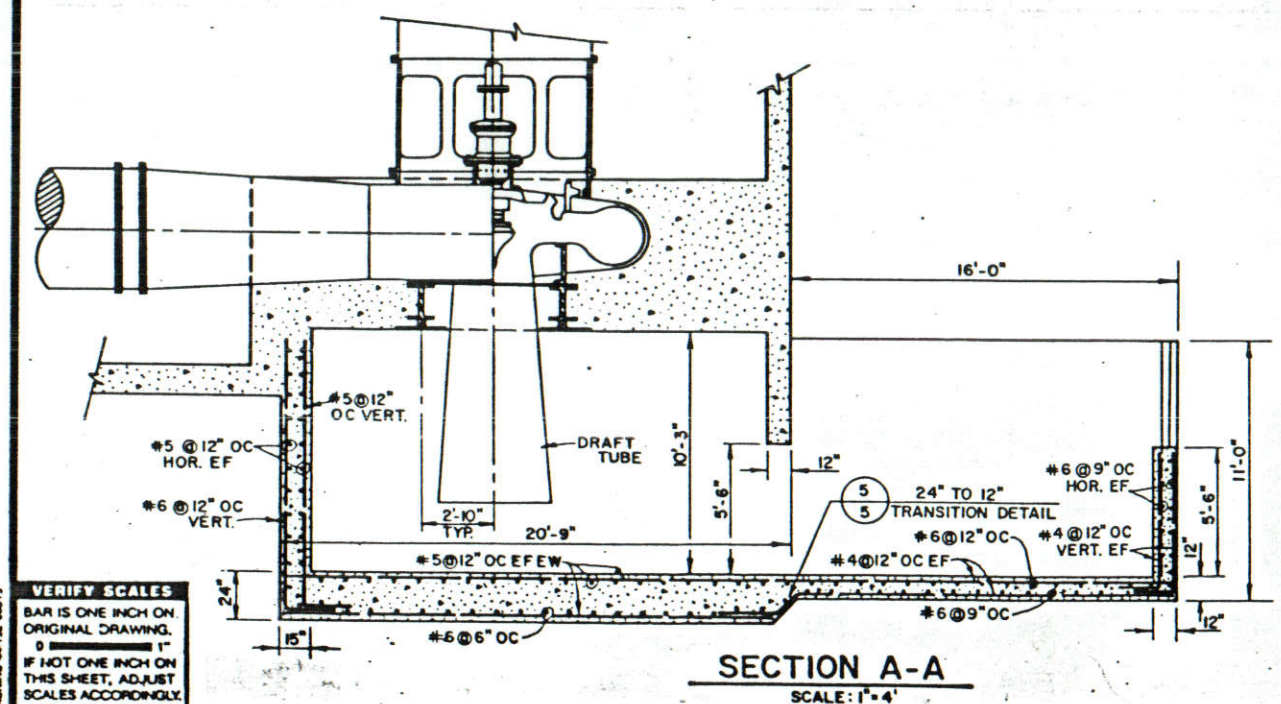
PLAN
SCALE: 1" = 4'



SECTION B-B
SCALE: 1" = 4'



SECTION C-C
SCALE: 1" = 4'



SECTION A-A
SCALE: 1" = 4'

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

DRAWING 44-152 80313

GENERAL NOTES

1 - CONSTRUCT TAILRACE ON COMPACTED NATIVE MATERIAL OR GRANULAR BASE MATERIAL COMPACTED TO 95% T-99 PROCTOR DENSITY.

2 - REFER TO INDEX SHEET FOR TYPICAL CONCRETE REINFORCING REQUIREMENTS.

3 - DETAILS SHOW TAILRACE REINFORCING. COORDINATE THIS REINFORCING WITH TURBINE DECK FLOOR REINFORCEMENT.

4 - REFER TO HYDRO WEST DRAWING FOR ADDITIONAL BASE FRAME DETAILS.

EXHIBIT "F"

FALL RIVER RURAL ELECTRIC COOPERATIVE INC.

FELT HYDROELECTRIC PROJECT

POWERHOUSE

TAILRACE - PLAN & SECTIONS

PROJECT NO. | OCT 1984 | EXHIBIT F-8

EXISTING TUNNELS

EXISTING RESERVOIR

EXIST. INTAKES

EXIST POWER PLANT

TETON RIVER

PROPOSED 90" PENSTOCK

B-1 B-2 B-3 B-4 B-5

STA 8+83.64

STA 10+42.15

STA 12+62.50

STA 13+39.80

STA 14+73.90

AERIAL SPAN

AERIAL SPAN

PROPOSED METER, TRANSFORMER AND POLE STRUCTURE

BURIED TRANSMISSION LINE

PROPOSED POWERHOUSE

90" SURGE PIPE

PROPOSED ROAD

TETON R.

S 89°36'24" W 222.10'

BORING LOG LEGEND

B-2 — BORING IDENTIFICATION

NUMBER OF FRACTURES PER FOOT (X INDICATES HIGHLY FRACTURED OR BROKEN)

INDIVIDUAL CORE RUN

RECOVERY - PERCENT OF CORE RUN RECOVERED

R = 9%
RQD = 0%

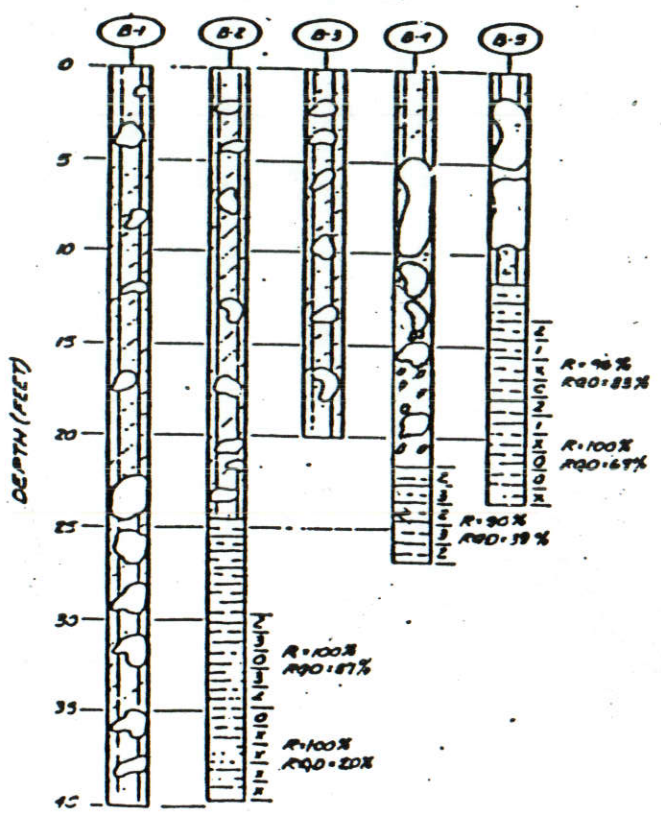
ROCK QUALITY DESIGNATION - PERCENT OF CORE RUN COMPRISED OF SOUND PIECES OF ROCK 4" OR LONGER

CLAYEY SILT AND SILTY CLAY

GRAVEL AND BOULDERS, BASALTIC OR RHYOLITIC IN COMPOSITION

WELDED ASH FLOW TUFF

BORING LOGS



0 100 200 300
SCALE IN FEET

EXHIBIT "F"

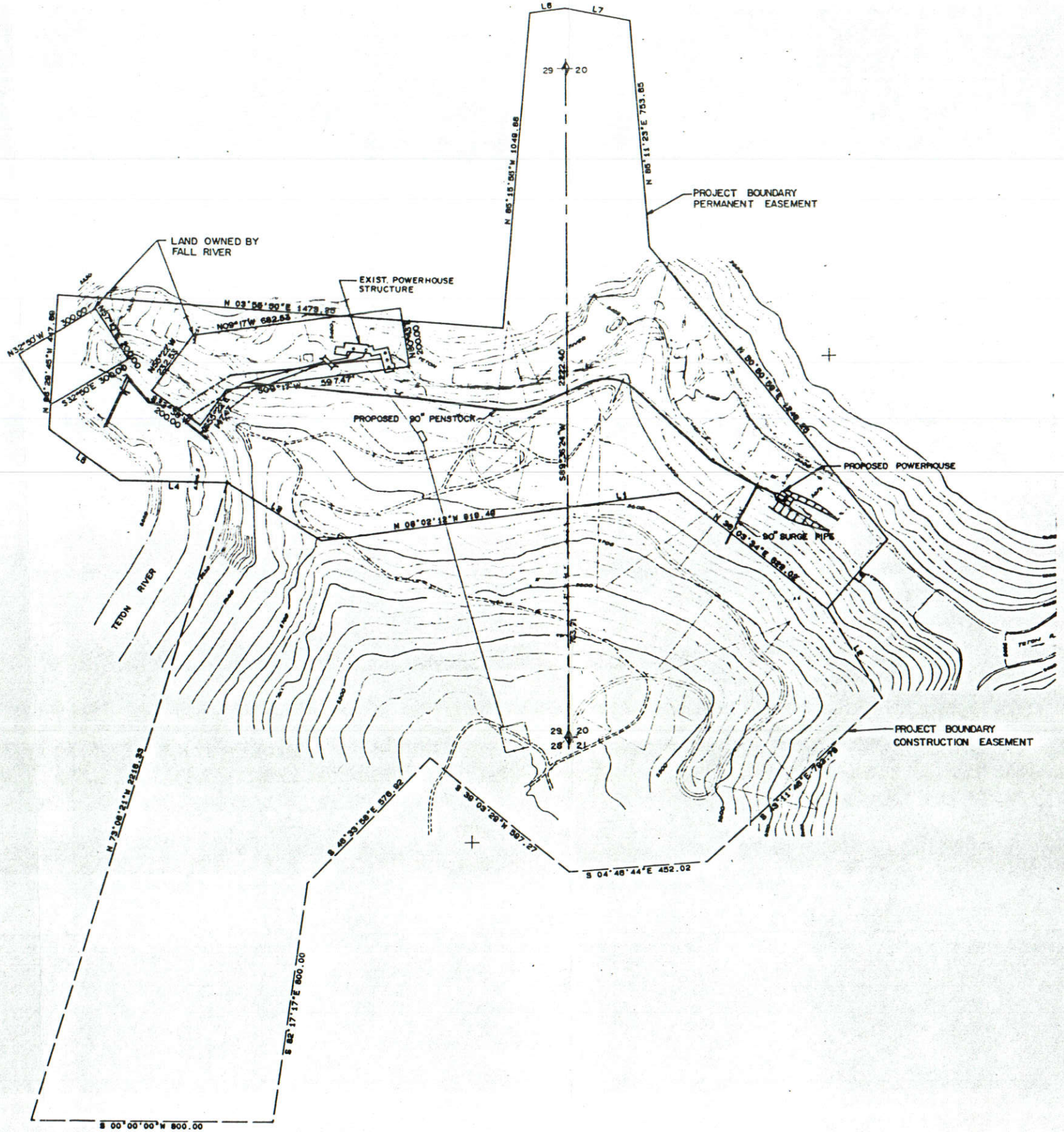
FALL RIVER RURAL ELECTRIC COOPERATIVE INC.

FELT

HYDROELECTRIC PROJECT

BORING LOCATION & LOGS

PROJECT NO | OCTOBER 1984 | EXHIBIT F-9



200 100 0 200 400 800

SCALE IN FEET

LINE	BEARING	DISTANCE
1	N 09°02'12"W	385.38
2	N 57°46'57"E	348.48
3	N 32°06'42"E	358.78
4	S 00°42'17"W	380.18
5	S 38°26'33"W	288.22
6	N 09°21'20"W	118.00
7	N 10°42'28"E	218.00
8	S 48°46'13"E	307.23

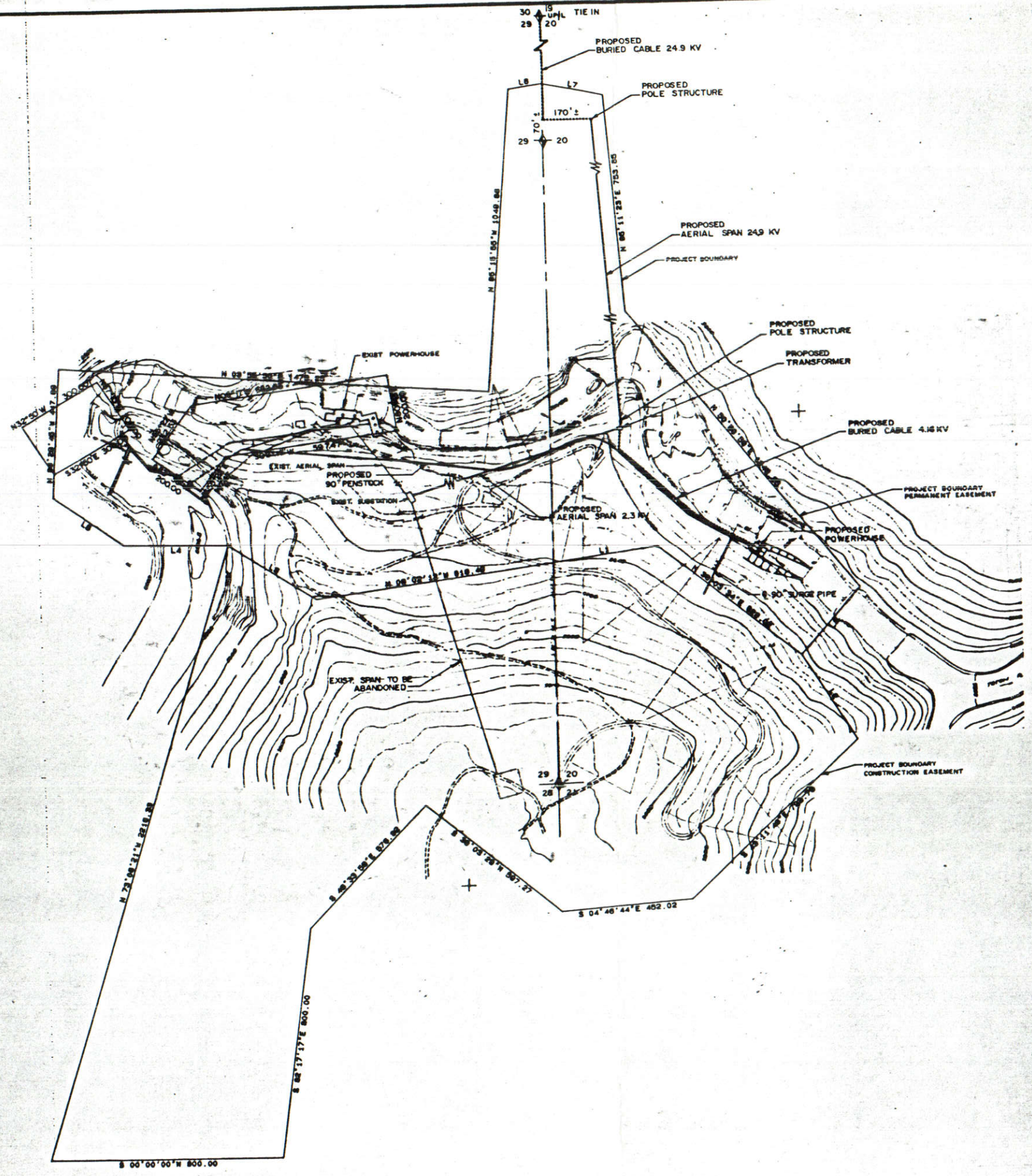
EXHIBIT "G"

FELT
HYDROELECTRIC PROJECT

PROJECT BOUNDARY

PROJECT NO. JANUARY 1985 EXHIBIT G-1

LANDMARK DRAFTING SYSTEMS 20418



LINE	BEARING	DISTANCE
1	N 08°02'12"W	360.36
2	N 57°46'57"E	348.46
3	N 32°08'48"E	358.78
4	S 06°48'17"W	380.18
5	S 35°29'33"W	288.22
6	N 08°21'20"W	110.00
7	N 10°48'26"E	210.00
8	S 46°48'13"E	307.22

EXHIBIT "G"

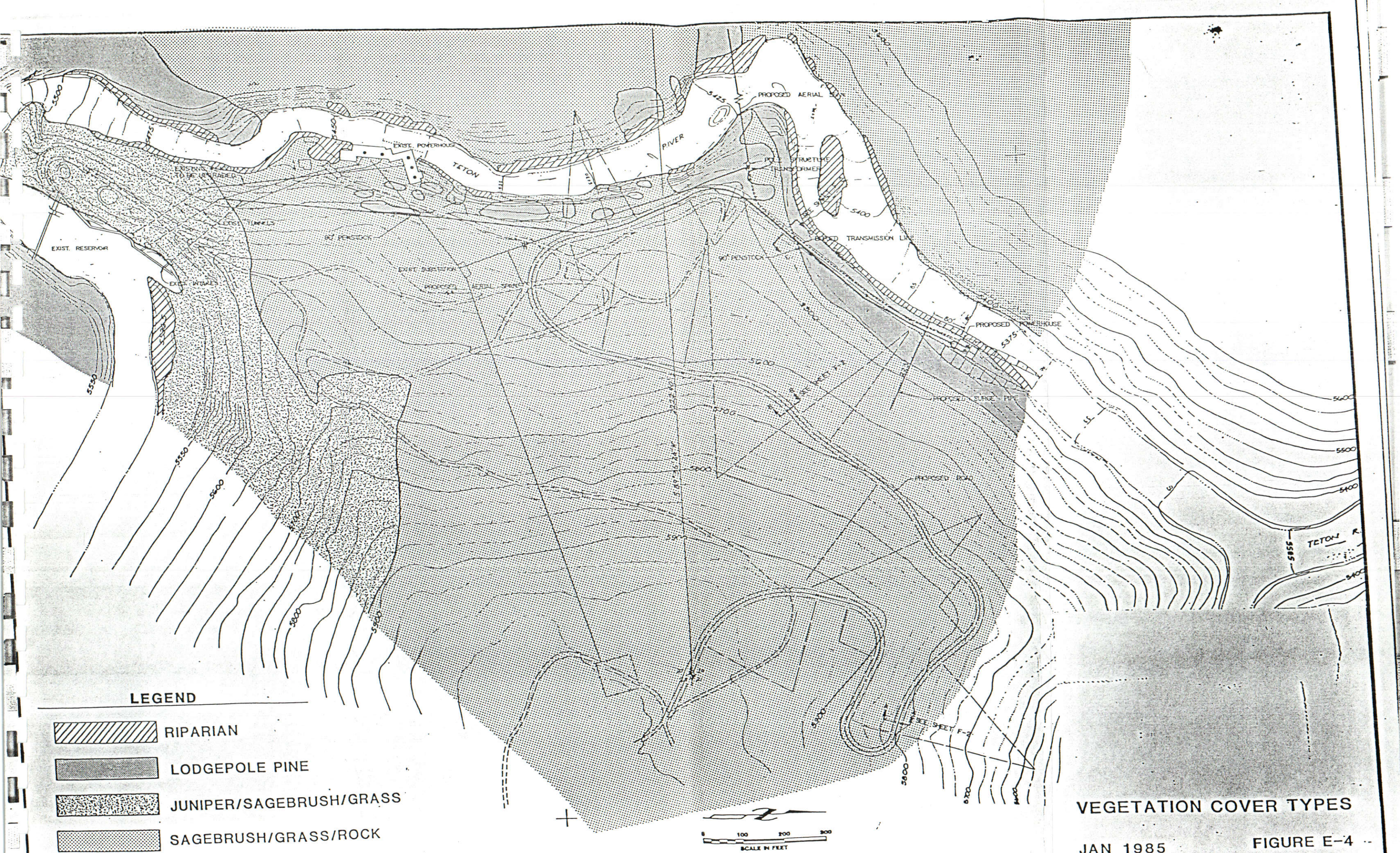
FALL RIVER RURAL ELECTRIC COOPERATIVE INC.

FELT HYDROELECTRIC PROJECT

TRANSMISSION MAP

PROJECT NO. JANUARY 1985 EXHIBIT G-2

LADRUM'S DRAFTING SYSTEMS 89410



LEGEND

- RIPARIAN
- LODGEPOLE PINE
- JUNIPER/SAGEBRUSH/GRASS
- SAGEBRUSH/GRASS/ROCK

VEGETATION COVER TYPES

JAN 1985

FIGURE E-4

State of Idaho
Department of Water Resources

WATER RIGHT LICENSE

WATER RIGHT NO. 22-07351

Priority: April 29, 1981 Maximum Diversion Rate: 300.00 CFS

This is to certify, that FALL RIVER RURAL ELECTRIC COOPERATIVE
PO BOX 830
ASHTON ID 83420 has complied with the terms and conditions of the permit, issued pursuant to Application for Permit dated March 18, 1981; and has submitted Proof of Beneficial Use on April 28, 1986. An examination indicates that the works have a diversion capacity of 520.000 cfs of water from:

TETON RIVER tributary to **SNAKE RIVER**

source, and a water right has been established as follows:

BENEFICIAL USE	PERIOD OF USE	RATE OF DIVERSION	ANNUAL VOLUME
POWER	01/01 to 12/31	300.00 CFS	

LOCATION OF POINT(S) OF DIVERSION: NWNE , Sec. 29, Township 07N, Range 44E
TETON County

PLACE OF USE: POWER

TWN	RGE	SEC	
07N	44E	20	SWSE

CONDITIONS/REMARKS:

1. This water right is appurtenant to the described place of use.
2. This right is subject to all prior water rights and may be forfeited by five years of non-use.
3. Modifications to or variance from this license must be made within the limits of Section 42-222, Idaho Code, or the applicable Idaho law.
4. The water right confirmed in this license for hydropower purposes shall be junior and subordinate to all rights to the use of water, other than hydropower, within the State of Idaho that are initiated later in time than the priority of this license and shall not give rise to any right or claim against any future rights to the use of water, other than hydropower, within the State of Idaho initiated later in time than the priority of this license.
5. Use of water under this water right will be regulated by the watermaster of State Water District No. 01.
6. Use of water under this right shall be non-consumptive.

APR 18 1994

State of Idaho
Department of Water Resources

WATER RIGHT LICENSE

WATER RIGHT NO. 22-07351

CONDITIONS/REMARKS:

7. A measuring device of a type approved by this Department shall be required at the diversion of the Teton River if determined to be necessary by either the Department of Water Resources or the watermaster of Water District 01.
8. The diversion and use of water under this license is subject to review by the Director 30 years from the date of issuance. Upon appropriate findings relative to the interest of the public, the Director may cancel all or any part of the use authorized herein and may revise, delete or add condition under which the right may be exercised.
9. Any loss of water to the Teton River resulting from conveyance and use pursuant to this license shall be mitigated with replacement water.
10. Use of water under this license shall not cause flucuation in the flows of the Teton River which impairs the ability of prior right holders to divert their water.
11. This right is used in connection with Right Nos. 22-7487 and 22-7482B.
12. This license is subject to revocation pursuant to Section 42-350, Idaho Code.
13. A flow of 20.0 cfs must bypass the diversion and flow uninterrupted to the powerhouse tailrace, except during the three month period of cutthroat spawning, determined by the Idaho Department of Fish and Game, when the bypass flow must be increased to 50.0 cfs.
14. The diversion dam is located in the SWNE, S29, T07N, R44E.
15. The point of dicharge to the Teton River is located in the SESE, S20, T07N, R44E.

This license is issued pursuant to the provisions of Section 42-219, Idaho Code. Witness the seal and signature of the Director, affixed at Boise, this 9th day of APRIL, 1994.

Acting for R. Keith Higginson, Director

APR 18 1994

APPROVED

State of Idaho
Department of Water Resources

RECEIVED
MAR 24 1994
Department of Water Resources

APPLICATION FOR AMENDMENT
(For Licensing Purposes)
WATER RIGHT NO. 22-07351

Date of Priority: April 29, 1981 Maximum Diversion Rate: 300.00 CFS

Comes now FALL RIVER RURAL ELECTRIC COOPERATIVE
PO BOX ~~617~~ 830
ASHTON ID 83420 and represents to the Director of the

Idaho Department of Water Resources:

That he is the owner and holder of Permit to Appropriate the Public Waters of the State of Idaho No. 22-07351, and requests that the permit be changed as follows:

Source: **TETON RIVER** tributary to **SNAKE RIVER**

BENEFICIAL USE	PERIOD OF USE	RATE OF DIVERSION	ANNUAL VOLUME
POWER	01/01 to 12/31	300.00 CFS	

LOCATION OF POINT(S) OF DIVERSION: NWNE , Sec. 29, Township 07N, Range 44E
TETON County

PLACE OF USE: POWER

TWN	RGE	SEC	
07N	44E	20	SWSE

APR 18 1994

Permit holder asserts that no one will be injured by such change and that such change will be made at permit holder's own risk.

Signed at Ashton Idaho, this 22nd day of MARCH, 19 94.

Dee M. Reynolds
(Signature)

State of Idaho
Department of Water Resources

APPLICATION FOR AMENDMENT
(For Licensing Purposes)
WATER RIGHT NO. 22-07351

****

FOR DEPARTMENT USE ONLY

Preliminary check by ____ Fee = 20.00 Receipted by dw # C029877 Date 3/24/94

ACTION OF THE DEPARTMENT OF WATER RESOURCES

I, R. Keith Higginson, of the Department of Water Resources hereby approve the above Application for Amendment for Permit No. 22-07351 with the following;

CONDITIONS/REMARKS:

1. This water right is appurtenant to the described place of use.
2. This right is subject to all prior water rights and may be forfeited by five years of non-use.
3. Modifications to or variance from this license must be made within the limits of Section 42-222, Idaho Code, or the applicable Idaho law.
4. The water right confirmed in this license for hydropower purposes shall be junior and subordinate to all rights to the use of water, other than hydropower, within the State of Idaho that are initiated later in time than the priority of this license and shall not give rise to any right or claim against any future rights to the use of water, other than hydropower, within the State of Idaho initiated later in time than the priority of this license.
5. Use of water under this water right will be regulated by the watermaster of State Water District No. 01.
6. Use of water under this right shall be non-consumptive.

APR 18 1994

State of Idaho
Department of Water Resources

APPLICATION FOR AMENDMENT
(For Licensing Purposes)
WATER RIGHT NO. 22-07351

CONDITIONS/REMARKS:

7. A measuring device of a type approved by this Department shall be required at the diversion of the Teton River if determined to be necessary by either the Department of Water Resources or the watermaster of Water District 01.
8. The diversion and use of water under this license is subject to review by the Director 30 years from the date of issuance. Upon appropriate findings relative to the interest of the public, the Director may cancel all or any part of the use authorized herein and may revise, delete or add condition under which the right may be exercised.
9. Any loss of water to the Teton River resulting from conveyance and use pursuant to this license shall be mitigated with replacement water.
10. Use of water under this license shall not cause flucuation in the flows of the Teton River which impairs the ability of prior right holders to divert their water.
11. This right is used in connection with Right Nos. 22-7487 and 22-7482B.
12. This license is subject to revocation pursuant to Section 42-350, Idaho Code.
13. A flow of 20.0 cfs must bypass the diversion and flow uninterrupted to the powerhouse tailrace, except during the three month period of cutthroat spawning, determined by the Idaho Department of Fish and Game, when the bypass flow must be increased to 50.0 cfs.
14. The diversion dam is located in the SWNE, S29, T07N, R44E.
15. The point of dicharge to the Teton River is located in the SESE, S20, T07N, R44E.

Witness my hand this 9TH day of April, 1994.

Acting for R. Keith Higginson, Director

APR 18 1994

State of Idaho
DEPARTMENT OF WATER RESOURCES
STATE OFFICE, 450 W. State Street, Boise, Idaho

JOHN V. EVANS
Governor

A. KENNETH DUNN
Director

Mailing address:
Statehouse
Boise, Idaho 83720
(208) 334-4440

June 28, 1985

Fall River Rural Electric Cooperative, Inc.
POB AE
Ashton, Idaho 83420
Attention: Manager

Bonneville Pacific Corporation
200 East South Temple, Suite 300
Salt Lake City, Utah 84111
Attention: Robert L. Wood

Hydro Valley Development, Inc.
c/o Bonneville Pacific Corporation
200 East South Temple, Suite 300
Salt Lake City, Utah 84111
Attention: L. Wynn Johnson

First Interstate Bank of Utah, N.A.
180 South Main Street
Salt Lake City, Utah 84101

First Interstate Bank of Idaho, N.A.
700 West Idaho Street, Third Floor
Boise, Idaho 83702

Re: Leases and Mortgage Trust Indenture and Security Agreement Affecting Decreed Right 22-0606, Licensed Rights 22-2123 and 22-2126 and Permit Nos. 2[redacted], 22-7487 and 22-7482

Gentlemen:

This office has received a copy of the Lease and Assignment Agreement dated December 18, 1984, whereunder Fall River Rural Electric Cooperative, Inc. ("Fall River") has leased the above-referenced decreed, licensed, and permit water rights (collectively "Water Rights") to Bonneville Pacific Corporation ("Bonneville"), and a copy of the Partial Assignment of Lease and Assignment Agreement dated June 14, 1985, whereunder Bonneville has further leased the Water Rights to Hydro Valley

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Development, Inc. ("Hydro Valley"). We have also received the Mortgage Trust Indenture and Security Agreement (the "Security Agreement") whereunder Bonneville and Hydro Valley intend to assign the leasehold interest in the Water Rights to First Interstate Bank of Idaho, N.A., as trustee, and First Interstate Bank of Utah, N.A., as beneficiary, pursuant to obtaining the construction financing for the Felt Dam Hydroelectric Project located in Teton County, Idaho.

Based upon our understanding of the information contained in said Lease and Assignment Agreement, Partial Assignment of Lease and Assignment, and Seucrity Agreement, Fall River has leased the above-referenced Water Rights to Bonneville and Bonneville has further leased said Water Rights to Hydro Valley. It is further our understanding that Bonneville and Hydro Valley are assigning their leasehold interest in the Water Rights to First Interstate Bank of Idaho, N.A., as trustee to have and to hold the same as partial security for the performance by Bonneville and Hydro Valley of certain obligations to First Interstate Bank of Utah, N.A., as beneficiary, in connection with financing the Felt Dam Hydroelectric Project to which the Water Rights relate.

This letter confirms that this office has reviewed the Lease and Assignment Agreement, the Partial Assignment of Lease and Assignment Agreement and the Security Agreement and has found that the same conform to and comply with the requirements of Section 42-206 and 42-207, Idaho Code, and that Bonneville and Hydro Valley are qualified entities to hold leasehold interests in Water Rights in accordance with the laws of the State of Idaho, and that the trustee, First Interstate Bank of Idaho, N.A., is an entity qualified to hold a leasehold interest in said Water Rights as security for the construction financing of the Felt Dam Hydroelectric Project. Therefore, the lease of the Water Rights from Fall River to Bonneville, and subsequent lease of the Water Rights from Bonneville to Hydro Valley, and the subsequent assignment of the leasehold interest in the Water Rights as security for the construction financing as described herein are consented to and approved by the Department of Water Resources, and will be effective as of the date of receipt of the signed Mortgage Trust Indenture and Security Agreement. It is further noted that leasing of the Water Rights and assignment of leasehold interests therein will not change the name of record of the Water Rights.

The future approval of the leasing of the Water Rights and assignment of leasehold interests therein will not constitute a waiver by this Department of the State of Idaho to seek appropriate regulatory actions against the entities identified within this letter for any and all violation of any state statute, rule or regulation, notably with respect to stream channel alterations.

Sincerely,

Norman C Young

NORMAN C. YOUNG
Administrator
Resources Administration Division

NCY/DRT/ls

MICROFILMED

Form 202
3/78

Ident. No. 22-7351

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

AMENDED **APPLICATION FOR PERMIT** AMENDED

To appropriate the public waters of the State of Idaho

APPROVED

1. Name of applicant FALL RIVER RURAL ELECTRIC CO-OP Phone 208-652-7431

   Post office address P.O. Box 617 Ashton, ID 83420

2. Source of water supply Teton River which is a tributary of Snake River

3. Location of point of diversion is SW ¼ of NE ¼ of Section 29 Township 7N

   Range 44E B.M. Teton County, additional points of diversion if any: ____

4. Water will be used for the following purposes:

   Amount 300 (cfs or ~~acre-feet per annum~~) for Power purposes from 1-1 to 12-31 (both dates inclusive)

   Amount _____ (cfs or acre-feet per annum) for _____ purposes from _____ to _____ (both dates inclusive)

   Amount _____ (cfs or acre-feet per annum) for _____ purposes from _____ to _____ (both dates inclusive)

   Amount _____ (cfs or acre-feet per annum) for _____ purposes from _____ to _____ (both dates inclusive)

5. Total quantity to be appropriated:

   a. 300 cubic feet per second and/or b. _____ acre-feet per annum.

6. Proposed diverting works:

   a. Description of ditches, flumes, pumps, headgates, etc. All facilities are existing and are being used to produce power at Fall River Electric's "Felt Power Plant"

   b. Height of storage dam _____ feet, active reservoir capacity _____ acre-feet; total reservoir capacity _____ acre-feet, materials used in storage dam: Concrete

      Period of year when water will be diverted to storage _____ (Month/Day) to _____ (Month/Day) inclusive.

   c. Proposed well diameter is _____ inches; proposed depth of well is _____ feet.

7. Time required for the completion of the works and application of the water to the proposed beneficial use is ~~immediate~~ one years *(minimum 1 year – maximum 5 years).*

8. Description of proposed uses: SEE ATTACHED DESCRIPTION

   a. If water is **not** for irrigation:

      (1) Give the place of use of water: NW ¼ of NE ¼ of Section 29 Township 7N

      Range 44E B.M.

      (2) Amount of power to be generated: 1870 horsepower under 80 feet of head.

      (3) List number of each kind of livestock to be watered _____

      (4) Name of municipality to be served _____, or number of families to be supplied with domestic water _____.

      (5) If water is to be used for other purposes describe: _____

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b. If water is for irrigation, indicate acreage in each subdivision in the tabulation below:

TWP	RANGE	SEC.	NE¼				NW¼				SW¼				SE¼				TOTALS
			NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	

Total number of acres to be irrigated _____

c. Describe any other water rights used for the same purposes as described above. _____

22-0606, 22-2123, 22-2126 for power generation

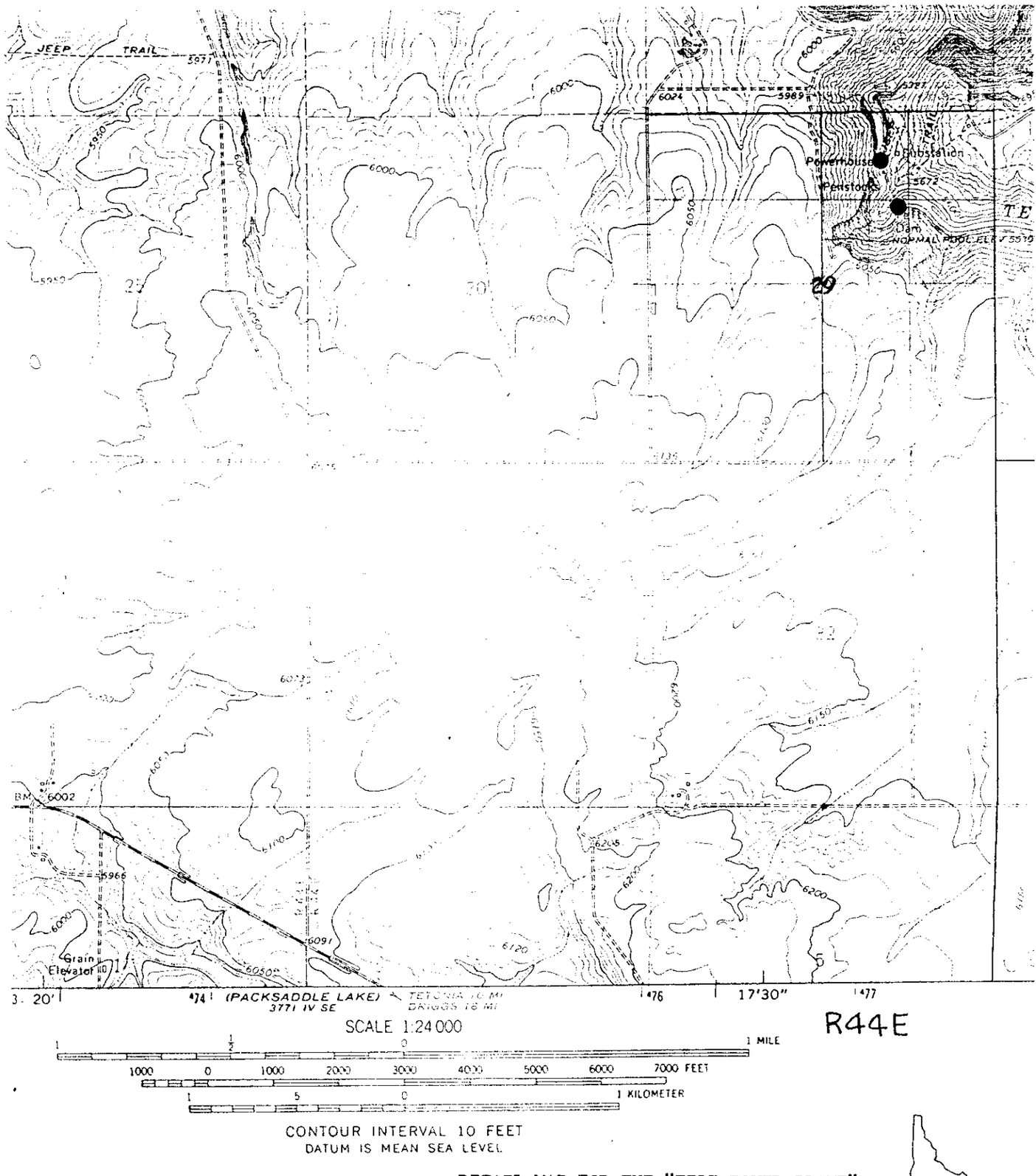
9. a. Who owns the property at the point of diversion Applicant

b. Who owns the land to be irrigated or place of use Applicant

c. If the property is owned by a person other than the applicant, describe the arrangement enabling the applicant to make this filing _____

10. Remarks _____

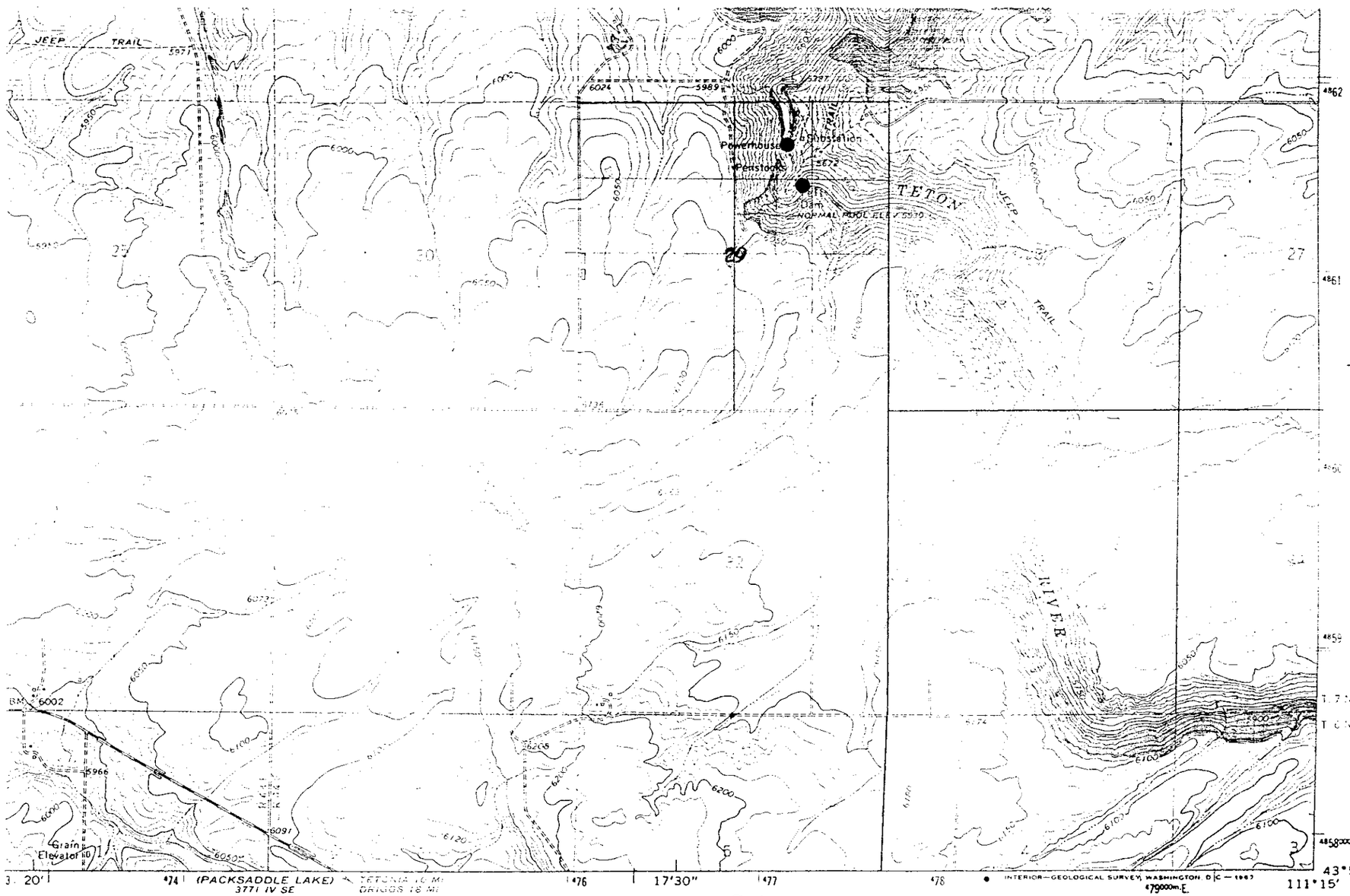
11. Map of proposed project: show clearly the proposed point of diversion, place of use, section number, township and range number.



DETAIL MAP FOR THE "FELT POWER PLANT"

Charles Lee Dawsey
(Applicant)
Assistant Manager

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DETAIL MAP FOR THE "FELT POWER PLANT"

Charles Lee Dawsey
(Applicant)
assistant Manager

ATTACHMENT TO CONDITIONS OF APPROVAL

For Permit No. 22-7351

d. A measuring device and lockable controlling works of a type acceptable to the Department shall be permanently installed and maintained as part of the diverting works.

e. This permit is subject to the provisions of Sections 42-205 through 42-210, Idaho Code, restricting the sale, transfer, assignment, or mortgage of this permit. Failure to comply with these provisions is cause for immediate cancellation of this permit.

f. Water used under this permit if discharged into a natural channel shall meet Idaho Water Quality Standards.

g. The diversion and use of water under this permit and any license subsequently issued is subject to review by the Director on the date(s) of expiration of any license issued by the Federal Energy Regulatory Commission. Upon appropriate findings relative to the interest of the public, the Director may cancel all or any part of the use authorized herein and may revise, delete or add conditions under which the right may be exercised.

h. The water right acquired under this permit for hydropower purposes shall be junior and subordinate to all rights to the use of water, other than hydropower, within the State of Idaho that are initiated later in time than the priority of this permit and shall not give rise to any right or claim against future rights to the use of water, other than hydropower, within the State of Idaho initiated later in time than the priority of this permit.

i. Use of water under this permit shall be non-consumptive.

j. This permit does not constitute Idaho Public Utilities Commission or Federal Energy Regulatory Commission approval that may be required.

k. Use of water under this permit is subject to control by the watermaster of State Water District No. 01, Snake River.

l. A separate stream alteration permit from the IDWR is required for any activity in the stream channel other than construction and/or maintenance of the diversion structure. If your proposed construction or operation involves construction of an outfall or any other work in the stream channel other than a water diversion, you must contact the Department and obtain a Stream Channel Alteration permit prior to the start of construction.

m. Diversion and use of water under this permit is subject to an agreement between permit holder and the Idaho Department of Fish and Game to the extent such agreement covers matters within the jurisdiction of the Department of Water Resources.

Witness my hand this 8th day of May, 1985.

L. Glen Saxton

Chief, Operations Bureau

MICROFILMED

FORM 206
1/81

Ident. No. _____

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
AFFIDAVIT OF RESIDENCY OR QUALIFICATION TO DO BUSINESS IN AND UNDER THE LAWS OF IDAHO

A. Individual Applicant or Individual Members of a Partnership:

I _____ (name) of _____ (city), County of _____, State of Idaho, being duly sworn, do hereby certify that I am a bona fide resident of the State of Idaho.

/s/ _____

Subscribed and sworn to before me this _____ day of _____, 19 ____

/s/ _____

Notary Public

Residence _____

My Commission expires _____

B. Corporation:

I Fall River Rural Electric Coop. Inc. (name) of Ashton (city), County of Fremont, State of Idaho, being first duly sworn, depose and say: That I am the designated registered agent of the Fall River Rural Electric Cooperative, Inc. (Board President) (name of corporation); that as such I am in charge of the registered office of the said corporation as required by Section 30-1-12, *Idaho Code*, at Ashton (city), Idaho, wherein are kept the corporate records required by Section 30-1-52, *Idaho Code:* and that Fall River Rural Electric, Cooperative Inc. (name of corporation) is a corporation qualified to do business in the State of Idaho under the laws of the State of Idaho.

/s/ Gale A. Reed

Subscribed and sworn to before me this 17 day of March, 19 81

/s/ Glen R Myers

Notary Public
Residence Ashton, Idaho

My Commission Expires Oct. 1981

MICROFILMED

m 205
7/81

Ident. No. 21-7277

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
AFFIDAVIT FOR WATER RIGHTS TO BE USED
FOR POWER PURPOSES

RECEIVED
AUG 18 1981
Department of Water Resources

Ownership of Facilities: (To be completed for hydropower projects only) Teton River

The hydropower facility to be developed pursuant to the attached Application for Permit: See attatched sheet for description

(check one)

☒ Will not utilize existing man-made irrigation facilities such as a dam or a canal.

☐ Will utilize existing man-made irrigation facilities such as a dam or a canal, and permission of the owner is documented in an affidavit attached hereto.

☐ Will utilize existing man-made irrigation facilities such as a dam or a canal and the owner of the facilities is the signee of this affidavit.

Calvin H Burnham
Applicant

State of Idaho)
County of Fremont) ss.

On this 14 day of August, 19 81, personally appeared before me the signer(s) of the above instrument, who duly acknowledged to me that he (she) (they) executed the same.

Glen R. Myers
Notary Public residing at

seal

Ashton Ida.

Comm. Exp - 17 Oct 1985

My commission expires:

Oct 17, 1985

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AFFIDAVIT OF PUBLICATION

State of Idaho)
) ss
County of Teton)

I, Anne Hatch
being first duly sworn depose and say that I am the Secretary
of the Teton Valley News, a newspaper as defined by Idaho Codes Annotated, Section 58-106, as amended, and that said newspaper is a weekly newspaper printed and published at Driggs, in Teton County, Idaho, having a general circulation in said county, and that said newspaper has been printed in said county for more that 78 consecutive weeks prior to the first publication of the attached notice, advertisement or publication of

amended application
22-7351

And affiant further says that said attached notice, advertisement or publication, as per clipping attached, was published in said newspaper, in the regular and entire issue thereof, and not in any supplement issure thereof, for 2 consecutive issues thereof; first publication having been made on the 10 day of Jan., 1985 and last publication on the 17 day of Jan., 1985

And affiant further says that at the times herein mentioned said newspaper was made up of at least eight pages of at least five columns each, printed from type matter, of at least sixteen inches deep.

Anne Hatch

Subscribed in my presence and sworn to before me this 17 day of Jan. 19 85

(SEAL) Notary Public for the state of Idaho, residence and postoffice address, Driggs, Idaho.

Ronda Hammon

My Commission expires
9/29, 1986

NOTICE OF AMENDED APPLICATION FOR WATER PERMIT
22-7351

Notice is hereby given that Application for Permit No. 22-7351 in the name of Fall River Rural Electric Cooperative, Inc. was filed for the diversion of 300.0 cfs of water from Teton River tributary to Snake River, with point of diversion within the SW¼NW¼, Sec. 29, T. 7N, R. 44E, B.M., Teton County; to be used from Jan. 1 to Dec. 31 for power purposes within the SW¼NE¼, Sec. 29, T. 7N, R. 44E, B.M.

The applicant now proposes to amend Application No. 22-7351, requesting the point of diversion be changed to within the SW¼NE¼, Sec. 29, T. 7N, R. 44E, B.M., Teton County.

Any protest to the proposed amending of the application must be filed with the Idaho Department of Water Resources, 150 Shoup, Suite 15, Idaho Falls, ID 83402 on or before January 28, 1985.

A. Kenneth Dunn
Director

Published in the Teton Valley News January 10 and 17, 1985.

RECEIVED
JAN 18 1985
Department of Water Resources
Eastern District Office

MICROFILMED

Form 202
3/78

22 7351
Ident. No. _____

VOID - see amended app.

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
APPLICATION FOR PERMIT

To appropriate the public waters of the State of Idaho

1. Name of applicant Fall River Rural Electric Cooperative, Inc. Phone 208-652-7431

   Post office address P.O. Box 617 Ashton Idaho 83420

2. Source of water supply Teton River which is a tributary of Snake River

3. Location of point of diversion is SW ¼ of NW ¼ of Section 29 Township 7N

   Range 44E B.M. Teton County, additional points of diversion if any: _____

4. Water will be used for the following purposes:

   Amount 300 (cfs ~~or acre-feet per annum~~) for Power Product purposes from Jan. 1 to Dec. 31 (both dates inclusive)

   Amount _____ (cfs or acre-feet per annum) for _____ purposes from _____ to _____ (both dates inclusive)

   Amount _____ (cfs or acre-feet per annum) for _____ purposes from _____ to _____ (both dates inclusive)

   Amount _____ (cfs or acre-feet per annum) for _____ purposes from _____ to _____ (both dates inclusive)

5. Total quantity to be appropriated:

   a. 300 cubic feet per second and/or b. _____ acre-feet per annum.

6. Proposed diverting works:

   a. Description of ditches, flumes, pumps, headgates, etc. All facilities are existing and are being used to produce power at Fall River Electric's "Felt Power Plant"

   b. Height of storage dam NA feet, active reservoir capacity NA acre-feet; total reservoir capacity NA acre-feet, materials used in storage dam: Concrete

      Period of year when water will be diverted to storage NA (Month/Day) to NA (Month/Day) inclusive.

   c. Proposed well diameter is NA inches; proposed depth of well is NA feet.

7. Time required for the completion of the works and application of the water to the proposed beneficial use is immediate years *(minimum 1 year – maximum 5 years).*

8. Description of proposed uses: SEE ATTACHED DESCRIPTION

   a. If water is **not** for irrigation:

      (1) Give the place of use of water: NW ¼ of NE ¼ of Section 29 Township 7N

      Range 44E B.M.

      (2) Amount of power to be generated: 1870 horsepower under 80 feet of head.

      (3) List number of each kind of livestock to be watered _____

      (4) Name of municipality to be served _____, or number of families to be supplied with domestic water _____.

      (5) If water is to be used for other purposes describe: _____

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DESCRIPTION OF SECTION #8

The diversion structure is an existing concrete dam approximately 10-feet in height which is presently diverting water into two penstocks which supply water and head to the Fall River Electric "Felt Plant" which is in operation. The diversion dam is further described as follows: NE ¼ SW ¼ NE ¼ of Section 29, Township 7N, Range 44E. The additional 300 cubic feet per second which is requested in this application will be transfered to the existing plant via the two penstocks in operation. The 300 cubic feet per second at an effective head of approximately 80 feet, will allow existing generating facilities in the plant to operate at maximum capacity of 1.4 megawatts, with a yearly output of 9,000 megawatt hours.

Mr. Ray Brown who receives irrigation water between the Felt Power Plant intake and the power plant has recently tapped one of the penstocks and now receives all of his intake water via the penstock. His point of attachment to the penstock, is adjacent to the power house. Fall River R.E.C. has a contract with Mr. Brown which covers his attachment, to the power facility penstock.

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b. If water is for irrigation, indicate acreage in each subdivision in the tabulation below: NA

TWP	RANGE	SEC.	NE¼				NW¼				SW¼				SE¼				TOTALS
			NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	

Total number of acres to be irrigated NA

c. Describe any other water rights used for the same purposes as described above. NA

22-0606, 22-2123, and 22-2126 for power generation.

9. a. Who owns the property at the point of diversion Fall River Rural Electric Cooperative, Inc.

b. Who owns the land to be irrigated or place of use Fall River Rural Electric Cooperative, Inc.

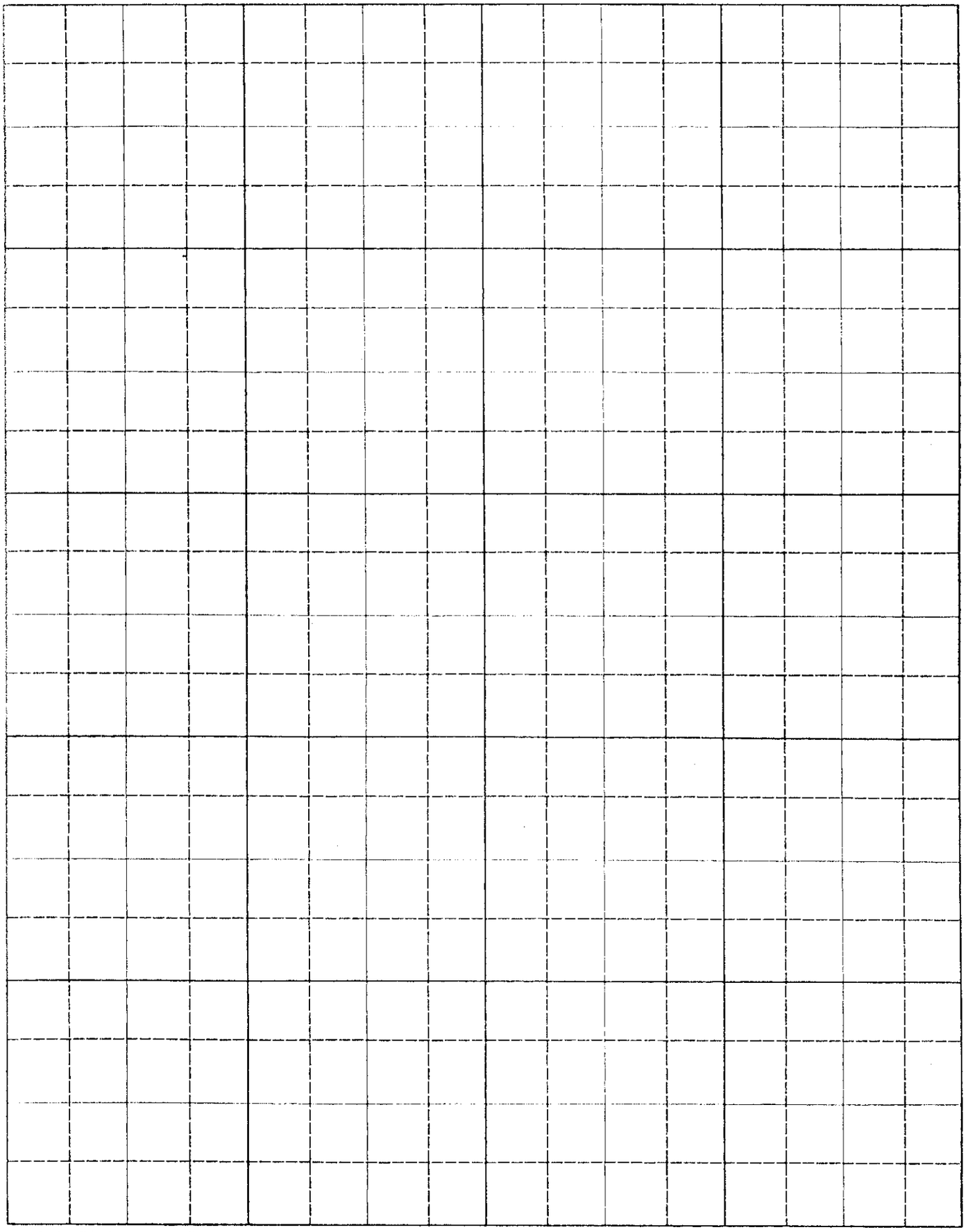
c. If the property is owned by a person other than the applicant, describe the arrangement enabling the applicant to make this filing NA

10. Remarks

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11. Map of proposed project: show clearly the proposed point of diversion, place of use, section number, township and range number.

NA



Scale: 2 inches equal 1 mile.

BE IT KNOWN that the undersigned hereby makes application for permit to appropriate the public waters of the State of Idaho as herein set forth.

Dale A. Reed

(Applicant)

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Proposed Priority 3/18/81

Received by JK Date 18 MARCH 81 Time 2 PM

Preliminary check by SM Fee $ $2,225.00

Receipted by kw Date 3/18/81 #17109

Publication prepared by kw Date 3/27/81

Published in Teton Valley News

Publication dates 4/02 & 4/09/81

Publication approved kw Date 4/20/81

Protests filed by: None

Copies of protests forwarded by

Hearing held by Date

Recommended for approval denial by EMC.

ACTION OF THE DIRECTOR, DEPARTMENT OF WATER RESOURCES

This is to certify that I have examined Application for Permit to appropriate the public waters of the State of Idaho No. 22-7351, and said application is hereby APPROVED.

1. Approval of said application is subject to the following limitations and conditions:

   a. SUBJECT TO ALL PRIOR WATER RIGHTS.

   b. Proof of construction of works and application of water to beneficial use shall be submitted on or before _____, 19____.

   c. The rate of diversion, if water is to be used for irrigation under this permit, when combined with all other water rights for the same land shall not exceed 0.02 cubic feet per second for each acre of land.

   d. Other: A measuring device of a type approved by the Department shall be permanently installed and maintained as part of the diverting works.

   Use of water under this permit is subject to control by the watermaster of State Water District No. 01, Upper Snake River.

   This permit is subject to the provisions of Sections 42-205 through 42-210, Idaho Code, restricting the sale, transfer, assignment, or mortgage of this permit. Failure to comply with these provisions is cause for immediate cancellation of this permit.

MICROFILMED

AFFIDAVIT OF PUBLICATION

State of Idaho)
) ss
County of Teton)

Sharyn Hasling being first duly sworn deposes and say that I am the Secretary of the Teton Valley News, a newspaper as defined by Idaho Codes Annotated, Section 58-106, as amended, and that said newspaper is a weekly newspaper printed and published at Driggs, in Teton County, Idaho, having a general circulation in said county, and that said newspaper has been printed in said county for more that 78 consecutive weeks prior to the first publication of the attached notice, advertisement or publication of

Fall River 22-7351
Charles Parrish 22-7352

And affiant further says that said attached notice, advertisement or publication, as per clipping attached, was published in said newspaper, in the regular and entire issue thereof, and not in any supplement issure thereof, for 2 consecutive issues thereof; first publication having been made on the 2 day of Apr., 19 82 and last publication on the 9 day of April, 19 82.

And affiant further says that at the times herein mentioned said newspaper was made up of at least eight pages of at least five columns each, printed from type matter, of at least sixteen inches deep.

Sharyn Hasling

Subscribed in my presence and sworn to before me this 13th day of April, 1982.

(SEAL) Notary Public for the state of Idaho, residence and postoffice address, Driggs, Idaho.

Mitchell A Nielsen

My Commission expires

July 7, 1982

[redacted] APPLICATION FOR WATER RIGHT

Notice is hereby given that the following application(s) have been submitted for permit to appropriate the public waters of the State of Idaho:

22-7351

FALL RIVER RURAL ELECTRIC COOP. INC.

P.O. Box 617, Ashton, ID 83420.

Source: TETON RIVER tributary to SNAKE RIVER

Date Filed: 03/18/1981.

Amount: 300.00 CFS

Diversion Point: SWNW Sec 29 T 07N R 44E, TETON co.

Use: POWER (300.00 CFS) from 01/01 to 12/31.

Place of Use: NWNE Sec 29 T 07N R 44 E

Diversion Means: FELT POWER PLANT.

22-7352

PARRISH, CHARLES M.

Parrish Lane Ranch, P. O. Box 41, Victor, ID 83455

Source: GROUNDWAT-[redacted]

[redacted]

Diversion Point: SWNE Sec 30 T 04N R 46E NENE Sec 35 T 04N R 45E, TETON Co.

Use: IRRIGATION (6.12 CFS) from 06/01 to 10/01.

Place of Use: SWNE SWNW SENW NESW NWSW NWSE Sec 30 T 04N R 46E SENE NESE SESE Sec 25 T 04N R 45E NWNE SWNE Sec 36 T 04N R 45E FOR 306 ACRES.

Diversion Means: WELL & PUMP.

If issued, the permit(s) will be subject to all prior water rights. Protests against the granting of any permit must be filed with the Director of the Idaho Department of Water Resources, 150 Shoup Ave., Idaho Falls, Idaho 83401 on or before APRIL 20, 1981.

C. STEPHEN ALLRED
Director

Published in the Teton Valley News April 2 & 9, [redacted].

RECEIVED
APR 15
Department of Water Resources
Eastern District Office

MICROFILMED

State of Idaho
DEPARTMENT OF WATER RESOURCES
1301 North Orchard Street, Statehouse Mail, Boise, Idaho 83720-9000
Phone: (208) 327-7900 FAX: (208) 327-7866

CECIL D. ANDRUS
GOVERNOR

R. KEITH HIGGINSON
DIRECTOR

April 11, 1994

FALL RIVER RURAL ELECTRIC COOPERATIVE
PO BOX 830
ASHTON ID 83420

RE: WATER RIGHT NO. 22-07351

Dear Water Right Holder(s):

Enclosed herewith is a copy of the Water Right License issued on the above referenced permit along with a copy of your approved Application for Amendment.

Should you have any questions regarding these documents, please feel free to contact this office.

Sincerely,

JIM JOHNSON
Water Rights Supervisor

JJ:dc

Enclosure

APR 18 1994

State of Idano
DEPARTMENT OF WATER RESOURCES
1301 North Orchard Street, Statehouse Mail, Boise, Idaho 83720-9000
Phone: (208) 327-7900 FAX: (208) 327-7866

CECIL D. ANDRUS
GOVERNOR

R. KEITH HIGGINSON
DIRECTOR

March 10, 1994

RE: Permit Nos. 22-07351, 22-07482A/B, 22-07487

Fall River Rural Electric Cooperative
Box 617
Ashton, ID 83420

Gentlemen:

The above referenced water rights for power generation are being reviewed for licensing. Permit No. 22-07482A pertains to the old power plant, while Permit Nos. 22-07482B, 22-07351 and 22-07487 are for the new power plant.

Capacity of New Plant	520 cfs
Capacity of Old Plant	420 cfs

Below is a compilation of existing rights and those proposed to be licensed to cover these capacities.

New Plant -

22-07351	300.0 cfs	Priority - 04/29/81
22-07482B	40.0 cfs	Priority - 11/12/84
22-07487	180.0 cfs	Priority - 04/09/85
	520.0 cfs	

Old Plant -

22-00606	80.0 cfs	Priority - 10/01/21
22-02123A	70.0 cfs	Priority - 11/17/36
22-02126	150.0 cfs	Priority - 02/02/46
22-02123B	80.0 cfs	Priority - 03/14/48
22-07482A	40.0 cfs	Priority - 11/12/84
	420.0 cfs	

Enclosed is a draft copy of the license proposed to be issued on Permit No. 22-07482A. We ask that you review the proposed license and if you do not concur with the information, let us know within 10 days.

RECEIVED
APR 18 1994

IDAHO DEPARTMENT OF WATER RESOURCES
WATER RIGHT PROFILE REPORT

OWNER CODE	NAME & ADDRESS	PRIORITY DATE	WATER USE	USE PERIOD FROM	USE PERIOD TO	DIVERSION RATE	DIVERSION VOLUME
C	FALL RIVER RURAL ELECTRIC COOPERATIVE PO BOX 617 ASHTON ID 83420	04/29/1981	POWER	01-01	12-31	300.00 CFS	
				TOTAL DIVERSION:		300.00 CFS	

Water Source: TETON RIVER Tributary to: SNAKE RIVER Stage: LICENSE

Point(s) of Diversion Capacity: 520.00 CFS

Point(s) of Diversion: T07N R44E S29 NWNE TETON County

Place of use Legal Description for: POWER

			NE				NW				SW				SE			
			NENE	NWNE	SWNE	SENE	NENW	NWNW	SWNW	SENW	NESW	NWSW	SWSW	SESW	NESE	NWSE	SWSE	SESE
T	R	S	Lt Ac	Lt Ac	Lt Ac	Lt Ac	Lt Ac	Lt Ac	Lt Ac	Lt Ac	Lt Ac	Lt Ac	Lt Ac	Lt Ac	Lt Ac	Lt Ac	Lt Ac	Lt Ac
07N	44E	20															P	

Pou County: TETON

Other Rights: 22-0606, 22-2123, 22-2126.

Other Water Rights Listing Overlapping Place(s) of use:
22-07256

Conditions of Approval:

R23 - The water right confirmed in this license for hydropower purposes
- shall be junior and subordinate to all rights to the use of
- water, other than hydropower, within the State of Idaho that are
- initiated later in time than the priority of this license and
- shall not give rise to any right or claim against any future
- rights to the use of water, other than hydropower, within the
- State of Idaho initiated later in time than the priority of this
- license.

R04 - Use of water under this water right will be regulated by the
- watermaster of State Water District No. 01.

027 - Use of water under this right shall be non-consumptive.

Remarks: A measuring device of a type approved by this Department shall be required at the diversion of the Teton River if determined to be necessary by either the Department of Water Resources or the watermaster of Water District 01.
The diversion and use of water under this license is subject to review by the Director 30 years from the date of issuance. Upon appropriate findings relative to the interest of the public, the Director may cancel all or any part of the use authorized herein and may revise, delete or add condition under which the right may be exercised.
Any loss of water to the Teton River resulting from conveyance and use pursuant to this license shall be mitigated with replacement water.
Use of water under this license shall not cause flucuation in the

amendment - plu

Remarks: flows of the Teton River which impairs the ability of prior right holders to divert their water.
This right is used in connection with Right Nos. 22-7487 and 22-7482B.
This license is subject to revocation pursuant to Section 42-350, Idaho Code.
A flow of 20.0 cfs must bypass the diversion and flow uninterrupted to the powerhouse tailrace, except during the three month period of cutthroat spawning, determined by the Idaho Department of Fish and Game, when the bypass flow must be increased to 50.0 cfs.
The diversion dam is located in the SWNE, S29, T07N, R44E.
The point of dicharge to the Teton River is located in the SESE, S20, T07N, R44E.

Dates:				
	App. Received:	03/18/1981	Priority Date:	04/29/1981
	Proof Due Date:	06/01/1986	Proof Made Date:	04/28/1986
	Exam Made Date:	10/09/1987	Exam Sent to S.O.:	11/30/1987
	Licensed Date:			

Misc: Water District Number: 01 Field Exam Fee: R (Received)

Audit: 11/19/92 SKAGGS

MEMORANDUM

TO: Files Nos. 22-07351, 22-07482 & 22-07487
FROM: Gary Spackman
DATE: November 18, 1992

RE: License Preparation

In reviewing the field examinations for permits nos. 22-07351, 22-07482 and 22-07487, I found that all three permits must be amended prior to licensing. I also followed the examiner's calculation that the priority date must be advanced 42 days.

The beneficial use under this right was examined by a Department examiner and a certified water right examiner. Fall River Rural Electric apparently paid a certified water right examiner, and also paid an examination fee to the Department. As a result, two field examinations have been filed.

A single copy of the beneficial use field report completed by the certified water right examiner is contained in file no. 22-07351. The original copy of the field report completed by the Department is contained in file no. 22-07351, and some original photographs of the old power plant are also contained in file no. 22-07482. The reason the original photographs for the old plant were filed in file no. 22-07482 is because 22-07351 will apply only to the new power plant. Partial copies of the Department exam are also contained in the other files.

After the two examinations were submitted to the Department, deficiencies were identified, and Department staff conducted an auxiliary examination. As part of the auxiliary examination, the water rights were split between the old plant and the new plant. Rights nos. 22-07351, 22-07487 and a portion of 22-07482B were allocated to the new power plant. The other portion of 22-07482A was allocated to the old power plant.

Permit no. 22-07482 authorized year around diversion of 80.0 cfs. Forty cfs was dedicated to the old power plant. The Department examiner recommended that the full amount authorized by 22-07351 and 22-07487 be licensed, and, although 40.0 cfs could be licensed under right no. 22-07482B, only 16.0 cfs would be licensed because any additional flow rate would exceed the capacity of the power plant. After reviewing the recommendation, I propose that the entire 40.0 cfs of 22-07482B be licensed, and the later-in-time priority right, 22-07487, which also authorizes a shortened diversion season, be reduced to reflect the capacity of the system. As a result, 22-07487 will be reduced to 180.0 cfs.

APR 18 1994

TO: ~~Gary~~ File

FROM: QUENTIN

DATE: 5/17/91

SUBJECT: PERMIT NO.'s 22-7487, 7351, + 7482

ATTACHED ARE THE FELT HYDROPOWER PERMITS. I BELIEVE EVERY THING THAT IS REQUIRED FOR THIS PERMIT IS HERE, EXCEPT FOR DOCUMENTATION VERIFYING THE CAPACITY OF THE OLD POWER PLANT. ERIC JERNERS ADDENDUM TO FIELD EXAMS DATED July 18, 1989, SAYS THAT THE CAPACITY IS 420 cfs. Which, WAS OBTAINED FROM A PHONE CONVERSATION WITH BRENT VAN WAGONER. I CONTACTED MR. VAN WAGNER 5/9/91 AND HE SAID THERE IS NO RECORD OF THE CAPACITY. THE TURBINES HAVE BEEN REBUILT AND MODIFIED. THE 420 cfs IS WHAT BONNEVILLE PACIFIC ESTIMATED THE CAPACITY TO BE AND IS BASED ON SOME TESTS THAT THEY DID, BUT THERE IS NO DOCUMENTATION ON THOSE TESTS. ALSO, BOTH THE OLD PLANT AND THE NEW PLANT FEED INTO THE SAME POWER METER. THEREFORE, MAKING IT HARD TO DETERMINE WHAT EACH PLANT IS PUTTING OUT INDIVIDUALLY. I TOLD MR. VAN WAGONER WE WOULD PROBABLY REQUIRE SOME KIND OF MEASUREMENT, NOT JUST TAKING HIS WORD FOR IT.

ANOTHER ITEM THAT WAS NOT INCLUDED IN THE ORIGINAL EXAM AND IS NOT MENTIONED IN ERIC JERNER'S ADDENDUM TO FIELD EXAMS IS THE LEGAL DESCRIPTION OF THE POINT OF DISCHARGE BACK INTO THE RIVER. I HAVE LOCATED THIS FROM LOOKING AT MAPS THAT WERE INCLUDED WITH THE FIELD EXAMINATION. THE POINTS OF DISCHARGE ARE AS FOLLOWS:

OLD - NWNE sec 29 7N 44E

NEW - SESE sec 20 7N 44E.

ALSO, THERE ARE COPIES OF TWO OTHER LICENCES FOR HYDROPOWER THAT ARE FAIRLY RECENT WHICH CAN BE USED AS EXAMPLES.

APR 18 1994

ADDENDUM TO FIELD EXAMS 22-7351, 22-7487, 22-7482A & 22-7482B

As requested, I conducted a follow-up examination of the above referenced field examinations on July 15, 1989. I was accompanied by Zane Larsen, Plant Manager and Keith Wilson of the Department of Water Resources.

The purpose of the visit was to resolve differences between the beneficial use field report I prepared on October 9, 1987 and the report submitted by certified water rights examiner, J.U.B. Engineering. The following summarizes my findings regarding the discrepancies listed in the review sheet compiled by Gary Spackman.

RECEIVED
JUL 26 1989
Department of Water Resources

A) Serial numbers of Generators at new plant:

Unit 1 - #330080
Unit 2 - #330081 (#330083 on IDWR exam is serial no. of brushes)

B) Legal description of Point of Diversion: Recommend 2 (two) points of diversion. First diversion is dam across river and the second is the pipeline intakes. The descriptions are:

Dam - NE1/4 SW1/4 NE1/4 SEC 29 T7N R44E
Intakes - SE1/4 NW1/4 NE1/4 SEC 29 T7N R44E

C) Plant capacities:

New plant - 520 cfs (usually runs at 85% to 90%. Monitor recorded 452cfs on this day)
Old plant - 420 cfs (verified by phone conversation with Bret Van Wagner of Bonneville Pacific Corp.) 208 734-0551

D) Measuring device and lockable works: Per conversations with Ron Carlson, I suggested Bonneville Pacific ask that this condition be dropped from the permits. Since inflow equals outflow, there is no apparent need for the Water Master to measure the inflow into the plants. There is a measuring device (rect. weir) on the dam to measure the minimum flow condition. Bret Van Wagner said he would draft a letter for this request. He is also submitting a description of the measuring device used at the new plant.

E) Recommendations for licensing amounts of water: See attached summary sheet.

Submitted by: Eric Verner, July 18, 1989

APR 18 1994

FELT HYDRO POWER PLANT WATER RIGHTS SUMMARY
FOR BENEFICIAL USE FIELD EXAMINATIONS 22-7351 22-7487 AND 22-7482

(See cream Folder)

GIVEN: New Plant Capacity is 520 cfs → Verified By Pictures of Nameplate - each turbine is rated at 260 cfs
Old Plant Capacity is 420 cfs → only Verified By Ph. Conversation

Right Number		Amount (cfs)	af/yr	Priority	For Plant
**22-7351 ✓		300.0	217,190	3-18-1981	new
**22-7487		204.0	147,689	2-25-1985	new
**22-7482B		16.0	11,583	10-1-1984	new
	TOTAL	520.0			
*22-0606		80.0 ✓		10-1-1921	old
*22-2123A		70.0 ✓		11-17-1936	old
*22-2123B		80.0 ✓		3-14-1948	old
*22-2126		150.0 ✓		2-2-1946	old
**22-7482A		40.0	28,959	10-1-1984	old
	TOTAL	420.0			

* - Existing rights
** - Recommendations for amounts under these permits

P.U.

Old Plant:
NW¼ NE¼ Sec 29 7N 44E

New Plant:
SE¼ SE¼ Sec 20 7N 44E

APR 18 1994

State of Idaho
DEPARTMENT OF WATER RESOURCES
150 Shoup Ave., Suite 15, Idaho Falls, Idaho 83402 - (208) 525-7161

EASTERN REGION

CECIL D. ANDRUS
GOVERNOR
R. KEITH HIGGINSON
DIRECTOR

RECEIVED
AUG 18 1989
Department of Water Resources

August 14, 1989

RE: Felt Hydroelectric Plant Water Water Right Nos.
22-07482, 22-07487, 22-07351, 22-00606, 22-02123A
22-02123B, 22-02126

Mr. Brett Van Wagoner
Bonneville Pacific Services
P.O. Box 2467
Twin Falls, Idaho 83303-2467

Dear Mr. Van Wagoner:

We have reviewed your request to have the measuring device and lockable controlling device requirement removed from the above referenced water right permits. The Department has agreed to defer the imposition of this condition and has modified it as follows:

> The Department of Water Resources permanently retains jurisdiction over this right to impose at any time such measuring device and lockable control works as the Director may deem necessary for the proper delivery of this and other water rights.

Very truly yours,

Ronald D. Carlson

RONALD D. CARLSON
Eastern Regional Manager

RDC:cw

cc: IDWR - State Office

APR 18 1994

From: DWR70::VERNER 5-JUL-1989 11:27
To: DWR03::SPACKMAN,VERNER
Subj: Field exams for 22 51, 22-7482 and 22-7487

Since your initial memo, these exams have made the rounds-from me, to Skip, to Keith, to Skip and now, back to me (what goes around comes around?!). We have finally had a little lull in activety so I hope to visit the site next week. Sorry it's taken so long. I'll let you know as soon as we get the matter resolved.

Eric

RECEIVED
JUL 26 1989
Department of Water Resources

Cfs on 7-15-89:

452 new plant

Brent VanWagner

Twin Falls - Bonneville Pacific Services

208 734-0551

RECEIVED
APR 18 1994

MEMORANDUM

TO: Eric Verner
FROM: Gary Spackman Gary
DATE: June 27, 1989

RE: Field Exams for 22-7351, 22-7482, and 22-7487

Attached is a memo which I sent to you in February 1989 about coordination of your field examination of the above rights with JUB Engineers. Has anything happened since I last communicated with you about this?

RECEIVED

APR 18 1994

MEMORANDUM

TO: Eric Verner
FROM: Gary Spackman Gary
DATE: February 28, 1989
RE: Field examination of the Fall River Rural Electric Cooperative Felt Plant on the Teton River: Water right nos. 22-7351 and 22-7482

Approximately six months ago, I wrote a letter to David Curtis of JUB Engineers regarding the field examination for the Felt project. We received a field examination from both JUB Engineers and from the department. I had identified deficiencies, and indicated in the letter that you would contact him. I don't recall whether I spoke to directly about this, but I noticed that the letter was carbon copied to you.

Could you provide me an update of what is happening with coordination of submittal of the deficiencies. Thank You.

APR 18 1994

State of Idaho
DEPARTMENT OF WATER RESOURCES
1301 North Orchard Street, Statehouse Mail, Boise, Idaho 83720 - (208) 334-7900

CECIL D. ANDRUS
GOVENOR
R. KEITH HIGGINSON
DIRECTOR

August 29, 1988

David L. Curtis, Professional Engineer
JUB Engineers, Inc.
800 Falls Avenue
Twin Falls, ID 83301

RE: Beneficial Use Examination for Permit Nos. 22-7351, 22-7482, & 22-7487: Felt Hydroelectric Project

Dear Mr. Curtis:

The Department has reviewed the field exam submitted by JUB Engineers, Inc. for the Felt Hydroelectric Project. The Department was surprised to receive a field examination from you, because own staff examined the system during October, 1987. We received field examinations from our staff for all of the permits approximately a month-and-a-half prior to receiving your exam. Our records reflect that Fall River Rural Electric Cooperative, Inc. paid a $600 examination fee to the Department for each of the permits. Your employment by Bonneville Pacific Corporation was apparently not coordinated with Fall River Rural Electric Cooperative, Inc.

I am not certain how to reconcile differences between the duplicate examinations. At this point, I am willing to accept both sets of exams, and combine the information contained therein. The following additional information required by the beneficial use examination rules and regulations must be submitted to the Department prior to the final review of the exams:

(1) Rule 5, 1, 5. requires that the point of discharge back into the Teton River be described. By referring to the maps, it appears that the old system discharges in the NW 1/4 NE 1/4, Section 29, Township 7N, Range 44E, and that the new hydropower system discharges into the Teton River in the SE 1/4 SW 1/4, Section 20, Township 7N, Range 44E. This information must be confirmed or corrected.

(2) Rule 5, 1, 7. requires that the field examination explain how conditions of approval on the permit were complied with. In particular, a condition on each of the permits states that a measuring device and lockable controlling works of a type acceptable to the Department shall be permanently installed and maintained as part of the diverting

RECEIVED
APR 18 1994

works. Your examination refers to an insertion flow meter in the penstock with a digital readout. More information must be submitted regarding measurement, and will be discussed further in paragraph 4 below. An express representation of how the conditions of approval have been satisfied must accompany the field examination.

(3) Rule 5, 1, 10. implies that total annual volume must be submitted on all examinations except examinations for municipal and fire protection uses. Total volume should be calculated based on the total annual flow that is available for hydropower production.

(4) Rule 5, 1, 15. requires that the amount of water licensed shall be limited to the smaller of (a) the permitted amount, (b) the amount on which the license exam fee is paid, (c) the capacity of the diversion works, or (d) the amount beneficially used. To determine the amount of water beneficially used, a water water flow measurement must be submitted. The exam states that a flow of 400 cfs was observed on the day of the examination. We would normally use the amount of water measured by the examiner as the maximum amount of water that could be licensed. In this case, another measurement may be necessary to determine the maximum amount of water that can physically be diverted.

(5) Rule 6, 4. states that theoretical diversion rates or theoretical carrying capacities are not acceptable as the rate of diversion except for some diversion systems where an exception is granted by the Director. An exception has not been granted on these permits. Since a measurement is required, the requirements of Rule 6, 2. and 6, 3. must be satisfied. Rule 6, 2. requires that the flow shall be measured with the project works fully in place operating at normal capacity. I interpret normal capacity to mean the capacity of the system during the highest flows. Rule 6, 3. requires, among other things, that the field report describe the method used in measuring, including submittal rating tables and/or calibration information to enable

APR 18 1994

the Department to check the quantity of water measured in each case.

Several differences between the Department's exam and the exam performed by JUB Engineers are evident. The Department's examiner recommended a specific flow rate for each of the permits based on his review of the permits and other existing water rights. Your examination lumps all the permits together, and recommends a total flow rate of 520 cfs without accounting for existing water rights. It also does not account for any new capacity for the old plant.

There is also a difference in the serial nos. on the new turbines. The Department field exam lists the number as 330083, but your exam lists it as 330081. You list two points of diversion, and the Department examination only lists one point of diversion which matches in the SW 1/4 NE 1/4, Section 29, Township 7N, Range 44E. Finally, the flow recommended respectively by the examinations for the old plant do not agree. The Department examiner stated that the flow in the old plant was 420 cfs (which is design capacity) and you stated that the capacity of the old plant is 300 cfs. This discrepancy must be resolved.

Eric Verner of our Eastern Regional Office in Idaho Falls was the person who examined the hydropower facility. I have asked him to visit with you to resolve these questions. He should be contacting you within the next thirty days. Once the additional information is submitted, we can proceed with final review of the permits.

Sincerely,

Gary Spackman

GARY SPACKMAN, Manager
Water Allocation Section

GS:hm

cc: Fall River Electric Cooperative
Eric Verner, Eastern Region

APR 18 1994

FIELD EXAM REVIEW

TO: File 22-7351, 22-7482, 22-7487

FROM: ~~Jim Johnson~~ GARY SPACKMAN

DATE: AUGUST 23, 1988

Review of Compliance with Beneficial Use Rules & Regulations

Rule 3. Authority of Representative

? ___ 3,1. ✓ 3,2.

Rule 4. Qualification

✓ 4,1.

Rule 5. Examination for Beneficial Use

5,1. Field Report:

✓ 5,1,2. ✓ 5,1,3. ✓ 5,1,4. ___ 5,1,5. ___ 5,1,6.

___ 5,1,7. ✓ 5,1,8. ✓ 5,1,9. ___ 5,1,10. ___ 5,1,11.

✓ 5,1,12. ~~___~~ request 5,1,13. ✓ 5,1,14. Need measurement 5,1,15. ? 5,1,16.

N/A 5,1,17.

5,2. Field Report Acceptability:

✓ 5,2,1. ✓ 5,2,2. ✓ 5,2,3. ? 5,2,4.

5,3. General:

✓ 5,3,1. ✓ 5,3,2. ✓ 5,3,3. ✓ 5,3,4. ✓ 5,3,5.

Rule 6. Water Measurement

6,1. Measurement Terminology:

✓ 6,1,1. No volume 6,1,2. No measurement 6,2. No measurement 6,3. not exempt 6,4.

___ 6,5.

Remarks:

Difference in serial #'s on new turbines

1. Dept. field exam - 330083
2. JUB - 330081

Difference in points of diversion

1. Dept. SWNE sec. 29
2. JUB NWNE SWNE Sec. 29

Flows for the two plants don't agree

1. Dept. old - 420 new - 520
2. JUB old - 300 new - 520 OK

total volume

no legal description (old - NWNE Sec. 29, T7N, R44E) (New - SESE, Sec. 20, T7N, R44E)

Measuring device & lockable controlling works

What is an insertion flow meter.

How much to license under each one?

APR 18 1994

Form 219-S.A.
6/86

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

22-7351
Permit No.

Staff Analysis Sheet
for
Beneficial Use Field Report

RECEIVED
NOV 30 1987
Department of Water Resources

A. Prior to Conducting the Exam, the File Contains:

- ☐ Blank Field Report Form
- ☑ Copy of Permit
- ☑ Copies of any Amendments/Orders with conditions of approval
- ☐ Computer Data Proof Report
- ☑ Copy of U.S.G.S. Quad
- ☑ Check for Government Lots. If so, make a copy of Government Plat

Check of P/D index EB 5/20/87 (Initial and date)

Overlap? ☑ yes ☐ no If yes: ☑ copy of exam(s) attached?
Type of Overlap? ☐ Add acres or uses to existing system
☐ Increase rate of flow or volume
☐ Other: Irrigation. See attached

Check of P/U index EB 5/20/87 (Initial and date)

Overlap? ☐ yes ☑ no If yes: ☑ copy of water right(s) attached?
Type of Overlap? ☐ Increase rate of flow or volume
☐ Add P/D's
☐ Increase number of acres within tracts
☐ Other: Irrigation Use

Aerial Photo

Required? ☑ yes ☐ no If yes: ☑ copy attached?

Scheduling Letter sent? _____ (Initial and date)

☐ Appointment made and telephone conversation memo attached

B. After Conducting the Exam, the File Contains:

- ☑ Fully completed and signed Field Report Form
- ☑ Photographs of Point of Diversion and Place of Use
- ☐ Corrected Computer Data Proof Report with recommended license information, and date and signature of examiner.

C. Review and Processing:

Exam Completed 9-Oct-1987 EB (Signature of examiner and date)

Exam Reviewed by Senior Water Resource Agent [illegible] 11-20-87 (Initial and date)

Exam Reviewed by Manager of Regional Office SM 11-23-87 (Initial and date)

Exam Date Entered in Computer _____ (Initial and date)

Exam sent to State Office _____ (Initial and date)

Copy of Staff Analysis Sheet sent to Manager of Regional Office and Original Refiled in White File _____ (Initial and date)

Form 219
6/86

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No. 22-7351

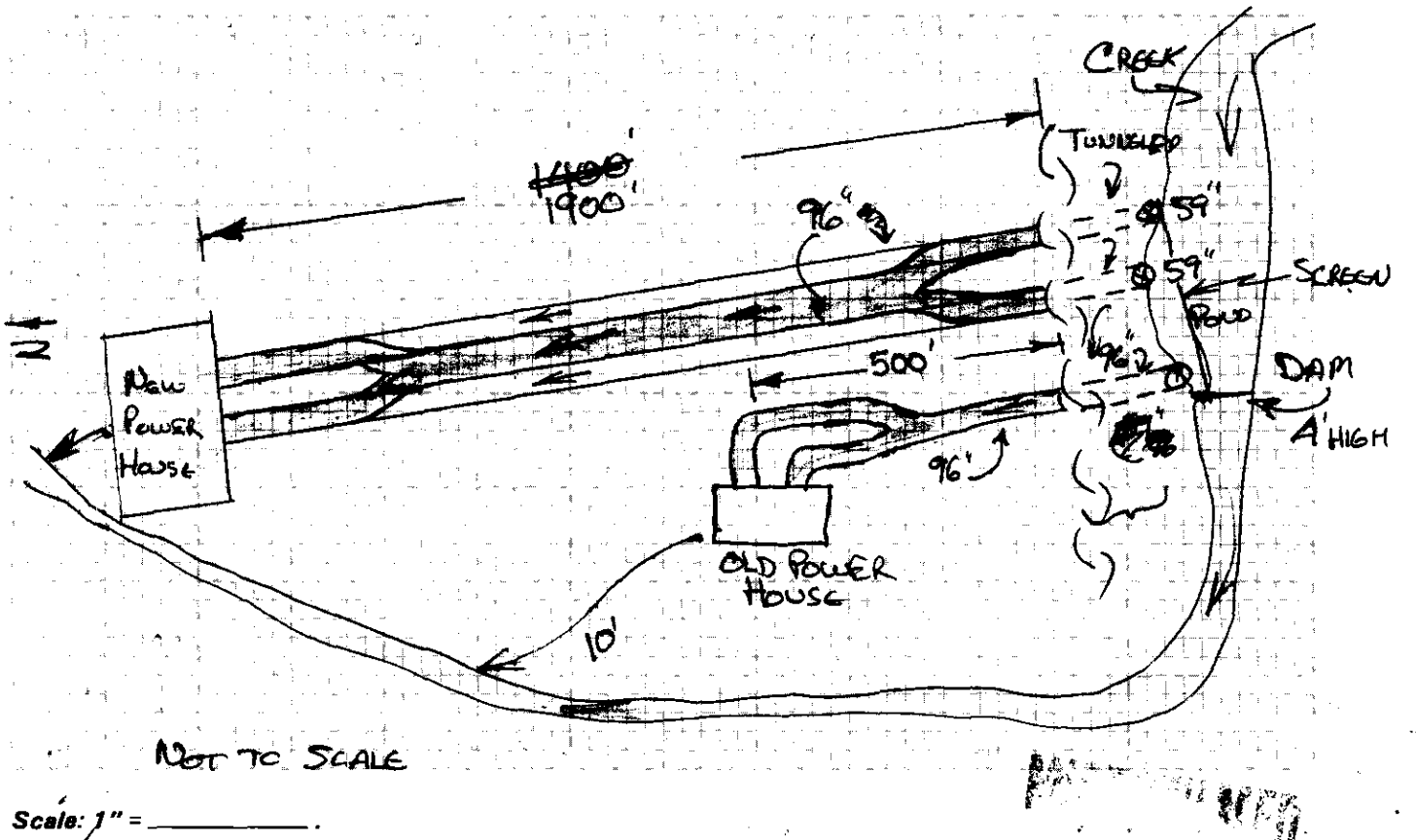
1. Owner: FALL RIVER RURAL ELECTRIC COOP, INC. Phone No. 652-7431
   Current Address: P.O. BOX AE, ASHTON, ID. 83420
2. Accompanied by: ZANE LARSON EXAM. DATE: 9-OCT-1987
   Address: Box 111 Tetonia Phone No. 456-2369
   Relationship to Permit Holder: PLANT MANAGER
3. Source: TETON RIVER tributary to SNAKE RIVER

B. OVERLAP REVIEW

1. Other water rights with same place of use: ~~22-0606, 2123, 2126,~~ 7482A / 7487
   ☐ Copies Attached
2. Other water rights with same point of diversion: 22-0606, 2123, 2126, 7482 N/A 7487
   ☐ Copies Attached ☐ Copies of Field Exam's Attached

C. SYSTEM DESCRIPTION

1. **Diversion System Diagram:** Indicate all major components and distances between components. Indicate weir size/ditch size/pipe i.d. as applicable. ☑ Alternative diagram attached



Scale: 1" = _____.

2. ☑ Copy of U.S.G.S. Quadrangle Attached
   Showing location(s) of point(s) of diversion and place(s) of use (required).
   ☐ Aerial Photo Attached
   (required for irrigation of 10 acres or more)
   ☑ Photo of Diversion and System Attached
   (required for all but single household domestic groundwater, and stockwater.

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System Description (continued)

3. **Narrative:** Description (As operating at time of measurement. Indicate pressure, number of sprinklers, etc.)

THIS SYSTEM INCLUDES WATER USED TO GENERATE ELECTRIC POWER AT 2 SEPARATE POWER PLANTS. THE DIVERSION IS A 4' HIGH DAM THAT DIVERTS WATER INTO 2 LARGE PIPELINES. AT THE DIVERSION, 3 PIPELINES HAVE BEEN TUNNELED THROUGH THE HILLSIDE. THE FIRST PIPE SENDS WATER TO THE ORIGINAL POWERHOUSE (WATER RTS. 22-0606/2123/21262). A NEW POWER PLANT WAS ADDED TO THE SYSTEM UNDER THESE NEW APPLICATIONS. TWO @ 59" PIPES, TUNNELED THROUGH THE HILLSIDE, CONVERGE INTO AN 8' PIPELINE WHICH SENDS WATER TO THE NEW POWER PLANT.

☐ See Remarks on page 4 for continuation

4. JAMES LEFFEL & CO.

Well or Diversion Identification No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
~~PRIMARY~~ TURBINES ↑ No. 1 Generator	Westinghouse	950KW	W1325	360RPM	——
FRANCIS No. 2	Westinghouse	720KW	4099305	360RPM	
TURBINES ↓ Unit 1 NEW PLANT	Ideal Elect.	3840	12	~~SEW~~ 600RPM	330080 / 155' HEAD
Unit 2 NEW PLANT	"	3840	11	600RPM	330083 / 155' HEAD

**Code to correspond with No. on map and aerial photo*

5. **Point(s) of Diversion:**

Ident. No.	Gov't. Lot	¼	¼	¼	Sec.	Twp.	Rge.	County	Method of Determination/Remarks
~~P1~~		NE	SW	NE	29	7N	44E	TETON	USGS / ON SITE

6. **Place(s) of Use:** Indicate Method of Determination _____

Twp.	Rge.	Sec.	NE¼				NW¼				SW¼				SE¼				Totals
			NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	
7N	44E	20																P	
~~7N~~	~~44E~~	~~29~~		P															

Do not use this space

APR 18 1994

Do not use this space

D. FLOW MEASUREMENTS

☑ Additional Data Sheets Attached SEE OVERLAP/UNREDUCING ANALYSIS.

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date

2. **Measurements:**

~~AS DESIGNED~~ AS BUILT DESIGN CAPACITIES FOR TURBINES
NEW PLANT: (UNIT 1) 260 cfs + (UNIT 2) 260 cfs = 520 cfs.
OLD PLANT: (No. 1) 210 cfs + (UNIT 2) 210 cfs = 420 cfs
TOTAL = 940 cfs

E. FLOW CALCULATIONS

☐ Additional Computation Sheets Attached

1. Measured Method:

CAPACITY OF NEW PLANT 520 cfs - @ LIMITED BY PERMIT 300 cfs

2. Alternate Method for Checking Purposes:

F. PUMP EFFICIENCY DATA (Optional)

Discharge Pressure: _____ psi x 2.31 = _____ ft (1); Dynamic pumping level: _____ ft (2)
Total Head: (1) + (2) = _____ (3) ; Flow rate: _____ cfs (4)

Water HP: (3) x (4) ÷ 8.8 = _____ (5)
Meter Input KW: 3.6 x _____ KH x _____ CTR or _____ MULT x _____ PTR x _____ N/ _____ T = _____ (6)
Meter Input HP: (6) x 1.34 = _____ (7)
Panel Input KW: _____ Ave PF x _____ Ave Volts x _____ Ave Ampsx .001732 = _____ (6)
Panel Input HP: (6) x 1.34 = _____ (7) Efficiency: (5)/(7) x 100 = _____ %

G. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$V_{I.R.}$ = (Acres Irrigated) x (Irrigation Requirement) = _____

$V_{D.R.}$ = [Diversion Rate (cfs)] x (Days in Irrigation Season) x 1.9835 = _____

V = Smaller of $V_{I.R.}$ and $V_{D.R.}$ = _____

2. Volume Calculations for Other Uses:

N/A - NON CONSUMPTIVE USE.

APR 18 1994

H. REMARKS AND OVERLAP REVIEW ANALYSIS

THIS RIGHT APPLIES TO NEW POWER PLANT

UNDER NORMAL CONDITIONS THE OLD POWER HOUSE IS ABLE TO RUN DURING HIGH WATER IN THE SPRING. DURING THE REMAINDER OF THE YEAR ANY UNAPPROPRIATED FLOW GOES THROUGH THE NEW POWER PLANT. THE COMBINED CAPACITY OF FLOW W/ BOTH PLANTS ON TO CAPACITY IS 940 cfs. A MINIMUM STREAM FLOW IS ALLOWED THROUGH THE DIVERSION TO SATISFY FISH NEEDS B/T HEADGATES AND POWER PLANT OUTFLOWS.

THERE ARE 2 TURBINES/GENERATORS IN EACH POWER HOUSE. WATER IS RETURNED TO TETON RIVER.

THIS DEVELOPMENT IS KNOWN AS THE "FELT POWER PLANTS"

I. RECOMMENDATIONS

1. Recommended Amounts

Beneficial Use	Period of Use From	Period of Use To	Rate of Diversion Q (cfs)	Annual Volume V (afa)
POWER	1/1	12/31	300.0 cfs	
		Totals:	300.0 cfs	

2. Recommended Amendments

☐ Change P.D. as reflected above ☐ Add P.D. as reflected above ☐ None

☑ Change P.U. as reflected above ☐ Add P.U. as reflected above ☐ Other

J. AUTHENTICATION

Field Examiner's Name: ERIC S. WERNER

Signature: Eric Werner

Certification Date: 23-NOV-1987

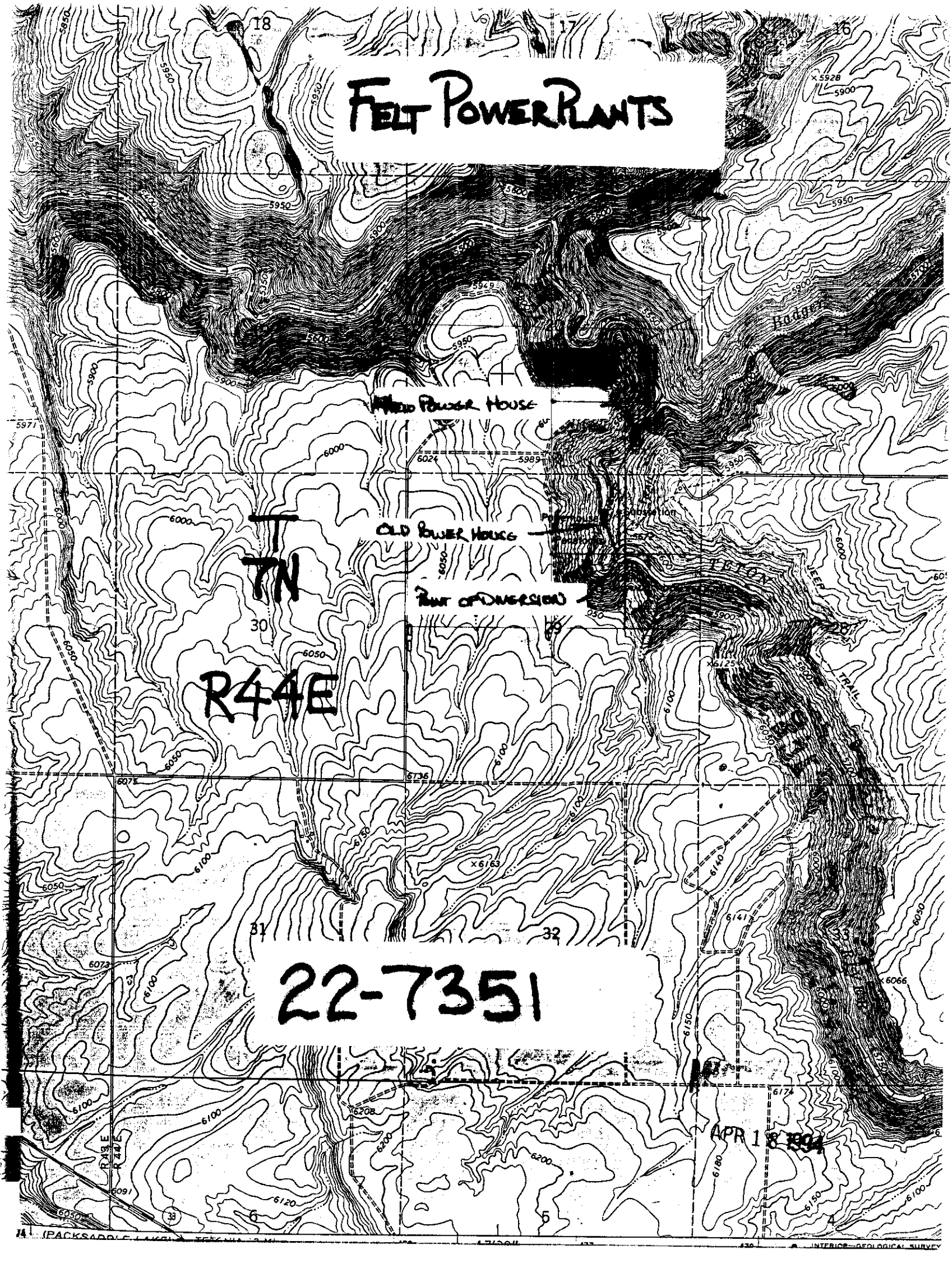
Field Report Preparation Date: NOV-20-1987

Steve McCormick

CONSULTANT SEAL

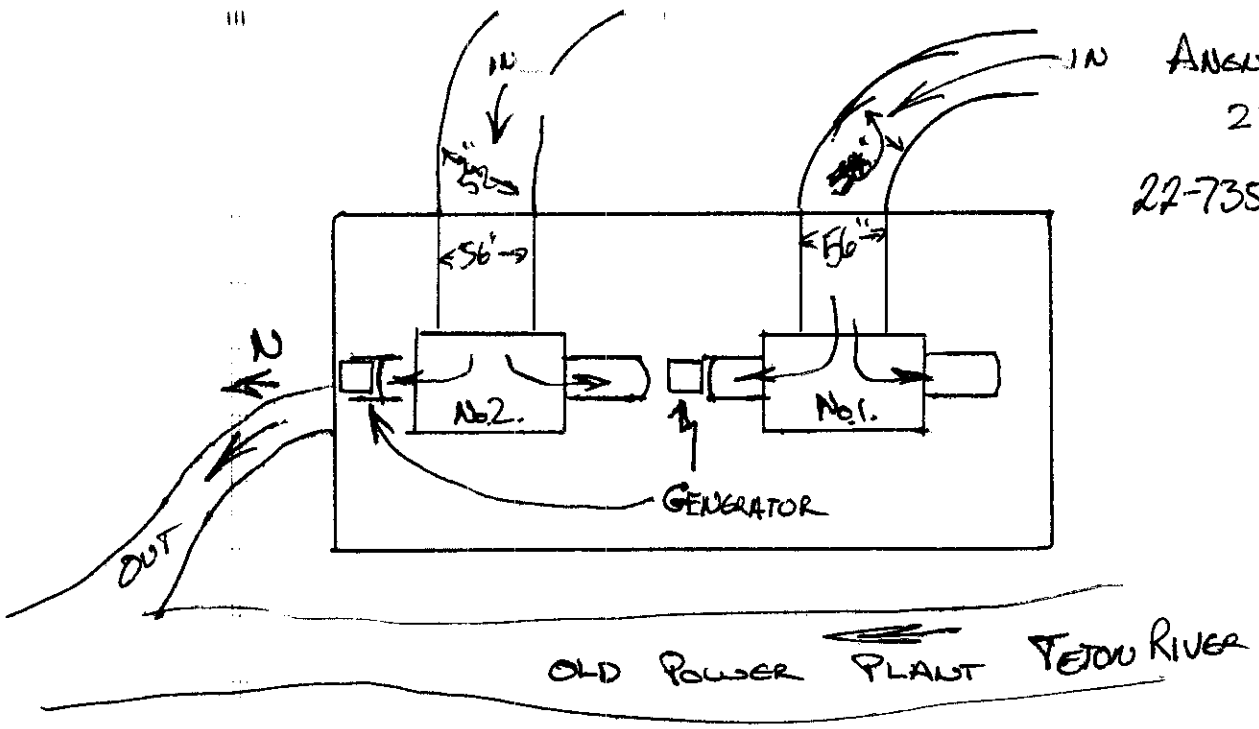
K. Licensing recommendation shall be prepared by an Idaho Department of Water Resources employee on a computer printout attached hereto.

APR 18 199

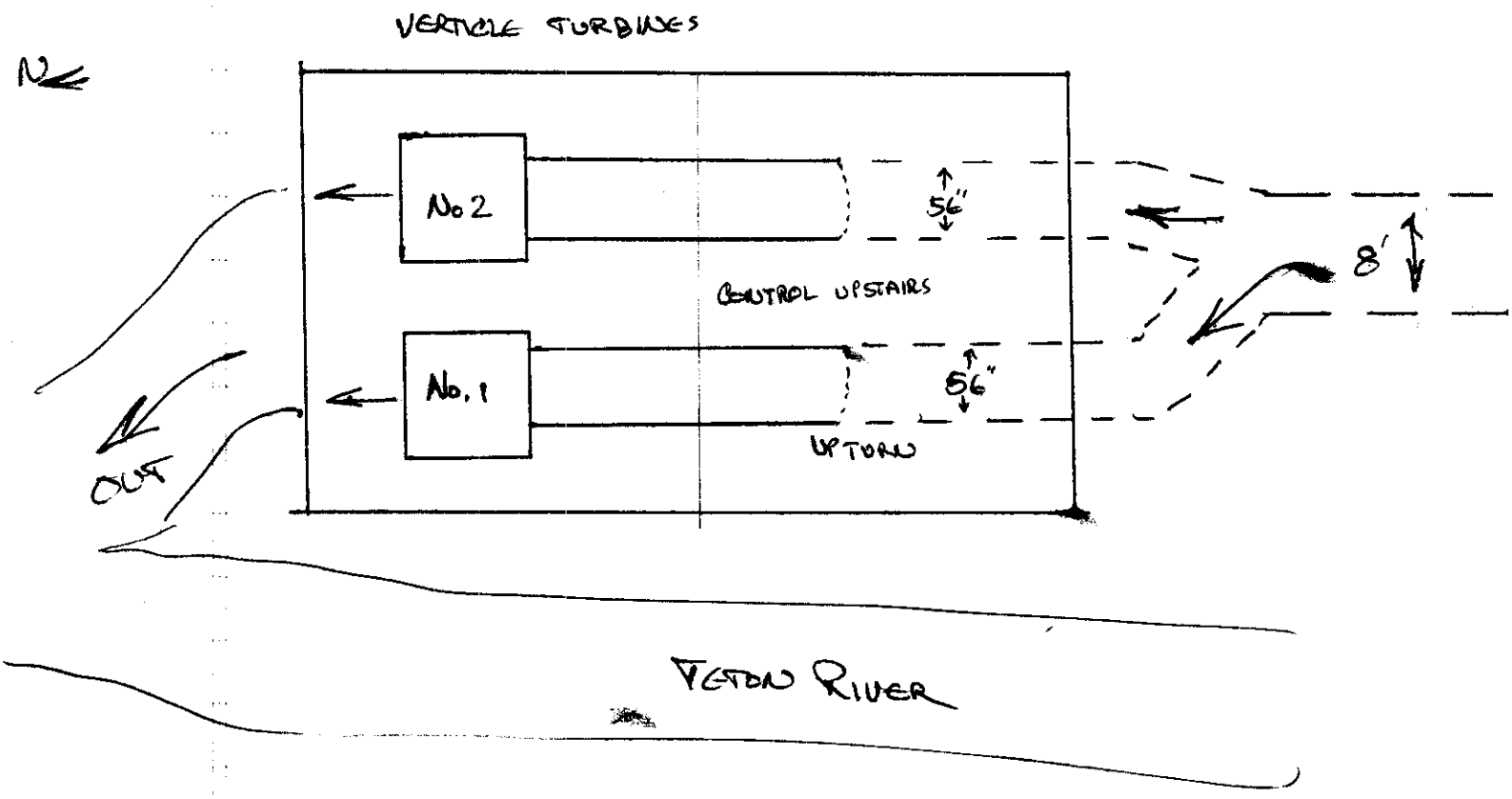

FELT POWER PLANTS
Felt Power House
Old Power House
Power Diversion
T 7N
R44E
22-7351
APR 18 1994
Badger
Teton
Jeep
Trail
18
17
16
30
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28
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33
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4

ADDENDUM TO EXAMS
22-7351

22-7351/7482/7487



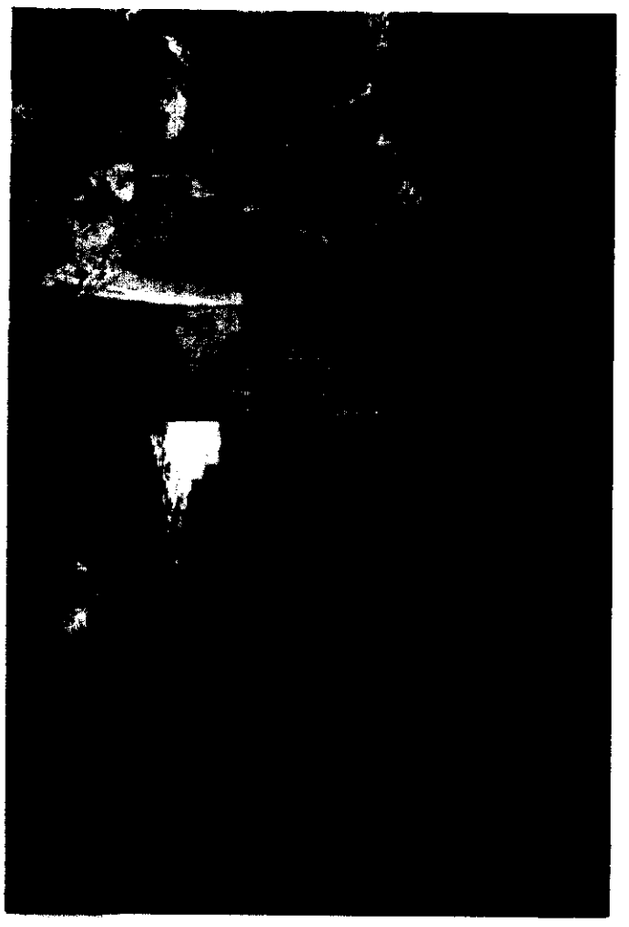
NEW POWER PLANT

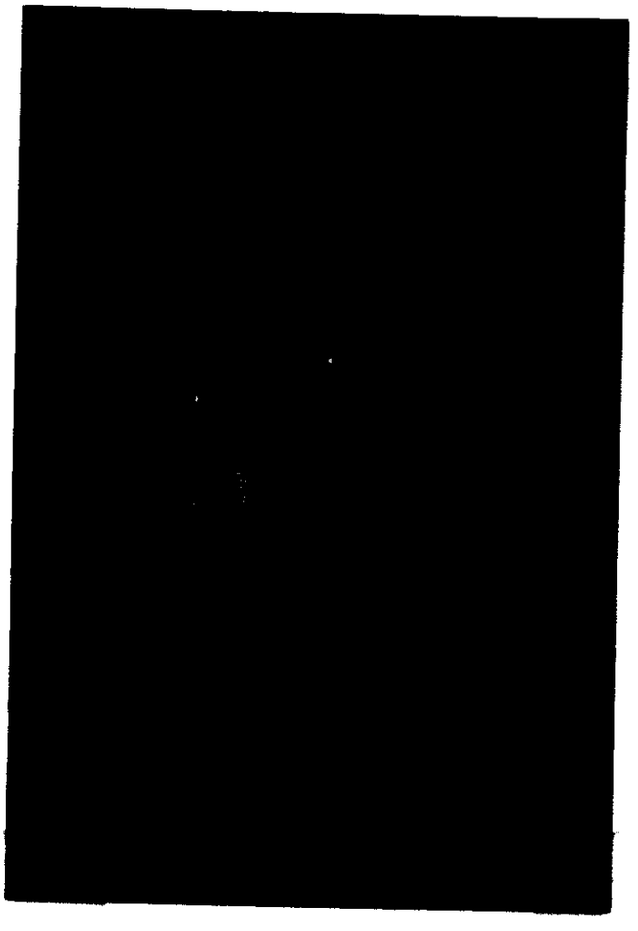


NOT TO SCALE

APR 18 1994









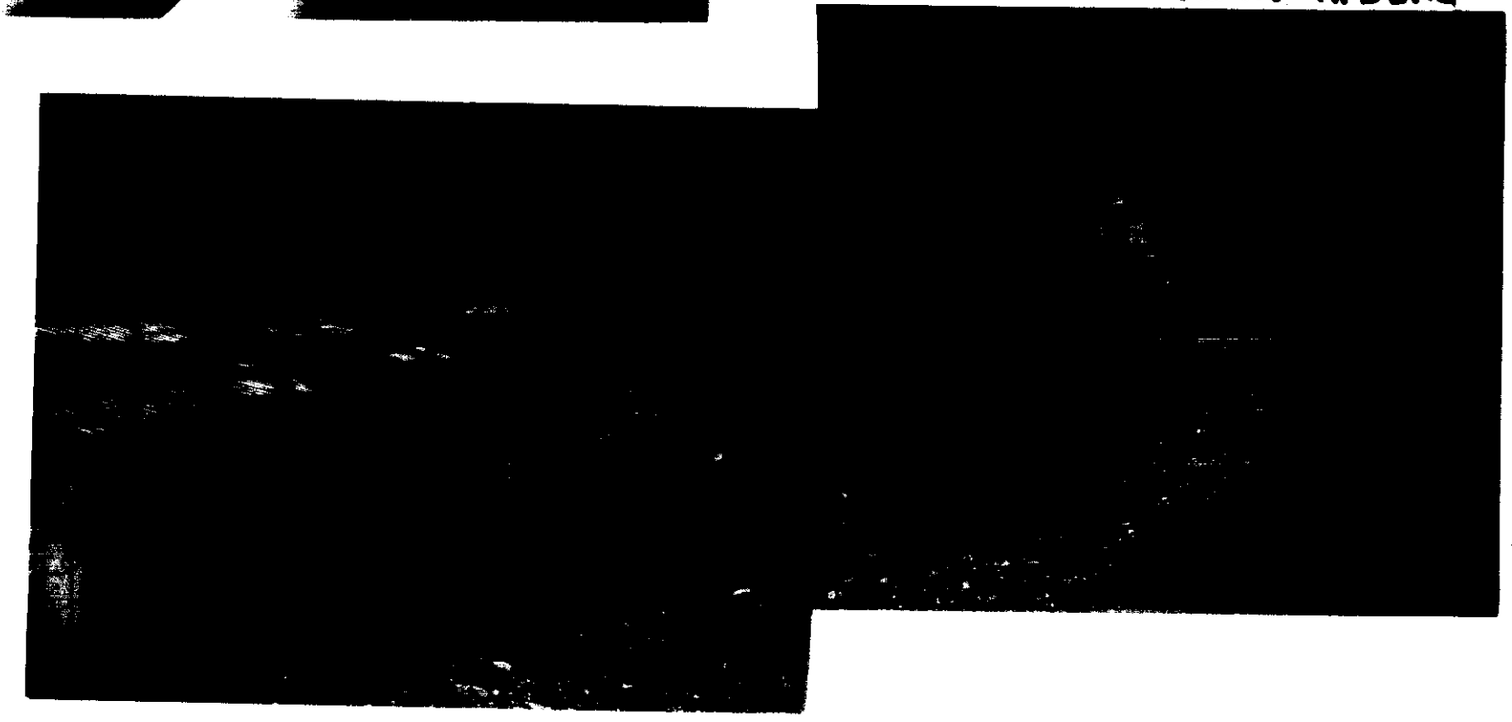
22-7351

APR 18 1994

22-7351



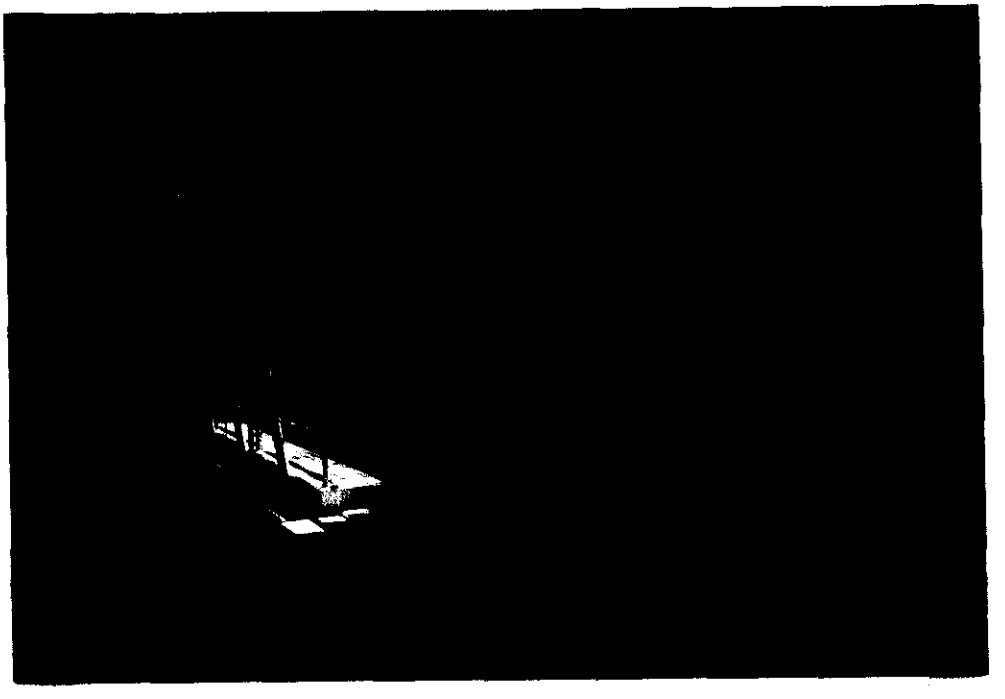
NEW PLANT PIPELINE



92-7351

NEW POWER PLANT





APR 18 1994

22-7351

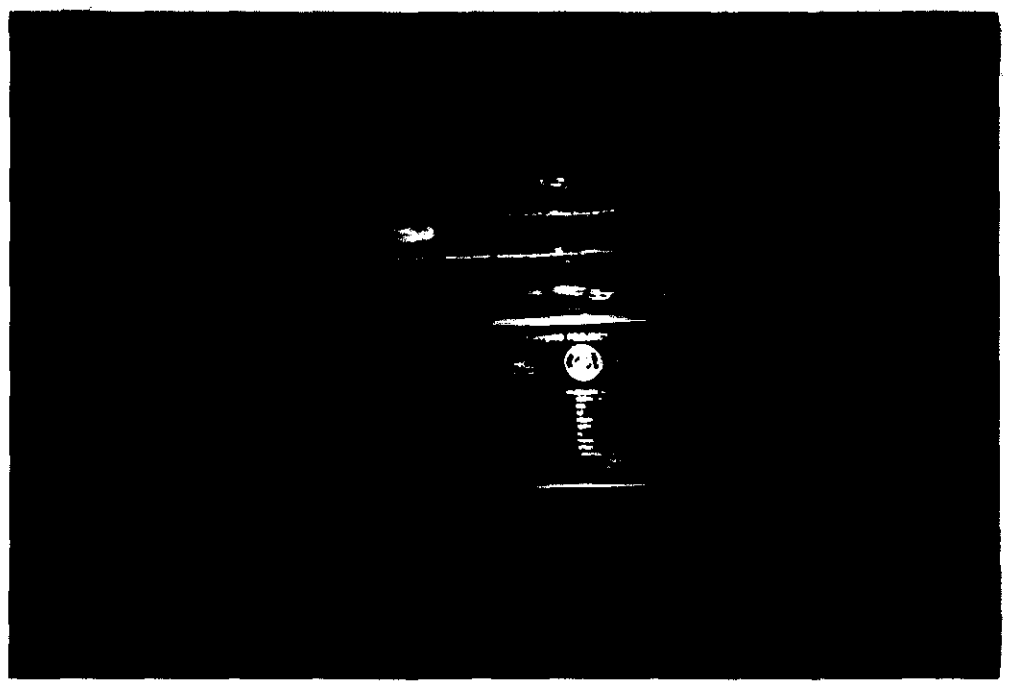
NEW POWER PLANT TURBINES.





APR 1 8 1994





— OVERLAP REVIEW — 22-7351

Field Exams 22-7351/7482/7487

Current Rights through Power Plant:

No.	Amt	Priority
22-0606	~~80 cfs~~ 80 cfs	10-1-1921
22-2123A	70 cfs	11-17-1936
22-2123B	80 cfs	3-14-1948
22-2126	150 cfs	2-2-1946
TOTAL RIGHT:	380 cfs	(OLD PLANT ORIGINAL CAPACITY)

For	Permits			Allow
NEW PLANT OLD PLANT UP-GRADE HIGH WATER BOTH PLANTS.	22-7351	300 cfs	3-18-81	300 cfs
	22-7482	80 cfs	10-1-84	40 cfs A (NEW PLANT 16 cfs B)
	22-7487	204 cfs	2-25-85	204 cfs
	ADDITIONAL REQUESTED:	584 cfs		560 cfs + 380 = 940 cfs

MAX. POSSIBLE TO LICENCE: = ~~964 cfs~~ LIMITED BY CAP. TO 940 cfs
(INCLUDING PREVIOUS RTS.)

CAPACITY OF POWER FACILITY:

OLD PLANT AS BUILT CAPACITY = 420 cfs
NEW PLANT AS BUILT CAPACITY = 520 cfs
TOTAL CAPACITY = 940 cfs

APR 18 1994

ANALYSIS

- PERMIT 22-7351 - LICENSE 300 cfs NEW PLANT POU
- PERMIT 22-7482 - LICENSE — 80 cfs UNDER 'A' FOR OLD PLANT
  16 cfs UNDER 'B' FOR NEW PLANT
- PERMIT 22-7487 - LICENSE 204 cfs NEW PLANT POU

INTER-DEPARTMENT MEMO — 1

DATE 5-11-87

FROM ERIC VERNER

TO FILES

SUBJECT LATE EXAM FEE PAYMENT FOR PERMIT No. 22-7351

FEE DUE DATE: 3-27-87

FEE RECIVED: 5-8-87

Permit should therefore loose 42 days priority.

ESV

SIGNATURE

APR 18 1988

State of Idaho
DEPARTMENT OF WATER RESOURCES
1301 North Orchard Street, Statehouse Mail, Boise, Idaho 83720 - (208) 334-7900

CECIL D. ANDRUS
GOVENOR
R. KEITH HIGGINSON
DIRECTOR

August 29, 1988

David L. Curtis, Professional Engineer
JUB Engineers, Inc.
800 Falls Avenue
Twin Falls, ID 83301

RE: Beneficial Use Examination for Permit Nos. 22-7351, 22-7482, & 22-7487: Felt Hydroelectric Project

Dear Mr. Curtis:

The Department has reviewed the field exam submitted by JUB Engineers, Inc. for the Felt Hydroelectric Project. The Department was surprised to receive a field examination from you, because own staff examined the system during October, 1987. We received field examinations from our staff for all of the permits approximately a month-and-a-half prior to receiving your exam. Our records reflect that Fall River Rural Electric Cooperative, Inc. paid a $600 examination fee to the Department for each of the permits. Your employment by Bonneville Pacific Corporation was apparently not coordinated with Fall River Rural Electric Cooperative, Inc.

I am not certain how to reconcile differences between the duplicate examinations. At this point, I am willing to accept both sets of exams, and combine the information contained therein. The following additional information required by the beneficial use examination rules and regulations must be submitted to the Department prior to the final review of the exams:

(1) Rule 5, 1, 5. requires that the point of discharge back into the Teton River be described. By referring to the maps, it appears that the old system discharges in the NW 1/4 NE 1/4, Section 29, Township 7N, Range 44E, and that the new hydropower system discharges into the Teton River in the SE 1/4 SW 1/4, Section 20, Township 7N, Range 44E. This information must be confirmed or corrected.

(2) Rule 5, 1, 7. requires that the field examination explain how conditions of approval on the permit were complied with. In particular, a condition on each of the permits states that a measuring device and lockable controlling works of a type acceptable to the Department shall be permanently installed and maintained as part of th[illegible]

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APR 18 1994

works. Your examination refers to an insertion flow meter in the penstock with a digital readout. More information must be submitted regarding measurement, and will be discussed further in paragraph 4 below. An express representation of how the conditions of approval have been satisfied must accompany the field examination.

(3) Rule 5, 1, 10. implies that total annual volume must be submitted on all examinations except examinations for municipal and fire protection uses. Total volume should be calculated based on the total annual flow that is available for hydropower production.

(4) Rule 5, 1, 15. requires that the amount of water licensed shall be limited to the smaller of (a) the permitted amount, (b) the amount on which the license exam fee is paid, (c) the capacity of the diversion works, or (d) the amount beneficially used. To determine the amount of water beneficially used, a water water flow measurement must be submitted. The exam states that a flow of 400 cfs was observed on the day of the examination. We would normally use the amount of water measured by the examiner as the maximum amount of water that could be licensed. In this case, another measurement may be necessary to determine the maximum amount of water that can physically be diverted.

(5) Rule 6, 4. states that theoretical diversion rates or theoretical carrying capacities are not acceptable as the rate of diversion except for some diversion systems where an exception is granted by the Director. An exception has not been granted on these permits. Since a measurement is required, the requirements of Rule 6, 2. and 6, 3. must be satisfied. Rule 6, 2. requires that the flow shall be measured with the project works fully in place operating at normal capacity. I interpret normal capacity to mean the capacity of the system during the highest flows. Rule 6, 3. requires, among other things, that the field report describe the method used in measuring, including submittal rating tables and/or calibration information to enable

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APR 18 1994

the Department to check the quantity of water measured in each case.

Several differences between the Department's exam and the exam performed by JUB Engineers are evident. The Department's examiner recommended a specific flow rate for each of the permits based on his review of the permits and other existing water rights. Your examination lumps all the permits together, and recommends a total flow rate of 520 cfs without accounting for existing water rights. It also does not account for any new capacity for the old plant.

There is also a difference in the serial nos. on the new turbines. The Department field exam lists the number as 330083, but your exam lists it as 330081. You list two points of diversion, and the Department examination only lists one point of diversion which matches in the SW 1/4 NE 1/4, Section 29, Township 7N, Range 44E. Finally, the flow recommended respectively by the examinations for the old plant do not agree. The Department examiner stated that the flow in the old plant was 420 cfs (which is design capacity) and you stated that the capacity of the old plant is 300 cfs. This discrepancy must be resolved.

Eric Verner of our Eastern Regional Office in Idaho Falls was the person who examined the hydropower facility. I have asked him to visit with you to resolve these questions. He should be contacting you within the next thirty days. Once the additional information is submitted, we can proceed with final review of the permits.

Sincerely,

Gary Spackman

GARY SPACKMAN, Manager
Water Allocation Section

GS:hm

cc: Fall River Electric Cooperative
Eric Verner, Eastern Region

APR 18

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JAN 30 1988
Department of Water Resources
RECEIVED
1988
Department of Water Resources
Southern Region Office

Form 219
6/86

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No. 22-7351, 22-7482, 22-7487

1. Owner: Fall River Rural Electric Cooperative, Inc. Phone No. 652-7431

   Current Address: P. O. Box 617 Ashton, Idaho 83420

2. Accompanied by: - EXAM. DATE: November 5, 1986

   Address: - Phone No. -

   Relationship to Permit Holder: -

3. Source: Teton River tributary to Snake River

B. OVERLAP REVIEW

1. Other water rights with same place of use: None

   ☐ Copies Attached

2. Other water rights with same point of diversion: 22-0606, 22-2123, 22-2126 (original Felt Hydroelectric Project)

   ☒ Copies Attached ☐ Copies of Field Exam's Attached

C. SYSTEM DESCRIPTION

1. **Diversion System Diagram:** Indicate all major components and distances between components. Indicate weir size/ditch size/pipe i.d. as applicable. ☒ Alternative diagram attached

APR 18 1994

Scale: 1" = _____ .

2. ☒ Copy of U.S.G.S. Quadrangle Attached Showing location(s) of point(s) of diversion and place(s) of use (required).
   ☐ Aerial Photo Attached (required for irrigation of 10 acres or more).
   ☒ Photo of Diversion and System Attached (required for all but single household domestic groundwater, and stockwater.

System Description (continued)

3. **Narrative:** Description (As operating at time of measurement. Indicate pressure, number of sprinklers, etc.)

The Felt Hydroelectric Project consists of an original hydroelectric project constructed in the early 1900's and a newer project constructed during late 1985. Both projects utilize the same dam and diversion/intakes. A concrete weir wall dam spans across the Teton River. There is negligible water storage behind the dam. A bypass radial gate and fish ladder are also present. Just upstream of the dam are three intakes in which the flow enters three tunnels which pass through the hillside. The discharge end of the tunnels are connected to penstocks which lead to the original and the new powerhouse. This layout is shown on the Overall Plan and associated photos.

☑ See Remarks on page 4 for continuation

4.

Well or Diversion Identification No.*	Generator Make	Turbine Hp	Generator Serial No.	Turbine Make	Design Turbine Discharge Size
N/A	Ideal Electric Company	3840 (2865 KW)	330080	Hydro-West Group	260 cfs
N/A	Ideal Electric Company	3840 (2865 KW)	330081	Hydro-West Group	260 cfs

**Code to correspond with No. on map and aerial photo*

5. **Point(s) of Diversion:**

Ident. No.	Gov't. Lot	¼	¼	¼	Sec.	Twp.	Rge.	County	Method of Determination/Remarks
			NW	NE	29	7N	44E	Teton	Diversion at Teton River
			SW	NE	29	7N	44E	Teton	Diversion at Teton River

6. **Place(s) of Use:** Indicate Method of Determination USGS QUAD Map

Twp.	Rge.	Sec.	NE¼				NW¼				SW¼				SE¼				Totals
			NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	
7N	44E	20															X		-

Do not use this space

APR 18 1994

Do not use this space

D. FLOW MEASUREMENTS

☐ Additional Data Sheets Attached

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
See narrative below						

2. **Measurements:**

An insertion flow meter is located in the penstock approximately 100 feet upstream of the powerhouse. The digital readout in the powerhouse indicated a total combined flow of 400 cfs. Pressure gauges within the powerhouse indicated a total pressure of 65 psi (150 feet) while power production was approximately 1930 KW per unit.

E. FLOW CALCULATIONS

☐ Additional Computation Sheets Attached

1. Measured Method: Insertion flowmeter indicated a total flow of 400 cfs through the plant.

2. Alternate Method for Checking Purposes: Certified turbine curves were used to determine flow (See attached turbine curve). Head and power production was determined by a pressure gage and KW output meter located in the powerhouse.

F. PUMP EFFICIENCY DATA (Optional) N/A

Discharge Pressure: _____ psi x 2.31 = _____ ft (1); Dynamic pumping level: _____ ft (2)
Total Head: (1) + (2) = _____ (3) ; Flow rate: _____ cfs (4)

Water HP: (3) x (4) ÷ 8.8 = _____ (5)
Meter Input KW: 3.6 x _____ KH x _____ CTR or _____ MULT x _____ PTR x _____ N/ _____ T = _____ (6)
Meter Input HP: (6) x 1.34 = _____ (7)
Panel Input KW: _____ Ave PF x _____ Ave Volts x _____ Ave Ampsx .001732 = _____ (6)
Panel Input HP: (6) x 1.34 = _____ (7) Efficiency: (5)/(7) x 100 = _____ %

G. VOLUME CALCULATIONS N/A

1. Volume Calculations for Irrigation:

$V_{I.R.}$ = (Acres Irrigated) x (Irrigation Requirement) = _____

$V_{D.R.}$ = [Diversion Rate (cfs)] x (Days in Irrigation Season) x 1.9835 = _____

V = Smaller of $V_{I.R.}$ and $V_{D.R.}$ = _____

2. Volume Calculations for Other Uses:

APR 18 1994

H. REMARKS AND OVERLAP REVIEW ANALYSIS

The water rights to the original power plant are dictated by water right numbers 22-0606, 22-2123, and 22-2126 (for a total flow of 300 cfs). The water rights for the new powerhouse is dictated by permit numbers 22-7351, 22-7482, and 22-7487 (for a total flow of 584 cfs). Water discharges back to the Teton River after passing through the turbines in the respective powerhouses. As a result, there is no consumptive use of water on the project.

The new powerhouse houses two vertical Francis turbines. The nameplate rating (and associated turbine curves) indicate each turbine has a hydraulic capacity of 260 cfs for a total hydraulic capacity of 520 cfs. The plant was not at full capacity during the time of examination due to the lower flows that occur in the Teton River during the month of November. On the basis of the nameplate ratings (and associated turbine curves) it is felt that 520 cfs be recommended for beneficial use.

I. RECOMMENDATIONS

1. Recommended Amounts

Beneficial Use	Period of Use From	Period of Use To	Rate of Diversion Q (cfs)	Annual Volume V (afa)
Power Generation	Jan. 1	Dec. 31	520 cfs	
		Totals:	520 cfs	

2. Recommended Amendments

☒ Change P.D. as reflected above ☐ Add P.D. as reflected above ☐ None

☒ Change P.U. as reflected above ☐ Add P.U. as reflected above ☐ Other

J. AUTHENTICATION

Field Examiner's Name: David L. Curtis

Signature: David L Curtis

Certification Date: 8 Jan 88

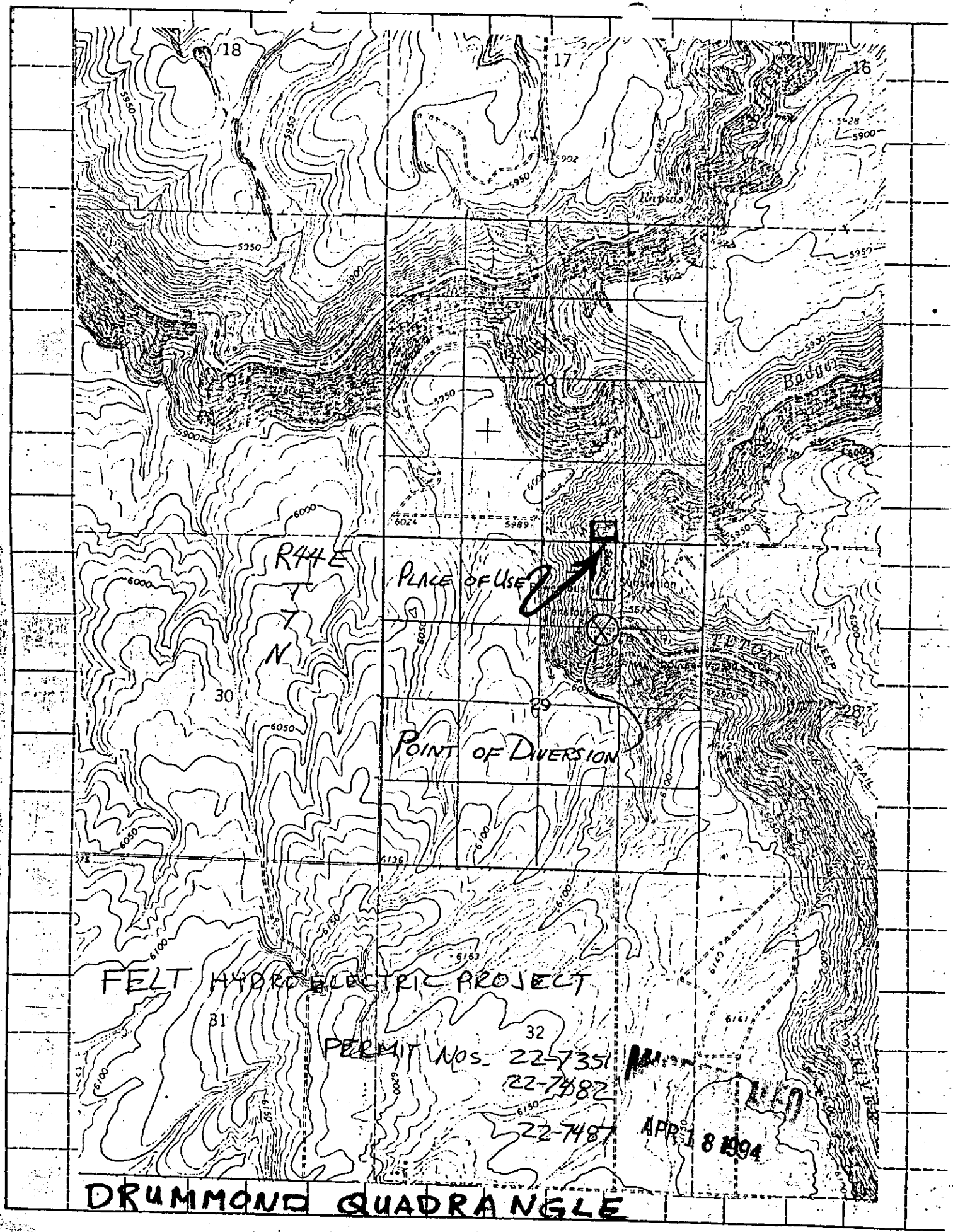
Field Report Preparation Date: 8 Jan 88

REGISTERED PROFESSIONAL ENGINEER 3121 1/18/88 STATE OF IDAHO CONSULTANTS SEAL DAVID L CURTIS

OK 1-26-88

K. Licensing recommendation shall be prepared by an Idaho Department of Water Resources employee on a computer printout attached hereto.

APR 18


18
17
16
Rapids
Badger
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R44E
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N
PLACE OF USE
POINT OF DIVERSION
Substation
Power House
Tailrace
JEEP TRAIL
RIVER
FELT HYDROELECTRIC PROJECT
PERMIT NOS. 22-7351
22-7382
22-7487
APR 18 1994
DRUMMOND QUADRANGLE

ORIGINAL FELT POWERHOUSE
LICENSE No. 22-0606
22-2123
22-2126

APR 18 1994

NEW FELT POWERHOUSE
PERMITS No. 22-7351
22-7482
22-7487

NOTE: EXISTING TUNNELS TO BE ACTIVATED

TO BE RECONDITIONED

TURBINE UNITS

EXISTING POWERHOUSE TO BE ABANDONED

EXISTING PENSTOCK TO BE UTILIZED

FISH LADDER

GATED OUTLET STRUCTURE

OVERFLOW CREST

EXIST. RESERVOIR

EXIST. INTAKE

EXISTING TUNNELS

96" PENSTOCK

EXISTING AERIAL SPAN

PROPOSED AERIAL SPAN

EXISTING SWITCHYARD

PROPOSED AERIAL SPAN

POLE STRUCTURE

TRANSFORMER

SURFACE PENSTOCK

BURIED TRANSMISSION LINE

PROPOSED POWERHOUSE

UNIT 1 (NEW) 5372

TURBINE UNIT 6 (NEW) 5372

PROPOSED SURGE TANK

SLOPE LENGTH = 506
2228

SEE SHEET C-3

SEE SHEET C-2

PROPOSED ROAD

EXISTING BADGER SUBSTATION

TETON RIVER

RIVER

TETON

0 100 200 300
SCALE IN FEET

FALL RIVER RURAL ELECTRIC COOPERATIVE INC

FELT HYDROELECTRIC PROJECT

OVERALL PLAN

Bingham Engineering
Salt Lake City, Utah

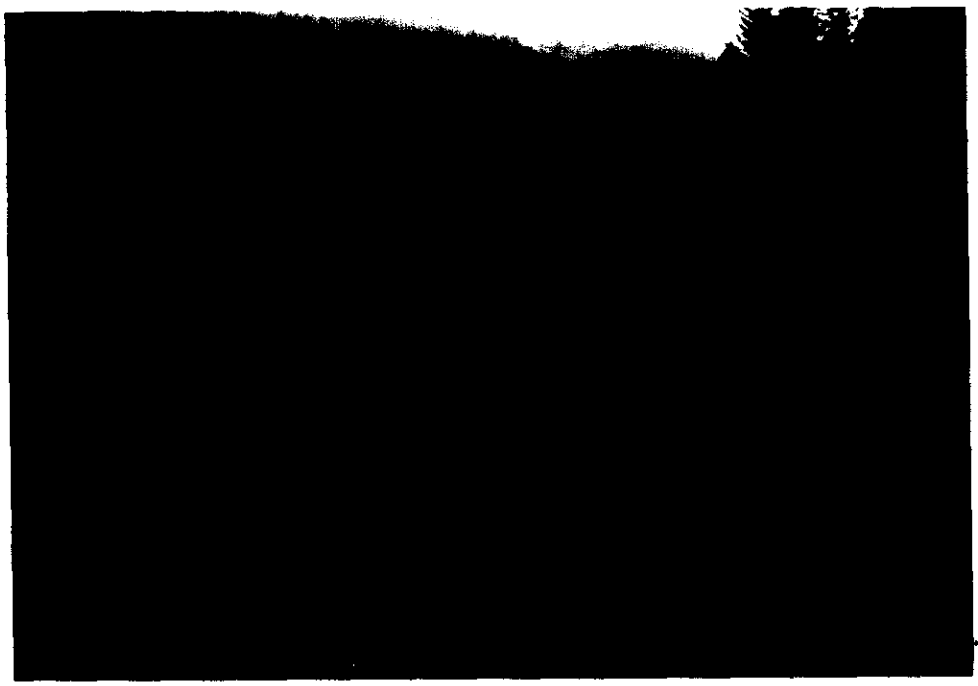
Design KCF
Drawn CLL
Checked KCF
Approved

Date FEB. 1985 Project 602-012 Sht C-1

Permit No. 22-7351
22-7482
22-7487



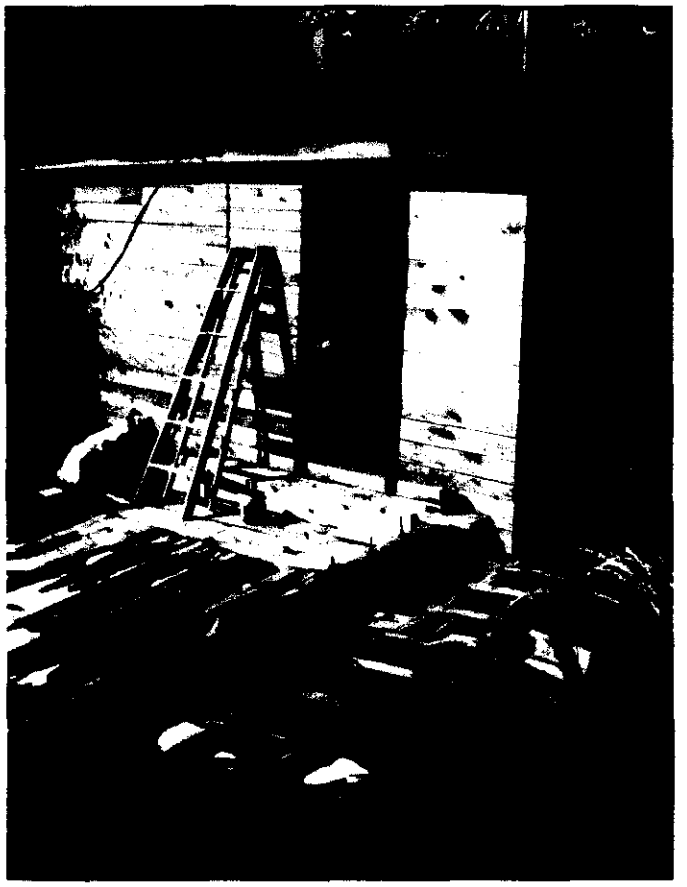
Diversion Dam
(Looking Downstream)
Tunnel intakes are on right side of photo beyond trash racks.
(Note protective building over visible intake.)



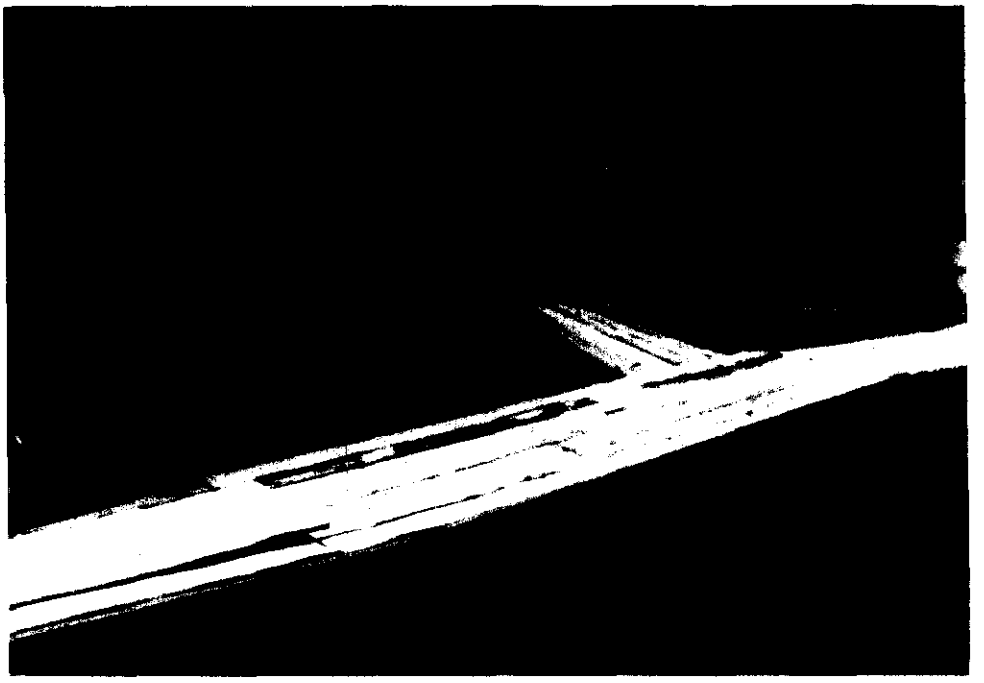
Diversion Dam
(Looking Upstream)

DEC 18 1994

Permit No. 22-7351
22-7482
22-7487



Tunnel Intake Protective Building



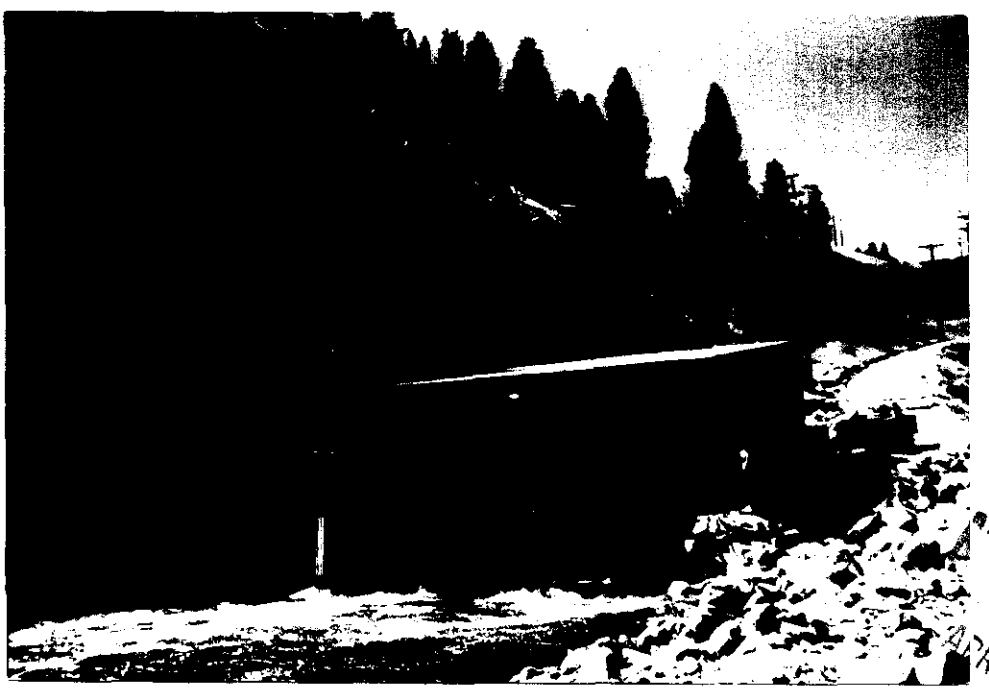
APR 18 1994

Tunnel Intake Protective Building

Permit No. 22-7351
22-7482
22-7487



New Felt Powerhouse
(Looking Downstream)

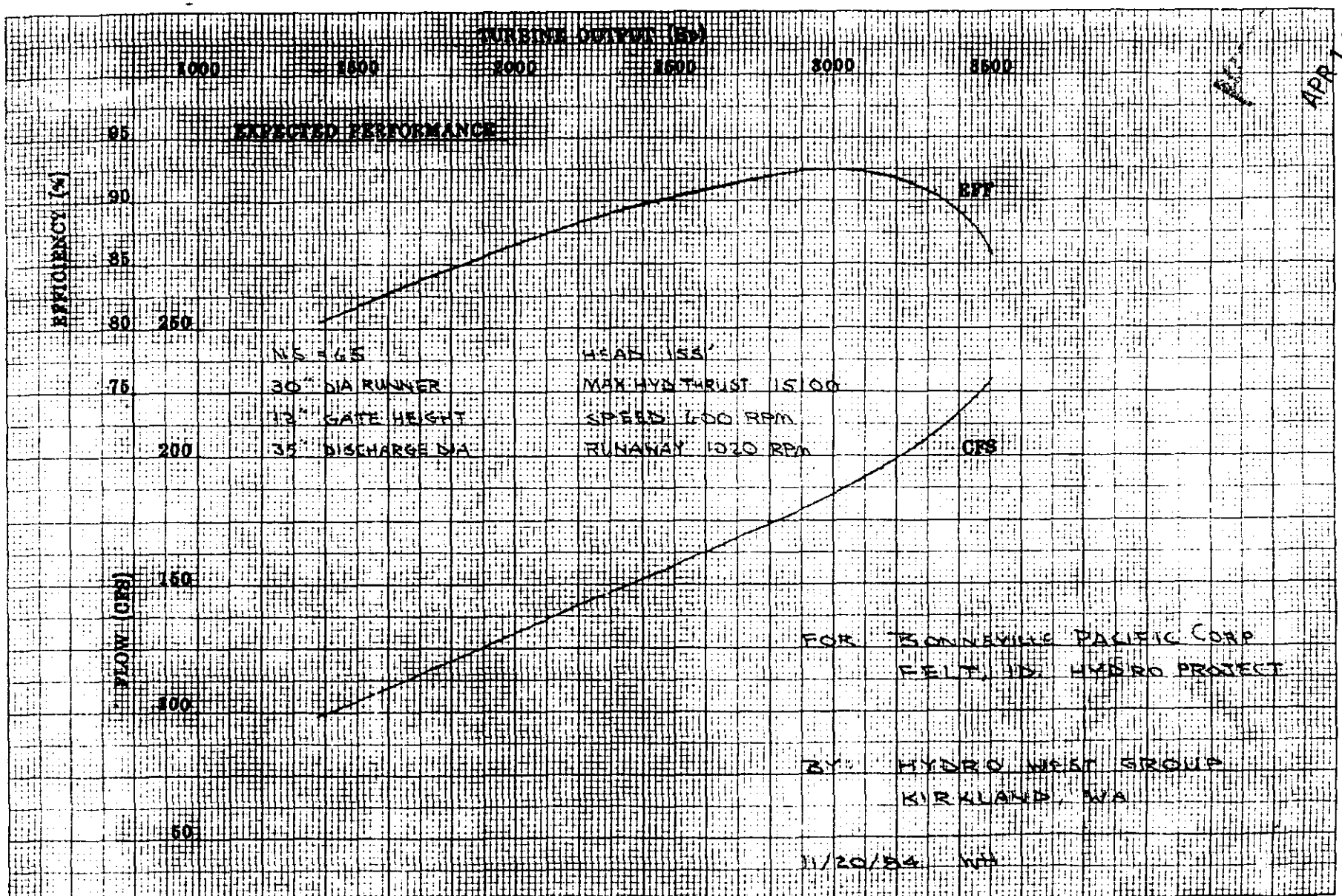


New Felt Powerhouse
(Looking Upstream)

APR 18 1994

PERMIT Nos. 22-7351
22-7482
22-7487

FELT HYDROELECTRIC PROJECT



APR 18 1994

J-U-B ENGINEERS, INC.

800 Falls Avenue • Twin Falls, Idaho 83301 • Telephone (208) 733-2414

RECEIVED
JAN 20 1983
Department of Water Resources

January 18, 1988

RECEIVED
JAN 19 1988
Department of Water Resources
Southern Region Office

Mr. Loren Holmes
State of Idaho
Department of Water Resources
2148 4th Avenue East
Twin Falls, Idaho 83301

Re: Beneficial Use Examination for Permit Nos. 22-7351, 22-7482, & 22-7487-Felt Hydroelectric Project

Dear Mr. Holmes:

This letter serves to formally notify you that J-U-B ENGINEERS, Inc., has been retained by Bonneville Pacific Corporation to conduct the Proof of Beneficial Use field examination for the above noted project and permit.

The beneficial use field report was prepared under the supervision of Mr. David L. Curtis, P.E., of our Boise office who is a certified water rights field examiner. The field examination was conducted on November 5, 1986.

Sincerely yours,

J-U-B ENGINEERS, Inc.

David D. Joerger

David D. Joerger, E.I.T.

DDJ:al

cc: Mr. Orlin V. Clements, Bonneville Pacific Corp.

RECEIVED
APR 18 1994

4/86

For Office Use Only
Fee Received ~~$600.00~~ 600.00
Date 8 May 87
Receipt # 41180
Receipt by ena
Sent to S.O. 5-15-87

RECEIVED
MAY 20 1987
Department of Water Resources

STATE OF IDAHO

DEPARTMENT OF WATER RESOURCES

EXAMINATION FEE INFORMATION

1. Permit No. 22-7351

ONE OF THE FOLLOWING BOXES SHOULD BE MARKED TO DESIGNATE YOUR CHOICE

☒ I choose to have the department make the field examination of this permit; attached is the examination fee. (If this box is marked, complete items 1 thru 8.)

2. Permit Holder: Fall River Rural Electric Coop Inc

3. Post Office Address: P.O. Box AE, Ashton, Idaho 83420

Telephone No. 208-652-7431

4. Source of Water: Teton River

5. Extent of Use:

Domestic _____(No. of households) Stockwater _____(No. and type of stock)

Irrigation _____(acres) Other/Remark Power Production 300CFS

6. Total rate &/or volume for which proof is submitted 300 cfs _____acre-feet

7. Show the date water was first diverted and beneficially used under this permit:

December 1985

8. Person to contact to accompany the department representative during the field examination:

Zane Larsen
(Name)

APR 18 [illegible]

Tetonia, Idaho
(Address)

208-456-2364
(Telephone Number)

☐ I choose to have the field examination conducted by a certified water right examiner. Attached is a statement from the certified examiner I have selected verifying that he has been retained to conduct the examination. (If this box is marked, complete items 1 thru 7.)

5/18/87
Date

Calvin H Buckham
Signature of Permit Holder (and title, if appropriate)

INTER-DEPARTMENT MEMO — 1

DATE 5-11-87

FROM ERIC VERNER

TO FILES

SUBJECT LATE EXAM FEE PAYMENT FOR PERMIT No. 22-7351

RECEIVED
MAY 20 1987
Department of Water Resources

FEE DUE DATE: 3-27-87

FEE RECIVED: 5-8-87

Permit should therefore loose 42 days priority.

EV

SIGNATURE

RECEIVED
APR 18 1994

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
EASTERN REGION

John V. Evans
Governor

A. Kenneth Dunn
Director

150 Shoup — Suite 15
Idaho Falls, Idaho 83402
(208) 525-7161

May 6, 1987

22-7351
FALL RIVER RURAL ELECTRIC COOP. IN
P.O. BOX 617
ASHTON, ID 83420

Dear Permit Holder:

On January 26, 1987 this Department sent you a certified letter explaining the recent statutory changes in the licensing procedure that will pertain to the above referenced permit. The new statutes provide the permit holder with a choice of who will perform the licensing field examination. You may either choose a certified water rights examiner from the private sector, or select the Department. If you elect to have the examination done by the Department there is now a fee for this service based on the amount of water being diverted.

The letter advised you had a period of 60 days to notify the Department of your decision. You were to notify the Department by returning the examination fee information form which accompanied the certified letter and the appropriate examination fee, provided you wanted the Department to do the examination. As indicated in the certified letter, failure to return the form and submit the examination fee, within 60 days would cause the priority of your permit to be advanced.

Our records indicate you did not respond within the 60 day period. Starting with March 27, 1987 the priority of your permit will be advanced one day for each day your response is late. Failure to submit a completed examination fee information form, with the examination fee, by March 27, 1988 will result in the permit being lapsed.

As always our staff is available to assist you or answer questions concerning the above matter. For your convenience, we have enclosed another examination fee information form.

Respectfully submitted,

Ernest Carlsen
Assistant Regional Manager

APR 18 1994

EC/md

Enclosure

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
EASTERN REGION

John V. Evans
Governor

A. Kenneth Dunn

150 Shoup — Suite 15
Idaho Falls, Idaho 83402
(208) 525-7161

22-7351
FALL RIVER RURAL ELECTRIC COOP. IN
P.O. BOX 617
ASHTON, ID 83420

January 26, 1987

CERTIFIED
No. 0013709

EXAMINATION FEE NOTICE

Dear Permit Holder:

Department records show that proof of beneficial use has been submitted for the above-referenced permit, but that a field examination has not yet been conducted to determine the extent of beneficial use of the water for licensing purposes.

House Bill 671 (effective April 4, 1986) enacted by the 1986 Idaho Legislature requires the payment of a fee before this Department can conduct the field examination needed to issue a license confirming use of water under the permit. This letter is notification that the license examination fee is due within sixty (60) days of the date of this letter. The examination fee information sheet (enclosed) must be returned with the fee.

As an alternative to submitting the fee, the Department will accept a field examination report completed by a certified water right examiner from the private sector. If you choose to have the examination done by a certified water right examiner, you need not submit the license examination fee to the Department, but you must within sixty (60) days of the date of this letter return to the Department, the examination fee information sheet showing appropriate information together with a statement from the certified examiner to verify that you have retained a certified examiner to conduct the field examination. If you choose this alternative, a completed field examination report must be submitted within one year of the date of this letter. You cannot later change your decision to use this alternative and submit the fee needed for the Department to conduct the field examination, but you may change to another certified examiner.

Certified water right examiners are licensed engineers, geologists, or land surveyors certified by the Department to conduct water right examinations. The procedure for certifying examiners results from the recently enacted HB 671 and is being developed at this time. A listing of certified water right examiners will be available from this Department when examiners have been certified.

MICROFILMED

APR 18 1994

If your permitted use, in fact, has already been examined by the Department and you have not asked to have the examination repeated, the fee requirement is not applicable to your permit. If you believe this is the case, please contact the Department.

The license examination fee is to be based on the amount of water you indicate you have developed, as listed in item 6 on the examination fee information sheet. The amount of water on which the examination fee is based can be less than the permitted amount, if less water has been diverted and benefically used. The licensed amount of water, however, will not exceed the amount you claim on the examination fee information sheet. The enclosed license examination fee schedule shows a listing of applicable fees.

FAILURE TO SUBMIT WITHIN THE SIXTY (60) DAY PERIOD THE FEE OR THE STATEMENT THAT A CERTIFIED EXAMINER HAS BEEN RETAINED TO MAKE THE FIELD EXAMINATION WILL BE CAUSE TO ADVANCE THE PRIORITY OF THE PERMIT ONE DAY FOR EACH DAY THAT THE FEE SUBMITTAL IS LATE.

FAILURE TO SUBMIT THE FEE OR THE COMPLETED FIELD EXAMINATION REPORT WITHIN A YEAR WILL BE CAUSE TO CONSIDER THE PROOF OF BENEFICIAL USE TO BE INCOMPLETE AND TO LAPSE THE PERMIT.

The attached examination fee information sheet and the fee may be submitted to the following Department office:

Eastern Region
Idaho Dept. of Water Resources
150 Shoup Ave., Suite 15
Idaho Falls, Idaho 83401
Phone: 525-7161

Very Truly Yours,

Ronald D. Carlson
Eastern Regional Manager

Enclosures

APR 18 1994

INTER-DEPARTMENT MEMO — 1

FROM Linda S.

DATE October 3, 1986

TO File No. 22-0606, 22-2123A, 22-2126, 22-7351, 22-7482

SUBJECT

Lease and Assignment Agreement, Felt Project; Partial Assignment of Lease and Assignment Agreement; Third Party Easement and Water Rights Mortgage, Assignment of Rents, Security Agreement and Fixture Filing can all be found in 22-7487.

SIGNATURE

LAW OFFICES

PARSONS, BEHLE & LATIMER

A PROFESSIONAL CORPORATION

185 SOUTH STATE STREET, SUITE 700
POST OFFICE BOX 11898
SALT LAKE CITY, UTAH 84147-0898
TELEPHONE (801) 532-1234
TELECOPIER (801) 532-1234, EXT. 273

1016-16TH STREET, N.W., SUITE 600
WASHINGTON, D.C. 20036
TELEPHONE (202) 659-0862

FORMERLY
DICKSON, ELLIS, PARSONS & McCREA
1882-1959

KEITH E. TAYLOR
JAMES B. LEE
SCOTT M. MATHESON
GORDON L. ROBERTS
F. ROBERT REEDER
WILLIAM L. CRAWFORD
LAWRENCE E. STEVENS
DANIEL M. ALLRED
HOWARD J. MARSH
YAN M. ROSS
DAVID S. DOLOWITZ
KENT W. WINTERHOLLER
BARBARA K. POLICH
RANDY L. DRYER
CHARLES H. THRONSON
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FRANCIS M. WIKSTROM
DAVID W. TUNDERMANN
JAMES M. ELEGANTE
DAVID P. HIRSCHI
VAL R. ANTCZAK
PATRICK J. GARVER
SPENCER E. AUSTIN

C.C. PARSONS
1907-1968

CALVIN A. BEHLE
1947-

OF COUNSEL
GEORGE W. LATIMER

JOHN B. WILSON
ROBERT C. HYDE
CRAIG B. TERRY
DAVID A. ANDERSON
KENT O. ROCHE
PATRICIA J. WINMILL
RANDY M. GRIMSHAW
J. STEPHEN RUSSELL
DANIEL W. HINDERT
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MARK E. RINEHART
MICHAEL L. LARSEN
JONATHAN K. BUTLER
DAVID G. MANGUM
JULIA C. ATTWOOD
DEREK LANGTON
HAL J. POS
W. MARK GAVRE
DAVID J. SMITH
TONI MARIE SUTLIFF

September 22, 1986

RECEIVED
SEP 23 1986
Department of Water Resources

Mr. Norman C. Young
State of Idaho
Department of Water Resources
450 West State Street
Boise, Idaho 83720

Re: Felt Dam Hydroelectric Project, Teton County, Idaho--Leases and Security Interest in Decreed Right 22-0606, Licensed Rights 22-2123A, and 22-2126, and Approved Applications for Permit Nos. 22-7351, 22-7482 and 22-7487

Dear Mr. Young:

Please be advised that pursuant to a Lease and Assignment Agreement dated December 18, 1984, between Fall River Rural Electric Cooperative, Inc. ("Fall River") and Bonneville Pacific Corporation ("Bonneville"), Fall River has leased the above-referenced water rights and permits (collectively the "Water Permits") to Bonneville for use in connection with the Felt Dam Hydroelectric Project, a copy of which Lease and Assignment Agreement is enclosed herewith.

Please be further advised that pursuant to the terms of that certain Partial Assignment of Lease and Assignment Agreement, dated June 14, 1985, between Bonneville and Hydro Valley Development, Inc. ("Hydro Valley"), Bonneville has assigned its leasehold interest in the Water Permits to Hydro Valley, a copy of which Partial Assignment of Lease and Assignment Agreement is enclosed herewith. Both Bonneville and Hydro Valley are Utah corporations qualified to do business in the State of Idaho.

Please be further advised that in connection with obtaining the permanent financing for the Felt Dam Hydroelectric Project by CDM Hydroelectric Company, a Colorado limited partnership in which Bonneville and Hydro Valley are general partners, Hydro Valley is being required by Prudential Interfunding Corp., a Delaware corporation qualified to do business in Idaho ("Prudential"), to assign its leasehold interest in and to the Water Permits to Prudential as security for the permanent financing. This assignment will be made in accordance with the terms of a Third Party Easement and Water Rights Mortgage, Assignment of Rents, Security Agreement and Fixture Filing (the "Security Agreement") a copy of which is enclosed herewith. I will forward to your office a fully-executed copy of the Security Agreement after it is executed.

Pursuant to the provisions of Sections 42-206 and 42-207, Idaho Code, we are requesting the consent and approval of the Idaho Department of Water Resources to the above-described transfers of leasehold interests in the Water Permits. Our review of appropriate Idaho law indicates that the lease of the Water Permits from Fall River to Bonneville and the lease of the Water Permits from Bonneville to Hydro Valley, and the proposed Security Agreement, whereunder the leasehold interest in the Water Permits is assigned to Prudential, are in conformance with Section 42-206 and 42-207, Idaho Code, and we therefore request that the Department of Water Resources consent to and approve such leases and assignments.

The assignment of the Water Permits to First Interstate Bank of Idaho, N.A., as trustee for First Interstate Bank of Utah, N.A. in connection with the construction financing for this project, which was previously approved by the Department of Water Resources on June 28, 1985, will be released. I am enclosing for your reference a copy of the approval letter of the Department of Water Resources dated June 25, 1985.

For your convenience, I have enclosed herewith a form letter which has been approved by the parties to the leases and by Prudential. Please review the enclosed materials and contact me at your earliest convenience with any questions or comments which you may have thereon. If the Department of Water Resources

approves the proposed assignment, please have the enclosed letter or a letter in substantially similar form prepared on Department of Water Resources letterhead and send the original copy executed by the Director or Administrator of the Department of Water Resources to me for use in the loan closing. The loan closing is presently scheduled for September 29, 1986, and we will aprpeciate your processing this application for approval as soon as possible.

Very truly yours,

Craig B. Terry

Craig B. Terry
of and for
PARSONS, BEHLE & LATIMER

CBT:jp
Enclosure
cc: Robert L. Wood

State of Idaho
DEPARTMENT OF WATER RESOURCES
STATE OFFICE, 450 W. State Street, Boise, Idaho

JOHN V. EVANS
Governor

A. KENNETH DUNN
Director

Mailing address:
Statehouse
Boise, Idaho 83720
(208) 334-4440

June 28, 1985

Fall River Rural Electric Cooperative, Inc.
POB AE
Ashton, Idaho 83420
Attention: Manager

Bonneville Pacific Corporation
200 East South Temple, Suite 300
Salt Lake City, Utah 84111
Attention: Robert L. Wood

Hydro Valley Development, Inc.
c/o Bonneville Pacific Corporation
200 East South Temple, Suite 300
Salt Lake City, Utah 84111
Attention: L. Wynn Johnson

First Interstate Bank of Utah, N.A.
180 South Main Street
Salt Lake City, Utah 84101

First Interstate Bank of Idaho, N.A.
700 West Idaho Street, Third Floor
Boise, Idaho 83702

Re: Leases and Mortgage Trust Indenture and Security Agreement Affecting Decreed Right 22-0606, Licensed Rights 22-2123 and 22-2126 and Permit Nos. 22-7351, 22-7487 and 22-7482

Gentlemen:

This office has received a copy of the Lease and Assignment Agreement dated December 18, 1984, whereunder Fall River Rural Electric Cooperative, Inc. ("Fall River") has leased the above-referenced decreed, licensed, and permit water rights (collectively "Water Rights") to Bonneville Pacific Corporation ("Bonneville"), and a copy of the Partial Assignment of Lease and Assignment Agreement dated June 14, 1985, whereunder Bonneville has further leased the Water Rights to Hydro Valley

Development, Inc. ("Hydro Valley"). We have also received the Mortgage Trust Indenture and Security Agreement (the "Security Agreement") whereunder Bonneville and Hydro Valley intend to assign the leasehold interest in the Water Rights to First Interstate Bank of Idaho, N.A., as trustee, and First Interstate Bank of Utah, N.A., as beneficiary, pursuant to obtaining the construction financing for the Felt Dam Hydroelectric Project located in Teton County, Idaho.

Based upon our understanding of the information contained in said Lease and Assignment Agreement, Partial Assignment of Lease and Assignment, and Seucrity Agreement, Fall River has leased the above-referenced Water Rights to Bonneville and Bonneville has further leased said Water Rights to Hydro Valley. It is further our understanding that Bonneville and Hydro Valley are assigning their leasehold interest in the Water Rights to First Interstate Bank of Idaho, N.A., as trustee to have and to hold the same as partial security for the performance by Bonneville and Hydro Valley of certain obligations to First Interstate Bank of Utah, N.A., as beneficiary, in connection with financing the Felt Dam Hydroelectric Project to which the Water Rights relate.

This letter confirms that this office has reviewed the Lease and Assignment Agreement, the Partial Assignment of Lease and Assignment Agreement and the Security Agreement and has found that the same conform to and comply with the requirements of Section 42-206 and 42-207, Idaho Code, and that Bonneville and Hydro Valley are qualified entities to hold leasehold interests in Water Rights in accordance with the laws of the State of Idaho, and that the trustee, First Interstate Bank of Idaho, N.A., is an entity qualified to hold a leasehold interest in said Water Rights as security for the construction financing of the Felt Dam Hydroelectric Project. Therefore, the lease of the Water Rights from Fall River to Bonneville, and subsequent lease of the Water Rights from Bonneville to Hydro Valley, and the subsequent assignment of the leasehold interest in the Water Rights as security for the construction financing as described herein are consented to and approved by the Department of Water Resources, and will be effective as of the date of receipt of the signed Mortgage Trust Indenture and Security Agreement. It is further noted that leasing of the Water Rights and assignment of leasehold interests therein will not change the name of record of the Water Rights.

The future approval of the leasing of the Water Rights and assignment of leasehold interests therein will not constitute a waiver by this Department of the State of Idaho to seek appropriate regulatory actions against the entities identified within this letter for any and all violation of any state statute, rule or regulation, notably with respect to stream channel alterations.

Sincerely,

Norman C. Young

NORMAN C. YOUNG
Administrator
Resources Administration Division

NCY/DRT/ls

State of Idaho
DEPARTMENT OF WATER RESOURCES
STATE OFFICE, 450 W. State Street, Boise, Idaho

JOHN V. EVANS
Governor

A. KENNETH DUNN
Director

Mailing address:
Statehouse
Boise, Idaho 83720
(208) 334-4440

September 29, 1986

Fall River Rural Electric Cooperative, Inc.
POB AE
Ashton, ID 83420
Attention: Manager

Bonneville Pacific Corporation
200 East South Temple, Suite 300
Salt Lake City, UT 84111
Attention: Robert L. Wood

Hydro Valley Development, Inc.
c/o Bonneville Pacific Corporation
200 East South Temple, Suite 300
Salt Lake City, UT 84111
Attention: L. Wynn Johnson

Prudential Interfunding Corp.
Four Embarcadero Center
Suite 2750
San Francisco, CA 94111

Re: Leases and Third Party Easement and Water Rights Mortgage, Assignment of Rents, Security Agreement and Fixture Filing Affecting Decreed Right 22-0606, Licensed Rights 22-2123A and 22-2126 and Permit Nos. 22-7351, 22-7482 and 22-7487

Gentlemen:

This office has received a copy of the Lease and Assignment Agreement dated December 18, 1984, whereunder Fall River Rural Electric Cooperative, Inc. ("Fall River") has leased the above-referenced decreed, licensed, and permitted water rights (collectively "Water Rights") to Bonneville Pacific Corporation ("Bonneville"), and a copy of the Partial Assignment of Lease and Assignment Agreement dated June 14, 1985, whereunder Bonneville has further assigned the leased Water Rights to Hydro Valley Development, Inc. ("Hydro Valley"). We have also received the Third Party Easement and Water Rights Mortgage, Assignment of Rents,

Security Agreement and Fixture Filing (the "Security Agreement") whereunder Hydro Valley intends to mortgage the leasehold interest in the Water Rights to Prudential Interfunding Corp. ("Prudential") to facilitate the permanent financing for Felt Dam Hydroelectric Project located in Teton County, Idaho, which permanent financing is being obtained by CDM Hydroelectric Company ("CDM"), a Colorado limited partnership.

According to the information we have received, the following transactions have occurred: Fall River has leased the above-referenced Water Rights to Bonneville, Bonneville has assigned the lease of said Water Rights to Hydro Valley, and Hydro Valley has assigned the lease of the Water Rights to First Interstate Bank of Idaho, N.A., as trustee for First Interstate Bank of Utah. It is further our understanding that Hydro Valley desires to mortgage the leasehold interest in the Water Rights held by First Interstate Bank of Idaho to Prudential, as partial security for the performance by CDM of certain obligations to Prudential in connection with permanent financing for the Felt Dam Hydroelectric Project to which the Water Rights relate.

This office has reviewed the lease, assignments of lease and mortgage agreements, and understands CDM will be the principle developer of the project. Based on representations made by Craig B. Terry of Parsons, Behle and Latimer during a telephone conversation on September 25, 1986, the participation of CDM in the development is for the purpose of generating capital through the limited partnership mechanism, and Hydro Valley, as a general partner in CDM, is mortgaging a leasehold interest currently held by First Interstate Bank on behalf of CDM by means of a third party mortgage. This arrangement does not appear to be in bad faith, or for purposes of delay or speculation, but rather appears to be an effort to facilitate financing arrangements.

The lease and assignments previously approved by the Department and the proposed third party mortgage comply with the requirements of Sections 42-206 and 42-207, Idaho Code. Bonneville is not currently registered to do business in the State of Idaho, but non-registration is not defective provided that the partial assignment to Hydro Valley is deemed as a complete assignment of the property needed for the proposed development.

Hydro Valley, CDM, and Prudential are qualified to do business in the State of Idaho. Specifically, Prudential is qualified to hold a security interest in the Water Rights.

According to our records, however, First Interstate Bank of Idaho is currently the owner of the Water Rights. The approval of Prudential's proposed security interest is contingent upon the full relinquishment or reassignment of ownership of the leasehold interest by First Interstate Bank of Idaho, N.A., trustee for First Interstate Bank of Utah, N.A.

Please be informed that the lease, assignments of lease, and proposed mortgage of Water Rights will not change the name of the owner of the rights in the records of the Department. The future approval of

the leasing of the Water Rights and assignment of leasehold interests therein will not constitute a waiver by this Department or the State of Idaho of the right to seek appropriate regulatory actions against the entities identified within this letter for any and all violations of any state statute, rule or regulation, notably with respect to stream channel alterations.

Sincerely,

Gary Spackman

GARY SPACKMAN
Supervisor, Water Allocation Section

ls

STATE OF IDAHO

DEPARTMENT OF WATER RESOURCES
Eastern Region

---

150 Shoup, Suite 15
Idaho Falls, Idaho 83402
(208) 525-7161

JUNE 30, 1986

FALL RIVER RURAL ELECTRIC COOP INC.
P.O. BOX 617
ASHTON ID 83420

RE: Permit No. 22-7351

Dear Permit Holder:

We acknowledge receipt of your statement submitted as proof of beneficial use for the above referenced permit.

Before a license can be issued, a field examination must be made by a representative of this department.

A field examiner will contact you to arrange to examine your system.

If you have any questions regarding the field examination, please contact this office by phone at 525-7161 or in person in the third floor State Office Building, 150 Shoup, Idaho Falls, Idaho.

Sincerely,
s/HAROLD W. JONES
Sr. Resource Agent

Form 217
12/84

STATE OF IDAHO

DEPARTMENT OF WATER RESOURCES

PROOF OF BENEFICIAL USE

RECEIVED
APR 23 '86
Department of Water Resources
Regional Office

The Idaho Department of Water Resources will consider this form as a statement that the permit holder(s) has completed development under this permit and that water has been applied according to the provisions of the permit for the beneficial use(s) described below:

Permit No. 22-7351

Name(s) of Permit Holder: Fall River Rural Electric Co -Op Inc.

Post Office Address: P.O. Box 617, Ashton, Idaho 83420

Telephone No. 652-7431

Source of Water: Teton River

Extent of Use:

Domestic _____ (number of households)

Stockwater _____ (number and type of stock)

Irrigation _____ (acres)

Other/Remarks Power Production 300 CFS

Indicate the date water was first diverted and beneficially used under this permit: December 1985

Measuring Device: Required? ☑ Yes ☐ No
Installed? ☑ Yes ☐ No

Flow Measurement Port: Required? ☐ Yes ☐ No
Installed? ☐ Yes ☐ No

Person to contact to accompany the Department representative during the field examination:

MICROFILMED

R. Brett Van Wagoner
(Name)

P.O. Box 23 Tetonia, Idaho
(Address)

456-2808
(Telephone Number)

The above information is a true statement of the extent to which the above numbered permit has been developed.

4/22/86
Date

Charles Lee Dawsey - Assistant Manager
Signature of Permit Holder (and Title, if appropriate)

L-86-54

FALL RIVER RURAL ELECTRIC
COOPERATIVE, INC.

714 MAIN STREET
P.O. BOX AE
ASHTON, IDAHO 83420
208-652-7431

RECEIVED
APR 23 1986
Department of Water Resources
Western Regional Office

April 23, 1986

Mr. Dave Tuthhill, Supervisor
Water Allocation Section
State of Idaho
Department of Water Resources
State Office, 450 W. State Street
Boise, ID 83720

Dear Dave,

Enclosed are copies of "Proof of Beneficial Use" forms for the water permits nos. 22-7482, 22-7351, and 22-7487 which are held by Fall River Electric Cooperative, Inc., Ashton, Idaho. As you may recall, these permits are to appropriate water for the Felt Hydo Project.

If any additional information is required, please contact my office.

Sincerely yours,

Chuck

C.L. Dawsey
Assistant Manager

Enclosures

MICROFILMED

STATE OF IDAHO

DEPARTMENT OF WATER RESOURCES

- -

STATEHOUSE
BOISE, IDAHO 83720
(208) 334-4440
CERTIFIED MAIL
MARCH 31, 1986
138033

FALL RIVER RURAL ELECTRIC COOP. INC.
P.O. BOX 617
ASHTON, ID 83420

PROOF DUE NOTICE

RE: PERMIT NO. 22-7351

DEAR PERMIT HOLDER:

ONE OF THE CONDITIONS OF APPROVAL OF THE ABOVE REFERENCED WATER PERMIT WAS THAT PROOF OF THE EXTENT OF YOUR BENEFICIAL USE MUST BE SUBMITTED TO THIS OFFICE ON OR BEFORE JUNE 1, 1986. (SEE LAST PAGE OF YOUR APPROVED PERMIT OR YOUR LAST APPROVED EXTENSION REQUEST.) ENCLOSED IS A FORM WHICH MAY BE USED TO SUBMIT THE REQUIRED PROOF.

IF YOU HAVE NOT FULLY COMPLETED YOUR PROJECT, AND YOU OR A PREVIOUS OWNER OF THIS PERMIT HAVE NOT RECEIVED A PRIOR EXTENSION OF TIME, YOU MAY REQUEST AN EXTENSION OF TIME IF THE DELAY IS FOR REASONABLE CAUSE AS PROVIDED IN SECTION 42-204, IDAHO CODE. IF YOU HAVE BEEN PREVENTED FROM PROCEEDING BY A GOVERNMENTAL AGENCY OR BY LITIGATION WHICH MIGHT BRING TITLE TO THE WATER IN QUESTION, MORE THAN ONE EXTENSION OF TIME CAN BE GRANTED. AN EXTENSION OF TIME REQUEST FORM IS ENCLOSED FOR YOUR CONVENIENCE.

EITHER A COMPLETED PROOF OF BENEFICIAL USE FORM OR A REQUEST FOR AN EXTENSION OF TIME MUST BE RECEIVED BY THIS DEPARTMENT ON OR BEFORE THE ABOVE DESCRIBED PROOF DUE DATE. IF NEITHER IS RECEIVED, THE DEPARTMENT WILL SEND YOU A LAPSE NOTICE. WITHIN SIXTY (60) DAYS OF THE MAILING OF THE LAPSE NOTICE, THE PERMIT WILL NO LONGER BE OF ANY FORCE NOR EFFECT.

SINCERELY,

RITA FLECK
SECRETARY/RECORDS MANAGER

ENCLOSURES

MICROFILMED

LAW OFFICES OF

PARSONS, BEHLE & LATIMER

A PROFESSIONAL CORPORATION

185 SOUTH STATE STREET, SUITE 700
POST OFFICE BOX 11898
SALT LAKE CITY, UTAH 84147-0898
TELEPHONE (801) 532-1234
TELECOPIER (801) 532-1234, EXT. 273

1801 "K" STREET, N.W., SUITE 1109L
WASHINGTON, D.C. 20006
TELEPHONE (202) 659-0862

FORMERLY
DICKSON, ELLIS, PARSONS & McCREA
1882-1959

KEITH E. TAYLOR
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CALVIN A. BEHLE
1947-

OF COUNSEL
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CONSTANCE K. LUNDBERG
†LYNNE D. FINNEY

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MICHAEL L. LARSEN
JONATHAN K. BUTLER
DAVID G. MANGUM
JULIA C. WEBB
DEREK LANGTON
HAL J. POS

*ADMITTED IN COLORADO ONLY
†ADMITTED IN CALIFORNIA AND DISTRICT OF COLUMBIA ONLY

October 25, 1985

RECEIVED
OCT 29 1985
Department of Water Resources

Robert Shaiman, Esq.
LOHF & BARNHILL, P.C.
900 Cherry Tower
950 South Cherry Street
Denver, Colorado 80222

Re: Effect on Leasehold Interest in Water Rights of Hydro Valley Development, Inc. Serving as General Partner of CDM Hydroelectric Company

Dear Bob:

Your client, Kal Zeff, has requested an opinion from this office concerning the effect, if any, on the holding of the leasehold interest in the Water Rights relating to the Felt Dam Hydroelectric Project by Hydro Valley Development, Inc. should Hydro Valley be named as general partner in CDM Hydroelectric Company.

I have reviewed Idaho statutes relating to holding water rights and have discussed this matter at some length with Phillip J. Rassier, Deputy Attorney General in charge of the Department of Water Resources of the State of Idaho, and have concluded, based upon this research and my conversation with Mr. Rassier that the qualification to hold a leasehold interest in Idaho water rights by Hydro Valley will not be jeopardized due to the fact that it serves as a general partner in CDM Hydroelectric Company.

As you are aware, the Department of Water Resources has already approved the Assignment of the Water Rights from Bonneville Pacific Corporation to Hydro Valley Development,

MICROFILMED

Inc. and has rendered an opinion approving the ownership of the shares of Hydro Valley Development, Inc. by CDM Hydroelectric Company. Neither I nor Mr. Rassier can see any reason why the next step, that of making Hydro Valley Development, Inc. a general partner of CDM Hydroelectric Company, will have any adverse impact on Hydro Valley's ability to hold the leasehold interest in the Water Rights.

Please feel free to contact me with any further comments or questions which you may have regarding this matter.

Very truly yours,

PARSONS, BEHLE & LATIMER

David P. Hirschi

DPH/jml
cc: Robert L. Wood
Phillip J. Rassier, Esq.

MICROFILMED

State of Idaho
DEPARTMENT OF WATER RESOURCES
STATE OFFICE, 450 W. State Street, Boise, Idaho

JOHN V. EVANS
Governor

A. KENNETH DUNN
Director

Mailing address:
Statehouse
Boise, Idaho 83720
(208) 334-4440

September 24, 1985

Mr. David P. Hirschi, Esq.
PARSONS, BEHLE & LATIMER
P.O. Box 11898
Salt Lake City, Utah 84147-0898

RE: Decreed Right 22-0606, Licensed Rights 22-2123 and 22-2126 and Permit Numbers 22-7351, 22-7487 and 22-7482

Dear Mr. Hirschi:

This is in response to your letter of September 18, 1985, in which you ask the department to respond to the propriety of a proposed arrangement for the ownership of the above referenced water rights.

It is our understanding that the water rights are presently owned by Fall River Rural Electric Cooperative, Inc. and leased to Hydro Valley Development, Inc., a Utah corporation qualified to do business in Idaho. Your letter states that CDM Hydroelectric Company, a Colorado limited partnership qualified to do business in Idaho, may purchase all of the issued and outstanding shares of Hydro Valley Development Company. Your letter also states that if the stock purchase occurs, Hydro Valley Development Company will continue to hold the leasehold interest in the water rights and that Hydro Valley will become a wholly owned subsidiary corporation of CDM.

In answer to your question, it is the interpretation of the department that the provisions of Sections 42-206 and 42-207, Idaho Code, will continue to be satisfied even if Hydro Valley becomes a wholly owned subsidiary corporation of CDM Hydroelectric Company, as long as the referenced water permits continue to be held by Hydro Valley Development Company as a foreign corporation qualified to do business in the State of Idaho.

Sincerely,

Norman C. Young

NORMAN C. YOUNG
Administrator
Resources Administration
Division

PJR:NCY:plb

MICROFILMED

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1907-1988

CALVIN A. BEHLE
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*ADMITTED IN COLORADO ONLY
†ADMITTED IN CALIFORNIA AND DISTRICT OF COLUMBIA ONLY

September 18, 1985

RECEIVED
SEP 20 1985
Department of Water Resources

Norman C. Young, Administrator
Resources Administration Division
Department of Water Resources
Statehouse
Boise, Idaho 83720

Re: Decreed Right 22-0606, Licensed Rights 22-2123 and 22-2126 and Permit Numbers 22-7351, 22-7487 and 22-7482

Dear Norm:

I received your letter of September 12, 1985 responding to our request for approval of an assignment of lease of the above referenced rights and permits. While we are disappointed in the opinions rendered relating to our request, we understand your conclusions and we appreciate the thoroughness of your response.

We now request that your department render an opinion relating to the ownership of the shares of Hydro Valley Development Company, the Lessee of the above referenced rights and permits. It is likely that in the near future CDM Hydroelectric Company, a Colorado limited partnership qualified to do business in Idaho will purchase all of the issued and outstanding shares of Hydro Valley Development Company, a Utah corporation qualified to do business in the State of Idaho. It is anticipated that Hydro Valley Development Company will continue to hold the Leasehold Interest in the above referenced water rights and permits and that Hydro Valley Development Company will become a wholly owned subsidiary corporation of CDM Hydroelectric Company. A question has arisen concerning the propriety of this arrangement in light of Sections 42-206 and 42-207 Idaho Code and the analysis of your letter dated September 12, 1985.

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My reading of these Sections would indicate that the Department of Water Resources will not look to the residency of the shareholders of a corporation to determine the ability of a corporation to hold water rights in the State of Idaho. In other words, if the corporation is otherwise qualified to hold water rights under Sections 42-206 and 42-207, the residency and qualification of the shareholders of that corporation are immaterial. If you are in agreement with this analysis, please advise me of the same by return mail.

We appreciate your cooperation in assisting us in this matter.

Very truly yours,

PARSONS, BEHLE & LATIMER

David P. Hirschi

cc: Robert L. Wood
Jim E. Sorenson
Phillip J. Rassier

MICROFILMED

22-7351 ✓
22-7482
22-7487

9-16-85

SEP 18 1985
Department of Water Resources

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Fall River Rural Electric Cooperative, Inc.)
Hydro Valley Development, Inc.) Project No. 5089-004

ORDER APPROVING TRANSFER OF MAJOR LICENSE
(Issued August 30, 1985)

On February 20, 1985, Fall River Rural Electric Cooperative, Inc. (Fall River), Licensee, and Hydro Valley Development, Inc. (Hydro Valley), jointly filed an application for transfer of the major license for the Felt Hydroelectric Project No. 5089 to Fall River and Hydro Valley, as joint licensees.1/ The license for Project No. 5089 was issued on September 9, 1983,2/ and amended on July 8, 1985.3/ The project is located on the Teton River, near Tetonia in Teton County, Idaho.

In order to facilitate the proposed transfer, Fall River and Bonneville Pacific Corporation (BPC), parent corporation of Hydro Valley, have entered into a lease and assignment agreement under which Fall River agrees to lease to BPC all lands, water rights, and other interests necessary for the construction, operation, and maintenance of the project. Fall River would retain fee title in all the leased property and interests, and BPC would own the power facilities to be constructed under the license. The terms of the agreement authorize BPC to assign its interests acquired under the agreement to any other entity for the purpose of facilitating the financing, construction, and operation of the project. By separate agreement, BPC assigned its rights and interests needed to develop the project to its wholly-owned subsidiary, Hydro Valley. By virtue of these agreements, ownership of the project would be shared between Fall River and Hydro Valley, who will be the joint licensees.

1/ Authority to act on this matter is delegated to the Director, Office of Hydropower Licensing, under §375.314 of the Commission's regulations, 49 Fed. Reg. 29,369 (1984)(Errata issued July 27, 1984)(to be codified at 18 C.F.R. §375.314). This order may be appealed to the Commission by any party within 30 days of the issuance date of this order pursuant to Rule 1902, 18 C.F.R. §385.1902 (1984). Filing an appeal and final Commission action on that appeal are prerequisites for filing an application for rehearing as provided in Section 313(a) of the Act. Filing an appeal does not operate as a stay of the effective date of this order or of any other date specified in this order, except as specifically directed by the Commission.

2/ Fall River Rural Electric Cooperative, Inc., 24 FERC ¶62,289 (1983).

3/ Fall River Rural Electric Cooperative, Inc., 32 FERC ¶62,029 (1985).

Hydro Valley is a private corporation organized under the laws of the State of Utah and is qualified to do business in the State of Idaho. Hydro Valley proposes to operate the project in accordance with the license and agrees to accept all the terms and conditions of the license and to be bound thereby as if it were the original licensee.

The Licensee certifies that it has fully complied with the terms of the license and obligates itself to pay all annual charges accrued under the license to the date of transfer.

The purpose of the proposed transfer is to facilitate the financing of the project. Public notice of the filing of the application was given. No protests or motions to intervene have been received.

It is concluded that approval of the transfer of license would be in the public interest. Approval of this transfer is an administrative action, with no authorization for construction or change in project operations other than that previously approved in the license. Consequently, it is not a major Federal action significantly affecting the quality of the human environment.

It is ordered that:

(A) The transfer of the license for Project No. 5089 from Fall River Rural Electric Cooperative, Inc. to Fall River Rural Electric Cooperative, Inc. and Hydro Valley Development, Inc. as joint licensees is approved and made effective as of the first day of the month in which this order is issued, subject to the provisions of Section 9.3 of the Commission's regulations4/ under the Federal Power Act.

(B) Approval of the transfer is contingent upon the transfer of title to the properties under license and delivery of all license instruments to Fall River Rural Electric Cooperative, Inc. and Hydro Valley Development, Inc., as joint licensees who shall be subject to all the conditions of the Federal Power Act and the terms and conditions of the license, as though they were the original licensees. Fall River Rural Electric Cooperative, Inc. shall be responsible for the payment of annual charges that have accrued prior to the date of transfer. Certified copies of all instruments of conveyance shall be submitted to the Commission within 60 days from the date of issuance of this order.

(C) The Licensees failure to file a petition appealing this order to the Commission shall constitute acceptance of this order. In acknowledgement of acceptance of this order and its terms and conditions, it shall be signed by the Licensees and returned to the Commission within 60 days from the date this order is issued.

4/ 18 C.F.R. §9.3 (1984).

DC:RG

(D) This order is final unless a petition appealing it to the Commission is filed within 30 days from the date of its issuance, as provided in Section 385.1902 of the Commission's regulations, 18 C.F.R. §385.1902 (1984).

Kenneth M. Pusateri
Acting Director, Office of
Hydropower Licensing

IN TESTIMONY of its acknowledgment of acceptance of all of the terms and conditions of this order, Hydro Valley Development, Inc., this _____ day of _____, 19____, has caused its corporate name to be signed hereto by _____, its _____ President, and its corporate seal to be affixed hereto and attested by _____ its _____ Secretary, pursuant to a resolution of its Board of Directors duly adopted on the _____ day of _____ 19____, a certified copy of the record of which is attached hereto.

By_____
President

Attest:

_____
Secretary

(Executed in quadruplicate)

MICROFILMED

Project No. 5089-004

IN TESTIMONY of its acknowledgment of acceptance of all of the terms and conditions of this order, Fall River Rural Electric Cooperative, Inc., this _____ day of _____, 19____, has caused its corporate name to be signed hereto by _____, its _____ President, and its corporate seal to be affixed hereto and attested by _____ its _____ Secretary, pursuant to a resolution of its Board of Directors duly adopted on the _____ day of _____ 19____, a certified copy of the record of which is attached hereto.

By_____
President

Attest:

_____
Secretary

(Executed in quadruplicate)

State of Idaho
DEPARTMENT OF WATER RESOURCES
STATE OFFICE, 450 W. State Street, Boise, Idaho

JOHN V. EVANS
Governor

A. KENNETH DUNN
Director

Mailing address:
Statehouse
Boise, Idaho 83720
(208) 334-4440

SEPTEMBER 1, 1985

DEAR PERMIT HOLDER:

ACCORDING TO OUR RECORDS, YOU ARE THE HOLDER OF A WATER PERMIT ON WHICH PROOF OF BENEFICIAL USE OF WATER WAS NOT SUBMITTED BEFORE JULY 1, 1985, WHICH INDICATES YOUR PROJECT IS NOT COMPLETE. THEREFORE, YOU NEED TO BE AWARE OF CHANGES IN IDAHO LAW, EFFECTIVE JULY 1, 1985, WHICH IMPACT ALL WATER PERMITS ISSUED BY THIS DEPARTMENT.

SPECIFICALLY, PURSUANT TO SECTION 42-203D, IDAHO CODE, THE DEPARTMENT MUST REVIEW ALL PERMITS FOR WHICH DEVELOPMENT OF WATER USE WAS NO COMPLETED ON OR BEFORE JULY 1, 1985, TO DETERMINE IF THEY MEET THE NEW REQUIREMENTS OF CHAPTER 2, TITLE 42, IDAHO CODE. RULES AND REGULATIONS GOVERNING THE RE-EVALUATION OF PERMITS ARE NOT YET FINALIZED. HOWEVER, IF YOU COMPLETED THE DEVELOPMENT UNDER YOUR PERMIT BEFORE JULY 1, 1985, YOU SHOULD SUBMIT A PROOF OF BENEFICIAL USE STATEMENT, STATING THAT THE PROJECT WAS COMPLETED BEFORE JULY 1, 1985 SO THAT YOUR PERMIT WILL NOT BE SUBJECT TO THE REVIEW REQUIREMENTS OF SECTION 42-203D, WHICH READS AS FOLLOWS:

> 42-203D. REVIEW OF PERMITS - OPPORTUNITY FOR HEARING. - (1)THE DEPARTMENT SHALL REVIEW ALL PERMITS ISSUED PRIOR TO THE EFFECTIVE DATE [JULY 1, 1985] OF THIS SECTION, EXCEPT TO THE EXTENT A PERMIT HAS BEEN PUT TO BENEFICIAL USE PRIOR TO JULY 1, 1985, TO DETERMINE WHETHER THEY COMPLY WITH THE PROVISIONS OF CHAPTER 2, TITLE 42, IDAHO CODE. IF THE DEPARTMENT FINDS THAT THE PROPOSED USE DOES NOT SATISFY THE CRITERIA OF CHAPTER 2, TITLE 42, IDAHO CODE, THEN THE DEPARTMENT SHALL EITHER CANCEL THE PERMIT OR IMPOSE THE CONDITIONS REQUIRED TO BRING THE PERMIT INTO COMPLIANCE WITH CHAPTER 2, TITLE 42, IDAHO CODE. IF THE DEPARTMENT FINDS THAT THE PERMIT SATISFIES THE CRITERIA ESTABLISHED IN CHAPTER 2, TITLE 42, IDAHO CODE, THEN THE DEPARTMENT SHALL ENTER AN ORDER CONTINUING THE PERMIT.
> (2)THE DEPARTMENT SHALL PROVIDE AN OPPORTUNITY FOR HEARING IN ACCORDANCE WITH SECTION 42-1701A, IDAHO CODE, AND SECTIONS 67-5209 THROUGH 67-5215, IDAHO CODE, FOR EACH HOLDER OF A PERMIT THAT IS PROPOSED EITHER TO BE CANCELLED OR MADE SUBJECT TO NEW CONDITIONS.

YOU MAY OBTAIN PROOF OF BENEFICIAL USE FORMS FROM THE DEPARTMENT. IF YOU HAVE ANY QUESTIONS, PLEASE LET US KNOW.

SINCERELY,

L. Glen Saxton

L. GLEN SAXTON
CHIEF, OPERATIONS BUREAU

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*ADMITTED IN COLORADO ONLY
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August 29, 1985

RECEIVED
AUG 30 1985
Department of Water Resources

VIA UPS COURIER

Mr. Norman C. Young
Administrator
Resource Administration Division
Idaho Department of Water Resources
Statehouse
Boise, Idaho 83720

Re: Request for Approval of Assignment of Lease of Decreed Right 22-0606, Licensed Rights 22-2123 and 22-2126 and Permit Nos. 22-7351, 22-7487 and 22-7482

Dear Mr. Young:

As you are aware, this firm represents Bonneville Pacific Corporation ("Bonneville") and Hydro Valley Development, Inc. ("Hydro Valley"), both Utah corporations qualified to do business in the State of Idaho. For purposes of this matter, this firm is also serving as special counsel to CDM Hydroelectric Company ("CDM"), a Colorado limited partnership qualified to do business in the State of Idaho.

Reference is made to your letter of June 28, 1985 (copy enclosed) wherein the Department of Water Resources approved the lease of the above-referenced water rights, licenses and permits (collectively referred to hereinafter as the "Water Rights") from Fall River Rural Electric Cooperative, Inc. ("Fall River") to Bonneville, and the subsequent Assignment of the Lease of the Water Rights by Bonneville to Hydro Valley. Your files should contain all of the documentation relating to these Assignments, specifically the Lease and Assignment Agreement dated December 18, 1984 between Fall River and Bonneville, and the Partial Assignment of Lease and Assignment

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Agreement dated June 14, 1985 between Bonneville and Hydro Valley.

It is my understanding that your files now indicate that Fall River holds the Water Rights as "owner" and Hydro Valley holds the Water Rights as "lessee", with First Interstate Bank of Idaho having the first lien security interest in the lease of the Water Rights pursuant to the Mortgage Trust Indenture and Security Agreement, a complete and fully executed copy of which is enclosed herewith to complete your records in this matter.

Hydro Valley now desires to assign its leasehold interest in the Water Rights to CDM pursuant to an Assignment of Leasehold Interest in Water Rights, in form and substance similar to the document of the same name enclosed herewith for your review.

Hydro Valley desires to obtain the prior approval of the Department of Water Resources to this proposed Assignment due to questions which have arisen concerning Hydro Valley's right to assign its leasehold interest in the Water Rights to CDM under the provisions of Section 42-207 of the Idaho Code and CDM's ability to hold the leasehold interest in the Water Rights under the provisions of Section 42-206 of the Idaho Code.

As you are aware, Section 42-206 prohibits the granting of a permit to appropriate water to any person or association of persons which is not an actual bona fide resident of the State of Idaho. In seeking the approval of the Department of Water Resources to the leasehold assignment of Water Rights by Hydro Valley to CDM, we suggest first that CDM, as a Colorado limited partnership duly registered to do business in the State of Idaho, qualifies as a "bona fide resident of the State", and is therefore a qualified entity to hold Water Rights under Section 42-206. Further, Section 42-206 seems to relate solely to a new permit to appropriate waters and not to a leasehold of existing water rights. Therefore Section 42-206 should not apply to the leasehold situation provided that (as in our case) the actual ownership of the Water Rights remains in a qualified entity (Fall River).

Section 42-207 deals with transfer rights and prohibits the sale, assignment, transfer or mortgage of a water right to a nonqualified entity. It is unclear from the language of the statute whether this statute applies to a lease situation since in such a situation the ownership of the water rights does not change. Furthermore, in the present case there is no

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situation or remedy available under the Lease and Assignment Agreement, the Partial Assignment of Lease and Assignment Agreement or the newly proposed Assignment of Leasehold Interest in Water Rights which could result in a nonqualified entity ever becoming the actual owner of the Water Rights.

In asking for the Department of Water Resource's preapproval of the enclosed Assignment of Leasehold Interest in Water Rights, we are essentially asking that the following questions be answered:

First, as a duly registered limited partnership, does CDM qualify to hold Water Rights under the provisions of Section 42-206 of the Idaho Code, and

Second, do Sections 42-206 and 42-207 relate to a leasehold situation, where actual ownership of the water right is retained by a lessor qualified to hold water rights under Section 42-206.

CDM and Hydro Valley are presently working with Prudential Interfunding Corp. in finalizing the permanent financing of the Felt Dam Hydroelectric Project, therefore your prompt attention to this matter will be greatly appreciated. I have taken the liberty of copying Phil Rassier with this letter, and I invite either you or Phil to contact me at your earliest convenience to discuss this matter further.

Very truly yours,

PARSONS, BEHLE & LATIMER

David P. Hirschi

DPH/jml
Enclosure
cc: Phillip J. Rassier, Esq.
Robert L. Wood

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22-7351-
22-7482-
22-7487-

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Fall River Rural Electric Cooperative, Inc.) Project No. 5089-003

ORDER AMENDING LICENSE
(Issued July 8, 1985)

Fall River Rural Electric Cooperative, Inc. (Licensee) filed on February 5, 1985, an application for amendment of its license for the Felt Water Power Project No. 5089, located on the Teton River and occupying U.S. lands administered by the Department of the Interior, Bureau of Reclamation, in Teton County, Idaho.1/2/

The Felt Project as currently licensed contains a powerhouse with two generating units having a total installed capacity of 6,025 kW. The Licensee proposes to relocate the powerhouse to a site approximately 300 feet downstream and size the two generating units for a total installed capacity of 5,500 kW. The Licensee would also refurbish an existing inoperative powerhouse containing two generating units with a total installed capacity of 2,000 kW. The proposed amendment would result in an increase of 1,475 kW in the total installed capacity of the project and an increase of 4,700 MWh in the average annual energy production. Ordering paragraph (A) contains a more detailed description of the proposed project.

PUBLIC NOTICE AND AGENCY COMMENTS

Notice of the application was given. No protests or motions to intervene were filed. Federal, state and local agencies that received the public notice of the application were requested to provide comments on the application. None of the responding agencies objected to the proposed amendment. All substantive comments received are discussed below.

1/ The license for Project No. 5089 was issued on September 9, 1983. Fall River Rural Electric Cooperative, Inc., 24 FERC ¶62,289 (1983).

2/ Authority to act on this matter is delegated to the Director, Office of Hydropower Licensing, under §375.314 of the Commission's regulations, 49 Fed. Reg. 29,369 (1984)(Errata issued July 27, 1984)(to be codified at 18 C.F.R. §375.314). This order may be appealed to the Commission by any party within 30 days of the issuance date of this order pursuant to Rule 1902, 18 C.F.R. §385.1902 (1984). Filing an appeal and final Commission action on that appeal are prerequisites for filing an application for rehearing as provided in Section 313(a) of the Act. Filing an appeal does not operate as a stay of the effective date of this order or of any other date specified in this order, except as specifically directed by the Commission.

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COMPREHENSIVE DEVELOPMENT

The project as amended would make good use of the flow and fall of the Teton River and would be best adapted to the comprehensive development of the Upper Snake River Basin upon compliance with the terms and conditions of the amended license.

ECONOMIC FEASIBILITY

The estimated cost of the proposed project is $8,240,000. Project power will be sold to Utah Power and Light Company (UP&L) at a contract price of 54.5 mills/kWh. The amended project will generate 36,100 MWh and would be economically feasible based upon UP&L's contract price.

SAFETY AND ADEQUACY

The proposed modifications to the project would not affect the structural integrity of the project. The proposed powerhouse has been analyzed and found to be safe.

ENVIRONMENTAL CONSIDERATIONS

Fishery Resources

The amended project has the potential to have an impact on the trout populations of the Teton River. The U.S. Fish and Wildlife Service and the Idaho Department of Fish and Game recommend that the Applicant stock the Teton River with 20,000 cutthroat trout (200 per pound) to mitigate the loss of 300 feet of trout habitat. To mitigate the impacts of turbine-related fish mortality that would result from the use of two additional units, the agencies recommend that the Applicant either screen the project intake (0.25 inch opening in mesh or screen with a water approach velocity of 0.5 foot per second or less) or stock the Teton River with 330,000 trout. The Applicant accepts the recommended mitigation but has not specified whether it plans to install fish screens or provide fish for stocking.

The measures recommended by the fishery agencies and agreed to by the Applicant would adequately mitigate the impacts of the amended project on trout populations. Article 45 requires the Applicant to implement the recommended measures and to file a fisheries mitigative plan outlining specific details of the mitigative proposals.

Cultural Resources

The Idaho State Historic Preservation Officer indicated that the amended project would have no effect on cultural resources. Article 36 of the original license requires the protection of archeological or historic sites in the event that such sites are discovered during construction.

Other Environmental Concerns

In a letter dated April 16, 1985, the Idaho Department of Health and Welfare indicated that the water quality certificate issued on June 23, 1982, is valid for the amended project.

Pursuant to Section 4(h) of the Pacific Northwest Electric Power Planning and Conservation Act of 1980 (Pub. L. No. 96-501), the Northwest Power Planning Council (NPPC) developed in 1982 a fish and wildlife program to protect, mitigate, and enhance fish and wildlife resources in the Pacific Northwest. The proposed amendment does not appear to conflict with NPPC's fish and wildlife program. Article 44 of the original license reserves in the Commission the authority to order where practicable alterations in project structures and operations in order to take into account NPPC's fish and wildlife program.

In a letter dated March 16, 1985, the United States Department of the Interior, Bureau of Reclamation (BR) commented that mitigation measures would be needed for the loss of big game lands that would be occupied by the project. By letter dated June 28, 1985, however, BR indicated that the Applicant and BR had consulted and reached a mutual agreement resolving BR's concerns.

FINDING OF NO SIGNIFICANT IMPACT

The amended project would result in minor, short-term increases in noise levels, dust, and exhaust emissions from construction activities, and sedimentation and erosion from the disturbance of riverbed and land surfaces. Turbine-related fish mortality and the loss of 300 feet of trout habitat would result, but these impacts would be adequately mitigated. Approximately 7 acres of vegetation would be disturbed.

No Federally listed threatened or endangered species would be affected by the project. Similarly, no sites or structures listed or eligible for listing in the National Register of Historic Places would be affected.

In accordance with the National Environmental Policy Act of 1969, an Environmental Assessment 2/ was prepared for the amendment of license for the Felt Project (FERC No. 5089). On the basis of the record and of Staff's independent analysis, issuance of the amendment of license for the project, as conditioned herein, will not constitute a major Federal action significantly affecting the quality of the human environment.

2/ Environmental Assessment, Felt Project, FERC No. 5089--Idaho, June 28, 1985, prepared by the Division of Environmental Analysis, Office of Hydropower Licensing, Federal Energy Regulatory Commission. This document is available in the Division of Public Information and in the Commission's public file associated with this proceeding.

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It is ordered that:

The license for the Felt Water Power Project No. 5089, is amended as follows:

(A) Paragraph (2) of Ordering Paragraph (B) of the license is revised to read, in part, as follows:

Project works consisting of:

(a) a 12-foot-high, 135-foot-long dam having a 90-foot-long spillway section with crest elevation 5,530 feet m.s.l. and having a sluiceway and a fish ladder; (b) a reservoir having a surface area of 10 acres and a storage capacity of 40 acre-feet; (c) three intake structures along the reservoir right bank; (d) a 170-foot-long flowline Tunnel No. 1 connecting to a 100-foot-long, 78-inch-diameter steel penstock bifurcating into two steel penstocks, each approximately 300 feet long and 60 inches in diameter; (e) a rehabilitated powerhouse containing two generating units with a total installed capacity of 2,000 kW at a design head of 80 feet; (f) a 215-foot-long flowline Tunnel No. 2 and a 180-foot-long flowline Tunnel No. 3, both connecting to a 1,850-foot-long, 90-inch-diameter steel penstock; (g) a powerhouse containing two generating units having a total installed capacity of 5,500 kW at a design head of 159 feet; (h) a 7,500-kVA, 4.16/24.9-kV, three-phase transformer; (i) a 700-foot-long, 4.16-kV transmission line from the rehabilitated powerhouse to the new powerhouse; (j) a 1,400-foot-long, 24.9-kV overhead transmission line connecting to an existing Utah Power and Light Company transmission line; (k) an access road; (l) a public-parking area; and (m) appurtenant facilities.

(B) The following Exhibit A and Exhibit F and G drawings have been examined and found to generally conform to the Commission's rules and regulations and are approved and made a part of the license, superseding the indicated Exhibit F and G drawings:

Exhibit A

Section A, entitled "Proposed New Facilities", pages A-5 to A-7, revised, in part, filed on February 5, 1985.

Exhibit	FERC No.	Title	Superseding
F-10	5089-10	Felt Hydroelectric Plan	5089-5
F-11	5089-11	Penstock and Access Road	5089-6

Exhibit	FERC No.	Title	Superseding
F-12	5089-12	Penstock and Surge Pipe	None
F-13	5089-13	Penstock and Bifurcation	None
F-14	5089-14	Turbine Deck and Valve Bay	None
F-15	5089-15	Switch Gear Deck	None
F-16	5089-16	Powerhouse Section	5089-7
F-17	5089-17	Tailrace Plans and Sections	None
F-18	5089-18	Boring Locations and Logs	5089-8
G-1	5089-19	Project Boundary	5089-9
G-2	5089-20	Transmission Map	None

(C) The following license articles are revised to read as follows:

Article 39. The Licensee shall review and approve the design of contractor-designed cofferdams and deep excavations prior to the start of construction and shall ensure that construction of cofferdams and deep excavations is consistent with the approved design. At least 30 days prior to start of construction of the cofferdam, the Licensee shall provide the Commission's Regional Engineer and Director, Division of Inspections, one copy of the approved cofferdam construction drawings and specifications and a copy of the letter(s) of approval.

Article 40. The Licensee shall within 90 days of completion of construction file with the Commission for approval, revised Exhibits A, F, and G to describe and show the project as-built.

(D) Article 42 of the license is revised to include the following additional paragraph:

(4) The Licensee shall pay the United States the following additional annual charge, effective the date of this amendment.

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(a) For the purpose of reimbursing the United States for the cost of administration of Part I of the Federal Power Act, a reasonable annual charge as determined by the Commission in accordance with provisions of its regulations in effect from time to time. The authorized additional installed capacity for that purpose is 1,970 horsepower.

(E) The following additional article is included in the license:

Article 45. The Licensee, after consultation with the U.S. Fish and Wildlife Service and the Idaho Department of Fish and Game, shall file for Commission approval, within 6 months from the date of issuance of this order, and prior to the completion of project construction, a fisheries mitigation plan for the Felt Project. The mitigation plan must provide either (1) detailed plans for the annual stocking of 350,000 cutthroat trout (200 per pound) in the Teton River; or (2) detailed plans for the annual stocking of 20,000 cutthroat trout (200 per pound) in the river and functional design drawings of the fish screening device for the Felt Project. Agency comments on the fisheries mitigation plan shall be included in the filing. Further, the Licensee shall file as-built drawings with the Commission, within 3 months after completion of construction of any fish screening device.

(F) The Licensee's failure to file a petition appealing this order to the Commission shall constitute acceptance of this license. In acknowledgement of acceptance of this order and its terms and conditions, it shall be signed by the Licensee and returned to the Commission within 60 days from the date this order is issued.

(G) This order is final unless a petition appealing it to the Commission is filed within 30 days from the date of its issuance, as provided in Section 385.1902 of the Commission's regulations, 18 C.F.R. §385.1902 (1984).

Quentin A. Edson

Quentin A. Edson
Director, Office of
Hydropower Licensing

Project No. 5089-003

IN TESTIMONY of its acknowledgment of acceptance of all of the terms and conditions of this order, Fall River Rural Electric Cooperative, Inc., this _____ day of _____, 19____, has caused its corporate name to be signed hereto by _____, its _____ President, and its corporate seal to be affixed hereto and attested by _____ its _____ Secretary, pursuant to a resolution of its Board of Directors, duly adopted on the _____ day of _____ 19____, a certified copy of the record of which is attached hereto.

By_____
President

Attest:

_____
Secretary

(Executed in quadruplicate)

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INTER-DEPARTMENT MEMO — 1

FROM Linda Smith

DATE 6-28-85

TO 22-7351

SUBJECT

The Mortgage Trust Indenture and Security Agreement and the Partial Assignment of Lease and Assignment Agreement are filed in No. 22-7487.

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SIGNATURE

LAW OFFICES OF
PARSONS, BEHLE & LATIMER
A PROFESSIONAL CORPORATION
185 SOUTH STATE STREET, SUITE 700
POST OFFICE BOX 11898
SALT LAKE CITY, UTAH 84147-0898
TELEPHONE (801) 532-1234
TELECOPIER (801) 532-1234, EXT. 273

1801 "K" STREET, N.W., SUITE 1109L
WASHINGTON, D.C. 20006
TELEPHONE (202) 659-0862

FORMERLY
DICKSON, ELLIS, PARSONS & McCREA
1882-1959

KEITH E. TAYLOR
JAMES B. LEE
SCOTT M. MATHESON
GORDON L. ROBERTS
F. ROBERT REEDER
WILLIAM L. CRAWFORD
LAWRENCE E. STEVENS
DANIEL M. ALLRED
HOWARD J. MARSH
YAN M. ROSS
ERIE V. BOORMAN
DAVID S. DOLOWITZ
KENT W. WINTERHOLLER
BARBARA K. POLICH
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DAVID W. TUNDERMANN
KREGE B. CHRISTENSEN
JAMES M. ELEGANTE
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VAL R. ANTCZAK
PATRICK J. GARVER
SPENCER E. AUSTIN

C.C. PARSONS
1907-1988

CALVIN A. BEHLE
1947-

OF COUNSEL
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HAL J. POS

*ADMITTED IN COLORADO ONLY
†ADMITTED IN CALIFORNIA AND DISTRICT OF COLUMBIA ONLY

June 17, 1985

RECEIVED
JUN 18 1985
Department of Water Resources

Mr. David Tuthill
State of Idaho
Department of Water Resources
Statehouse
Boise, Idaho 83720

FEDERAL EXPRESS

Re: Felt Dam Hydroelectric Project, Teton County, Idaho--Leases and Security Interest in Decreed Right 22-0606, License Rights 22-2123, 22-2126, and Approved Applications for Permit Nos. [redacted], 22-7487 and 22-7482

Dear Mr. Tuthill:

Please be advised that pursuant to a Lease and Assignment Agreement dated December 18, 1984, between Fall River Rural Electric Cooperative, Inc. ("Fall River") and Bonneville Pacific Corporation ("Bonneville"), Fall River has leased the above-referenced water rights and permits (collectively the "Water Permits") to Bonneville for use in connection with the Felt Dam Hydroelectric Project (a copy of which Lease and Assignment Agreement is attached as Exhibit "A" to that certain Mortgage Trust Indenture and Security Agreement (the "Security Agreement") enclosed herewith).

Please be further advised that pursuant to the terms of that certain Partial Assignment of Lease and Assignment Agreement, dated June 14, 1985, between Bonneville and Hydro Valley Development, Inc. ("Hydro Valley"), Bonneville has assigned its leasehold interest in the Water Permits to Hydro Valley (a copy of which Partial Assignment of Lease and Assignment Agreement is enclosed herewith). Both Bonneville and

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Hydro Valley are Utah corporations qualified to do business in the State of Idaho.

Please be further advised that in connection with obtaining the construction financing of the Felt Dam Hydroelectric Project, Bonneville and Hydro Valley are being required by First Interstate Bank of Idaho, N.A., as trustee, and First Interstate Bank of Utah, N.A., as beneficiary, to assign their leasehold interest in and to the Water Permits to said Banks as security for the construction financing. This assignment will be made in accordance with the terms of the Security Agreement, a copy of which is enclosed herewith.

Pursuant to the provisions of Sections 42-206 and 42-207, Idaho Code, we are requesting the consent and approval of the Idaho Department of Water Resources to the above-described transfers of leasehold interests in the Water Permits. Our review of appropriate Idaho law indicates that the lease of the Water Permits from Fall River to Bonneville and the lease of the Water Permits from Bonneville to Hydro Valley, and the proposed Security Agreement, whereunder the leasehold interest in the Water Permits is assigned to First Interstate Bank of Idaho, as trustee, are in conformance with Section 42-206 and 42-207, Idaho Code, and we therefore request that the Department of Water Resources consent to and approve such leases and assignments.

For your convenience, I have enclosed herewith a form letter which has been approved by the parties to the leases and the Banks. Please review the enclosed materials and contact me at your earliest convenience with any questions or comments which you may have thereon. If the Department of Water Resources approves the proposed assignment, please have the enclosed letter or a letter in substantially similar form prepared on Department of Water Resources letterhead and send the original copy executed by the Director or Administrator of the Department of Water Resources to me for use in the loan closing. The loan closing is presently scheduled for June 25, 1985, and we will appreciate your processing this application for approval as soon as possible.

Very truly yours,

PARSONS, BEHLE & LATIMER

David P. Hirschi

DPH:mmp 6891C
cc: Robert L. Wood
Ray W. Rigby, Esq.
Pamela T. Greenwood, Esq.
Enclosure

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State of Idaho
DEPARTMENT OF WATER RESOURCES
STATE OFFICE, 450 W. State Street, Boise, Idaho

JOHN V. EVANS
Governor

A. KENNETH DUNN
Director

Mailing address:
Statehouse
Boise, Idaho 83720
(208) 334-4440

MEMORANDUM

TO: Clive J. Strong
Office of the Attorney General

FROM: Norman C. Young

DATE: May 31, 1985

RE: Felt Hydroelectric Project - FERC No. 5089

Attached are copies of Department correspondence with respect to the Felt Hydro Project.

The Department has no additional comments on the project.

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RECEIVED
MAY 29 1985
Department of Water Resources

M E M O R A N D U M

TO: Todd Graeff
Norm Young
Virgil Moore
Bob Becker
Jack Hockberger

FROM: Clive J. Strong CJS

DATE: May 24, 1985

RE: Felt Hydroelectric Project, FERC No. 5089 - 22-7351

Bingham Engineering Company has contacted the Governor and Attorney General's Office regarding FERC Project No. 5089. Recently, the company submitted an amendment application to FERC for this project. They are desirous of being able to commence construction on this project during the summer. Therefore, they have requested that the Governor send a letter to FERC if the state has no objections. I have enclosed a notice of the original application filed to FERC. At present no notice of the amended application has been filed. I have in my possession a multipage document regarding the amendment. If you believe that you have any concerns regarding this project, I would be happy to make this document available to you. Additionally, I would appreciate receiving your comments within two weeks.

Enclosure
cc: Pat Costello
Jim Jones

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[¶ 62,289]

Fall River Rural Electric Cooperative, Inc., Project No. 5089-001

Order Issuing License (Major)

(Issued September 9, 1983)

Lawrence R. Anderson, Director, Office of Electric Power Regulation.

Fall River Rural Electric Cooperative, Inc. has filed an application for a license under Part I of the Federal Power Act (Act) to reconstruct, operate, and maintain the Felt Project No. 5089. [1] The project is located on the Teton River near the Town of Tetonia, Teton County, Idaho, affects the interests of interstate or foreign commerce, and would occupy lands of the United States under the jurisdiction of the Bureau of Reclamation.

Notice of the application has been published and comments have been received from interested federal, state, and local agencies. No protests or petitions to intervene have been received, and none of the agencies objected to issuance of the license. The significant concerns of the commenting agencies are discussed below.

History and Description

The original dam, power plant, and appurtenances were constructed in 1921. The facility was expanded in 1946 to include a second powerhouse. A new dam was constructed in 1963. The plant was operated intermittently from 1968 until 1980, when full power production was resumed.

The existing facilities consist of a dam, a reservoir, three intakes, three tunnels, three penstocks, two powerhouses containing an installed capacity of 1870 kW, and miscellaneous appurtenant facilities. Applicant proposes to add a fish ladder, a penstock extension, a powerhouse containing two generating units with a total capacity of 6025 kW, a tailrace, and to relocate the transmission line and access road. The existing powerhouses would be removed from service. [2] A more detailed project description is contained in Ordering Paragraph (B).

Safety and Adequacy

Staff inspected the project and found it to be well maintained and in good operating condition. The dam was observed to be in sound structural condition.

Failure of the dam, classified as low hazard, would not create additional hazard to downstream life or property. Failure of the dam under flood conditions would not significantly increase the flow downstream. The spillway capacity is adequate.

It is concluded that the project, under the conditions of this license, will be safe and adequate.

Economic Feasibility

The proposed plant would operate run-of-river under a static head of 150 feet with a hydraulic capacity of 680 cfs. Streamflow exceeding 680 cfs occurs approximately 17 percent of the time and would be released over the dam.

A staff analysis shows the project is economically feasible.

Fish, Wildlife and Recreation Resources

The Applicant and Idaho Department of Fish and Game (IDFG) have agreed on conditions to protect and enhance fish, wildlife, and recreational resources. The U.S. Fish and Wildlife Service, the Idaho Conservation League, and the Sierra Club stated that they had no objection to the proposed project provided that the agreement between the Applicant and IDFG is implemented, The Fish, Wildlife, and Botanical Resources Report, "Mitigation" portion, of the Exhibit E will be approved.

To ensure the protection and enhancement of the fishery resource, Article 33 is included to provide for an interim minimum flow. Article 34 is included to require fishery and minimum flow studies. In addition, Article 35 requires the Licensee to consult with the agencies concerning the design of fish passage facilities, to file for Commission approval of functional design drawings, and to file as-built drawings with the Commission.

Pursuant to Section 4(h) of the Pacific Northwest Electric Power Planning and Conservation Act of 1980 (P.L. 96-501), the Northwest Power Planning Council ("NPPC") developed in 1982 a fish and wildlife program to protect, mitigate, and enhance fish and wildlife resources in the Pacific Northwest. The proposed project does not appear to conflict with NPPC's fish and wildlife program. Nevertheless, Article 44 reserves in the Commission the authority to order where practicable alterations in project structures and operations in order to take into account NPPC's fish and wildlife program.

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Under Article 17 of this license, the Commission reserves the right to require additional recreational development in the future. The Idaho Department of Health and Welfare has issued a water quality certificate for the project, in accordance with Section 401 of the Federal Water Pollution Control Act.

Cultural Resources

The Applicant has consulted with the Idaho State Historic Preservation Officer (SHPO). The SHPO reported that the project would have no effect on significant cultural resources.

In accordance with standard Commission practice, Article 36 of this license also requires cultural resources protection measures in the event of any future construction or development at the project.

Other Aspects of Comprehensive Development

The proposed project is not in conflict with any planned development. It efficiently utilizes the flow and fall of the Teton River and, upon compliance with the terms and conditions of the license, the project would be best adapted to the comprehensive development of the Upper Snake River basin for beneficial purposes.

License Term

The project will use an existing dam, reservoir, tunnels and penstocks. In addition, it will include a new fish ladder, penstock extension and an additional powerhouse containing two new generating units, a tailrace and will relocate the transmission line and access road. Licensing the project is considered to be a licensing action similar to the relicensing of a project where a moderate amount of reconstruction is proposed. Consistent with the Commission policy expressed in *The Village of Lyndonville Electric Department*, [3] this license will expire forty years from the first day of the month in which this order is issued.

The policy under Pacific Power and Light Company [4] is to issue the license effective as of the date of any unauthorized post 1935 construction. Here the post 1935 construction was an expansion of the project completed by January 1, 1947. Because of the 50-year statutory maximum license period, however, the license will be effective September 1, 1973.

Annual Charges

In accordance with the order issuing a license for the Shoshone Falls Project, [5] annual charges will be based upon the effective date, but this license will also be conditioned upon payment of an amount equivalent to the annual charges that would otherwise have been due for the period from January 1, 1947 to August 31, 1973. This payment is not a penalty, but is intended to place the Applicant as nearly as possible in the same position it would have been in before our change in termination date policy, and the same position as similarly situated Licensees who received their license before that change in policy.

For projects constructed prior to 1938 and located on U.S. lands without proper Federal permission, Commission policy would be to condition the license upon payment of an amount equivalent to the annual charges that would otherwise have been due since January 1, 1938. The redeveloped Felt Project, however, would be located on recently acquired U.S. lands, under the jurisdiction of the Bureau of Reclamation.

Accordingly, the charge for the use of U.S. lands will be made effective September 1, 1983.

Environmental Impacts

The short-term minor adverse impacts associated with the construction period would include: soil erosion and localized increases in suspended sediment loads; increased noise and air pollution; and disruption of wildlife and wildlife habitat. The long-term impacts on the change in streamflow pattern and the fishery resources are adequately mitigated. No federaly listed threatened or endangered species would be affected by the proposed action. On the basis of the record and staff's independent analysis, we conclude that approval of the proposed license would not constitute a major Federal action significantly affecting the quality of the human environment.

It is ordered that:

(A) This license is issued to Fall River Rural Electric Cooperative, Inc. (Licensee), of Ashton, Idaho, under Part I of the Federal Power Act (Act), for a period effective September 1, 1973 and terminating 40 years from the first day of the month in which this order is issued, for reconstruction, operation, and maintenance of the Felt Project No. 5089, located in Teton County, Idaho, on the Teton River, and occupying lands of the United States under the jurisdiction of the Bureau of Reclamation and affecting the interests of interstate or foreign commerce. This license is subject to the terms and conditions of the Act, which is incorporated by reference as part of this license, and subject to the regulations the Commission issues under the provisions of the Act.

(B) The Felt Project No. 5089 consists of:

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(1) All lands, to the extent of the Licensee's interests in those lands, constituting the project area and enclosed by the project boundary. The project area and boundary are shown and described by certain exhibits that form part of the application for license and that are designated and described as:

Exhibit	*FERC No.*	*Showing*
A-3	5089-1	Lands of the United States
G-1	5089-9	Project Map

(2) Project works consisting of:

(a) a 12-foot-high 135-foot long dam having a 90-foot long spillway section with crest elevation 5,530 feet m.s.l. and having a sluiceway and a fish ladder; (b) a reservoir having a surface area of 10 acres and a storage capacity of 40 acre-feet; (c) three intake structures along the reservoir right bank; (d) inoperative flowline no. 1 consisting of a 170-foot-long tunnel; (e) flowline no. 2 consisting of a 215-foot-long tunnel and a 395-foot-long 59-inchdiameter steel penstock; (f) flowline no. 3 consisting of a 180-foot-long tunnel and a 405-foot-long 59-inch-diameter steel penstock; (g) an 8-foot-diameter 1,200-foot-long steel penstock extending from the 59-inch-diameter penstocks to a powerhouse; (h) a powerhouse containing two generating units having a total rated capacity of 6,025 kW at a net head of 123 feet and hydraulic capacity of 680 cfs; (i) the 4.16-kV generator leads and a 3-phase 4.16/46-kV, 75 MVA transformer; (j) a 1,600-foot-long 46-kV transmission line; (k) the facilities necessary to connect to the Licensee's system at the Badger Substation; (l) a 170-foot-long excavated tailrace with water surface elevation 5380.0 feet m.s.l.; (m) an access road; (n) a public-parking area; and (o) appurtenant facilities.

The location, nature, and character of these project works are generally shown and described by the exhibits cited above and more specifically shown and described by certain other exhibits and reports that also form a part of the application for license and that are designated and described as:

Drawing No.	*FERC No.*	*Showing*
F-1	5089-5	Project Layout
F-2	5089-6	Profile and Typical Sections
F-3	5089-7	Powerplant Plans and Sections
F-4	5089-8	Boring Locations and Logs
A-4	5089-2	Facilities Profiles
A-5	5089-3	Felt Dam

Exhibit A - The Section, filed February 22, 1982, entitled "Structures and Equipment", consisting of two typewritten pages of text, pages A-5 to A-7, and:

Exhibit E - The Section, filed February 22, 1982, as revised on June 1, 1982, entitled "Mitigation", consisting of five typewritten pages of text, pages E-21 to E-25.

(3) All of the structures, fixtures, equipment, or facilities used or useful in the operation or maintenance of the project and located within the project boundary, all portable property that may be employed in connection with the project, located within or outside the project boundary, as approved by the Commission, and all riparian or other rights that are necessary or appropriate in the operation or maintenance of the project.

(C) Exhibits F and G, and the portions of Exhibits A and E designated in Ordering Paragraph (B) above, are approved and made a part of the license.

(D) This license is also subject to the terms and conditions set forth in Form L-2 (revised October 1975), entitled "Terms and Conditions of License for Unconstructed Major Project Affecting Lands of the United States," attached to (reported at 54 FPC 1808) and made a part of this license, except insofar as Standard Article 20 relates to a plan for clearing the reservoir area. The license is also subject to the following additional articles:

Article 33. Licensee shall discharge an interim continuous minimum flow of 20 cubic feet per second (cfs) except for 3 months each year, during the period of cutthroat trout spawning migration, when the minimum flow release will be 50 cfs or the inflow of the reservoir, whichever is less, for the purpose of protecting fish and wildlife resources. The 3-month spawning migration period shall be determined through consultation with the Idaho Department of Fish and Game. These flows may be temporarily modified if required by operating emergencies beyond the control of the Licensee, for fishery and minimum flow studies required by Article 34, and for short periods for fishery management purposes upon mutual agreement between the Licensee and the Idaho Department of Fish and Game.

Article 34. Licensee shall consult and cooperate with the Idaho Department of Fish and Game and the U.S. Fish and Wildlife Service in conducting studies to determine the period of cutthroat trout spawning migration, and the minimum flow release needed at the Felt Project to ensure protection and enhancement of fishery and wildlife resources. Further, Licensee shall, within 2 years from the date of issuance of this license, file a report of its findings and, for Commission approval,

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recommendations for a minimum flow release from the project, together with any agency comments on the report and recommendations. At the same time, copies of the filings shall be served upon the agencies consulted.

Article 35. License shall, within 2 years following issuance of this license, file for Commission approval functional design drawings of the proposed fish passage facilities at the Felt Project, prepared in consultation with the Idaho Department of Fish and Game and the U.S. Fish and Wildlife Service. Agency letters of comment on the design drawings shall be included in this filing. Further, Licensee shall file as-built drawings with the Commission within 6 months after completion of construction of the fish passage facilities.

Article 36. Prior to the commencement of any future construction or development of any project works or other facilities at the project, the Licensee shall consult and cooperate with the Idaho State Historic Preservation Officer (SHPO) to determine the need for, and extent of, any archeological or historic resource surveys and any mitigative measures that may be necessary. The Licensee shall provide funds in a reasonable amount for any such activity. If any previously unrecorded archeological or historical sites are discovered during the course of construction, construction activity in the vicinity shall be halted, a qualified archeologist shall be consulted to determine the significance of the sites, and the Licensee shall consult with the SHPO to develop a mitigation plan for the protection of significant archeological or historic resources. If the Licensee and the SHPO cannot agree on the amount of money to be expended on archeological or historic work related to the project, the Commission reserves the right to require the Licensee to conduct, at its own expense, any such work found necessary.

Article 37. Licensee shall commence construction of the proposed project within 1 year of the effective date of issuance of the license and shall complete construction within 3 years from the effective date of this license.

Article 38. Licensee shall file with the Commission's Regional Engineer and the Director, Office of Electric Power Regulation, one copy each of the final contract drawings and specifications for pertinent features of the project, such as water retention structures, powerhouses, and water conveyance structures, at least 60 days prior to start of construction. The Director, Office of Electric Power Regulation, may require changes in the plans and specifications to assure a safe and adequate project.

Article 39. The Licensee shall review and approve the design of contractor-designed cofferdams and deep excavations prior to the start of construction and shall ensure that construction of cofferdams and deep excavations are consistent with the approved design. At least 30 days prior to start of construction of the cofferdam the Licensee shall file with the Commission's Regional Engineer and Director, Office Of Electric Power Regulation, one copy of the approved cofferdam construction drawings and specifications and a copy of the letter(s) of approval.

Article 40. The Licensee shall within 90 days of completion of construction file for approval of the Director, Office of Electric Power Regulation, revised Exhibit F drawings showing the project as-built.

Article 41. Pursuant to Section 10(d) of the Act, after the first 20 years of operation of the project under license, a specified reasonable rate of return upon the net investment in the project shall be used for determining surplus earnings of the project for the establishment and maintenance of amortization reserves. One half of the project surplus earnings, if any, accumulated after the first 20 years of operation under the license, in excess of the specified rate of return per annum on the net investment, shall be set aside in a project amortization reserve account at the end of each fiscal year. To the extent that there is a deficiency of project earnings below the specified rate of return per annum for any fiscal year after the first 20 years of operation under the license, the amount of that deficiency shall be deducted from the amount of any surplus earnings subsequently accumulated, until absorbed. One-half of the remaining surplus earnings, if any, cumulatively computed, shall be set aside in the project amortization reserve account. The amounts established in the project amortization reserve account shall be maintained until further order of the Commission. The annual specified reasonable rate of return shall be the sum of the annual weighted costs of long-term debt, preferred stock, and common equity, as defined below. The annual weighted cost for each component of the reasonable rate of return is the product of its capital ratio and cost rate. The annual capital ratio for each component of the rate of return shall be calculated based on an average of 13 monthly balances of amounts properly includable in the Licensee's long-term debt and proprietary capital accounts as listed in the Commission's Uniform System of Accounts. The cost rates for long-term debt and preferred stock shall be their respective weighted average costs for the year, and the cost of common equity shall be the interest rate on 10-

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year government bonds (reported as the Treasury Department's 10 year constant maturity series) computed on the monthly average for the year in question plus four percentage points (400 basis points).

Article 42. (1) The Licensee shall pay the United States an amount equal to the annual charge that would have applied for the period January 1, 1947 to August 31, 1973, if the project had been licensed during that period:

(a) For the purpose of reimbursing the United States for the cost of administration of Part I of the Federal Power Act, a reasonable annual charge as determined by the Commission in accordance with provisions of its regulations in effect from time to time during that period. The authorized installed capacity for that purpose is 2,490 horsepower.

(2) The Licensee shall pay the United States the following annual charge for the period September 1, 1973, the effective date of this license, to August 31, 1983:

(a) For the purpose of reimbursing the United States for the cost of administration of Part I of the Act, a reasonable amount as determined in accordance with the provisions of the Commission's regulations in effect from time to time during that period. The authorized installed capacity for that purpose is 2,490 horsepower.

(3) The Licensee shall pay the United States the following annual charges, effective September 1, 1983:

(a) For the purpose of reimbursing the United States for the cost of administration of Part I of the Act, a reasonable amount as determined in accordance with the provisions of the Commission's regulations in effect from time to time. The authorized installed capacity for that purpose is 8,030 horsepower.

(b) For the purpose of recompensing the United States for the use, occupancy, and enjoyment of 50.2 acres of its lands, a reasonable amount in accordance with the provisions of the Commission's regulations in effect from time to time.

Article 43. (a) In accordance with the provisions of this article, the Licensee shall have the authority to grant permission for certain types of use and occupancy of project lands and waters and to convey certain interests in project lands and waters for certain other types of use and occupancy, without prior Commission approval. The Licensee may exercise the authority only if the proposed use and occupancy is consistent with the purposes of protecting and enhancing the scenic, recreational, and other environmental values of the project. For those purposes, the Licensee shall also have continuing responsibility to supervise and control the uses and occupancies for which it grants permission, and to monitor the use of, and ensure compliance with the covenants of the instrument of conveyance for, any interests that it has conveyed, under this article. If a permitted use and occupancy violates any condition of this article or any other condition imposed by the Licensee for protection and enhancement of the project's scenic, recreational, or other environmental values, or if a covenant of a conveyance made under the authority of this article is violated, the Licensee shall take any lawful action necessary to correct the violation. For a permitted use or occupancy, that action includes, if necessary, cancelling the permission to use and occupy the project lands and waters and requiring the removal of any non-complying structures and facilities.

(b) The types of use and occupancy of project lands and waters for which the Licensee may grant permission without prior Commission approval are: (1) landscape plantings; (2) non-commercial piers, landings, boat docks, or similar structures and facilities that can accommodate no more than 10 watercraft at a time where said facility is intended to serve single-family type dwellings; and (3) embankments, bulkheads, retaining walls, or similar structures for erosion control to protect the existing shoreline. To the extent feasible and desirable to protect and enhance the project's scenic, recreational, and other environmental values, the Licensee shall require multiple use and occupancy of facilities for access to project lands or waters. The Licensee shall also ensure, to the satisfaction of the Commission's authorized representative, that the uses and occupancies for which it grants permission are maintained in good repair and comply with applicable State and local health and safety requirements. Before granting permission for construction of bulkheads or retaining walls, the Licensee shall: (1) inspect the site of the proposed construction, (2) consider whether the planting of vegetation or the use of riprap would be adequate to control erosion at the site, and (3) determine that the proposed construction is needed and would not change the basic contour of the reservoir shoreline. To implement this paragraph (b), the Licensee may, among other things, establish a program for issuing permits for the specified types of use and occupancy of project lands and waters, which may be subject to the payment of a reasonable fee to cover the Licensee's costs of administering the permit program. The Commission reserves the right to require the Licensee to file a description of its standards, guidelines, and procedures for implementing this paragraph (b) and to

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require modification of those standards, guidelines, or procedures.

(c) The Licensee may convey easements or rights-of-way across, or leases of, project lands for: (1) replacement, expansion, realignment, or maintenance of bridges and roads for which all necessary State and Federal approvals have been obtained; (2) storm drains and water mains; (3) sewers that do not discharge into project waters; (4) minor access roads; (5) telephone, gas, and electric utility distribution lines; (6) non-project overhead electric transmission lines that do not require erection of support structures within the project boundary; (7) submarine, overhead, or underground major telephone distribution cables or major electric distribution lines (69-kV or less); and (8) water intake or pumping facilities that do not extract more than one million gallons per day from a project reservoir. No later than January 31 of each year, the Licensee shall file three copies of a report briefly describing for each conveyance made under this paragraph (c) during the prior calendar year, the type of interest conveyed, the location of the lands subject to the conveyance, and the nature of the use for which the interest was conveyed.

(d) The Licensee may convey fee titles to, easements or rightsof-way across, or leases of project lands for: (1) construction of new bridges or roads for which all necessary State and Federal approvals have been obtained; (2) sewer or effluent lines that discharge into project waters, for which all necessary Federal and State water quality certificates or permits have been obtained; (3) other pipelines that cross project lands or waters but do not discharge into project waters; (4) non-project overhead electric transmission lines that require erection of support structures within the project boundary, for which all necessary Federal and State approvals have been obtained; (5) private or public marinas that can accommodate no more that 10 watercraft at a time and are located at least one-half mile from any other private or public marina; (6) recreational development consistent with an approved Exhibit R or approved report on recreational resources of an Exhibit E; and (7) other uses, if: (i) the amount of land conveyed for a particular use is five acres or less; (ii) all of the land conveyed is located at least 75 feet, measured horizontally, from the edge of the project reservoir at normal maximum surface elevation; and (iii) no more than 50 total acres of project lands for each project development are conveyed under this clause (d)(7) in any calendar year. At least 45 days before conveying any interest in project lands under this paragraph (d), the Licensee must file a letter to the Director, Office of Electric Power Regulation, stating its intent to convey the interest and briefly describing the type of interest and location of the lands to be conveyed (a marked Exhibit G or K map may be used), the nature of the proposed use, the identity of any Federal or State agency official consulted, and any Federal or State approvals required for the proposed use. Unless the Director, within 45 days from the filing date, requires the Licensee to file an application for prior approval, the Licensee may convey the intended interest at the end of that period.

(e) The following additional conditions apply to any intended conveyance under paragraphs (c) or (d) of this article:

(1) Before conveying the interest, the Licensee shall consult with Federal and State fish and wildlife or recreation agencies, as appropriate, and the State Historic Preservation Officer.

(2) Before conveying the interest, the Licensee shall determine that the proposed use of the lands to be conveyed is not inconsistent with any approved Exhibit R or approved report on recreational resources of an Exhibit E; or, if the project does not have an approved Exhibit R or approved report on recreational resources, that the lands to be conveyed do not have recreational value.

(3) The instrument of conveyance must include covenants running with the land adequate to ensure that: (i) the use of the lands conveyed shall not endanger health, create a nuisance, or otherwise be incompatible with overall project recreational use; and (ii) the grantee shall take all reasonable precautions to ensure that the construction, operation, and maintenance of structures or facilities on the conveyed lands will occur in a manner that will protect the scenic, recreational, and environmental values of the project.

(4) The Commission reserves the right to require the Licensee to take reasonable remedial action to correct any violation of the terms and conditions of this article, for the protection and enhancement of the project's scenic, recreational, and other environmental values.

(f) The conveyance of an interest in project lands under this article does not in itself change the project boundaries. The project boundaries may be changed to exclude land conveyed under this article only upon approval of revised Exhibit G or K drawings (project boundary maps) reflecting exclusion of that land. Lands conveyed under this article will be excluded from the project only upon a determination that the lands are not necessary for project purposes, such as operation and maintenance, flowage, recreation, public

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access, protection of environmental resources, and shoreline control, including shoreline aesthetic values. Absent extraordinary circumstances, proposals to exclude lands conveyed under this article from the project shall be consolidated for consideration when revised Exhibit G or K drawings would be filed for approval for other purposes.

Article 44. The Commission reserves the authority to order, upon its own motion or upon the recommendation of federal or state fish and wildlife agencies or affected Indian Tribes, alterations of project structures and operations to take into account to the fullest extent practicable at each relevant stage of the decision making processes, the regional fish and wildlife program developed and amended pursuant to the Pacific Northwest Electric Power Planning and Conservation Act.

(E) Within 90 days from the date of acceptance of this license, the Licensee shall file a statement under oath showing the gross amount of power generation for the project in kilowatt-hours for each calendar year commencing January 1, 1947, in accordance with the provisions of Section 11.20(a)(4) of the Commission's regulations.

(F) The Licensee's failure to file a petition appealing this order to the Commission shall constitute acceptance of this license. In acknowledgment of acceptance of this order and its terms and conditions, it shall be signed by the Licensee and returned to the Commission within 60 days from the date this order is issued.

— Footnotes —

[1] Authority to act on this matter is delegated to the Director, Office of Electric Power Regulation, under § 375.308 of the Commission's regulations, 18 C.F.R. § 375.308 (1983). This order may be appealed to the Commission by any party within 30 days of its issuance pursuant to Rule 1902, 18 C.F.R. § 385.1902 (1983). Filing an appeal and final Commission action on that appeal are prerequisites for filing an application for rehearing as provided in Section 313(a) of the Act. Filing an appeal does not operate as a stay of the effective date of this order or any other date specified in this order, except is specifically directed by the Commission.

[2] The proposed project, with its average annual generation of 31.4 million kWh, will utilize a renewable resource that will save the equivalent of approximately 51,560 barrels of oil or 14,540 tons of coal per year.

[3] *The Village of Lyndonville Electric Department*, 7 FERC ¶ 61,324 (June 29, 1979).

[4] *Pacific Power and Light Company*, 56 FPC 1804 (1976).

[5] *Idaho Power Co.*, 7 FERC ¶ 61,254 (1979).

[¶ 62,290]

Energenics Systems, Inc., Project No. 4750-001

Order Issuing License (Minor)

(Issued September 9, 1983)

Lawrence R. Anderson, Director, Office of Electric Power Regulation.

On June 24, 1982, Energenics Systems, Inc. (ESI) filed an application for a license under Part I of the Federal Power Act (Act) to construct, operate, and maintain the Eltopia Branch Canal Project No. 4750. [1] The project would be located on milepost 625+90 of the U.S. Bureau of Reclamation's (USBR) Eltopia Branch Canal, a part of the USBR's Columbia Basin Project in Franklin County, Washington.

Project Description and Operation

The proposed run-of-the-canal project would consist of an intake structure, a penstock, a powerhouse to contain a 682-kW generating unit, and a 1,000-foot-long transmission line connecting the project to an existing Big Bend Electric Cooperative 13.2-kV line. A more detailed project description is included in Ordering Paragraph (B) herein.

The project would operate from mid-March through October generating 3.08 GWh of energy annually at a head of 53 feet using the irrigation flows available in the canal. The project would not alter the existing flow release schedules set by the USBR and the downstream users demands.

Public Notice and Agency Comments

Notice of the filing of the ESI's application was given on August 5, 1982. No protests or motions to intervene were filed. Federal, State, and local agencies that received the public notice were requested to provide comments on the application. The Environmental Protection Agency stated that the application adequately discusses water quality issues and environmental mitigation measures and, therefore, had no comments. The U.S. Department of the Interior indicated that the project would not impact anadromous fish, migratory birds, and threatened or endangered species. Interior had no objection

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State of Idaho
DEPARTMENT OF WATER RESOURCES
STATE OFFICE, 450 W. State Street, Boise, Idaho

JOHN V. EVANS
Governor

A. KENNETH DUNN
Director

Mailing address:
Statehouse
Boise, Idaho 83720
(208) 334-4440

May 21, 1985

Mr. Kenneth Plumb, Secretary
Federal Energy Regulatory Commission
825 North Capitol Street N.E.
Washington, D.C. 20426

Re: Felt Hydroelectric Project, FERC No. 5089

Dear Mr. Plumb:

On May 20, 1985, Mr. Clark M. Mower hand delivered a copy of an Application for Amendment of License (dated April, 1985) for the above-referenced project in an effort to expedite the review process.

The Department's comments with respect to the project have not significantly changed from our comment letter of April 5, 1985.

Water right permits identified as Nos. 22-7482, 22-7487 and 22-7351, however, have been issued by the Department in connection with the project since our April 5, 1985 letter.

Sincerely,

A. KENNETH DUNN
Director

AKD/LGS/ls

cc: Eastern Region
Clark M. Mower

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BINGHAM ENGINEERING

100 Lindbergh Plaza 2, 5160 Wiley Post Way, Salt Lake City, Utah 84116, 801-532-2520

May 21, 1985

RECEIVED
MAY 22 1985
Hand delivered
Department of Water Resources

Mr. Glenn Saxton
State of Idaho
Department of Water Resources
State House
450 West State Street
Boise, Idaho 83720

Re: Felt Hydroelectric Project, FERC No. 5089

Dear Mr. Saxton:

I am enclosing for your information a copy of the Application for Amendment for the Felt Hydroelectric Project. The project has been noticed for comment by the FERC. We are delivering to you a copy of the amendment application to facilitate a more expeditious response to FERC's request if possible.

The Felt Hydroelectric Project is ready for construction and is in an area of relatively short construction period. Your earliest response would be appreciated. Official notice from the FERC should be forthcoming in the next two-week period. Would you please file your answers directly with:

Mr. Kenneth Plumb, Secretary
Federal Energy Regulatory Commission
825 North Capitol Street N.E.
Washington, D.C. 20426

I would appreciate it very much if you could forward a copy of your comments to me at our [redacted] listed above. Comments on the amendment application from your local agency were forwarded to FERC at an earlier date and are enclosed for your information and reference.

Thank you very much for your cooperation.

Sincerely,

BINGHAM ENGINEERING

Clark M. Mower
Executive Vice President

CMM/bde

Enclosures

cc: 602-012

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WATER RIGHT NUMBER 22-7351

OWNER LAST NAME - FALL RIVER RURAL ELECTRIC COOP. INC. FIRST NAME - ORIG OWNER -
ADDRESS LINE 1 - P.O. BOX 617 ADDRESS LINE 2 -
ADDRESS LINE 3 - CITY - ASHTON STATE - ID ZIP CODE - 83420
SOURCE - TETON RIVER TRIBUTARY OF - SNAKE RIVER
STAGE - APPLICATION STATUS - PRIORITY - 03-18-1981 COUNTY - TETON TOTAL DIV. RATE - 300.0000 -CFS
TOTAL DIV. VOLUME - ✓ .00 AFA TRFR/AMEND - WATER DIST. - 01 DLE/CAREY ACT - RIGHT BASIS -
DIVERSION POINT - SWNE 29 07N 44E LOT REDIV - 272.0 489.0 10.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 47.4
FROM - 01-01 TO - 12-31 USE - POWER USE DIV. RATE - 300.0000 CFS USE DIV. VOLUME - .00 AFA
USE - POWER PLACE OF USE - TWN 07N RNG 44E SEC 29 TRACT NWNE LOT AC
DECREE NAME - DATE - TOTAL ACRES 0
REMARKS -
NON IRRIG USE -
OTHER RIGHTS FOR SAME USE - 22-0606, 22-2123, 22-2126.
PROOF DUE - PERMIT/DENIED - PROTESTED - 04-15-1981 HEARING - OLD NO. -
PROOF MADE - FLD EXAM - COND. OF APPROVAL -
DIVERSION MEANS - FELT POWER PLANT.

VERIFIED VGK

State of Idaho
DEPARTMENT OF WATER RESOURCES
STATE OFFICE, 450 W. State Street, Boise, Idaho

JOHN V. EVANS
Governor

A. KENNETH DUNN
Director

Mailing address:
Statehouse
Boise, Idaho 83720
(208) 334-4440

May 9, 1985

RE: Permit Nos. 22-7351, 22-7482 & 22-7487

Fall River Rural Electric Coop
Box 617
Ashton, ID 83420

Gentlemen:

Enclosed are copies of your approved Applications for Permit. We direct your attention to the conditions of approval on the fourth pages.

Be sure to note the special condition requiring you to install measuring devices and lockable controlling works that will enable the watermaster to control your rates of diversion.

Please be advised that prior applications for permit have been filed to appropriate water from your source which may impact the availability of water to be used under these permits. Therefore, you should be sure to analyze the impact of these rights before making major investments into your water use projects.

We have enclosed a form entitled "Instructions for Proof of Beneficial Use". Please read the instructions carefully since you must take further action to develop these permits. Also enclosed for your convenience are the statements of beneficial use that must be submitted when your projects are completed.

Sincerely,

DAVID R. TUTHILL, JR., P.E.
Supervisor, Water Allocation Section

DRT:sc

Enclosures

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State of Idaho
DEPARTMENT OF WATER RESOURCES
STATE OFFICE, 450 W. State Street, Boise, Idaho

JOHN V. EVANS
Governor

A. KENNETH DUNN
Director

Mailing address:
Statehouse
Boise, Idaho 83720
(208) 334-4440

April 5, 1985

Bingham Engineering
Attn: Clark M. Mower, Vice President
165 Wright Brothers Drive
Salt Lake International Center
Salt Lake City, UT 84116

Re: Felt Hydroelectric Project, Project No. 5089

Dear Mr. Mower:

The purpose of this letter is to provide comments relative to the Application for Amendment of License dated January, 1985, which was filed with the Federal Energy Regulatory Commission (FERC) by your firm on behalf of Fall River Rural Electric Co-operative, Inc. for the Felt Hydroelectric Project, FERC Project No. 5089.

My staff has reviewed the water rights on the proposed project, and has found that the water rights portion on the Introductory Statement in the FERC Application is current and valid with respect to Water Right Nos. 22-0060, 22-2123, 22-2126 and 22-7351. The section also alludes to an additional Application for Permit which was anticipated to be filed concurrently with the filing of the FERC application.

The additional water right application was filed in two parts. Application No. 22-7482 for 80 cubic feet per second was filed on October 1, 1984. The application has been advertised and the protest period ended on November 19, 1984. No protests were received, but the Idaho Department of Fish and Game submitted a letter which indicated no objection to approval of the application provided that specified minimum flows are allowed to bypass the hydroelectric diversion to provide an instream flow in the Teton River. The extent of these flows was the subject of an agreement between Fall River Rural Electric Co-operative, Inc. and the Idaho Department of Fish and Game, and it consists of 50 cubic feet per second through the bypassed reach during three months of spawning, and 20 cubic feet per second through the reach for the remainder of the year.

It is my understanding that an additional water right application was a subject of discussion during your visit to this Department on February 12. As you are aware, Application for Permit No. 22-7487 was filed on February 25, 1985, for a rate of flow of 204 cubic

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feet per second. This application has also been advertised, and the protest period ended March 25, 1985. No protests were received although the Department received a letter from the Idaho Department of Fish and Game reiterating their position requiring that the specified minimum flows be left in the stream.

Please be advised that if the three Applications for Permit specified above are approved, the resulting permits will be subordinated to future consumptive beneficial uses, and a term of approval will be associated with the water rights.

Please find enclosed a copy of the fifth page addendum to the minimum stream flow Application for Permit on the Teton River, No. 22-7369, which Mr. Tuthill indicated we would provide to you.

Please continue to advise this office of significant activities regarding FERC actions on this project.

Sincerely,

A. KENNETH DUNN
Director

AKD/DRT/ls

Enclosure

cc: Eastern Region

MICROFILMED

BINGHAM ENGINEERING

165 Wright Brothers Drive, Salt Lake International Center, Salt Lake City, Utah 84116, 801-532-2520

February 5, 1985

RECEIVED
FEB 12 1985

Department of Water Resources

Mr. David Tuthill
Idaho Department of Water Resources
State House
Boise, Idaho 83720

Dear Mr. Tuthill:

RE: Felt Hydroelectric Project, Project No. 5089

Fall River Rural Electric Cooperative, Inc. was granted a license for the Felt Hydroelectric Project designated as Project No. 5089 in the records of the Federal Energy Regulatory Commission issued on September 8, 1983.

Since that time it has been necessary to make minor modifications to the project in order to better utilize the resource and permit construction in 1985. Attached is a copy of an application for amendment of license for the Felt Project which was filed with the Federal Energy Regulatory Commission on February 4, 1985.

We would appreciate it if you would review the attached amendment and make any comments as quickly as possible.

Sincerely,

BINGHAM ENGINEERING

Clark M. Mower

CMM/cs

Enclosure

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State of Idaho
DEPARTMENT OF WATER RESOURCES
STATE OFFICE, 450 W. State Street, Boise, Idaho

JOHN V. EVANS
Governor

A. KENNETH DUNN
Director

Mailing address:
Statehouse
Boise, Idaho 83720
(208) 334-4440

January 12, 1982

Mr. Thomas W. Haislip, Jr.
Environmental Project Manager
CH2M-Hill
P. O. Box 8748
Boise, ID 83707

Dear Mr. Haislip:

RE: Felt Hydro Gen Project

We have made a preliminary review of the referenced project from the information contained in the Phase I Feasibility Report for the Felt Project and have the following comments:

- Department records show the following existing water rights diverted in the NWNE, Sec. 29, T. 7N, R. 44E. for power purposes:

  a. Decreed right 22-0606 in the amount of 80 cfs with priority of October 1, 1921.

  b. Licensed right 22-2123 in the amount of 70 cfs with priority of November 17, 1936.

  c. Licensed right 22-2126 in the amount of 150 cfs with priority of February 2, 1946.

- The department has received application for water right permit No. 22-7351 from Fall River Rural Electric Cooperative, Inc. The applicant proposes to divert 300 cfs of water from the Teton River for power production purposes at a point in SWNW, Sec. 29, T. 7N, R. 44E.

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If the existing rights in the amount of 300 cfs and water application 22-7351 are to be diverted at the same point, either an amendment or transfer must be filed with Department of Water Resources to make the points of diversion consistent. Other changes in the proposed project relative to the use of water may require the filing of amendments or transfers.

While the department is not opposed to the release of certain minimum flows past the project for fishery and other purposes, the release required by FERC is not binding upon IDWR in its consideration of future appropriations since the Water Resource Board is the only entity in Idaho authorized to apply for and hold minimum stream flows.

Construction of new dams or modification of existing dams which may affect the size or safety of a dam will require submittal of plans and specifications to the Idaho Department of Water Resources for review and approval.

These are preliminary comments and may be supplemented upon a more detailed review by department staff.

Please let us know if we can be of further assistance.

Sincerely,

A. KENNETH DUNN
Director

AKD:alw

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State of Idaho
DEPARTMENT OF WATER RESOURCES
STATE OFFICE, 450 W. State Street, Boise, Idaho

JOHN V. EVANS
Governor

A. KENNETH DUNN
Director

Mailing address:
Statehouse
Boise, Idaho 83720
(208) 334-4440

RECEIVED
DEC 15 1981
CH2M HILL
BOISE

December 11, 1981

Mr. Thomas W. Haislip, Jr.
CH2M-Hill
700 Clearwater Lane
P.O. Box 8748
Boise, Idaho 83707

Dear Mr. Haislip:

This is to inform you that we have received your request for comments on: a) Eagle Rock Hydroelectric Project, and b) Felt Hydroelectric Project.

The projects are being reviewed and we will send our comments to you in the near future.

Sincerely,

Murland R. Packer, Chief
Project Studies Bureau

MRP:mb

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CH2M HILL
engineers
planners
economists
scientists

November 4, 1981

B14404.L0.00

Mr. James Baggs
Idaho Department of Water
Resources
State House
Boise, Idaho 83720

Dear Jim:

Fall River Rural Electric Cooperative, Inc. is in the process of preparing a license application to be submitted to the Federal Energy Regulatory Commission (FERC) for the Felt Hydroelectric Generating Project on the Teton River. FERC regulations require the applicant to consult with Federal, state, and local resource and managerial authorities concerning land use, recreation, and visual resources that may be affected by the proposed project. A letter(s) is required from the agencies consulted, outlining the extent and adequacy of the consultation, concerns regarding the project, and recommended mitigation measures.

On behalf of Fall River Rural Electric, we request that you review the material enclosed and submit a letter to Fall River Rural Electric Cooperative, Inc., Attention: Mr. Calvin Wickham, P.O. Box 617, Ashton, Idaho 83250 with appropriate comments by November 25, 1981. Please send a copy to me so it can be attached to the FERC application.

If I can provide you with further information, please contact our office.

Sincrely,

M. T. Hill

Mark T. Hill

F375-A

Enclosures

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LETTER DISTRIBUTION BY AGENCY

Mr. Doug James
Code 150
Bureau of Reclamation
P.O. Box 043
550 West Fort Street
Boise, Idaho 83724

Mr. Bill Scribner
Idaho Department of
State Lands
State House
Boise, Idaho 83720

Dr. Thomas Green
State Archeologist
Idaho State Historical
Society
610 Julia Davis Drive
Boise, Idaho 83706

Mr. Gerard Bentyrn
National Park Service
Westin Building
2001 6th Avenue
Seattle, Washington 98104

Mr. Todd Graeff
Idaho Department of Parks
and Recreation
State House Mail
2177 Warm Springs Avenue
Boise, Idaho 83720

Mr. Larry Koenig
Idaho Department of Health
and Welfare
State House
Boise, Idaho 83720

Mr. James Baggs
Idaho Department of
Water Resources
State House
Boise, Idaho 83720

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Mr. Dennis Buechler
Ecological Services
U.S. Fish and Wildlife Service
4620 Overland Road -- Room 209
Boise, Idaho 83705

Mr. Monte Richards
Chief, Program Coordination
Idaho Department of Fish
and Game
P.O. Box 25
Boise, Idaho 83707

Mr. O'Dell Frandsen
District Manager
Bureau of Land Management
940 Lincoln Road
Idaho Falls, Idaho 83401

Mr. Steve Smart
District Conservationist
Soil Conservation Service
P.O. Box 87
Driggs, Idaho 83422

Mr. Dan Lethan
Teton County
Planning and Zoning Commission
Driggs, Idaho 83422

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Dave T — DAT

Dave T
Sounds reasonable.
4-1-85

INTER-DEPARTMENT MEMO — 1

FROM Dave T DATE 3/29/84

TO Gla

SUBJECT 22-7351, 22-7482

These two apps are for the power plant at Felt Dam.

They are eligible for approval, but I have 2 thoughts.

a. 22-7482 is later-in-time than the min stream flow on the Teton River. Do we want to reference the approval to the agreement with Fish & Game concerning bypass through the River?

b. Although there is already a FERC license on this project, the license has

SIGNATURE

(over)

been requested by Fall Riv Rural Elec Coop to be amended (see App for amendment of FERC License in file). This is similar to the Swan Falls app for amendment of FERC license, so to be consistent, perhaps we should not approve the apps until requested to to so by the applicant.

Your suggestion?

Dave

POWER CALCULATIONS FOR APPLICATION NO. 22-7351

1383.8 1870

P = Kilowatts .74 X hp

Q = cfs 300

H = feet 80

e = efficiency

proposed

1.) Affidavit of Residency
2.) Ownership of Facilities
3.)*Financial Ability
4.) Feasibility of Project
a. Plans, drawings — ok see FERC License
b. Economic analysis
5.)*Compliance w/FERC

Need

License issued

*only for projects of more than 25 cfs or more than 500 horsepower.

$$e = \frac{P(11.8)}{QH} = \frac{1383.8(11.8)}{300 \times 80} = \frac{16328.84}{24000} = 0.68$$ ok

Based on the above calculations the proposed project must have an 68 % efficiency.

****

OVERLAP REVIEW per micro-fiche 3/14/85:

P/D 22-0606 - power
22-2123 - " "
22-2126 - " "
22-7196 - irrig.
22-7482 - attached (also ready for approval)

P/U ~~(sec. 20) 22-7256 - irrigation gw~~ N/A

(sec. 29) 22-7256 - irrig. - gw.
22-7108 - irrig. - Teton R.
22-7208 - irrig. - gw

BYPASSED AREA

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MSF #22-7369? NO - NOT permit yet

Form No. 202a
3/79

State of Idaho
Department of Water Resources

Amended

APPLICATION FOR PERMIT ANALYSIS SHEET

INITIAL REVIEW BY: HWS APPLICATION NUMBER: _____

CHECK:

- ☑ Source.
- ☑ Point of diversion.
- ☑ County.
- ☑ Quantity of water and period of use.
- ☑ Description of diverting works.
- ☑ Time required for beneficial use of water.
- ☑ Place of use or acres irrigated.
- ☑ Map.
- ☑ Signature.
- ☑ Fee.

Field check by: _____
Date: _____
Comments: _____

- ☐ Yes ☑ No Field check required.
- ☐ Yes ☑ No Critical groundwater area.
- ☐ Yes ☑ No Request dam safety information. Sent by: _____ Date: _____
- ☑ Yes ☐ No* In form to receipt.

*REQUEST THE FOLLOWING ADDITIONAL INFORMATION FROM THE APPLICANT: _____

SEND COPIES TO:

- ☐ Idaho State Health Department. Copies sent by: _____ Date: _____
- ☑ Idaho Fish and Game Department. (cw) 1-03-85
- ☐ Idaho Department of Lands.
- ☐ U.S. Bureau of Land Management.
- ☐ U.S. Forest Service.
- ☑ Other WD #01

PROCESSING:

- ☐ Yes ☑ No Platted by: _____ Map No. _____
- ☑ Yes ☐ No Other rights on same place of use. 22-0606, 22-2123, 22-2126
- ☑ Yes ☐ No* In form for advertising.
  Final date for protests: 1-28-85
- ☐ Yes ☐ No Protests received. If yes, record information on 4th page of application.

FINAL REGIONAL PROCESSING REVIEW:

- ☑ Affidavit of publication received. Date: 1-18-1985
- ☑ Application published correctly. If not, record action taken: _____
- ☑ Fee amount, receipt date & number, recorded on application.
- ☑ Publication dates and paper, recorded on application.
- ☑ Protests, dates, withdrawal, etc., recorded on application.
- ☑ Recommendation & initial, recorded on application.
- ☑ Yes ☐ No Measuring device required.
- ☐ Yes ☐ No Access port required.
- ☑ Yes ☐ No Will water be delivered by watermaster? If yes, what district? 01
- 3-18-1981 Date of priority recommended.

Special conditions of approval or cover letter. _____

08A, 17G, 17K, 25

By: Ernest Carlson. Date: Jan 30, 1985

STATE OFFICE REVIEW:

L14, L08, L16 01E 05(01, Snake River) 27
08A 09D 17G 17K 25

- ☐ See attached sheet for more information.

By: CW Date: 3-14-85

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RECEIVED
FEB 05 1985
Department of Water Resources

3/79

IDEN.. NO. 22 7351

IDAHO DEPARTMENT OF WATER RESOURCES

WATER RIGHT
DATA ENTRY LOG

Initials	Date	Item
kw	3/27/81	Original form entered
		Edit Report Correct
		Date Protested
		Date of Hearing
		Date Approved/Denied (Proof due date, stage and/or status, conditions of approval, water district)
		Record Verified
		Amendment Approved
		Extension Approved
		Partial Proof
		Proof Complete
		Field Exam Received
		Field Exam Accepted and changes entered
		License Signed
		Transfer Approved
		Keypunched by State Office

VERIFICATION OF FINANCIAL ABILITY

Fall River Rural Electric Cooperative, Inc., an Idaho Corporation, duly organized under the State Laws of Idaho and authorized to conduct business in the States of Montana, Idaho, and Wyoming, is a rural electric cooperative formed as a result of the Rural Electrification Act of 1936. Under the Rural Electrification Act, Fall River Rual Electric Cooperative, Inc. borrows its operating capital from the Rural Electrification Administration (REA), and the Cooperative Finance Corporation (CFC).

Fall River Electric Cooperative is also anticipating the ability to secure private investment capital which would be available to suppliment financing through the REA and CFC programs. At this time, we do not foresee any problems with regard to the Cooperative's ability to finance the proposed hydro project. This will be accomplished through the REA and CFC current loan programs, or may be financed with private investment capital under a seperate agreement.

Calvin H. Wickham

Calvin H. Wickham
General Manager

CHW:lb

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Table D-4
FINANCING REQUIREMENTS AND ANNUAL COSTS
($1,000)

Year	Project Cost in 1981	Cost Escalation @ 10%/yr	Project Cost in Year Spent	8% Interest		12% Interest		16% Interest	
				Interest During Construction	Accumulated Amount Borrowed	Interest During Construction	Accumulated Amount Borrowed	Interest During Construction	Accumulated Amount Borrowed
1981	$ 122		$ 122	9.8	$ 122	14.6	$ 122	19.5	$ 122
1982	440	$ 22	462	47.5	593.8	71.8	598.6	96.6	603.5
1983	2,338	362	2,700	267.3	3,341.3	404.4	3,370.4	544.0	3,400.1
1984	6,520	1,764	8,284	951.4	11,892.6	1,447.1	12,058.9	1,956.5	12,228.1
TOTAL	$9,420	$2,148	$11,568		$12,844.0		$13,506.0		$14,184.6
TOTAL FINANCING REQUIREMENT					$12,844.0		$13,506.0		$14,184.6
ANNUAL COSTS									
Principal and Interest					$ 1,102.1		$ 1,652.0		$ 2,282.2
Operation and Maintenance					60.0		60.0		60.0
Administration and General					20.0		20.0		20.0
Insurance and Taxes					20.0		20.0		20.0
TOTAL ANNUAL COST					$ 1,202.1		$ 1,752.0		$ 2,382.2
Average Energy Generation (MWh)					31,400		31,400		31,400
Unit Energy Cost in 1984 (¢/kWh)					3.8		5.6		7.6

Table D-3
FELT PROJECT
COST SUMMARY
(1981 COST LEVEL)

FERC ACCOUNT NUMBER	ACCOUNT DESCRIPTION	COST
Hydroelectric Plant Accounts		
330	Lands and Land Rights	$ 13,000
331	Structures and Improvements	873,000
332	Reservoirs, Dams, and Waterways	1,845,000
333	Waterwheels, Turbines, and Generators	2,790,000
334	Accessory Electrical Equipment	484,000
335	Miscellaneous Power Plant Equipment	164,000
336	Roads, Railroads, and Bridges	375,000
Transmission Plant Accounts		
350	Land and Land Rights	5,000
352	Structures and Improvements	14,000
353	Station Equipment	136,000
354	Towers and Fixtures	0
355	Poles and Fixtures	8,000
356	Overhead Conductors and Devices	6,000
357	Underground Conduit	0
358	Underground Conductors and Devices	9,000
359	Roads and Trails	5,000
Subtotal		$6,727,000
Contingencies		1,345,000
Subtotal		$8,072,000
Sales Tax (3% of Materials)		121,000
TOTAL CONSTRUCTION COST		$8,193,000
Engineering and Owner's Cost		1,227,000
TOTAL PROJECT COST (1981)		$9,420,000

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WATERMASTER COMMENTS

I have reviewed Application for Permit No. Amended 22-7351 and have the following comments/objections to the approval of this application for permit:

The application should be correct

1/22/85
Date

RONALD D. CARLSON, WATERMASTER
Water District No. 01

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IDAHO DEPARTMENT OF FISH AND GAME
REGION 6
1515 Lincoln Road
Idaho Falls • Idaho • 83401

RECEIVED
JAN 16 1985
Department of Water Resources
Eastern District Office

January 14, 1985

Mr. Ernest Carlsen
Assistant Regional Supervisor
Department of Water Resources
150 Shoup, Suite 15
Idaho Falls, Idaho 83402

RE: Amended Application for Permit No. 22-7351 Fall River Rural
Teton River at Felt Dam.

Dear Ernie:

The Idaho Department of Fish and Game have no objections to Fall River Rural Electric's application for 300 cfs at Felt Dam, provided Fall River abides by the prior agreement on minimum flow through their project reach. Those flows include a constant 20 cfs minimum discharge year-round; with 50 cfs minimum flow provided for three months for spawner passage. Fall River Rural also agreed to construct a fish ladder with 10 to 30 cfs flow capacity to provide for fish passage.

Sincerely,

Tom Reinecker
Regional Supervisor
Region 6

TR:SE:dnb

cc: USFWS (Wolfin)
Bureau of Fisheries
Bureau of Program Coordination

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File

January 3, 1985

RE: Amended Application for Permit No. 22-7351 FALL RIVER RURAL

Mr. Tom Reinecker
Regional Supervisor
Department of Fish & Game
1515 Lincoln Road
Idaho Falls, ID 83401

Dear Tom:

We are enclosing a copy of an application that may be of interest to your agency. Please review the application and submit any comments you may have to our Department as soon as possible. The last date of protest is January 28, 1985, and we are required to take final action shortly thereafter.

If we may be of further assistance, please feel free to contact us.

Respectfully submitted,

ERNEST CARLSEN
Assistant Regional Supervisor

EC:cw

Enclosure

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STATE OF IDAHO

DEPARTMENT OF WATER RESOURCES
Eastern Region

150 Shoup Ave., Suite 15
Idaho Falls, Idaho 83402
(208) 525-7161

JANUARY 2, 1985

Teton Valley News
Driggs, ID 83422

Gentlemen:

Enclosed you will find a legal notice which we wish to have published on the dates indicated (once a week for two consecutive weekly issues) in your newspaper. We have allowed ample time for you to submit a galley proof to this office for review before the first publication date. If you cannot publish the notice on the proposed dates, please contact us immediately.

An affidavit of publication must be submitted to the Department along with the publication bill. Your cooperation is appreciated.

Please send the affidavit of publication and publication billing to this office before JANUARY 28, 1985.

Yours truly,

RONALD D. CARLSON
Supervisor
Eastern Region

Encl.

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NOTICE OF AMENDED APPLICATION FOR WATER PERMIT

22-7351

Notice is hereby given that Application for Permit No. 22-7351 in the name of Fall River Rural Electric Cooperative, Inc. was filed for the diversion of 300.0 cfs of water from Teton River tributary to Snake River, with point of diversion within the SW¼NW¼, Sec. 29, T. 7N, R. 44E, B.M., Teton County; to be used from Jan. 1 to Dec. 31 for power purposes within the NW¼NE¼, Sec. 29, T. 7N, R. 44E, B.M.

The applicant now proposes to amend Application No. 22-7351, requesting the point of diversion be changed to within the SW¼NE¼, Sec. 29, T. 7N, R. 44E, B.M., Teton County.

Any protest to the proposed amending of the application must be filed with the Idaho Department of Water Resources, 150 Shoup, Suite 15, Idaho Falls, ID, 83402 on or before January 28, 1985.

A. KENNETH DUNN

Director

Published in the Teton Valley News, Driggs on 1/10 & 1/17/85.

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December 19, 1984

RE: Amended Application for Permit No. 22-7351

Mr. Chuck Darsey
Assistant Manager
Fall River Rural Electric Co-op
P.O. Box 617
Ashton, Idaho 83420

Dear Mr. Darsey:

In our conversation of December 12, 1984 you asked:

1. Does the amendment of application for permit 22-7351 require readvertising?

2. Can future upstream appropriators be allowed to deplete the flows available to Fall River Rural Electric, Inc.?

3. Can Ray Brown's use of the company's penstock in conjunction with his water rights for irrigation be expanded in the future to the detriment of Fall River Rural Electric?

I will attempt to answer these questions in the same order they were asked.

1. Idaho Code §42-211 requires the readvertising of any amended application. Because the language in the statute does not provide an option, this will be readvertised in the Teton Valley News on January 3 and 10, 1985.

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2. Subordination language has historically been a standard condition on hydropower water rights. These conditions originally were imposed to prevent large hydrdoelectric projects located low in a drainage from asserting water rights which would eliminate the opportunity to appropriate water for new upstream uses. These conditions, for the sake of consistency, have normally been applied to all hydropower rights. As a practical matter, the opportunities for new consumptive uses that could impact the flows available to hydropower plants located high in a drainage are very limited because of the prior downstream rights that have to be met. For example, the lower Teton has 1,834 cfs of rights with priority earlier than January 22, 1916. The flow at the Teton near St. Anthony gage in 1982, which was a good water year, was greater than 1,834 cfs only between May 16 and July 27. This might indicate that water could be available early in the spring. However, because of downstream water rights, water only could have been diverted from the Teton for a new use between May 24 and July 17. This is normally too early for water to be needed in the Teton Basin. In addition, the Department has, for several years, required that all new applications on the Snake River drainage demonstrate that sufficient supplemental water supplies are available to assure adequate supplies to complete a crop. This usually requires stored water that could be released once the natural flow right is cut. Because there is no upstream storage on the Teton, it would be very difficult to meet the requirement for a "full" water supply. In the past, there have been arrangements made to use stored water on the upper Teton through exchange arrangements. Opportunities for further exchanges are very limited.

3. Ray Brown is one of the people who has made arrangements to pump groundwater into the lower Teton to replace water diverted through the pumps located at your Felt facility. I expect it to become increasingly difficult for Mr. Brown to maintain the present exchange arrangement even without attempting to expand his water use. In any case, his water use of Fall River Electric penstock is a contractual arrangement that is outside the scope of the relative water rights.

Very truly yours,

RONALD D. CARLSON
Eastern Regional Supervisor

RDC:cw

NOTE-O-GRAM®
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FALL RIVER RURAL ELECTRIC COOPERATIVE INC.

ASHTON, IDAHO 83420 • 652-7431

MESSAGE

TO Mr. Ron Carlson
Water Resources Board
Idaho Falls, Idaho 83401

DATE December 12, 1984

Dear Mr. Carlson,

As discussed during our telephone conversation on December 12, 1984, could you give us your opinion on the reliability of the flow of water at this power site, excepting of course, the effect of nature but particularly the potential impact of any new upstream water rights with respect to our water permits for hydro production?

Your assistance is appreciated.

BY

Form N N73 © The Drawing Board, Inc., Box 505, Dallas, Texas 75221

INSTRUCTIONS TO SENDER:
1. KEEP YELLOW COPY. 2. SEND WHITE AND PINK COPIES INTACT.

REPLY

DATE

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SIGNED

INSTRUCTIONS TO RECEIVER:
1. WRITE REPLY. 2. DETACH STUB, KEEP PINK COPY, RETURN WHITE COPY TO SENDER.

December 3, 1984

Gale Reed
Fall River Electric Co-op, Inc.
Box 617
Ashton, Id 83420

RE: Application for Permit 22-7351

Dear Mr. Reed:

Final review of your application, filed March 18, ~~1984~~ 1981 was recently performed. The review revealed an apparent error in the original application.

Enclosed is an amended application. Please note this application changes the point of diversion from the SW1/4 NW1/4 of Sec. 29 to the SW1/4 NE1/4, Sec. 29. The map filed with the original application indicates the SW1/4 NE1/4 of Sec. 29 as the proper tract for point of diversion.

Please review the application and the changes carefully. If you feel it is correct, sign and return it as soon as possible so that processing can continue.

There is a $20.00 filing fee to amend the application, this must also be enclosed.

If you have any questions please feel free to contact our office.

Sincerely,

STEVE McCORMICK
Water Resource Engineer

SM/cz

Enclosure

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ACTION REQUIRED

FROM: Kay Walker Kay 10/26/1984

TO: Ernie - Eastern Region RE: Application 22-7351

Hi, Ernie!!!

I was reviewing this application for approval and found that the point of diversion is not in the SW¼NW¼ (as stated on legal description). On the map and attachment (Description of Section #8) they state the point of diversion is within the SW¼NE¼.

I've talked this over with Dave Tuthill and he says we have to have the applicants correct the application (by changing the legal and initialing the correction) and then we must readvertise the change.

DONE We also need to request a "financial ability" statement. Since you will be in contact with them, could you please request it?

We realize this is an oldie-goldie (I even advertised it by in 1981!), but we have to correct it and readvertise to be in conformance with Idaho Code.

Have a nice day!!!

RECEIVED

OCT 31 1984

Department of Water Resources
Eastern District Office

FALL RIVER
Rural Electric Cooperative, Inc.

RECEIVED
OCT 22 1984
Department of Water Resources

714 MAIN STREET • P. O. BOX AE • ASHTON, IDAHO 83420 • [208] 652-7431

October 19, 1984

Department of Water Resources
State Office
450 W. State Street
Boise, Idaho 83720

Re: Application for Permit No. 22-7351

Dear Sirs:

In response to a letter addressed to our utility, dated August 25, 1981, and signed by Mr. Glen Saxton (copy enclosed), we are submitting a copy of the FERC Order Issuing License on Fall River's Project No. 5089-001. It is our understanding that the application for Water Permit No. 22-7351 can now be approved.

If we can be of any further assistance during the approval process, please contact my office.

Sincerely yours,

C. L. Dawsey
Manager, Engineering & Operations

CLD:lb

Enclosures

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UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Fall River Rural Electric Cooperative, Inc.) Project No. 5089-001

ORDER ISSUING LICENSE (MAJOR)

(Issued September 9, 1983)

Fall River Rural Electric Cooperative, Inc. has filed an application for a license under Part I of the Federal Power Act (Act) to re-construct, operate, and maintain the Felt Project No. 5089. 1/ The project is located on the Teton River near the Town of Tetonia, Teton County, Idaho, affects the interests of interstate or foreign commerce, and would occupy lands of the United States under the jurisdiction of the Bureau of Reclamation.

Notice of the application has been published and comments have been received from interested federal, state, and local agencies. No protests or petitions to intervene have been received, and none of the agencies objected to issuance of the license. The significant concerns of the commenting agencies are discussed below.

1/ Authority to act on this matter is delegated to the Director, Office of Electric Power Regulation, under §375.308 of the Commission's regulations, 18 C.F.R. §375.308 (1983). This order may be appealed to the Commission by any party within 30 days of its issuance pursuant to Rule 1902, 18 C.F.R. 385.1902 (1983). Filing an appeal and final Commission action on that appeal are prerequisites for filing an application for rehearing as provided in Section 313(a) of the Act. Filing an appeal does not operate as a stay of the effective date of this order or any other date specified in this order, except as specifically directed by the Commission.

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History and Description

The original dam, power plant, and appurtenances were constructed in 1921. The facility was expanded in 1946 to include a second powerhouse. A new dam was constructed in 1963. The plant was operated intermittently from 1968 until 1980, when full power production was resumed.

The existing facilities consist of a dam, a reservoir, three intakes, three tunnels, three penstocks, two powerhouses containing an installed capacity of 1870 kW, and miscellaneous appurtenant facilities. Applicant proposes to add a fish ladder, a penstock extension, a powerhouse containing two generating units with a total capacity of 6025 kW, a tailrace, and to relocate the transmission line and access road. The existing powerhouses would be removed from service. 2/ A more detailed project description is contained in ordering paragraph (B).

Safety and Adequacy

Staff inspected the project and found it to be well maintained and in good operating condition. The dam was observed to be in sound structural condition.

Failure of the dam, classified as low hazard, would not create additional hazard to downstream life or property. Failure of the dam under flood conditions would not significantly increase the flow downstream. The spillway capacity is adequate.

It is concluded that the project, under the conditions of this license, will be safe and adequate.

Economic Feasibility

The proposed plant would operate run-of-river under a static head of 150 feet with a hydraulic capacity of 680 cfs. Streamflow exceeding 680 cfs occurs approximately 17 percent of the time and would be released over the dam.

A staff analysis shows the project is economically feasible.

2/ The proposed project, with its average annual generation of 31.4 million kWh, will utilize a renewable resource that will save the equivalent of approximately 51,560 barrels of oil or 14,540 tons of coal per year.

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Fish, Wildlife and Recreation Resources

The Applicant and Idaho Department of Fish and Game (IDFG) have agreed on conditions to protect and enhance fish, wildlife, and recreational resources. The U.S. Fish and Wildlife Service, the Idaho Conservation League, and the Sierra Club stated that they had no objection to the proposed project provided that the agreement between the Applicant and IDFG is implemented, The Fish, Wildlife, and Botanical Resources Report, "Mitigation" portion, of the Exhibit E will be approved.

To ensure the protection and enhancement of the fishery resource, Article 33 is included to provide for an interim minimum flow. Article 34 is included to require fishery and minimum flow studies. In addition, Article 35 requires the Licensee to consult with the agencies concerning the design of fish passage facilities, to file for Commission approval of functional design drawings, and to file as-built drawings with the Commission.

Pursuant to Section 4(h) of the Pacific Northwest Electric Power Planning and Conservation Act of 1980 (P.L. 96-501), the Northwest Power Planning Council ("NPPC") developed in 1982 a fish and wildlife program to protect, mitigate, and enhance fish and wildlife resources in the Pacific Northwest. The proposed project does not appear to conflict with NPPC's fish and wildlife program. Nevertheless, Article 44 reserves in the Commission the authority to order where practicable alterations in project structures and operations in order to take into account NPPC's fish and wildlife program.

Under Article 17 of this license, the Commission reserves the right to require additional recreational development in the future. The Idaho Department of Health and Welfare has issued a water quality certificate for the project, in accordance with Section 401 of the Federal Water Pollution Control Act.

Cultural Resources

The Applicant has consulted with the Idaho State Historic Preservation Officer (SHPO). The SHPO reported that the project would have no effect on significant cultural resources.

In accordance with standard Commission practice, Article 36 of this license also requires cultural resources protection measures in the event of any future construction or development at the project.

Other Aspects of Comprehensive Development

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The proposed project is not in conflict with any planned development. It efficiently utilizes the flow and fall of the Teton River and, upon compliance with the terms and conditions of the license, the project would be best adapted to the comprehensive development of the Upper

Snake River basin for beneficial purposes.

License Term

The project will use an existing dam, reservoir, tunnels and penstocks. In addition, it will include a new fish ladder, penstock extension and an additional powerhouse containing two new generating units, a tailrace and will relocate the transmission line and access road. Licensing the project is considered to be a licensing action similar to the relicensing of a project where a moderate amount of reconstruction is proposed. Consistent with the Commission policy expressed in Lyndonville Electric Department 3/ this license will expire forty years from the first day of the month in which this order is issued.

The policy under Pacific Power and Light Company 4/ is to issue the license effective as of the date of any unauthorized post 1935 construction. Here the post 1935 construction was an expansion of the project completed by January 1, 1947. Because of the 50 year statutory maximum license period, however, the license will be effective September 1, 1973.

Annual Charges

In accordance with the order issuing a license for the Shoshone Falls Project, 5/ annual charges will be based upon the effective date, but this license will also be conditioned upon payment of an amount equivalent to the annual charges that would otherwise have been due for the period from January 1, 1947, to August 31, 1973. This payment is not a penalty, but is intended to place the Applicant as nearly as possible in the same position it would have been in before our change in termination date policy, and the same position as similarly situated Licensees who received their license before that change in policy.

For projects constructed prior to 1938 and located on U.S. lands without proper Federal permission, Commission policy would be to condition the license upon payment of an amount equivalent to the annual charges that would otherwise have been due since January 1, 1938. The redeveloped Felt Project, however, would be located on recently acquired U.S. lands, under the jurisdiction of the Bureau of Reclamation.

3/ Lyndonville Electric Department 7 FERC ¶61324 (June 29, 1979).

4/ Pacific Power and Light Company, 56 FPC 1804 (1976).

5/ Idaho Power Co., 7 FERC $61,254(1979).

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Accordingly, the charge for the use of U.S. lands will be made effective Septembe[redacted]

Environmental Impacts

The short-term minor adverse impacts associated with the construction period would include: soil erosion and localized increases in suspended sediment loads; increased noise and air pollution; and disruption of wildlife and wildlife habitat. The long-term impacts on the change in streamflow pattern and the fishery resources are adequately mitigated. No federaly listed threatened or endangered species would be affected by the proposed action. On the basis of the record, and staff's independent analysis, we conclude that approval of the proposed license would not constitute a major Federal action significantly affecting the quality of the human environment.

It is ordered that:

(A) This license is issued to Fall River Rural Electric Cooperative, Inc. (Licensee), of Ashton, Idaho, under Part I of the Federal Power Act (Act), for a period effective September 1, 1973 and terminating 40 years from the first day of the month in which his order is issued, for reconstruction, operation, and maintenance of the Felt Project No. 5089, located in Teton County, Idaho, on the Teton River, and occupying lands of the United States under the jurisdiction of the Bureau of Reclamation and affecting the interests of interstate or foreign commerce. This license is subject to the terms and conditions of the Act, which is incorporated by reference as part of this license, and subject to the regulations the Commission issues under the provisions of the Act.

(B) The Felt Project No. 5089 consists of:

(1) All lands, to the extent of the Licensee's interests in those lands, constituting the project area and enclosed by the project boundary. The project area and boundary are shown and described by certain exhibits that form part of the appliction for license and that are designated and described as:

Exhibit	FERC No.	Showing
A-3	5089-1	Lands of the United States
G-1	5089-9	Project Map

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(2) Project works consisting of:

(a) a 12-foot-high 135-foot long dam having a 90-foot long spillway section with crest elevation 5,530 feet m.s.l. and having a sluiceway and a fish ladder; (b) a reservoir having a surface area of 10 acres and a storage capacity of 40 acre-feet; (c) three intake structures along the reservoir right bank; (d) inoperative flowline no. 1 consisting of a 170-foot-long tunnel; (e) flowline no. 2 consisting of a 215-foot-long tunnel and a 395-foot-long 59-inch-diameter steel penstock; (f) flowline no. 3 consisting of a 180-foot-long tunnel and a 405-foot-long 59-inch-diameter steel penstock; (g) an 8-foot-diameter 1,200-foot-long steel penstock extending from the 59-inch-diameter penstocks to a powerhouse; (h) a powerhouse containing two generating units having a total rated capacity of 6,025 kW at a net head of 123 feet and hydraulic capacity of 680 cfs; (i) the 4.16-kV generator leads and a 3-phase 4.16/46-kV, 75 MVA transformer; (j) a 1,600-foot-long 46-kV transmission line; (k) the facilities necessary to connect to the Licensee's system at the Badger Substation; (l) a 170-foot-long excavated tailrace with water surface elevation 5380.0 feet m.s.l.; (m) an access road; (n) a public-parking area; and (o) appurtenant facilities.

The location, nature, and character of these project works are generally shown and described by the exhibits cited above and more specifically shown and described by certain other exhibits and reports that also form a part of the application for license and that are designated and described as:

Drawing No.	FERC No.	Showing
F-1	5089-5	Project Layout
F-2	5089-6	Profile and Typical Sections
F-3	5089-7	Powerplant Plans and Sections
F-4	5089-8	Boring Locations and Logs

Exhibit A - The Section, filed February 22, 1982, entitled "Structures and Equipment", consisting of two typewritten pages of text, pages A-5 to A-7, and:

Drawing No.	FERC No.	Showing
A-4	5089-2	Facilities Profiles
A-5	5089-3	Felt Dam

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Exhibit E - The Section, filed February 22, 1982, as revised on June 1, 1982, entitled "Mitigation", consisting of five typewritten pages of text, pages E-21 to E-25.

(3) All of the structures, fixtures, equipment, or facilities used or useful in the operation or maintenance of the project and locted within the project boundary, all portable property that may be employed in connection with the project, located within or outside the project boundary, as approved by the Commission, and all riparian or other rights that are necessary or appropriate in the operation or maintenance of the project.

(C) Exhibits F and G, and the portions of Exhibits A and E designated in ordering paragraph (B) above, are approved and made a part of the license.

(D) This license is also subject to the terms and conditions set forth in Form L-2 (revised October 1975), entitled "Terms and Conditions of License for Unconstructed Major Project Affecting Lands of the United States", attached to and made a part of this license, except insofar as Standard Article 20 relates to a plan for clearing the reservoir area. The license is also subject to the following additional articles:

Article 33. Licensee shall discharge an interim continuous minimum flow of 20 cubic feet per second (cfs) except for 3 months each year, during the period of cutthroat trout spawning migration, when the minimum flow release will be 50 cfs or the inflow of the reservoir, whichever is less, for the purpose of protecting fish and wildlife resources. The 3-month spawning migration period shall be determined through consultation with the Idaho Department of Fish and Game. These flows may be temporarily modified if required by operating emergencies beyond the control of the Licensee, for fishery and minimum flow studies required by Article 34, and for short periods for fishery management purposes upon mutual agreement between the Licensee and the Idaho Department of Fish and Game.

Article 34. Licensee shall consult and cooperate with the Idaho Department of Fish and Game and the U.S. Fish and Wildlife Service in conducting studies to determine the period of cutthroat trout spawning migration, and the minimum flow release needed at the Felt Project to ensure protection and enhancement of fishery and wildlife resources. Further, Licensee shall, within 2 years from the date of issuance of this license, file a report of its findings and, for Commission approval, recommendations for a minimum flow release from the project, together with any agency comments on the report and recommendations. At the same time, copies of the filings shall be served upon the agencies consulted.

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Article 35. Licensee shall, within 2 years following issuance of this license, file for Commission approval functional design drawings of the proposed fish passage facilities at the Felt Project, prepared in consultation with the Idaho Department of Fish and Game and the U.S. Fish and Wildlife Service. Agency letters of comment on the design drawings shall be included in this filing. Further, Licensee shall file as-built drawings with the Commission within 6 months after completion of construction of the fish passage facilities.

Article 36. Prior to the commencement of any future construction or development of any project works or other facilities at the project, the Licensee shall consult and cooperate with the Idaho State Historic Preservation Officer (SHPO) to determine the need for, and extent of, any archeological or historic resource surveys and any mitigative measures that may be necessary. The Licensee shall provide funds in a reasonable amount for any such activity. If any previously unrecorded archeological or historical sites are discovered during the course of construction, construction activity in the vicinity shall be halted, a qualified archeologist shall be consulted to determine the significance of the sites, and the Licensee shall consult with the SHPO to develop a mitigation plan for the protection of significant archeological or historic resources. If the Licensee and the SHPO cannot agree on the amount of money to be expended on archeological or historic work related to the project, the Commission reserves the right to require the Licensee to conduct, at its own expense, any such work found necessary.

Article 37. Licensee shall commence construction of the proposed project within 1 year of the effective date of issuance of the license and shall complete construction within 3 years from the effective date of this license.

Article 38. Licensee shall file with the Commission's Regional Engineer and the Director, Office of Electric Power Regulation, one copy each of the final contract drawings and specifications for pertinent features of the project, such as water retention structures, powerhouses, and water conveyance structures, at least 60 days prior to start of construction. The Director, Office of Electric Power Regulation may require changes in the plans and specifications to assure a safe and adequate project.

Article 39. The Licensee shall review and approve the design of contractor-designed cofferdams and deep excavations prior to the start of construction and shall ensure that construction of cofferdams and deep excavations are consistent with the approved design. At least 30 days prior to start of construction of the cofferdam the Licensee shall file with the Commssion's Regional Engineer and Director, Office Of Electric Power Regulation, one copy of the approved cofferdam construction drawings and specifications and a copy of the letter(s) of approval.

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Article 40. The Licensee shall within 90 days of completion of construction file for approval of the Director, Office of Electric Power Regulation revised Exhibit F drawings showing the project as-built.

Article 41. Pursuant to Section 10(d) of the Act, after the first 20 years of operation of the project under license, a specified reasonable rate of return upon the net investment in the project shall be used for determining surplus earnings of the project for the establishment and maintenance of amortization reserves. One half of the project surplus earnings, if any, accumulated after the first 20 years of operation under the license, in excess of the specified rate of return per annum on the net investment, shall be set aside in a project amortization reserve account at the end of each fiscal year. To the extent that there is a deficiency of project earnings below the specified rate of return per annum for any fiscal year after the first 20 years of operation under the license, the amount of that deficiency shall be deducted from the amount of any surplus earnings subsequently accumulated, until absorbed. One-half of the remaining surplus earnings, if any, cumulatively computed, shall be set aside in the project amortization reserve account. The amounts established in the project amortization reserve account shall be maintained until further order of the Commission. The annual specified reasonable rate of return shall be the sum of the annual weighted costs of long-term debt, preferred stock, and common equity, as defined below. The annual weighted cost for each component of the reasonable rate of return is the product of its capital ratio and cost rate. The annual capital ratio for each component of the rate of return shall be calculated based on an average of 13 monthly balances of amounts properly includable in the Licensee's long-term debt and proprietary capital accounts as listed in the Commission's Uniform System of Accounts. The cost rates for long-term debt and preferred stock shall be their respective weighted average costs for the year, and the cost of common equity shall be the interest rate on 10-year government bonds (reported as the Treasury Department's 10 year constant maturity series) computed on the monthly average for the year in question plus four percentage points (400 basis points).

Article 42. (1) The Licensee shall pay the United States an amount equal to the annual charge that would have applied for the period January 1, 1947, to August 31, 1973, if the project had been licensed during that period:

(a) For the purpose of reimbursing the United States for the cost of administration of Part I of the Federal Power Act, a reasonable annual charge as determined by the Commission in accordance with provisions of its regulations in effect from time to time during that period. The authorized installed capacity for that purpose is 2,490 horsepower.

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(2) The Licensee shall pay the United States the following annual charge for the period September 1, 1973, the effective date of this license, to August 31, 1983:

(a) For the purpose of reimbursing the United States for the cost of administration of Part I of the Act, a reasonable amount as determined in accordance with the provisions of the Commission's regulations in effect from time to time during that period. The authorized installed capacity for that purpose is 2,490 horsepower.

(3) The Licensee shall pay the United States the following annual charges, effective September 1, 1983:

(a) For the purpose of reimbursing the United States for the cost of administration of Part I of the Act, a reasonable amount as determined in accordance with the provisions of the Commission's regulations in effect from time to time. The authorized installed capacity for that purpose is 8,030 horsepower.

(b) For the purpose of recompensing the United States for the use, occupancy, and enjoyment of 50.2 acres of its lands, a reasonable amount in accordance with the provisions of the Commission's regulations in effect from time to time.

Article 43. (a) In accordance with the provisions of this article, the Licensee shall have the authority to grant permission for certain types of use and occupancy of project lands and waters and to convey certain interests in project lands and waters for certain other types of use and occupancy, without prior Commission approval. The Licensee may exercise the authority only if the proposed use and occupancy is consistent with the purposes of protecting and enhancing the scenic, recreational, and other environmental values of the project. For those purposes, the Licensee shall also have continuing responsibility to supervise and control the uses and occupancies for which it grants permission, and to monitor the use of, and ensure compliance with the covenants of the instrument of conveyance for, any interests that it has conveyed, under this article. If a permitted use and occupancy violates any condition of this article or any other condition imposed by the Licensee for protection and enhancement of the project's scenic, recreational, or other environmental values, or if a covenant of a conveyance made under the authority of this article is violated, the Licensee shall take any lawful actio

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necessary to correct the violation. For a permitted use or occupancy, that action includes, if necessary, cancelling the permission to use and occupy the project lands and waters and requiring the removal of any non-complying structures and facilities.

(b) The types of use and occupancy of project lands and waters for which the Licensee may grant permission without prior Commission approval are: (1) landscape plantings; (2) non-commercial piers, landings, boat docks, or similar structures and facilities that can accommodate no more than 10 watercraft at a time where said facility is intended to serve single-family type dwellings; and (3) embankments, bulkheads, retaining walls, or similar structures for erosion control to protect the existing shoreline. To the extent feasible and desirable to protect and enhance the project's scenic, recreational, and other environmental values, the Licensee shall require multiple use and occupancy of facilities for access to project lands or waters. The Licensee shall also ensure, to the satisfaction of the Commission's authorized representative, that the uses and occupancies for which it grants permission are maintained in good repair and comply with applicable State and local health and safety requirements. Before granting permission for construction of bulkheads or retaining walls, the Licensee shall: (1) inspect the site of the proposed construction, (2) consider whether the planting of vegetation or the use of riprap would be adequate to control erosion at the site, and (3) determine that the proposed construction is needed and would not change the basic contour of the reservoir shoreline. To implement this paragraph (b), the Licensee may, among other things, establish a program for issuing permits for the specified types of use and occupancy of project lands and waters, which may be subject to the payment of a reasonable fee to cover the Licensee's costs of administering the permit program. The Commission reserves the right to require the Licensee to file a description of its standards, guidelines, and procedures for implementing this paragraph (b) and to require modification of those standards, guidelines, or procedures.

(c) The Licensee may convey easements or rights-of-way across, or leases of, project lands for: (1) replacement, expansion, realignment, or maintenance of bridges and roads for which all necessary State and Federal approvals have been obtained; (2) storm drains and water mains; (3) sewers that do not discharge into project waters; (4) minor access roads; (5) telephone, gas, and electric utility distribution lines; (6) non-project overhead electric transmission lines that do not require erection of support structures within the project boundary; (7) submarine, overhead, or

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underground major telephone distribution cables or major electric distribution lines (69-kV or less); and (8) water intake or pumping facilities that do not extract more than one million gallons per day from a project reservoir. No later than January 31 of each year, the Licensee shall file three copies of a report briefly describing for each conveyance made under this paragraph (c) during the prior calendar year, the type of interest conveyed, the location of the lands subject to the conveyance, and the nature of the use for which the interest was conveyed.

(d) The Licensee may convey fee titles to, easements or rights-of-way across, or leases of project lands for: (1) construction of new bridges or roads for which all necessary State and Federal approvals have been obtained; (2) sewer or effluent lines that discharge into project waters, for which all necessary Federal and State water quality certificates or permits have been obtained; (3) other pipelines that cross project lands or waters but do not discharge into project waters; (4) non-project overhead electric transmission lines that require erection of support structures within the project boundary, for which all necessary Federal and State approvals have been obtained; (5) private or public marinas that can accommodate no more that 10 watercraft at a time and are located at least one-half mile from any other private or public marina; (6) recreational development consistent with an approved Exhibit R or approved report on recreational resources of an Exhibit E; and (7) other uses, if: (i) the amount of land conveyed for a particular use is five acres or less; (ii) all of the land conveyed is located at least 75 feet, measured horizontally, from the edge of the project reservoir at normal maximum surface elevation; and (iii) no more than 50 total acres of project lands for each project development are conveyed under this clause (d)(7) in any calendar year. At least 45 days before conveying any interest in project lands under this paragraph (d), the Licensee must file a letter to the Director, Office of Electric Power Regulation, stating its intent to convey the interest and briefly describing the type of interest and location of the lands to be conveyed (a marked Exhibit G or K map may be used), the nature of the proposed use, the identity of any Federal or State agency official consulted, and any Federal or State approvals required for the proposed use. Unless the Director, within 45 days from the filing date, requires the Licensee to file an application for prior approval, the Licensee may convey the intended interest at the end of that period.

(e) The following additional conditions apply to any intended conveyance under paragraphs (c) or (d) of this article:

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Article 44. The Commission reserves the authority to order, upon its own motion or upon the recommendation of federal or state fish and wildlife agencies or affected Indian Tribes, alterations of project structures and operations to take into account to the fullest extent practicable at each relevant stage of the decision making processes, the regional fish and wildlife program developed and amended pursuant to the Pacific Northwest Electric Power Planning and Conservation Act.

(E) Within 90 days from the date of acceptance of this license, the Licensee shall file a statement under oath showing the gross amount of power generation for the project in kilowatt-hours for each calendar year commencing January 1, 1947, in accordance with the provisions of Section 11.20(a)(4) of the Commission's regulations.

(F) The Licensee's failure to file a petition appealing this order to the Commission shall constitute acceptance of this license. In acknowledgment of acceptance of this order and its terms and conditions, it shall be signed by the License and returned to the Commission within 60 days from the date this order is issued.

Lawrence R. Anderson
Director, Office of Electric
Power Regulation

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Project No. 5089-001

IN TESTIMONY of its acknowledgment of acceptance of all of the terms and conditions of this Order, Fall River Rural Electric Cooperative, Inc. this 19th day of September 19 83, has caused its corporate name to be signed hereto by Gale Reed, its Board of Directors President, and its corporate seal to be affixed hereto and attested by Milo Bowen its Board of Directors Secretary, pursuant to a resolution of its Board of Directors duly adopted on the 19th day of September 19 83, a certified copy of the record of which is attached hereto.

By Gale A Reed
President

Attest:

Milo L Bowen
Secretary

(Executed in quadruplicate)

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Form L-2
(Revised October, 1975)

FEDERAL ENERGY REGULATORY COMMISSION

TERMS AND CONDITIONS OF LICENSE FOR UNCONSTRUCTED MAJOR PROJECT AFFECTING LANDS OF THE UNITED STATES

Article 1. The entire project, as described in this order of the Commission, shall be subject to all of the provisions, terms, and conditions of the license.

Article 2. No substantial change shall be made in the maps, plans, specifications, and statements described and designated as exhibits and approved by the Commission in its order as a part of the license until such change shall have been approved by the Commission: Provided, however, That if the Licensee or the Commission deems it necessary or desirable that said approved exhibits, or any of them, be changed, there shall be submitted to the Commission for approval a revised, or additional exhibit or exhibits covering the proposed changes which, upon approval by the Commission, shall become a part of the license and shall supersede, in whole or in part, such exhibit or exhibits theretofore made a part of the license as may be specified by the Commission.

Article 3. The project works shall be constructed in substantial conformity with the approved exhibits referred to in Article 2 herein or as changed in accordance with the provisions of said article. Except when emergency shall require for the protection of navigation, life, health, or property, there shall not be made without prior approval of the Commission any substantial alteration or addition not in conformity with the approved plans to any dam or other project works under the license or any substantial use of project lands and waters not authorized herein; and any emergency alteration, addition, or use so made shall thereafter be subject to such modification and change as the Commission may direct. Minor changes in project works, or in uses of project lands and waters, or divergence from such approved exhibits may be made if such changes will not result in a decrease in efficiency, in a material increase in cost, in an adverse environmental impact, or in impairment of the general scheme of development; but any of such minor changes made without the prior approval of the Commission, which in its judgment have produced or will produce any of such results, shall be subject to such alteration as the Commission may direct.

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Upon the completion of the project, or at such other time as the Commission may direct, the Licensee shall submit to the Commission for approval revised exhibits insofar as necessary to show any divergence from or variations in the project area and project boundary as finally located or in the project works as actually constructed when compared with the area and boundary shown and the works described in the license or in the exhibits approved by the Commission, together with a statement in writing setting forth the reasons which in the opinion of the Licensee necessitated or justified variation in or divergence from the approved exhibits. Such revised exhibits shall, if and when approved by the Commission, be made a part of the license under the provisions of Article 2 hereof.

Article 4. The construction, operation, and maintenance of the project and any work incidental to additions or alterations shall be subject to the inspection and supervision of the Regional Engineer, Federal Power Commission, in the region wherein the project is located, or of such other officer or agent as the Commission may designate, who shall be the authorized representative of the Commission for such purposes. The Licensee shall cooperate fully with said representative and shall furnish him a detailed program of inspection by the Licensee that will provide for an adequate and qualified inspection force for construction of the project and for any subsequent alterations to the project. Construction of the project works or any feature or alteration thereof shall not be initiated until the program of inspection for the project works or any such feature thereof has been approved by said representative. The Licensee shall also furnish to said representative such further information as he may require concerning the construction, operation, and maintenance of the project, and of any alteration thereof, and shall notify him of the date upon which work will begin, as far in advance thereof as said representative may reasonably specify, and shall notify him promptly in writing of any suspension of work for a period of more than one week, and of its resumption and completion. The Licensee shall allow said representative and other officers or employees of the United States, showing proper credentials, free and unrestricted access to, through, and across the project lands and project works in the performance of their official duties. The Licensee shall comply with such rules and regulations of general or special applicability as the Commission may prescribe from time to time for the protection of life, health, or property.

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Article 5. The Licensee, within five years from the date of issuance of the license, shall acquire title in fee or the right to use in perpetuity all lands, other than lands of the United States, necessary or appropriate for the construction, maintenance, and operation of the project. The Licensee or its successors and assigns shall, during the period of the license, retain the possession of all project property covered by the license as issued or as later amended, including the project area, the project works, and all franchises, easements, water rights, and rights of occupancy and use; and none of such properties shall be voluntarily sold, leased, transferred, abandoned, or otherwise disposed of without the prior written approval of the Commission, except that the Licensee may lease or otherwise dispose of interests in project lands or property without specific written approval of the Commission pursuant to the then current regulations of the Commission. The provisions of this article are not intended to prevent the abandonment or the retirement from service of structures, equipment, or other project works in connection with replacements thereof when they become obsolete, inadequate, or inefficient for further service due to wear and tear; and mortgage or trust deeds or judicial sales made thereunder, or tax sales, shall not be deemed voluntary transfers within the meaning of this article.

Article 6. In the event the project is taken over by the United States upon the termination of the license as provided in Section 14 of the Federal Power Act, or is transferred to a new licensee or to a non-power licensee under the provisions of Section 15 of said Act, the Licensee, its successors and assigns shall be responsible for, and shall make good any defect of title to, or of right of occupancy and use in, any of such project property that is necessary or appropriate or valuable and serviceable in the maintenance and operation of the project, and shall pay and discharge, or shall assume responsibility for payment and discharge of, all liens or encumbrances upon the project or project property created by the Licensee or created or incurred after the issuance of the license: Provided, That the provisions of this article are not intended to require the Licensee, for the purpose of transferring the project to the United States or to a new licensee, to acquire any different title to, or right of occupancy and use in, any of such project property than was necessary to acquire for its own purposes as the Licensee.

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Article 7. The actual legitimate original cost of the project, and of any addition thereto or betterment thereof, shall be determined by the Commission in accordance with the Federal Power Act and the Commission's Rules and Regulations thereunder.

Article 8. The Licensee shall install and thereafter maintain gages and stream-gaging stations for the purpose of determining the stage and flow of the stream or streams on which the project is located, the amount of water held in and withdrawn from storage, and the effective head on the turbines; shall provide for the required reading of such gages and for the adequate rating of such stations; and shall install and maintain standard meters adequate for the determination of the amount of electric energy generated by the project works. The number, character, and location of gages, meters, or other measuring devices, and the method of operation thereof, shall at all times be satisfactory to the Commission or its authorized representative. The Commission reserves the right, after notice and opportunity for hearing, to require such alterations in the number, character, and location of gages, meters, or other measuring devices, and the method of operation thereof, as are necessary to secure adequate determinations. The installation of gages, the rating of said stream or streams, and the determination of the flow thereof, shall be under the supervision of, or in cooperation with, the District Engineer of the United States Geological Survey having charge of stream-gaging operations in the region of the project, and the Licensee shall advance to the United States Geological Survey the amount of funds estimated to be necessary for such supervision, or cooperation for such periods as may be mutually agreed upon. The Licensee shall keep accurate and sufficient records of the foregoing determinations to the satisfaction of the Commission, and shall make return of such records annually at such time and in such form as the Commission may prescribe.

Article 9. The Licensee shall, after notice and opportunity for hearing, install additional capacity or make other changes in the project as directed by the Commission, to the extent that it is economically sound and in the public interest to do so.

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Article 10. The Licensee shall, after notice and opportunity for hearing, coordinate the operation of the project, electrically and hydraulically, with such other projects or power systems and in such manner as the Commission may direct in the interest of power and other beneficial public uses of water resources, and on such conditions concerning the equitable sharing of benefits by the Licensee as the Commission may order.

Article 11. Whenever the Licensee is directly benefited by the construction work of another licensee, a permittee, or the United States on a storage reservoir or other headwater improvement, the Licensee shall reimburse the owner of the headwater improvement for such part of the annual charges for interest, maintenance, and depreciation thereof as the Commission shall determine to be equitable, and shall pay to the United States the cost of making such determination as fixed by the Commission. For benefits provided by a storage reservoir or other headwater improvement of the United States, the Licensee shall pay to the Commission the amounts for which it is billed from time to time for such headwater benefits and for the cost of making the determinations pursuant to the then current regulations of the Commission under the Federal Power Act.

Article 12. The operations of the Licensee, so far as they affect the use, storage and discharge from storage of waters affected by the license, shall at all times be controlled by such reasonable rules and regulations as the Commission may prescribe for the protection of life, health, and property, and in the interest of the fullest practicable conservation and utilization of such waters for power purposes and for other beneficial public uses, including recreational purposes, and the Licensee shall release water from the project reservoir at such rate in cubic feet per second, or such volume in acre-feet per specified period of time, as the Commission may prescribe for the purposes hereinbefore mentioned.

Article 13. On the application of any person, association, corporation, Federal agency, State or municipality, the Licensee shall permit such reasonable use of its reservoir or other project properties, including works, lands and water rights, or parts thereof, as may be ordered by the Commission, after notice and opportunity

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for hearing, in the interests of comprehensive development of the waterway or waterways involved and the conservation and utilization of the water resources of the region for water supply or for the purposes of steam-electric, irrigation, industrial, municipal or similar uses. The Licensee shall receive reasonable compensation for use of its reservoir or other project properties or parts thereof for such purposes, to include at least full reimbursement for any damages or expenses which the joint use causes the Licensee to incur. Any such compensation shall be fixed by the Commission either by approval of an agreement between the Licensee and the party or parties benefiting or after notice and opportunity for hearing. Applications shall contain information in sufficient detail to afford a full understanding of the proposed use, including satisfactory evidence that the applicant possesses necessary water rights pursuant to applicable State law, or a showing of cause why such evidence cannot concurrently be submitted, and a statement as to the relationship of the proposed use to any State or municipal plans or orders which may have been adopted with respect to the use of such waters.

Article 14. In the construction or maintenance of the project works, the Licensee shall place and maintain suitable structures and devices to reduce to a reasonable degree the liability of contact between its transmission lines and telegraph, telephone and other signal wires or power transmission lines constructed prior to its transmission lines and not owned by the Licensee, and shall also place and maintain suitable structures and devices to reduce to a reasonable degree the liability of any structures or wires falling or obstructing traffic or endangering life. None of the provisions of this article are intended to relieve the Licensee from any responsibility or requirement which may be imposed by any other lawful authority for avoiding or eliminating inductive interference.

Article 15. The Licensee shall, for the conservation and development of fish and wildlife resources, construct, maintain, and operate, or arrange for the construction, maintenance, and operation of such reasonable facilities, and comply with such reasonable modifications of the project structures and operation, as may be ordered by the Commission upon its own motion or upon the recommendation of the Secretary of the Interior or the fish and wildlife agency or agencies of any State in which the project or a part thereof is located, after notice and opportunity for hearing.

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Article 16. Whenever the United States shall desire, in connection with the project, to construct fish and wildlife facilities or to improve the existing fish and wildlife facilities at its own expense, the Licensee shall permit the United States or its designated agency to use, free of cost, such of the Licensee's lands and interests in lands, reservoirs, waterways and project works as may be reasonably required to complete such facilities or such improvements thereof. In addition, after notice and opportunity for hearing, the Licensee shall modify the project operation as may be reasonably prescribed by the Commission in order to permit the maintenance and operation of the fish and wildlife facilities constructed or improved by the United States under the provisions of this article. This article shall not be interpreted to place any obligation on the United States to construct or improve fish and wildlife facilities or to relieve the Licensee of any obligation under this license.

Article 17. The Licensee shall construct, maintain, and operate, or shall arrange for the construction, maintenance, and operation of such reasonable recreational facilities, including modifications thereto, such as access roads, wharves, launching ramps, beaches, picnic and camping areas, sanitary facilities, and utilities, giving consideration to the needs of the physically handicapped, and shall comply with such reasonable modifications of the project, as may be prescribed hereafter by the Commission during the term of this license upon its own motion or upon the recommendation of the Secretary of the Interior or other interested Federal or State agencies, after notice and opportunity for hearing.

Article 18. So far as is consistent with proper operation of the project, the Licensee shall allow the public free access, to a reasonable extent, to project waters and adjacent project lands owned by the Licensee for the purpose of full public utilization of such lands and waters for navigation and for outdoor recreational purposes, including fishing and hunting: Provided, That the Licensee may reserve from public access such portions of the project waters, adjacent lands, and project facilities as may be necessary for the protection of life, health, and property.

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Article 19. In the construction, maintenance, or operation of the project, the Licensee shall be responsible for, and shall take reasonable measures to prevent, soil erosion on lands adjacent to streams or other waters, stream sedimentation, and any form of water or air pollution. The Commission, upon request or upon its own motion, may order the Licensee to take such measures as the Commission finds to be necessary for these purposes, after notice and opportunity for hearing.

Article 20. The Licensee shall consult with the appropriate State and Federal agencies and, within one year of the date of issuance of this license, shall submit for Commission approval a plan for clearing the reservoir area. Further, the Licensee shall clear and keep clear to an adequate width lands along open conduits and shall dispose of all temporary structures, unused timber, brush, refuse, or other material unnecessary for the purposes of the project which results from the clearing of lands or from the maintenance or alteration of the project works. In addition, all trees along the periphery of project reservoirs which may die during operations of the project shall be removed. Upon approval of the clearing plan all clearing of the lands and disposal of the unnecessary material shall be done with due diligence and to the satisfaction of the authorized representative of the Commission and in accordance with appropriate Federal, State, and local statutes and regulations.

Article 21. Timber on lands of the United States cut, used, or destroyed in the construction and maintenance of the project works, or in the clearing of said lands, shall be paid for, and the resulting slash and debris disposed of, in accordance with the requirements of the agency of the United States having jurisdiction over said lands. Payment for merchantable timber shall be at current stumpage rates, and payment for young growth timber below merchantable size shall be at current damage appraisal values. However, the agency of the United States having jurisdiction may sell or dispose of the merchantable timber to others than the Licensee: Provided, That timber so sold or disposed of shall be cut and removed from the area prior to, or without undue interference with, clearing operations of the Licensee and in coordination with the Licensee's project construction schedules. Such sale or disposal to others shall not relieve the Licensee of responsibility for the clearing and disposal of all slash and debris from project lands.

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Article 22. The Licensee shall do everything reasonably within its power, and shall require its employees, contractors, and employees of contractors to do everything reasonably within their power, both independently and upon the request of officers of the agency concerned, to prevent, to make advance preparations for suppression of, and to suppress fires on the lands to be occupied or used under the license. The Licensee shall be liable for and shall pay the costs incurred by the United States in suppressing fires caused from the construction, operation, or maintenance of the project works or of the works appurtenant or accessory thereto under the license.

Article 23. The Licensee shall interpose no objection to, and shall in no way prevent, the use by the agency of the United States having jurisdiction over the lands of the United States affected, or by persons or corporations occupying lands of the United States under permit, of water for fire suppression from any stream, conduit, or body of water, natural or artificial, used by the Licensee in the operation of the project works covered by the license, or the use by said parties of water for sanitary and domestic purposes from any stream, conduit, or body of water, natural or artificial, used by the Licensee in the operation of the project works covered by the license.

Article 24. The Licensee shall be liable for injury to, or destruction of, any buildings, bridges, roads, trails, lands, or other property of the United States, occasioned by the construction, maintenance, or operation of the project works or of the works appurtenant or accessory thereto under the license. Arrangements to meet such liability, either by compensation for such injury or destruction, or by reconstruction or repair of damaged property, or otherwise, shall be made with the appropriate department or agency of the United States.

Article 25. The Licensee shall allow any agency of the United States, without charge, to construct or permit to be constructed on, through, and across those project lands which are lands of the United States such conduits, chutes, ditches, railroads, roads, trails, telephone and power lines, and other routes or means of transportation and communication as are not inconsistent with the enjoyment

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of said lands by the Licensee for the purposes of the license. This license shall not be construed as conferring upon the Licensee any right of use, occupancy, or enjoyment of the lands of the United States other than for the construction, operation, and maintenance of the project as stated in the license.

Article 26. In the construction and maintenance of the project, the location and standards of roads and trails on lands of the United States and other uses of lands of the United States, including the location and condition of quarries, borrow pits, and spoil disposal areas, shall be subject to the approval of the department or agency of the United States having supervision over the lands involved.

Article 27. The Licensee shall make provision, or shall bear the reasonable cost, as determined by the agency of the United States affected, of making provision for avoiding inductive interference between any project transmission line or other project facility constructed, operated, or maintained under the license, and any radio installation, telephone line, or other communication facility installed or constructed before or after construction of such project transmission line or other project facility and owned, operated, or used by such agency of the United States in administering the lands under its jurisdiction.

Article 28. The Licensee shall make use of the Commission's guidelines and other recognized guidelines for treatment of transmission line rights-of-way, and shall clear such portions of transmission line rights-of-way across lands of the United States as are designated by the officer of the United States in charge of the lands; shall keep the areas so designated clear of new growth, all refuse, and inflammable material to the satisfaction of such officer; shall trim all branches of trees in contact with or liable to contact the transmission lines; shall cut and remove all dead or leaning trees which might fall in contact with the transmission lines; and shall take such other precautions against fire as may be required by such officer. No fires for the burning of waste material shall be set except with the prior written consent of the officer of the United States in charge of the lands as to time and place.

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Article 29. The Licensee shall cooperate with the United States in the disposal by the United States, under the Act of July 31, 1947, 61 Stat. 681, as amended (30 U.S.C. sec. 601, et seq.), of mineral and vegetative materials from lands of the United States occupied by the project or any part thereof: Provided, That such disposal has been authorized by the Commission and that it does not unreasonably interfere with the occupancy of such lands by the Licensee for the purposes of the license: Provided further, That in the event of disagreement, any question of unreasonable interference shall be determined by the Commission after notice and opportunity for hearing.

Article 30. If the Licensee shall cause or suffer essential project property to be removed or destroyed or to become unfit for use, without adequate replacement, or shall abandon or discontinue good faith operation of the project or refuse or neglect to comply with the terms of the license and the lawful orders of the Commission mailed to the record address of the Licensee or its agent, the Commission will deem it to be the intent of the Licensee to surrender the license. The Commission, after notice and opportunity for hearing, may require the Licensee to remove any or all structures, equipment and power lines within the project boundary and to take any such other action necessary to restore the project waters, lands, and facilities remaining within the project boundary to a condition satisfactory to the United States agency having jurisdiction over its lands or the Commission's authorized representative, as appropriate, or to provide for the continued operation and maintenance of nonpower facilities and fulfill such other obligations under the license as the Commission may prescribe. In addition, the Commission in its discretion, after notice and opportunity for hearing, may also agree to the surrender of the license when the Commission, for the reasons recited herein, deems it to be the intent of the Licensee to surrender the license.

Article 31. The right of the Licensee and of its successors and assigns to use or occupy waters over which the United States has jurisdiction, or lands of the United States under the license, for the purpose of maintaining the project works or otherwise, shall absolutely cease at the end of the license period, unless the Licensee has obtained a new license pursuant to the then existing laws and regulations, or an annual license under the terms and conditions of this license.

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Article 32. The terms and conditions expressly set forth in the license shall not be construed as impairing any terms and conditions of the Federal Power Act which are not expressly set forth herein.

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CONVERSATION MEMORANDUM

DATE 10/11/84

FILE 22-7351

NAME OF PARTY David Hirschi

EMPLOYEE Dave Tuthill

RE: 22-7351 Status ?

I indicated that we are awaiting FERC approval info. He stated that it will be forthcoming, possibly in the form of a request to FERC for Amendment of an existing license. I stated that I didn't know if we would approve the permit based on this type of info, where there is an existing license in place. He stated that Ray Rigby may be contacting us on this matter.

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UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Fall River Rural Electric Cooperative, Inc.) Project No. 5089-001

NOTICE OF APPLICATION FOR LICENSE (over 5 MW)
(May 12, 1982)

Take notice that Fall River Rural Electric Cooperative, Inc. (Applicant) filed on February 22, 1982, and revised on April 19, 1982, an application for license [pursuant to the Federal Power Act, 16 U.S.C. §§791(a) - 825(r)] for reconstruction and continued operation of a water power project known as the Felt Project No. 5089. The project would be located on the Teton River in Teton County, Idaho. Correspondence with the Applicant should be directed to: Mr. Calvin Wickham, Fall River Rural Electric Cooperative, Inc., 714 Main Street, Ashton, Idaho 83420.

Project Description - The Applicant-owned and operated project presently consists of the following existing facilities: (1) a 12-foot high 135-foot long dam having a 90-foot long spillway section with crest elevation 5,530 feet m.s.l.; (2) a reservoir having a surface area of 10 acres and a storage capacity of 40 acre-feet; (3) three intake structures along the reservoir right bank; (4) flowline no. 1 consisting of a 170-foot long tunnel and an inoperative 530-foot long 54-inch diameter wood-stave penstock; (5) flowline no. 2 consisting of a 215-foot long tunnel and a 395-foot long 59-inch diameter steel penstock; (6) flowline no. 3 consisting of a 180-foot long tunnel and a 405-foot long 59-inch diameter steel penstock; (7) a powerhouse containing: (a) generating units 1, 2 and 3 having a total rated capacity of 650 kW and connected to flowline no. 1; (b) generating unit 4 having a rated capacity of 720 kW and connected to flowline no. 2; (c) generating unit 5 having a rated capacity of 500 kW and connected to flowline no. 3; (8) a short 2.4-kV transmission line; (9) a plant substation; (10) a 1,000-foot long 46-kV transmission line; (11) the Badger Substation; and (12) appurtenant facilities.

Applicant proposes to: (1) construct a fish ladder; (2) provide a public parking area near the Badger Substation; (3) reconstruct the access road; (4) construct an 8-foot diameter 1,200-foot long steel penstock extending from the 59-inch penstocks to a new powerhouse; (5) construct a powerhouse containing two generating units having a total rated capacity of 6,025 kW at a net head of 123 feet and hydraulic capacity of 680 cfs; (7) construct a 4.16/46-kV plant substation; (6) excavate a 170-foot long tailrace; and (8) construct a 1,600-foot long 46-kV transmission line.

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MAY 17 1982
Department of Water Resources

82-7351

The redeveloped Felt Project would be operated as run-of-river. The new construction would affect lands of the United States under the jurisdiction of the Bureau of Reclamation. Applicant estimates that project redevelopment would cost $9,420,000.

Purpose of Project - Project energy would be sold to the Bonneville Power Administration. Applicant estimates that the average annual energy output would be 31,400 MWh.

Competing Applications - Anyone desiring to file a competing application must submit to the Commission, on or before JUL 26 1982, either the competing application itself [See 18 C.F.R. §4.33(a) and (d)] or a notice of intent [See 18 C.F.R. §4.33(b) and (c)] to file a competing application. Submission of a timely notice of intent allows an interested person to file an acceptable competing application no later than the time specified in §4.33(c) or §4.101 et. seq. (1981).

Comments, Protests, or Petitions to Intervene - Anyone may submit comments, a protest, or a petition to intervene in accordance with the requirements of the Rules of Practice and Procedure, 18 C.F.R. §1.8 or §1.10 (1980). In determining the appropriate action to take, the Commission will consider all protests or other comments filed, but only those who file a petition to intervene in accordance with the Commission's Rules may become a party to the proceeding. Any comments, protests, or petitions to intervene must be received on or before JUL 26 1982.

Filing and Service of Responsive Documents - Any filings must bear in all capital letters the title "COMMENTS", "NOTICE OF INTENT TO FILE COMPETING APPLICATION", "COMPETING APPLICATION", "PROTEST", or "PETITION TO INTERVENE", as applicable, and the Project Number of this notice. Any of the above named documents must be filed by providing the original and those copies required by the Commission's regulations to: Kenneth F. Plumb, Secretary, Federal Energy Regulatory Commission, 825 North Capitol Street, NE., Washington, D.C. 20426. An additional copy must be sent to: Fred E. Springer, Chief, Applications Branch, Division of Hydropower Licensing, Federal Energy Regulatory Commission, Room 208 RB at the above address. A copy of any notice of intent, competing application, or petition to intervene must also be served upon each representative of the Applicant specified in the first paragraph of this notice.

Kenneth F. Plumb
Secretary

MICROFILMED

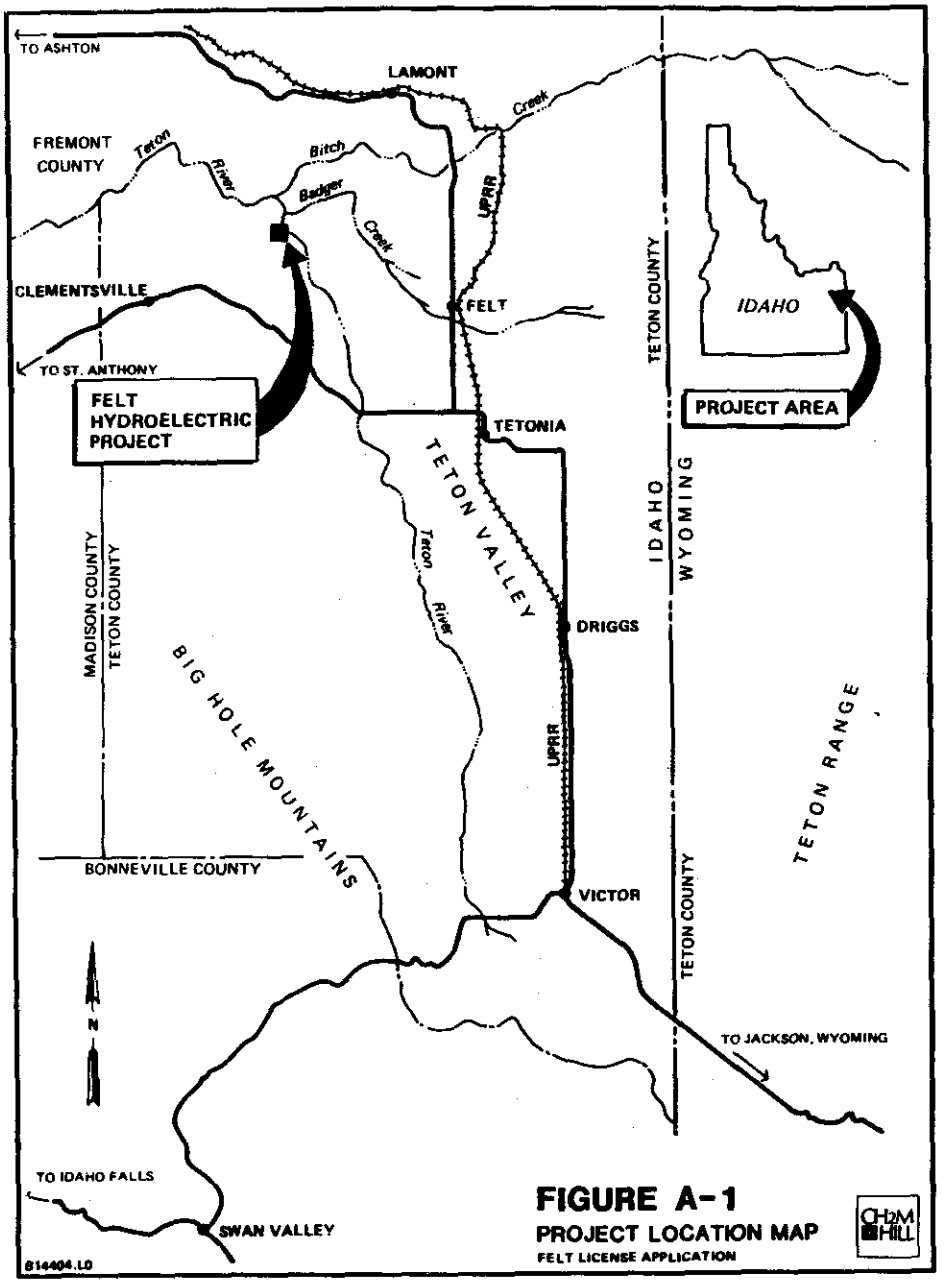
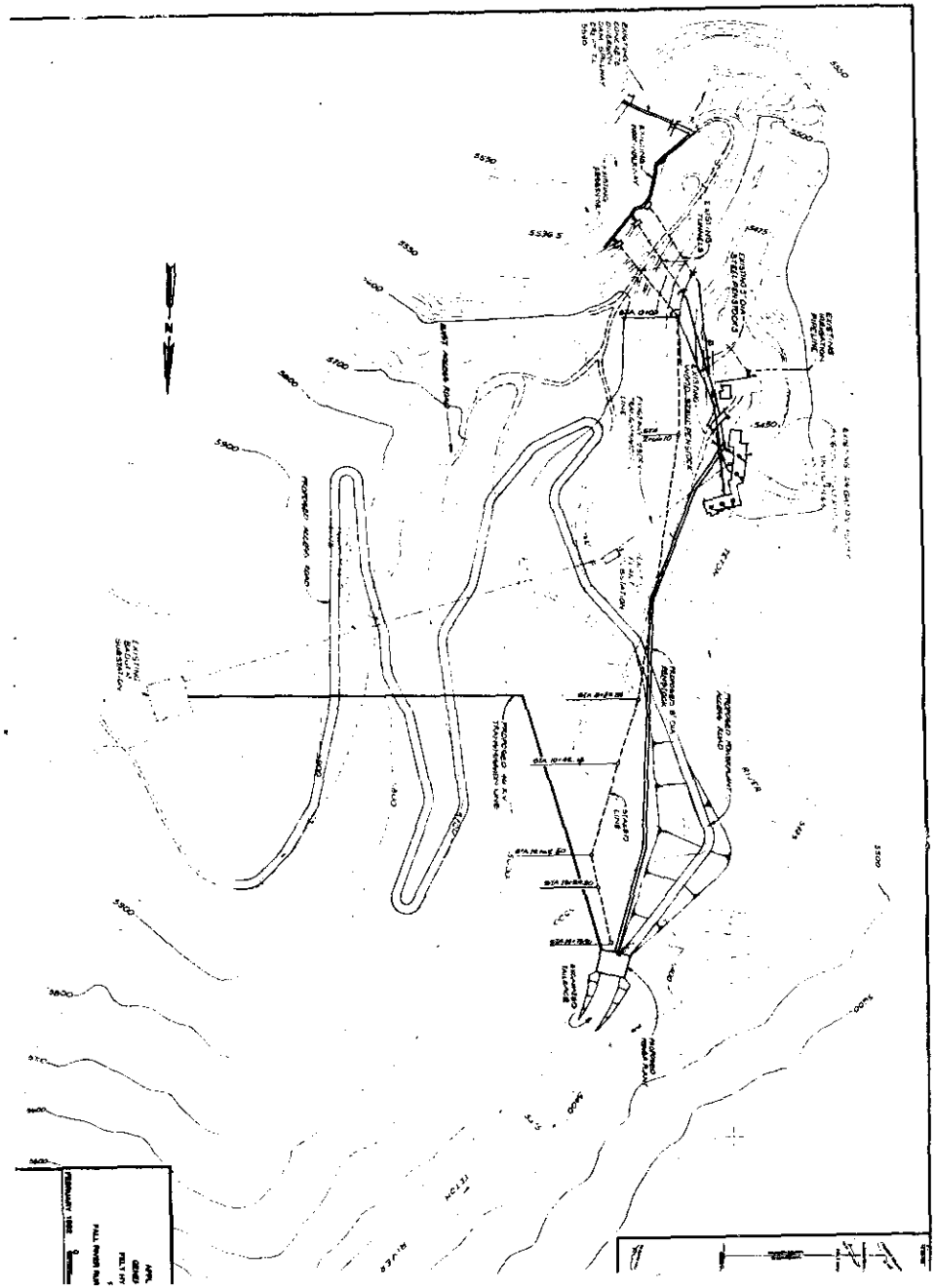
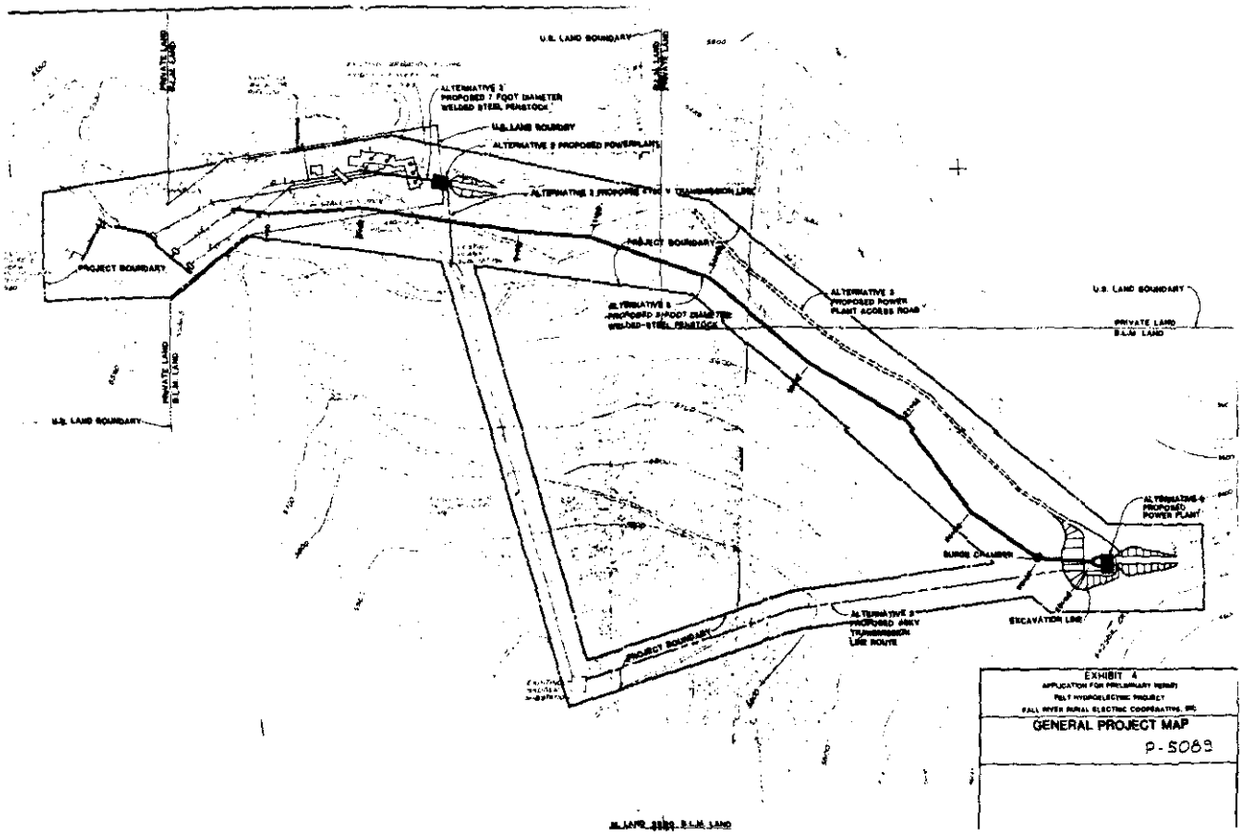


FIGURE A-1
PROJECT LOCATION MAP
FELT LICENSE APPLICATION

CH2M HILL




U.S. LAND BOUNDARY
PRIVATE LAND
B.L.M. LAND
ALTERNATIVE 3
PROPOSED 7 FOOT DIAMETER
WELDED STEEL PENSTOCK
U.S. LAND BOUNDRY
ALTERNATIVE 3 PROPOSED POWERPLANT
ALTERNATIVE 3 PROPOSED 57KV TRANSMISSION LINE
PROJECT BOUNDARY
ALTERNATIVE 3
PROPOSED POWER
PLANT ACCESS ROAD
ALTERNATIVE 3
PROPOSED 5-FOOT DIAMETER
WELDED STEEL PENSTOCK
ALTERNATIVE 3
PROPOSED
POWER PLANT
SURGE CHAMBER
EXCAVATION LINE
ALTERNATIVE 3
PROPOSED AREY
TRANSMISSION
LINE ROUTE
EXHIBIT 4
APPLICATION FOR PRELIMINARY PERMIT
FELT HYDROELECTRIC PROJECT
FALL RIVER RURAL ELECTRIC COOPERATIVE, INC
GENERAL PROJECT MAP
P-5069

MICRO

RECEIVED
SEP 18 1981
Department of Water Resources

FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON, D. C. 20426
EQUAL OPPORTUNITY EMPLOYER

State of Idaho P-5089-000
Department of Water Resources
State House
Boise, Idaho 83720

MICROFILMED

22-7351

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Fall River Rural Electric Cooperative, Inc.) Project No. 5089-000

NOTICE OF APPLICATION FOR PRELIMINARY PERMIT

(September 2, 1981)

Take notice that Fall River Rural Electric Cooperative, Inc. (Applicant) filed on July 20, 1981, an application for preliminary permit [pursuant to the Federal Power Act, 16 U.S.C. §§791(a) - 825(r)] for Project No. 5089 to be known as the Felt Hydroelectric Project located on the Teton River in Teton County, Idaho. The application is on file with the Commission and is available for public inspection. Correspondence with the Applicant should be directed to: Mr. Calvin H. Wickham, Fall River Rural Electric Cooperative, Inc., 714 Main Street, Ashton, Idaho 83420.

Project Description - The Applicant-owned project presently consists of the following existing and operating facilities: (1) a 12-foot high 135-foot long dam having a 90-foot long spillway section with crest elevation 5,530 feet m.s.l.; (2) a reservoir having a surface area of 10 acres and a storage capacity of 40 acre-feet; (3) three intake structures along the reservoir right bank; (4) flowline no. 1 consisting of a 170-foot long tunnel and an inoperative 530-foot long 54-inch diameter wood-stave penstock; (5) flowline no. 2 consisting of a 215-foot long tunnel and a 395-foot long 59-inch diameter steel penstock; (6) flowline no. 3 consisting of a 180-foot long tunnel and a 405-foot long 59-inch diameter steel penstock; (7) a powerhouse containing: (a) generating units 1, 2 and 3 having a total rated capacity of 650 kW and connected to flowline no. 1; (b) generating unit 4 having a rated capacity of 720 kW and connected to flowline no. 2; (c) generating unit 5 having a rated capacity of 500 kW and connected to flowline no. 3; (8) a short 2.3-KV transmission line; (9) a plant substation; (10) a 1,000-foot long 46-kV transmission line; (11) the Badger Substation; and (12) appurtenant facilities.

Applicant proposes to study three alternative proposals for redevelopment of the existing facilities as follows: (1) Replace the generating units with new units having a total rated capacity of 2,700 kW; or (2) Construct a 200-foot long penstock and a new powerhouse containing a generating unit having a rated capacity of 3,700 kW; or (3) Construct a 2,600-foot long penstock and a new powerhouse containing two generating units having a total rated capacity of 6,670 kW. The new construction would affect lands of the United States under the jurisdiction of the Bureau of Land Management. Project energy would be used within Applicant's system or sold. Applicant estimates that the average annual energy output would be between 15,000 MWh and 38,100 MWh.

Proposed Scope of Studies under Permit - A preliminary permit, if issued, does not authorize construction. Applicant seeks issuance of a preliminary permit for a period of three years, during which time it would complete a currently under-way feasibility study, including technical, environmental, economic and financial aspects, prepare a preliminary design, conduct an environmental study, and would prepare an application for an FERC license. Applicant estimates the cost of the work under the permit would be $40,000.

Competing Applications - Anyone desiring to file a competing application must submit to the Commission, on or before _____, either the competing application itself [See 18 C.F.R. §4.33(a) and (d)(1980)] or a notice of intent [See 18 C.F.R. §4.33(b) and (c)(1980)] to file a competing application. Submission of a timely notice of intent allows an interested person to file an acceptable competing application no later than the time specified in §4.33(c).

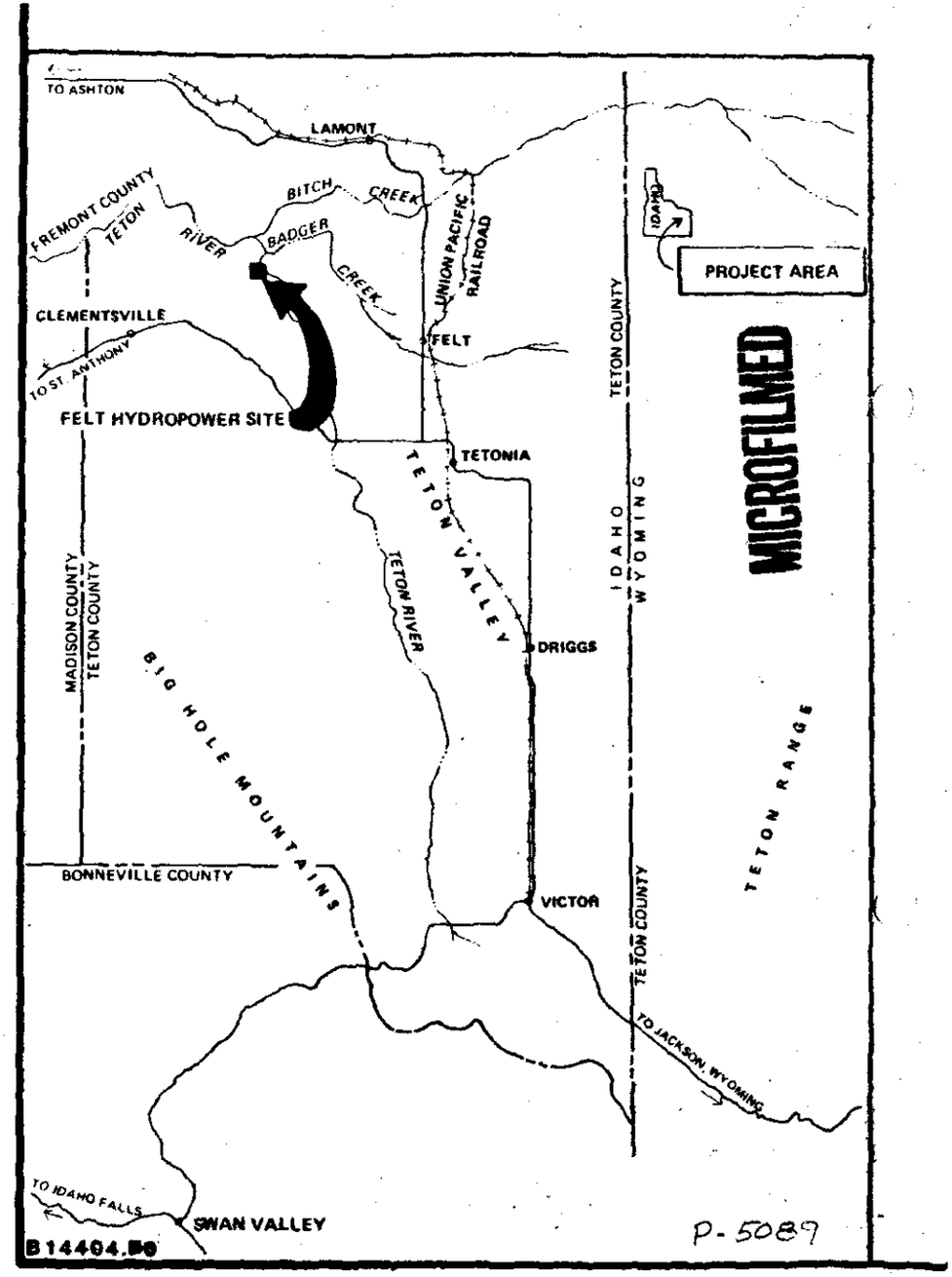
Agency Comments - Federal, State, and local agencies are invited to submit comments on the described application. (A copy of the application may be obtained by agencies directly from the Applicant.) If an agency does not file comments within the time set below, it will be presumed to have no comments.

Comments, Protests, or Petitions to Intervene - Anyone may submit comments, a protest, or a petition to intervene in accordance with the requirements of the Rules of Practice and Procedure, 18 C.F.R. §1.8 or §1.10 (1980). In determining the appropriate action to take, the Commission will consider all protests or other comments filed, but only those who file a petition to intervene in accordance with the Commission's Rules may become a party to the proceeding. Any comments, protests, or petitions to intervene must be received on or before _____.

Filing and Service of Responsive Documents - Any filings must bear in all capital letters the title "COMMENTS", "NOTICE OF INTENT TO FILE COMPETING APPLICATION", "COMPETING APPLICATION", "PROTEST", or "PETITION TO INTERVENE", as applicable, and the Project Number of this notice. Any of the above named documents must be filed by providing the original and those copies required by the Commission's regulations to: Kenneth F. Plumb, Secretary, Federal Energy Regulatory Commission, 825 North Capitol Street, NE., Washington, D.C. 20426. An additional copy must be sent

to: Fred E. Springer, Chief, Applications Branch, Division of Hydropower Licensing, Federal Energy Regulatory Commission, Room 2c6 RB at the above address. A copy of any notice of intent, competing application, or petition to intervene must also be served upon each representative of the Applicant specified in the first paragraph of this notice.

Kenneth F. Plumb
Secretary



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TITLE OF CASE

SOURCE _____ PAGE _____

WATER DIST. _____ COUNTY _____

JUDICAL DIST. _____ JUDGE _____

DATE OF DECREE _____ RECORDED IN BOOK NO. _____ AT PAGE NO. _____ FILE NO. _____

P.N.	D.N.	DECREED OWNER NAME / PRESENT OWNER	AMT. INCHES □ SEC. FT. □	PRIORTY	DIVERSION SUBDIV.	SEC.	TWP.	RG.	REMARKS, LAND TO BE IRRIGATED, ETC.	C.T.
22-0605		Island Ward Canal Co. — North Fork Teton River	0 (100.0)	1-23-1901					Lands of stockholders (Description not given)	
	P.D.	Trans. 220 - Island Ward Canal Co.	100.0		NENE	6	6N	40E	T6N, R39E - Part Sec. 9,10,11,15,16,20,21	
22-0283		Hague, William A. — Teton River	2.0	3-25-1901					NW¼SW¼, SW¼NW¼ - Sec. 14; SE¼NE¼ - Sec. 15, T7N, R41E	
22-0511		Siddoway-Briggs Co. — Teton River	84.0	6-01-1903					S½SW¼ - Sec. 31, T5N, R45E N½NW¼ - Sec. 6, T6N, R45E.	
22-2020		Central Teton Canal Co. — Teton Creek	1.5	1-17-1907	NWNE	20	5N	46E	N½NW¼ - Sec. 30, T5N, R46E.	
22-2023		Fairbanks, Frank P. — Teton Creek	0.24	3-14-1907	NESE	25	5N	45E	E½SE¼ - Sec. 25, T5N, R45E.	
22-2045		Peaceful Valley Improvement Co., Ltd. — Teton River	20.0	7-09-1909	SENE	20	7N	42E	SE¼SE¼ - Sec. 7; S½SW¼, S½SE¼ - Sec. 8; Sec. 17; E½NE¼, E½SE¼ - Sec. 18; N½NE¼, N½NW¼, SW¼NW¼ - Sec. 20, T7N, R42E	
22-0606		Teton Valley Power & Milling Co. — Teton River	80.0	10-01-1921	NWNE	29	7N	44E	For hydroelectric purposes	
22-2123		Teton Valley Power & Milling Co. — Teton River	70.0	11-17-1936	NWNE	29	7N	44E	NW¼NE¼ - Sec. 29, T7N, R44E	
22-2126		Teton Valley Power & Milling Co. — Teton River	150.0	2-02-1946	NWNE	29	7N	44E	Power purposes in NW¼NE¼ - Sec. 29, T7N, R44E	
22-2290		Fremont Madison Irr. District — Teton River	315,000AF	5-23-1960	SWNW	29	7N	42E	See permit (Lands in Irrigation District)	

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LEGEND P.N. = PRIORTY NUMBER D.N. = DECREE NUMBER C.T. = CUMULATIVE TOTAL

State of Idaho
DEPARTMENT OF WATER RESOURCES
STATE OFFICE, 450 W. State Street, Boise, Idaho

JOHN V. EVANS
Governor

A. KENNETH DUNN
Director

Mailing address:
Statehouse
Boise, Idaho 83720
(208) 334-4440

August 25, 1981

RE: Application for Permit No. 22-7351

Fall River Rural Electric Cooperative, Inc.
P.O. Box 617
Ashton, ID 83420

Gentlemen:

We have completed a preliminary review of the above referenced application. This review has included advertising by the regional office and a verification that all required preliminary information has been provided.

At this time we see no reason that the application will not be approved with certain conditions of approval. However, for power projects that are under the jurisdiction of the Federal Energy Regulatory Commission (FERC), we withhold final action on the application pending (1) approval of a preliminary permit by FERC, or (2) FERC granting an exemption. If you have not yet contacted FERC, the address below is a good starting point:

Federal Energy Regulatory Commission
Regional Engineer's Office
Attn: Mr. Jerry Leach
6th Floor, 333 Market Street
San Francisco, CA 94105
(Tel. No. (415) 764-7150)

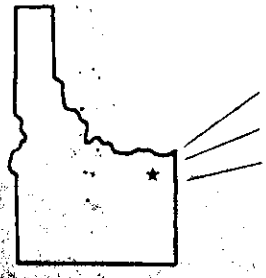
The continued validity of this application is contingent on your proceeding with due diligence toward obtaining an approval or an exemption from FERC. Please keep this office informed of progress in this regard.

Sincerely,

L. GLEN SAXTON
Chief, Operations Bureau

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RECEIVED
AUG 18 1981
Department of Water Resources



FALL RIVER
Rural Electric Cooperative, Inc.

714 Main Street • Ashton, Idaho 83420 • (208) 652-7431

~~21-7211~~
22-7351

August 14, 1981

David R. Tuthill Jr., P. E.
Idaho State Department
of Water Resources
State Office
450 W. State St.
Boise, Idaho 83720

Dear Sir:

In reference to your letter dated July 24, 1981 concerning the change in Idaho Code, we have enclosed the completed affidavits of Water Rights for the Teton River, Warm River and the North Fremont Gravity Irrigation Project (Fall River).

The Affidavit of Water Rights for the Island Park Hydroelectric Project will be delayed as we are awaiting its arrival from the B.L.M.

As we were unsure which identity no. went to each project, we labled the projects so they can be identified by name rather than number.

Should there be some problem or questions concerning this matter please feel free to contact us.

Sincerely,

Laura Petrun

Laura Petrun,
Engineering Dept.
for C.L. Dawsey,
Manager of Engineering

LP/lp
cc:
enclosures

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EXHIBIT 1

DESCRIPTION OF THE PROPOSED PROJECT

APPLICATION FOR PRELIMINARY PERMIT

FELT HYDROELECTRIC PROJECT

GENERAL

The Felt Hydroelectric Project proposed in this application consists of renovating and replacing parts of an existing project. The original diversion dam and power plant were built in 1921 and the power plant was enlarged in 1947. The facility has never been licensed by the FERC and is currently owned and operated by the applicant, Fall River Rural Electric Cooperative, Inc.

This application is made so that Fall River may have time to study several alternatives before application to FERC for a license. These alternatives will include:

- Rehabilitate and increase the capacity of the existing plant.
- Replace the existing plant with a modern, larger plant near the same location.
- Replace the existing plant with a modern, larger plant located about 1/2 mile downstream.

The existing and proposed facilities are shown on the acompanying map in Exhibit 4.

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EXISTING FACILITIES

Diversion Dam

The diversion dam is a low concrete gravity overflow weir with one tainter gate. Its purpose is to divert water to the power plant, and it has the following characteristics:

Crest Length	135 feet
Height	12 feet
Spillway Crest Length (incorporated in dam)	90 feet
Outlet Gate Width	16 feet
Outlet Gate Height	7 feet
Crest Elevation	5,530 feet m.s.l.
Initial Reservoir Capacity	40 ac/ft
Initial Reservoir Area	10 acres

Penstocks

Three penstocks extend from the reservoir to the power plant. Each consists of a tunnel portion and an exposed pipe from the tunnel to the power plant. Penstock No. 1 is no longer used. Their characteristics follow:

	No. 1	No. 2	No. 3
Tunnel Length (ft)	170	215	180
Exposed Pipe Type	Wood Stave	Steel	Steel
Exposed Pipe Length (ft)	530	395	405
Exposed Pipe Diameter (in)	54	59	59
Units Served	1,2,3	4	5

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Form No. 202a
3/79

State of Idaho
Department of Water Resources

APPLICATION FOR PERMIT ANALYSIS SHEET 22 7351

INITIAL REVIEW BY: Steve McCormick APPLICATION NUMBER: Fall R. Elec 22-7351

CHECK:
- ☑ Source.
- ☑ Point of diversion.
- ☑ County.
- ☑ Quantity of water and period of use.
- ☑ Description of diverting works.
- ☑ Time required for beneficial use of water.
- ☑ Place of use or acres irrigated.
- ☑ Map.
- ☑ Signature.
- ☑ Fee.

Field check by: _____
Date: _____
Comments: _____

- ☐ Yes ☑ No Field check required.
- ☐ Yes ☑ No Critical groundwater area.
- ☐ Yes ☑ No Request dam safety information. Sent by: _____ Date: _____
- ☑ Yes ☐ No* In form to receipt.

*REQUEST THE FOLLOWING ADDITIONAL INFORMATION FROM THE APPLICANT: _____
✓ Affidavit
✓ Calculations

SEND COPIES TO:

	Copies sent by:	Date:
☐ Idaho State Health Department.		
☑ Idaho Fish and Game Department.	KW	4/2
☐ Idaho Department of Lands.		
☐ U.S. Bureau of Land Management.		
☑ U.S. Forest Service.	KW	4/2
☑ Other 01	KW	4/2

PROCESSING:
- ☐ Yes ☑ No Platted by: SM Map No. _____
- ☑ Yes ☐ No Other rights on same place of use. _____
- ☑ Yes ☐ No* In form for advertising. Final date for protests: April 20 ✓
- ☐ Yes ☑ No Protests received. If yes, record information on 4th page of application.

FINAL REGIONAL PROCESSING REVIEW:
- ☑ Affidavit of publication received. Date: 4-15-81 ✓
- ☑ Application published correctly. If not, record action taken: _____
- ☑ Fee amount, receipt date & number, recorded on application.
- ☑ Publication dates and paper, recorded on application.
- ☑ Protests, dates, withdrawal, etc., recorded on application.
- ☑ Recommendation & initial, recorded on application.
- ☑ Yes ☐ No Measuring device required.
- ☐ Yes ☑ No Access port required.
- ☑ Yes ☐ No Will water be delivered by watermaster? If yes, what district? 01
- 3-18-81 Date of priority recommended.
- ✓ Special conditions of approval or cover letter. _____

THIS PERMIT DOES NOT CONSTITUTE IDAHO PUBLIC UTILITIES COMMISSION OR FEDERAL ENERGY REGALATORY COMMISSION APPROVAL THAT MAY BE REQUIRED.

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By: Ernest Carlson Date: July 21, 81

STATE OFFICE REVIEW:
SLW/LO2 01, 05(01 Upper Snake R.) 08A, 17 & special cond above

- ☐ See attached sheet for more information.

By: _____ Date: 8/17/81

Do not approve at this time
send FERC letter
8/17/81

copy

State of Idaho
DEPARTMENT OF WATER RESOURCES
STATE OFFICE, 450 W. State Street, Boise, Idaho

JOHN V. EVANS
Governor

A. KENNETH DUNN
Director

Mailing address:
Statehouse
Boise, Idaho 83720
(208) 334-4440

July 24, 1981

RE: Application for Permit No. 22-7351

Dear Applicant:

The 1981 Idaho Legislature made a change in Section 42-205, Idaho Code, that may affect the above referenced application. The change requires that if a proposed hydropower project will use existing irrigation facilities, the approval of the owner of the facilities must be obtained before an application for permit to develop a water right can be approved.

Please find enclosed an affidavit which we must receive before we can complete the review of your application. Please complete the affidavit, sign it before a notary, and return it to this office at your earliest convenience, no later than August 15, 1981.

Sincerely,

David R. Tuthill Jr.

DAVID R. TUTHILL JR., P. E.
Supervisor, Water Allocation Section

DRT:jg

Enclosure

MICROFILMED

July 21, 1981

RE: Application for Permit No. 22-7351

Fall River Rural Electric Cooperative, Inc.
P.O. Box 617
Ashton, Idaho 83420

Gentlemen:

This is to advise you that the Idaho Department of Fish and Game has withdrawn their protest against approval of the above referenced application. The Department will take no further action in setting a hearing in this matter and has resumed the processing of your application.

If you have any questions concerning this matter, please feel free to contact this office.

Very truly yours,

ERNEST CARLSEN
Assistant Regional Supervisor

EC:cw:kw

MICROFILMED

July 21, 1981

RE: Application for Permit No. 22-7351 FALL RIVER RURAL ELECTRIC CO-OP

Mr. Tom Reinecker
Regional Supervisor
Department of Fish & Game
1515 Lincoln Road
Idaho Falls, Idaho 83401

Dear Tom:

This is to acknowledge receipt of your withdrawal of protest against approval of the above referenced application. The Department will take no further action in setting a hearing in this matter.

If you have any questions concerning this matter, please feel free to contact this office.

Very truly yours,

ERNEST CARLSEN
Assistant Regional Supervisor

EC:cw:kw

MICROFILMED

STATE OF IDAHO

DEPARTMENT OF FISH AND GAME

REGION 6
1515 LINCOLN ROAD
IDAHO FALLS, IDAHO 83401

July 17, 1981

Mr. Ernest Carlsen
Sr. Resource Analyst
Department of Water Resources
150 Shoup Avenue
Idaho Falls, Idaho 83401

Dear Ernie:

Re: Appl. No. 22-7351
Fall River Rural Electric

Fall River Rural Electric Cooperative, Inc. agrees to our request for a 20 cfs minimum flow at the Felt Dam project on the Teton River. Therefore, we no longer object to the project.

Sincerely,

Tom Reinecker
Regional Supervisor
Region 6

RECEIVED
JUL 20 1981
Department of Water Resources
Office

MICROFILMED

April 22, 1981

Fall River Rural Electric Cooperative, Inc.
P.O. Box 617
Ashton, Idaho 83420

Gentlemen:

Enclosed is a copy of a protest filed against the issuance of a permit pursuant to your Application No. 22-7351. The Department suggests you contact the protestant directly in an effort to determine the nature of the protest and to attempt to resolve the protest.

If you do not advise us within twenty (20) days that the protest has been resolved, the matter will be scheduled for conference and/or hearing. At such a conference and/or hearing, the following are the principle items the Department can consider in either approving or denying the application for permit (Section 42-203, Idaho Code):

1. Will the proposed use reduce the quantity of water under existing water rights?

2. Is the proposed water supply insufficient for the purpose intended?

3. Is the application made in good faith or for delay or speculative purposes?

4. Has the applicant sufficient financial resources with which to complete the project?

5. Will the proposed use under this permit conflict with the local public interest?

If this office can be of further assistance, please contact us.

Very truly yours,

RONALD D. CARLSON
Eastern Regional Supervisor

RDC:cw:kw

Enclosure

cc: IDWR - State Office

April 21, 1981

RE: Applications for Permits No. 21-7276, 21-7277, and 22-7351

Mr. Tom Reinecker
Regional Supervisor
Department of Fish & Game
1515 Lincoln Road
Idaho Falls, ID 83401

Dear Tom:

Your protest against the approval of the above referenced applications has been received and a copy has been sent to the applicants. The Department suggests you contact the applicants directly in an effort to determine what is proposed by the application and to attempt to resolve the protest.

If you do not advise us within twenty (20) days that the protest has been resolved, the matter will be scheduled for conference and/or hearing. At such a conference and/or hearing, the following are the principle items the Department can consider in either approving or denying an application for permit (Section 42-203, Idaho Code):

1. Will the proposed use reduce the quantity of water under existing water rights?

2. Is the proposed water supply insufficient for the purpose intended?

3. Is the application made in good faith or for delay or speculative purposes?

4. Has the applicant sufficient financial resources with which to complete the project?

5. Will the proposed use under this permit conflict with the local public interest?

If this office can be of further assistance, please contact us.

Very truly yours,

RONALD D. CARLSON
Eastern Regional Supervisor

RDC:cw:kw

cc: IDWR - State Office

MICROFILMED

STATE OF IDAHO

DEPARTMENT OF FISH AND GAME

REGION 6
1515 LINCOLN ROAD
IDAHO FALLS, IDAHO 83401

April 13, 1981

Mr. Ernest Carlsen
Sr. Resource Analyst
Department of Water Resources
150 Shoup Avenue
Idaho Falls, Idaho 83401

Dear Ernie:

Re: Appls. Nos. 22-7351,
21-7276, & 21-7277
Fall River Rural Electric
Fall River, Warm River,
Teton River

We have reviewed the subject applications and have the following comments:

Application No. 21-7276: As described, this project would dewater some 11 miles of Fall River during most of each year. We object to this project if Fall River is dewatered.

Application No. 21-7277: We object to this project if Warm River is dewatered.

Application No. 22-7351: We object to this project at Felt Dam in the Teton River if the River is dewatered.

Thank you for the opportunity to comment on these proposed projects.

Sincerely,

Tom Reinecker
Regional Supervisor
Region 6

cc: Fish and Wildlife Service
Bureau of Program Coordination
Bureau of Fisheries
P. Jeppson

MICROFILMED
RECEIVED
APR 15 1981
Department of Water Resources
Eastern District Office

EQUAL OPPORTUNITY EMPLOYER

WATERMASTER COMMENTS

I have reviewed Application for Permit No. 22-7351 and have the following comments/objections to the approval of this application for permit:

Application proposes nothing that will interfere w/ existing water rights

April 10, 1981
Date

Ronald D. Carlson
RONALD D. CARLSON, WATERMASTER
Water District No. 01

MICROFILMED

April 1, 1981

RE: Applicatians for Permits No. 22-7351, 21-7276, 21-7277
FALL RIVER RURAL ELECTRIC

Mr. Tom Reinecker
Regional Supervisor
Department of Fish & Game
1515 Lincoln Road
Idaho Falls, Idaho 83401

Dear Mr. Reinecker:

We are enclosing copies of applications that may be of interest to your agency. Please review the applications and submit any comments you may have to our Department as soon as possible. The last date of protest is April 20, 1981, and we are required to take final action shortly thereafter.

If we may be of further assistance, please feel free to contact us.

Respectfully submitted,

ERNEST CARLSEN
Sr. Resource Analyst

EC:cw:kw

Enclosures

MICROFILMED

April 1, 1981

RE: Applications for Permits No. 22-7351, 21-7276, 21-7277
FALL RIVER RURAL ELECTRIC

Targhee National Forest
Forest Supervisor
420 W. Bridge
St. Anthony, Idaho 83445

Gentlemen:

We are enclosing copies of applications that may be of interest to your agency. Please review the applications and submit any comments you may have to our Department as soon as possible. The last date of protest is April 20, 1981, and we are required to take final action shortly thereafter.

If we may be of further assistance, please feel free to contact us.

Respectfully submitted,

ERNEST CARLSEN
Sr. Resource Analyst

EC:cw:kw

Enclosures

MICROFILMED

STATE OF IDAHO

DEPARTMENT OF WATER RESOURCES
Eastern Region

150 Shoup Ave.
Idaho Falls, Idaho 83401
(208) 525-7161

MARCH 27, 1981

Teton Valley News
Driggs,
Idaho 83422

Gentlemen:

Enclosed you will find a legal notice which we wish to have published on the dates indicated (once a week for two consecutive weekly issues) in your newspaper. We have allowed ample time for you to submit a galley proof to this office for review before the first publication date. If you cannot publish the notice on the proposed dates, please contact us immediately.

An affidavit of publication must be submitted to the Department along with the publication bill. Your cooperation is appreciated.

Please send the affidavit of publication and publication billing to this office before APRIL 20, 1981.

Yours truly,

RONALD D. CARLSON
Supervisor
Eastern Region

Encl.

MICROFILMED

NOTICE OF APPLICATION FOR WATER RIGHT

Notice is hereby given that the following application(s) have been submitted for permit to appropriate the public waters of the State of Idaho:

If issued, the permit(s) will be subject to all prior water rights. Protests against the granting of any permit must be filed with the Director of the Idaho Department of Water Resources, 150 Shoup Ave., Idaho Falls, Idaho 83401 on or before APRIL 20, 1981.

C. STEPHEN ALLRED

Director

Published 4/02 & 4/09/81.

MICROFILMED

22-2351

FALL RIVER RURAL ELECTRIC COOP. INC.

P.O. BOX 617. ASHTON. ID 83420

Source: TETON RIVER tributary to SNAKE RIVER

Date Filed: 03/18/1981

Amount: 300.00 CFS

Diversion Point: SWNW Sec 29 T 07N R 44E. TETON Co.

Use: POWER (300.00 CFS) from 01/01 to 12/31

Place of Use: NWNE Sec 29 T 07N R 44E

Diversion Means: FELT POWER PLANT.

MICROFILMED

22-7357

BEFORE THE FEDE[illegible] .ATORY COMMISSION

APPLICATION FOR AMEND[illegible]NT OF LICENSE

FELT

HYDRO[illegible]ECTRIC PROJECT

TET[illegible]Y, IDAHO

FOR

FAL[illegible]ER

R[illegible] Cooperative, Inc.
A[illegible]

PROJECT NO. 5089

PREPARED BY:

BINGHAM ENG[illegible]
165 Wright Brothers Dr[illegible]
Salt Lake International [illegible]
Salt Lake City, Utah 8[illegible]

JANUARY 1985

BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

APPLICATION FOR AMENDMENT OF LICENSE

FELT
HYDROELECTRIC PROJECT

TETON COUNTY, IDAHO

FOR:

FALL RIVER
Rural Electric Cooperative, Inc.
Ashton, Idaho

PROJECT NO. 5089

PREPARED BY:

BINGHAM ENGINEERING
165 Wright Brothers Drive
Salt Lake International Center
Salt Lake City, Utah 84116
801-532-2520

JANUARY 1985

BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

APPLICATION FOR AMENDMENT OF LICENSE

FELT HYDROELECTRIC PROJECT

Teton County, Idaho

Project No. 5089

Prepared for

Fall River
Rural Electric Cooperative, Inc.
Ashton, Idaho

Prepared by

Bingham Engineering
165 Wright Brothers Drive
Salt Lake City, UT 84116

January, 1985

BINGHAM ENGINEERING
165 Wright Brothers Drive, Salt Lake International Center, Salt Lake City, Utah 84116, 801-532-252

February 1, 1985

Hon. Kenneth F. Plumb, Secretary
Federal Energy Regulatory Commission
825 North Capitol Street
Washington, D.C. 20426

Re: Fall River Rural Electric Cooperative, et al.
Project No. 5089

Dear Mr. Plumb:

Enclosed for filing are the original and 14 conformed copies of an application for amendment of an existing license for the proposed Felt Hydroelectric Project, to be located in Teton County, Idaho.

A request to include the name of Bonneville Pacific Corporation along with the original applicant, Fall River Electric Cooperative, has been filed separately with the Federal Energy Regulatory Commission and we ask that the request be considered concurrently with this application.

This amendment will provide for a better utilization of the resource, and will permit construction in 1985 if this application is considered. The amended project also would utilize existing equipment and be more cost effective.

Respectfully Submitted,

Jay R. Bingham
Agent for Applicants

ah

enclosures

INTRODUCTORY STATEMENT

BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION
APPLICATION FOR AMENDMENT OF LICENSE

1. Fall River Electric Cooperative, Inc. applies to the Federal Energy Regulatory Commission for an amendment of license for the Felt Water Power Project.

2. The exact name, business address and telephone number of the applicant are

Fall River Rural Electric Cooperative, Inc.
714 Main Street
Ashton, Idaho 83420
(208) 652-7431

3. The applicant is a non profit cooperative corporation formed under the laws of the State of Idaho, licensee for the water power project designated as Project NO. 5089 in the records of the Federal Energy Regulatory Commission, issued on the 9th day of September, 1983.

4. The proposed amendments to the Felt Hydroelectric Project License and the reasons why the proposed changes are necessary are:

a. A relocation of the powerhouse to a site approximately 300 feet downstream of the location identified in the license.

b. Refurbishing the existing Number 4 and 5 units and including them in the license application.

c. Rerouting of the proposed transmission lines from the power plants to the customer's point of delivery.

d. Increasing the plant capacity from 6.0 MW to 7.5 MW.

e. Rerouting the project access road from the county road to the project facilities.

The reasons why the proposed changes are necessary are:

a. The relocation of the powerhouse is being proposed for economic considerations and to maximize utilization of the resource. The new site offers the opportunity to increase the available hydraulic head.

In the amendment application the location of the powerhouse has been moved approximately 300 feet downstream to allow for utilization of additional head in that reach of the river.

The new turbines have been sized for a [redacted] of [redacted] cfs in place of the licensed hydraulic capacity of 680 cfs. This allows the turbine/generator equipment to operate at maximum efficiency over longer periods of time throughout the year and provides a better match of equipment to historic stream flows, and permits better utilization of refurbished units 4 and 5. 2.

The relocation of the powerhouse is not expected to produce adverse effects on the environment. The relocation has been approved by the Idaho Dept. of Fish and Game and the Bureau of Reclamation. (See January 23, 1985 and January 25, 1985 letters contained in appendix to Exhibit E. The penstock grade and alignment have been improved by making a direct connection to existing tunnels 2 and 3 approximately 300 feet upstream of the point of attachment described in the license. This eliminates the adverse grade and 60-inch restriction detailed in the license.

b. The license calls for the abandonment of the existing power facilities and construction of two new turbine units. To provide for comprehensive development of the project and to optimize utilization of the resource, the applicant proposes to refurbish and utilize existing turbine number 4 and 5 generators. The two turbines have a combined maximum hydraulic capacity of 420 cfs. Combined with the two new turbines this makes the overall project more effective than the configuration in the license. The existing equipment will be utilized when flows exceed the hydraulic capacity of the newly installed equipment (464 cfs). By maximizing the efficiencies of the lower plant and utilizing the refurbished upper plant, plant capacity will be increased from the 6.0 megawatts listed under the license to 7.5 megawatts under the amendment application.

The resulting annual energy production will be increased by an estimated 4,700 megawatt hours annually. The utilization of the refurbished existing units in conjunction with the two new downsized units will result in an estimated cost savings of $1.13 million for the

project. The amendment will use refurbished existing equipment and previously designed equipment which will be available for operation in 1985. This could result in a 1 year time savings over the license.

c. Rerouting of the proposed transmission lines is necessary because the license originally contemplated the sale of the power produced by the project to BPA through the Fall River Rural Electric Cooperative, Inc.'s transmission system. Since the license application was formulated, the applicant has entered into a 35 year agreement with Utah Power & Light Company for delivery of the power into its grid system. Delivery of the power to the Utah Power & Light system requires rerouting of the proposed transmission lines and changing of the transmission voltage levels from 48 KV to 24.9 KV. The new routing has been located within existing Fall River Rural Electric Cooperative easements and rights-of-way to the point of UP & L intertie.

d. By down sizing and relocating the lower plant and refurbishing the existing equipment it will be possible to maximize the efficiencies of the lower plant while optimizing the use of the resource by routing flows which exceed the hydraulic capacity of the lower plant (464 cfs) through the existing upper plant.

As a result of maximizing the efficiencies of the lower plant and utilizing the refurbished upper plant, plant capacity will be increased from the 6.0 megawatts listed under the license

application to 7.5 megawatts under the amendment application.

e. The present access road is a very narrow and is limited to four-wheel drive vehicles (portions of the road exceed 26% grade). In order to facilitate construction traffic and to improve travel safety of the access road from the county road to the project facilities will be relocated. The improved alignment has been sited after numerous onsite inspections and will better serve the requirements. Even though the new alignment is longer, improvements in location and grades will result in very little increase in the overall disturbance created by the construction of roadway. The alignment changes have been approved by the Bureau of Reclamation as have the changes in the routing and location of the powerline facilities. (See January 25, 1985 letter contained in appendix to Exhibit E.)

5(i) The statutory or regulatory requirements of the State of Idaho that affect the project as proposed with respect to bed and banks and to the appropriation, diversion and use of water for power purposes and with respect to Fall River's right to engage in the business of developing, transmitting and distributing power and in any other business necessary to accomplish the purposes of the license under the Federal Power Act are

Streambeds and Banks

Minimum stream flow, Idaho Code, Title 42, Chapter 15.

Alteration of channels, Idaho Code, Title 42, Chapter 38.

Fish protection, Idaho Code, Title 36, Chapter 9, Statute 36-906.

Pollution unlawful, Idaho Code, Title 39, Chapter 1, Statutes 39-102, 39-103 and 39-108.

Appropriation of Water Rights and Diversion for Power

The constitutional provisions in Idaho that govern appropriation of waters flowing in natural streams are contained in Article 15, Sections 3 and 7. The appropriation of waters, including power use, is regulated by statutes of the Idaho Code, Title 42, Chapters 1, 2, 3 and 7.

Fall River's Right to Engage in the Project

Fall River is a rural electric cooperative formed under the laws and regulations of the Rural Electrification Administration (REA). Fall River owns and operates the existing power facilities at the site, which will be expanded under this project. Fall River has expended its funds for rehabilitation of the existing facilities, preparation of a feasibility report, preparation of the license application and application to the State of Idaho for additional water rights. Fall River's right to engage in the project is expressed in Article II of "Articles of Incorporation of Fall River Rural Electric Cooperative,

Inc." The articles of incorporation were included in the license application.

5(ii) The applicant has taken or plans to take the following steps to comply with each of the laws cited above:

Streambeds and Banks

Correspondence from the State of Idaho Department of Lands states that Idaho considers the Teton River not navigable and adjacent lands previously owned by Idaho have been sold. Consequently, an easement from the state will not be required.

Other State and Local Permits

Other state permits for which application will be made include a Stream Alteration Permit and a Dam Safety Permit from the Department of Water Resources and a Water Quality Certificate from the Department of Health and Welfare. Locally, a building permit will be required from Teton County. A 404 permit for the project will not be required from the Dept. of the Army Corps of Engineers. (See January 11, 1985, letter contained in appendix to Exhibit E.)

Water Rights

Fall River has existing water rights for the existing power generating facilities in the amount of 300 cubic feet per second (cfs), as listed below:

No. 22-060, 80 cfs, priority of 10-1-21

No. 22-2123, 70 cfs, priority of 11-17-36

No. 22-2126, 150 cfs, priority of 2-2-46

On March 18, 1981, Fall River filed an "Application for Permit to Appropriate the Public Waters of the State of Idaho" for the project for an additional 300 cfs. The permit has been approved contingent upon the granting of the project's FERC license and assigned No. 22-7351. A copy of the 1981 application was attached at the end of the initial statement accompanying the license application. In the event the amendment is granted, the applicant will apply to the State of Idaho to have the location of the powerhouse changed on their applications.

An additional "Application for Permit to Appropriate the Public Waters of the State of Idaho" in the amount of 300 cfs is being filed by the applicant concurrent with the filing of this application for amendment of license.

State of Utah)
) ss.
County of Salt Lake)

This application is executed by Jay R. Bingham, who being duly sworn, deposes and says that the contents of this application are true to the best of his knowledge or belief. The undersigned applicant has signed this application this 1st day of February, 1985.

Jay R. Bingham

Subscribed and sworn to before me, a notary public authorized by the State to notarize documents as appropriate in the State of Utah, this 1st day of February, 1985.

Notary Public

My Commission Expires: 15 Oct. 1987

EXHIBIT A
PROJECT DESCRIPTION

AMENDMENT TO FELT LICENSE APPLICATION

All changes refer to the license application for the Felt Hydroelectric Project #5089 dated February, 1982. The statement as contained in the license application is underlined and referenced by page and location. The amended information follows in the same format. Following the amended information is a description of the proposed project with expected impacts and proposed methods of mitigation. This section follows the format of Exhibit E contained in the 1982 license application.

Page A-2, last sentence of "Intakes" paragraph

This intake has been blocked with sandbags and is no longer used.

A bulkhead has been added to this intake, and it is currently being used to supply water to the R and J Brown Pumps that supply water for irrigation purposes.

Page A-4, top paragraph, last two sentences

Delete:

A tap is made in the No. 5 penstock about 240 feet downtream from its portal to supply water to four high-lift pumps used to irrigate lands in the west along the canyon rim. The tap is controlled by a valve.

Page A-5, PROPOSED NEW FACILITIES, Structures and Equipment

The project includes constructing a new power plant on the Teton River approximately 1,200 feet north (downstream) of the existing plant. A plant at this location will develop 50 feet more head than the existing plant and will be capable of generating about three times as much energy.

The project includes constructing a new power plant on the Teton River approximately 1500 feet north (downstream) of the existing plant. A plant at this location will develop 67 feet more head than the existing plant and will be capable of generating about four times as much energy.

Second paragraph

An 8-foot diameter penstock 1200 feet long will extend from the two existing 59-inch penstocks to the new power plant.

A 7.5-foot diameter penstock 1850 feet long will extend from the outlet portal of tunnels 2 and 3 to the new power plant, the connection to each tunnel will be 78 inch steel pipe.

This more direct connection will allow for a positive grade to be maintained as the penstock extends to the new power plant location.

Page A-6

Top paragraph

generators with a total output of 6.0 megawatts (MW) and average annual generation of 31,400 megawatt hours (MWh).

	Single Unit at Capacity	Two Units at Capacity
Gross static head (ft)	150	150
Design Discharged (cfs)	370	680
Net Head at Design Discharge	141	123
Turbine type	Francis	Francis
Turbine Horsepower	5276	8460
Generator Type	Synchronous	Synchronous
Generator Rating (kVA at 0.2 Power Factor)	4175	8350
Generator Output (kW)	3758	6025
Generator Voltage	4160	4160
Transformer Rating (kVA)		7500

generators with a total output of 7.5 megawatts (MW) and average annual generation of 36,100 megawatt-hours (MWh).

Lower Plant (New)

	Single Unit at Capacity	Two Units at Capacity
Gross static head (ft)	162	162
Design Discharged (cfs)	232	464
Net Head at Design Discharge	159	156
Turbine type	Francis	Francis
Turbine Horsepower	3487	6974
Generator Type	Synchronous	Synchronous
Generator Rating (kVA at 0.2 Power Factor)	2750	5500
Generator Output (kW)	2613	5226
Generator Voltage	4160	4160
Transformer Rating (kVA)		7500

Upper Plant (Existing)	Single Unit at Capacity	Two Units at Capacity
Gross static head (ft)	83	83
Design Discharged (cfs)	210	420
Net Head at Design Discharge	80	74
Turbine type	Francis	Francis
Turbine Horsepower	1400	2800
Generator Type	Synchronous	Synchronous
Generator Rating (kVA at 0.2 Power Factor)	1053	2105
Generator Output (kW)	1000	2000
Generator Voltage	2300	2300
Transformer Rating (kVA)		7500

Second to last paragraph, second sentence

Power will be stepped up from 4,260 volts to 46 kV at the power substation located adjacent to the powerhouse.

Power will be stepped up from 4,260 volts at the new plant and from 2300 volts at the existing plant to 24.9 kV at the power substation located adjacent to the powerhouse.

Second to last paragraph, last sentence:

An overhead transmission line will leave the substation takeoff tower, continuing up the ridge to the Badger Substation, where the power will be fed into the Fall River system through a set of disconnect switches.

Power from the existing plant will utilize the existing overhead line from the old plant to the existing substation take-off tower. An overhead will then extend northerly to the new transformer. The power from the new power plant will be conducted approximately 700 feet southwesterly at a generation voltage of 4160 in a burie conduit to a new transformer pad. A new overhead transmission line will leave the transformer takeoff tower, and span the river to the west. It will continue overhead for approximately 1400 feet to the west rim of the canyon. It will then be placed underground. The line will continue underground for approximately 2600 feet to its point of intertie with the existing Utah Power & Light line. Both the overhead and underground sections of the newly constructed line will parallel an existing 115 kv line belonging to Fall River Rural Electric to the point of intertie with the existing Utah Power and Light Co. line.

Last paragraph:

The power plant will be a reinforced concrete structure with maximum outside dimensions of 57 feet wide by 52 feet long by 50 feet high.

The power plant will be a reinforced concrete structure with maximum outside dimensions of 40.3 feet long and 38 feet wide by 30.25 feet high. The top of the structure will extend approximately 15 feet above natural ground. An insulated metal sandwich building will be added to the structure to provide enclosure for the inside equipment. A 34.5 foot by 11 foot tailrace extends downstream from the powerplant. Copies of the drawings of the structures and buildings are included in Exhibit F of this application.

Page A-7, Second paragraph, second paragraph

A 7500 kVA, 4160 V/46 kV three-phase transformer will step up the generator's output to a level suitable for transmission to the existing Badger Substation. Station class lightning arrestors (46 kV) and a group-oriented fused (100 A) disconnect switch will be mounted on a steel takeoff structure at the plant. The takeoff structure will serve as a dead end for a three phase, 46 kV transmission line connecting the power plant to the Badger Substation. The transmission line will be approximately 1,600 feet long, and of wood pole construction with three No. 2 ACSR phase conductors and one 3/8 inch high-strength steel overhead shield wire. A group-operated fused (100 A) disconnect switch and a steel dead end/takeoff structure at Badger substation will complete the tie to Fall River's power grid.

A 7500 kVA, 4160 V/24.9 kV three-phase transformer will step up the generator's output to a level suitable for transmission to the existing UP & L line at the point of intertie. Station class lightning arrestors and a group-oriented fused disconnect switch will be mounted at the transformer substation. The overhead transmission line will be approximately 1400 feet long, and of wood pole construction with three No. 1 ACSR phase conductors and one 3/8 inch high-strength steel overhead shield wire. A group-operated fused disconnect switch will complete the tie to UP & L's power grid.

Page A-8 & 9 Legal Description, Replace with the following:

Thompson Engineering, Inc. legal description .

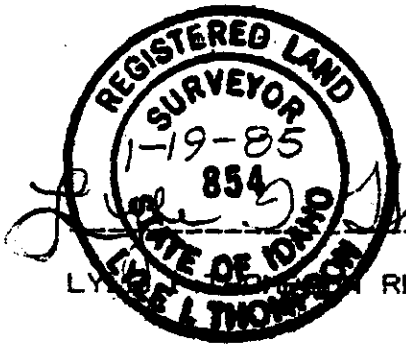
The project boundary described is shown on the Project Map, Exhibit G of this application for license.

THOMPSON ENGINEERING INC.
CONSULTING ENGINEERS
Rigby, Idaho 83442

DATE ------ November 21, 1984 ** revised 1-19-85
JOB NAME -- Felt Hydro Electric Prpject
JOB NO. --- 84028 & 85004
Parcel ----- PERMANENT EASEMENT- DAM * FLUMES * STRUCTURES

LEGAL DESCRIPTION

A PARCEL OF LAND SITUATED IN TETON COUNTY, STATE OF IDAHO, TOWNSHIP 7 NORTH, RANGE 44 EAST OF THE BOISE MERIDIAN, SECTIONS 20, 21, 28, & 29 MORE PARTICULARLY DESCRIBED AS FOLLOWS:
BEGINNING AT THE SECTION CORNER COMMON TO SECTIONS 20, 21, 28, & 29 T 7 N, R 44 E, B.M.;
THENCE S89-36-24 W ALONG THE SECTION LINE FOR A DISTANCE OF 763.71 FEET TO THE TRUE POINT OF BEGINNING;
THENCE S08-02-12 E FOR A DISTANCE OF 819.49 FEET;
THENCE S32-06-42 W FOR A DISTANCE OF 359.76 FEET;
THENCE S00-42-17 W FOR A DISTANCE OF 360.16 FEET;
THENCE S35-26-33 W FOR A DISTANCE OF 289.22 FEET;
THENCE N86-29-45 W FOR A DISTANCE OF 447.69 FEET;
THENCE N03-55-50 E FOR A DISTANCE OF 1473.25 FEET;
THENCE N85-15-55 W FOR A DISTANCE OF 1049.88 FEET;
THENCE N08-21-20 W FOR A DISTANCE OF 118.00 FEET;
THENCE N10-42-26 E FOR A DISTANCE OF 218.00 FEET;
THENCE N85-11-23 E FOR A DISTANCE OF 753.65 FEET;
THENCE N50-50-59 E FOR A DISTANCE OF 1248.25 FEET;
THENCE S48-45-13 E FOR A DISTANCE OF 307.23 FEET;
THENCE S38-03-34 W FOR A DISTANCE OF 622.02 FEET;
THENCE S08-02-12 E FOR A DISTANCE OF 365.38 FEET TO THE TRUE POINT OF BEGINNING, CONTAINING 47.52 ACRES MORE OR LESS.



LYLE L THOMPSON RLS

Exhibit A - Figures and Tables

Table A-1 Summary of Equipment Nameplate Data at existing Felt Power Plant.

Motor and Generator Nameplate Data for Unit 4 and Unit 5 were transposed in License Application. Corrected tabulation shown here for convenience.

Figure A-1, Project Location Map

No change, shown for convenience

Figure A-2, Existing Facilities Plan

Substitute new Figure A-2.

Figure A-2-A, Licensed Facilities Plan

Figure A-2-B, Amended Facilities Plan

TABLE A-1

Table 1-1
SUMMARY OF EQUIPMENT NAMEPLATE DATA AT EXISTING FELT POWER PLANT

Equipment	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5
Turbine	Francis type assumed Rated head: 250 ft	Francis type assumed Rated head: 90 ft	Francis type assumed Rated head: 250 ft	Francis type Two runners Horizontal James Leffel and Co. Type: F Order W1325, 1927 1,000 hp 360 rpm Rated head: 45 ft	Francis type Two runners Horizontal James Leffel and Co. Type: F Order W1325, 1927 1,000 hp 360 rpm Rated head: 45 ft
Governor	Type: O Serial No.: 1322 Lombard Governor Co.	Type: Compensating Serial No.: C4654 Woodward Governor Co.	Type: O Serial No.: 1323 Lombard Governor Co.	Type: LR Serial No.: 5961 Woodward Governor Co. Size: 7.75 x 12 8,400 ft-lb 1927	Type: LR Serial No.: 5962 Woodward Governor Co. Size: 7.75 x 12 8,400 ft-lb 1927
Generator	Serial No.: 2629677 Westinghouse Electric Co. 250 kW @ 1.0 pf Speed: 450 rpm 6,600 V (operated at 2,300 V) Amps per terminal @ 6,600 V: 21.8 3-phase, 60 Hz	Type: ATB8-150-900 Form RC Serial No.: F301052 General Electric Co. 150 kW @ 1.0 pf Speed: 900 rpm 2,300 V 37.5 A 3-phase, 60 Hz	Serial No.: 379666 Westinghouse Electric Co. 250 kW @ 1.0 pf Speed: 450 rpm 6,000 V (operated at 2,300 V) Amps per terminal @ 6,600 V: 21.6 3-phase, 60 Hz	Type: ATB-20-900M-360 Form S Serial No.: 4099305 General Electric Co. 720 kW @ 0.8 pf 900 kVA continuous Stator: 50°C rise Rotor: 60°C rise Speed: 360 rpm 2,300 V Armature Amps: 226 3-phase, 60 Hz Excitation: 125 V Field Amps: 94	Type: ATB 20-500-A-360 Form S General Electric Co. 500 kW Speed: 360 rpm 2,300 V 126 A 3-phase, 60 Hz
Exciter	Type: CVC Serial No.: 426451 General Electric Co. 9.5 kW Speed: 450 rpm 115 VDC 76 A	Type: CVC 113 Form AA1055 Serial No.: 4-37613 General Electric Co. 7 kW Speed: 1,800 rpm 125 VDC 56 A	Serial No.: 379068 Westinghouse Electric Co. 9 kW Speed: 450 rpm 125 VDC 72 A	Motor Type KT 527-4-50-1800 General Electric Co. 50 hp induction Speed: 1,730 rpm 2,300 V, 11.5 A 3-phase, 60 Hz Generator Type: CCD 95 Form A, Model No. 54A29 General Electric Co. 35 kW Speed: 1,800 rpm 125 VDC, 280 A	Motor Type: KT 346-8-40-900 General Electric Co. 40 hp induction Speed: 865 rpm 2,300 V, 10 A 3-phase, 60 Hz Generator Type: SK Westinghouse Electric 26 kW Speed: 900 rpm 125 VDC, 208 A

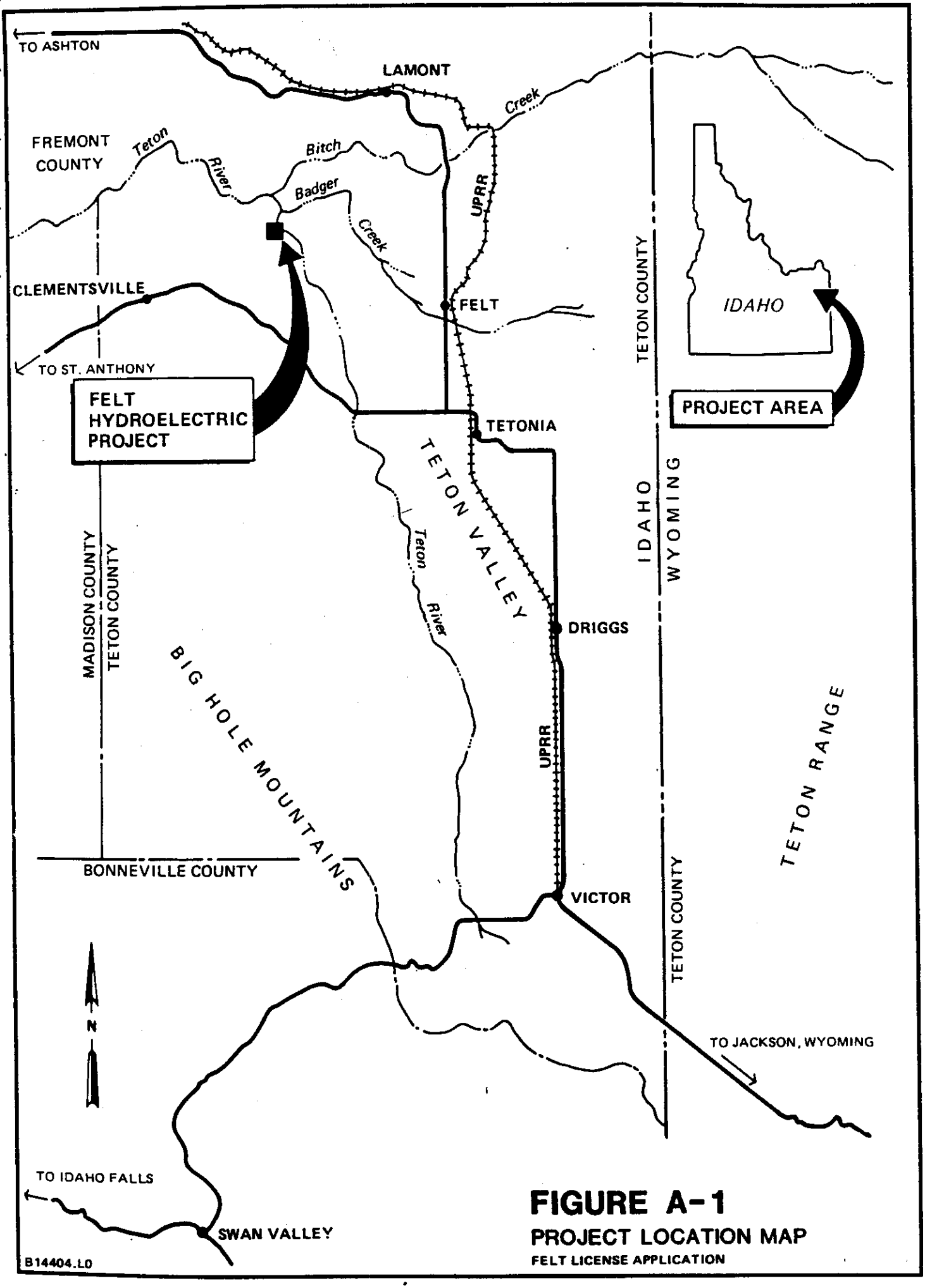
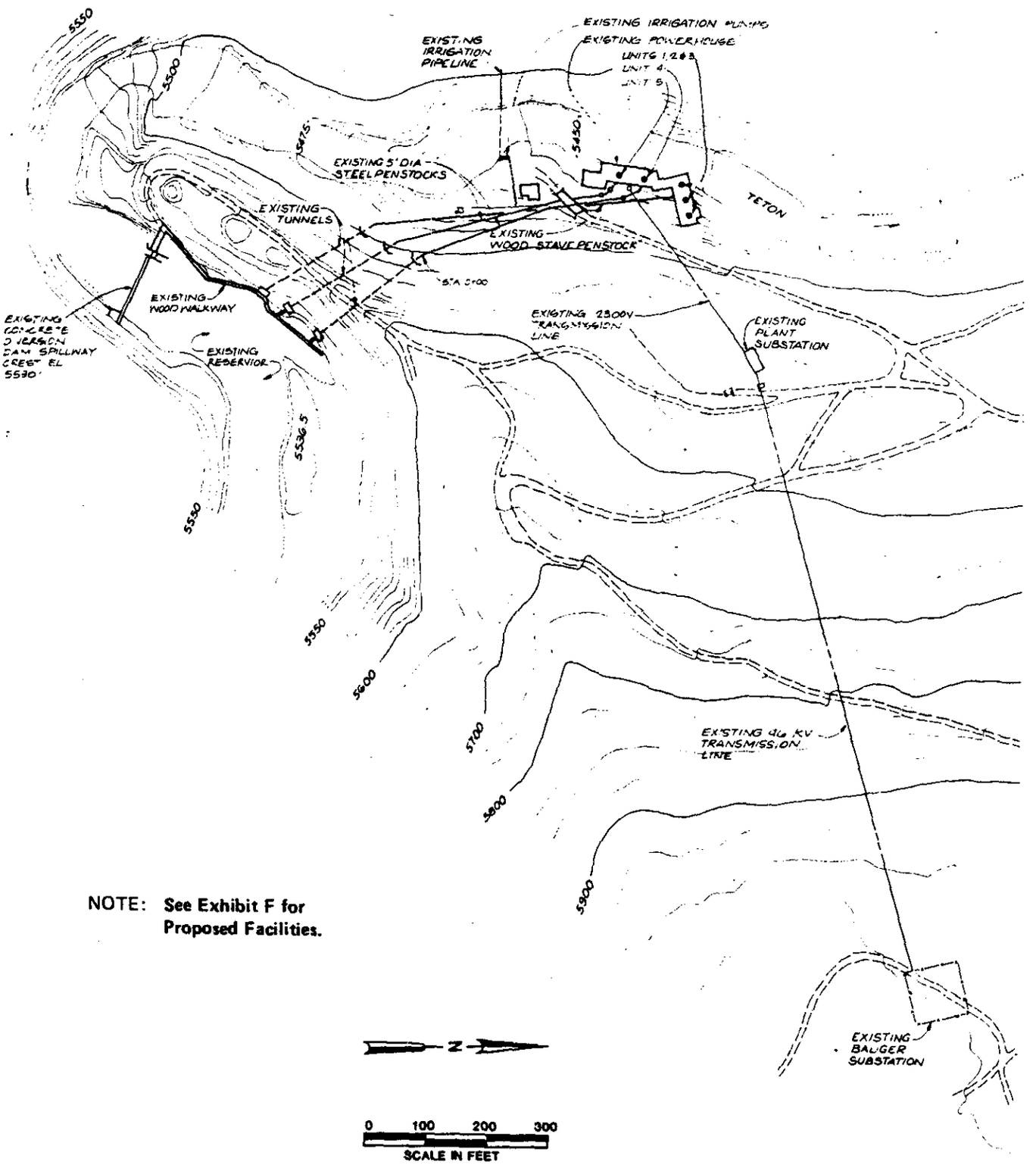


FIGURE A-1

PROJECT LOCATION MAP

FELT LICENSE APPLICATION

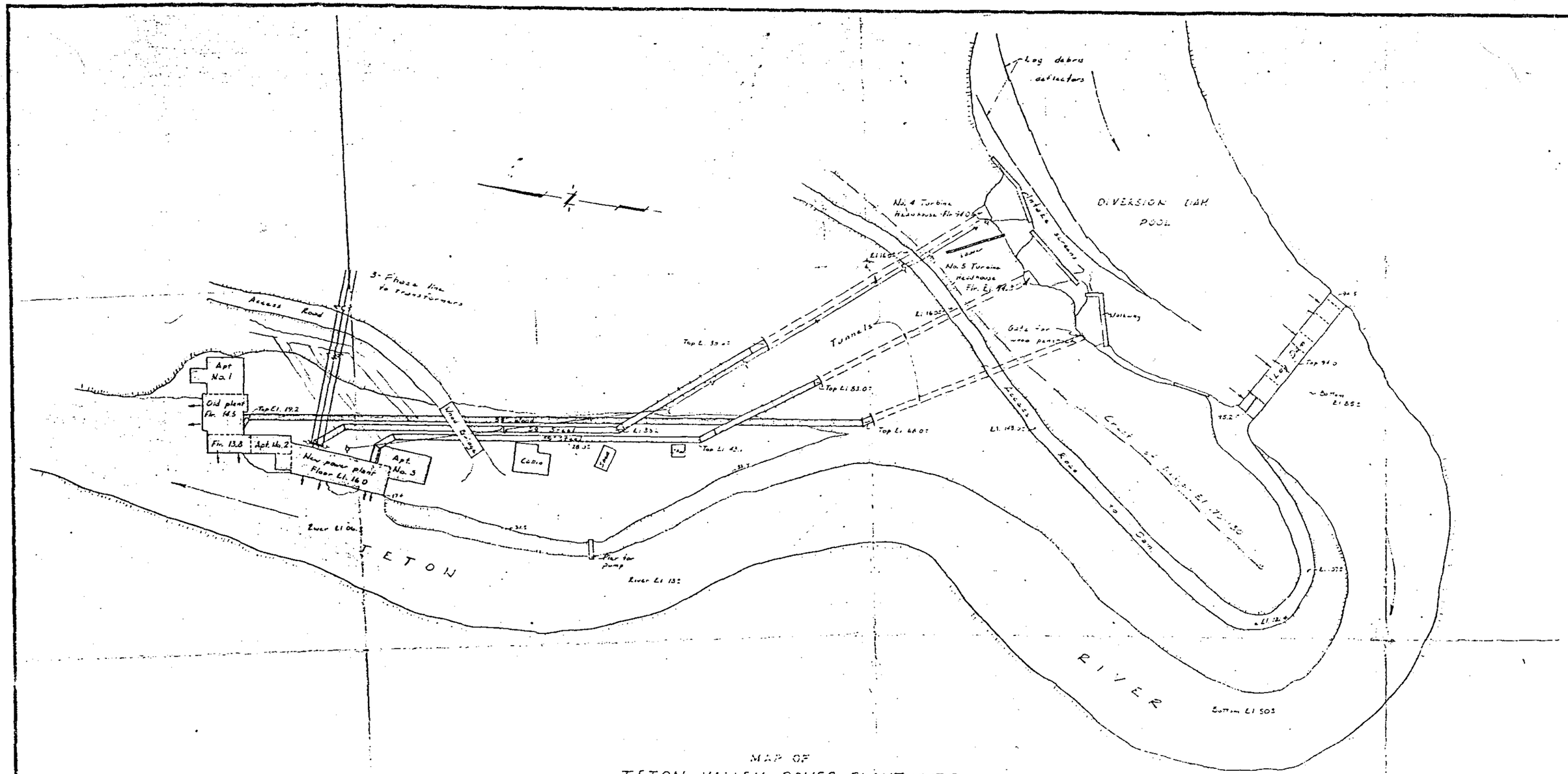


NOTE: **See Exhibit F for Proposed Facilities.**

FIGURE A-2
EXISTING FACILITIES PLAN

FELT LICENSE APPLICATION

B14404.L0



MAP OF

TETON VALLEY POWER PLANT SITE

Scale: 1"=40'

FIGURE A-2
EXISTING

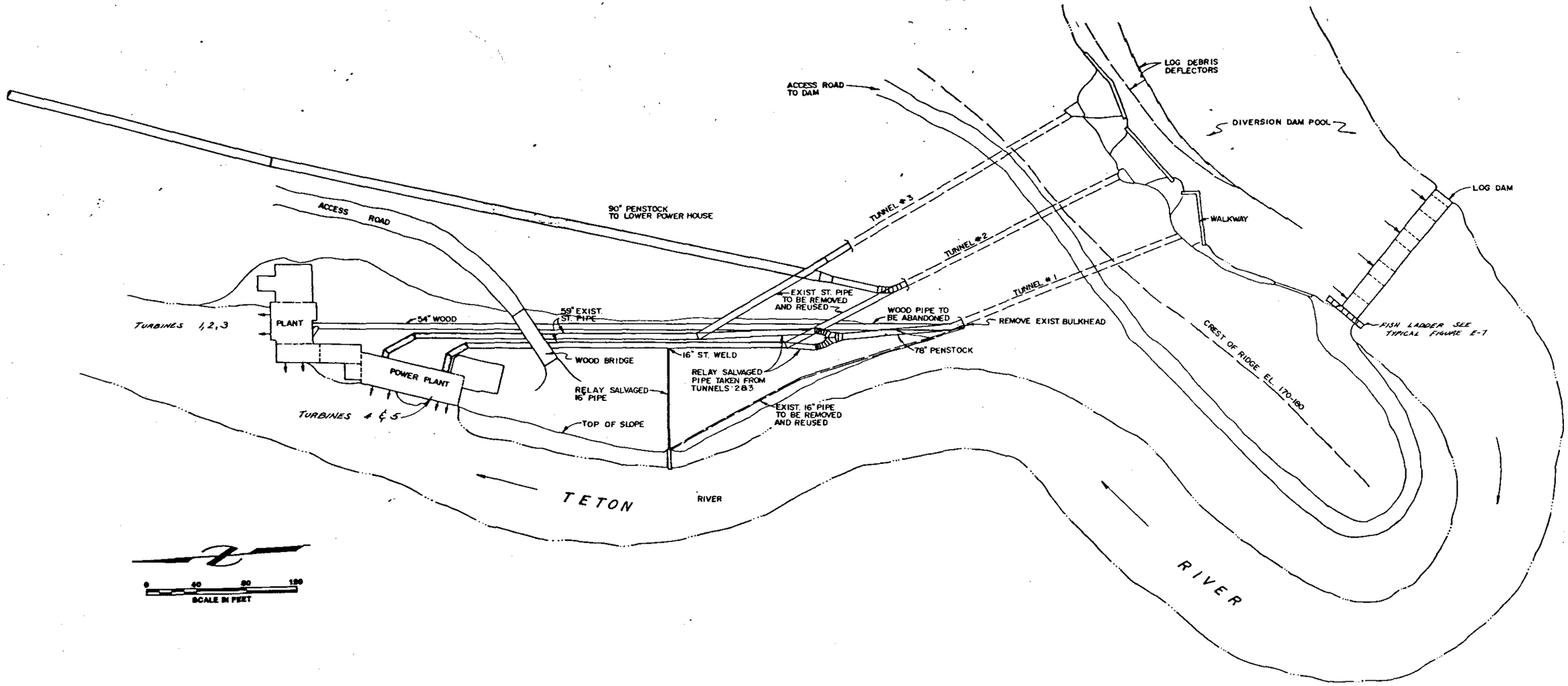


FIGURE A-2-B

AMENDED

EXHIBIT B

EXHIBIT B

Page B-1, Description of Plant Operation, first sentence

. . . through a VHF radio link with Fall River's office in Ashton, Idaho.

through a VHF radio line with Turbine Generator Service's office in Ashton, Idaho. Turbine Generator's office is located about 30 miles from the project site.

Page B-2, Second paragraph

	Adverse Water Year (1955)	Mean Water Year	High Water Year (1943)
Installed Capacity (MW)	6.0	6.0	6.0
Annual Energy (MWh)	25,900	31,400	32,900
Plant Capacity Factor (%)	49	59	62

	Adverse Water Year (1955)	Average Water Year	High Water Year (1971)
Installed Capacity (MW)	7.5	7.5	7.5
Annual Energy (MWh)	26.400	36.100	42.300
Plant Capacity Factor (%)	42	54	59

The power plant will have an installed capacity of 6,025 kilowatts (KW) and an average annual energy production of 31,400,000 kilowatt hours (KWh).

The power plant will have an installed capacity 7,500 kilowatts (KW) and an average annual energy production of 36,100,000 kilowatt hours (KWh).

Page B-2, first paragraph

. . . The minimum discharge necessary for generation is 140 cfs, which corresponds to generating capability of 1220 kW and is available 99.6 percent of the time. Ninety-five percent of the time the plant could generate 1800 kW or more. The lowest flow month of the 16-year record is January, 1943. During that month, the plant would have generated

960,000 kWh, or 1,290 average kW. The plant would not have been able to generate any power during 11 days of that month.

. . . The minimum discharge necessary for generation is 93 cfs, which corresponds to generating capability of 840 kW and is available 99.9 percent of the time. Ninety-five percent of the time the plant could generate 1950 kW or more. The lowest flow month of the 16-year record is January, 1943. During that month, the plant would have generated 2,636,600 kWh, or 1950 average kW. The plant would not have been able to generate any power during 8 days of that month.

Page B-4, first paragraph

. . . the R & J Brown pump that takes water directly from the Unit No. 5 penstock above the Felt Power Plant.

. . . the R & J Brown pump that takes water directly from a bulkhead on the Number 1 intake located immediately below the dam.

Paragraph - (2iii) Power Plant Hydraulic Capacity

The maximum hydraulic capacity of the power plant is 680 cfs.

The maximum hydraulic capacity of the power plant is a total of 884 cfs. This includes capacities of 464 cfs at the lower plant and 420 cfs at the existing plant.

Page B-6, Last paragraph

The average monthly flows in the project area are illustrated on Figures B-8 and B-9. Figure B-9 shows that under the existing condition, no flow passes the diversion dam between August and May (8 months in an average year). The Applicant originally proposed to pass at least 20 cfs whenever the inflow exceeds 300 cfs if it can be demonstrated that the flow would be beneficial to fish. The average monthly flow exceeds 300 cfs most of the time from March to December. Therefore, the applicant's original proposal would increase the river discharge in the project reach during 5 months and decrease the no-flow period from 8 months to 3 months.

The average monthly flows in the project are illustrated on Figure B-8 and B-9. Figure B-9 shows that under the current agreement between the Idaho Department of Fish and Game and Fall River Rural Electric, a minimum instream flow of 20 cfs is maintained between the dam and the powerplant during the months of July, August, September October, November, December, January, February, and March. During the months of April May and June a minimum instream flow of 50 cfs is maintained between the dam and powerplant. Under the license all flows in excess of

the agreed to minimum flows, up to and including an additional 680 cfs, were to be diverted to the new location for hydroelectric power production. Under the proposed amendment the agreed to minimum flows would still be met. Flows in excess of the agreed to minimum flow requirements up to and including 464 cfs will continue to be diverted for power production and will re-enter the stream at the location of the proposed powerplant which is 300 feet downstream of the powerplant proposed under the license. Excess flows over and above the 464 cfs will be diverted through the existing powerplant and re-enter the stream approximately 1600 feet upstream of the location shown in the license application. The net effect of this change is to make additional flows available in the 1600 foot reach of stream above the powerhouse shown in the license through the critical months of April, May, June and July. Based on average monthly discharges during an average water year the net benefit to this section of stream will be an increased flow of 72 cfs in April, 106 cfs in May, 220 cfs in June and 58 cfs in July.

Page B-9, (3) Power Utilization - Delete the entire section through page B-17.

Replace with the following:

(3) Power Utilization

The applicant has entered into a 35 year agreement with Utah Power and Light Company for the purchase of all energy generated from the Felt Hydroelectric Facility beginning in 1985. The contract provides that the buyer is obligated to purchase the kilowatt hours measured on the buyer's meters located on Utah Power & Light's Company's pole at their facility on the rim of the Teton River Gorge west of the customer's facility.

Exhibit B Figures and Tables

Table B-1 Loads and Resources - Delete

Table B-2 Loads and Resources (continues) - Delete

Figure B-2 Annual runoff in the Teton River above the Felt Hydroelectric Site. Remove and replace with new Figure B-2.

Figure B-3 Power Plant Hydraulic Capacity - Delete

Figure B-4 Tailwater Rating - Delete
See new Figure B-7

Figure B-5 Head vs Capability
Remove and replace with new Figure B-5

Figure B-5-A Combine Turbine-Generator Efficiency Curves
Added for information.

Figure B-6 Flood Frequency
No change - included for informational purposes.

Figure B-7 Teton River Stage vs Discharge at Power Plant Site
Remove and replace with new Figure B-7.

Figure B-8 Daily Discharge in the Felt Hydroelectric Project Area during June for the Average Water Year 1946.
Remove and replace with new Figure B-8 for Water Year 1950.

Figure B-9 Monthly discharge in the Felt Hydroelectric Project Area during the Average Water Year 1946.
Remove and replace with new Figure B-9.

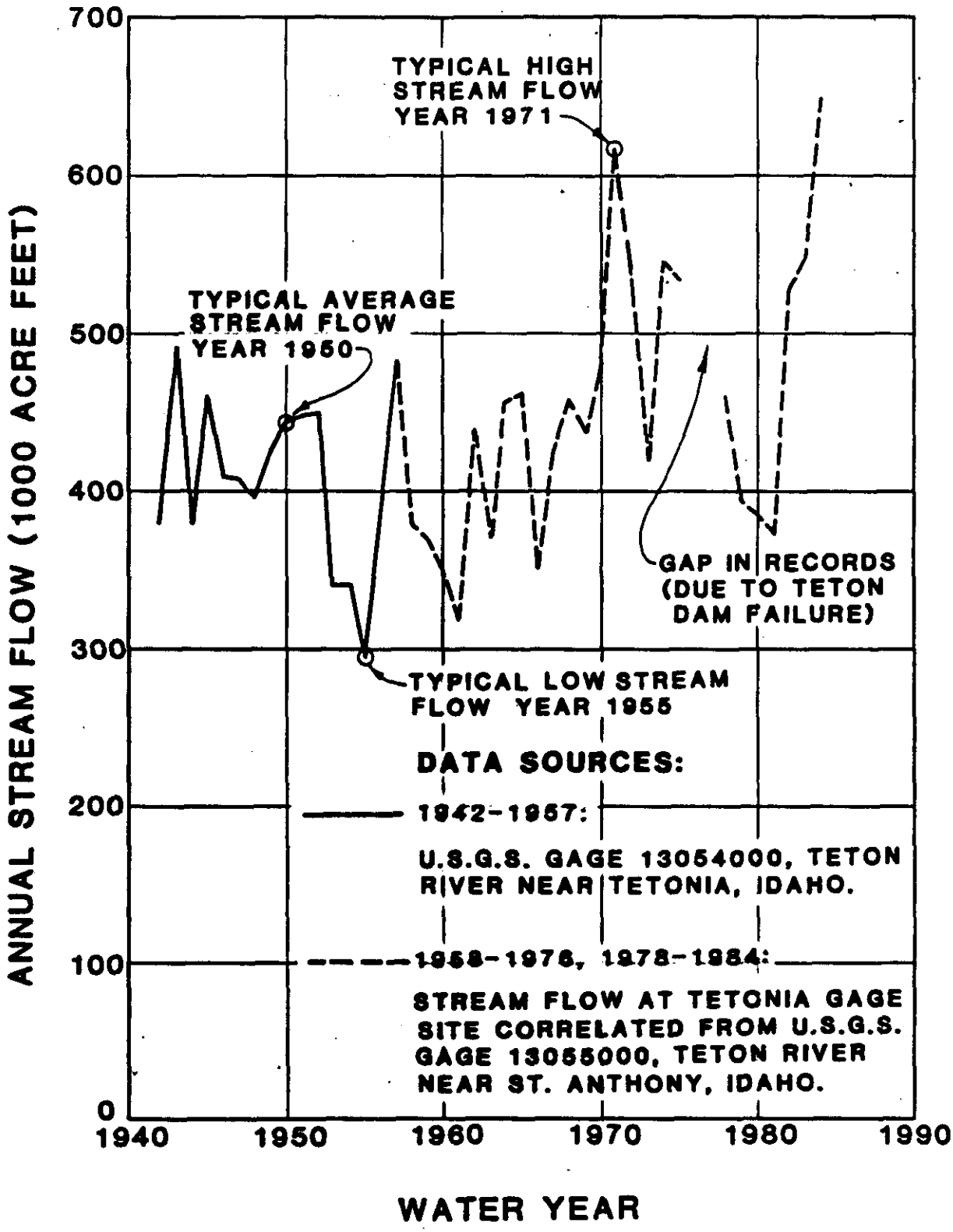
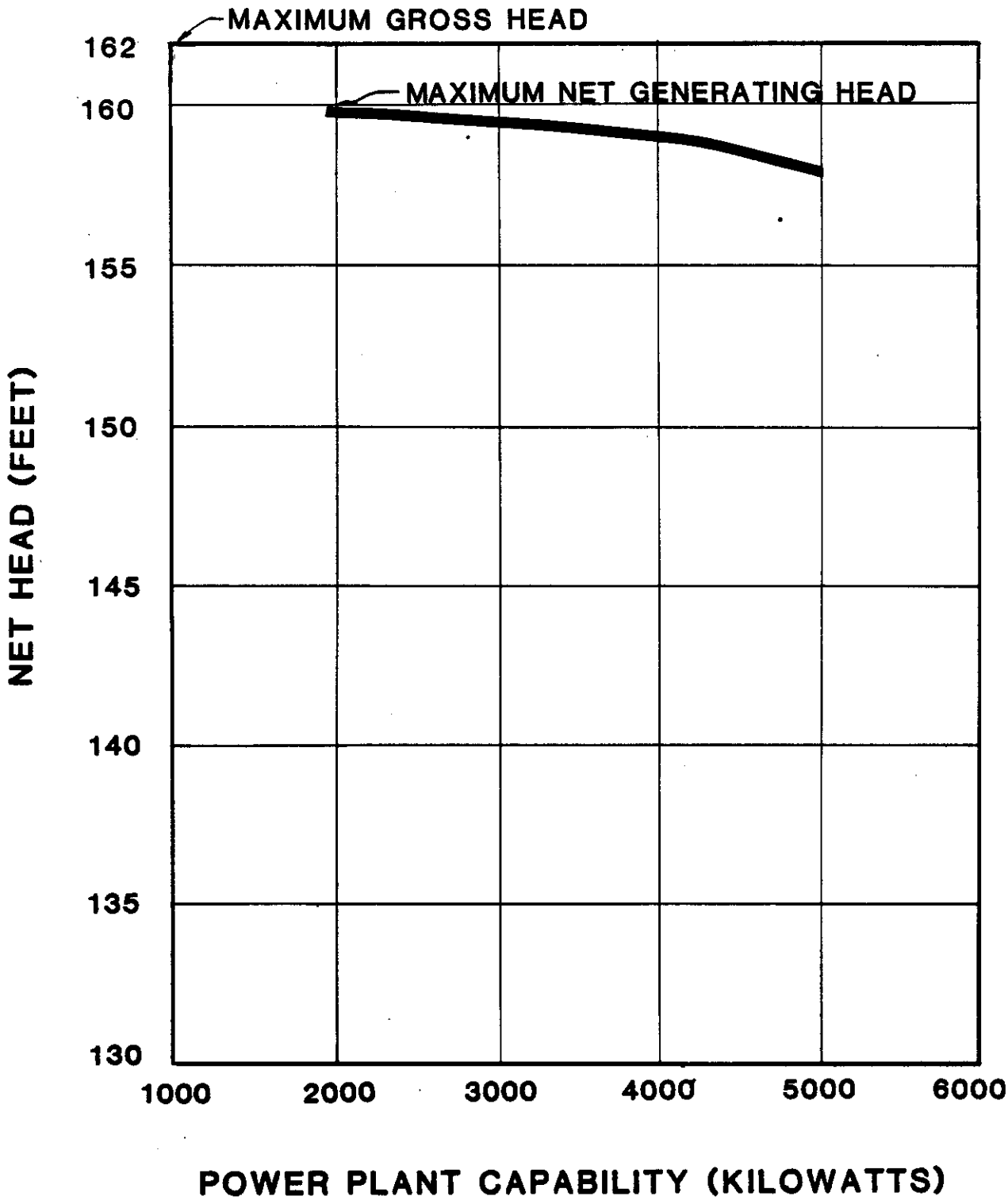


FIGURE B-2

ANNUAL RUN-OFF IN THE TETON RIVER ABOVE THE FELT HYDROPOWER SITE



HEAD VS CAPABILITY

FIGURE B-5

FELT

COMBINED TURBINE-GENERATOR EFFICIENCY CURVES

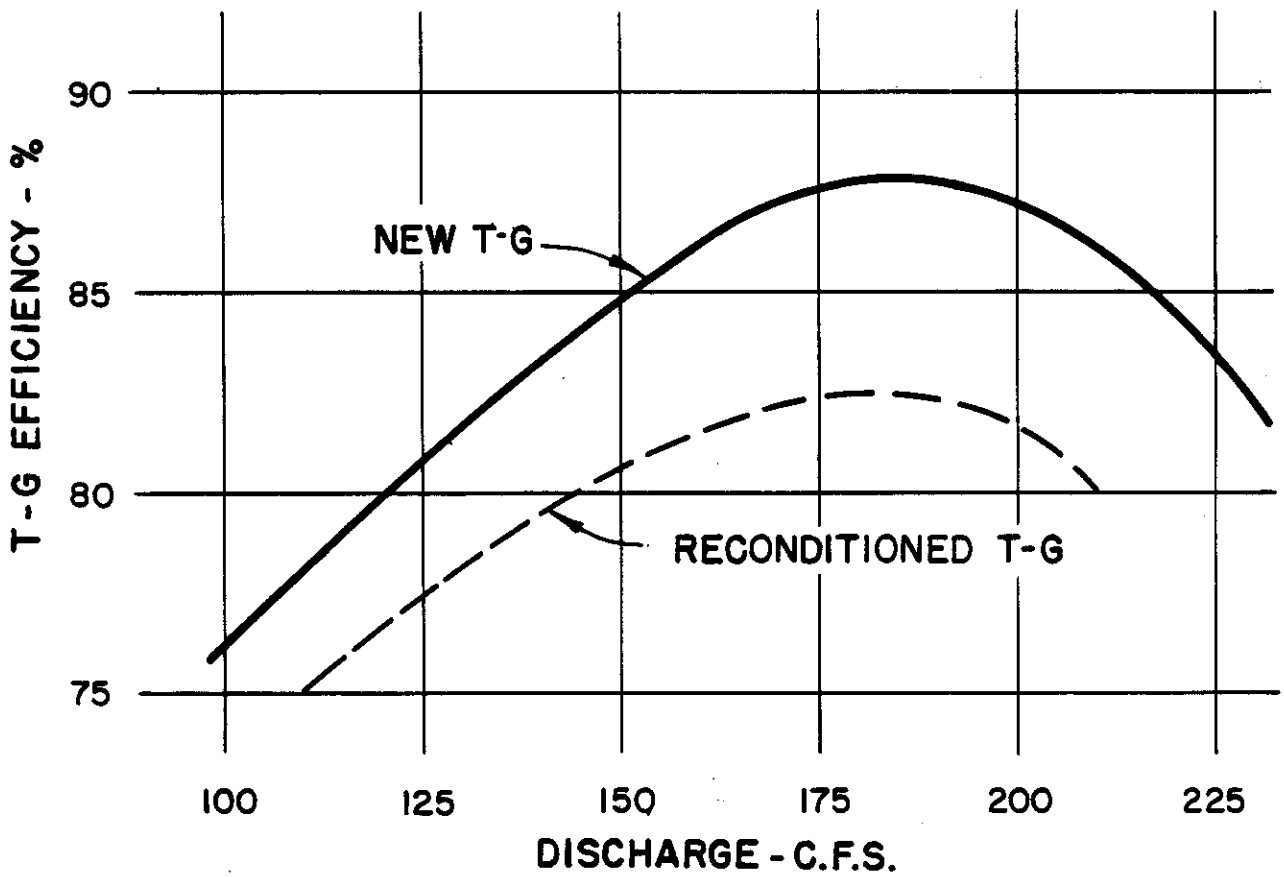
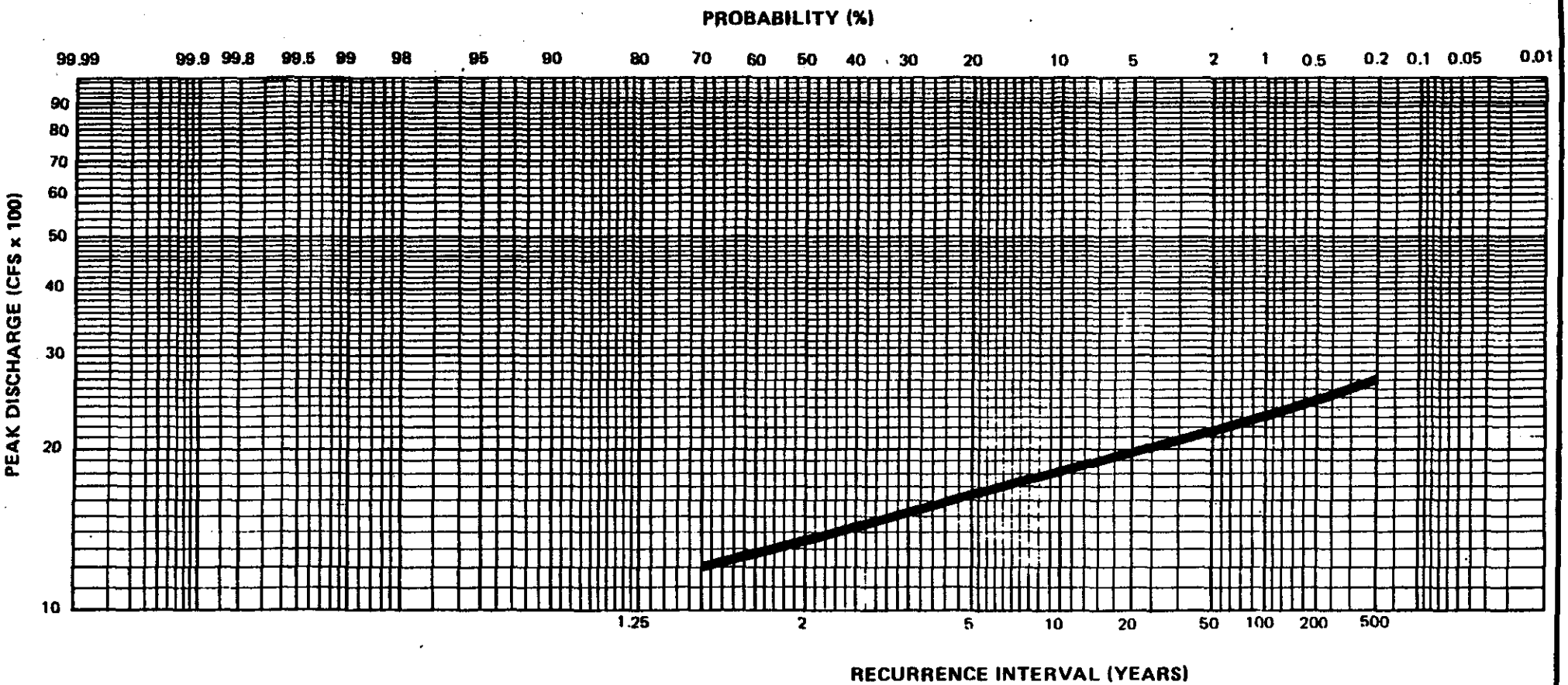


FIGURE B-5-A



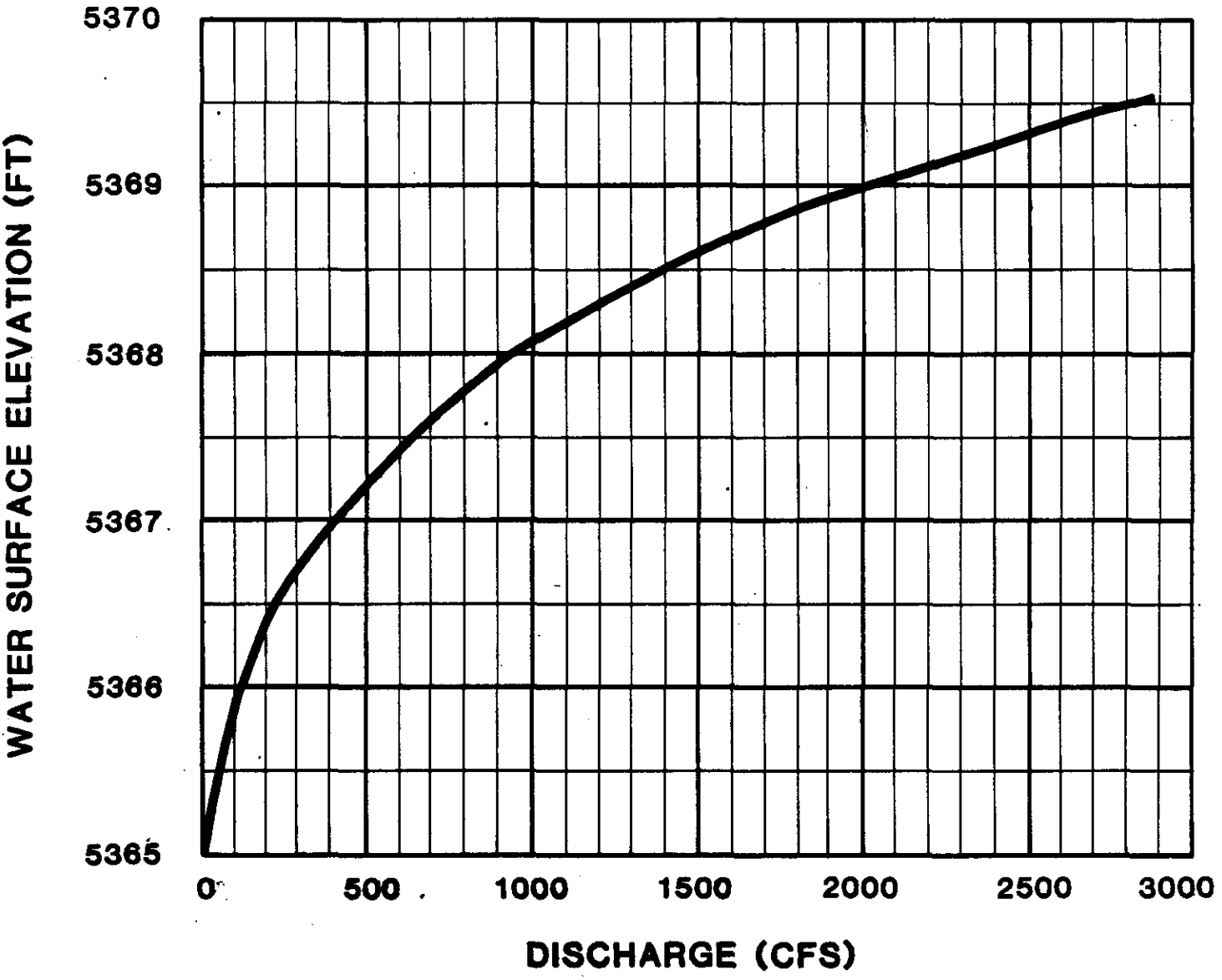
FELT HYDROELECTRIC PROJECT
FLOOD FREQUENCY CURVE
TETON RIVER NEAR TETONIA
DA = 471
PERIOD OF RECORD - 22 YEARS

FIGURE B-6

FLOOD FREQUENCY

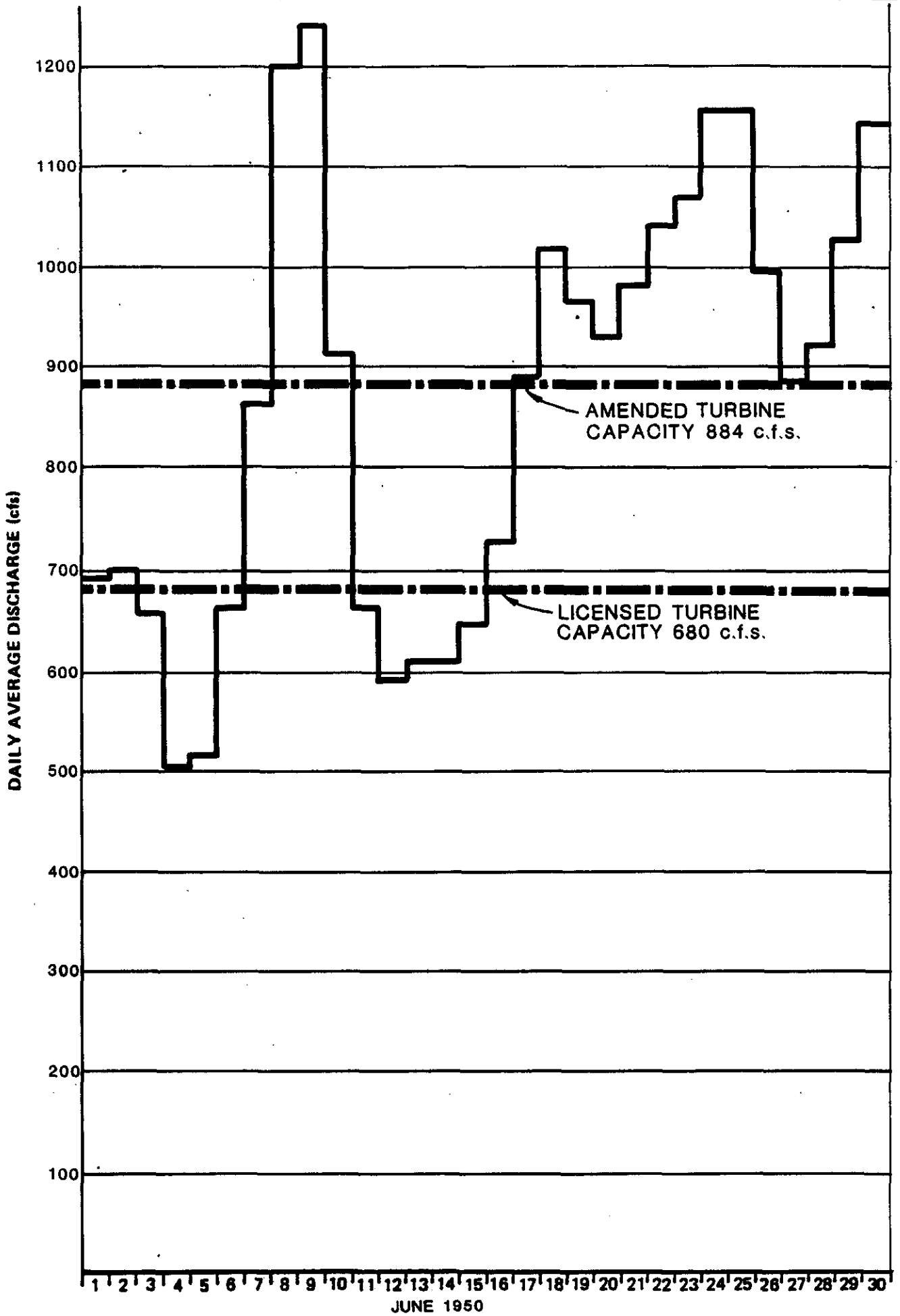
FELT LICENSE APPLICATION

B14404.L0



TETON RIVER STAGE VS
DISCHARGE AT POWER PLANT SITE

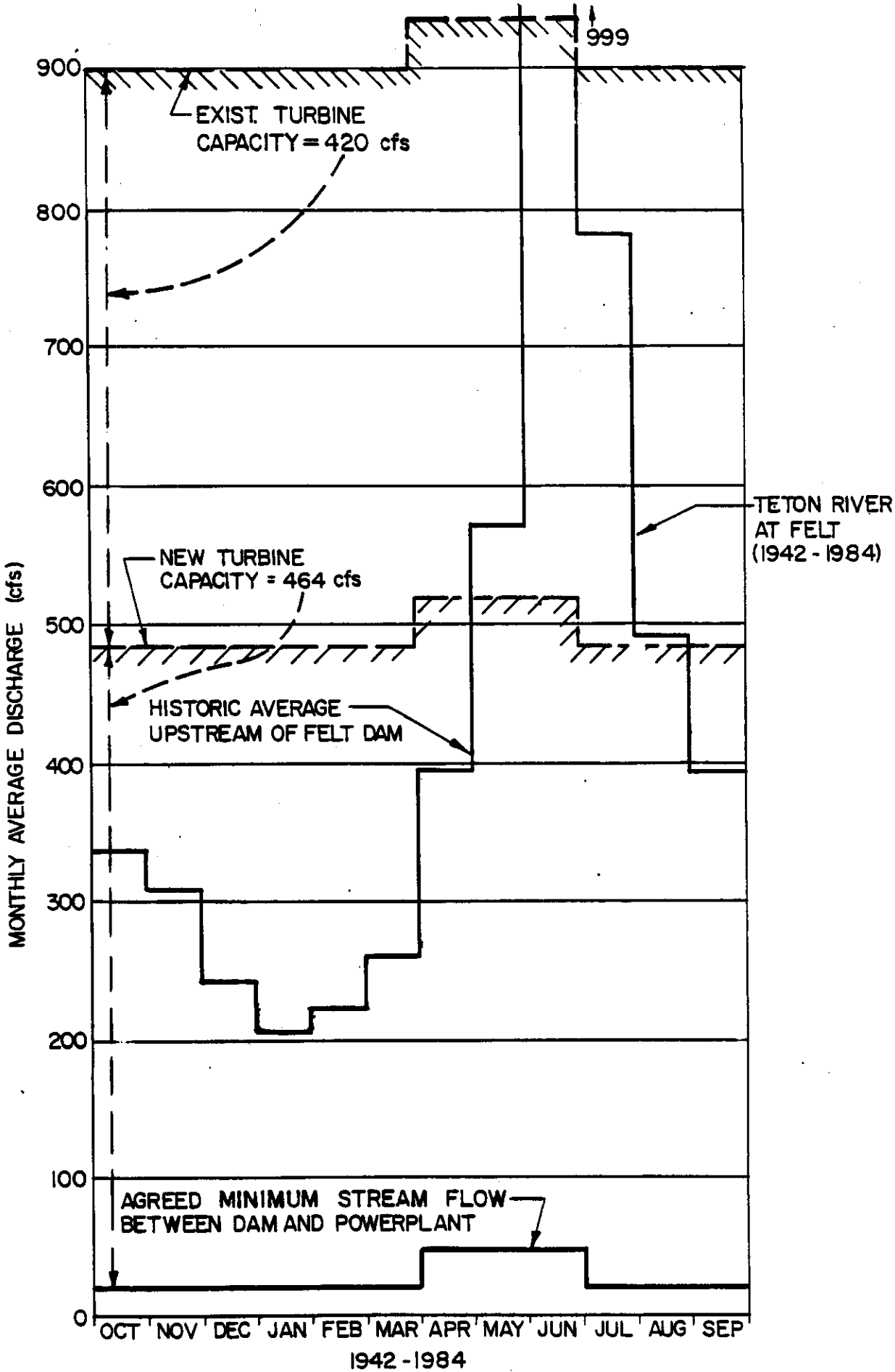
FIGURE B-7



DATA SOURCE:
U.S.G.S. Gage 13064000, Teton River Near Tetonia, Idaho

DAILY DISCHARGE WATER YEAR 1950

FIGURE B-8



AVERAGE MONTHLY DISCHARGE IN THE FELT HYDROELECTRIC PROJECT AREA

FELT LICENSE APPLICATION

FIGURE B-9

EXHIBIT C

EXHIBIT C

Page C-2, Paragraph (2) Proposed Construction Schedule

The proposed construction schedule is shown by the bar chart on Figure C-1. This schedule indicates that the project could be generating power by the end of 1984 if the remaining phases of project develpment go smoothly. The remaining phases include licensing, design and specifications, construction, equipment installation and startup.

The proposed construction schedule is shown on Figure C-1. This schedule indicates that the project could be generating power by the end of 1985 if the remaining phases of the project development go smoothly. The remaining phases include approval of the amendment to the license, finalization of design and specifications, construction, equipment installation and startup.

Page C-3

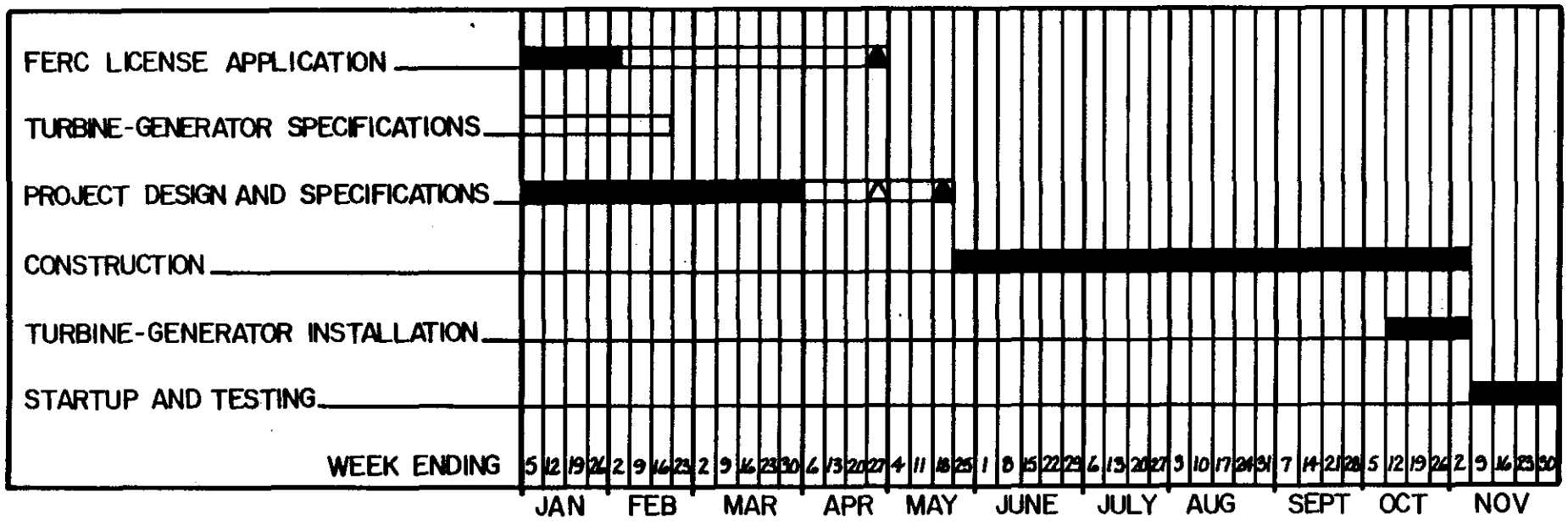
Construction will require two summer seasons because the heavy snowfall and cold temperatures common at the site may curtail winter construction. Equipment installation is scheduled for the second summer to allow approximately 1 year for delivery after the equipment contract award.

If this application for license amendment is not approved prior to early spring of 1985, construction of the facilities could require two summer seasons because the heavy snowfall and cold temperatures common to the site may curtail winter construction. Equipment installation is currently scheduled for late summer or early fall 1985. An advantage to the amendment application is that it utilizes equipment that will be available for fall 1985 delivery.

Exhibit C - Figures

Figure C-1, Project Schedule

Remove and replace with new Figure C-1.



LEGEND

- ENGINEERING OR CONSTRUCTION ACTIVITY
- PROCESSING OR ADVERTISING PERIOD
- BID OPENING
- APPROVAL OR CONTRACT AWARD

PROJECT SCHEDULE

FIGURE C-1

EXHIBIT D

EXHIBIT D

Page D-1, Paragraph (3) New Development Costs

The estimated project construction costs are summarized in Tables D-2 and D-3. Construction costs for the civil items were derived by calculating the quantities of various types of work and applying estimated unit prices to each type of work. Unit prices are based upon experience and published guidelines for similar work accomplished in 1981.

The costs of major equipment items (turbine, generator, transformer, guard valve) were obtained from manufacturers and suppliers of these types of equipment.

The estimated project construction costs are summarized in Tables D-2 and D-3. Construction costs for the civil items were derived from actual bids or by calculating the quantities of various types of work and applying estimated unit prices to each type of work. Where actual bids were not available, unit prices are based upon experience and published guidelines for similar work accomplished in 1984.

The costs of major equipment items (turbine, generator, transformer, guard valve) were obtained from manufacturers and suppliers of these types of equipment.

Page D-2, 4. Financing Requirements and Annual Costs

The cost estimates were prepared using 1981 cost levels and include a 20 percent contingency. The project's financing requirements and annual costs assume:

The project operating by the end of 1984.

Project capital costs will escalate at 10 percent per year until the end of the construction period.

Funds will be borrowed when needed according to the cost schedule shown in Table D-4.

Engineering costs include feasibility, licensing, design, preparation of construction drawings and specifications, construction managements and inspection during construction.

The project's long-term financing will be obtained from REA.

Annual insurance and taxes will be about $20,000.

Table D-1
FELT POWER PLANT
COST OF EXISTING PLANT

FERC Account Number	Description	Initial Costs (years) 1960 (Acquisition)	1961/62	1965	Total Cost of Plant When Shut Down (1968)	Rehabilitation Costs 1980/81	1981/82 Estimated	Total Plant Cost
301	Organization	$ 11,943.93			$ 11,943.93			$ 11,943.93
330	Land and Land Rights	332.00			332.00			332.00
331	Structures and Improvements	13,947.41	$2,497.11		16,444.52	$27,946.00	$ 8,500.00	52,890.52
332	Reservoirs, Dams, and Waterways	31,803.90		$11,360.04	43,163.94			43,163.94
333	Waterwheels, Turbines, and Generators	91,864.79		1,695.01	93,559.80			93,559.80
334	Accessory Electrical Equipment	878.27	1,577.73		2,456.00		2,000.00	4,456.00
335	Miscellaneous Power Plant Equipment	3,141.19			3,141.19	40,785.00	12,800.00	56,726.19
336	Roads, Railroads, and Bridges	5,184.60	2,734.48		7,919.08			7,919.08
	TOTAL	$159,096.09	$6,809.32	$13,055.05	$178,960.46	$68,731.00	$23,300.00	$270,991.46

TABLE D-2
FELT PROJECT QUANTITIES AND COSTS
(1984 Cost Level)

FERC ACCOUNT	QUANTITY	UNIT	UNIT PRICE	AMOUNT
Hydroelectric Plant Accounts				
330 Land and Land Rights				
Land Purchase		LS		$ 10,000
Water Rights		LS		3,000
SUBTOTAL (330)				$ 13,000
331 Structures and Improvements				
Power Plant				
Parking Area		LS		$ 2,000
Cofferdam	2,000	CY	$ 2	4,000
Dewatering		LS		20,000
Excavation-common	4,300	CY	10	43,000
Excavation-rock	1,500	CY	25	37,500
Concrete-Stage 1	1,180	CY	300	354,000
Concrete-Stage 2	350	CY	100	35,000
Reinforcing Steel	40	ton	1,000	40,000
Miscellaneous Metal	7	ton	4,000	28,000
Backfill	2,600	CY	10	26,000
Rock bolts and shoring	4,000	SF	10	40,000
Tailrace Excavation	4,000	CY	10	40,000
Remove existing plant & machinery (Units 1, 2, 3)		LS		30,500
SUBTOTAL (331)				$ 700,000
332 Reservoirs, Dams and Waterways				
Penstock				
Intake Rehabilitation		LS		40,0000
Tunnel Rehabilitation		LS		27,000

Excavation	11,000	CY	$ 7	77,000
Backfill	6,000	CY	5	30,000
Concrete Anchor Blocks	300	CY	200	60,000
Reinforcing Steel	20	ton	1,000	20,000
Welded Pipe - straight (90" x 3/8")	1,850	LF	341	631,000
Welded Pipe - straight (78" x 3/8")	200	LF	200	40,000
Branches and Bends		LS		85,000
Surge Protection		LS		90,000
SUBTOTAL (332)				$1,100,000
333 Waterwheels, Turbines and Generators				
Turbine, Generator and Accessories		LS		$2,430,000
Turbine Guard Valve	2	ea	$ 35,000	70,000
SUBTOTAL (333)				$2,500,000
334 Accessory Electrical Equipment				
Station Service		LS		$ 35,000
Controls and Switching		LS		330,000
Buses, Conduits and Cables		LS		35,000
Remote Supervision		LS		60,000
SUBTOTAL (334)				$ 460,000
335 Miscellaneous Power Plant Equipment				
Draft Tube Gates and Hoists	4	ea	10,000	$ 40,000
Miscellaneous Equipment		LS		110,000
SUBTOTAL (335)				$ 150,000
336 Roads, Railroads and Bridges				
Access Road Earthwork	50,000	CY	$ 5.00	$ 250,000
Transmission Plant Accounts				
350 Land and Land Rights		LS		$ 5,000
352 Structures and Improvements				
Steel Structures and Fence		LS		$ 7,000
Substation Foundation		LS		7,000
SUBTOTAL (352)				$ 14,000

353 Station Equipment					
Transformers (7.5 MVA, 4.16/24.9 kV) (2.0 MVA 2.4/24.9 kV)					$ 84,000
Breakers, Switches, Fuses					22,000
Grounding and Conduit					2,000
Cable					2,000
Installation					10,000
SUBTOTAL (353)					$ 120,000
Transmission Plant Accounts					
354 Towers and Fixtures	2	ea	$	15,000	$ 30,000
355 Poles and Fixtures					8,000
356 Overhead Conductors and Devices					
Conductors	2,200	LF		12	$ 26,400
Aerial Ground Wire		LS			3,600
Insulation					2,000
Devices					3,000
SUBTOTAL (356)					$ 35,000
357 Underground Conduit	4000	LF	$	12.50	$ 50,000
358 Underground Conductors and Devices					$ 9,000
359 Roads and Trails					$ 5,000

Table D-3
FELT PROJECT
COST SUMMARY
(1984 COST LEVEL)

FERC ACCOUNT NUMBER	ACCOUNT DESCRIPTION	COST
Hydroelectric Plant Accounts		
330	Lands and Land Rights	$ 13,000
331	Structures and Improvements	700,000
332	Reservoirs, Dams, and Waterways	1,318,000
333	Waterwheels, Turbines, and Generators	2,500,000
334	Accessory Electrical Equipment	460,000
335	Miscellaneous Power Plant Equipment	150,000
336	Roads, Railroads, and Bridges	250,000
Transmission Plant Accounts		
350	Land and Land Rights	5,000
352	Structures and Improvements	14,000
353	Station Equipment	120,000
354	Towers and Fixtures	30,000
355	Poles and Fixtures	8,000
356	Overhead Conductors and Devices	35,000
357	Underground Conduit	50,000
358	Underground Conductors and Devices	9,000
359	Roads and Trails	5,000
	Subtotal	$5,667,000
	Contingencies	1,133,000
	Subtotal	$6,800,000
	Sales Tax (3% of Materials)	108,000
	TOTAL CONSTRUCTION COST	$6,908,000
	Engineering and Owner's Cost	1,382,000
	TOTAL PROJECT COST (1984)	$8,290,000

TABLE D-4
FINANCING REQUIREMENTS AND ANNUAL COSTS
($1,000)

Project Cost in 1984	$	8,290
14% interest during Const		460
Total Financing Requirement	$	8,750
From Equity	$	1,550
Debt Financing	$	7,200
Annual Costs		
Principal and Interest	$	1,172
Operation and Maintenance	$	100
Administration & General	$	20
Insurance and Taxes		20
Total Annual Cost	$	1,312
Average Energy Generation (MWh)	$	36,100
Unit Energy Cost in 1984 (¢/kWh)		3.6

EXHIBIT E
ENVIRONMENTAL REPORT

EXHIBIT E
ENVIRONMENTAL REPORT

Page E-5 & E-6, (2) Report on Water Use and Water Quality - Water Use - second paragraph third sentence

The estimated average daily flow at the project site is 413 cfs. Daily flow has ranged from about 62 cfs to more than 1,900 cfs during the period of record. Average monthly flows for 5 years of record at Tetonia are shown in Table E-1.

The discharge record at the Felt Project site was obtained by adjusting the Tetonia gage record for irrigation diversions and precipitation runoff inflow along the intervening reach. The runoff adjustment was derived from average monthly precipitation values and the 9-square-mile increment of additional drainage area between the hydro site and gage.

The Felt Hydroelectric Project will be capable of utilizing a maximum of 680 cfs through both turbines. Fall River Rural Electric Cooperative, Inc., has requested water rights to an additional 300 cfs from the Idaho Department of Water Resources for a total water right of 600 cfs. The project represents nonconsumptive use of the water and will be subject to available flows during the irrigation season. Prior diversion and water rights of irrigators will not be altered by the project.

Station No. 130544000 located just above the proposed Felt Hydroelectric Project measured the flows on the Teton River near Tetonia, Idaho for the 16 year period from 1942 to 1957. Flows have not been measured since 1957. Station 13055000 has measured flows on the Teton River near St. Anthony, Idaho from 1942 until the present. The correlated flow records at Tetonia, Idaho were obtained by correlating by months the flows between the two stations for the years 1942 through 1957 and then projecting the flows at Tetonia from the actual measured data on the Teton River near St. Anthony, Idaho. Based on this correlation the estimated average daily flow at the project site is 435 cfs. Daily flow has ranged from about 62 cfs to more than 1900 cfs during the period of record. Average monthly flows for the 16 year period from 1942 to 1957 are shown on Table E-1A. Correlated flow records at Tetonia, Idaho are shown on Table E-1, and the average monthly flows for the Teton River near St. Anthony, Idaho for the years 1942 through 1984 are shown on Table E-1B.

The Felt Hydroelectric Project is capable of utilizing a maximum of 884 cfs through all four turbines. This includes a capacity of 464 cfs at the lower plant and 420 cfs at the existing upper plant. Fall River Rural Electric Cooperative has three existing water rights totaling 300 cfs for hydropower generation at the site. They also filed an application for a

permit to appropriate the waters of the State of Idaho for 300 cfs on March 18, 1981. This permit has been approved contingent upon granting of the project's FERC license. This brings the total water right available for the project to 600 cfs. Concurrently with the filing of this application for amendment of license, the applicant is filing an application for permit to appropriate public waters of the State of Idaho for an additional 300 cfs. If approved this will bring the total water rights available for the project to 900 cfs. The project represents a non-consumptive use of the water and will be subject to available flows during the irrigation season. The water rights will have no effect on prior diversions and water rights of irrigators in the area. The supply water for the R and J Brown irrigation pumps will be met prior to the diversion of water into the hydroelectric generation facilities. The agreed minimum flows of 20 cfs during the months of July through March and 50 cfs for the months of April through June, will continue to be met. An additional benefit of the project as amended is that under the existing license all flows up to 680 cfs would have been diverted for power production and returned to the Teton River some 1600 feet below the existing power plant. Under the development proposed in this amendment only 464 cfs will be diverted to the new plant which is located 300 feet below the plant proposed in the license application. The flows in excess of the 464 cfs will be diverted into the existing turbines and will return to the river 1600 feet above the power plant location approved in the license.

Based on average monthly flows for the project area, during the critical months of April, May, June and July this will place an additional 72, 106, 220 and 58 cfs respectively into the 1600 foot section of the Teton River.

Page E-7, Minimum Flows

The capacity of the turbines will increase from 420 cfs to 680 cfs, and any remaining flow will spill over the dam. As shown on Figure E-6, the average monthly flows will usually be below turbine capacity. During most months the available flows will be routed through the penstocks and discharged into the tailrace. Consequently, flows will be diverted from the segment of river between the dam and the tailrace.

The capacity of the turbines will increase from 680 cfs to 884 cfs, consisting of capacities of 464 cfs at the lower (new) site and 420 cfs at the upper (existing) site. Any remaining flow will spill over the dam. Minimum flows of 20 and 50 cfs will continue to be met. As shown on Figure E-6, the average monthly flows will usually be below combined turbine capacity. During most months the available flows will be routed through the penstocks and discharged into the tailrace. Consequently, flows will be diverted from the segment of river between the dam and the tailrace. An advantage to the application for amendment of license is that the flows diverted to the lower powerplant have been reduced from

680 to 464. All flows from 464 cfs to the total maximum diversion of 884 will be diverted to the existing plant. These flows will then re-enter the river some 1600 feet above the location of the power plant in the license. Minimum instream flows as established in consultation with the Idaho Department of Fish and Game of 20 cfs during the months of July through March and 50 cfs through the months of April through June will continue to be met. The net effect of the diversion scheme proposed in the amendment to license is that during the critical water months of April through June additional water will be available in the 1600 feet of river above the proposed power plant location shown in the license and the agreed minimum flows will be available in the affected reach from the dam to the tailrace.

Second to last sentence

IDFG requested a minimum instream flow of 20 cfs between the dam and the existing powerhouse tailrace (see correspondence in the Exhibit E Appendix). IDFG has not identified a minimum flow for the additional 1500 feet of stream which the project will dewater.

IDFG requested minimum instream flows of 20 cfs during the months of July through March and 50 cfs during the months of April through June. IDFG has not identified a minimum flow for the additional 300 feet of stream which the project will dewater; however, a January 23, 1985 letter contains the following statement:

"Our department has no objections to a revised location up to 300 feet down stream of the original provided the agreed to minimum flows are maintained in the extended stream reach to be affected and that the licensee guarantees fish passage through the extended reach. We do not anticipate problems with fish passage, but the extended reach was not included in the original minimum stream flow study. Licensee should be aware that satisfactory fish passage should be maintained by one means or another if the agreed to minimum flows should be inadequate for the extended stream reach."

As stated earlier the applicant intends to redivert portions of the flows into the Teton River at the existing powerhouse location. This is 1600 feet upstream of the site approved in the original license and considered in the original agreed to minimum flows. The licensee is also required as a condition of the license to construct and maintain a fish ladder to provide for fish passage. The applicant further agrees that if additional measures are required, it will take whatever action is necessary to maintain the agreed to minimum flow in the extended stream reach (see January 23, 1985 letter contained in Appendix to Exhibit E).

Page E-8, Anticipated Impacts, second paragraph, second sentence

Construction of the new powerhouse and excavation of the tailrace will be done during two summers, beginning in June.

Based on timely approval of the application for amendment of license, construction of the new powerhouse and exacavation of the tailrace will be done during the summer, beginning in either June or July.

Page E-9, first sentence

Improvement of the penstock intakes will consist primarily of replacing or repairing the steel gates and will have no effect on water quality.

Improvement of the penstock intakes will consist primarily of replacing or repairing the steel gates and adding a shelter to Intake Structures #1,#2 and #3. A fish ladder and walkway will also be constructed. A typical fish ladder is shown on Figure E-7. The construction should have little or no effect on water quality.

Page E-12, last paragraph

The river below the dam to the existing powerhouse is essentially dewatered (except for dam seepage) during most of the year. Fish stranding occurs and small pools form which quickly lose dissolved oxygen and increase in temperature. Fish in these pools become stressed and fish-kills are possible under existing conditions. During the September field survey, a flow of 2 to 5 cfs was observed going over the dam. This flow cleared the pools and stranded fish moved downstream.

The river below the dam to the existing powerhouse is essentially dewatered (except for dam seepage) and minimum stream flows, during most of the year. Under the license the river below the dam to the proposed powerhouse location some 1600 feet below the existing powerhouse would be essentially dewatered during most of the year except for minimum instream flows of 20 and 50 cfs which have been agreed to by the agencies. The minimum flows were established to prevent fish stranding and to provide for continual movement of fish throughout the affected reaches. Higher flows were agreed to during April, May and June to provide for upstream fish passage for cutthroat trout spawning migration. An advantage to the application for amendment is that based on mean monthly flows it would place additional flows of 72, 106,220 and 58 cfs into the river during the critical months of April through July respectively (see Figure B-9).

Page E-17 and E-18, Anticipated Impacts, Fisheries, fourth sentence, first paragraph

The project proposal is to locate a new powerhouse 1200 feet north of the existing plant. Because of the bend in the river, the distance along the stream channel will be about 1500 feet. The stream channel distance from

the dam to the existing plant is 1300 feet. The removal of water from another 1500 feet feet of the river will exacerbate the existing problems of fish movement downstream and stranding by increasing the dewatered length from 1300 feet to 2800 feet.

Power generation will require the full instream flow 85 percent of the year. The spring freshet typically occurs in June, at which time river flows exceed the proposed turbine capacity of 680 cfs. Figure E-5 shows the discharge through the project area in June 1946 (a representative average water year). Except for 10 days in June of the average year, water will flow over the dam. This freshet coincides with the IDFG fish planting program, and there is more than adequate flow in June to allow for downstream passage. The proposed and existing project discharges are shown in Figure E-6. This figure is also based upon the 1946 water year and the average monthly flows. From this figure it can be seen that under the existing project conditions, water passes over the dam from April through July, and that under the increased flow requirements of the proposed project, water will still flow over the dam during June.

The project operation agreed upon by IDFG and Fall River will provide river flow between the dam and power plant of 20 cfs during 9 months and 50 cfs during 3 months. This will eliminate the fish stranding which now occurs, and represents a significant improvement over existing conditions. Consequently, the period during which the fish can use this reach of the river will be increased from 4 months to 12 months in an average year.

The project proposal is to locate a new powerhouse 1500 feet north of the existing plant. Because of the bend in the river, the distance along the stream channel will be about 1900 feet. The stream channel distance from the dam to the existing plant is 1300 feet. The removal of water from another 1900 feet feet of the river could exacerbate the existing problems of fish movement downstream and stranding by increasing the dewatered length from 1300 feet to 3200 feet. Minimum flow requirements have been set in conjunction with the Idaho Dept. of Fish and Game to facilitate fish passage and alleviate stranding.

Power generation will require the full instream flow 93 percent of the year. The spring peak runoff typically occurs in June, at which time river flows exceed the proposed turbine capacity of 884 cfs periodically during that period. During this time the agreed to minimum flow of 50 cfs will be supplemented by flows over and above 934 cfs (884 cfs total hydraulic capacity plus 50 cfs minimum release). This coincides with IDFG fish planting programs. The proposed and existing project discharges are shown on Figure E-6. From this figure it can be seen that under the license conditions, water passes over the dam from April through July and that under the increased flow requirements of the proposed project, water

may still flow over the dam during June. Figure E-5 shows the discharge through the project area in June 1946 (a representative average water year). This peak flow coincides with the IDFG fish planting program, and there is more than adequate flow in June to allow for downstream passage. The proposed and existing project discharges are shown in Figure E-6. This figure is also based upon the 1946 water year and the average monthly flows. From this figure it can be seen that under the existing project conditions, water passes over the dam from April through July, and that under the increased flow requirements of the proposed project, water will still flow over the dam during June.

A benefit under this application for amendment of license is that all flows in excess of the 464 maximum plant capacity of the proposed new plant, up to and including a combined flow of 884 cfs, will be diverted through the equipment at the existing plant. This places additional water in the 1600 foot stretch of river between the powerhouse location in the license and the existing powerhouse. This will be especially beneficial during the critical months of April, May, June and July when additional flows of 72 cfs, 106 cfs, 220, and 58 cfs respectively will be available. In addition to the minimum release flows of 20 cfs during nine months and 50 cfs during three months, all flows in excess of total plant capacity will continue to pass over the dam. This will eliminate the fish stranding which used to occur and represents a significant improvement over existing conditions in the license. Consequently, the period during which the fish can use the reach of the river from the dam to the powerhouse will be increased from four months to 12 months in an average year and the period of time when additional flows will be available in the 1600 foot reach from the existing powerhouse to the powerhouse in the license will be four months.

Next to last paragraph

No major alterations to the penstock intakes, dam or reservoir are proposed. Therefore, there will be no increase in downstream sediment loading or reservoir volume, nor changes in channel configuration. There will also be no additional impacts to the fisheries or aquatic resources upstream of the dam.

IDFG has expressed its concern that the confluence of the Teton River and Badger Creek not be dewatered. The additional penstock and new powerhouse will be located about 1100 feet above the confluence, and the flow past Badger Creek will not change.

No major alterations to the penstock intakes, dam or reservoir are proposed. Therefore, there will be no increase in downstream sediment loading or reservoir volume, nor changes in channel configuration. There will also be no additional impacts to the fisheries or aquatic resources upstream of the dam.

IDFG has expressed its concern that the confluence of the Teton River and Badger Creek not be dewatered. The additional penstock and new powerhouse will be located about 800 feet above the confluence, and the flow past Badger Creek will not change.

Page E-19, Wildlife, last paragraph

Most of the new penstock will be buried except for an approximately 300 foot long movement barrier created by access road and penstock construction. Cut and fill construction on the steep slope will create two steep high-walls; however, finished slopes will be comparable to existing slopes. These and the abovegrade 8-foot-diameter penstock will create a movement barrier running parallel to 300 feet of the river.

Under the proposed application for amendment of license, the 7.5 foot diameter penstock collects, by means of 78-inch diameter steel pipes the discharges of tunnels No.2 and No. 3 at their outlet portals, by means of a reinforced concrete bulkhead and transition. The 7.5 foot penstock will then be buried. The point of connection to Tunnel No. 2 and 3 is approximately 300 feet upstream of a point of connection shown in the license. This eliminates all but 20 to 30 feet of the 300 foot long movement barrier that would have been created by the access road and penstock construction. The improved alignment also allows for a positive grade to be maintained on the penstock from its point of convergence with the two 78 inch steel pipes to the new proposed powerhouse location. The barrier to movement that would have been created under the license will be eliminated under this amendment. Additionally a 120 foot long 78-inch diameter penstock and bifurcation will collect water from the outlet portal of Tunnel No. 1 and feed the realigned portins of the existing 59-inch diameter penstocks to existing turbine-generator units No. 4 and No. 5.

Page E-20, Botanical Resources, first paragraph

It is anticipated that dewatering an additional 1500 feet of river will have minimal impact on the riparian species occurring along the banks. Density of existing species could drop and invasion of weedy species might occur. The present dewatered reach of stream, from the dam to the existing powerhouse, supports a diverse stand of woody species and a health understory. It is assumed that the stretch below the existing powerhouse to the proposed powerhouse would support a similar vegetation complement as the presently dewatered stretch.

It is anticipated that dewatering an additional 300 feet of river will have minimal impact on the riparian species occurring along the banks. Density of existing species could drop and invasion of weedy species might occur. The present dewatered reach of stream, from the dam to the existing powerhouse, supports a diverse stand of woody species and a health understory. It is assumed that the stretch below the existing powerhouse to the proposed powerhouse would support a similar vegetation complement as the presently dewatered stretch. This will be further mitigated by the fact that the diversion to the lower powerhouse

location has decreased from 680 cfs under the license to 464 cfs under this amendment to license. Additional flows will be diverted through the exiting powerhouse location and will be available in the 1600 foot reach of stream that would have been dewatered under the license. These increased flows during the months of April, May, June and July will tend to aid in supporting vegetation in the riparian zones next to the river.

Page E-22, first paragraph, second sentence

A fish ladder was proposed by IDFG and U.S. Fish and Wildlife Service. Informal discussion with IDFG suggested that a flow of 10 cfs would be sufficient to operate a fish ladder.

A fish ladder was requested by IDFG and U.S. Fish and Wildlife Service and will be provided by the applicant. A design for typical fish ladder is shown on Exhibit E-7.

Second paragraph

If the usefulness of a fish ladder can be established and its cost justified in terms of the estimated number of trout which would use it, the applicant would be willing to share the cost of the facility. However, it would be premature to decide now that a facility should be constructed.

A fish ladder for the facility will be constructed as a part of the project. The fish ladder will be designed in cooperation with representatives of the Idaho Department of Fish and Game.

Last sentence **E-22** and first paragraph **Page E-23**

The applicant proposed to share the expense of an expanded fish stocking program rather than the construction of fish passage facilities, which may be of questionable value. Additional fisheries mitigation will include the enhancement of recreational opportunity. Anglers and rafters will be allowed access to the reservoir, the project reach, the tailrace and downstream access - areas which are presently inaccessible. Catch rates will be improved in the tailrace area because a deep pool will be created, and fish will concentrate in the area. The high quality resident trout fishery in the reservoir will be maintained and catch rates are expected to remain at their present level.

Idaho Department of Fish and Game has decided that a fish ladder in this location is desirable. A fish ladder will be constructed as a part of this application for amendment. Additional fisheries mitigation will include the enhancement of recreational opportunity. Anglers and rafters will be allowed access to the reservoir, the project reach, the tailrace and downstream access - areas which are presently inaccessible. Catch rates

will be improved in the tailrace area because a deep pool will be created, and fish will concentrate in the area. The high quality resident trout fishery in the reservoir will be maintained and catch rates are expected to remain at their present level.

Page E-26, Report on Recreational Resources, Existing and Potential Recreational Facilities and Use

Access is extremely poor - down a steep four-wheel-drive road, which in the past has been posted with a no trespassing sign due to the danger of travel.

Under the amendment to license application a new access route has been planned which provides for a wider road with flatter grades. The road will continue to be posted with "no trespassing" signs; however, the road will be available for foot access.

Page E-27, first paragraph, reprinted for clarity

Foot access will be allowed down the four-wheel-drive road, with parking space available around the Badger substation at the head of the road. Second, a new river reach will be made accessible to fishermen in the area of the new powerhouse and tailrace structure. Finally, improvements to the tunnel intakes and log booms will provide greater public safety protection in the dam area.

Last paragraph

The additional 300 cfs of water rights included in the proposal also would not affect any current irrigation practices or withdrawals either upstream or downstream of the project. This additional water, however, would not be available for possible future requests for increased irrigation water rights upstream of the project.

The additional 600 cfs of water rights included in the proposal also would not affect any current irrigation practices or withdrawals either upstream or downstream of the project. This additional water, however, would not be available for possible future requests for increased irrigation water rights upstream of the project.

Page E-28, Aesthetic Considerations

The proposed project would primarily have four visual impacts. First, the new powerhouse and tailrace structure will add a new manmade physical feature to the river shoreline. Second, the new transmission from the powerhouse to the substation will be visible, ascending the hill. Third, the path of the new buried penstock will be evident from the cleared corridor

of light-colored soil replaced over the pipeline. Until weathered, the soil will appear lighter in color than the undisturbed soil in the area. Fourth, an additional 1500 feet of river will have a low flow appearance.

The significance of these impacts is minimized by several existing characteristics of the site. There is already considerable manmade impact at the site in the form of not only the existing hydroelectric facilities, but also the high voltage transmission line, irrigation pipeline and associated footbridge crossing the river and the pumps. Offsetting the effect of the new penstock corridor in particular is the existing access road, which essentially parallels the corridor nearly its entire length. Also, the construction area is sparsely vegetated except for riparian patches along the river. As a result, the swath and clear-cutting effect often accompanying transmission line and powerhouse construction in mountainous areas will not occur with the Felt project. One last offsetting existing condition is the fact that the site has extremely low viewere sensitivity. A major consideration in present-day visual assessments is the degree the affected area is visible to the public. The Felt site cannot be seen from any roads, and is in fact seen only by the few people who visit the site.

The usual construction practices of replacing topsoil; revegetating; controlling erosion; and cleaning up spoils, material and trash will be followed to minimize the construction impact. The rehabilitation work proposed for the tunnel inlets will improve the physical appearance around the damsite.

The proposed project would primarily have four visual impacts. First, the new powerhouse and tailrace structure will add a new manmade physical feature to the river shoreline. Second, the new transmission from the powerhouse to the substation will be visible, ascending the hill. Third, the path of the new buried penstock and buried transmission line will be evident from the cleared corridor of light-colored soil replaced over the pipeline and existing utility corridor. Until weathered, the soil will appear lighter in color than the undisturbed soil in the area. Fourth, an additional 1900 feet of river will have a low flow appearance.

The significance of these impacts is minimized by several existing characteristics of the site. There is already considerable manmade impact at the site in the form of not only the existing hydroelectric facilities, but also the high voltage transmission line, irrigation pipeline and associated footbridge crossing the river and the pumps and associated facilities. Offsetting the effect of the new penstock corridor in particular is the existing access road, which essentially parallels the corridor nearly its entire length. The overhead and underground transmission line are planned within existing Fall River Rural Electric Cooperative utility rights-of-way and parallel to an existing overhead

line. Also, the construction area is sparsely vegetated except for riparian patches along the river. As a result, the swath and clear-cutting effect often accompanying transmission line and powerhouse construction in mountainous areas will not occur with the Felt project. One last offsetting existing condition is the fact that the site has extremely low viewer sensitivity. A major consideration in present-day visual assessments is the degree the affected area is visible to the public. The Felt site cannot be seen from any roads, and is in fact seen only by the few people who visit the site.

The usual construction practices of replacing topsoil; revegetating; controlling erosion; and cleaning up spoils, material and trash will be followed to minimize the construction impact. The rehabilitation work proposed for the tunnel inlets will improve the physical appearance around the damsite.

EXHIBIT E
SUMMARY

1. General Description

The amended project consists of construction of a new powerhouse, housing two identical 3487 horsepower, 600 rpm, Francis type turbines with a combined hydraulic capacity of 464 cfs. The two new turbines will be located in the lower powerhouse on the Teton River 300 feet downstream of the powerhouse shown on the license. The new proposed powerhouse is located 1500 feet north of the existing powerhouse. The two new turbines will have a static head of 162 feet and a net effective head of 156 feet. The turbines will power two 2750 KVA, 600 rpm, 4160 volt generators.

Units No. 4 and 5 located at the existing powerplant will be refurbished. They are both 1400 horsepower Francis-type turbines with a rated head of 80 feet. Design capacity of these two turbines is 210 cfs each, giving a combined capacity of 420 cfs.

The new (lower) turbines will be connected to the 60-inch outlets of the 90" penstock bifurcation. The 90-inch penstock extends 1850 feet from the bifurcation to the outlet portals of Tunnels No.2 and No.3. The existing Number 4 and 5 turbines will be fed from Tunnel number 1.

The existing 59 inch penstocks will be realigned and utilized for turbines 4 and 5. The bifurcation and 120 feet of new 59 inch pipe is all that will be required to make the connection.

In conjunction with the proposed project the existing intakes will be utilized; however, a new gate will be required for the Number 1 intake and shelters will be constructed for the Number 2 and 3 intakes.

A fish ladder and walkway will be constructed at the existing dam.

A surge pipe will be constructed near the location of the proposed lower powerplant. The surge pipe will run on a 40° incline up the hill and will be buried and will not be visible from the project site.

In conjunction with construction activity and the refurbishing of the Number 4 and 5 generating units, the old plants 1,2 and 3 and old abandoned buildings will be removed, and the debris cleaned out. The remains of the existing 54 inch wood stave pipe will also be removed.

Overhead power transmission lines will extend from the existing plant to a point of interconnection with the overhead line constructed in conjunction with the new facility. A 7500 kva 4160 volt 24.9 kv three-phase transformer will step up the output to a level suitable for transmission to the existing UP & L line. Station class lightning arrestors and a group oriented fuse disconnect system will be mounted at the transformer substation. The transmission line will then span the river and continue overhead for approximately 1400 feet to the rim of the canyon and will be of wood pole construction with three number ACSR conductors and one 3/8 inch high strength steel overhead shield wire. At the canyon rim the overhead line changes to underground. The buried line will continue approximately 2600 feet to the point of intertie with the existing Utah Power & Light lines. Construction of the 1400 feet of overhead and 2600 feet of underground transmission line will be within the existing Fall River Rural Electric Cooperative, Inc. corridor and parallel to their existing 115 volt overhead line.

The project existing access road from the county road to the project facilities has been rerouted. The access road is very narrow and is limited to four wheel drive vehicles. Portions of the road exceed 26% grade. In order to facilitate construction vehicle traffic and to improve travel safety, the access road from the county road to the project facilities will be relocated. The improved alignment will better serve the requirements of all parties. Even though the new alignment is longer, improvements in alignment and grade will result in very little increase in the overall disturbance created by construction of the roadway. The alignment changes have been discussed with and approved by the Bureau of Reclamation.

The project will be operated as a run-of-the-river project and will utilize all flows above the minimum release flows of 20 cfs during the months of July through March and 50 cfs during the months April through June for power generation up to and including flows in excess of the total design capacity of 884 cfs. Flows in excess of the minimum release and maximum power diversion requirements will continue to be bypassed over the dam and into the Teton River. All **flows over the minimum flows required for bypass up to and including the total hydraulic capacity of the lower plant of 464 cfs will be diverted to the lower (new) powerplant location. Flows in excess of the 464 cfs up to a maximum of 420 additional cfs (combined total of 884 cfs) will be diverted through the Number 4 and 5 units at the existing power facility.** Flows in excess of 464 cfs will be available in the 1500 foot reach of river between the existing power plant location and the power plant as located under the license application. Based on monthly average flow data, this will provide added flows in this stretch of the river during the critical months of April, May, June and July

2. Water Use and Water Quality

Station No. 130544000, located just above the proposed Felt Hydroelectric Project, measured the flows on the Teton River near Tetonia, Idaho for the 16 year period from 1942 to 1957. Flows have not been measured since

1957. Station 13055000 has measured the flow on the Teton River near St. Anthony, Idaho from 1942 until the present. The correlated flow records at Tetonia, Idaho were obtained by correlating the flows between the two stations for the years 1942 through 1957 and then projecting the flows at Tetonia from the actual measured data on the Teton River near St. Anthony, Idaho. Based on this correlation the estimated average daily flow at the project site is 435 cfs. Daily flow has ranged from about 62 cfs to more than 1900 cfs during the period of record. Average monthly flows for the 16 year period from 1942 to 1957 are shown on Table E-1A. Correlated flow records at Tetonia, Idaho are shown on Table E-1, and average monthly flows for the Teton River near St. Anthony, Idaho for the years 1942 through 1984 are shown on Table E-1B.

The Felt Hydroelectric Project will be capable of utilizing a maximum of 884 cfs through all four turbines. This includes a capacity of **464 cfs at the lower plant** and **420 cfs at the existing upper plant.** Fall River Rural Electric Cooperative has three existing water rights for power generating facilities at the project location which total a combined flow of 300 cfs. Fall River Rural Electric Cooperative filed an application for a permit to appropriate the waters of the State of Idaho for 300 cfs on March 18, 1981. This permit has been approved contingent upon granting of the project's FERC license. This brings the total water right available for the project to 600 cfs. Concurrently with the filing of this application for amendment of license, the applicant is filing an application for permit to appropriate public waters of the State of Idaho for an additional 300 cfs. If approved this will bring the total water rights available for the project to 900 cfs. The project represents a non-consumptive use of the water and will be subject to available flows during the irrigation season. The water rights will have no effect on prior diversion and water rights of irrigators in the area. The supply water for the R and J Brown irrigation pumps will be met prior to the diversion of water into the hydroelectric generation facilities. The agreed minimum flows of 20 cfs during the months of July through March and 50 cfs through the months of April through June will continue to be met. An additional benefit of the project as amended is that under the existing license all flows up to 680 cfs would have been diverted for power production and returned to the Teton River some 1600 feet below the existing power plant. Under the development proposed in this amendment only 464 cfs will be diverted to the new plant which is located 300 feet below the plant proposed in the license application. The flows in excess of the 464 cfs will be diverted into the existing turbines and will return to the river 1600 feet above the power plant location approved in the license.

Based on mean monthly flows for the project, during the critical months of April, May, June and July this will place an additional 72, 106, 220 and 58 cfs respectively into the 1600 foot section of the Teton River.

Water Quality

Water quality at the Felt Site is generally very good, but some degradation of water quality occurs as a result of return flows from irrigation use. Return flows are a very small percentage of the runoff. The quality of the water at the Felt Site and throughout the project is

extremely high with total dissolved solids less than 200 mg/ll. The quality of the water in the river is dependent upon the quality and amount of water in the return flows. Return flow quality is, in turn, dependent upon farm activities and irrigation practices.

Operation of the Felt Hydroelectric Project will not alter water quality at the site. The water is near saturation levels for dissolved oxygen, within the river and impoundment, and the powerplant will not suppress dissolved oxygen levels.

Anticipated Impacts

Construction activities associated with the proposed the project could cause temporary impacts on water quality. Activities that could contribute sediment and turbidity to the Teton River include construction of the access road, penstock, powerhouse and associated facilities, refurbishing of Number 4 and 5 units and cleanup of the existing abandoned powerhouse facilities. A cofferdam will be constructed around the construction site. Concrete will probably be trucked in from the Rexburg area. Washout areas will be designated away from the river. All loose concrete and construction debris will be removed from the river prior to removal of the cofferdam and rewatering the river.

Limited impacts to water quality may result from construction activities for the road improvements and transmission line construction; however, construction will require only minimal movement of surface soils. Slopes in the project area are stable and not conducive to erosion. Areas disturbed by construction activity will be reseeded with native vegetation as soon after construction as possible but in no event later than the same year construction takes place.

The proposed hydroelectric project will have little impact on existing water quality or uses. Only one use occurs between the proposed diversion and return of the water into the Teton River. This is for a pumping facility that draws water from the Number 1 intake prior to where it will enter the existing Number 4 and 5 turbine units. The existing water demand will continue to be satisfied.

3. Report on Fish, Wildlife and Botanical Resources

Fisheries

Detailed fish studies have been carried out in conjunction with the license. Minimum release flows have been established through consultation with the applicant and the Idaho Department of Fish and Game. The agreed to minimum releases for fish flows will continue to be met. No additional impacts are expected to result from construction of the project as proposed in the amendment. In fact, the amended license offers an additional benefit to the stretch of river from the existing power plant to the powerhouse location as proposed in the license.

The amendment proposal is to locate a new powerhouse 1500 feet north of the existing plant. Because of the bend in the river, the distance along

the stream channel will be about 1900 feet. The stream channel distance from the dam to the existing plant is 1300 feet. The removal of water from another 1900 feet feet of the river could exacerbate the existing problems of fish movement downstream and stranding by increasing the dewatered length from 1300 feet to 3200 feet.

Power generation will require the full instream flow 93 percent of the year. The peak spring runoff typically occurs in June, at which time river flows exceed the proposed turbine capacity of 884 cfs sometime during that period. During this time the agreed to minimum flow of 50 cfs will be supplemented by any flows over and above 934 cfs (884 cfs total hydraulic capacity plus 50 cfs minimum release). This coincides with the IDFG fish planting program. The proposed and existing project discharges are shown on Figure E-6. From this figure it can be seen that under the existing project conditions, water passes over the dam from April through July and that under the increased flow requirements of the proposed project, water may still flow over the dam during June. Figure E-5 shows the discharge through the project area in June 1946 (a representative average water year). This peak flow coincides with the IDFG fish planting program, and there is more than adequate flow in June to allow for downstream passage. The proposed and existing project discharges are shown in Figure E-6. This figure is also based upon the 1946 water year and the average monthly flows. From this figure it can be seen that under the existing project conditions, water passes over the dam from April through July, and that under the increased flow requirements of the proposed project, water will still flow over the dam during June.

A benefit under this application for amendment is that all flows in excess of the 464 maximum plant capacity up to and including a combined flow of 884 cfs, will be diverted through the equipment at the existing plant. This places additional water in the 1600 foot stretch of river between the powerhouse location in the license and the existing powerhouse. This will be especially beneficial during the critical months of April, May, June and July when additional flows of 72 cfs, 106 cfs, 220, and 58 cfs respectively will be available. In addition to the minimum release flows of 20 cfs during nine months and 50 cfs during three months, all flows in excess of total plant capacity will continue to pass over the dam. This will eliminate the fish stranding which previously occured and represents a significant improvement over conditions in the license. As a result of the minimum bypass flows the period during which the fish can use the reach of the river from the dam to the powerhouse will be increased from four months to 12 months in an average year. Under the diversions proposed in the amendment the period of time when additional flows will be available in the 1600 foot reach from the existing powerhouse to the powerhouse in the license will be four months.

No major alterations to the penstock intakes, dam or reservoir are proposed. Therefore, there will be no increase in downstream sediment loading or reservoir volume, nor changes in channel configuration. There will also be no additional impacts to the fisheries or aquatic resources upstream of the dam.

IDFG has expressed its concern that the confluence of the Teton River and Badger Creek not be dewatered. The additional penstock and new powerhouse will be located about 800 feet above their confluence, and the flow past Badger Creek will not be changed.

Wildlife

Under the proposed application for amendment of license, the 7.5 foot diameter penstock collects water from the outlet portals of Tunnels No. 2 and 3 by means of short sections of 78-inch pipe. The 7.5 foot penstock will then be buried. The point of connection to Tunnel No. 2 and 3 is approximately 300 feet upstream of the point of connection shown in the license. This eliminates all but 20 to 30 feet of the 300 foot long movement barrier that would have been created by the access road and penstock construction. The improved alignment also allows for a positive grade to be maintained on the penstock from its point of convergence with the two 59 inch steel pipes to the new proposed powerhouse location. The barrier to movement that would have been created under the license will be eliminated under this amendment.

Botanical Resources

It is anticipated that dewatering an additional 300 feet of river will have minimal impact on the riparian species occurring along the banks. Density of existing species could drop and invasion of weedy species might occur. The present dewatered reach of stream, from the dam to the existing powerhouse, supports a diverse stand of woody species and a health understory. It is assumed that the stretch below the existing powerhouse to the proposed powerhouse would support a similar vegetation complement as the presently dewatered stretch. This will be further mitigated by the fact that the diversion to the lower powerhouse location has decreased from 680 cfs under the license to 464 cfs under this amendment to license. Additional flows will be diverted through the exiting powerhouse location and will be available in the 1600 foot reach of stream that would have been dewatered under the license. These increased flows during the months of April, May, June and July will tend to aid in supporting vegetation in the riparian zones next to the river.

Construction of the project will disturb an additional 250 feet of juniper woodland and Douglas fir communities and an additional 50 feet of riparian vegetation along the river. All disturbed areas which do not support permanent project features will be replanted with native grasses, forbs and shrubs. This will minimize erosion into the stream and speed the recovery of wildlife habitat disturbed by the project.

Disturbance of vegetated areas will be mitigated by reseeding disturbed areas as soon after construction as possible in native vegetation. This reseeding will take place no later than the same season in which contruction occurs.

4. Report on Historical and Archeological Resources

There are no known archeological or historical sites in the project area. SHPO (1981) does not expect any archeological or historical resources to be found in the project area and does not recommend that any additional studies be conducted. It is not anticipated that any archeological or historical sites exist in the additional 300 feet of area to be disturbed by the proposed project.

5. Report on Recreational Resources

Existing and Potential Recreational Facilities

A very limited amount of fishing occurs on the site. Access is extremely poor down a steep four-wheel drive road. In the past it has been posted with "no trespassing" signs due to the danger of travel. Under the amendment to license application a new access route has been planned which provides for a wider road with shallower grades. The road will continue to be posted with "no trespassing" signs; however, the road will be available for foot access. Parking space will be available around the Badger substation at the head of the road. Second, a new river reach will be made accessible to fishermen in the area of the new powerhouse and tailrace structure. Finally, improvements to the tunnel intakes and log booms will provide greater public safety protection in the dam area.

6. Land Management and Aesthetics

The proposed project will primarily have four visual impacts. First, the new powerhouse and tailrace structure will add a new manmade physical feature to the river shoreline. Second, the new overhead transmission line from the powerhouse to the substation will be visible, ascending the hill. Third, the path of the new buried penstock and buried transmission line will be evident from the cleared corridor of light-colored soil replaced over the pipeline and existing utility corridor. Until weathered, the soil will appear lighter in color than the undisturbed soil in the area. Fourth, an additional 1900 feet of river will have a low flow appearance.

The significance of these impacts is minimized by several existing characteristics of the site. There is already considerable manmade impact at the site in the form of not only the existing hydroelectric facilities, but also the high voltage transmission line, irrigation pipeline and associated footbridge crossing the river and the pumps and pumping stations. Offsetting the effect of the new penstock corridor in particular is the existing access road, which essentially parallels the corridor nearly its entire length. The overhead and underground transmission line are planned within existing Fall River Rural Electric Cooperative utility rights-of-way and parallel to an existing overhead line. Also, the construction area is sparsely vegetated except for riparian patches along the river. As a result, the swath and clear-cutting effect often accompanying transmission line and powerhouse construction in mountainous areas will not occur with the Felt project. One last offsetting existing condition is the fact that the site has extremely low

viewer sensitivity. A major consideration in present-day visual assessments is the degree the affected area is visible to the public. The Felt site cannot be seen from any roads, and is in fact seen only by the few people who visit the site.

The usual construction practices of replacing topsoil; revegetating; controlling erosion; and cleaning up spoils, material and trash will be followed to minimize the construction impact. The rehabilitation work proposed for the tunnel inlets and the removal of the abandoned, dilapidated facilities will improve the physical appearance around the damsite.

EXHIBIT E
APPENDIX

Included are three new letters.

Letter to Chuck Dawsey, Fall River Rural Electric from United States Department of the Interior, January 25, 1985.

Letter to Kenneth F. Plumb, Secretary, Federal Energy Regulatory Commission from Idaho Department of Fish and Game, dated January 23, 1985.

Letter to Bonneville Pacific Corporation from Department of the Army dated January 11, 1985.

United States Department of the Interior

BUREAU OF RECLAMATION
MINIDOKA PROJECT OFFICE
1359 HANSEN AVENUE
BURLEY, IDAHO 83318

January 25, 1985

IN REPLY
REFER TO:

Chuck Dawsey
Fall River Rural Electric
Ashton, Idaho 83420

Dear Chuck:

We have reviewed your request for amendment to your Federal Energy Regulatory Commission (FERC) license for the Felt Project, and we have no problems with the powerline constructed as we discussed in our field trip.

If we can be of further assistance to you, please contact this office.

Sincerely yours,

Leo A. Busch for

Donald E. Tracy
Project Superintendent

IDAHO DEPARTMENT OF FISH AND GAME
600 South Walnut • Box 25
Boise • Idaho • 83707

January 23, 1985

Mr. Kenneth F. Plumb, Secretary
Federal Energy Regulatory Commission
825 North Capitol Street, NE
Washington, DC 20426

Re: Felt Dam Project No 5089. Teton River, Teton County, Idaho.

Dear Mr. Plumb:

It is our understanding that location of the powerhouse for the referenced project may be changed to approximately 200-300 feet downstream from the location shown on the plans in the license application.

Our Department has no objections to a revised location up to 300 feet downstream from the original, provided the agreed-to minimum flows are maintained in the extended stream reach to be affected, and that licensee guarantees fish passage through the extended reach.

We do not anticipate problems with fish passage, but the extended stream reach was not included in the original minimum stream flow study. Licensee should be aware that satisfactory fish passage must be maintained by one means or another if the agreed-to minimum flow should prove to be inadequate for the extended stream reach.

Sincerely,

Jerry M. Conley
Director

cc: USFWS (Wolflin)
Region 6
Fall River R.E.C.

DEPARTMENT OF THE ARMY
WALLA WALLA DISTRICT, CORPS OF ENGINEERS
BUILDING 602, CITY-COUNTY AIRPORT
WALLA WALLA, WASHINGTON 99362-9265

REPLY TO ATTENTION OF:

January 11, 1985

Bingham Engineering
RECEIVED
JAN 24 1985
Salt Lake City, Utah

NPWOP-RF

Bonneville Pacific Corporation
200 East South Temple, Suite 300
Salt Lake City, Utah 84111

Gentlemen:

This letter is to advise you that a Department of the Army Section 404 Permit will not be required for your proposed removal of material from the Teton River, as described by your Joint Application for Permit, Idaho No. 22-S-72, dated January 2, 1985.

In the event, however, that the proposed activity involves the discharge of dredged or fill material below the ordinary high water mark of the referenced stream channel or onto adjacent wetlands, a Section 404 Permit Application must be submitted for processing and the permit issued prior to the start of the project.

The information provided here is applicable only to Department of the Army Permits administered by the Corps of Engineers. If you have any questions, please write or call me at this office, telephone (509) 522-6724.

Sincerely,

James C Fellows

James C. Fellows
Regulatory Branch

Copy furnished:
Department of Water Resources
Western Regional Office
450 West State Street
Boise, Idaho 83705

Exhibit E - Table and Figures

Table E-1 Five Year Average Flow at Teton River near Tetonia, Idaho, Mean Flows by Month - replace with Tables E-1, Correlated Fow Records at Tetonia, Idaho; Table E-1A, Teton River near St. Anthony, Idaho and Teton River near Tetonia, Idaho, 1942 through 1957; and Table E-1B, Teton River near St. Anthony, Idaho, Drainage year Data 1942 through 1984.

Table E-2 Water Quality Data for the Felt Dam Project Area - reprinted for informational purposes.

Table E-3 Avian Species Expected to Occur along Teton River in vicinity of Felt Dam in Winter - unchanged.

Table E-4 Breeding Birds Expected to Occur Along Teton River in the vicinity of Felt Dam - unchanged.

Table E-5 Common Names of Plant Species - unchanged

Figure E-2 Detailed Project Location Map - replace with revised map.

Figure E-3 Population Centers near Felt Hydroelectric Project

Figure E-4 Felt Hydroelectric Project Vegetation Cover Types - replace with new vegetation map.

Figure E-5 Daily Discharge in the Felt Hydroelectric Project Area during June for the Average Water Year 1946 - replace with new figure.

Figure E-6 Monthly Discharge in the Felt Hydroelectric Project area during the 1942 - 1984 Average Water Year - replace with new figure.

Figure E-7 Typical Fish Ladder Detail

SIMULATED FLOW RECORDS AT TETONIA, IDAHO
FLOWS (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	ANNUAL
1942	322	284	277	212	204	204	464	529	905	598	417	315	394
1943	287	314	235	215	210	272	727	620	1,038	948	546	408	485
1944	384	366	256	232	225	217	326	380	788	620	444	339	381
1945	326	311	228	202	204	234	315	520	1,142	1,007	576	457	460
1946	383	346	275	230	220	339	653	562	657	522	427	363	415
1947	349	334	279	197	233	316	281	573	752	577	427	355	389
1948	325	315	233	217	197	206	425	615	957	552	403	317	397
1949	296	307	245	188	202	246	505	831	840	521	402	339	410
1950		313	229	204	299	294	443	427	993	880	470	416	414
1951	388	339	254	210	252	245	454	656	733	647	672	423	439
1952	406	330	257	227	216	221	566	839	878	564	414	343	438
1953	311	277	229	240	212	260	280	300	907	586	417	321	362
1954	275	266	217	193	199	232	346	538	593	597	425	352	353
1955	308	286	215	190	180	180	269	318	645	538	398	314	320
1956	289	290	317	211	169	269	454	760	1,005	677	475	394	442
1957	362	319	237	198	259	289	333	619	1,259	886	518	398	473
1958	354	311	250	217	239	241	325	690	640	532	402	354	380
1959	282	289	227	201	187	265	399	342	796	608	448	413	371
1960	335	279	215	168	174	277	414	373	622	525	437	370	349
1961	303	280	199	165	209	311	271	388	519	438	368	348	316
1962	301	275	201	166	481	292	638	593	769	673	463	368	435
1963	319	292	230	185	312	247	227	461	801	593	423	361	371
1964	293	300	195	176	184	195	321	518	1,440	963	495	407	457
1965	314	310	350	241	227	241	456	480	1,031	832	579	480	462
1966	401	346	240	205	201	260	357	443	505	466	396	377	350
1967	275	277	200	172	189	282	237	413	1,191	978	520	399	428
1968	386	316	256	225	241	300	262	457	1,226	777	612	437	458
1969	370	348	249	269	234	240	660	668	696	663	459	373	436
1970	320	280	244	214	208	217	287	576	1,419	1,006	545	449	480
1971	351	333	262	255	250	346	521	842	1,749	1,294	640	519	614
1972	481	364	240	222	203	423	417	766	1,479	841	515	438	533
1973	409	333	252	226	208	235	457	564	801	653	494	413	420
1974	377	355	250	218	195	334	432	707	1,688	1,006	537	414	543
1975	389	339	265	205	221	250	277	419	1,413	1,628	575	401	532
1976	283	204	183	163	161	172	172						
1977													
1978	256	223	213	176	180	266	419	576	1,074	1,037	598	492	459
1979	363	316	249	214	215	228	323	608	791	574	478	361	393
1980	284	252	219	218	248	239	336	627	786	645	460	318	386
1981	287	254	242	177	241	218	272	528	989	516	391	367	373
1982	235	230	225	178	225	249	352	751	1,365	1,421	599	502	528
1983	395	328	233	198	215	325	346	629	1,499	1,320	637	453	548
1984	545	523	329	274	242	287	559	936	1,589	1,351	624	488	645
AVERAGE	339	308	243	207	223	261	395	572	999	782	491	394	435
MAX	545	523	350	274	481	423	727	936	1,749	1,628	672	519	645
MIN	235	204	183	163	161	172	172	300	505	438	368	314	316

TABLE E - 1

TETON RIVER NEAR ST. ANTHONY IDAHO
STATION NUMBER 13055000

JANUARY 23, 1985

FLOWS (CFS)

YEAR	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	ANNUAL
1942	537	471	493	401	379	366	901	1,513	2,019	1,058	704	530	781
1943	479	522	418	407	390	486	1,411	1,773	2,314	1,678	923	685	957
1944	641	607	455	438	419	389	632	1,086	1,758	1,097	751	570	737
1945	544	517	405	381	380	418	611	1,488	2,547	1,782	973	768	901
1946	639	575	490	434	409	606	1,266	1,606	1,464	924	721	609	812
1947	583	554	496	372	433	566	545	1,638	1,677	1,021	721	596	767
1948	542	523	414	411	367	368	825	1,759	2,135	977	681	532	795
1949	495	509	436	355	375	441	979	2,378	1,873	923	679	569	834
1950		519	408	386	556	527	859	1,220	2,214	1,558	795	699	812
1951	648	563	452	397	468	439	880	1,875	1,635	1,145	1,135	711	862
1952	678	547	457	429	402	396	1,098	2,399	1,958	998	699	577	887
1953	519	459	407	453	394	465	543	858	2,022	1,038	704	540	700
1954	460	442	387	365	371	416	671	1,538	1,323	1,057	718	592	695
1955	514	474	382	359	335	322	521	909	1,439	953	672	528	617
1956	482	481	565	398	315	482	881	2,175	2,241	1,198	802	662	890
1957	604	530	422	374	482	518	646	1,769	2,807	1,569	875	669	939
AVERAGE	558	518	443	398	405	450	829	1,624	1,964	1,186	785	615	815

TETON RIVER NEAR TETONIA, IDAHO
STATION 13054000

FLOWS (CFS)

YEAR	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	ANNUAL
1942	300	264	279	204	196	190	402	610	907	540	377	303	381
1943	265	316	202	168	215	229	745	718	1,090	962	581	438	494
1944	408	372	254	209	209	205	369	309	854	635	397	324	379
1945	294	298	197	181	195	222	316	392	1,208	1,096	619	495	459
1946	410	359	285	234	214	323	538	571	698	521	394	356	409
1947	372	359	324	192	222	335	272	532	846	608	446	373	407
1948	341	321	232	207	194	202	429	598	972	569	371	302	395
1949	301	305	246	209	210	238	502	901	955	529	382	329	426
1950	351	317	224	195	278	293	435	447	865	942	532	446	444
1951	407	350	265	216	241	221	458	653	765	610	748	452	449
1952	424	317	257	250	222	217	569	871	932	581	427	338	450
1953	289	248	225	260	228	303	288	276	756	519	395	291	340
1954	269	255	208	205	195	240	355	524	550	548	425	325	342
1955	297	292	232	207	195	190	304	269	463	423	362	293	294
1956	280	284	310	237	189	299	455	764	1,027	666	462	371	445
1957	348	325	234	190	277	313	414	638	1,177	958	523	425	485
AVERAGE	335	311	248	210	218	251	428	567	879	669	465	366	412

TABLE E - 1a

TETON RIVER NEAR ST ANTHONY, IDAHO

DRAINAGE AREA 890 SQ MILES

FLOWS (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	ANNUAL
1942	537	471	493	401	379	366	901	1,513	2,019	1,058	704	530	781
1943	479	522	418	407	390	486	1,411	1,773	2,314	1,678	923	685	957
1944	641	607	455	438	419	389	632	1,086	1,758	1,097	751	570	737
1945	544	517	405	381	380	418	611	1,488	2,547	1,782	973	768	901
1946	639	575	490	434	409	606	1,266	1,606	1,464	924	721	609	812
1947	583	554	496	372	433	566	545	1,638	1,677	1,021	721	596	767
1948	542	523	414	411	367	368	825	1,759	2,135	977	681	532	795
1949	495	509	436	355	375	441	979	2,378	1,873	923	679	569	834
1950		519	408	386	556	527	859	1,220	2,214	1,558	795	699	812
1951	648	563	452	397	468	439	880	1,875	1,635	1,145	1,135	711	862
1952	678	547	457	429	402	396	1,098	2,399	1,958	998	699	577	887
1953	519	459	407	453	394	465	543	858	2,022	1,038	704	540	700
1954	460	442	387	365	371	416	671	1,538	1,323	1,057	718	592	695
1955	514	474	382	359	335	322	521	909	1,439	953	672	528	617
1956	482	481	565	398	315	482	881	2,174	2,241	1,198	802	662	890
1957	604	530	422	374	482	518	646	1,769	2,807	1,569	875	669	939
1958	592	517	445	411	444	431	630	1,973	1,427	942	680	595	757
1959	471	479	404	379	347	474	775	978	1,776	1,076	757	694	718
1960	559	463	383	318	323	495	804	1,068	1,388	930	738	621	674
1961	506	464	354	311	388	556	526	1,110	1,157	775	622	584	613
1962	503	456	357	313	895	522	1,238	1,695	1,715	1,191	783	618	857
1963	532	485	409	349	581	443	441	1,319	1,787	1,049	715	607	726
1964	489	498	347	332	342	349	623	1,481	3,211	1,704	836	684	908
1965	525	515	623	456	423	431	884	1,374	2,300	1,472	978	806	899
1966	669	574	427	388	374	466	693	1,268	1,126	824	670	633	676
1967	460	460	356	326	351	504	460	1,181	2,656	1,731	878	671	836
1968	644	524	456	425	448	537	509	1,307	2,734	1,376	1,034	734	894
1969	618	578	444	509	435	430	1,281	1,911	1,552	1,174	776	626	861
1970	535	464	435	405	387	389	557	1,646	3,164	1,780	921	755	953
1971	587	553	467	482	465	620	1,010	2,408	3,901	2,291	1,081	872	1,228
1972	804	605	427	419	378	758	809	2,192	3,298	1,488	870	736	1,065
1973	683	553	449	427	387	421	886	1,613	1,786	1,156	835	693	824
1974	630	589	445	412	362	598	839	2,022	3,764	1,780	907	695	1,087
1975	650	563	472	387	411	447	538	1,199	3,151	2,882	972	674	1,029
1976	472	338	326	309	300	308	333						
1977													
1978	427	370	380	332	334	477	813	1,646	2,394	1,836	1,010	826	904
1979	606	524	444	404	400	409	626	1,739	1,765	1,016	808	606	779
1980	474	419	389	412	462	428	652	1,794	1,752	1,141	777	534	770
1981	480	422	431	335	448	390	527	1,509	2,206	913	660	616	745
1982	392	382	401	337	418	445	682	2,147	3,044	2,515	1,012	844	1,052
1983	660	544	415	374	400	582	671	1,798	3,342	2,337	1,077	761	1,080
1984	910	868	585	518	450	514	1,084	2,676	3,543	2,391	1,055	819	1,284
AVERAGE	567	512	432	391	415	467	766	1,635	2,228	1,384	829	662	859
MAX	910	868	623	518	895	758	1,411	2,676	3,901	2,882	1,135	872	1,284
MIN	392	338	326	309	300	308	333	858	1,126	775	622	528	613

TABLE E - 1b

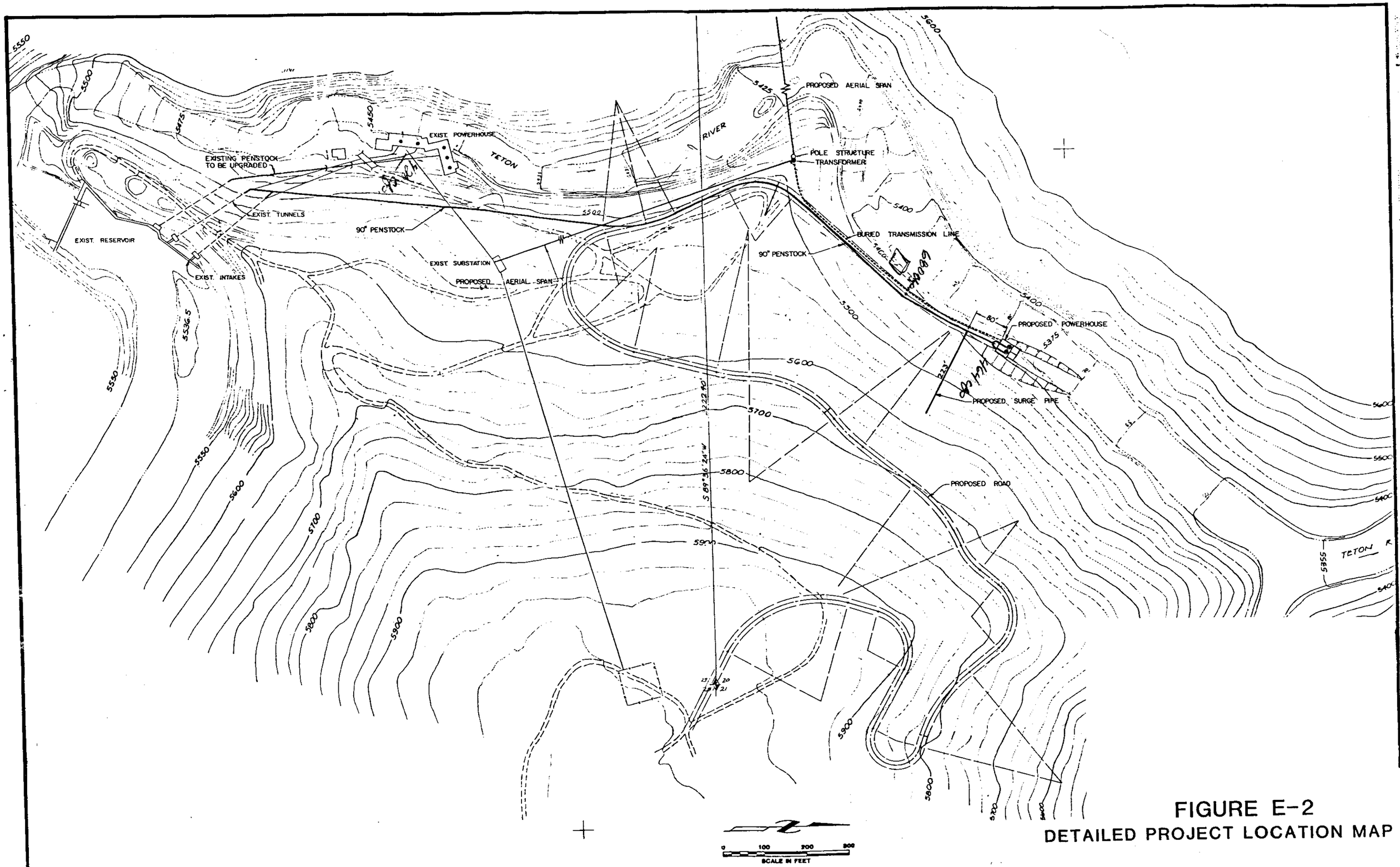


FIGURE E-2
DETAILED PROJECT LOCATION MAP

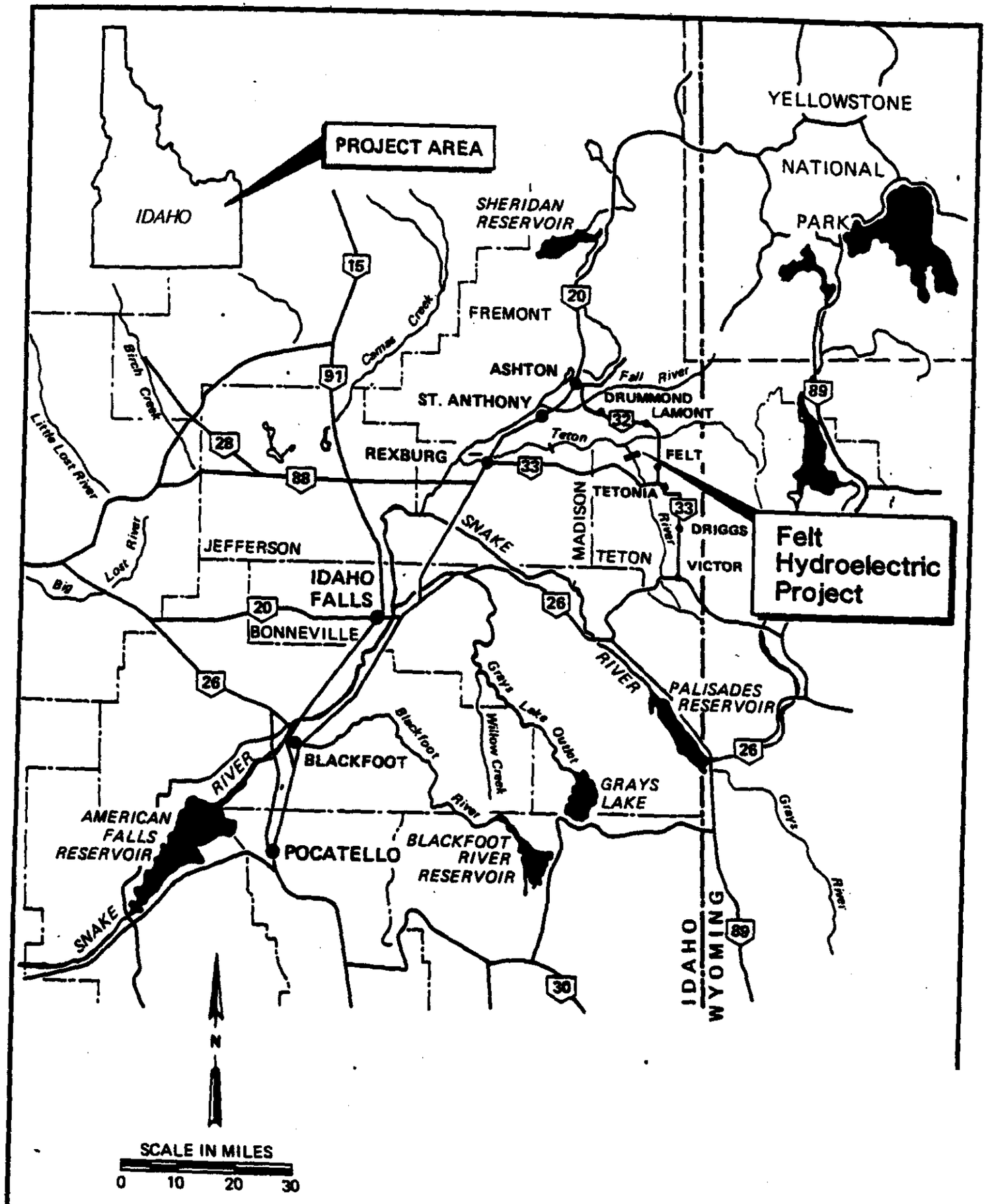


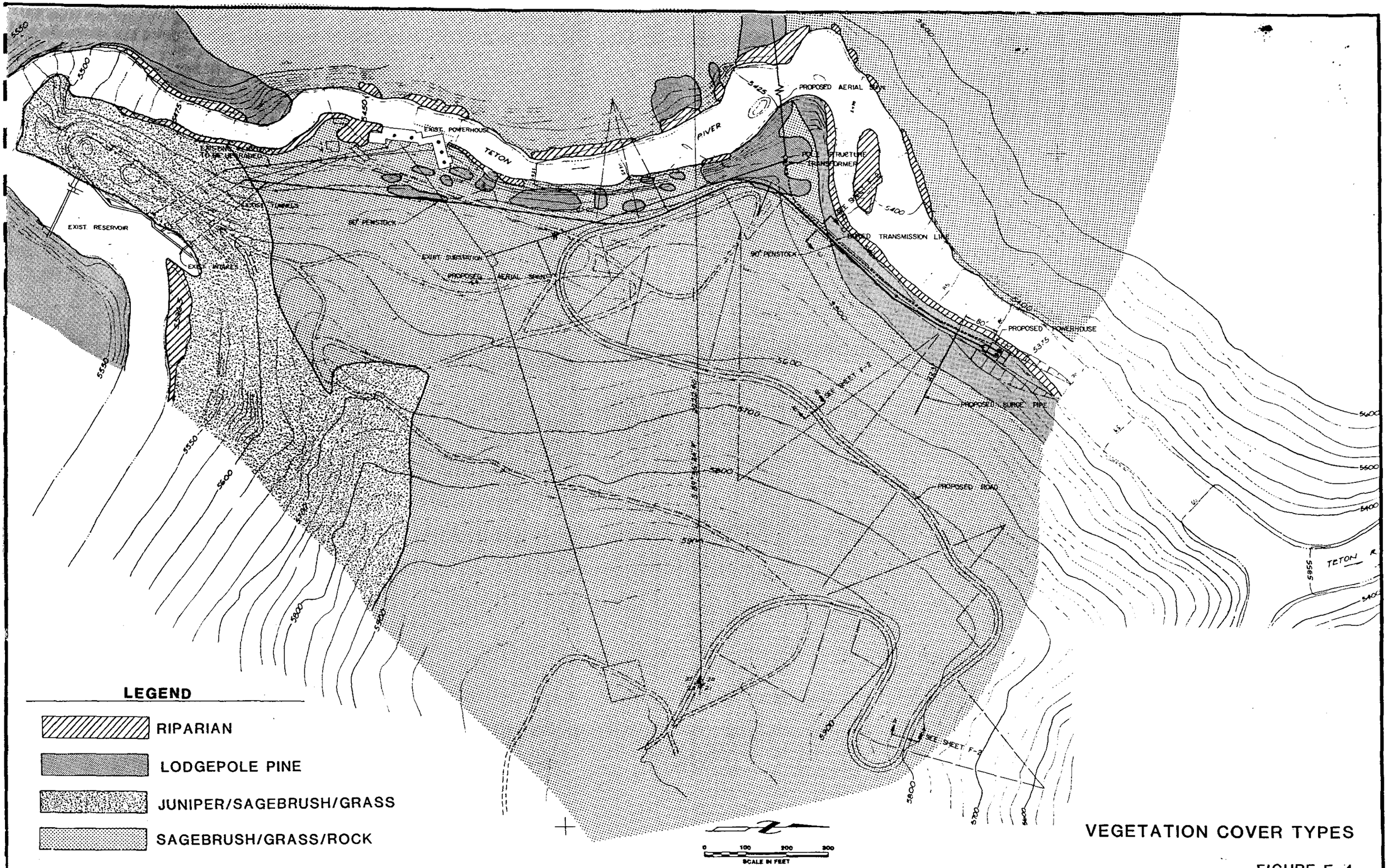
FIGURE E-3

POPULATION CENTERS NEAR FELT HYDROELECTRIC PROJECT

FELT LICENSE APPLICATION

B14404.L0

CH2M HILL

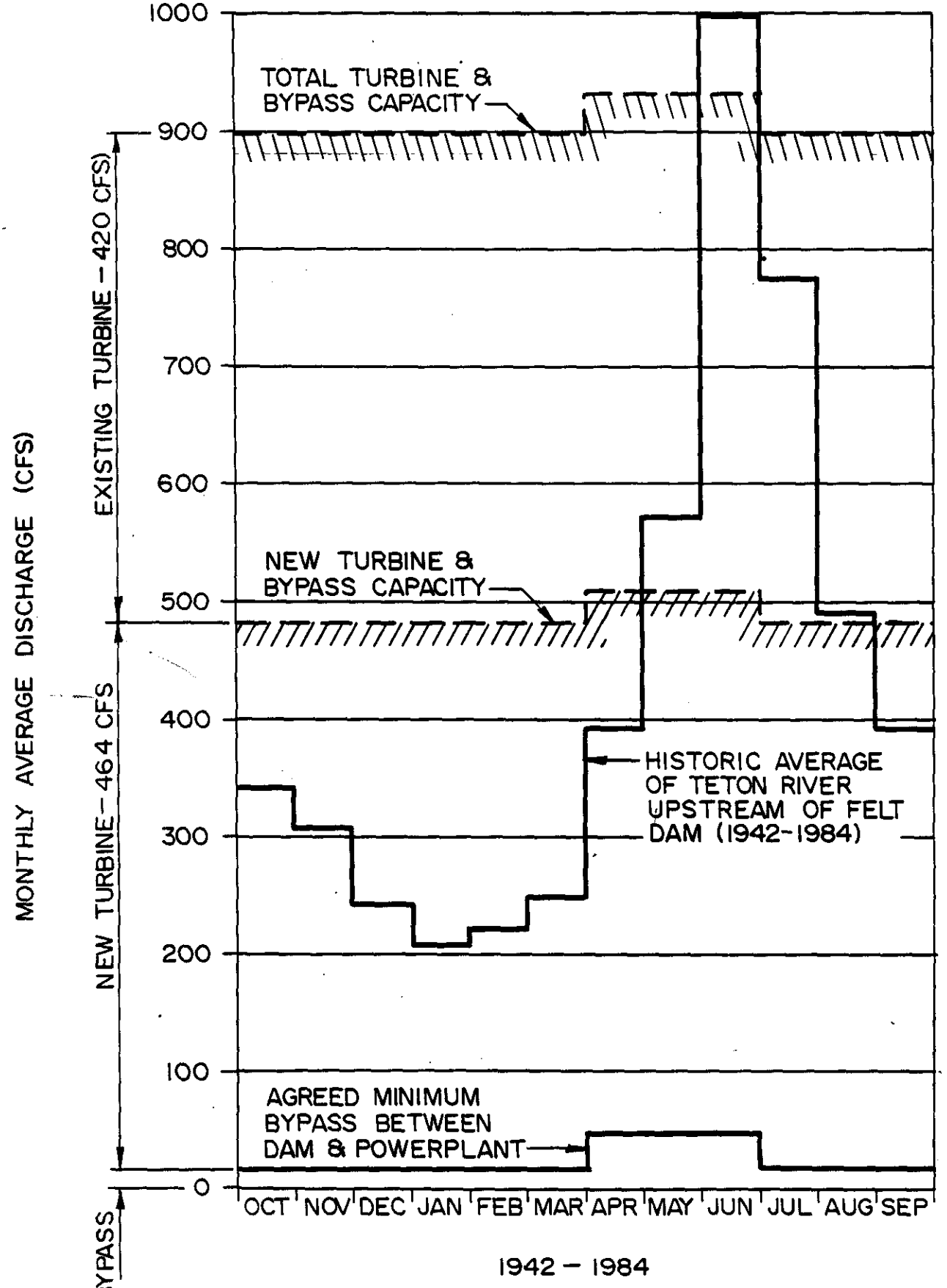


LEGEND

- RIPARIAN
- LODGEPOLE PINE
- JUNIPER/SAGEBRUSH/GRASS
- SAGEBRUSH/GRASS/ROCK

VEGETATION COVER TYPES

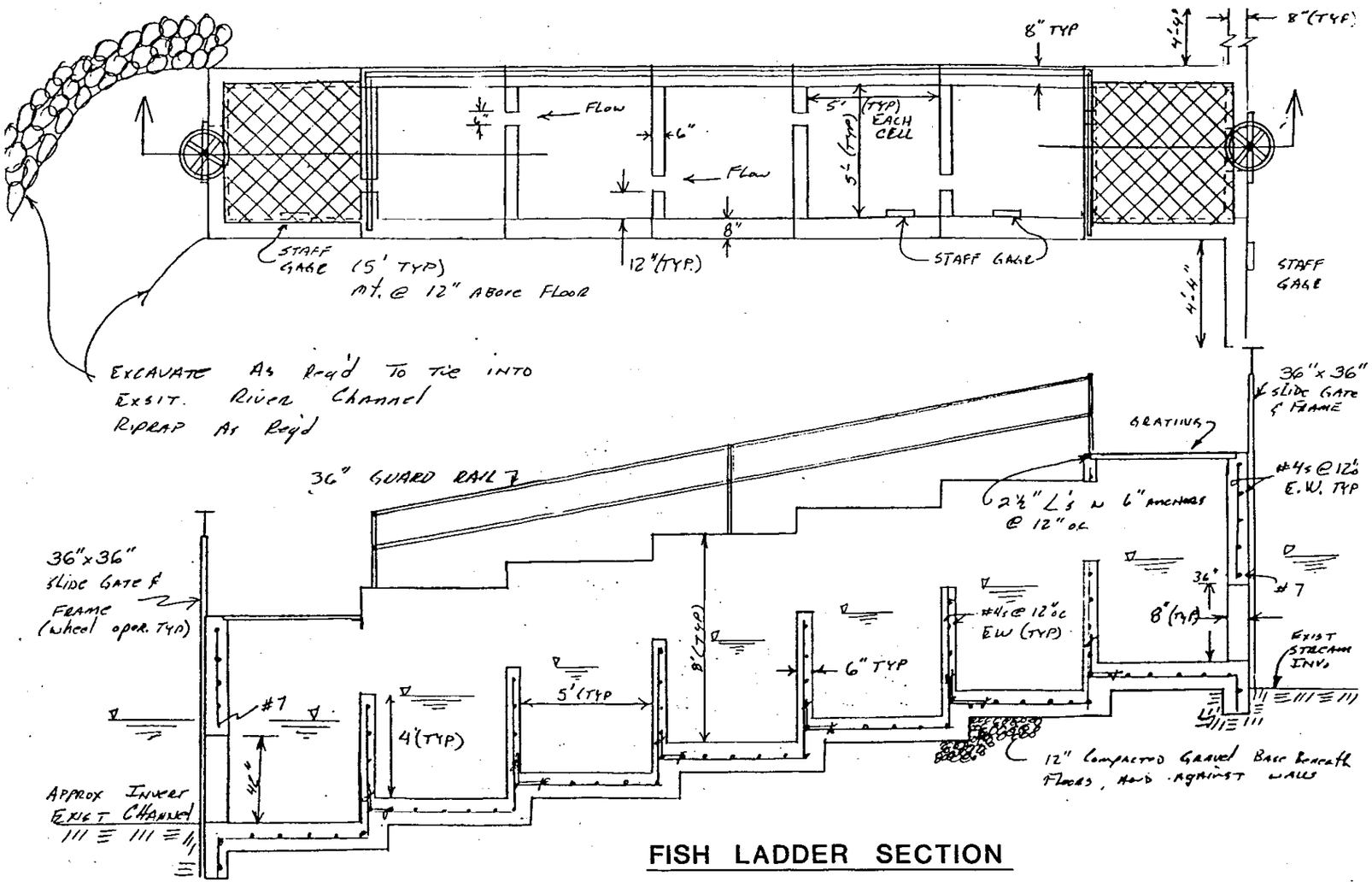
FIGURE E-4



AVERAGE MONTHLY DISCHARGE IN THE FELT HYDROELECTRIC PROJECT AREA

FELT LICENSE APPLICATION

FIGURE E-6



FISH LADDER SECTION

SCALE 1"=5'

FIGURE E-7

TYPICAL FISH LADDER SECTION

EXHIBIT F
GENERAL DRAWINGS

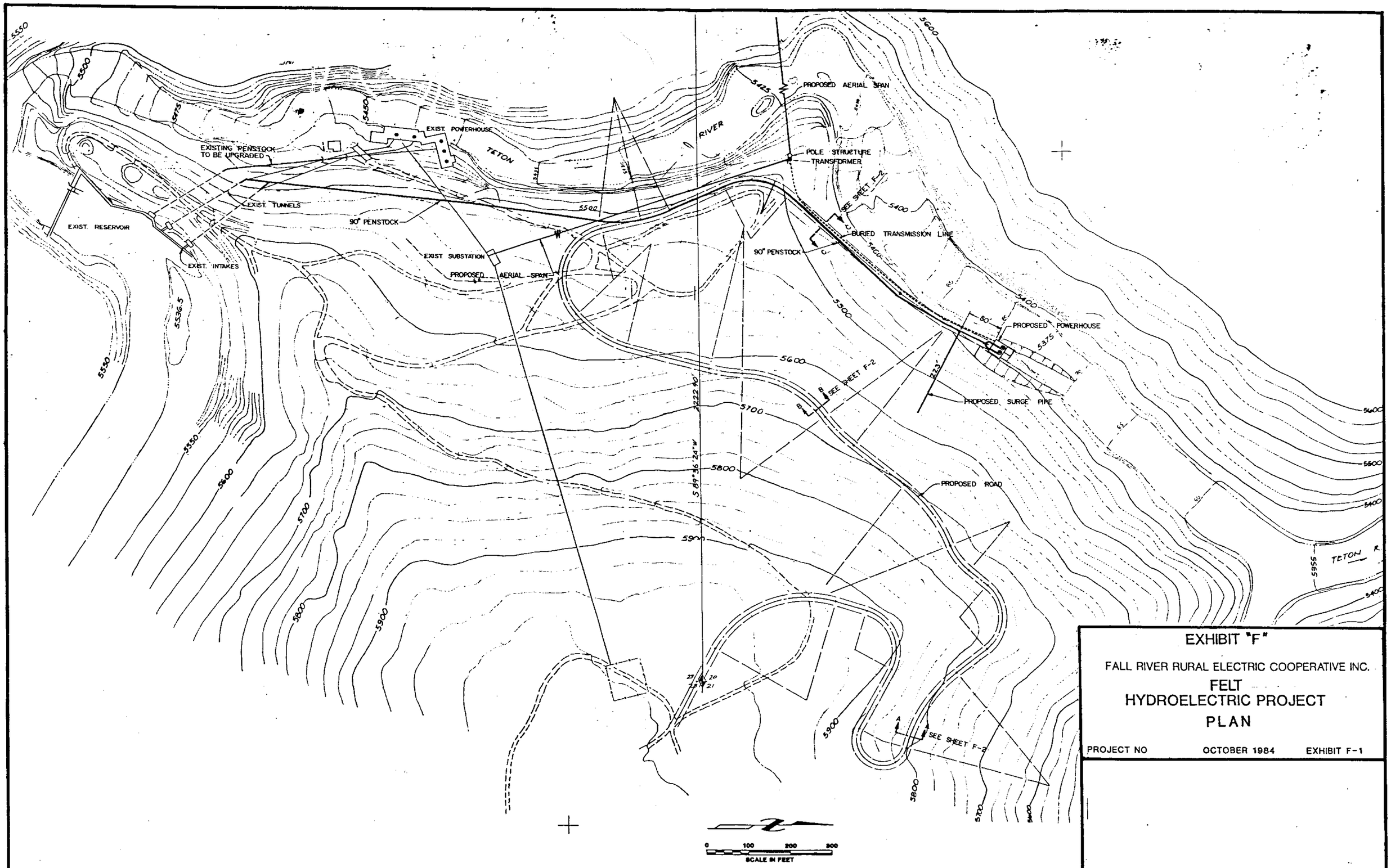


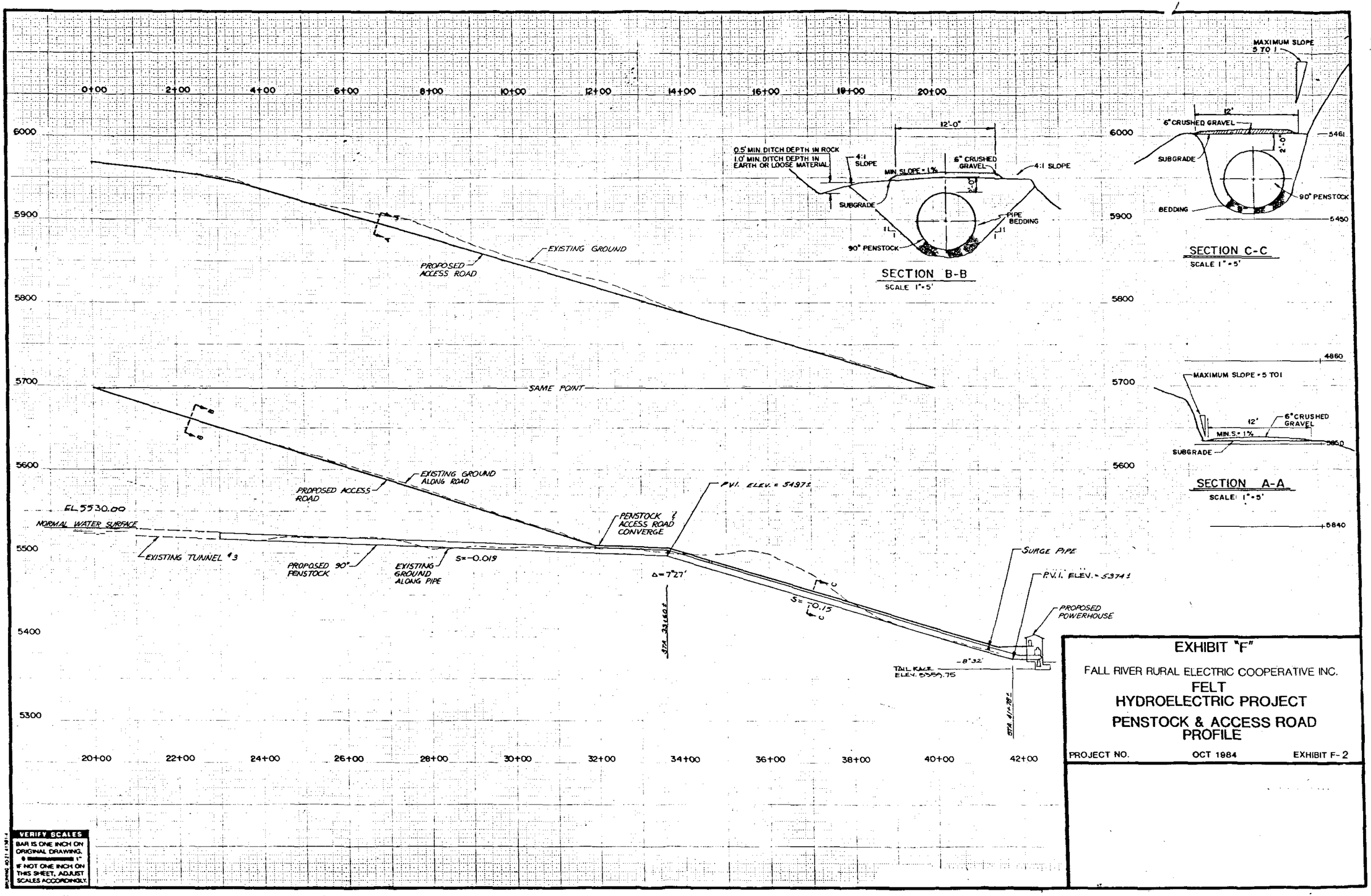
EXHIBIT "F"

FALL RIVER RURAL ELECTRIC COOPERATIVE INC.

FELT HYDROELECTRIC PROJECT

PLAN

PROJECT NO | OCTOBER 1984 | EXHIBIT F-1



VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

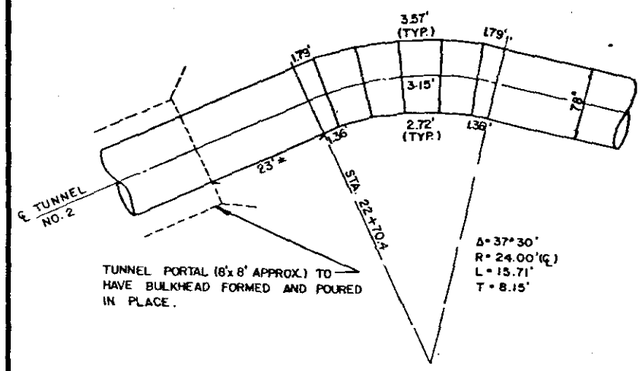
EXHIBIT "F"

FALL RIVER RURAL ELECTRIC COOPERATIVE INC.

FELT HYDROELECTRIC PROJECT

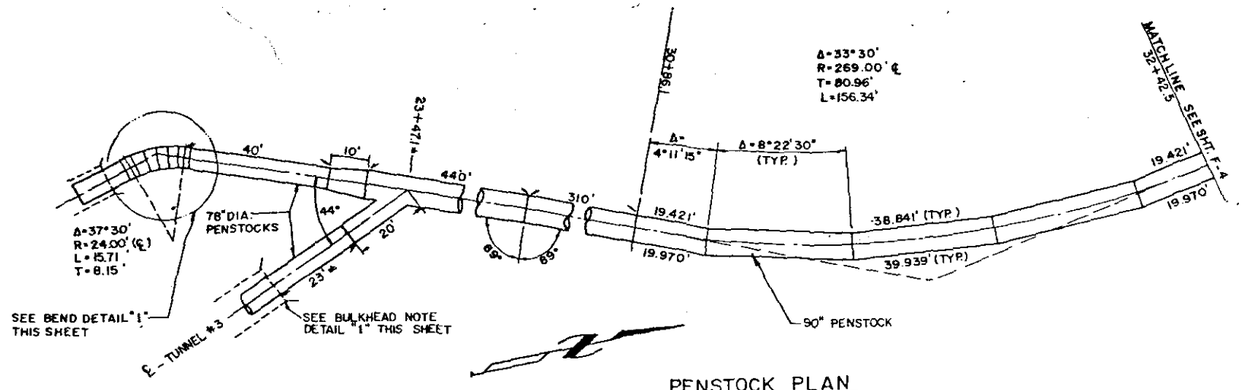
PENSTOCK & ACCESS ROAD PROFILE

PROJECT NO. | OCT 1984 | EXHIBIT F-2



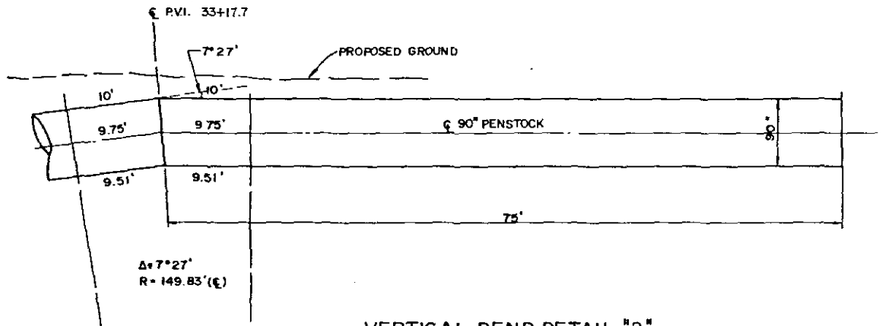
BEND DETAIL "1"

SCALE: 1"=6'



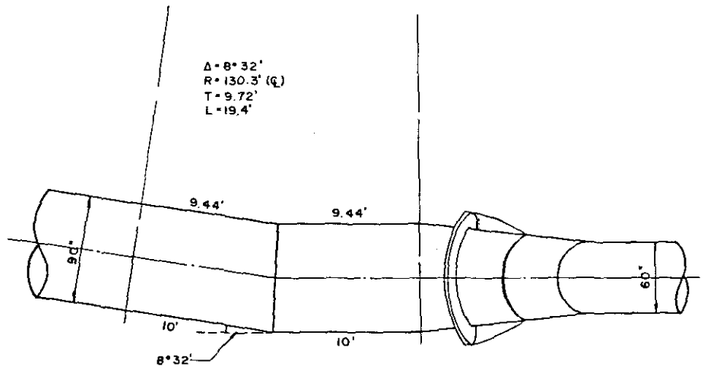
PENSTOCK PLAN

SCALE: 1"=20'



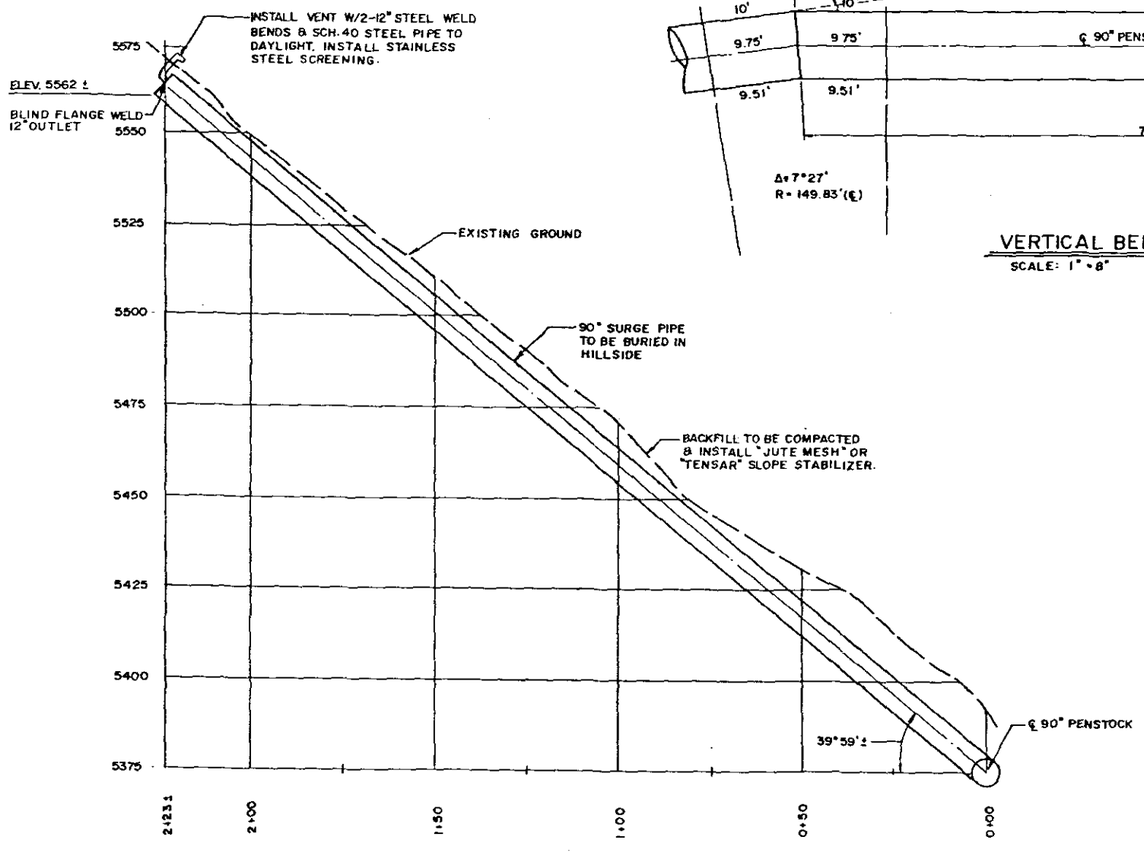
VERTICAL BEND DETAIL "2"

SCALE: 1"=8'



VERTICAL BEND DETAIL "3"

SCALE: 1"=5'



SECTION OF SURGE PIPE D-D

SCALE: 1"=20'

EXHIBIT "F"

FALL RIVER RURAL ELECTRIC COOPERATIVE INC.

FELT

HYDROELECTRIC PROJECT

PENSTOCK & SURGE PIPE

PROJECT NO JAN 1985 EXHIBIT F-3

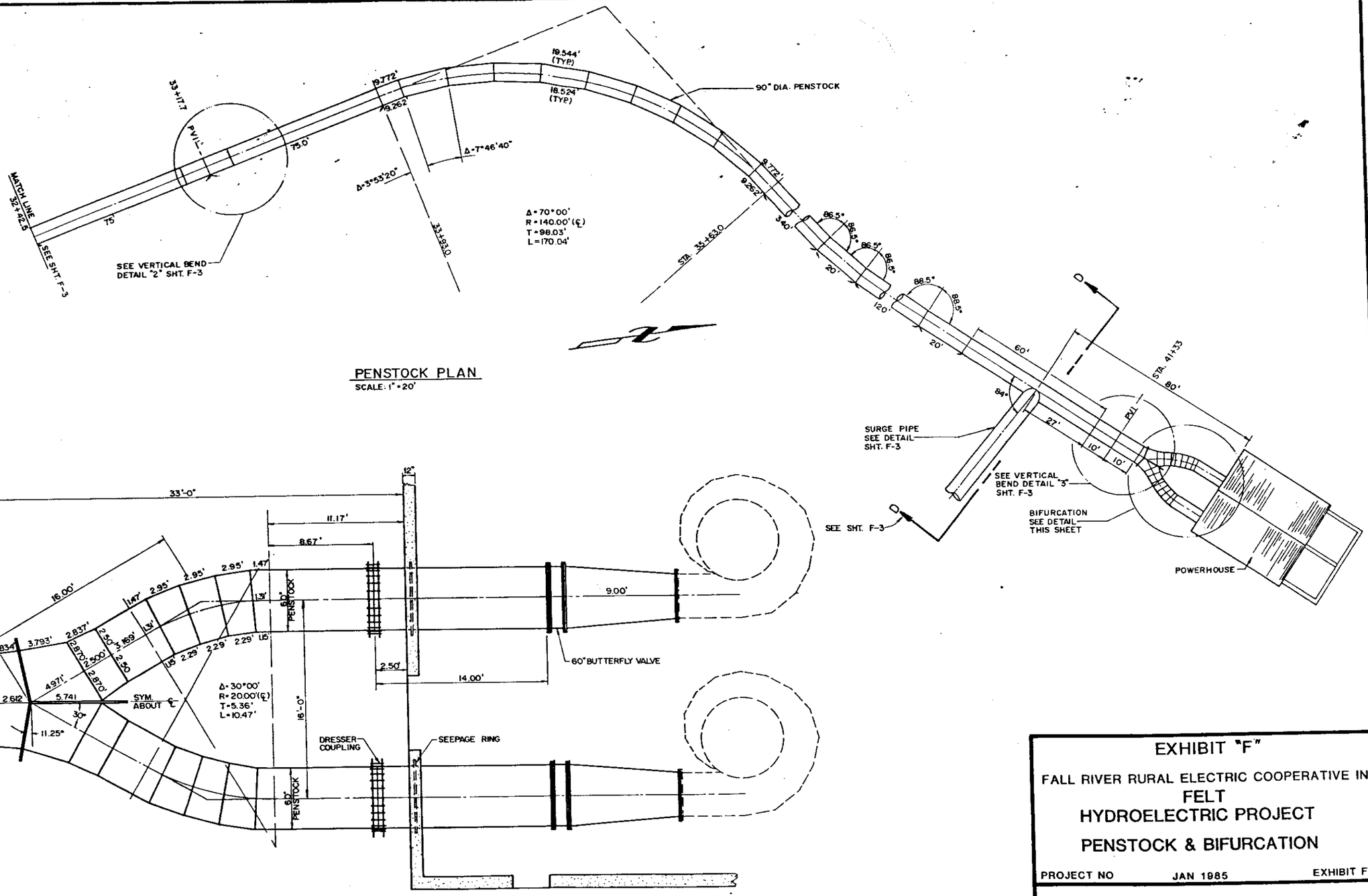
VERIFY SCALES

BAR IS ONE INCH ON ORIGINAL DRAWING.

0 1"

IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

LEROY'S DRAFTING SYSTEMS 99410



PENSTOCK PLAN
SCALE: 1" = 20'

BIFURCATION
SCALE-1"=4'

EXHIBIT "F"

FALL RIVER RURAL ELECTRIC COOPERATIVE INC.

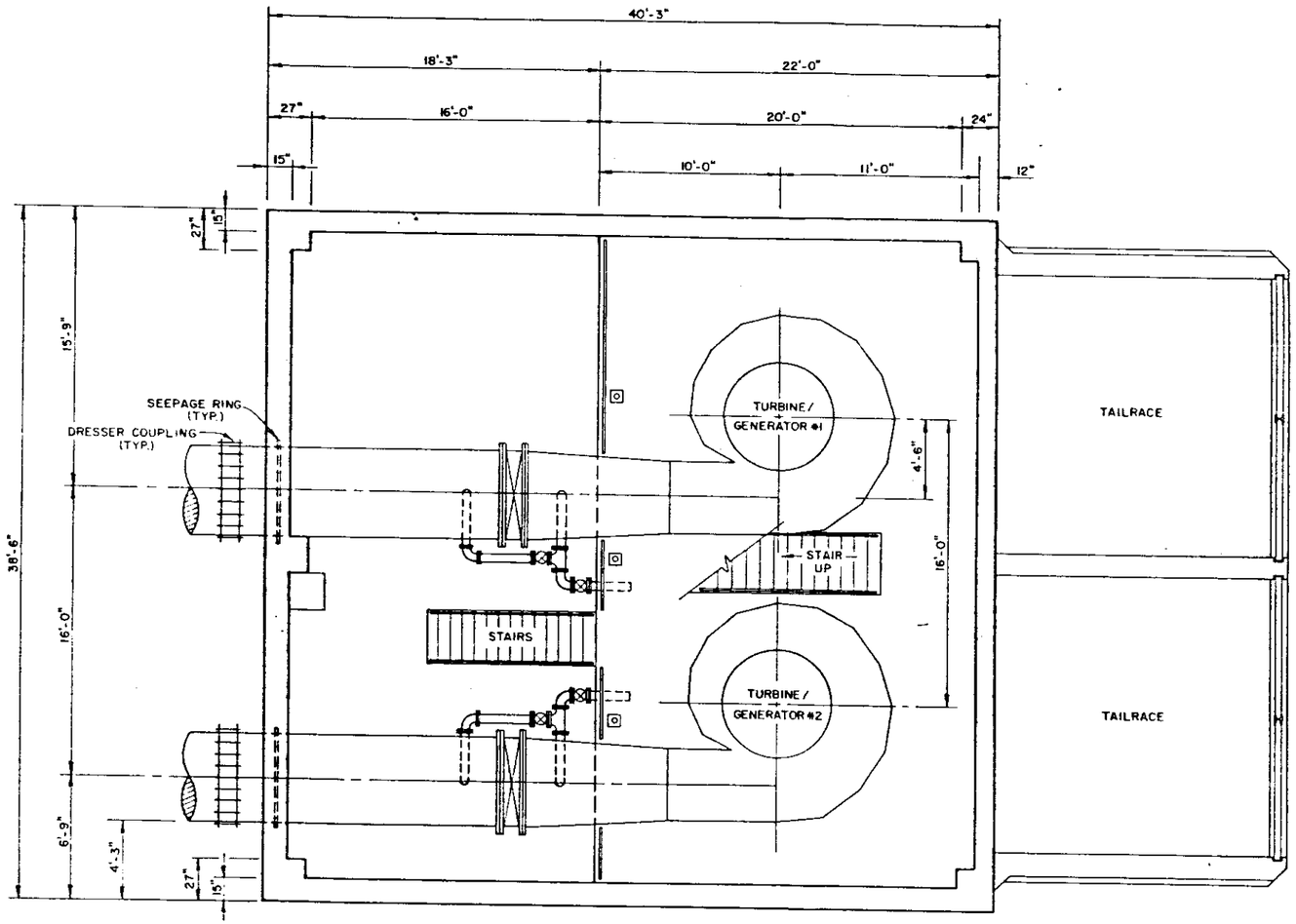
FELT
HYDROELECTRIC PROJECT

PENSTOCK & BIFURCATION

PROJECT NO | JAN 1985 | EXHIBIT F-4

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 ——— 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

LANMAN'S DRAFTING SYSTEMS 20410



TURBINE DECK / VALVE BAY - PLAN

SCALE : 1" = 4'

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 ——— 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

BRUNING 44-152 (0513)

EXHIBIT "F"

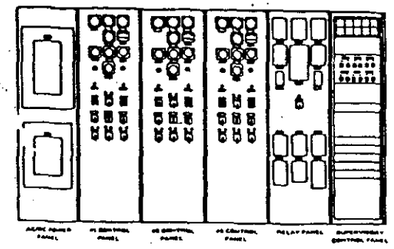
FALL RIVER RURAL ELECTRIC COOPERATIVE INC.

FELT
HYDROELECTRIC PROJECT
POWERHOUSE

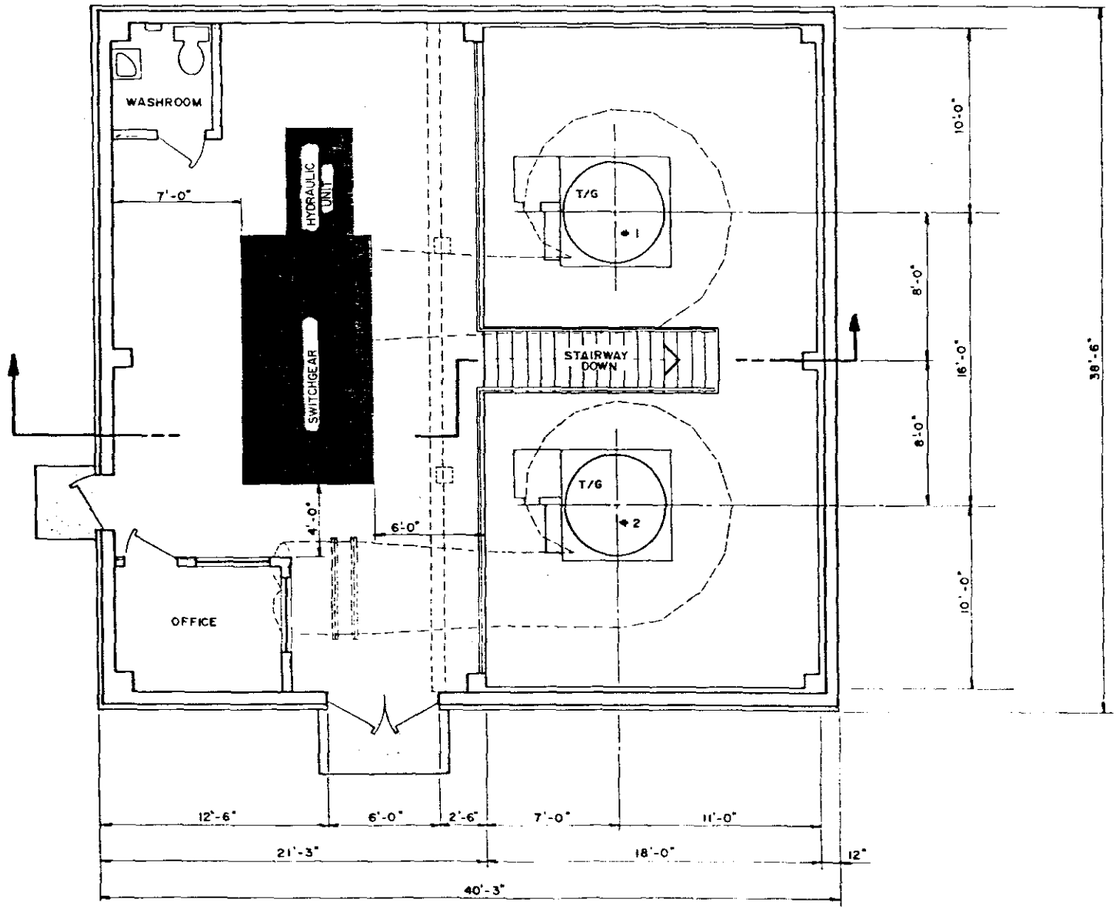
TURBINE DECK/VALVE BAY - PLAN

PROJECT NO. OCT 1984 EXHIBIT F- 5

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 ——— 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY



CONTROL PANEL
NTS



SWITCHGEAR DECK – PLAN
SCALE: 1" = 4'

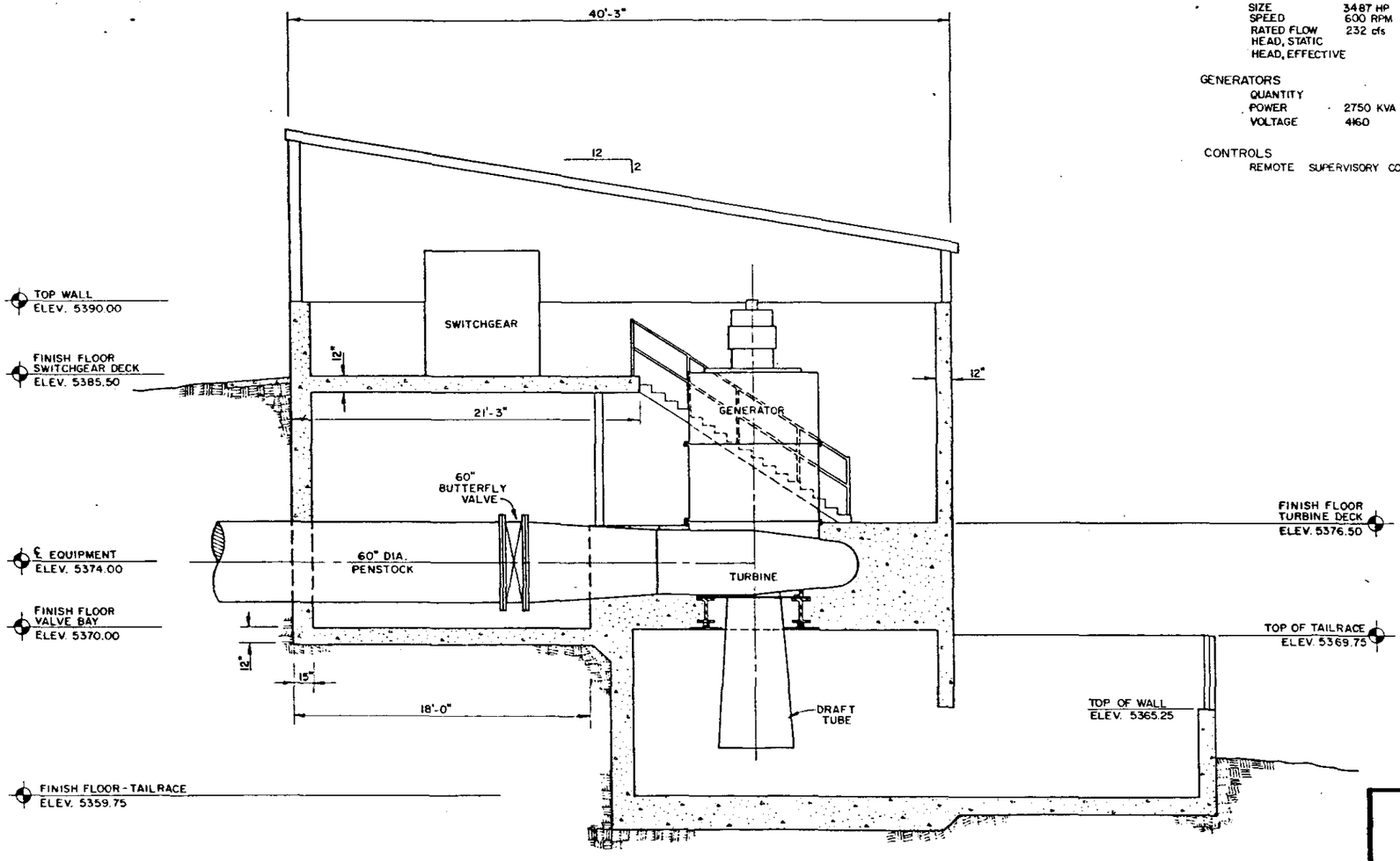
EXHIBIT "F"

FALL RIVER RURAL ELECTRIC COOPERATIVE INC.

FELT
HYDROELECTRIC PROJECT
POWERHOUSE
SWITCHGEAR DECK – PLAN

PROJECT NO. OCT 1984 EXHIBIT F- 6

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY



SECTION
SCALE: 1"=4'

EQUIPMENT SPECIFICATIONS

		EACH	TOTAL
TURBINE			
	QUANTITY		2
	SIZE	3487 HP	6975 HP
	SPEED	600 RPM	
	RATED FLOW	232 cfs	464 cfs
	HEAD, STATIC		158 ft.
	HEAD, EFFECTIVE		154 ft.
GENERATORS			
	QUANTITY		2
	POWER	2750 KVA	5500 KVA
	VOLTAGE	4160	

CONTROLS
REMOTE SUPERVISORY CONTROL

EXHIBIT "F"

FALL RIVER RURAL ELECTRIC COOPERATIVE INC.

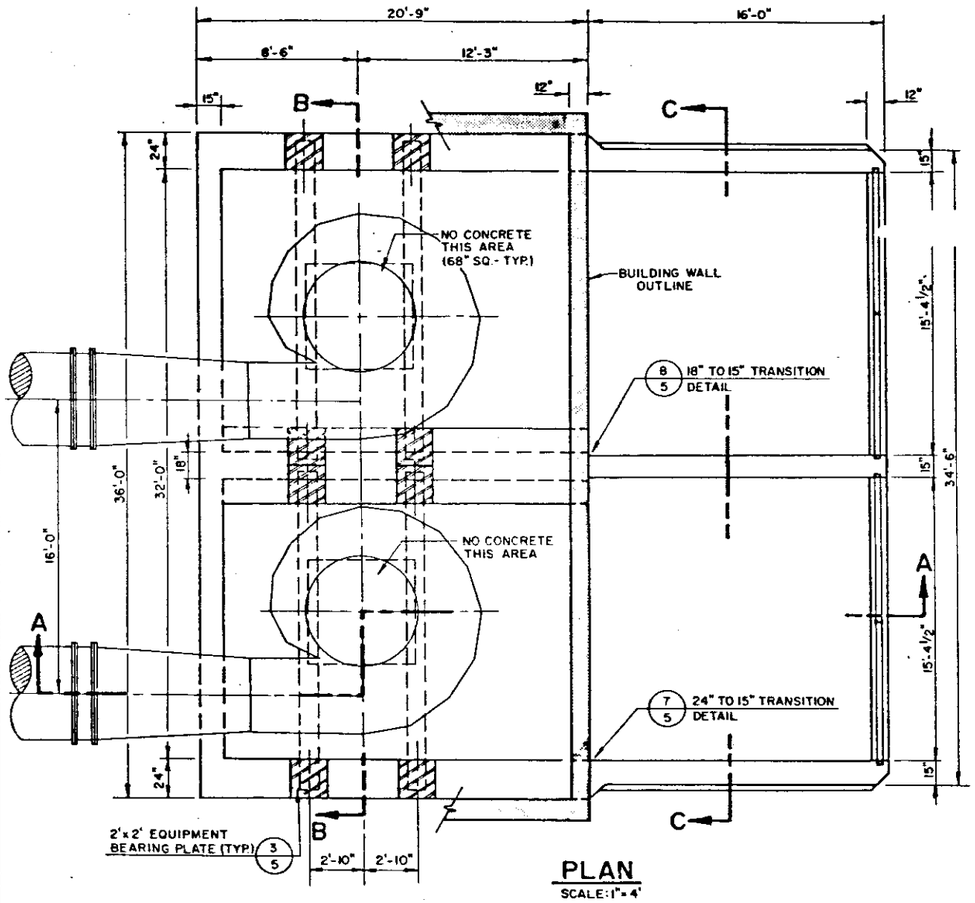
FELT
HYDROELECTRIC PROJECT

POWERHOUSE SECTION

PROJECT NO. OCT 1984 EXHIBIT F- 7

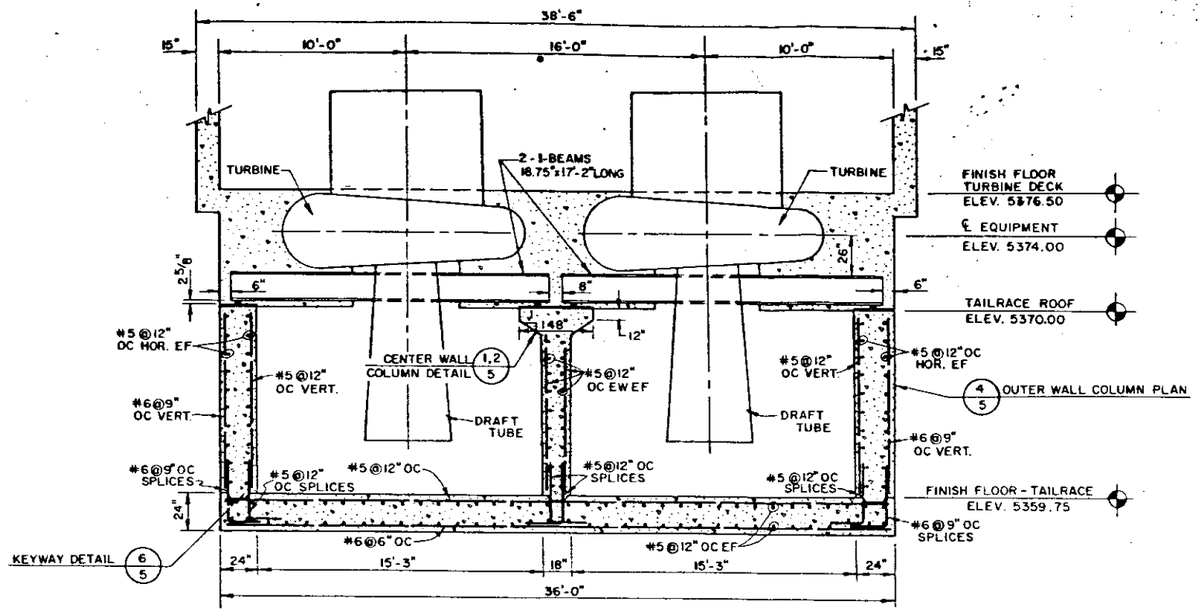
VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 ——— 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 ——— 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY



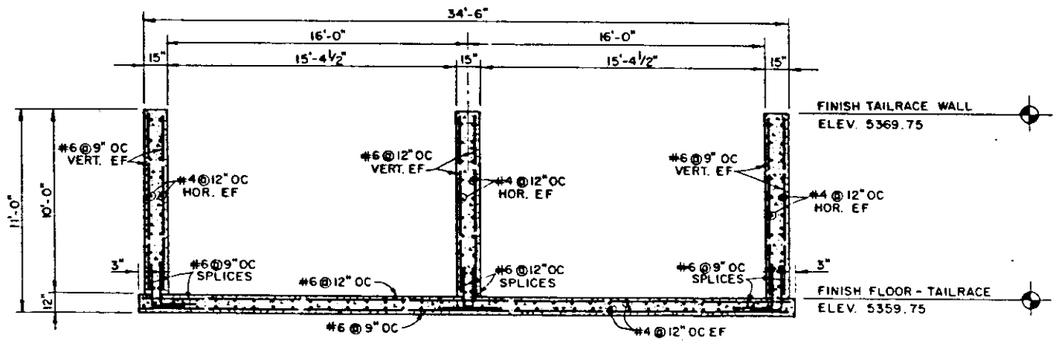
PLAN

SCALE: 1" = 4'



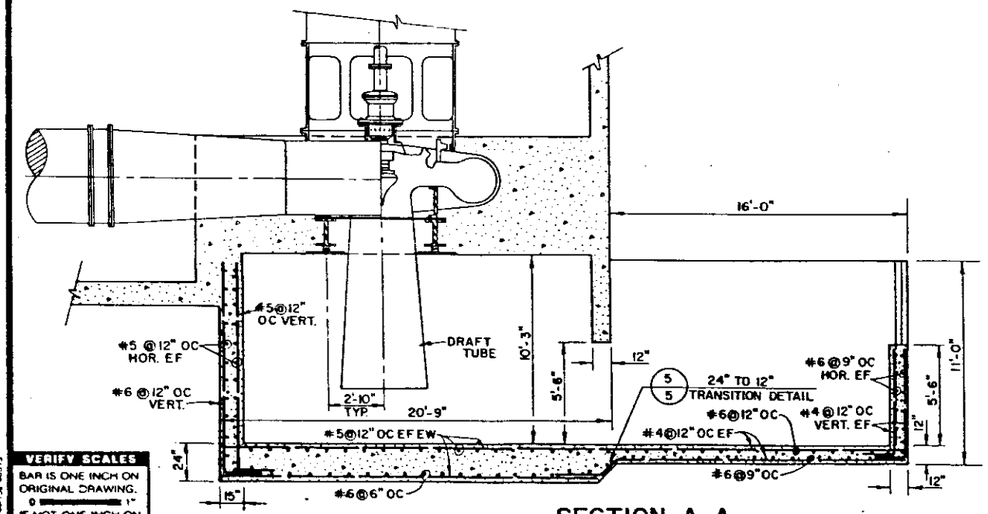
SECTION B-B

SCALE: 1" = 4'



SECTION C-C

SCALE: 1" = 4'



SECTION A-A

SCALE: 1" = 4'

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"
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GENERAL NOTES

1 - CONSTRUCT TAILRACE ON COMPACTED NATIVE MATERIAL OR GRANULAR BASE MATERIAL COMPACTED TO 95% T-99 PROCTOR DENSITY.

2 - REFER TO INDEX SHEET FOR TYPICAL CONCRETE REINFORCING REQUIREMENTS.

3 - DETAILS SHOW TAILRACE REINFORCING. COORDINATE THIS REINFORCING WITH TURBINE DECK FLOOR REINFORCEMENT.

4 - REFER TO HYDRO WEST DRAWING FOR ADDITIONAL BASE FRAME DETAILS.

EXHIBIT "F"

FALL RIVER RURAL ELECTRIC COOPERATIVE INC.

FELT HYDROELECTRIC PROJECT

POWERHOUSE

TAILRACE - PLAN & SECTIONS

PROJECT NO. OCT 1984 EXHIBIT F-8

EXISTING TUNNELS

EXISTING RESERVOIR

EXIST. INTAKES

EXIST POWER PLANT

TETON RIVER

AERIAL SPAN

AERIAL SPAN

PROPOSED METER, TRANSFORMER AND POLE STRUCTURE

BURIED TRANSMISSION LINE

PROPOSED 90" PENSTOCK

B-1 B-2 B-3 B-4 B-5

STA 8+83.84

STA 10+42.13

STA 12+62.50

STA 13+39.80

STA 14+73.90

PROPOSED POWERHOUSE

± 90" SURGE PIPE

PROPOSED ROAD

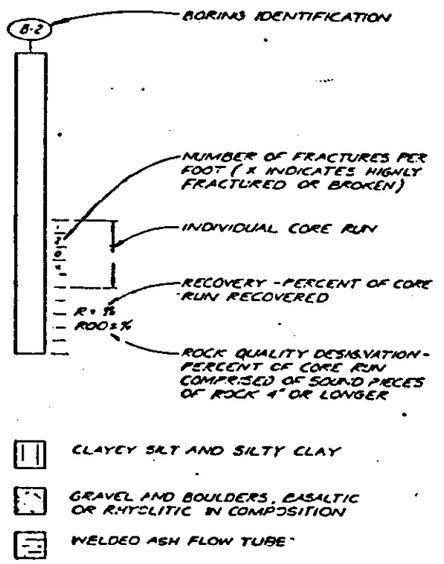
TETON R.

S 89°36'24" W 3222.90'

0 100 200 300

SCALE IN FEET

BORING LOG LEGEND



BORING LOGS

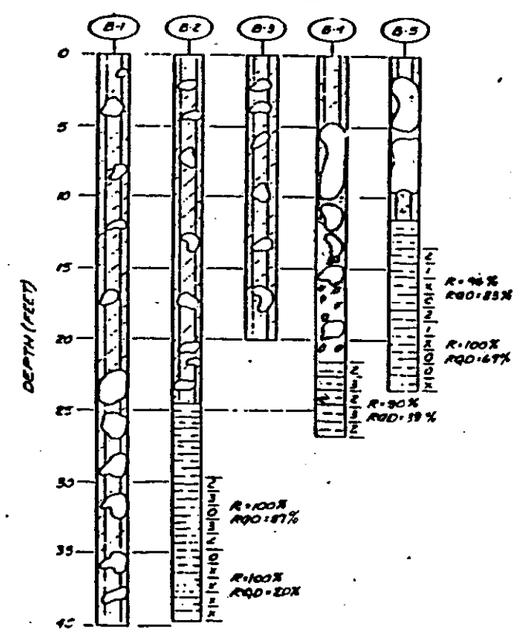


EXHIBIT "F"

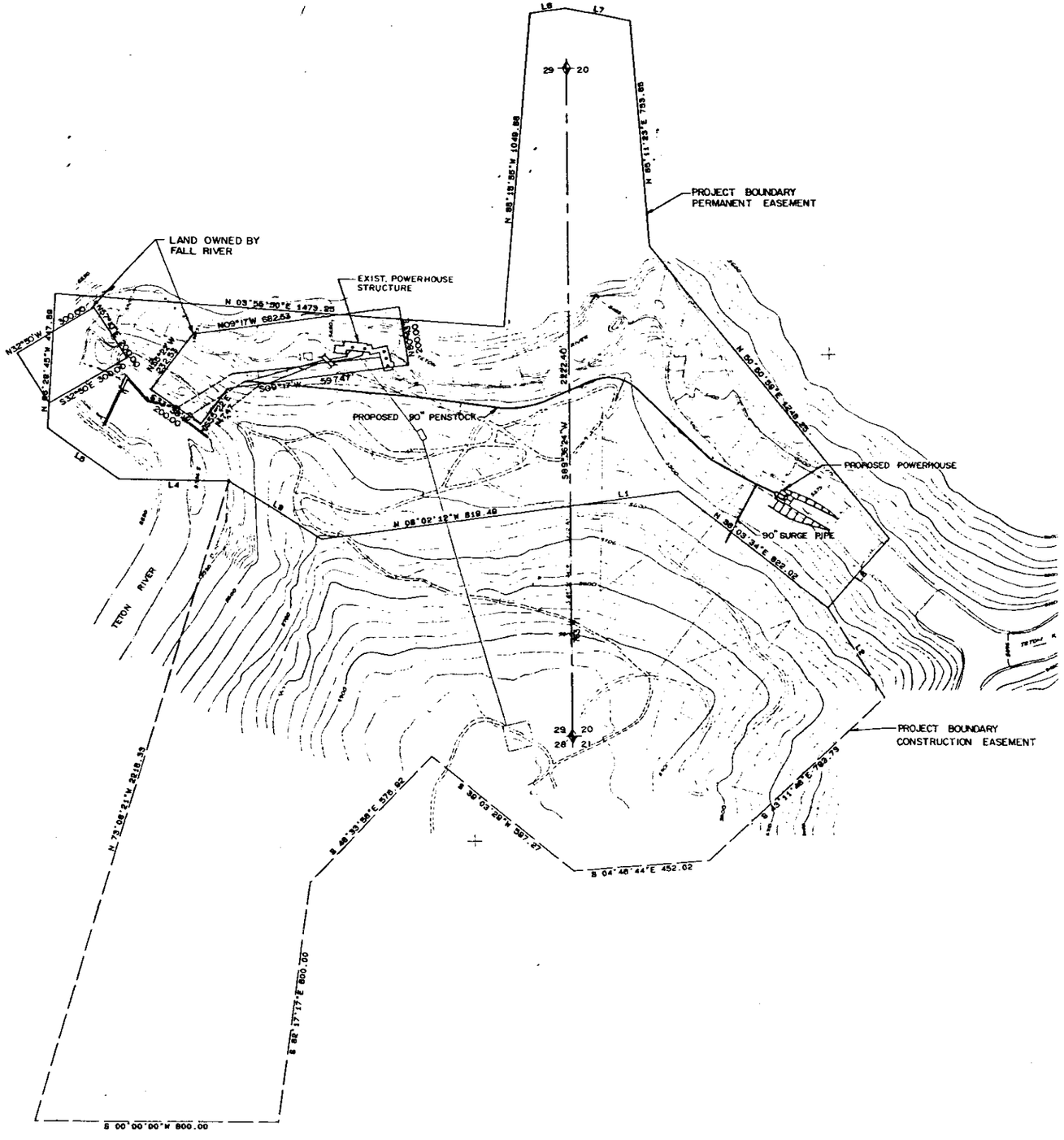
FALL RIVER RURAL ELECTRIC COOPERATIVE INC.

FELT
HYDROELECTRIC PROJECT

BORING LOCATION & LOGS

PROJECT NO OCTOBER 1984 EXHIBIT F-9

EXHIBIT G
PROJECT MAPS



200 100 0 200 400 800

SCALE IN FEET

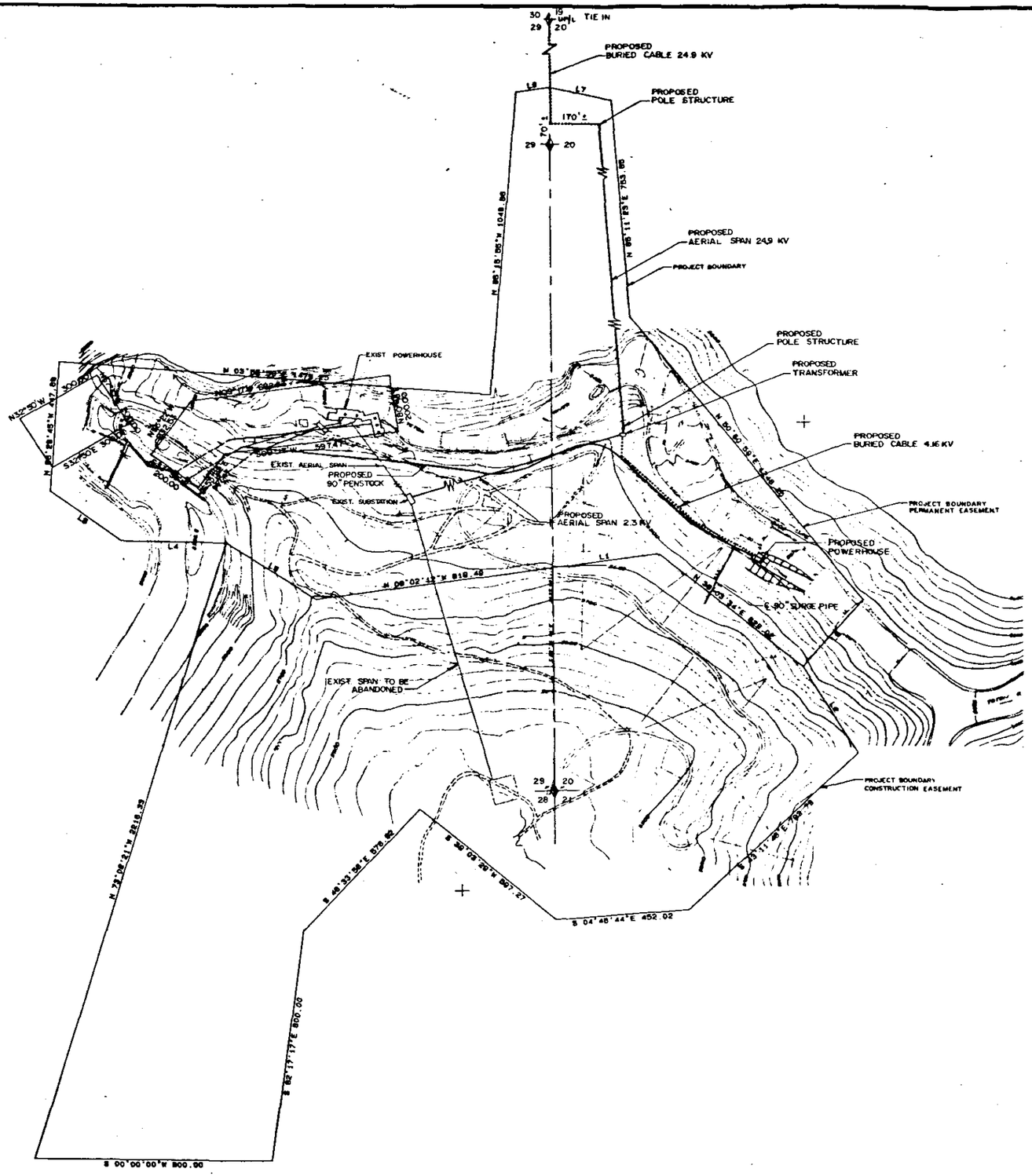
LINE	BEARING	DISTANCE
1	N 08°02'12"W	365.38
2	N 57°48'57"E	349.48
3	N 32°08'42"E	359.78
4	S 00°42'17"W	380.16
5	S 35°28'33"W	289.22
6	N 08°21'20"W	118.00
7	N 10°42'28"E	216.00
8	S 48°45'13"E	307.23

EXHIBIT "G"

FELT
HYDROELECTRIC PROJECT

PROJECT BOUNDARY

PROJECT NO. JANUARY 1985 EXHIBIT G-1



LINE	BEARING	DISTANCE
1	N 08°02'12"W	365.38
2	N 57°46'57"E	348.48
3	N 32°08'42"E	359.76
4	S 00°42'17"W	360.16
5	S 35°28'33"W	289.22
6	N 08°21'20"W	118.00
7	N 10°42'28"E	218.00
8	S 48°45'13"E	307.23

EXHIBIT "G"

FALL RIVER RURAL ELECTRIC COOPERATIVE INC.

FELT
HYDROELECTRIC PROJECT

TRANSMISSION MAP

PROJECT NO. JANUARY 1985 EXHIBIT G-2

BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

APPLICATION FOR AMENDMENT OF LICENSE

FELT
HYDROELECTRIC PROJECT

TETON COUNTY, IDAHO

FOR:

FALL RIVER
REC Rural Electric Cooperative, Inc.
Ashton, Idaho

PROJECT NO. 5089

Mark Felt on place of work.

PREPARED BY:

BINGHAM ENGINEERING
100 Lindbergh Plaza 2
5160 Wiley Post Way
Salt Lake City, Utah 84116
(801) 532-2520

APRIL 1985

REVISED WITH F.E.R.C.
DEFICIENCY COMMENTS

BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

APPLICATION FOR AMENDMENT OF LICENSE

FELT HYDROELECTRIC PROJECT

Teton County, Idaho

Project No. 5089

Prepared for

Fall River
Rural Electric Cooperative, Inc.
Ashton, Idaho

Prepared by

Bingham Engineering
165 Wright Brothers Drive
Salt Lake City, UT 84116

January, 1985

INTRODUCTORY STATEMENT

BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION
APPLICATION FOR AMENDMENT OF LICENSE

1. Fall River Electric Cooperative, Inc. applies to the Federal Energy Regulatory Commission for an amendment of license for the Felt Water Power Project.

2. The exact name, business address and telephone number of the applicant are

Fall River Rural Electric Cooperative, Inc.
714 Main Street
Ashton, Idaho 83420
(208) 652-7431

3. The applicant is a non profit cooperative corporation formed under the laws of the State of Idaho, licensee for the water power project designated as Project NO. 5089 in the records of the Federal Energy Regulatory Commission, issued on the 9th day of September, 1983.

4. The proposed amendments to the Felt Hydroelectric Project License and the reasons why the proposed changes are necessary are:

a. A relocation of the powerhouse to a site approximately 300 feet downstream of the location identified in the license.

b. Refurbishing the existing Number 4 and 5 units and including them in the license application.

c. Rerouting of the proposed transmission lines from the power plants to the customer's point of delivery.

d. Increasing the plant capacity from 6.0 MW to 7.5 MW.

e. Rerouting the project access road from the county road to the project facilities.

The reasons why the proposed changes are necessary are:

a. The relocation of the powerhouse is being proposed for economic considerations and to maximize utilization of the resource. The new site offers the opportunity to increase the available hydraulic head.

In the amendment application the location of the powerhouse has been moved approximately 300 feet downstream to allow for utilization of additional head in that reach of the river.

The new turbines have been sized for a maximum hydraulic capacity of 464 cfs in place of the licensed hydraulic capacity of 680 cfs. This allows the turbine/generator equipment to operate at maximum efficiency over longer periods of time throughout the year and provides a better match of equipment to historic stream flows, and permits better utilization of refurbished units 4 and 5.

The relocation of the powerhouse is not expected to produce adverse effects on the environment. The relocation has been approved by the Idaho Dept. of Fish and Game and the Bureau of Reclamation. (See January 23, 1985 and January 25, 1985 letters contained in appendix to Exhibit E. The penstock grade and alignment have been improved by making a direct connection to existing tunnels 2 and 3 approximately 300 feet upstream of the point of attachment described in the license. This eliminates the adverse grade and 60-inch restriction detailed in the license.

b. The license calls for the abandonment of the existing power facilities and construction of two new turbine units. To provide for comprehensive development of the project and to optimize utilization of the resource, the applicant proposes to refurbish and utilize existing turbine number 4 and 5 generators. The two turbines have a combined maximum hydraulic capacity of 420 cfs. Combined with the two new turbines this makes the overall project more effective than the configuration in the license. The existing equipment will be utilized when flows exceed the hydraulic capacity of the newly installed equipment (464 cfs). By maximizing the efficiencies of the lower plant and utilizing the refurbished upper plant, plant capacity will be increased from the 6.0 megawatts listed under the license to 7.5 megawatts under the amendment application.

The resulting annual energy production will be increased by an estimated 4,700 megawatt hours annually. The utilization of the refurbished existing units in conjunction with the two new downsized units will result in an estimated cost savings of $1.13 million for the

project. The amendment will use refurbished existing equipment and previously designed equipment which will be available for operation in 1985. This could result in a 1 year time savings over the license.

c. Rerouting of the proposed transmission lines is necessary because the license originally contemplated the sale of the power produced by the project to BPA through the Fall River Rural Electric Cooperative, Inc.'s transmission system. Since the license application was formulated, the applicant has entered into a 35 year agreement with Utah Power & Light Company for delivery of the power into its grid system. Delivery of the power to the Utah Power & Light system requires rerouting of the proposed transmission lines and changing of the transmission voltage levels from 48 KV to 24.9 KV. The new routing has been located within existing Fall River Rural Electric Cooperative easements and rights-of-way to the point of UP & L intertie.

d. By down sizing and relocating the lower plant and refurbishing the existing equipment it will be possible to maximize the efficiencies of the lower plant while optimizing the use of the resource by routing flows which exceed the hydraulic capacity of the lower plant (464 cfs) through the existing upper plant.

As a result of maximizing the efficiencies of the lower plant and utilizing the refurbished upper plant, plant capacity will be increased from the 6.0 megawatts listed under the license

application to 7.5 megawatts under the amendment application.

e. The present access road is a very narrow and is limited to four-wheel drive vehicles (portions of the road exceed 26% grade). In order to facilitate construction traffic and to improve travel safety of the access road from the county road to the project facilities will be relocated. The improved alignment has been sited after numerous onsite inspections and will better serve the requirements. Even though the new alignment is longer, improvements in location and grades will result in very little increase in the overall disturbance created by the construction of roadway. The alignment changes have been approved by the Bureau of Reclamation as have the changes in the routing and location of the powerline facilities. (See January 25, 1985 letter contained in appendix to Exhibit E.)

5(i) The statutory or regulatory requirements of the State of Idaho that affect the project as proposed with respect to bed and banks and to the appropriation, diversion and use of water for power purposes and with respect to Fall River's right to engage in the business of developing, transmitting and distributing power and in any other business necessary to accomplish the purposes of the license under the Federal Power Act are

Streambeds and Banks

Minimum stream flow, Idaho Code, Title 42, Chapter 15.

Alteration of channels, Idaho Code, Title 42, Chapter 38.

Fish protection, Idaho Code, Title 36, Chapter 9, Statute 36-906.

Pollution unlawful, Idaho Code, Title 39, Chapter 1, Statutes 39-102, 39-103 and 39-108.

Appropriation of Water Rights and Diversion for Power

The constitutional provisions in Idaho that govern appropriation of waters flowing in natural streams are contained in Article 15, Sections 3 and 7. The appropriation of waters, including power use, is regulated by statutes of the Idaho Code, Title 42, Chapters 1, 2, 3 and 7.

Fall River's Right to Engage in the Project

Fall River is a rural electric cooperative formed under the laws and regulations of the Rural Electrification Administration (REA). Fall River owns and operates the existing power facilities at the site, which will be expanded under this project. Fall River has expended its funds for rehabilitation of the existing facilities, preparation of a feasibility report, preparation of the license application and application to the State of Idaho for additional water rights. Fall River's right to engage in the project is expressed in Article II of "Articles of Incorporation of Fall River Rural Electric Cooperative,

Inc." The articles of incorporation were included in the license application.

5(ii) The applicant has taken or plans to take the following steps to comply with each of the laws cited above:

Streambeds and Banks

Correspondence from the State of Idaho Department of Lands states that Idaho considers the Teton River not navigable and adjacent lands previously owned by Idaho have been sold. Consequently, an easement from the state will not be required.

Other State and Local Permits

Other state permits for which application will be made include a Stream Alteration Permit and a Dam Safety Permit from the Department of Water Resources and a Water Quality Certificate from the Department of Health and Welfare. Locally, a building permit will be required from Teton County. A 404 permit for the project will not be required from the Dept. of the Army Corps of Engineers. (See January 11, 1985, letter contained in appendix to Exhibit E.)

Water Rights

Fall River has existing water rights for the existing power generating facilities in the amount of 300 cubic feet per second (cfs), as listed below:

No. 22-060, 80 cfs, priority of 10-1-21

No. 22-2123, 70 cfs, priority of 11-17-36

No. 22-2126, 150 cfs, priority of 2-2-46

On March 18, 1981, Fall River filed an "Application for Permit to Appropriate the Public Waters of the State of Idaho" for the project for an additional 300 cfs. The permit has been approved contingent upon the granting of the project's FERC license and assigned No. 22-7351. A copy of the 1981 application was attached at the end of the initial statement accompanying the license application. In the event the amendment is granted, the applicant will apply to the State of Idaho to have the location of the powerhouse changed on their applications.

An additional "Application for Permit to Appropriate the Public Waters of the State of Idaho" in the amount of 300 cfs is being filed by the applicant concurrent with the filing of this application for amendment of license.

State of Utah)
) ss.
County of Salt Lake)

This application is executed by Jay R. Bingham, who being duly sworn, deposes and says that the contents of this application are true to the best of his knowledge or belief. The undersigned applicant has signed this application this 1st day of February, 1985.

Jay R. Bingham

Subscribed and sworn to before me, a notary public authorized by the State to notarize documents as appropriate in the State of Utah, this 1st day of February, 1985.

Notary Public

My Commission Expires: 15 Oct. 1987

EXHIBIT A
PROJECT DESCRIPTION

AMENDMENT TO FELT LICENSE APPLICATION

All changes refer to the license application for the Felt Hydroelectric Project #5089 dated February, 1982. The statement as contained in the license application is underlined and referenced by page and location. The amended information follows in the same format. Following the amended information is a description of the proposed project with expected impacts and proposed methods of mitigation. This section follows the format of Exhibit E contained in the 1982 license application.

Page A-2, last sentence of "Intakes" paragraph

This intake has been blocked with sandbags and is no longer used.

A bulkhead has been added to this intake, and it is currently being used to supply water to the R and J Brown Pumps that supply water for irrigation purposes.

Page A-4, top paragraph, last two sentences

Delete:

A tap is made in the No. 5 penstock about 240 feet downtream from its portal to supply water to four high-lift pumps used to irrigate lands in the west along the canyon rim. The tap is controlled by a valve.

Page A-5, PROPOSED NEW FACILITIES, Structures and Equipment

The project includes constructing a new power plant on the Teton River approximately 1,200 feet north (downstream) of the existing plant. A plant at this location will develop 50 feet more head than the existing plant and will be capable of generating about three times as much energy.

The project includes constructing a new power plant on the Teton River approximately 1500 feet north (downstream) of the existing plant. A plant at this location will develop 67 feet more head than the existing plant and will be capable of generating about four times as much energy.

Second paragraph

An 8-foot diameter penstock 1200 feet long will extend from the two existing 59-inch penstocks to the new power plant.

A 7.5-foot diameter penstock 1850 feet long will extend from the outlet portal of tunnels 2 and 3 to the new power plant, the connection to each tunnel will be 78 inch steel pipe.

This more direct connection will allow for a positive grade to be maintained as the penstock extends to the new power plant location.

Page A-6

Top paragraph

generators with a total output of 6.0 megawatts (MW) and average annual generation of 31,400 megawatt hours (MWh).

	Single Unit at Capacity	Two Units at Capacity
Gross static head (ft)	150	150
Design Discharged (cfs)	370	680
Net Head at Design Discharge	141	123
Turbine type	Francis	Francis
Turbine Horsepower	5276	8460
Generator Type	Synchronous	Synchronous
Generator Rating (kVA at 0.2 Power Factor)	4175	8350
Generator Output (kW)	3758	6025
Generator Voltage	4160	4160
Transformer Rating (kVA)		7500

generators with a total output of 7.5 megawatts (MW) and average annual generation of 36,100 megawatt-hours (MWh).

Lower Plant (New).

	Single Unit at Capacity	Two Units at Capacity
Gross static head (ft)	162	162
Design Discharged (cfs)	232	464
Net Head at Design Discharge	159	156
Turbine type	Francis	Francis
Turbine Horsepower	3487	6974
Generator Type	Synchronous	Synchronous
Generator Rating (kVA at 0.2 Power Factor)	2750	5500
Generator Output (kW)	2613	5226
Generator Voltage	4160	4160
Transformer Rating (kVA)		7500

Upper Plant (Existing)	Single Unit at Capacity	Two Units at Capacity
Gross static head (ft)	83	83
Design Discharged (cfs)	210	420
Net Head at Design Discharge	80	74
Turbine type	Francis	Francis
Turbine Horsepower	1400	2800
Generator Type	Synchronous	Synchronous
Generator Rating (kVA at 0.2 Power Factor)	1053	2105
Generator Output (kW)	1000	2000
Generator Voltage	2300	2300
Transformer Rating (kVA)		7500

Second to last paragraph, second sentence

Power will be stepped up from 4,260 volts to 46 kV at the power substation located adjacent to the powerhouse.

Power will be stepped up from 4,260 volts at the new plant and from 2300 volts at the existing plant to 24.9 kV at the power substation located adjacent to the powerhouse.

Second to last paragraph, last sentence:

An overhead transmission line will leave the substation takeoff tower, continuing up the ridge to the Badger Substation, where the power will be fed into the Fall River system through a set of disconnect switches.

Power from the existing plant will utilize the existing overhead line from the old plant to the existing substation take-off tower. An overhead will then extend northerly to the new transformer. The power from the new power plant will be conducted approximately 700 feet southwesterly at a generation voltage of 4160 in a burie conduit to a new transformer pad. A new overhead transmission line will leave the transformer takeoff tower, and span the river to the west. It will continue overhead for approximately 1400 feet to the west rim of the canyon. It will then be placed underground. The line will continue underground for approximately 2600 feet to its point of intertie with the existing Utah Power & Light line. Both the overhead and underground sections of the newly constructed line will parallel an existing 115 kv line belonging to Fall River Rural Electric to the point of intertie with the existing Utah Power and Light Co. line.

Last paragraph:

The power plant will be a reinforced concrete structure with maximum outside dimensions of 57 feet wide by 52 feet long by 50 feet high.

The power plant will be a reinforced concrete structure with maximum outside dimensions of 40.3 feet long and 38 feet wide by 30.25 feet high. The top of the structure will extend approximately 15 feet above natural ground. An insulated metal sandwich building will be added to the structure to provide enclosure for the inside equipment. A 34.5 foot by 11 foot tailrace extends downstream from the powerplant. Copies of the drawings of the structures and buildings are included in Exhibit F of this application.

Page A-7, Second paragraph, second paragraph

A 7500 kVA, 4160 V/46 kV three-phase transformer will step up the generator's output to a level suitable for transmission to the existing Badger Substation. Station class lightning arrestors (46 kV) and a group-oriented fused (100 A) disconnect switch will be mounted on a steel takeoff structure at the plant. The takeoff structure will serve as a dead end for a three phase, 46 kV transmission line connecting the power plant to the Badger Substation. The transmission line will be approximately 1,600 feet long, and of wood pole construction with three No. 2 ACSR phase conductors and one 3/8 inch high-strength steel overhead shield wire. A group-operated fused (100 A) disconnect switch and a steel dead end/takeoff structure at Badger substation will complete the tie to Fall River's power grid.

A 7500 kVA, 4160 V/24.9 kV three-phase transformer will step up the generator's output to a level suitable for transmission to the existing UP & L line at the point of intertie. Station class lightning arrestors and a group-oriented fused disconnect switch will be mounted at the transformer substation. The overhead transmission line will be approximately 1400 feet long, and of wood pole construction with three No. 1 ACSR phase conductors and one 3/8 inch high-strength steel overhead shield wire. A group-operated fused disconnect switch will complete the tie to UP & L's power grid.

Page A-8 & 9 Legal Description, Replace with the following:

Thompson Engineering, Inc. legal description .

The project boundary described is shown on the Project Map, Exhibit G of this application for license.

THOMPSON ENGINEERING INC.

CONSULTING ENGINEERS
Rigby, Idaho 83442

DATE ------ November 21, 1984 ** revised 1-19-85
JOB NAME -- Felt Hydro Electric Project
JOB NO. --- 84028 & 85004
Parcel ---- PERMANENT EASEMENT- DAM * FLUMES * STRUCTURES

LEGAL DESCRIPTION

A PARCEL OF LAND SITUATED IN TETON COUNTY, STATE OF IDAHO, TOWNSHIP 7 NORTH, RANGE 44 EAST OF THE BOISE MERIDIAN, SECTIONS 20, 21, 28, & 29 MORE PARTICULARLY DESCRIBED AS FOLLOWS:
BEGINNING AT THE SECTION CORNER COMMON TO SECTIONS 20, 21, 28, & 29 T 7 N, R 44 E, B.M.;
THENCE S89-36-24 W ALONG THE SECTION LINE FOR A DISTANCE OF 763.71 FEET TO THE TRUE POINT OF BEGINNING;
THENCE S08-02-12 E FOR A DISTANCE OF 819.49 FEET;
THENCE S32-06-42 W FOR A DISTANCE OF 359.76 FEET;
THENCE S00-42-17 W FOR A DISTANCE OF 360.16 FEET;
THENCE S35-26-33 W FOR A DISTANCE OF 289.22 FEET;
THENCE N86-29-45 W FOR A DISTANCE OF 447.69 FEET;
THENCE N03-55-50 E FOR A DISTANCE OF 1473.25 FEET;
THENCE N85-15-55 W FOR A DISTANCE OF 1049.88 FEET;
THENCE N08-21-20 W FOR A DISTANCE OF 118.00 FEET;
THENCE N10-42-26 E FOR A DISTANCE OF 218.00 FEET;
THENCE N85-11-23 E FOR A DISTANCE OF 753.65 FEET;
THENCE N50-50-59 E FOR A DISTANCE OF 1248.25 FEET;
THENCE S48-45-13 E FOR A DISTANCE OF 307.23 FEET;
THENCE S38-03-34 W FOR A DISTANCE OF 622.02 FEET;
THENCE S08-02-12 E FOR A DISTANCE OF 365.38 FEET TO THE TRUE POINT OF BEGINNING, CONTAINING 47.52 ACRES MORE OR LESS.

REGISTERED LAND SURVEYOR
1-19-85
854
STATE OF IDAHO
LYLE L THOMPSON

LYLE L THOMPSON RLS

Exhibit A - Figures and Tables

Table A-1 Summary of Equipment Nameplate Data at existing Felt Power Plant.

Motor and Generator Nameplate Data for Unit 4 and Unit 5 were transposed in License Application. Corrected tabulation shown here for convenience.

Figure A-1, Project Location Map

No change, shown for convenience

Figure A-2, Existing Facilities Plan

Substitute new Figure A-2.

Figure A-2-A, Licensed Facilities Plan

Figure A-2-B, Amended Facilities Plan

TABLE A-1

Table 1-1
SUMMARY OF EQUIPMENT NAMEPLATE DATA AT EXISTING FELT POWER PLANT

Equipment	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5
Turbine	Francis type assumed Rated head: 250 ft	Francis type assumed Rated head: 90 ft	Francis type assumed Rated head: 250 ft	Francis type Two runners Horizontal James Leffel and Co. Type: F Order W1325, 1927 1,000 hp 360 rpm Rated head: 45 ft	Francis type Two runners Horizontal James Leffel and Co. Type: F Order W1325, 1927 1,000 hp 360 rpm Rated head: 45 ft
Governor	Type: O Serial No.: 1322 Lombard Governor Co.	Type: Compensating Serial No.: C4654 Woodward Governor Co.	Type: O Serial No.: 1323 Lombard Governor Co.	Type: LR Serial No.: 5961 Woodward Governor Co. Size: 7.75 x 12 8,400 ft-lb 1927	Type: LR Serial No.: 5962 Woodward Governor Co. Size: 7.75 x 12 8,400 ft-lb 1927
Generator	Serial No.: 2629677 Westinghouse Electric Co. 250 kW @ 1.0 pf Speed: 450 rpm 6,600 V (operated at 2,300 V) Amps per terminal @ 6,600 V: 21.8 3-phase, 60 Hz	Type: ATB8-150-900 Form RC Serial No.: F301052 General Electric Co. 150 kW @ 1.0 pf Speed: 900 rpm 2,300 V 37.5 A 3-phase, 60 Hz	Serial No.: 379666 Westinghouse Electric Co. 250 kW @ 1.0 pf Speed: 450 rpm 6,000 V (operated at 2,300 V) Amps per terminal @ 6,600 V: 21.6 3-phase, 60 Hz	Type: ATB-20-900M-360 Form S Serial No.: 4099305 General Electric Co. 720 kW @ 0.8 pf 900 kVA continuous Stator: 50°C rise Rotor: 60°C rise Speed: 360 rpm 2,300 V Armature Amps: 226 3-phase, 60 Hz Excitation: 125 V Field Amps: 94	Type: ATB 20-500-A-360 Form S General Electric Co. 500 kW Speed: 360 rpm 2,300 V 126 A 3-phase, 60 Hz
Exciter	Type: CVC Serial No.: 426451 General Electric Co. 9.5 kW Speed: 450 rpm 115 VDC 76 A	Type: CVC 113 Form AA1055 Serial No.: 4-37613 General Electric Co. 7 kW Speed: 1,800 rpm 125 VDC 56 A	Serial No.: 379068 Westinghouse Electric Co. 9 kW Speed: 450 rpm 125 VDC 72 A	Motor Type KT 527-4-50-1800 General Electric Co. 50 hp induction Speed: 1,730 rpm 2,300 V, 11.5 A 3-phase, 60 Hz Generator Type: CCD 95 Form A, Model No. 54A29 General Electric Co. 35 kW Speed: 1,800 rpm 125 VDC, 280 A	Motor Type: KT 346-8-40-900 General Electric Co. 40 hp induction Speed: 865 rpm 2,300 V, 10 A 3-phase, 60 Hz Generator Type: BK Westinghouse Electric 26 kW Speed: 900 rpm 125 VDC, 208 A

NGHAM ENGINEERING
165 Wright Brothers Drive, Salt Lake International Center, Salt Lake City, Utah 84116, 801-532-252

February 1, 1985

Hon. Kenneth F. Plumb, Secretary
Federal Energy Regulatory Commission
825 North Capitol Street
Washington, D.C. 20426

Re: Fall River Rural Electric Cooperative, et al.
Project No. 5089

Dear Mr. Plumb:

Enclosed for filing are the original and 14 conformed copies of an application for amendment of an existing license for the proposed Felt Hydroelectric Project, to be located in Teton County, Idaho.

A request to include the name of Bonneville Pacific Corporation along with the original applicant, Fall River Electric Cooperative, has been filed separately with the Federal Energy Regulatory Commission and we ask that the request be considered concurrently with this application.

This amendment will provide for a better utilization of the resource, and will permit construction in 1985 if this application is considered. The amended project also would utilize existing equipment and be more cost effective.

Respectfully submitted,

Jay R. Bingham
Agent for Applicants

ah

enclosures

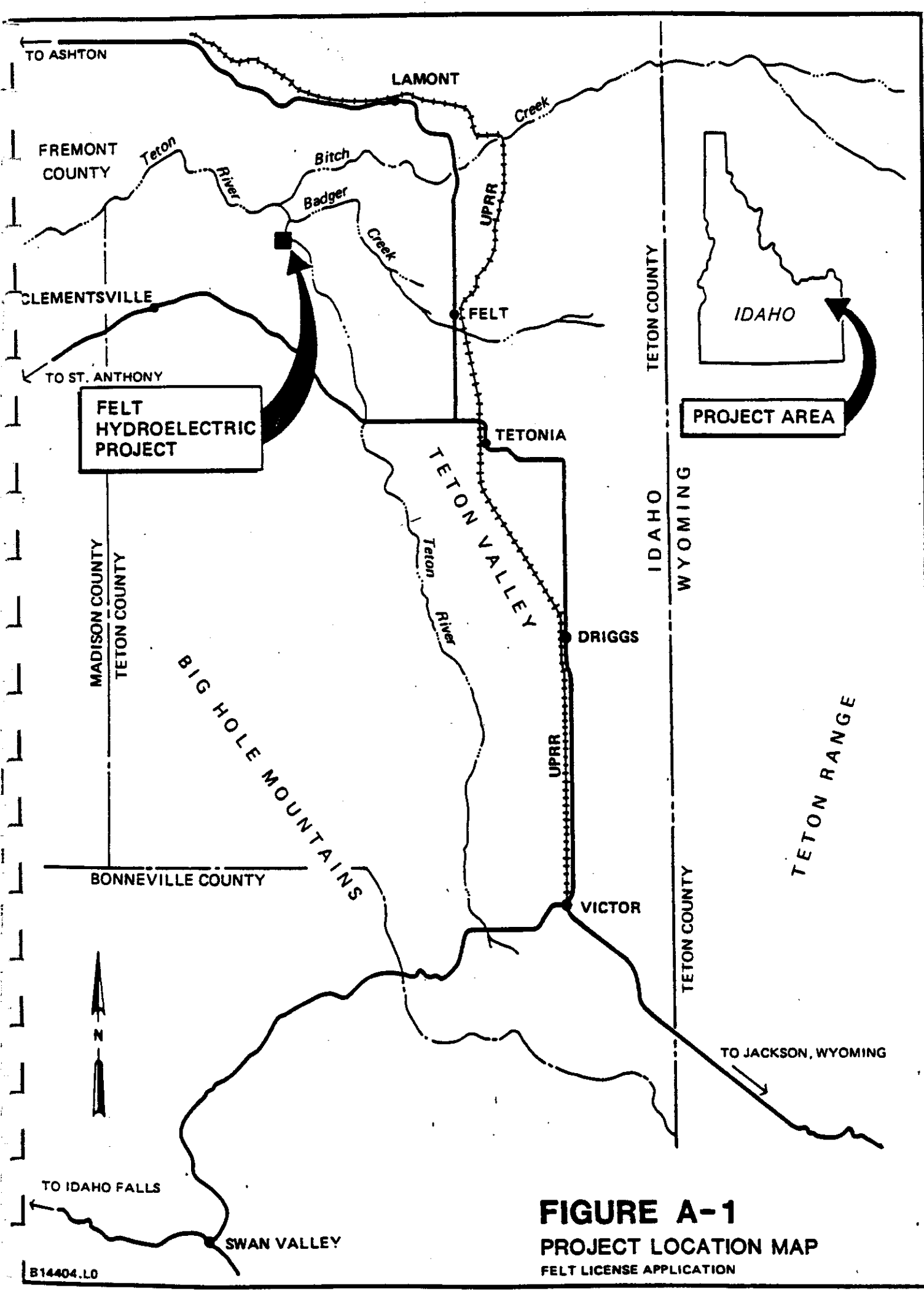
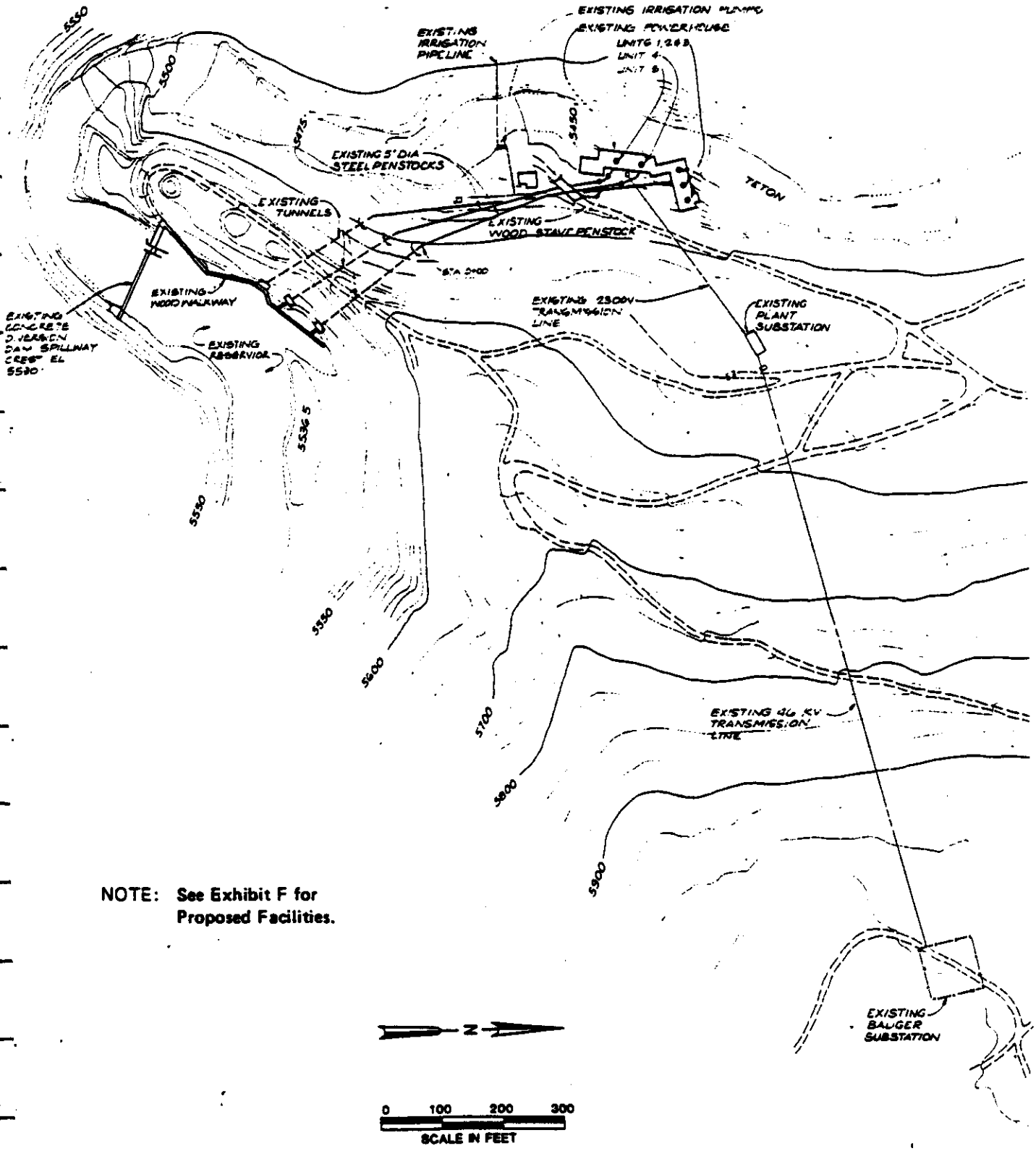


FIGURE A-1

PROJECT LOCATION MAP

FELT LICENSE APPLICATION



NOTE: **See Exhibit F for Proposed Facilities.**

FIGURE A-2
EXISTING FACILITIES PLAN

FELT LICENSE APPLICATION

B14404.L0

EXISTING IRRIGATION PUMPS
EXISTING WATER STORAGE
UNITS 1 2 & 3

EXISTING IRRIGATION PIPE LINE

EXISTING 5' DIA STEEL PENSTOCKS

EXISTING TUNNELS

EXISTING WOOD STAVE PENSTOCK

EXISTING WOOD WALKWAY

EXISTING CONCRETE DIVERSION DAM SPILLWAY CREST EL 5530

EXISTING RESERVOIR

EXISTING 6TA 2300V TRANSMISSION LINE

EXISTING PLANT SUBSTATION

PROPOSED 8' DIA PENSTOCK

PROPOSED POWER PLANT

EXCAVATED TAILRACE

STAKED LINE

B-1 B-2 B-3 B-4 B-5

STA 0+00.00

STA 8+88.84

STA 10+42.18

STA 15+05.52

STA 18+27.80

STA 21+73.96

PROPOSED 46 KV TRANSMISSION LINE

EXISTING BADGER SUBSTATION

TETON RIVER

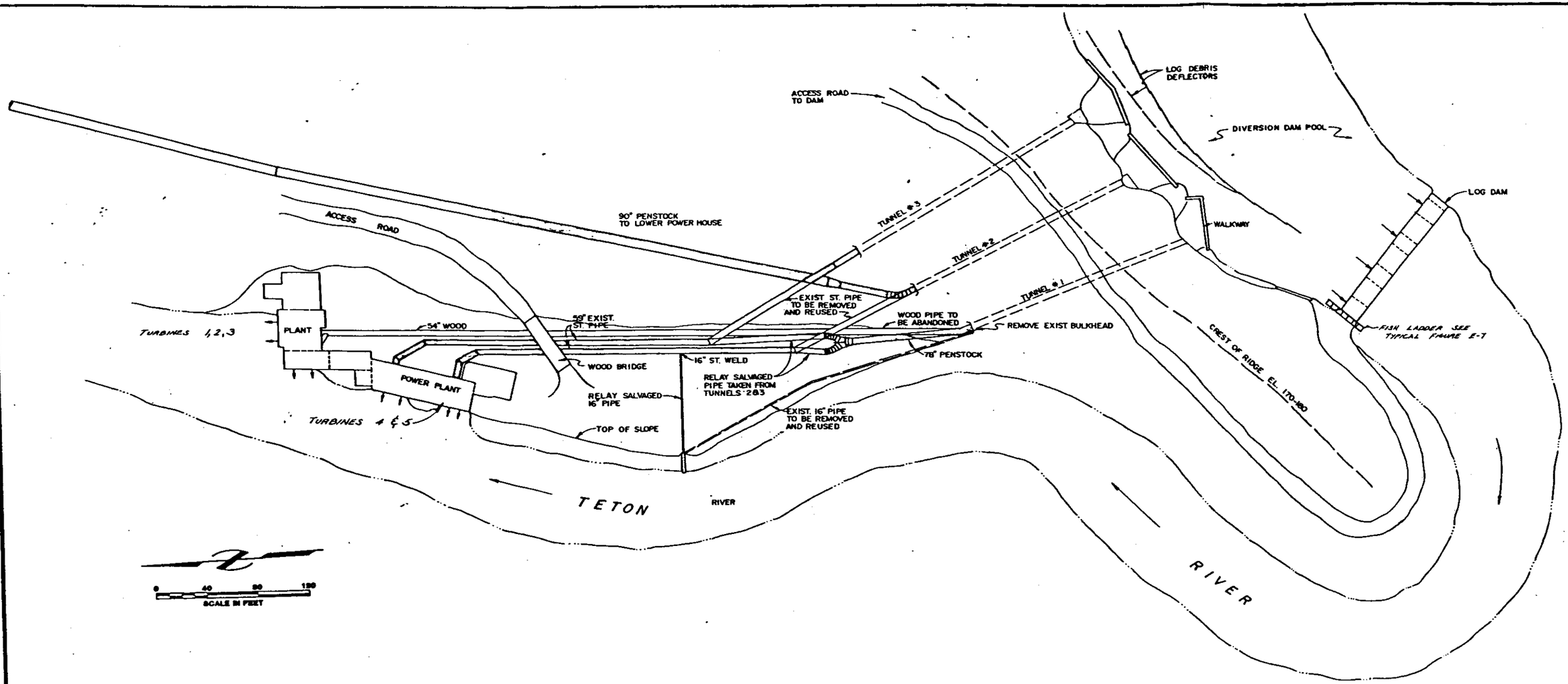
5500 5600 5425 5450 5475 5400 5375 5700 5800 5900 5550 5536.5

N

PROJECT LOCATION MAP

PROJECT AREA

FIGURE A-2-A
LICENSED



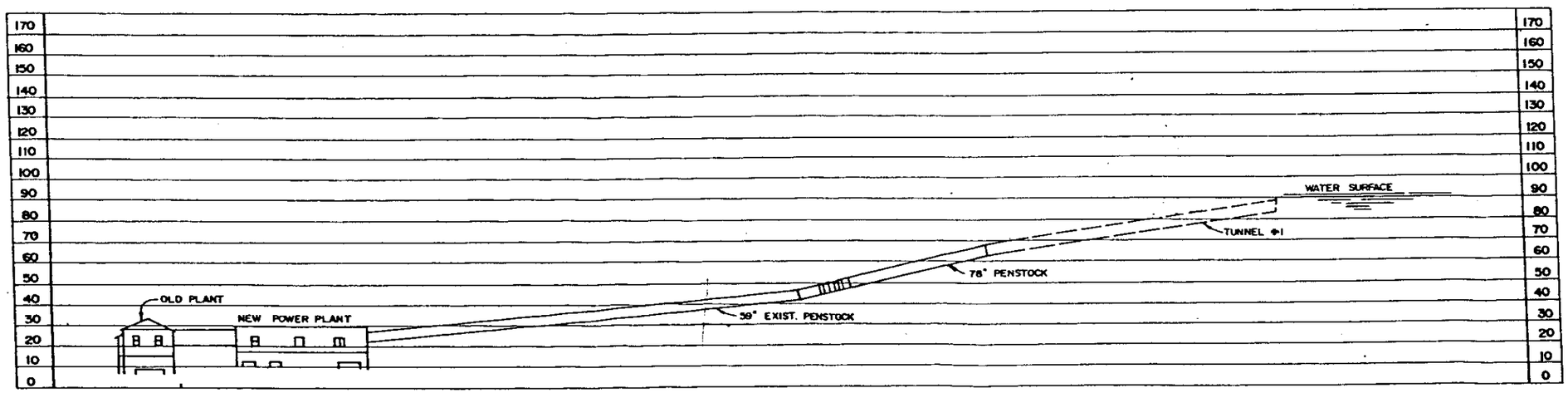


FIGURE A-2-B

AMENDED

EXHIBIT B

EXHIBIT B

Page B-1, Description of Plant Operation, first sentence

. . . through a VHF radio link with Fall River's office in Ashton, Idaho.

through a VHF radio line with Turbine Generator Service's office in Ashton, Idaho. Turbine Generator's office is located about 30 miles from the project site.

Page B-2, Second paragraph

	Adverse Water Year (1955)	Mean Water Year	High Water Year (1943)
Installed Capacity (MW)	6.0	6.0	6.0
Annual Energy (MWh)	25,900	31,400	32,900
Plant Capacity Factor (%)	49	59	62

	Adverse Water Year (1955)	Average Water Year	High Water Year (1971)
Installed Capacity (MW)	7.5	7.5	7.5
Annual Energy (MWh)	26.400	36.100	42.300
Plant Capacity Factor (%)	42	54	59

The power plant will have an installed capacity of 6,025 kilowatts (KW) and an average annual energy production of 31,400,000 kilowatt hours (KWh).

The power plant will have an installed capacity 7,500 kilowatts (KW) and an average annual energy production of 36,100,000 kilowatt hours (KWh).

Page B-2, first paragraph

. . . The minimum discharge necessary for generation is 140 cfs, which corresponds to generating capability of 1220 kW and is available 99.6 percent of the time. Ninety-five percent of the time the plant could generate 1800 kW or more. The lowest flow month of the 16-year record is January, 1943. During that month, the plant would have generated

960,000 kWh, or 1,290 average kW. The plant would not have been able to generate any power during 11 days of that month.

. . . The minimum discharge necessary for generation is 93 cfs, which corresponds to generating capability of 840 kW and is available 99.9 percent of the time. Ninety-five percent of the time the plant could generate 1950 kW or more. The lowest flow month of the 16-year record is January, 1943. During that month, the plant would have generated 2,636,600 kWh, or 1950 average kW. The plant would not have been able to generate any power during 8 days of that month.

Page B-4, first paragraph

. . . the R & J Brown pump that takes water directly from the Unit No. 5 penstock above the Felt Power Plant.

. . . the R & J Brown pump that takes water directly from a bulkhead on the Number 1 intake located immediately below the dam.

Paragraph - (2iii) Power Plant Hydraulic Capacity

The maximum hydraulic capacity of the power plant is 680 cfs.

The maximum hydraulic capacity of the power plant is a total of 884 cfs. This includes capacities of 464 cfs at the lower plant and 420 cfs at the existing plant.

Page B-6, Last paragraph

The average monthly flows in the project area are illustrated on Figures B-8 and B-9. Figure B-9 shows that under the existing condition, no flow passes the diversion dam between August and May (8 months in an average year). The Applicant originally proposed to pass at least 20 cfs whenever the inflow exceeds 300 cfs if it can be demonstrated that the flow would be beneficial to fish. The average monthly flow exceeds 300 cfs most of the time from March to December. Therefore, the applicant's original proposal would increase the river discharge in the project reach during 5 months and decrease the no-flow period from 8 months to 3 months.

The average monthly flows in the project are illustrated on Figure B-8 and B-9. Figure B-9 shows that under the current agreement between the Idaho Department of Fish and Game and Fall River Rural Electric, a minimum instream flow of 20 cfs is maintained between the dam and the powerplant during the months of July, August, September October, November, December, January, February, and March. During the months of April May and June a minimum instream flow of 50 cfs is maintained between the dam and powerplant. Under the license all flows in excess of

the agreed to minimum flows, up to and including an additional 680 cfs, were to be diverted to the new location for hydroelectric power production. Under the proposed amendment the agreed to minimum flows would still be met. Flows in excess of the agreed to minimum flow requirements up to and including 464 cfs will continue to be diverted for power production and will re-enter the stream at the location of the proposed powerplant which is 300 feet downstream of the powerplant proposed under the license. Excess flows over and above the 464 cfs will be diverted through the existing powerplant and re-enter the stream approximately 1600 feet upstream of the location shown in the license application. The net effect of this change is to make additional flows available in the 1600 foot reach of stream above the powerhouse shown in the license through the critical months of April, May, June and July. Based on average monthly discharges during an average water year the net benefit to this section of stream will be an increased flow of 72 cfs in April, 106 cfs in May, 220 cfs in June and 58 cfs in July.

Page B-9, (3) Power Utilization - Delete the entire section through page B-17.

Replace with the following:

(3) Power Utilization

The applicant has entered into a 35 year agreement with Utah Power and Light Company for the purchase of all energy generated from the Felt Hydroelectric Facility beginning in 1985. The contract provides that the buyer is obligated to purchase the kilowatt hours measured on the buyer's meters located on Utah Power & Light's Company's pole at their facility on the rim of the Teton River Gorge west of the customer's facility.

Exhibit B Figures and Tables

Table B-1 Loads and Resources - Delete

Table B-2 Loads and Resources (continues) - Delete

Figure B-2 Annual runoff in the Teton River above the Felt Hydroelectric Site. Remove and replace with new Figure B-2.

Figure B-3 Power Plant Hydraulic Capacity - Delete

Figure B-4 Tailwater Rating - Delete
See new Figure B-7

Figure B-5 Head vs Capability
Remove and replace with new Figure B-5

Figure B-5-A Combine Turbine-Generator Efficiency Curves
Added for information.

Figure B-6 Flood Frequency
No change - included for informational purposes.

Figure B-7 Teton River Stage vs Discharge at Power Plant Site
Remove and replace with new Figure B-7.

Figure B-8 Daily Discharge in the Felt Hydroelectric Project Area during June for the Average Water Year 1946.
Remove and replace with new Figure B-8 for Water Year 1950.

Figure B-9 Monthly discharge in the Felt Hydroelectric Project Area during the Average Water Year 1946.
Remove and replace with new Figure B-9.

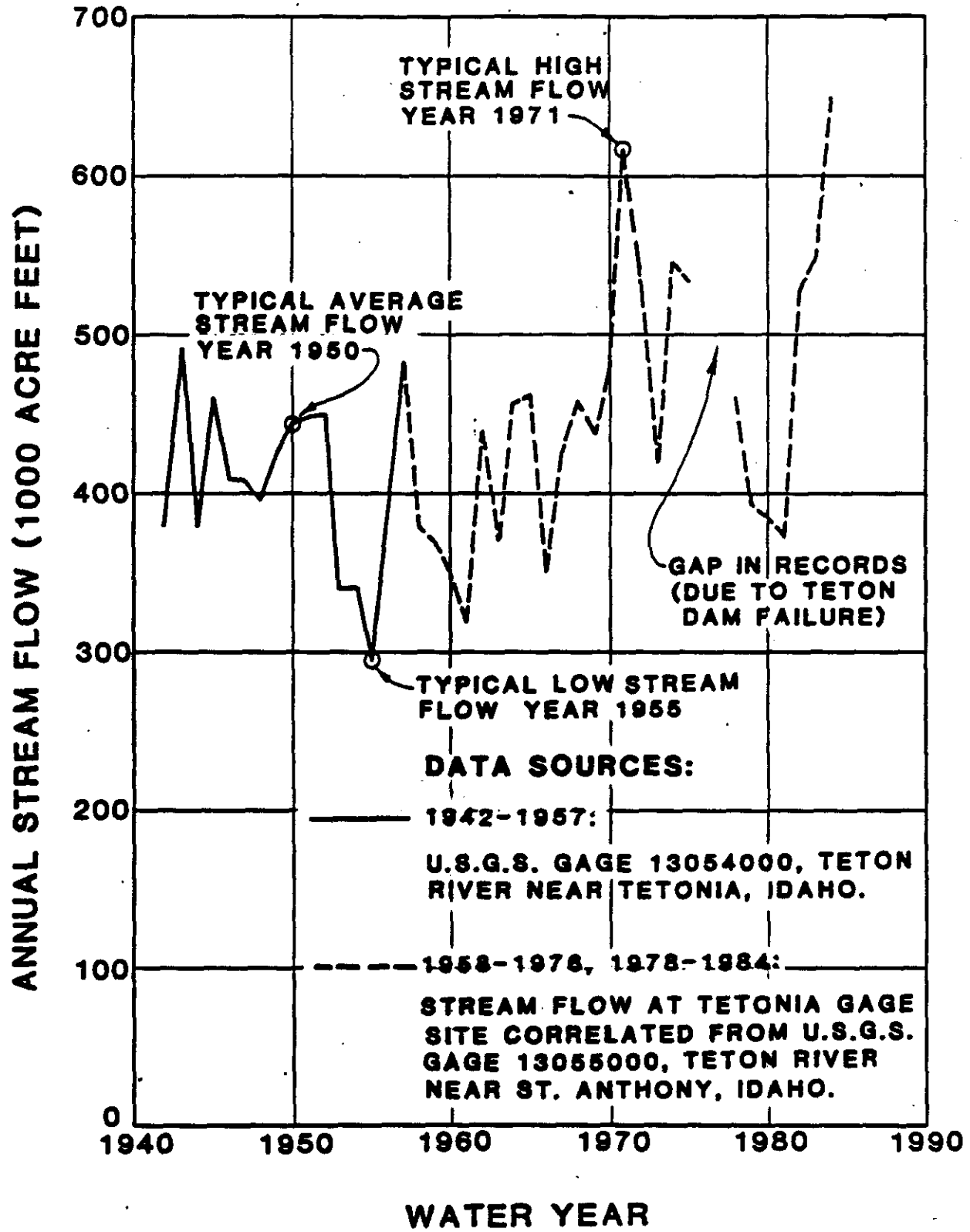
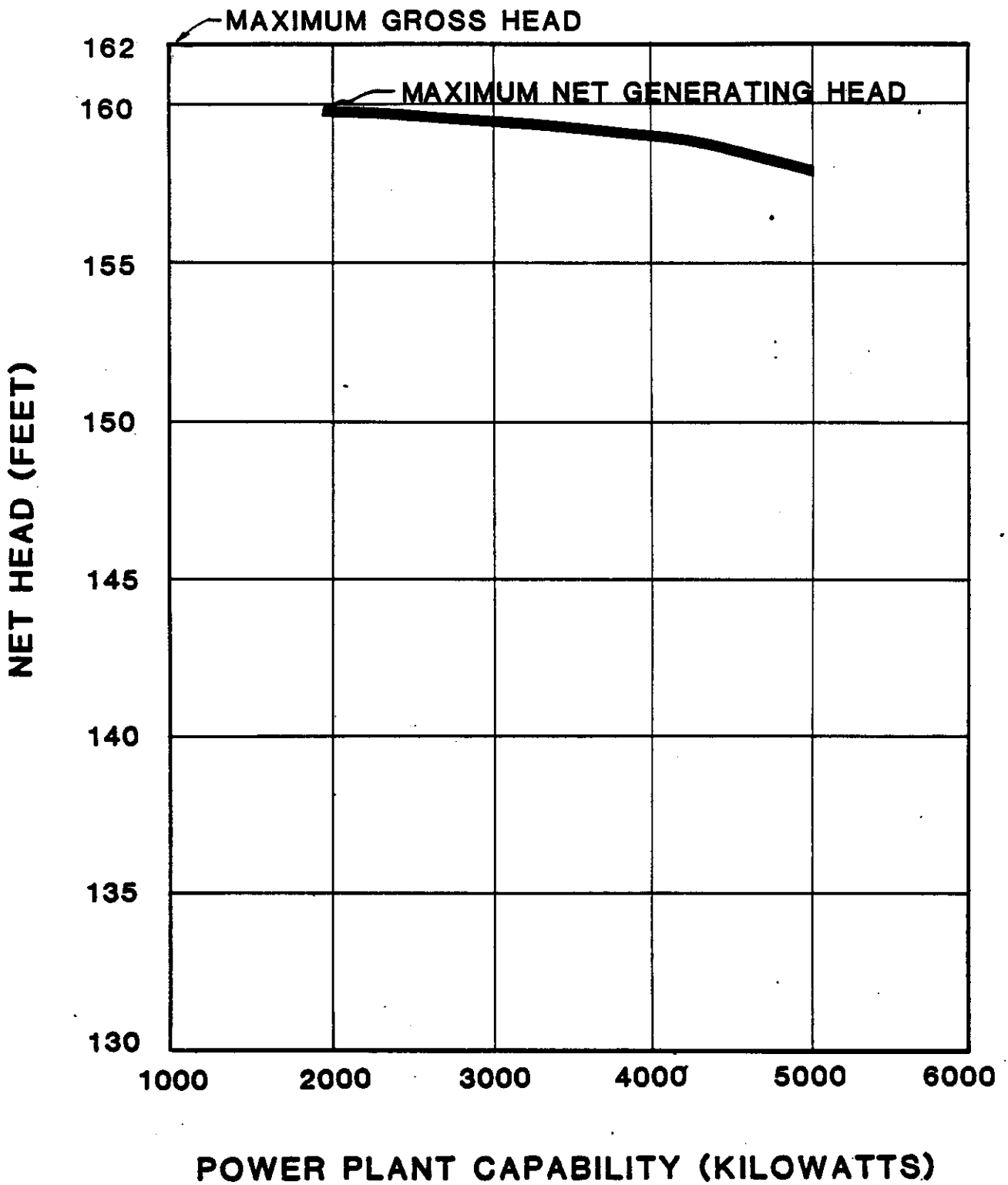


FIGURE B-2

ANNUAL RUN-OFF IN THE TETON RIVER
ABOVE THE FELT HYDROPOWER SITE



HEAD VS CAPABILITY

FELT

COMBINED TURBINE-GENERATOR EFFICIENCY CURVES

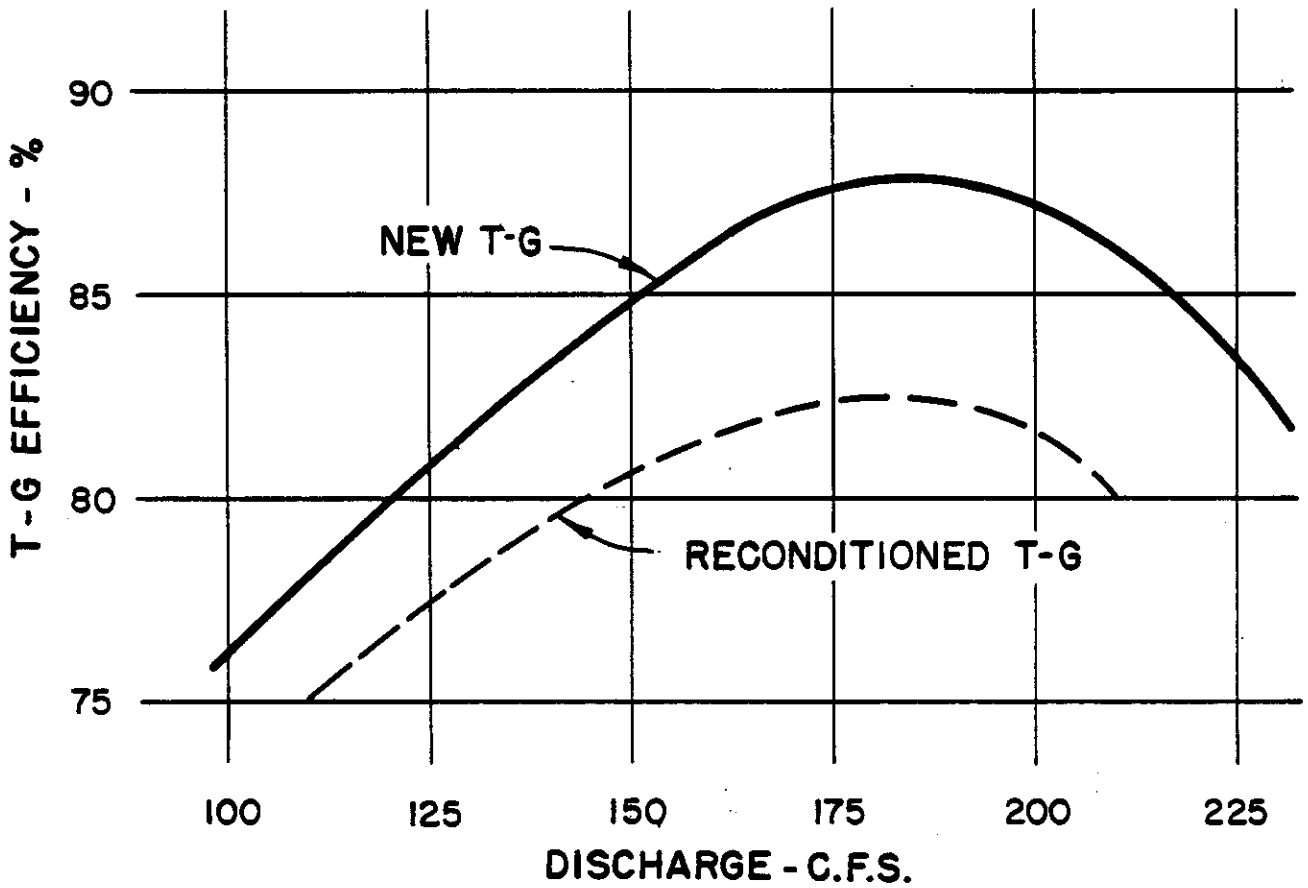
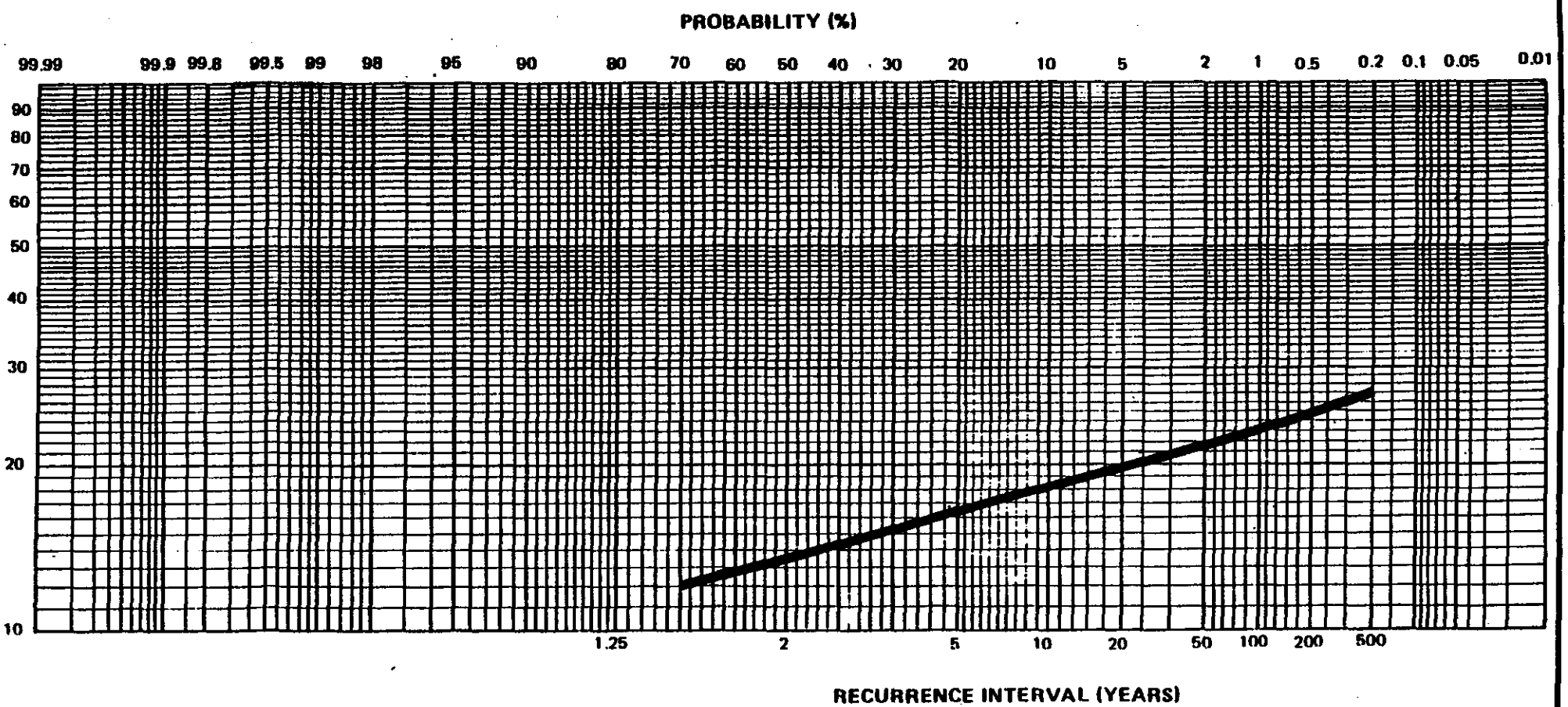


FIGURE B-5-A



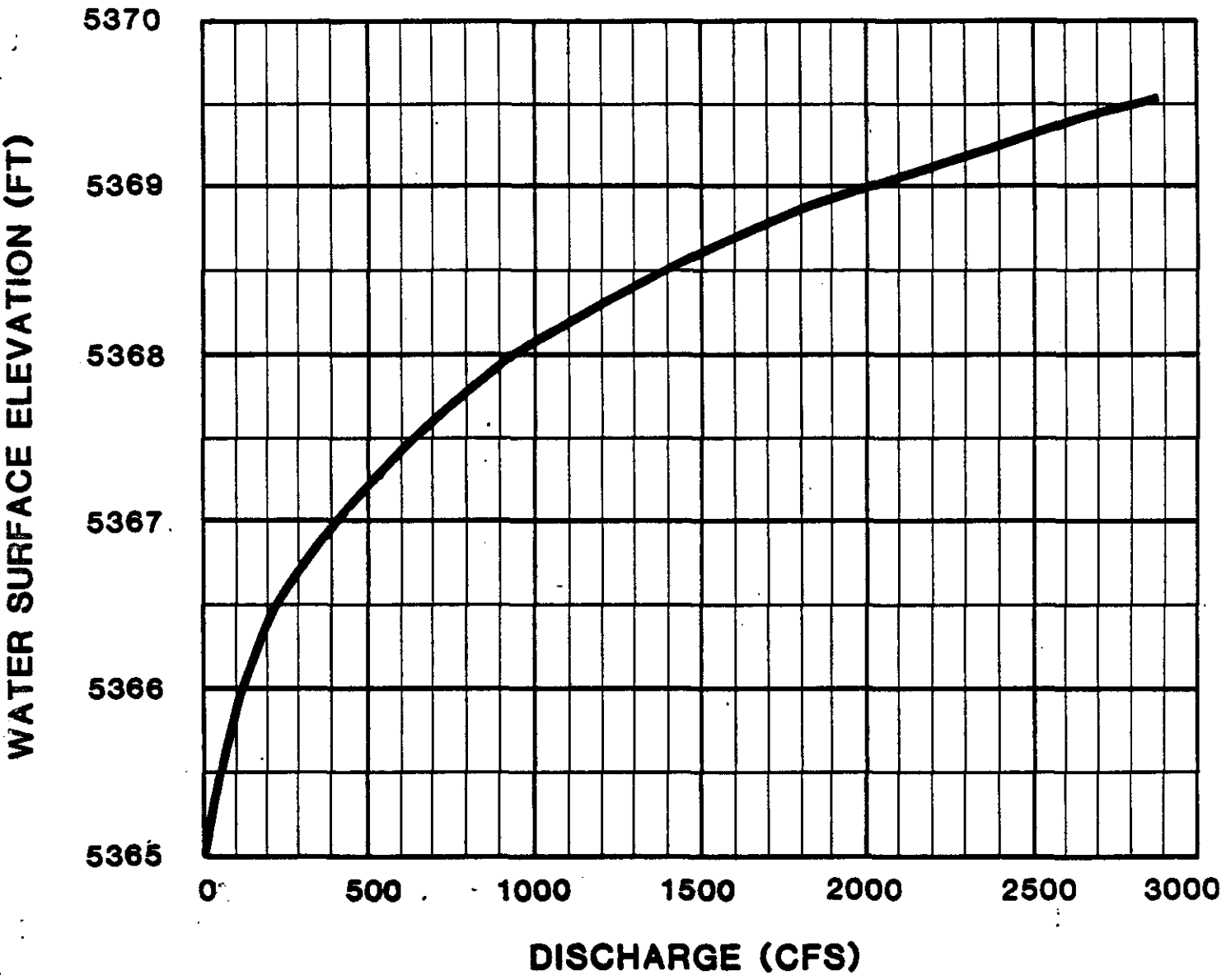
FELT HYDROELECTRIC PROJECT
FLOOD FREQUENCY CURVE
TETON RIVER NEAR TETONIA
DA = 471
PERIOD OF RECORD - 22 YEARS

FIGURE B-6

FLOOD FREQUENCY

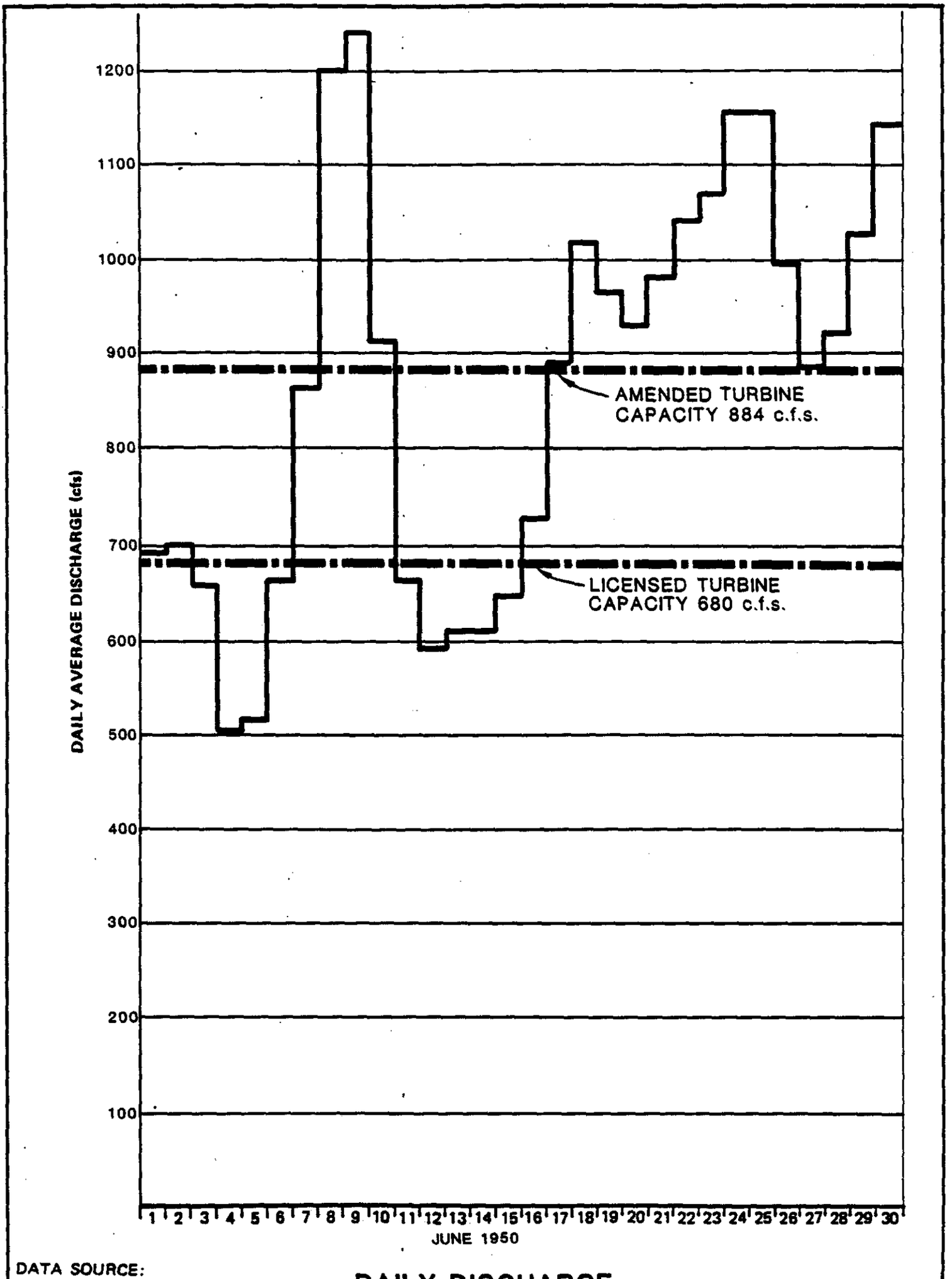
FELT LICENSE APPLICATION

04.L0



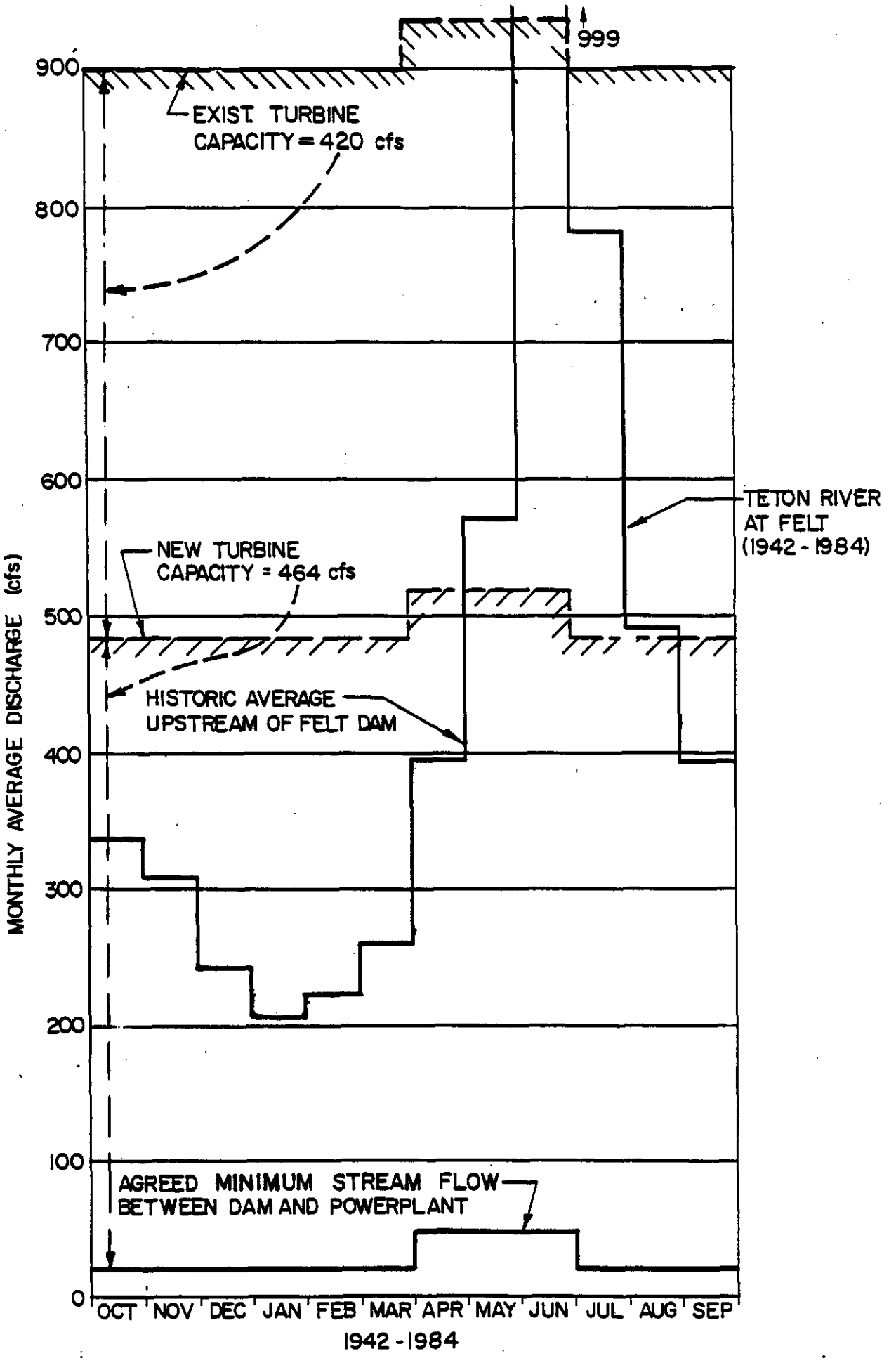
TETON RIVER STAGE VS
DISCHARGE AT POWER PLANT SITE

FIGURE B-7



DATA SOURCE:

DAILY DISCHARGE



AVERAGE MONTHLY DISCHARGE IN THE FELT HYDROELECTRIC PROJECT AREA

FELT LICENSE APPLICATION FIGURE B-9

EXHIBIT C

EXHIBIT C

Page C-2, Paragraph (2) Proposed Construction Schedule

The proposed construction schedule is shown by the bar chart on Figure C-1. This schedule indicates that the project could be generating power by the end of 1984 if the remaining phases of project develpment go smoothly. The remaining phases include licensing, design and specifications, construction, equipment installation and startup.

The proposed construction schedule is shown on Figure C-1. This schedule indicates that the project could be generating power by the end of 1985 if the remaining phases of the project development go smoothly. The remaining phases include approval of the amendment to the license, finalization of design and specifications, construction, equipment installation and startup.

Page C-3

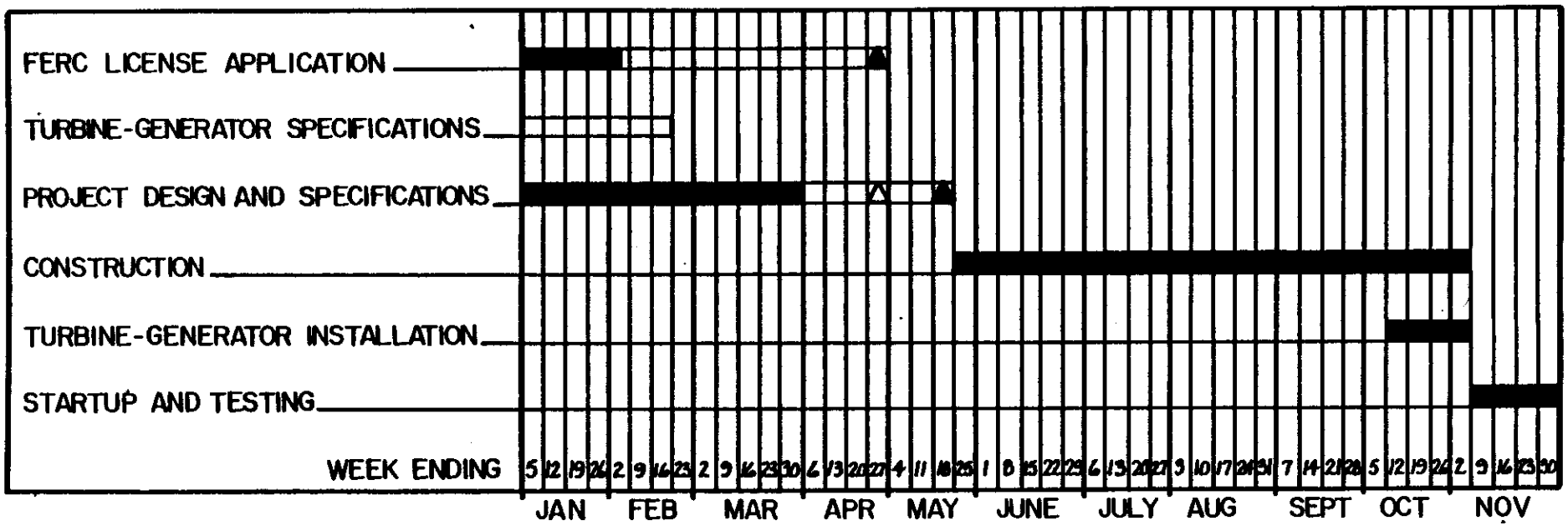
Construction will require two summer seasons because the heavy snowfall and cold temperatures common at the site may curtail winter construction. Equipment installation is scheduled for the second summer to allow approximately 1 year for delivery after the equipment contract award.

If this application for license amendment is not approved prior to early spring of 1985, construction of the facilities could require two summer seasons because the heavy snowfall and cold temperatures common to the site may curtail winter construction. Equipment installation is currently scheduled for late summer or early fall 1985. An advantage to the amendment application is that it utilizes equipment that will be available for fall 1985 delivery.

Exhibit C - Figures

Figure C-1, Project Schedule

Remove and replace with new Figure C-1.



LEGEND

- ENGINEERING OR CONSTRUCTION ACTIVITY
- PROCESSING OR ADVERTISING PERIOD
- BID OPENING
- APPROVAL OR CONTRACT AWARD

PROJECT SCHEDULE

FIGURE C-1

EXHIBIT D

EXHIBIT D

Page D-1, Paragraph (3) New Development Costs

The estimated project construction costs are summarized in Tables D-2 and D-3. Construction costs for the civil items were derived by calculating the quantities of various types of work and applying estimated unit prices to each type of work. Unit prices are based upon experience and published guidelines for similar work accomplished in 1981.

The costs of major equipment items (turbine, generator, transformer, guard valve) were obtained from manufacturers and suppliers of these types of equipment.

The estimated project construction costs are summarized in Tables D-2 and D-3. Construction costs for the civil items were derived from actual bids or by calculating the quantities of various types of work and applying estimated unit prices to each type of work. Where actual bids were not available, unit prices are based upon experience and published guidelines for similar work accomplished in 1984.

The costs of major equipment items (turbine, generator, transformer, guard valve) were obtained from manufacturers and suppliers of these types of equipment.

Page D-2, 4. Financing Requirements and Annual Costs

The cost estimates were prepared using 1981 cost levels and include a 20 percent contingency. The project's financing requirements and annual costs assume:

The project operating by the end of 1984.

Project capital costs will escalate at 10 percent per year until the end of the construction period.

Funds will be borrowed when needed according to the cost schedule shown in Table D-4.

Engineering costs include feasibility, licensing, design, preparation of construction drawings and specifications, construction managements and inspection during construction.

The project's long-term financing will be obtained from REA.

Financing will be repaid in equal annual installments over 35 years after construction.

No principal payments will be made during the period of project construction. Interest payments will be made during construction; the funds to make the interest payments will be borrowed and capitalized.

Average annual operation, maintenance and repair costs will be about $60,000.

Fall River's administration and overhead cost will be about $20,000 per year.

Annual insurance and taxes will be about $20,000.

The cost estimates were prepared using 1984 cost levels and include a 20 percent contingency. The project's financing requirements and annual costs assume:

The project operating by the end of 1985.

Funds will be borrowed when needed over the twelve month construction schedule.

Engineering costs include feasibility, licensing, design, preparation of construction drawings and specifications, construction managements and inspection during construction.

The project's long-term financing will be obtained from private sources. Equity financing - $1,550,000. Debt financing -$7,200,000.

Financing will be repaid in equal annual installments over 15 years after construction.

No principal payments will be made during the period of project construction. Interest payments will be made during construction; the funds to make the interest payments will be borrowed and capitalized.

Average annual operation, maintenance and repair costs will be about $100,000.

Administration and overhead cost will be about $20,000 per year.

Annual insurance and taxes will be about $20,000.

Page D-3, 5. Value of Power

As discussed previously, the project is expected to produce energy in the first year of operation at a cost of between 40 and 70 mills per KWh under average water conditions, depending upon interest rates and assuming an on-line date in late 1984. This compares favorably to other sources of

As discussed previously, the project is expected to produce energy in the first year of operation at a cost of between 40 and 70 mills per KWh under average water conditions, depending upon interest rates and assuming an on-line date in late 1985.

Pages D-4 and D-5 - Delete

Exhibit D -Tables

Table D-1, Unchanged, included for informational purposes

Table D-2, remove and replace with new Table D-2.

Table D-3, remove and replace with new Table D-3.

Table D-4, remove and replace with new Table D-4.

Table D-5, Delete

Table D-6, remove and replace with new Table D-6.

Table D-1
FELT POWER PLANT
COST OF EXISTING PLANT

FERC Account Number	Description	Initial Costs (years)			Total Cost of Plant When Shut Down (1968)	Rehabilitation Costs		Total Plant Cost
		1960 (Acquisition)	1961/62	1965		1980/81	1981/82 Estimated	
301	Organization	$ 11,943.93			$ 11,943.93			$ 11,943.93
330	Land and Land Rights	332.00			332.00			332.00
331	Structures and Improvements	13,947.41	$2,497.11		16,444.52	$27,946.00	$ 8,500.00	52,890.52
332	Reservoirs, Dams, and Waterways	31,803.90		$11,360.04	43,163.94			43,163.94
333	Waterwheels, Turbines, and Generators	91,864.79		1,695.01	93,559.80			93,559.80
334	Accessory Electrical Equipment	878.27	1,577.73		2,456.00		2,000.00	4,456.00
335	Miscellaneous Power Plant Equipment	3,141.19			3,141.19	40,785.00	12,800.00	56,726.19
336	Roads, Railroads, and Bridges	5,184.60	2,734.48		7,919.08			7,919.08
	TOTAL	$159,096.09	$6,809.32	$13,055.05	$178,960.46	$68,731.00	$23,300.00	$270,991.46

TABLE D-2
FELT PROJECT QUANTITIES AND COSTS
(1984 Cost Level)

FERC ACCOUNT	QUANTITY	UNIT	UNIT PRICE	AMOUNT
Hydroelectric Plant Accounts				
330 Land and Land Rights				
Land Purchase		LS		$ 10,000
Water Rights		LS		3,000
SUBTOTAL (330)				$ 13,000
331 Structures and Improvements				
Power Plant				
Parking Area		LS		$ 2,000
Cofferdam	2,000	CY	$ 2	4,000
Dewatering		LS		20,000
Excavation-common	4,300	CY	10	43,000
Excavation-rock	1,500	CY	25	37,500
Concrete-Stage 1	1,180	CY	300	354,000
Concrete-Stage 2	350	CY	100	35,000
Reinforcing Steel	40	ton	1,000	40,000
Miscellaneous Metal	7	ton	4,000	28,000
Backfill	2,600	CY	10	26,000
Rock bolts and shoring	4,000	SF	10	40,000
Tailrace Excavation	4,000	CY	10	40,000
Remove existing plant & machinery (Units 1, 2, 3)		LS		30,500
SUBTOTAL (331)				$ 700,000
332 Reservoirs, Dams and Waterways				
Penstock				
Intake Rehabilitation		LS		40,0000
Tunnel Rehabilitation		LS		27,000

Excavation	11,000	CY	$ 7	77,000
Backfill	6,000	CY	5	30,000
Concrete Anchor Blocks	300	CY	200	60,000
Reinforcing Steel	20	ton	1,000	20,000
Welded Pipe - straight (90" x 3/8")	1,850	LF	341	631,000
Welded Pipe - straight (78" x 3/8")	200	LF	200	40,000
Branches and Bends		LS		85,000
Surge Protection		LS		90,000
SUBTOTAL (332)				$1,100,000
333 Waterwheels, Turbines and Generators				
Turbine, Generator and Accessories		LS		$2,430,000
Turbine Guard Valve	2	ea	$ 35,000	70,000
SUBTOTAL (333)				$2,500,000
334 Accessory Electrical Equipment				
Station Service		LS		$ 35,000
Controls and Switching		LS		330,000
Buses, Conduits and Cables		LS		35,000
Remote Supervision		LS		60,000
SUBTOTAL (334)				$ 460,000
335 Miscellaneous Power Plant Equipment				
Draft Tube Gates and Hoists	4	ea	10,000	$ 40,000
Miscellaneous Equipment		LS		110,000
SUBTOTAL (335)				$ 150,000
336 Roads, Railroads and Bridges				
Access Road Earthwork	50,000	CY	$ 5.00	$ 250,000
Transmission Plant Accounts				
350 Land and Land Rights		LS		$ 5,000
352 Structures and Improvements				
Steel Structures and Fence		LS		$ 7,000
Substation Foundation		LS		7,000
SUBTOTAL (352)				$ 14,000

353 Station Equipment					
Transformers (7.5 MVA, 4.16/24.9 kV) (2.0 MVA 2.4/24.9 kV)					$ 84,000
Breakers, Switches, Fuses					22,000
Grounding and Conduit					2,000
Cable					2,000
Installation					10,000
SUBTOTAL (353)					$ 120,000
Transmission Plant Accounts					
354 Towers and Fixtures	2	ea	$	15,000	$ 30,000
355 Poles and Fixtures					8,000
356 Overhead Conductors and Devices					
Conductors	2,200	LF		12	$ 26,400
Aerial Ground Wire		LS			3,600
Insulation					2,000
Devices					3,000
SUBTOTAL (356)					$ 35,000
357 Underground Conduit	4000	LF	$	12.50	$ 50,000
358 Underground Conductors and Devices					$ 9,000
359 Roads and Trails					$ 5,000

Table D-3
FELT PROJECT
COST SUMMARY
(1984 COST LEVEL)

FERC ACCOUNT NUMBER	ACCOUNT DESCRIPTION	COST
Hydroelectric Plant Accounts		
330	Lands and Land Rights	$ 13,000
331	Structures and Improvements	700,000
332	Reservoirs, Dams, and Waterways	1,318,000
333	Waterwheels, Turbines, and Generators	2,500,000
334	Accessory Electrical Equipment	460,000
335	Miscellaneous Power Plant Equipment	150,000
336	Roads, Railroads, and Bridges	250,000
Transmission Plant Accounts		
350	Land and Land Rights	5,000
352	Structures and Improvements	14,000
353	Station Equipment	120,000
354	Towers and Fixtures	30,000
355	Poles and Fixtures	8,000
356	Overhead Conductors and Devices	35,000
357	Underground Conduit	50,000
358	Underground Conductors and Devices	9,000
359	Roads and Trails	5,000
	Subtotal	$5,667,000
	Contingencies	1,133,000
	Subtotal	$6,800,000
	Sales Tax (3% of Materials)	108,000
	TOTAL CONSTRUCTION COST	$6,908,000
	Engineering and Owner's Cost	1,382,000
	TOTAL PROJECT COST (1984)	$8,290,000

TABLE D-4
FINANCING REQUIREMENTS AND ANNUAL COSTS
($1,000)

Project Cost in 1984	$	8,290
14% interest during Const		460
Total Financing Requirement	$	8,750
From Equity	$	1,550
Debt Financing	$	7,200
Annual Costs		
Principal and Interest	$	1,172
Operation and Maintenance	$	100
Administration & General	$	20
Insurance and Taxes		20
Total Annual Cost	$	1,312
Average Energy Generation (MWh)	$	36,100
Unit Energy Cost in 1984 (¢/kWh)		3.6

EXHIBIT E
ENVIRONMENTAL REPORT

EXHIBIT E
ENVIRONMENTAL REPORT

Page E-5 & E-6, (2) Report on Water Use and Water Quality - Water Use - second paragraph third sentence

The estimated average daily flow at the project site is 413 cfs. Daily flow has ranged from about 62 cfs to more than 1,900 cfs during the period of record. Average monthly flows for 5 years of record at Tetonia are shown in Table E-1.

The discharge record at the Felt Project site was obtained by adjusting the Tetonia gage record for irrigation diversions and precipitation runoff inflow along the intervening reach. The runoff adjustment was derived from average monthly precipitation values and the 9-square-mile increment of additional drainage area between the hydro site and gage.

The Felt Hydroelectric Project will be capable of utilizing a maximum of 680 cfs through both turbines. Fall River Rural Electric Cooperative, Inc., has requested water rights to an additional 300 cfs from the Idaho Department of Water Resources for a total water right of 600 cfs. The project represents nonconsumptive use of the water and will be subject to available flows during the irrigation season. Prior diversion and water rights of irrigators will not be altered by the project.

Station No. 130544000 located just above the proposed Felt Hydroelectric Project measured the flows on the Teton River near Tetonia, Idaho for the 16 year period from 1942 to 1957. Flows have not been measured since 1957. Station 13055000 has measured flows on the Teton River near St. Anthony, Idaho from 1942 until the present. The correlated flow records at Tetonia, Idaho were obtained by correlating by months the flows between the two stations for the years 1942 through 1957 and then projecting the flows at Tetonia from the actual measured data on the Teton River near St. Anthony, Idaho. Based on this correlation the estimated average daily flow at the project site is 435 cfs. Daily flow has ranged from about 62 cfs to more than 1900 cfs during the period of record. Average monthly flows for the 16 year period from 1942 to 1957 are shown on Table E-1A. Correlated flow records at Tetonia, Idaho are shown on Table E-1, and the average monthly flows for the Teton River near St. Anthony, Idaho for the years 1942 through 1984 are shown on Table E-1B.

The Felt Hydroelectric Project is capable of utilizing a maximum of 884 cfs through all four turbines. This includes a capacity of 464 cfs at the lower plant and 420 cfs at the existing upper plant. Fall River Rural Electric Cooperative has three existing water rights totaling 300 cfs for hydropower generation at the site. They also filed an application for a

permit to appropriate the waters of the State of Idaho for 300 cfs on March 18, 1981. This permit has been approved contingent upon granting of the project's FERC license. This brings the total water right available for the project to 600 cfs. Concurrently with the filing of this application for amendment of license, the applicant is filing an application for permit to appropriate public waters of the State of Idaho for an additional 300 cfs. If approved this will bring the total water rights available for the project to 900 cfs. The project represents a non-consumptive use of the water and will be subject to available flows during the irrigation season. The water rights will have no effect on prior diversions and water rights of irrigators in the area. The supply water for the R and J Brown irrigation pumps will be met prior to the diversion of water into the hydroelectric generation facilities. The agreed minimum flows of 20 cfs during the months of July through March and 50 cfs for the months of April through June will continue to be met. An additional benefit of the project as amended is that under the existing license all flows up to 680 cfs would have been diverted for power production and returned to the Teton River some 1600 feet below the existing power plant. Under the development proposed in this amendment only 464 cfs will be diverted to the new plant which is located 300 feet below the plant proposed in the license application. The flows in excess of the 464 cfs will be diverted into the existing turbines and will return to the river 1600 feet above the power plant location approved in the license.

Based on average monthly flows for the project area, during the critical months of April, May, June and July this will place an additional 72, 106, 220 and 58 cfs respectively into the 1600 foot section of the Teton River.

Page E-7, Minimum Flows

The capacity of the turbines will increase from 420 cfs to 680 cfs, and any remaining flow will spill over the dam. As shown on Figure E-6, the average monthly flows will usually be below turbine capacity. During most months the available flows will be routed through the penstocks and discharged into the tailrace. Consequently, flows will be diverted from the segment of river between the dam and the tailrace.

The capacity of the turbines will increase from 680 cfs to 884 cfs, consisting of capacities of 464 cfs at the lower (new) site and 420 cfs at the upper (existing) site. Any remaining flow will spill over the dam. Minimum flows of 20 and 50 cfs will continue to be met. As shown on Figure E-6, the average monthly flows will usually be below combined turbine capacity. During most months the available flows will be routed through the penstocks and discharged into the tailrace. Consequently, flows will be diverted from the segment of river between the dam and the tailrace. An advantage to the application for amendment of license is that the flows diverted to the lower powerplant have been reduced from

680 to 464. All flows from 464 cfs to the total maximum diversion of 884 will be diverted to the existing plant. These flows will then re-enter the river some 1600 feet above the location of the power plant in the license. Minimum instream flows as established in consultation with the Idaho Department of Fish and Game of 20 cfs during the months of July through March and 50 cfs through the months of April through June will continue to be met. The net effect of the diversion scheme proposed in the amendment to license is that during the critical water months of April through June additional water will be available in the 1600 feet of river above the proposed power plant location shown in the license and the agreed minimum flows will be available in the affected reach from the dam to the tailrace.

Second to last sentence

IDFG requested a minimum instream flow of 20 cfs between the dam and the existing powerhouse tailrace (see correspondence in the Exhibit E Appendix). IDFG has not identified a minimum flow for the additional 1500 feet of stream which the project will dewater.

IDFG requested minimum instream flows of 20 cfs during the months of July through March and 50 cfs during the months of April through June. IDFG has not identified a minimum flow for the additional 300 feet of stream which the project will dewater; however, a January 23, 1985 letter contains the following statement:

"Our department has no objections to a revised location up to 300 feet down stream of the original provided the agreed to minimum flows are maintained in the extended stream reach to be affected and that the licensee guarantees fish passage through the extended reach. We do not anticipate problems with fish passage, but the extended reach was not included in the original minimum stream flow study. Licensee should be aware that satisfactory fish passage should be maintained by one means or another if the agreed to minimum flows should be inadequate for the extended stream reach."

As stated earlier the applicant intends to redivert portions of the flows into the Teton River at the existing powerhouse location. This is 1600 feet upstream of the site approved in the original license and considered in the original agreed to minimum flows. The licensee is also required as a condition of the license to construct and maintain a fish ladder to provide for fish passage. The applicant further agrees that if additional measures are required, it will take whatever action is necessary to maintain the agreed to minimum flow in the extended stream reach (see January 23, 1985 letter contained in Appendix to Exhibit E).

Page E-8, Anticipated Impacts, second paragraph, second sentence

Construction of the new powerhouse and excavation of the tailrace will be done during two summers, beginning in June.

Based on timely approval of the application for amendment of license, construction of the new powerhouse and exacavation of the tailrace will be done during the summer, beginning in either June or July.

Page E-9, first sentence

Improvement of the penstock intakes will consist primarily of replacing or repairing the steel gates and will have no effect on water quality.

Improvement of the penstock intakes will consist primarily of replacing or repairing the steel gates and adding a shelter to Intake Structures #1,#2 and #3. A fish ladder and walkway will also be constructed. A typical fish ladder is shown on Figure E-7. The construction should have little or no effect on water quality.

Page E-12, last paragraph

The river below the dam to the existing powerhouse is essentially dewatered (except for dam seepage) during most of the year. Fish stranding occurs and small pools form which quickly lose dissolved oxygen and increase in temperature. Fish in these pools become stressed and fish-kills are possible under existing conditions. During the September field survey, a flow of 2 to 5 cfs was observed going over the dam. This flow cleared the pools and stranded fish moved downstream.

The river below the dam to the existing powerhouse is essentially dewatered (except for dam seepage) and minimum stream flows, during most of the year. Under the license the river below the dam to the proposed powerhouse location some 1600 feet below the existing powerhouse would be essentially dewatered during most of the year except for minimum instream flows of 20 and 50 cfs which have been agreed to by the agencies. The minimum flows were established to prevent fish stranding and to provide for continual movement of fish throughout the affected reaches. Higher flows were agreed to during April, May and June to provide for upstream fish passage for cutthroat trout spawning migration. An advantage to the application for amendment is that based on mean monthly flows it would place additional flows of 72, 106,220 and 58 cfs into the river during the critical months of April through July respectively (see Figure B-9).

Page E-17 and E-18, Anticipated Impacts, Fisheries, fourth sentence, first paragraph

The project proposal is to locate a new powerhouse 1200 feet north of the existing plant. Because of the bend in the river, the distance along the stream channel will be about 1500 feet. The stream channel distance from

the dam to the existing plant is 1300 feet. The removal of water from another 1500 feet feet of the river will exacerbate the existing problems of fish movement downstream and stranding by increasing the dewatered length from 1300 feet to 2800 feet.

Power generation will require the full instream flow 85 percent of the year. The spring freshet typically occurs in June, at which time river flows exceed the proposed turbine capacity of 680 cfs. Figure E-5 shows the discharge through the project area in June 1946 (a representative average water year). Except for 10 days in June of the average year, water will flow over the dam. This freshet coincides with the IDFG fish planting program, and there is more than adequate flow in June to allow for downstream passage. The proposed and existing project discharges are shown in Figure E-6. This figure is also based upon the 1946 water year and the average monthly flows. From this figure it can be seen that under the existing project conditions, water passes over the dam from April through July, and that under the increased flow requirements of the proposed project, water will still flow over the dam during June.

The project operation agreed upon by IDFG and Fall River will provide river flow between the dam and power plant of 20 cfs during 9 months and 50 cfs during 3 months. This will eliminate the fish stranding which now occurs, and represents a significant improvement over existing conditions. Consequently, the period during which the fish can use this reach of the river will be increased from 4 months to 12 months in an average year.

The project proposal is to locate a new powerhouse 1500 feet north of the existing plant. Because of the bend in the river, the distance along the stream channel will be about 1900 feet. The stream channel distance from the dam to the existing plant is 1300 feet. The removal of water from another 1900 feet feet of the river could exacerbate the existing problems of fish movement downstream and stranding by increasing the dewatered length from 1300 feet to 3200 feet. Minimum flow requirements have been set in conjunction with the Idaho Dept. of Fish and Game to facilitate fish passage and alleviate stranding.

Power generation will require the full instream flow 93 percent of the year. The spring peak runoff typically occurs in June, at which time river flows exceed the proposed turbine capacity of 884 cfs periodically during that period. During this time the agreed to minimum flow of 50 cfs will be supplemented by flows over and above 934 cfs (884 cfs total hydraulic capacity plus 50 cfs minimum release). This coincides with IDFG fish planting programs. The proposed and existing project discharges are shown on Figure E-6. From this figure it can be seen that under the license conditions, water passes over the dam from April through July and that under the increased flow requirements of the proposed project, water

may still flow over the dam during June. Figure E-5 shows the discharge through the project area in June 1946 (a representative average water year). This peak flow coincides with the IDFG fish planting program, and there is more than adequate flow in June to allow for downstream passage. The proposed and existing project discharges are shown in Figure E-6. This figure is also based upon the 1946 water year and the average monthly flows. From this figure it can be seen that under the existing project conditions, water passes over the dam from April through July, and that under the increased flow requirements of the proposed project, water will still flow over the dam during June.

A benefit under this application for amendment of license is that all flows in excess of the 464 maximum plant capacity of the proposed new plant, up to and including a combined flow of 884 cfs, will be diverted through the equipment at the existing plant. This places additional water in the 1600 foot stretch of river between the powerhouse location in the license and the existing powerhouse. This will be especially beneficial during the critical months of April, May, June and July when additional flows of 72 cfs, 106 cfs, 220, and 58 cfs respectively will be available. In addition to the minimum release flows of 20 cfs during nine months and 50 cfs during three months, all flows in excess of total plant capacity will continue to pass over the dam. This will eliminate the fish stranding which used to occur and represents a significant improvement over existing conditions in the license. Consequently, the period during which the fish can use the reach of the river from the dam to the powerhouse will be increased from four months to 12 months in an average year and the period of time when additional flows will be available in the 1600 foot reach from the existing powerhouse to the powerhouse in the license will be four months.

Next to last paragraph

No major alterations to the penstock intakes, dam or reservoir are proposed. Therefore, there will be no increase in downstream sediment loading or reservoir volume, nor changes in channel configuration. There will also be no additional impacts to the fisheries or aquatic resources upstream of the dam.

IDFG has expressed its concern that the confluence of the Teton River and Badger Creek not be dewatered. The additional penstock and new powerhouse will be located about 1100 feet above the confluence, and the flow past Badger Creek will not change.

No major alterations to the penstock intakes, dam or reservoir are proposed. Therefore, there will be no increase in downstream sediment loading or reservoir volume, nor changes in channel configuration. There will also be no additional impacts to the fisheries or aquatic resources upstream of the dam.

IDFG has expressed its concern that the confluence of the Teton River and Badger Creek not be dewatered. The additional penstock and new powerhouse will be located about 800 feet above the confluence, and the flow past Badger Creek will not change.

Page E-19, Wildlife, last paragraph

Most of the new penstock will be buried except for an approximately 300 foot long movement barrier created by access road and penstock construction. Cut and fill construction on the steep slope will create two steep high-walls; however, finished slopes will be comparable to existing slopes. These and the abovegrade 8-foot-diameter penstock will create a movement barrier running parallel to 300 feet of the river.

Under the proposed application for amendment of license, the 7.5 foot diameter penstock collects, by means of 78-inch diameter steel pipes the discharges of tunnels No.2 and No. 3 at their outlet portals, by means of a reinforced concrete bulkhead and transition. The 7.5 foot penstock will then be buried. The point of connection to Tunnel No. 2 and 3 is approximately 300 feet upstream of a point of connection shown in the license. This eliminates all but 20 to 30 feet of the 300 foot long movement barrier that would have been created by the access road and penstock construction. The improved alignment also allows for a positive grade to be maintained on the penstock from its point of convergence with the two 78 inch steel pipes to the new proposed powerhouse location. The barrier to movement that would have been created under the license will be eliminated under this amendment. Additionally a 120 foot long 78-inch diameter penstock and bifurcation will collect water from the outlet portal of Tunnel No. 1 and feed the realigned portins of the existing 59-inch diameter penstocks to existing turbine-generator units No. 4 and No. 5.

Page E-20, Botanical Resources, first paragraph

It is anticipated that dewatering an additional 1500 feet of river will have minimal impact on the riparian species occurring along the banks. Density of existing species could drop and invasion of weedy species might occur. The present dewatered reach of stream, from the dam to the existing powerhouse, supports a diverse stand of woody species and a health understory. It is assumed that the stretch below the existing powerhouse to the proposed powerhouse would support a similar vegetation complement as the presently dewatered stretch.

It is anticipated that dewatering an additional 300 feet of river will have minimal impact on the riparian species occurring along the banks. Density of existing species could drop and invasion of weedy species might occur. The present dewatered reach of stream, from the dam to the existing powerhouse, supports a diverse stand of woody species and a health understory. It is assumed that the stretch below the existing powerhouse to the proposed powerhouse would support a similar vegetation complement as the presently dewatered stretch. This will be further mitigated by the fact that the diversion to the lower powerhouse

location has decreased from 680 cfs under the license to 464 cfs under this amendment to license. Additional flows will be diverted through the exiting powerhouse location and will be available in the 1600 foot reach of stream that would have been dewatered under the license. These increased flows during the months of April, May, June and July will tend to aid in supporting vegetation in the riparian zones next to the river.

Page E-22, first paragraph, second sentence

A fish ladder was proposed by IDFG and U.S. Fish and Wildlife Service. Informal discussion with IDFG suggested that a flow of 10 cfs would be sufficient to operate a fish ladder.

A fish ladder was requested by IDFG and U.S. Fish and Wildlife Service and will be provided by the applicant. A design for typical fish ladder is shown on Exhibit E-7.

Second paragraph

If the usefulness of a fish ladder can be established and its cost justified in terms of the estimated number of trout which would use it, the applicant would be willing to share the cost of the facility. However, it would be premature to decide now that a facility should be constructed.

A fish ladder for the facility will be constructed as a part of the project. The fish ladder will be designed in cooperation with representatives of the Idaho Department of Fish and Game.

Last sentence **E-22** and first paragraph **Page E-23**

The applicant proposed to share the expense of an expanded fish stocking program rather than the construction of fish passage facilities, which may be of questionable value. Additional fisheries mitigation will include the enhancement of recreational opportunity. Anglers and rafters will be allowed access to the reservoir, the project reach, the tailrace and downstream access - areas which are presently inaccessible. Catch rates will be improved in the tailrace area because a deep pool will be created, and fish will concentrate in the area. The high quality resident trout fishery in the reservoir will be maintained and catch rates are expected to remain at their present level.

Idaho Department of Fish and Game has decided that a fish ladder in this location is desirable. A fish ladder will be constructed as a part of this application for amendment. Additional fisheries mitigation will include the enhancement of recreational opportunity. Anglers and rafters will be allowed access to the reservoir, the project reach, the tailrace and downstream access - areas which are presently inaccessible. Catch rates

will be improved in the tailrace area because a deep pool will be created, and fish will concentrate in the area. The high quality resident trout fishery in the reservoir will be maintained and catch rates are expected to remain at their present level.

Page E-26, Report on Recreational Resources, Existing and Potential Recreational Facilities and Use

Access is extremely poor - down a steep four-wheel-drive road, which in the past has been posted with a no trespassing sign due to the danger of travel.

Under the amendment to license application a new access route has been planned which provides for a wider road with flatter grades. The road will continue to be posted with "no trespassing" signs; however, the road will be available for foot access.

Page E-27, first paragraph, reprinted for clarity

Foot access will be allowed down the four-wheel-drive road, with parking space available around the Badger substation at the head of the road. Second, a new river reach will be made accessible to fishermen in the area of the new powerhouse and tailrace structure. Finally, improvements to the tunnel intakes and log booms will provide greater public safety protection in the dam area.

Last paragraph

The additional 300 cfs of water rights included in the proposal also would not affect any current irrigation practices or withdrawals either upstream or downstream of the project. This additional water, however, would not be available for possible future requests for increased irrigation water rights upstream of the project.

The additional 600 cfs of water rights included in the proposal also would not affect any current irrigation practices or withdrawals either upstream or downstream of the project. This additional water, however, would not be available for possible future requests for increased irrigation water rights upstream of the project.

Page E-28, Aesthetic Considerations

The proposed project would primarily have four visual impacts. First, the new powerhouse and tailrace structure will add a new manmade physical feature to the river shoreline. Second, the new transmission from the powerhouse to the substation will be visible, ascending the hill. Third, the path of the new buried penstock will be evident from the cleared corridor

of light-colored soil replaced over the pipeline. Until weathered, the soil will appear lighter in color than the undisturbed soil in the area. Fourth, an additional 1500 feet of river will have a low flow appearance.

The significance of these impacts is minimized by several existing characteristics of the site. There is already considerable manmade impact at the site in the form of not only the existing hydroelectric facilities, but also the high voltage transmission line, irrigation pipeline and associated footbridge crossing the river and the pumps. Offsetting the effect of the new penstock corridor in particular is the existing access road, which essentially parallels the corridor nearly its entire length. Also, the construction area is sparsely vegetated except for riparian patches along the river. As a result, the swath and clear-cutting effect often accompanying transmission line and powerhouse construction in mountainous areas will not occur with the Felt project. One last offsetting existing condition is the fact that the site has extremely low viewere sensitivity. A major consideration in present-day visual assessments is the degree the affected area is visible to the public. The Felt site cannot be seen from any roads, and is in fact seen only by the few people who visit the site.

The usual construction practices of replacing topsoil; revegetating; controlling erosion; and cleaning up spoils, material and trash will be followed to minimize the construction impact. The rehabilitation work proposed for the tunnel inlets will improve the physical appearance around the damsite.

The proposed project would primarily have four visual impacts. First, the new powerhouse and tailrace structure will add a new manmade physical feature to the river shoreline. Second, the new transmission from the powerhouse to the substation will be visible, ascending the hill. Third, the path of the new buried penstock and buried transmission line will be evident from the cleared corridor of light-colored soil replaced over the pipeline and existing utility corridor. Until weathered, the soil will appear lighter in color than the undisturbed soil in the area. Fourth, an additional 1900 feet of river will have a low flow appearance.

The significance of these impacts is minimized by several existing characteristics of the site. There is already considerable manmade impact at the site in the form of not only the existing hydroelectric facilities, but also the high voltage transmission line, irrigation pipeline and associated footbridge crossing the river and the pumps and associated facilities. Offsetting the effect of the new penstock corridor in particular is the existing access road, which essentially parallels the corridor nearly its entire length. The overhead and underground transmission line are planned within existing Fall River Rural Electric Cooperative utility rights-of-way and parallel to an existing overhead

line. Also, the construction area is sparsely vegetated except for riparian patches along the river. As a result, the swath and clear-cutting effect often accompanying transmission line and powerhouse construction in mountainous areas will not occur with the Felt project. One last offsetting existing condition is the fact that the site has extremely low viewer sensitivity. A major consideration in present-day visual assessments is the degree the affected area is visible to the public. The Felt site cannot be seen from any roads, and is in fact seen only by the few people who visit the site.

The usual construction practices of replacing topsoil; revegetating; controlling erosion; and cleaning up spoils, material and trash will be followed to minimize the construction impact. The rehabilitation work proposed for the tunnel inlets will improve the physical appearance around the damsite.

EXHIBIT E
SUMMARY

1. General Description

The amended project consists of construction of a new powerhouse, housing two identical 3487 horsepower, 600 rpm, Francis type turbines with a combined hydraulic capacity of 464 cfs. The two new turbines will be located in the lower powerhouse on the Teton River 300 feet downstream of the powerhouse shown on the license. The new proposed powerhouse is located 1500 feet north of the existing powerhouse. The two new turbines will have a static head of 162 feet and a net effective head of 156 feet. The turbines will power two 2750 KVA, 600 rpm, 4160 volt generators.

Units No. 4 and 5 located at the existing powerplant will be refurbished. They are both 1400 horsepower Francis-type turbines with a rated head of 80 feet. Design capacity of these two turbines is 210 cfs each, giving a combined capacity of 420 cfs.

The new (lower) turbines will be connected to the 60-inch outlets of the 90" penstock bifurcation. The 90-inch penstock extends 1850 feet from the bifurcation to the outlet portals of Tunnels No.2 and No.3. The existing Number 4 and 5 turbines will be fed from Tunnel number 1.

The existing 59 inch penstocks will be realigned and utilized for turbines 4 and 5. The bifurcation and 120 feet of new 59 inch pipe is all that will be required to make the connection.

In conjunction with the proposed project the existing intakes will be utilized; however, a new gate will be required for the Number 1 intake and shelters will be constructed for the Number 2 and 3 intakes.

A fish ladder and walkway will be constructed at the existing dam.

A surge pipe will be constructed near the location of the proposed lower powerplant. The surge pipe will run on a 40° incline up the hill and will be buried and will not be visible from the project site.

In conjunction with construction activity and the refurbishing of the Number 4 and 5 generating units, the old plants 1,2 and 3 and old abandoned buildings will be removed, and the debris cleaned out. The remains of the existing 54 inch wood stave pipe will also be removed.

Overhead power transmission lines will extend from the existing plant to a point of interconnection with the overhead line constructed in conjunction with the new facility. A 7500 kva 4160 volt 24.9 kv three-phase transformer will step up the output to a level suitable for transmission to the existing UP & L line. Station class lightning arrestors and a group oriented fuse disconnect system will be mounted at the transformer substation. The transmission line will then span the river and continue overhead for approximately 1400 feet to the rim of the canyon and will be of wood pole construction with three number ACSR conductors and one 3/8 inch high strength steel overhead shield wire. At the canyon rim the overhead line changes to underground. The buried line will continue approximately 2600 feet to the point of intertie with the existing Utah Power & Light lines. Construction of the 1400 feet of overhead and 2600 feet of underground transmission line will be within the existing Fall River Rural Electric Cooperative, Inc. corridor and parallel to their existing 115 volt overhead line.

The project existing access road from the county road to the project facilities has been rerouted. The access road is very narrow and is limited to four wheel drive vehicles. Portions of the road exceed 26% grade. In order to facilitate construction vehicle traffic and to improve travel safety, the access road from the county road to the project facilities will be relocated. The improved alignment will better serve the requirements of all parties. Even though the new alignment is longer, improvements in alignment and grade will result in very little increase in the overall disturbance created by construction of the roadway. The alignment changes have been discussed with and approved by the Bureau of Reclamation.

The project will be operated as a run-of-the-river project and will utilize all flows above the minimum release flows of 20 cfs during the months of July through March and 50 cfs during the months April through June for power generation up to and including flows in excess of the total design capacity of 884 cfs. Flows in excess of the minimum release and maximum power diversion requirements will continue to be bypassed over the dam and into the Teton River. All flows over the minimum flows required for bypass up to and including the total hydraulic capacity of the lower plant of 464 cfs will be diverted to the lower (new) powerplant location. Flows in excess of the 464 cfs up to a maximum of 420 additional cfs (combined total of 884 cfs) will be diverted through the Number 4 and 5 units at the existing power facility. Flows in excess of 464 cfs will be available in the 1500 foot reach of river between the existing power plant location and the power plant as located under the license application. Based on monthly average flow data, this will provide added flows in this stretch of the river during the critical months of April, May, June and July

2. Water Use and Water Quality

Station No. 130544000, located just above the proposed Felt Hydroelectric Project, measured the flows on the Teton River near Tetonia, Idaho for the 16 year period from 1942 to 1957. Flows have not been measured since

1957. Station 13055000 has measured the flow on the Teton River near St. Anthony, Idaho from 1942 until the present. The correlated flow records at Tetonia, Idaho were obtained by correlating the flows between the two stations for the years 1942 through 1957 and then projecting the flows at Tetonia from the actual measured data on the Teton River near St. Anthony, Idaho. Based on this correlation the estimated average daily flow at the project site is 435 cfs. Daily flow has ranged from about 62 cfs to more than 1900 cfs during the period of record. Average monthly flows for the 16 year period from 1942 to 1957 are shown on Table E-1A. Correlated flow records at Tetonia, Idaho are shown on Table E-1, and average monthly flows for the Teton River near St. Anthony, Idaho for the years 1942 through 1984 are shown on Table E-1B.

The Felt Hydroelectric Project will be capable of utilizing a maximum of 884 cfs through all four turbines. This includes a capacity of 464 cfs at the lower plant and 420 cfs at the existing upper plant. Fall River Rural Electric Cooperative has three existing water rights for power generating facilities at the project location which total a combined flow of 300 cfs. Fall River Rural Electric Cooperative filed an application for a permit to appropriate the waters of the State of Idaho for 300 cfs on March 18, 1981. This permit has been approved contingent upon granting of the project's FERC license. This brings the total water right available for the project to 600 cfs. Concurrently with the filing of this application for amendment of license, the applicant is filing an application for permit to appropriate public waters of the State of Idaho for an additional 300 cfs. If approved this will bring the total water rights available for the project to 900 cfs. The project represents a non-consumptive use of the water and will be subject to available flows during the irrigation season. The water rights will have no effect on prior diversion and water rights of irrigators in the area. The supply water for the R and J Brown irrigation pumps will be met prior to the diversion of water into the hydroelectric generation facilities. The agreed minimum flows of 20 cfs during the months of July through March and 50 cfs through the months of April through June will continue to be met. An additional benefit of the project as amended is that under the existing license all flows up to 680 cfs would have been diverted for power production and returned to the Teton River some 1600 feet below the existing power plant. Under the development proposed in this amendment only 464 cfs will be diverted to the new plant which is located 300 feet below the plant proposed in the license application. The flows in excess of the 464 cfs will be diverted into the existing turbines and will return to the river 1600 feet above the power plant location approved in the license.

Based on mean monthly flows for the project, during the critical months of April, May, June and July this will place an additional 72, 106, 220 and 58 cfs respectively into the 1600 foot section of the Teton River.

Water Quality

Water quality at the Felt Site is generally very good, but some degradation of water quality occurs as a result of return flows from irrigation use. Return flows are a very small percentage of the runoff. The quality of the water at the Felt Site and throughout the project is

extremely high with total dissolved solids less than 200 mg/ll. The quality of the water in the river is dependent upon the quality and amount of water in the return flows. Return flow quality is, in turn, dependent upon farm activities and irrigation practices.

Operation of the Felt Hydroelectric Project will not alter water quality at the site. The water is near saturation levels for dissolved oxygen, within the river and impoundment, and the powerplant will not suppress dissolved oxygen levels.

Anticipated Impacts

Construction activities associated with the proposed the project could cause temporary impacts on water quality. Activities that could contribute sediment and turbidity to the Teton River include construction of the access road, penstock, powerhouse and associated facilities, refurbishing of Number 4 and 5 units and cleanup of the existing abandoned powerhouse facilities. A cofferdam will be constructed around the construction site. Concrete will probably be trucked in from the Rexburg area. Washout areas will be designated away from the river. All loose concrete and construction debris will be removed from the river prior to removal of the cofferdam and rewatering the river.

Limited impacts to water quality may result from construction activities for the road improvements and transmission line construction; however, construction will require only minimal movement of surface soils. Slopes in the project area are stable and not conducive to erosion. Areas disturbed by construction activity will be reseeded with native vegetation as soon after construction as possible but in no event later than the same year construction takes place.

The proposed hydroelectric project will have little impact on existing water quality or uses. Only one use occurs between the proposed diversion and return of the water into the Teton River. This is for a pumping facility that draws water from the Number 1 intake prior to where it will enter the existing Number 4 and 5 turbine units. The existing water demand will continue to be satisfied.

3. Report on Fish, Wildlife and Botanical Resources

Fisheries

Detailed fish studies have been carried out in conjunction with the license. Minimum release flows have been established through consultation with the applicant and the Idaho Department of Fish and Game. The agreed to minimum releases for fish flows will continue to be met. No additional impacts are expected to result from construction of the project as proposed in the amendment. In fact, the amended license offers an additional benefit to the stretch of river from the existing power plant to the powerhouse location as proposed in the license.

The amendment proposal is to locate a new powerhouse 1500 feet north of the existing plant. Because of the bend in the river, the distance along

the stream channel will be about 1900 feet. The stream channel distance from the dam to the existing plant is 1300 feet. The removal of water from another 1900 feet feet of the river could exacerbate the existing problems of fish movement downstream and stranding by increasing the dewatered length from 1300 feet to 3200 feet.

Power generation will require the full instream flow 93 percent of the year. The peak spring runoff typically occurs in June, at which time river flows exceed the proposed turbine capacity of 884 cfs sometime during that period. During this time the agreed to minimum flow of 50 cfs will be supplemented by any flows over and above 934 cfs (884 cfs total hydraulic capacity plus 50 cfs minimum release). This coincides with the IDFG fish planting program. The proposed and existing project discharges are shown on Figure E-6. From this figure it can be seen that under the existing project conditions, water passes over the dam from April through July and that under the increased flow requirements of the proposed project, water may still flow over the dam during June. Figure E-5 shows the discharge through the project area in June 1946 (a representative average water year). This peak flow coincides with the IDFG fish planting program, and there is more than adequate flow in June to allow for downstream passage. The proposed and existing project discharges are shown in Figure E-6. This figure is also based upon the 1946 water year and the average monthly flows. From this figure it can be seen that under the existing project conditions, water passes over the dam from April through July, and that under the increased flow requirements of the proposed project, water will still flow over the dam during June.

A benefit under this application for amendment is that all flows in excess of the 464 maximum plant capacity up to and including a combined flow of 884 cfs, will be diverted through the equipment at the existing plant. This places additional water in the 1600 foot stretch of river between the powerhouse location in the license and the existing powerhouse. This will be especially beneficial during the critical months of April, May, June and July when additional flows of 72 cfs, 106 cfs, 220, and 58 cfs respectively will be available. In addition to the minimum release flows of 20 cfs during nine months and 50 cfs during three months, all flows in excess of total plant capacity will continue to pass over the dam. This will eliminate the fish stranding which previously occured and represents a significant improvement over conditions in the license. As a result of the minimum bypass flows the period during which the fish can use the reach of the river from the dam to the powerhouse will be increased from four months to 12 months in an average year. Under the diversions proposed in the amendment the period of time when additional flows will be available in the 1600 foot reach from the existing powerhouse to the powerhouse in the license will be four months.

No major alterations to the penstock intakes, dam or reservoir are proposed. Therefore, there will be no increase in downstream sediment loading or reservoir volume, nor changes in channel configuration. There will also be no additional impacts to the fisheries or aquatic resources upstream of the dam.

IDFG has expressed its concern that the confluence of the Teton River and Badger Creek not be dewatered. The additional penstock and new powerhouse will be located about 800 feet above their confluence, and the flow past Badger Creek will not be changed.

Wildlife

Under the proposed application for amendment of license, the 7.5 foot diameter penstock collects water from the outlet portals of Tunnels No. 2 and 3 by means of short sections of 78-inch pipe. The 7.5 foot penstock will then be buried. The point of connection to Tunnel No. 2 and 3 is approximately 300 feet upstream of the point of connection shown in the license. This eliminates all but 20 to 30 feet of the 300 foot long movement barrier that would have been created by the access road and penstock construction. The improved alignment also allows for a positive grade to be maintained on the penstock from its point of convergence with the two 59 inch steel pipes to the new proposed powerhouse location. The barrier to movement that would have been created under the license will be eliminated under this amendment.

Botanical Resources

It is anticipated that dewatering an additional 300 feet of river will have minimal impact on the riparian species occurring along the banks. Density of existing species could drop and invasion of weedy species might occur. The present dewatered reach of stream, from the dam to the existing powerhouse, supports a diverse stand of woody species and a health understory. It is assumed that the stretch below the existing powerhouse to the proposed powerhouse would support a similar vegetation complement as the presently dewatered stretch. This will be further mitigated by the fact that the diversion to the lower powerhouse location has decreased from 680 cfs under the license to 464 cfs under this amendment to license. Additional flows will be diverted through the exiting powerhouse location and will be available in the 1600 foot reach of stream that would have been dewatered under the license. These increased flows during the months of April, May, June and July will tend to aid in supporting vegetation in the riparian zones next to the river.

Construction of the project will disturb an additional 250 feet of juniper woodland and Douglas fir communities and an additional 50 feet of riparian vegetation along the river. All disturbed areas which do not support permanent project features will be replanted with native grasses, forbs and shrubs. This will minimize erosion into the stream and speed the recovery of wildlife habitat disturbed by the project.

Disturbance of vegetated areas will be mitigated by reseeding disturbed areas as soon after construction as possible in native vegetation. This reseeding will take place no later than the same season in which contruction occurs.

4. Report on Historical and Archeological Resources

There are no known archeological or historical sites in the project area. SHPO (1981) does not expect any archeological or historical resources to be found in the project area and does not recommend that any additional studies be conducted. It is not anticipated that any archeological or historical sites exist in the additional 300 feet of area to be disturbed by the proposed project.

5. Report on Recreational Resources

Existing and Potential Recreational Facilities

A very limited amount of fishing occurs on the site. Access is extremely poor down a steep four-wheel drive road. In the past it has been posted with "no trespassing" signs due to the danger of travel. Under the amendment to license application a new access route has been planned which provides for a wider road with shallower grades. The road will continue to be posted with "no trespassing" signs; however, the road will be available for foot access. Parking space will be available around the Badger substation at the head of the road. Second, a new river reach will be made accessible to fishermen in the area of the new powerhouse and tailrace structure. Finally, improvements to the tunnel intakes and log booms will provide greater public safety protection in the dam area.

6. Land Management and Aesthetics

The proposed project will primarily have four visual impacts. First, the new powerhouse and tailrace structure will add a new manmade physical feature to the river shoreline. Second, the new overhead transmission line from the powerhouse to the substation will be visible, ascending the hill. Third, the path of the new buried penstock and buried transmission line will be evident from the cleared corridor of light-colored soil replaced over the pipeline and existing utility corridor. Until weathered, the soil will appear lighter in color than the undisturbed soil in the area. Fourth, an additional 1900 feet of river will have a low flow appearance.

The significance of these impacts is minimized by several existing characteristics of the site. There is already considerable manmade impact at the site in the form of not only the existing hydroelectric facilities, but also the high voltage transmission line, irrigation pipeline and associated footbridge crossing the river and the pumps and pumping stations. Offsetting the effect of the new penstock corridor in particular is the existing access road, which essentially parallels the corridor nearly its entire length. The overhead and underground transmission line are planned within existing Fall River Rural Electric Cooperative utility rights-of-way and parallel to an existing overhead line. Also, the construction area is sparsely vegetated except for riparian patches along the river. As a result, the swath and clear-cutting effect often accompanying transmission line and powerhouse construction in mountainous areas will not occur with the Felt project. One last offsetting existing condition is the fact that the site has extremely low

viewer sensitivity. A major consideration in present-day visual assessments is the degree the affected area is visible to the public. The Felt site cannot be seen from any roads, and is in fact seen only by the few people who visit the site.

The usual construction practices of replacing topsoil; revegetating; controlling erosion; and cleaning up spoils, material and trash will be followed to minimize the construction impact. The rehabilitation work proposed for the tunnel inlets and the removal of the abandoned, dilapidated facilities will improve the physical appearance around the damsite.

EXHIBIT E
APPENDIX

Included are three new letters.

Letter to Chuck Dawsey, Fall River Rural Electric from United States Department of the Interior, January 25, 1985.

Letter to Kenneth F. Plumb, Secretary, Federal Energy Regulatory Commission from Idaho Department of Fish and Game, dated January 23, 1985.

Letter to Bonneville Pacific Corporation from Department of the Army dated January 11, 1985.

United States Department of the Interior

BUREAU OF RECLAMATION
MINIDOKA PROJECT OFFICE
1359 HANSEN AVENUE
BURLEY, IDAHO 83318

January 25, 1985

IN REPLY
REFER TO:

Chuck Dawsey
Fall River Rural Electric
Ashton, Idaho 83420

Dear Chuck:

We have reviewed your request for amendment to your Federal Energy Regulatory Commission (FERC) license for the Felt Project, and we have no problems with the powerline constructed as we discussed in our field trip.

If we can be of further assistance to you, please contact this office.

Sincerely yours,

Leo A. Busch for

Donald E. Tracy
Project Superintendent

IDAHO DEPARTMENT OF FISH AND GAME
600 South Walnut • Box 25
Boise • Idaho • 83707

January 23, 1985

Mr. Kenneth F. Plumb, Secretary
Federal Energy Regulatory Commission
825 North Capitol Street, NE
Washington, DC 20426

Re: Felt Dam Project No 5089. Teton River, Teton County, Idaho.

Dear Mr. Plumb:

It is our understanding that location of the powerhouse for the referenced project may be changed to approximately 200-300 feet downstream from the location shown on the plans in the license application.

Our Department has no objections to a revised location up to 300 feet downstream from the original, provided the agreed-to minimum flows are maintained in the extended stream reach to be affected, and that licensee guarantees fish passage through the extended reach.

We do not anticipate problems with fish passage, but the extended stream reach was not included in the original minimum stream flow study. Licensee should be aware that satisfactory fish passage must be maintained by one means or another if the agreed-to minimum flow should prove to be inadequate for the extended stream reach.

Sincerely,

Jerry M. Conley
Director

cc: USFWS (Wolflin)
Region 6
Fall River R.E.C.

DEPARTMENT OF THE ARMY
WALLA WALLA DISTRICT, CORPS OF ENGINEERS
BUILDING 602, CITY-COUNTY AIRPORT
WALLA WALLA, WASHINGTON 99362-9265

REPLY TO ATTENTION OF:

January 11, 1985

NPWOP-RF

Bonneville Engineering
RECEIVED
JAN 24 1985
Salt Lake City, Utah

Bonneville Pacific Corporation
200 East South Temple, Suite 300
Salt Lake City, Utah 84111

Gentlemen:

This letter is to advise you that a Department of the Army Section 404 Permit will not be required for your proposed removal of material from the Teton River, as described by your Joint Application for Permit, Idaho No. 22-S-72, dated January 2, 1985.

In the event, however, that the proposed activity involves the discharge of dredged or fill material below the ordinary high water mark of the referenced stream channel or onto adjacent wetlands, a Section 404 Permit Application must be submitted for processing and the permit issued prior to the start of the project.

The information provided here is applicable only to Department of the Army Permits administered by the Corps of Engineers. If you have any questions, please write or call me at this office, telephone (509) 522-6724.

Sincerely,

James C Fellows

James C. Fellows
Regulatory Branch

Copy furnished:
Department of Water Resources
Western Regional Office
450 West State Street
Boise, Idaho 83705

Exhibit E - Table and Figures

Table E-1 Five Year Average Flow at Teton River near Tetonia, Idaho, Mean Flows by Month - replace with Tables E-1, Correlated Fow Records at Tetonia, Idaho; Table E-1A, Teton River near St. Anthony, Idaho and Teton River near Tetonia, Idaho, 1942 through 1957; and Table E-1B, Teton River near St. Anthony, Idaho, Drainage year Data 1942 through 1984.

Table E-2 Water Quality Data for the Felt Dam Project Area - reprinted for informational purposes.

Table E-3 Avian Species Expected to Occur along Teton River in vicinity of Felt Dam in Winter - unchanged.

Table E-4 Breeding Birds Expected to Occur Along Teton River in the vicinity of Felt Dam - unchanged.

Table E-5 Common Names of Plant Species - unchanged

Figure E-2 Detailed Project Location Map - replace with revised map.

Figure E-3 Population Centers near Felt Hydroelectric Project

Figure E-4 Felt Hydroelectric Project Vegetation Cover Types - replace with new vegetation map.

Figure E-5 Daily Discharge in the Felt Hydroelectric Project Area during June for the Average Water Year 1946 - replace with new figure.

Figure E-6 Monthly Discharge in the Felt Hydroelectric Project area during the 1942 - 1984 Average Water Year - replace with new figure.

Figure E-7 Typical Fish Ladder Detail

SIMULATED FLOW RECORDS AT TETONIA, IDAHO
FLOWS (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	ANNUAL
1942	322	284	277	212	204	204	464	529	905	598	417	315	394
1943	287	314	235	215	210	272	727	620	1,038	948	546	408	485
1944	384	366	256	232	225	217	326	380	788	620	444	339	381
1945	326	311	228	202	204	234	315	520	1,142	1,007	576	457	460
1946	383	346	275	230	220	339	653	562	657	522	427	363	415
1947	349	334	279	197	233	316	281	573	752	577	427	355	389
1948	325	315	233	217	197	206	425	615	957	552	403	317	397
1949	296	307	245	188	202	246	505	831	840	521	402	339	410
1950		313	229	204	299	294	443	427	993	880	470	416	414
1951	388	339	254	210	252	245	454	656	733	647	672	423	439
1952	406	330	257	227	216	221	566	839	878	564	414	343	438
1953	311	277	229	240	212	260	280	300	907	586	417	321	362
1954	275	266	217	193	199	232	346	538	593	597	425	352	353
1955	308	286	215	190	180	180	269	318	645	538	398	314	320
1956	289	290	317	211	169	269	454	760	1,005	677	475	394	442
1957	362	319	237	198	259	289	333	619	1,259	886	518	398	473
1958	354	311	250	217	239	241	325	690	640	532	402	354	380
1959	282	289	227	201	187	265	399	342	796	608	448	413	371
1960	335	279	215	168	174	277	414	373	622	525	437	370	349
1961	303	280	199	165	209	311	271	388	519	438	368	348	316
1962	301	275	201	166	481	292	638	593	769	673	463	368	435
1963	319	292	230	185	312	247	227	461	801	593	423	361	371
1964	293	300	195	176	184	195	321	518	1,440	963	495	407	457
1965	314	310	350	241	227	241	456	480	1,031	832	579	480	462
1966	401	346	240	205	201	260	357	443	505	466	396	377	350
1967	275	277	200	172	189	282	237	413	1,191	978	520	399	428
1968	386	316	256	225	241	300	262	457	1,226	777	612	437	458
1969	370	348	249	269	234	240	660	668	696	663	459	373	436
1970	320	280	244	214	208	217	287	576	1,419	1,006	545	449	480
1971	351	333	262	255	250	346	521	842	1,749	1,294	640	519	614
1972	481	364	240	222	203	423	417	766	1,479	841	515	438	533
1973	409	333	252	226	208	235	457	564	801	653	494	413	420
1974	377	355	250	218	195	334	432	707	1,688	1,006	537	414	543
1975	389	339	265	205	221	250	277	419	1,413	1,628	575	401	532
1976	283	204	183	163	161	172	172						
1977													
1978	256	223	213	176	180	266	419	576	1,074	1,037	598	492	459
1979	363	316	249	214	215	228	323	608	791	574	478	361	393
1980	284	252	219	218	248	239	336	627	786	645	460	318	386
1981	287	254	242	177	241	218	272	528	989	516	391	367	373
1982	235	230	225	178	225	249	352	751	1,365	1,421	599	502	528
1983	395	328	233	198	215	325	346	629	1,499	1,320	637	453	548
1984	545	523	329	274	242	287	559	936	1,589	1,351	624	488	645
AVERAGE	339	308	243	207	223	261	395	572	999	782	491	394	435
MAX	545	523	350	274	481	423	727	936	1,749	1,628	672	519	645
MIN	235	204	183	163	161	172	172	300	505	438	368	314	316

TABLE E - 1

TETON RIVER NEAR ST. ANTHONY IDAHO
STATION NUMBER 13055000

JANUARY 23, 1985

FLOWS (CFS)

YEAR	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	ANNUAL
1942	537	471	493	401	379	366	901	1,513	2,019	1,058	704	530	781
1943	479	522	418	407	390	486	1,411	1,773	2,314	1,678	923	685	957
1944	641	607	455	438	419	389	632	1,086	1,758	1,097	751	570	737
1945	544	517	405	381	380	418	611	1,488	2,547	1,782	973	768	901
1946	639	575	490	434	409	606	1,266	1,606	1,464	924	721	609	812
1947	583	554	496	372	433	566	545	1,638	1,677	1,021	721	596	767
1948	542	523	414	411	367	368	825	1,759	2,135	977	681	532	795
1949	495	509	436	355	375	441	979	2,378	1,873	923	679	569	834
1950		519	408	386	556	527	859	1,220	2,214	1,558	795	699	812
1951	648	563	452	397	468	439	880	1,875	1,635	1,145	1,135	711	862
1952	678	547	457	429	402	396	1,098	2,399	1,958	998	699	577	887
1953	519	459	407	453	394	465	543	858	2,022	1,038	704	540	700
1954	460	442	387	365	371	416	671	1,538	1,323	1,057	718	592	695
1955	514	474	382	359	335	322	521	909	1,439	953	672	528	617
1956	482	481	565	398	315	482	881	2,175	2,241	1,198	802	662	890
1957	604	530	422	374	482	518	646	1,769	2,807	1,569	875	669	939
AVERAGE	558	518	443	398	405	450	829	1,624	1,964	1,186	785	615	815

TETON RIVER NEAR TETONIA, IDAHO
STATION 13054000

FLOWS (CFS)

YEAR	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	ANNUAL
1942	300	264	279	204	196	190	402	610	907	540	377	303	381
1943	265	316	202	168	215	229	745	718	1,090	962	581	438	494
1944	408	372	254	209	209	205	369	309	854	635	397	324	379
1945	294	298	197	181	195	222	316	392	1,208	1,096	619	495	459
1946	410	359	285	234	214	323	538	571	698	521	394	356	409
1947	372	359	324	192	222	335	272	532	846	608	446	373	407
1948	341	321	232	207	194	202	429	598	972	569	371	302	395
1949	301	305	246	209	210	238	502	901	955	529	382	329	426
1950	351	317	224	195	278	293	435	447	865	942	532	446	444
1951	407	350	265	216	241	221	458	653	765	610	748	452	449
1952	424	317	257	250	222	217	569	871	932	581	427	338	450
1953	289	248	225	260	228	303	288	276	756	519	395	291	340
1954	269	255	208	205	195	240	355	524	550	548	425	325	342
1955	297	292	232	207	195	190	304	269	463	423	362	293	294
1956	280	284	310	237	189	299	455	764	1,027	666	462	371	445
1957	348	325	234	190	277	313	414	638	1,177	958	523	425	485
AVERAGE	335	311	248	210	218	251	428	567	879	669	465	366	412

TETON RIVER NEAR ST ANTHONY, IDAHO

DRAINAGE AREA 890 SQ MILES

FLOWS (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	ANNUAL
1942	537	471	493	401	379	366	901	1,513	2,019	1,058	704	530	781
1943	479	522	418	407	390	486	1,411	1,773	2,314	1,678	923	685	957
1944	641	607	455	438	419	389	632	1,086	1,758	1,097	751	570	737
1945	544	517	405	381	380	418	611	1,488	2,547	1,782	973	768	901
1946	639	575	490	434	409	606	1,266	1,606	1,464	924	721	609	812
1947	583	554	496	372	433	566	545	1,638	1,677	1,021	721	596	767
1948	542	523	414	411	367	368	825	1,759	2,135	977	681	532	795
1949	495	509	436	355	375	441	979	2,378	1,873	923	679	569	834
1950		519	408	386	556	527	859	1,220	2,214	1,558	795	699	812
1951	648	563	452	397	468	439	880	1,875	1,635	1,145	1,135	711	862
1952	678	547	457	429	402	396	1,098	2,399	1,958	998	699	577	887
1953	519	459	407	453	394	465	543	858	2,022	1,038	704	540	700
1954	460	442	387	365	371	416	671	1,538	1,323	1,057	718	592	695
1955	514	474	382	359	335	322	521	909	1,439	953	672	528	617
1956	482	481	565	398	315	482	881	2,174	2,241	1,198	802	662	890
1957	604	530	422	374	482	518	646	1,769	2,807	1,569	875	669	939
1958	592	517	445	411	444	431	630	1,973	1,427	942	680	595	757
1959	471	479	404	379	347	474	775	978	1,776	1,076	757	694	718
1960	559	463	383	318	323	495	804	1,068	1,388	930	738	621	674
1961	506	464	354	311	388	556	526	1,110	1,157	775	622	584	613
1962	503	456	357	313	895	522	1,238	1,695	1,715	1,191	783	618	857
1963	532	485	409	349	581	443	441	1,319	1,787	1,049	715	607	726
1964	489	498	347	332	342	349	623	1,481	3,211	1,704	836	684	908
1965	525	515	623	456	423	431	884	1,374	2,300	1,472	978	806	899
1966	669	574	427	388	374	466	693	1,268	1,126	824	670	633	676
1967	460	460	356	326	351	504	460	1,181	2,656	1,731	878	671	836
1968	644	524	456	425	448	537	509	1,307	2,734	1,376	1,034	734	894
1969	618	578	444	509	435	430	1,281	1,911	1,552	1,174	776	626	861
1970	535	464	435	405	387	389	557	1,646	3,164	1,780	921	755	953
1971	587	553	467	482	465	620	1,010	2,408	3,901	2,291	1,081	872	1,228
1972	804	605	427	419	378	758	809	2,192	3,298	1,488	870	736	1,065
1973	683	553	449	427	387	421	886	1,613	1,786	1,156	835	693	824
1974	630	589	445	412	362	598	839	2,022	3,764	1,780	907	695	1,087
1975	650	563	472	387	411	447	538	1,199	3,151	2,882	972	674	1,029
1976	472	338	326	309	300	308	333						
1977													
1978	427	370	380	332	334	477	813	1,646	2,394	1,836	1,010	826	904
1979	606	524	444	404	400	409	626	1,739	1,765	1,016	808	606	779
1980	474	419	389	412	462	428	652	1,794	1,752	1,141	777	534	770
1981	480	422	431	335	448	390	527	1,509	2,206	913	660	616	745
1982	392	382	401	337	418	445	682	2,147	3,044	2,515	1,012	844	1,052
1983	660	544	415	374	400	582	671	1,798	3,342	2,337	1,077	761	1,080
1984	910	868	585	518	450	514	1,084	2,676	3,543	2,391	1,055	819	1,284
AVERAGE	567	512	432	391	415	467	766	1,635	2,228	1,384	829	662	859
MAX	910	868	623	518	895	758	1,411	2,676	3,901	2,882	1,135	872	1,284
MIN	392	338	326	309	300	308	333	858	1,126	775	622	528	613

TABLE E - 1b

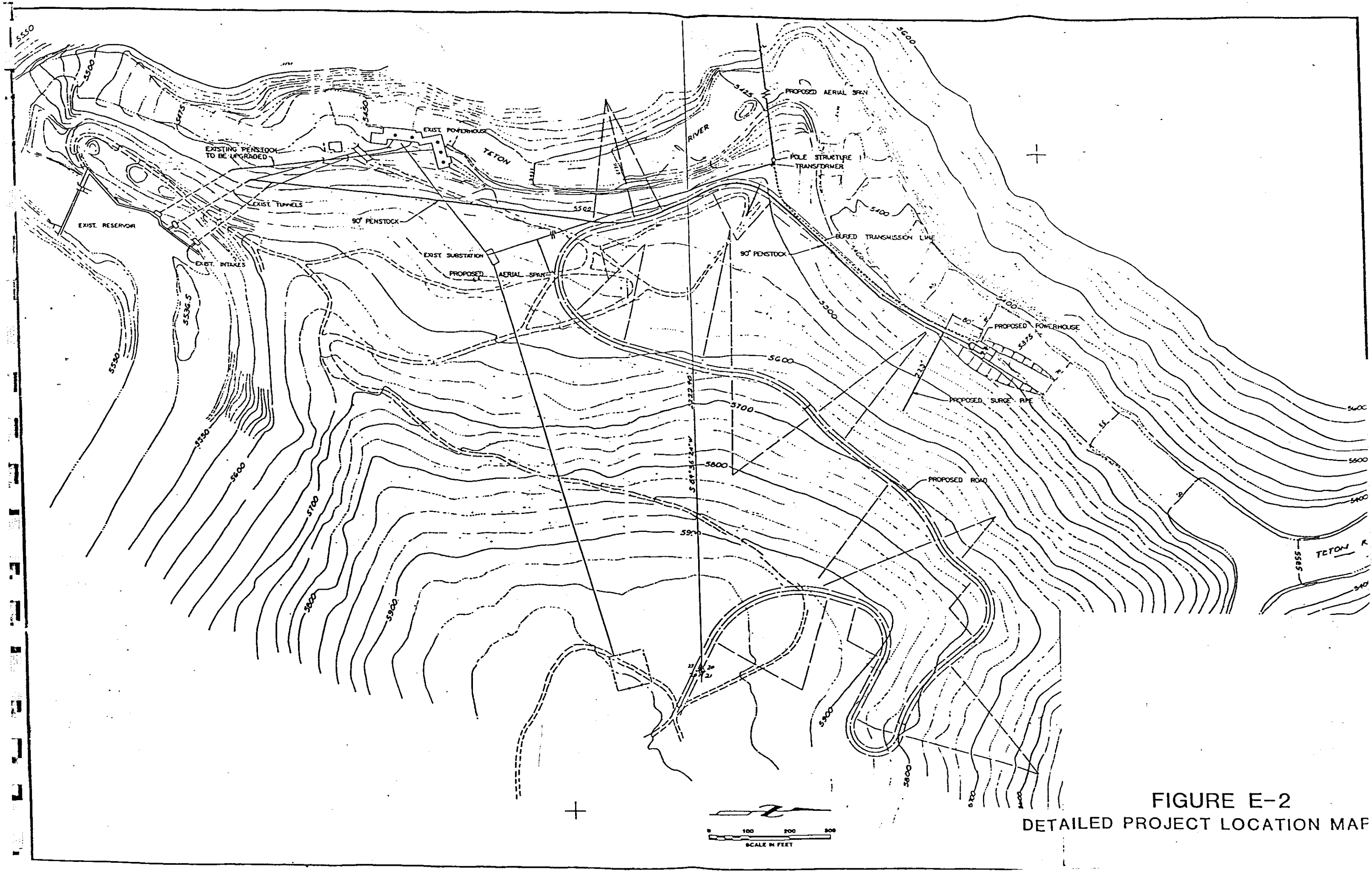


FIGURE E-2
DETAILED PROJECT LOCATION MAP

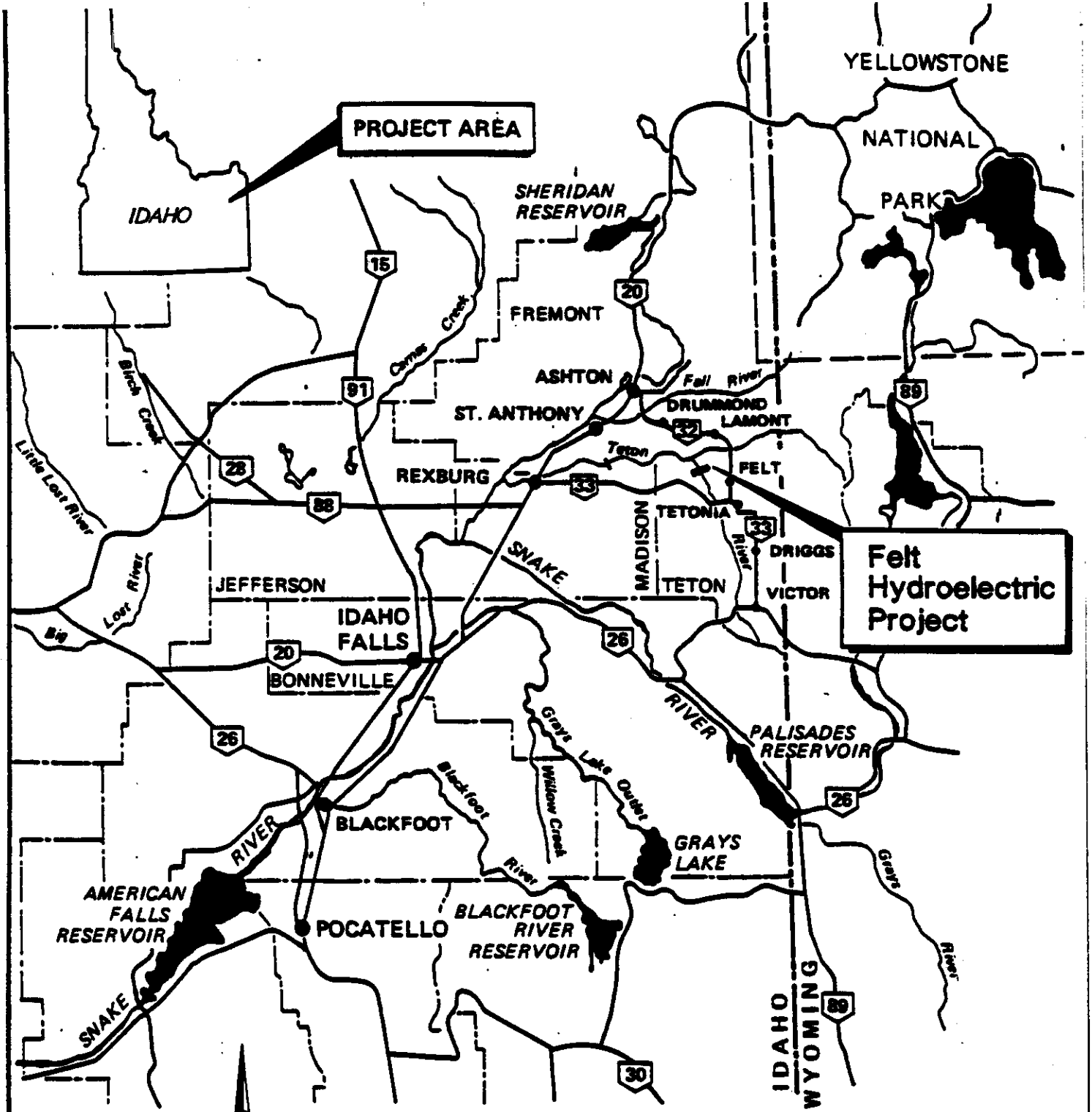


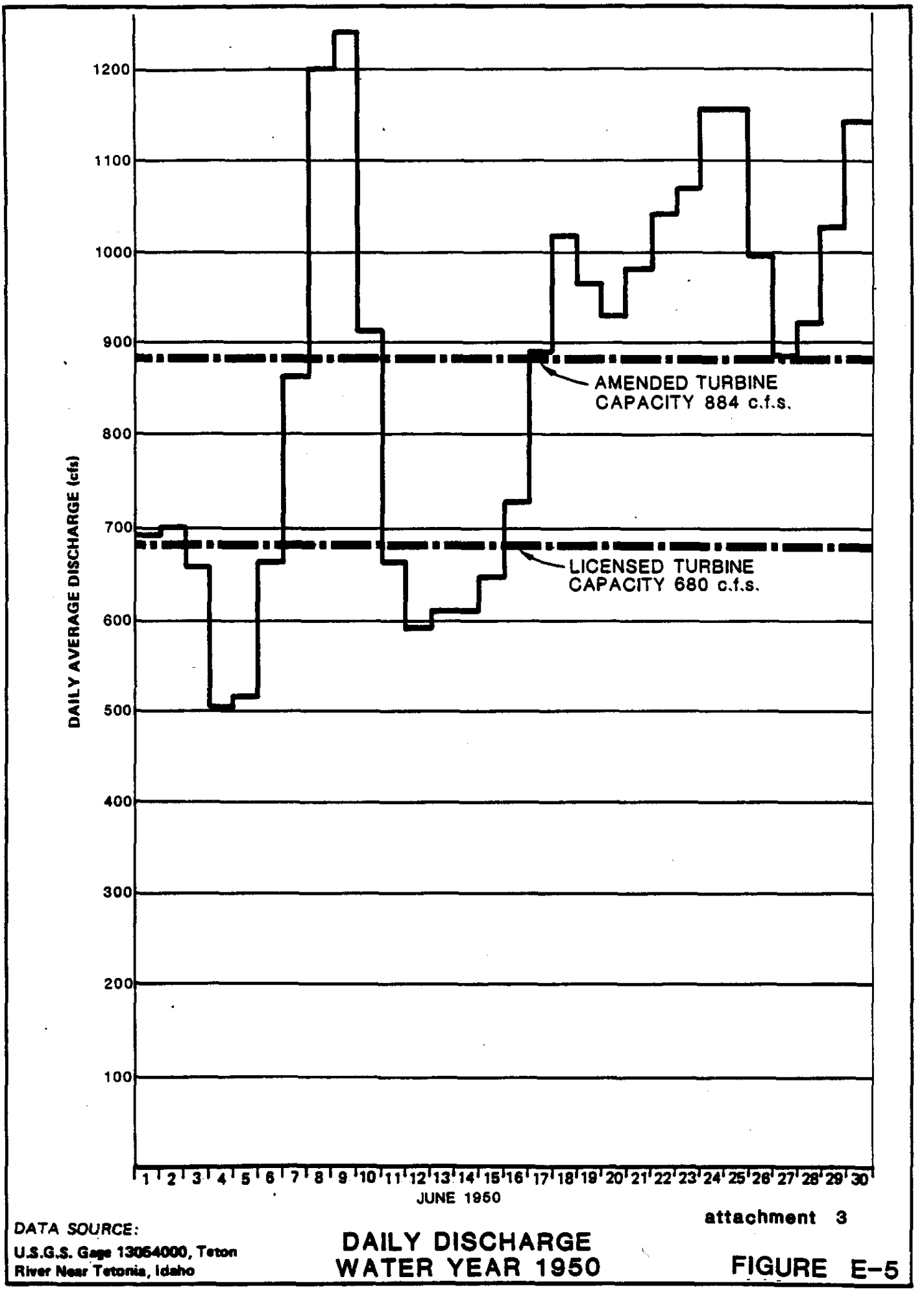
FIGURE E-3

POPULATION CENTERS NEAR FELT HYDROELECTRIC PROJECT

FELT LICENSE APPLICATION

CH2M HILL

B14404.L0

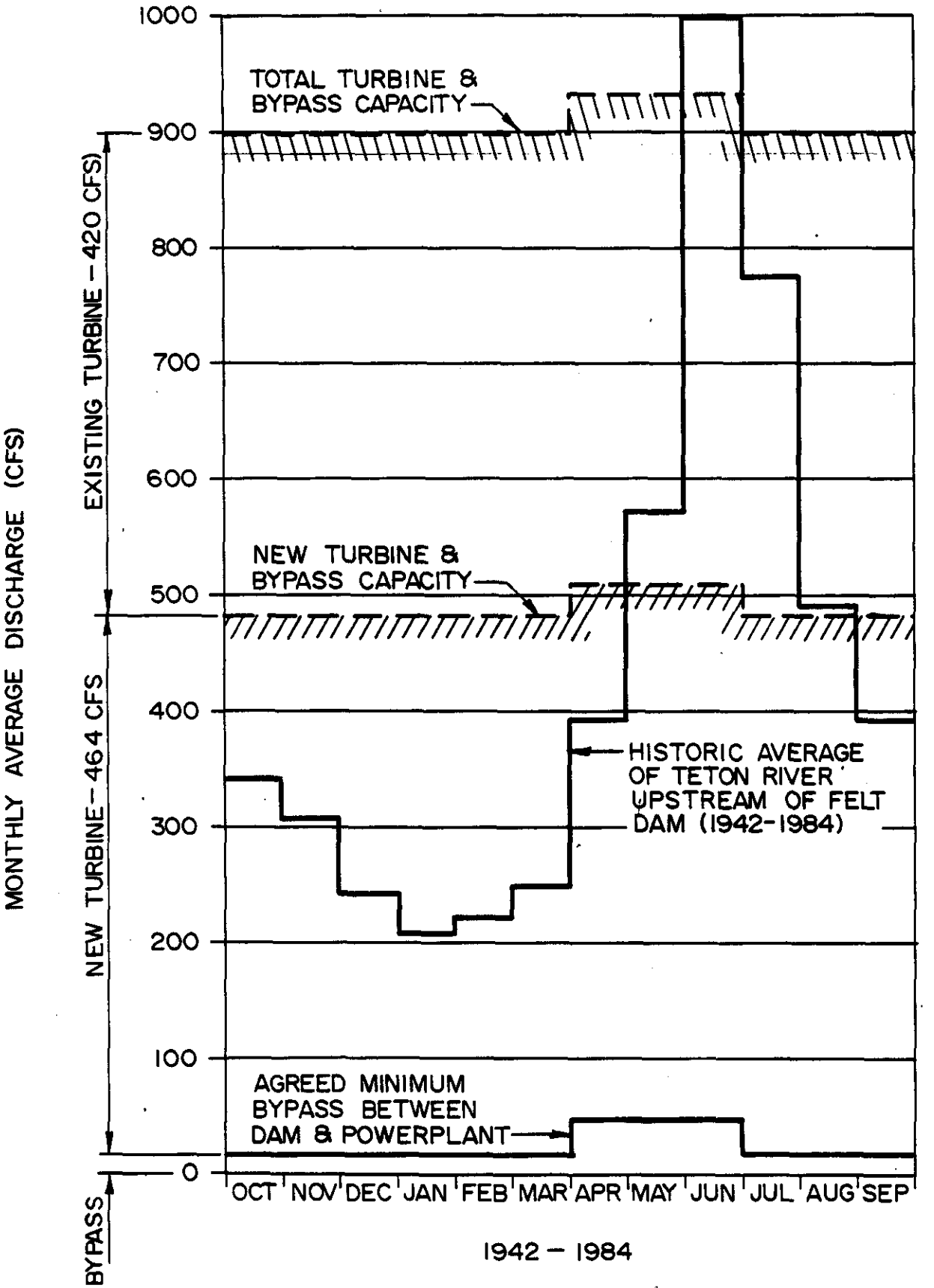


attachment 3

DATA SOURCE:
U.S.G.S. Gage 13054000, Teton River Near Tetonia, Idaho

DAILY DISCHARGE WATER YEAR 1950

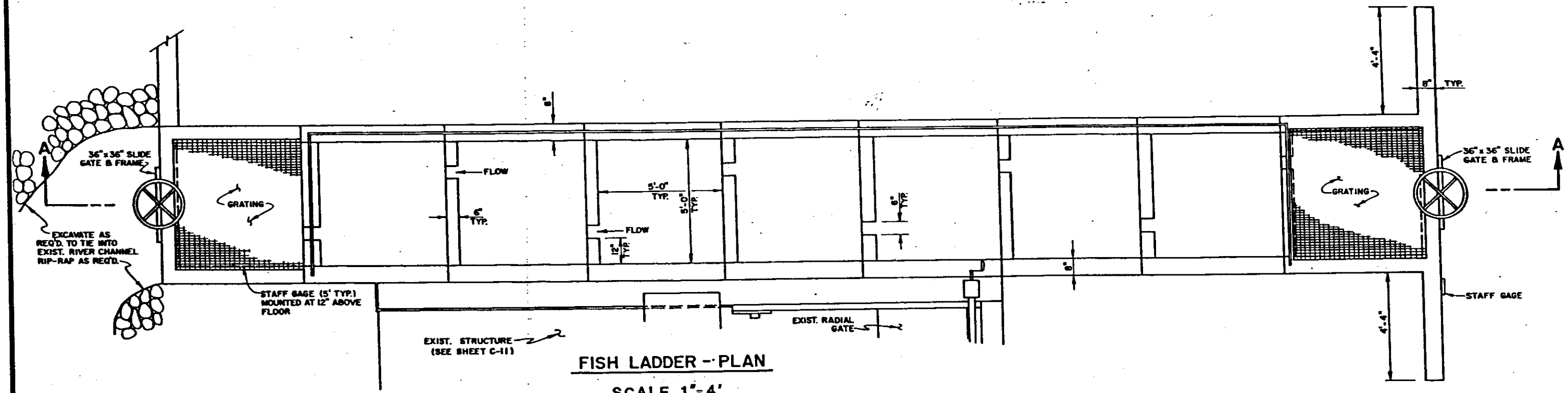
FIGURE E-5



AVERAGE MONTHLY DISCHARGE IN THE FELT HYDROELECTRIC PROJECT AREA

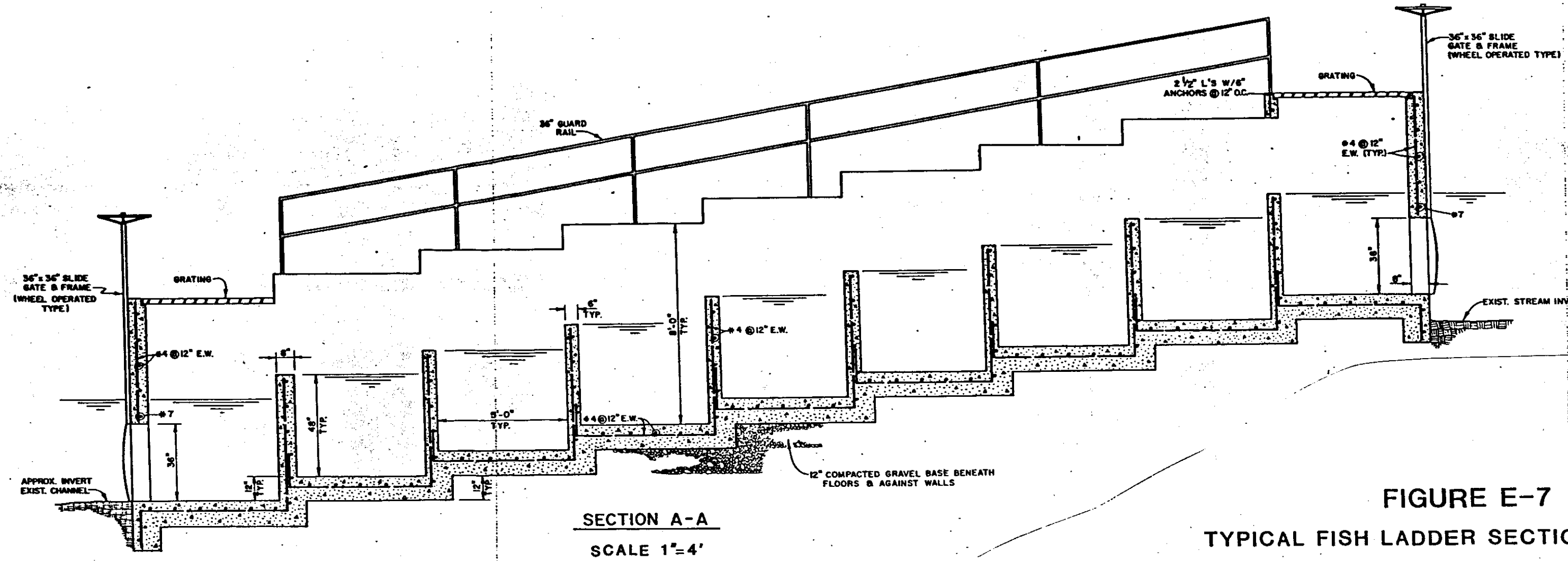
FELT LICENSE APPLICATION

FIGURE E-6



FISH LADDER - PLAN

SCALE 1"=4'



SECTION A-A

SCALE 1"=4'

FIGURE E-7

TYPICAL FISH LADDER SECTION

EXHIBIT F
GENERAL DRAWINGS

EXISTING PENSTOCK TO BE UPGRADED

EXIST. POWERHOUSE

TETON RIVER

FISH LADDER

EXIST. TUNNELS

EXIST. RESERVOIR

96" PENSTOCK

EXIST. AERIAL SPAN

EXIST. SWITCHYARD

EXIST. INTAKES

PROPOSED AERIAL SPAN

PROPOSED AERIAL SPAN

POLE STRUCTURE
TRANSFORMER

SEE SHEET F-2

BURIED TRANSMISSION LINE

90" PENSTOCK

PROPOSED POWERHOUSE

PROPOSED SURGE TANK

PROPOSED ROAD

SEE SHEET F-2

SEE SHEET F-2

EXIST. BADGER SUBSTATION

TETON R.

5550
5500
5475
5450
5425
5400
5375
5356.5
5350
5600
5700
5800
5900
6000
6100
6200
6300
6400
6500

S 89°36'24" W
222.10'

0 100 200 300
SCALE IN FEET

EXHIBIT "F"

FALL RIVER RURAL ELECTRIC COOPERATIVE INC.

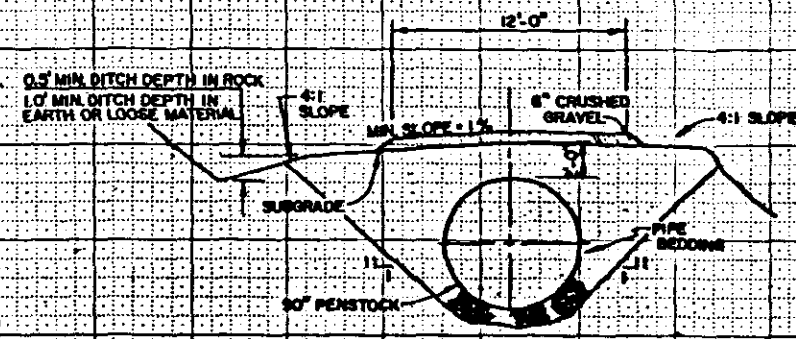
FELT
HYDROELECTRIC PROJECT
PLAN

PROJECT NO | OCTOBER 1984 | EXHIBIT F-1

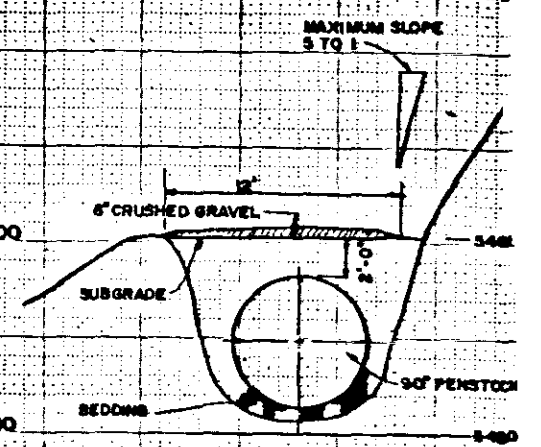
0+00 2+00 4+00 6+00 8+00 10+00 12+00 14+00 16+00 18+00 20+00

6000 5900 5800 5700 5600 5500 5400 5300

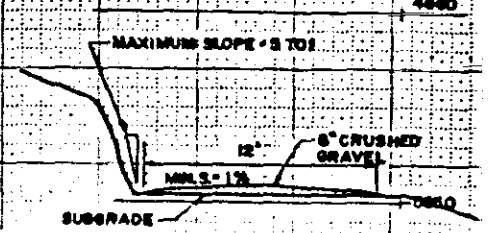
EXISTING GROUND
PROPOSED ACCESS ROAD
SAME POINT
EXISTING GROUND ALONG ROAD
PROPOSED ACCESS ROAD
EL 5730.00
NORMAL WATER SURFACE
EXISTING TUNNEL #3
PROPOSED 90" PENSTOCK
EXISTING GROUND ALONG PIPE
S=-0.019
PENSTOCK & ACCESS ROAD CONVERGE
P.V.I. ELEV. = 5497.2
Δ=7°27'
S=-0.15
SURGE PIPE
P.V.I. ELEV. = 5374.1
PROPOSED POWERHOUSE
TAIL RACE ELEV. 5359.75



SECTION B-B
SCALE 1"=5'



SECTION C-C
SCALE 1"=5'



SECTION A-A
SCALE 1"=5'

20+00 22+00 24+00 26+00 28+00 30+00 32+00 34+00 36+00 38+00 40+00 42+00

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING.
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

BRUNING 60 51 4381-4

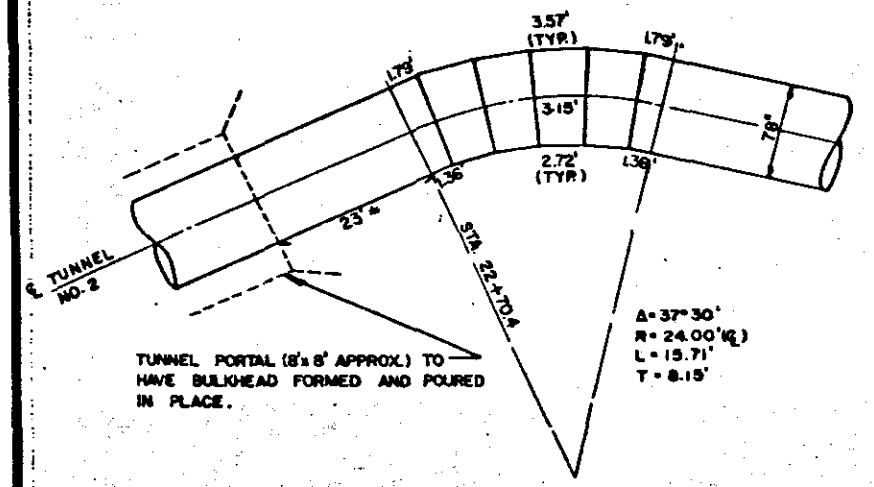
EXHIBIT "F"

FALL RIVER RURAL ELECTRIC COOPERATIVE INC.

FELT HYDROELECTRIC PROJECT

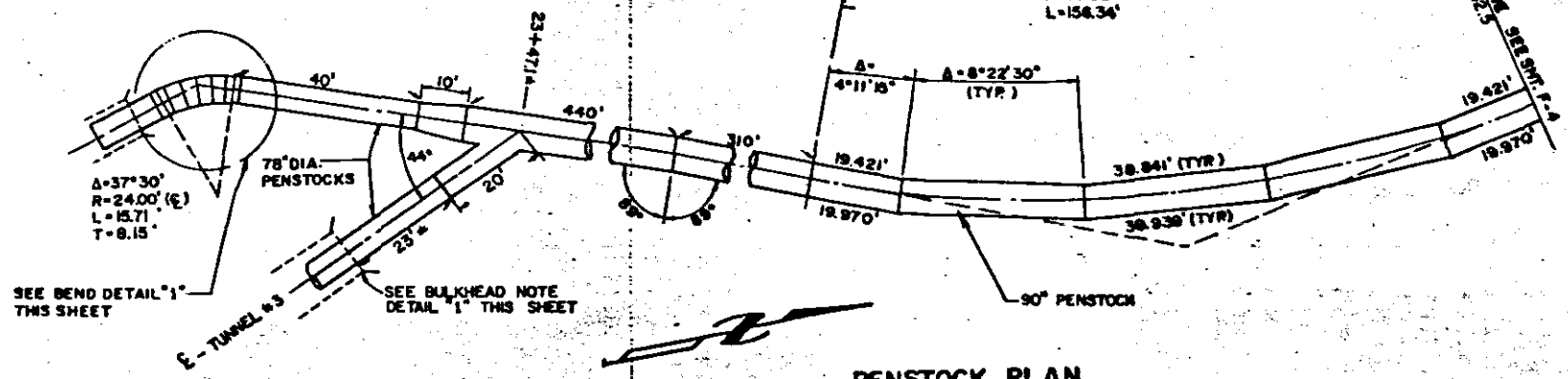
PENSTOCK & ACCESS ROAD PROFILE

PROJECT NO. OCT 1984 EXHIBIT F-2



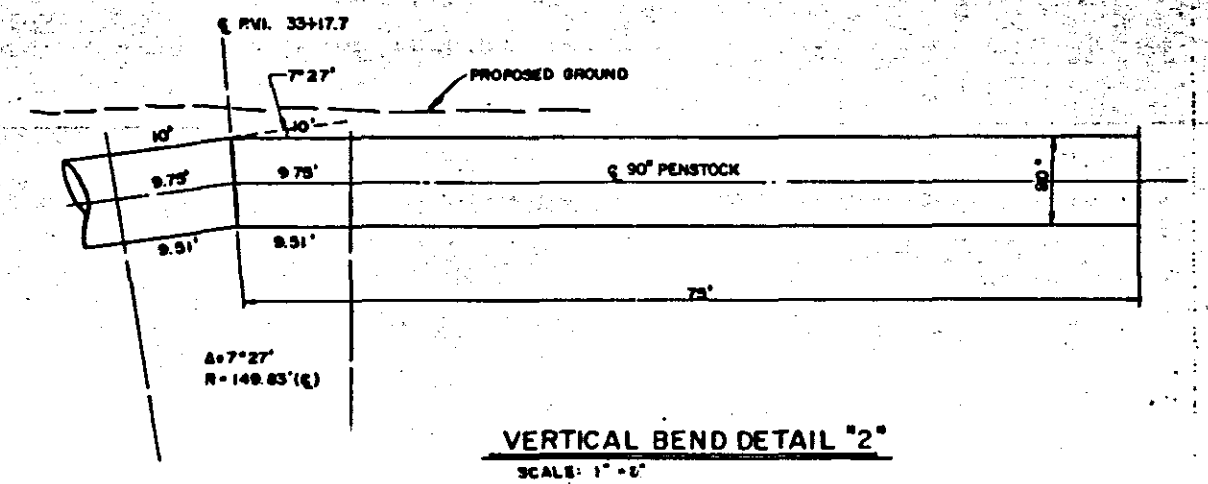
BEND DETAIL "1"

SCALE: 1"=8'



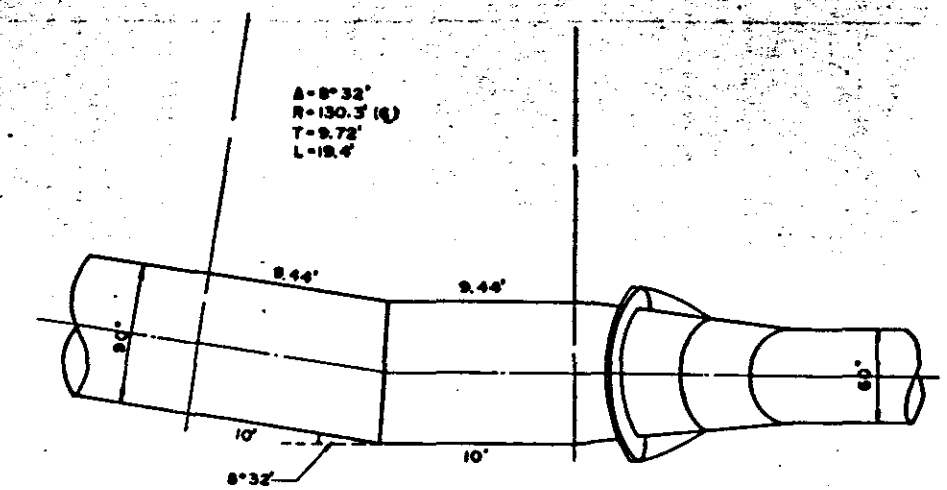
PENSTOCK PLAN

SCALE: 1"=20'



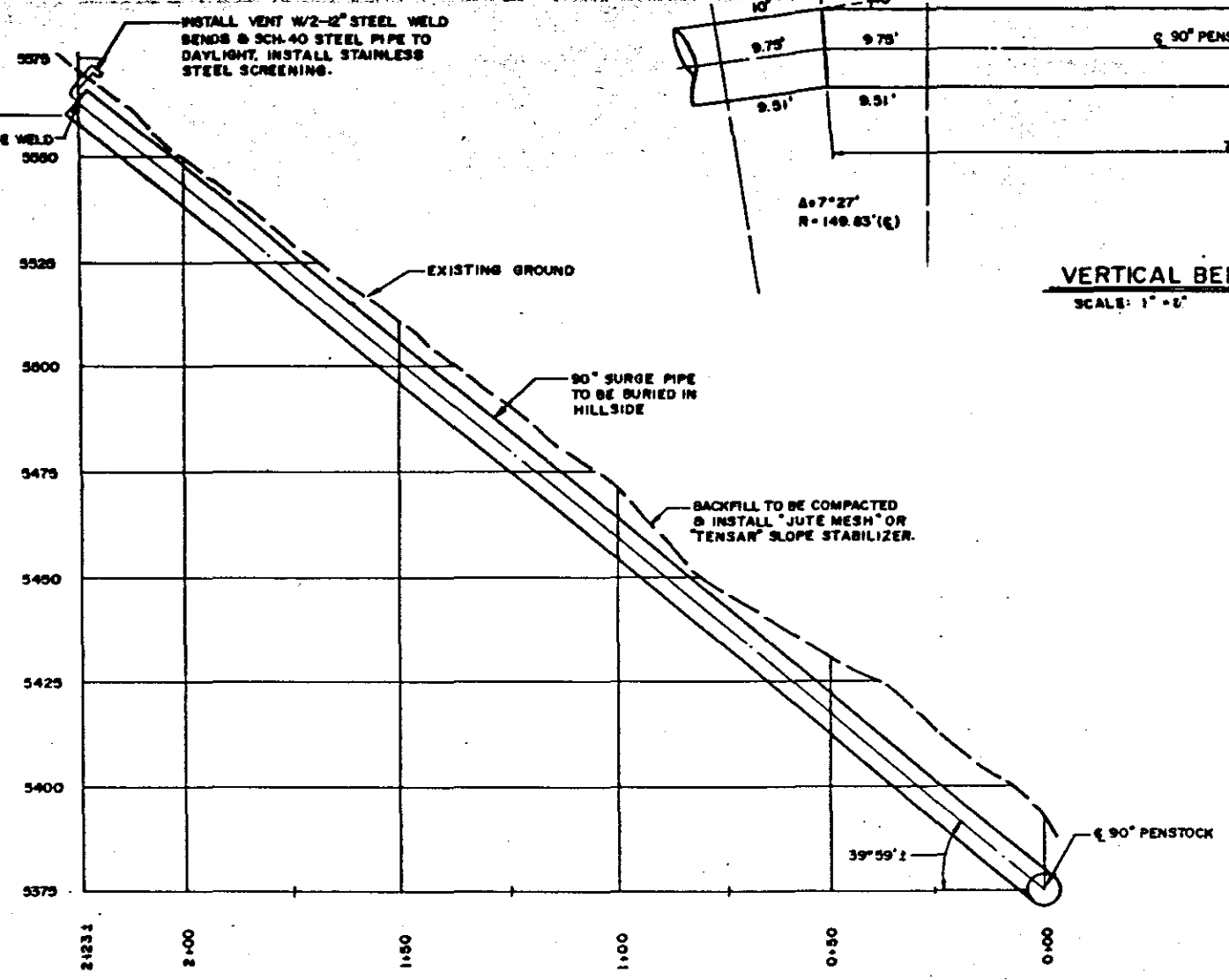
VERTICAL BEND DETAIL "2"

SCALE: 1"=8'



VERTICAL BEND DETAIL "3"

SCALE: 1"=8'



SECTION OF SURGE PIPE D-D

SCALE: 1"=20'

EXHIBIT "F"

FALL RIVER RURAL ELECTRIC COOPERATIVE INC.

FELT

HYDROELECTRIC PROJECT

PENSTOCK & SURGE PIPE

PROJECT NO | JAN 1986 | EXHIBIT F-3

VERIFY SCALE

BAR IS ONE INCH ON ORIGINAL DRAWING.
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

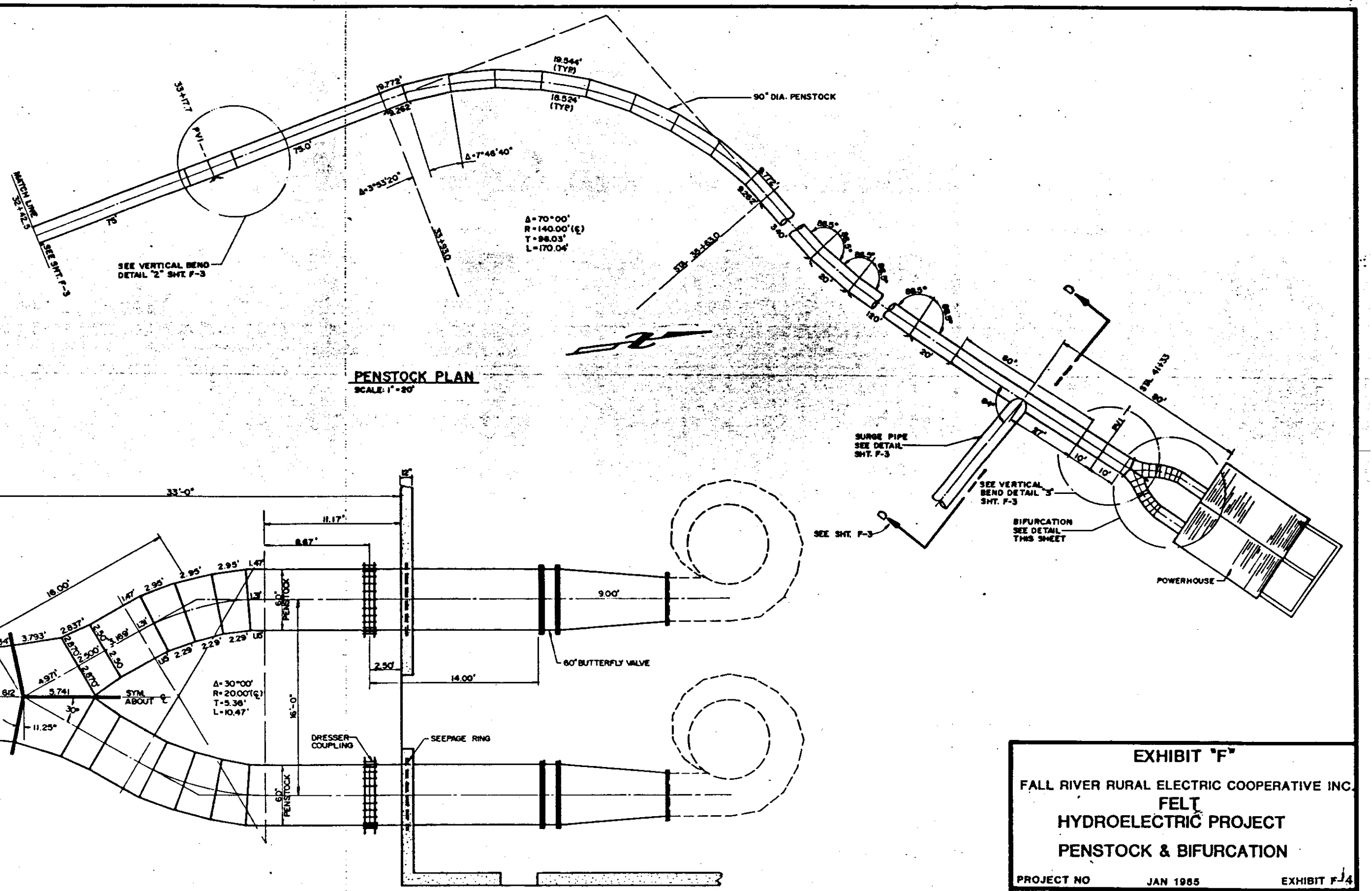


EXHIBIT "F"

FALL RIVER RURAL ELECTRIC COOPERATIVE INC.

FELT

HYDROELECTRIC PROJECT

PENSTOCK & BIFURCATION

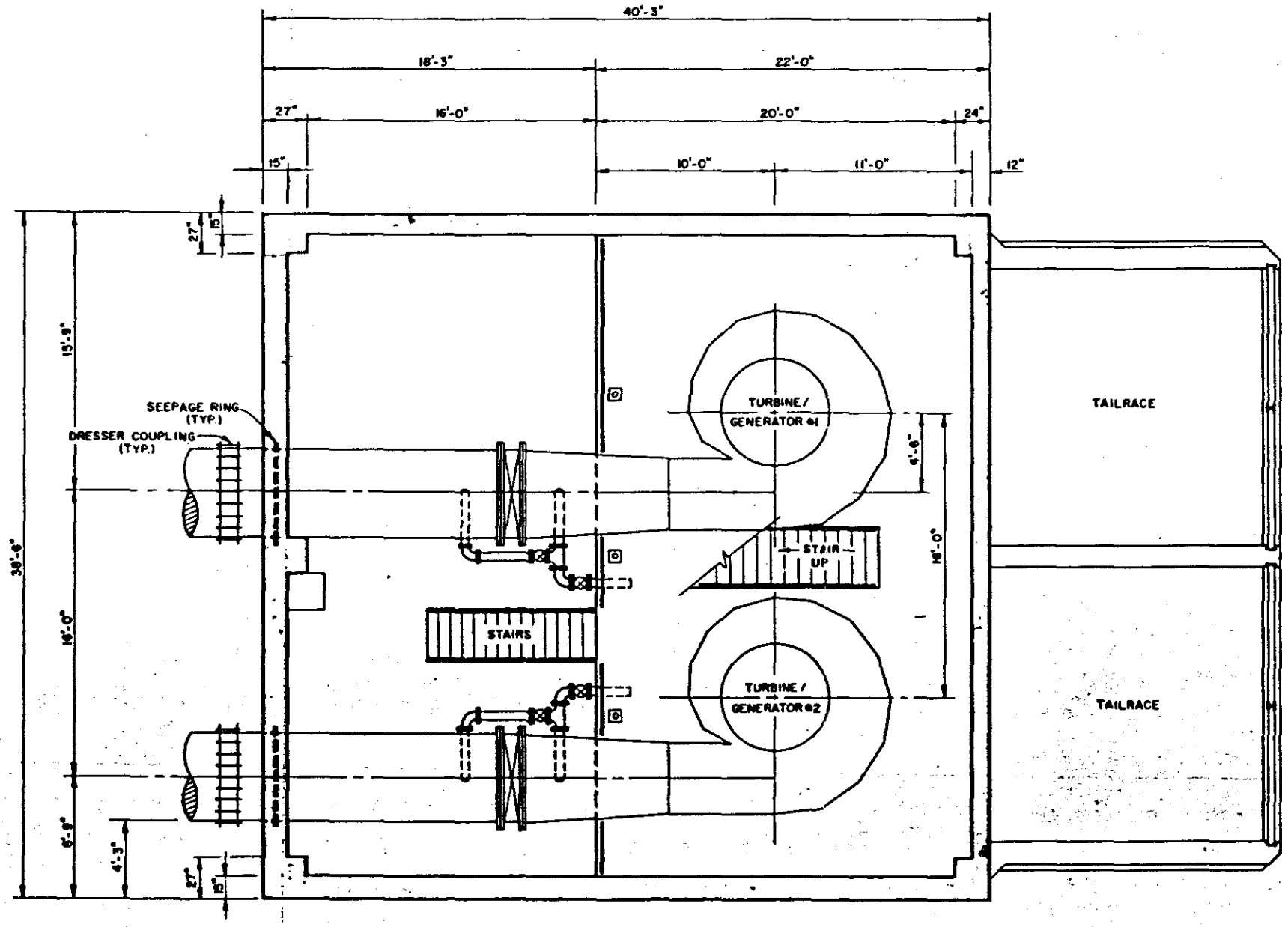
PROJECT NO | JAN 1985 | EXHIBIT F-4

VERIFY SCALES

BAR IS ONE INCH ON ORIGINAL DRAWING.

0 1"

IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.



TURBINE DECK / VALVE BAY - PLAN

SCALE: 1" = 4'

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 ——— 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

EXHIBIT "F"

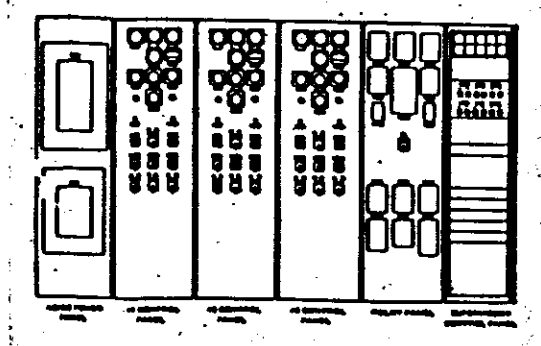
FALL RIVER RURAL ELECTRIC COOPERATIVE INC.

FELT
HYDROELECTRIC PROJECT
POWERHOUSE

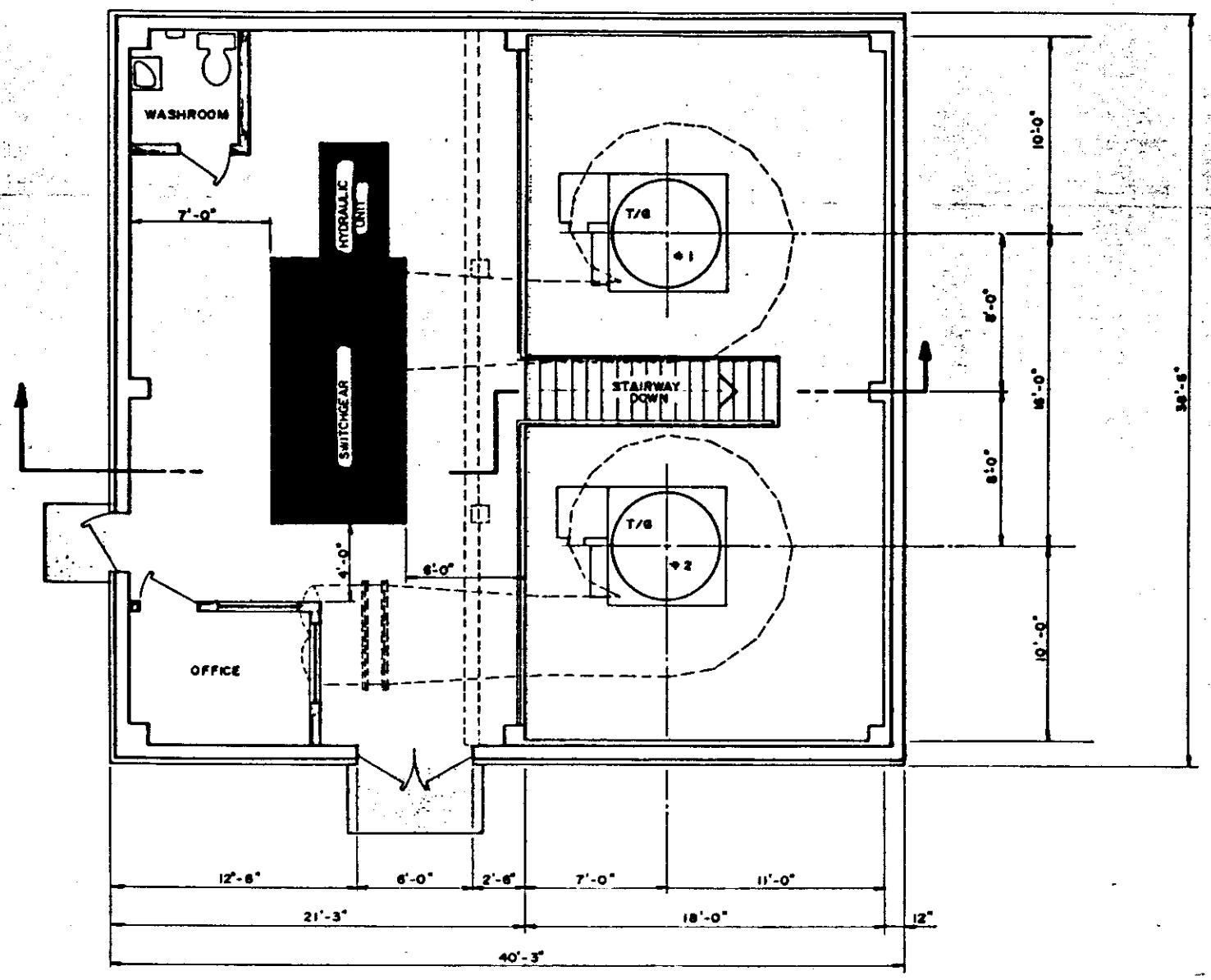
TURBINE DECK/VALVE BAY-PLAN

PROJECT NO. : OCT 1984 EXHIBIT F- 5

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 ——— 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY



CONTROL PANEL
NTS



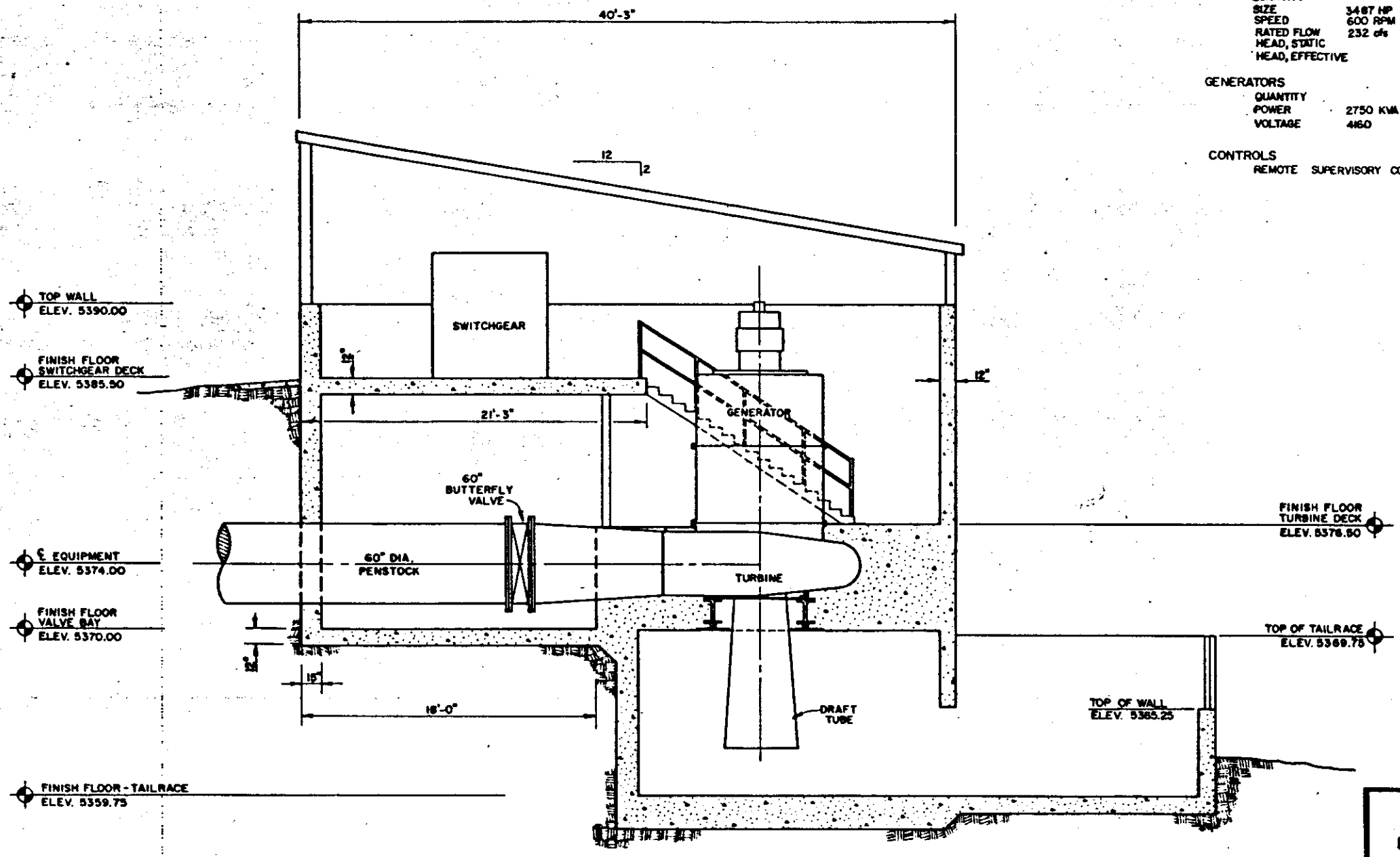
SWITCHGEAR DECK – PLAN
SCALE: 1" = 4'

EXHIBIT "F"

FALL RIVER RURAL ELECTRIC COOPERATIVE INC.
FELT
HYDROELECTRIC PROJECT
POWERHOUSE
SWITCHGEAR DECK – PLAN

PROJECT NO. | OCT 1984 | EXHIBIT F-6

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY



SECTION
SCALE: 1"=4'

EQUIPMENT SPECIFICATIONS

		EACH	TOTAL
TURBINE			
	QUANTITY		2
	SIZE	3487 HP	6975 HP
	SPEED	600 RPM	
	RATED FLOW	232 cfs	464 cfs
	HEAD, STATIC		158 ft.
	HEAD, EFFECTIVE		154 ft.
GENERATORS			
	QUANTITY		2
	POWER	2750 KVA	5500 KVA
	VOLTAGE	4160	

CONTROLS
REMOTE SUPERVISORY CONTROL

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 ——— 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 ——— 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

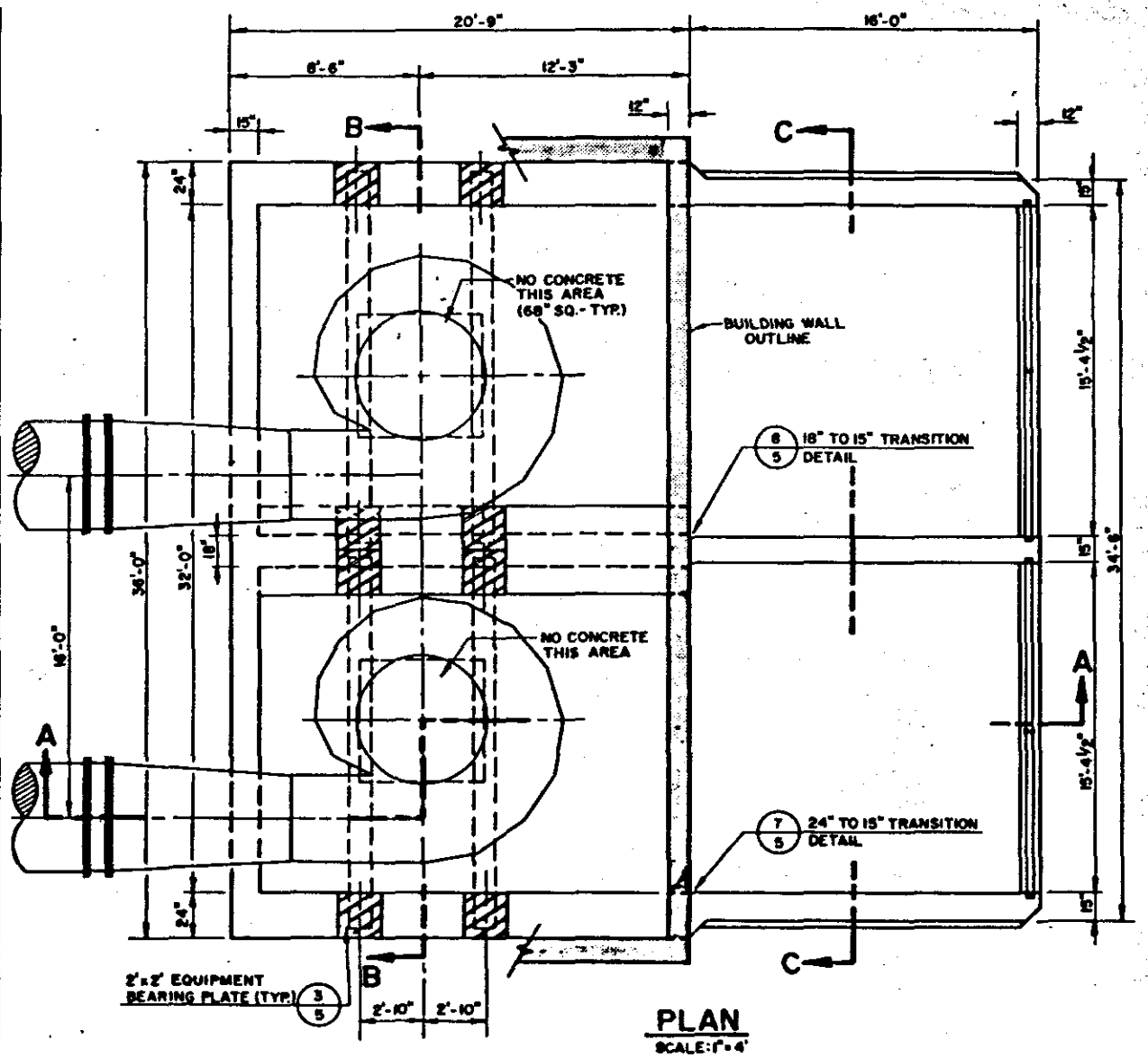
EXHIBIT "F"

FALL RIVER RURAL ELECTRIC COOPERATIVE INC.

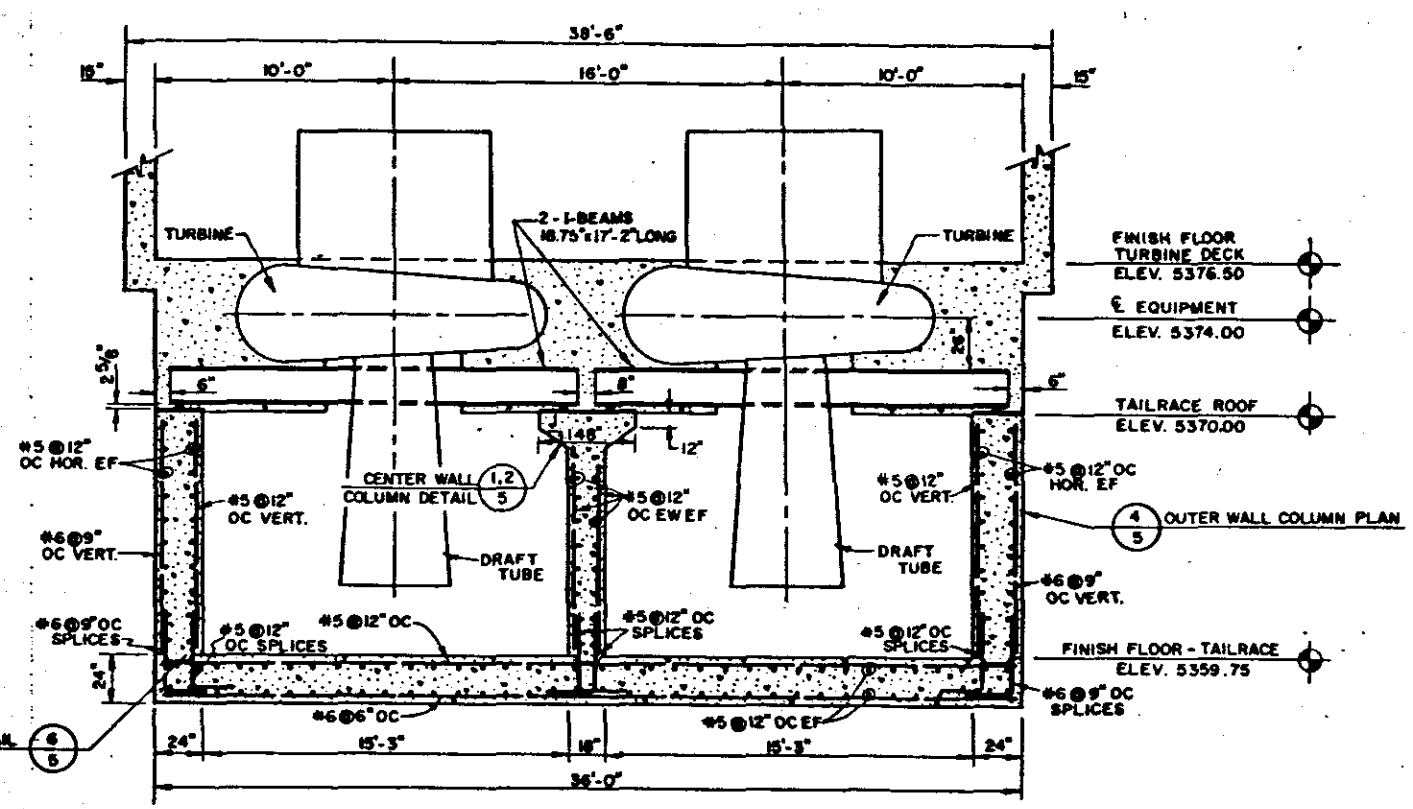
FELT
HYDROELECTRIC PROJECT

POWERHOUSE SECTION

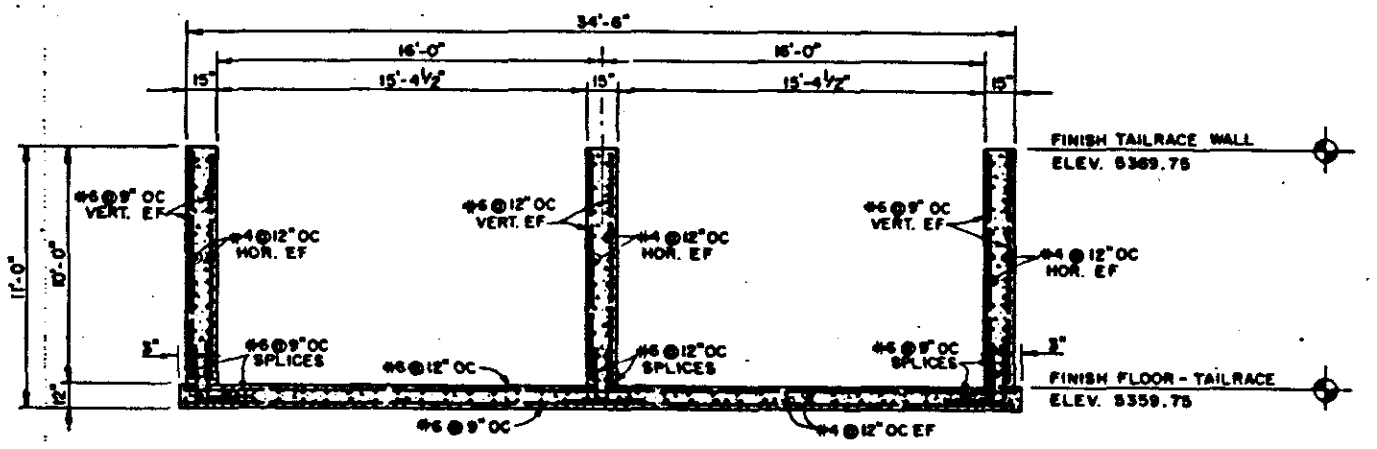
PROJECT NO. | OCT 1984 | EXHIBIT F- 7



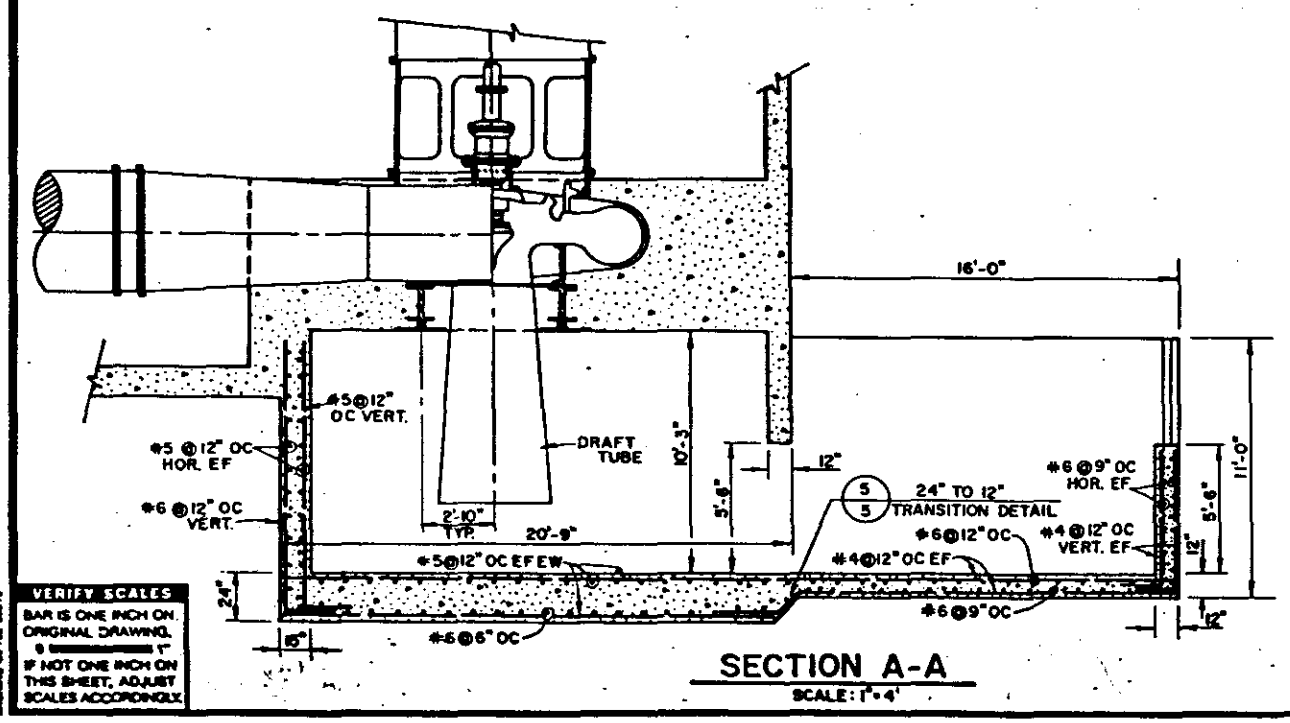
PLAN
SCALE: 1"=4'



SECTION B-B
SCALE: 1"=4'



SECTION C-C
SCALE: 1"=4'



SECTION A-A
SCALE: 1"=4'

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

GENERAL NOTES

1 - CONSTRUCT TAILRACE ON COMPACTED NATIVE MATERIAL OR GRANULAR BASE MATERIAL COMPACTED TO 95% T-99 PROCTOR DENSITY.
2 - REFER TO INDEX SHEET FOR TYPICAL CONCRETE REINFORCING REQUIREMENTS.
3 - DETAILS SHOW TAILRACE REINFORCING. COORDINATE THIS REINFORCING WITH TURBINE DECK FLOOR REINFORCEMENT.
4 - REFER TO HYDRO WEST DRAWING FOR ADDITIONAL BASE FRAME DETAILS.

EXHIBIT "F"

FALL RIVER RURAL ELECTRIC COOPERATIVE INC.

FELT HYDROELECTRIC PROJECT

POWERHOUSE

TAILRACE – PLAN & SECTIONS

PROJECT NO. | OCT 1984 | EXHIBIT F-8

EXISTING TUNNELS

EXISTING RESERVOIR

EXIST. INTAKES

EXIST. POWER PLANT

TETON RIVER

PROPOSED 90" PENSTOCK

AERIAL SPAN

PROPOSED METER, TRANSFORMER AND POLE STRUCTURE

BURIED TRANSMISSION LINE

PROPOSED POWERHOUSE

90" SURGE PIPE

PROPOSED ROAD

B-1 B-2 B-3 B-4 B-5

STA 8+63.64

STA 10+42.15

STA 12+62.92

STA 13+39.80

STA 14+75.90

S 49°36'24" W 1222.90'

TETON R.

5550 5500 5475 5450 5425 5400 5375 5350 5325 5300 5275 5250 5225 5200 5175 5150 5125 5100 5075 5050 5025 5000 4975 4950 4925 4900 4875 4850 4825 4800 4775 4750 4725 4700 4675 4650 4625 4600 4575 4550 4525 4500 4475 4450 4425 4400 4375 4350 4325 4300 4275 4250 4225 4200 4175 4150 4125 4100 4075 4050 4025 4000 3975 3950 3925 3900 3875 3850 3825 3800 3775 3750 3725 3700 3675 3650 3625 3600 3575 3550 3525 3500 3475 3450 3425 3400 3375 3350 3325 3300 3275 3250 3225 3200 3175 3150 3125 3100 3075 3050 3025 3000 2975 2950 2925 2900 2875 2850 2825 2800 2775 2750 2725 2700 2675 2650 2625 2600 2575 2550 2525 2500 2475 2450 2425 2400 2375 2350 2325 2300 2275 2250 2225 2200 2175 2150 2125 2100 2075 2050 2025 2000 1975 1950 1925 1900 1875 1850 1825 1800 1775 1750 1725 1700 1675 1650 1625 1600 1575 1550 1525 1500 1475 1450 1425 1400 1375 1350 1325 1300 1275 1250 1225 1200 1175 1150 1125 1100 1075 1050 1025 1000 975 950 925 900 875 850 825 800 775 750 725 700 675 650 625 600 575 550 525 500 475 450 425 400 375 350 325 300 275 250 225 200 175 150 125 100 75 50 25 0

0 100 200 300
SCALE IN FEET

BORING LOG LEGEND

B-2 BORING IDENTIFICATION

NUMBER OF FRACTURES PER FOOT (X INDICATES HIGHLY FRACTURED OR BROKEN)

INDIVIDUAL CORE RUN

RECOVERY - PERCENT OF CORE RUN RECOVERED

R = 5%
RQD = 5 %

ROCK QUALITY DESIGNATION - PERCENT OF CORE RUN COMPRISED OF SOUND PIECES OF ROCK 4" OR LONGER

CLAYEY SILT AND SILTY CLAY

GRAVEL AND BOULDERS, BASALTIC OR RHYOLITIC IN COMPOSITION

WELDED ASH FLOW TUFF

BORING LOGS

B-1 B-2 B-3 B-4 B-5

DEPTH (FEET) 0 5 10 15 20 25 30 35 40

R = 90 %
RQD = 88 %

R = 100 %
RQD = 69 %

R = 90 %
RQD = 59 %

R = 100 %
RQD = 67 %

R = 100 %
RQD = 20 %

EXHIBIT "F"

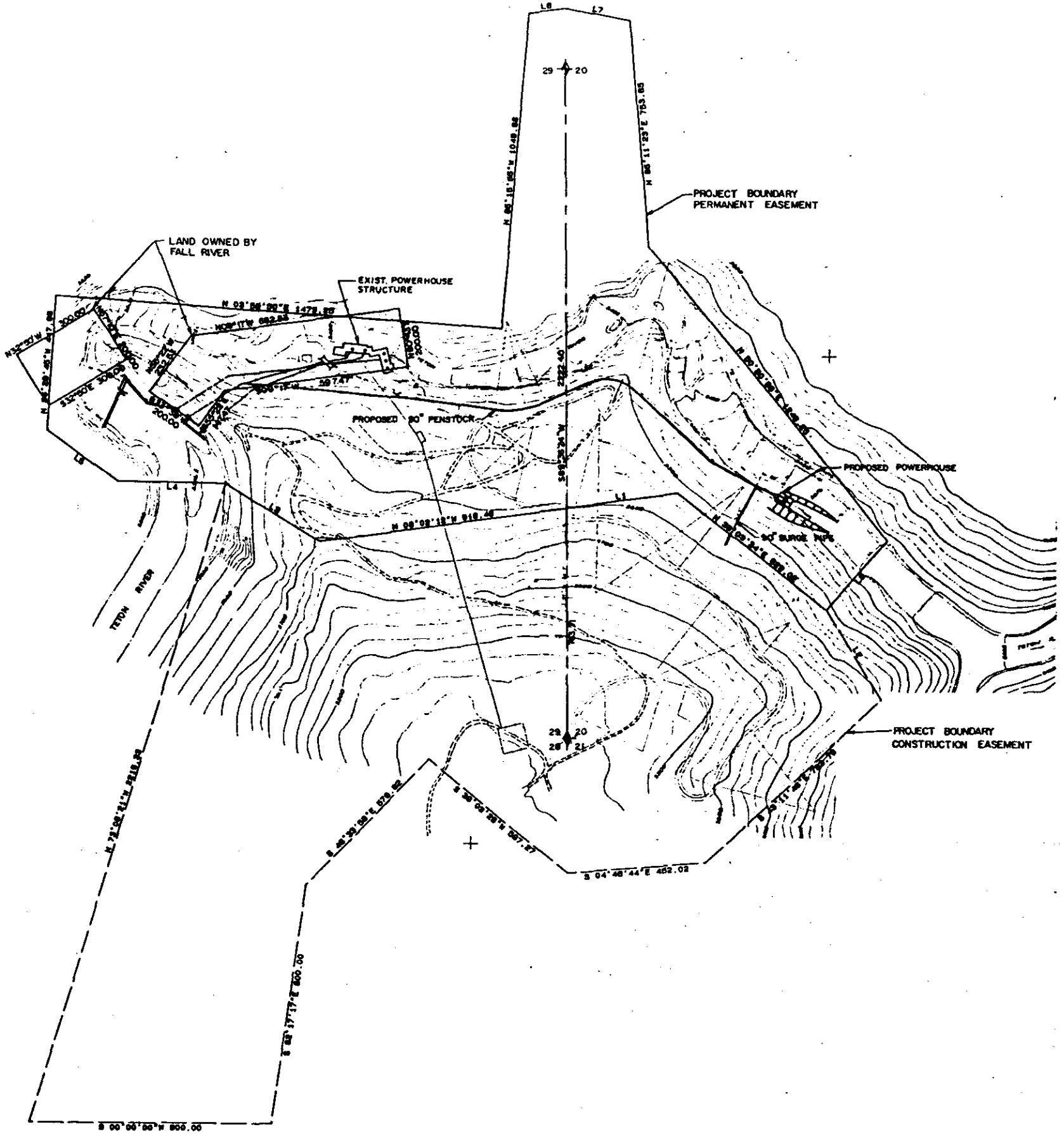
FALL RIVER RURAL ELECTRIC COOPERATIVE INC.

FELT HYDROELECTRIC PROJECT

BORING LOCATION & LOGS

PROJECT NO | OCTOBER 1984 | EXHIBIT F-9

EXHIBIT G
PROJECT MAPS



200 100 0 200 400 800
SCALE IN FEET

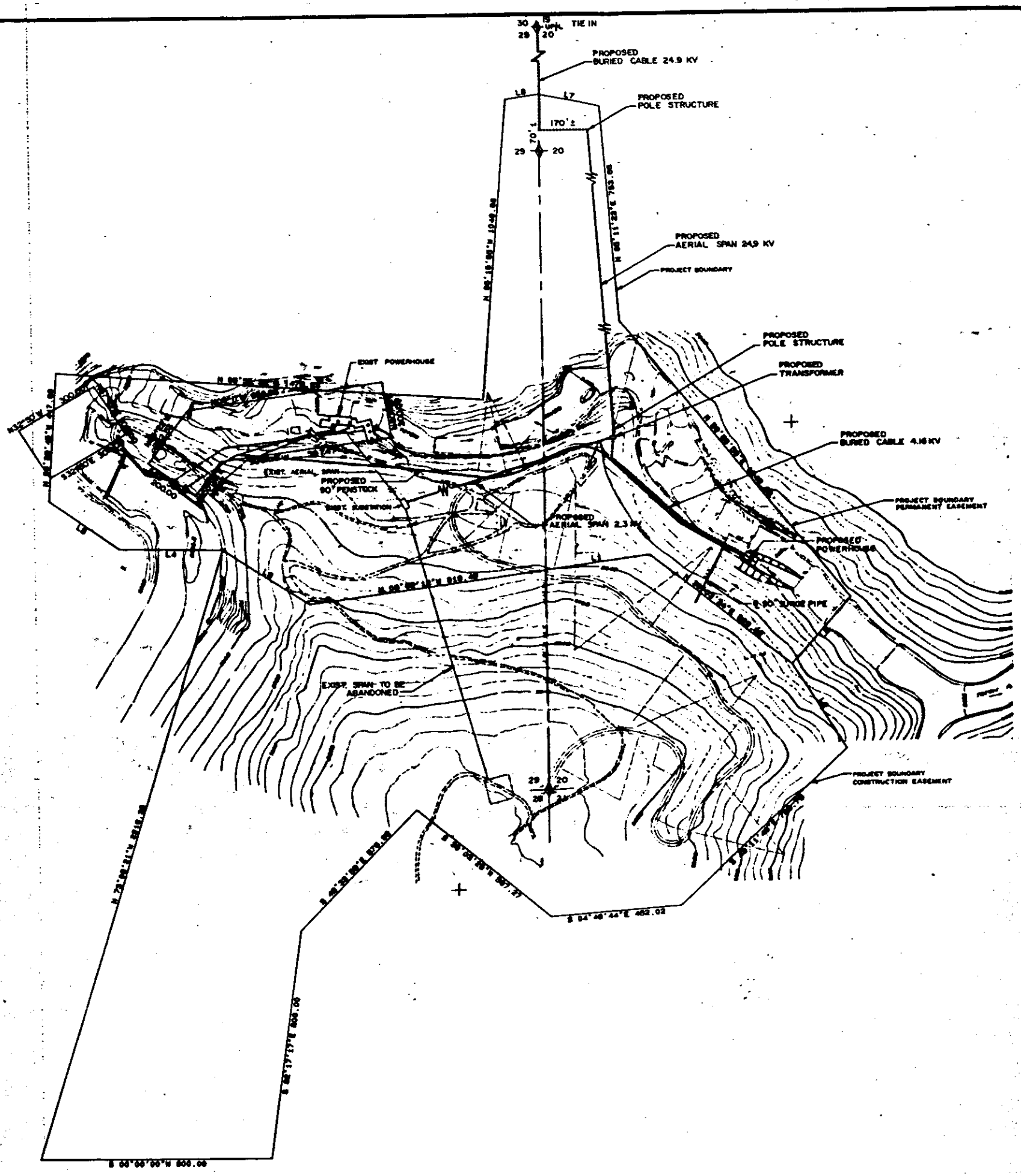
LINE	BEARING	DISTANCE
1	N 06°08'18"W	385.36
2	N 87°46'57"E	348.48
3	N 38°06'48"E	358.78
4	S 60°48'17"W	380.18
5	S 38°26'35"W	288.22
6	N 66°21'20"W	118.00
7	N 10°48'38"E	218.00
8	S 48°45'19"E	307.22

EXHIBIT "G"

FELT
HYDROELECTRIC PROJECT

PROJECT BOUNDARY

PROJECT NO. JANUARY 1985 EXHIBIT G-1



LINE	BEARING	DISTANCE
1	N 08°02'18"W	288.39
2	N 83°48'27"E	348.48
3	N 36°08'48"E	388.78
4	S 85°48'17"E	288.18
5	S 38°38'38"E	388.38
6	N 08°21'30"E	118.88
7	N 10°48'28"E	218.88
8	S 48°48'19"E	307.38

EXHIBIT "G"

FALL RIVER RURAL ELECTRIC COOPERATIVE INC.

FELT
HYDROELECTRIC PROJECT

TRANSMISSION MAP

PROJECT NO. JANUARY 1988 EXHIBIT G-2

DEFICIENCIES

AND

ADDITIONAL INFORMATION

N[illegible]AM ENGINEERING
100 Lindbergh Plaza 2, 5160 Wiley Post Way, Salt Lake City, Utah 84116, 801-532-2520

April 30, 1985

Mr. Kenneth F. Plumb, Secretary
Federal Energy Regulatory Commission
825 North Capitol Street, NE
Washington, DC 20426

Dear Mr. Plumb:

RE: Felt Project (FERC #5089)

In response to Mr. Quinton Edson's letter of April 1, 1985 (see copy of letter attached for reference) and subsequent telephone conversations with members of the FERC staff, we respectfully submit the following information:

DEFICIENCIES

Exhibit E

1. The fishery resource as described on pages E-10 through E-13 of the original license application is still considered applicable to the full bypass reach. Copies of this section are included for your information. Since these studies included in part that portion of the Teton River from Bitch Creek downstream of the amended project to a point well upstream of the dam, the applicant concluded that the proposed changes in the project would not warrant additional fishery resource studies. Agency consultations supported this position.

2. and 3. The assessment of impacts of the minimum stream flow release on the quality of aquatic habitat within the bypass reach was addressed in the license application with agreement for minimum stream flow and mitigative measures as documented on pages E-34 and E-35 of the license application. Copies of these pages are included for your information.

Following the above referenced study an agreement was reached between the Idaho Department of Fish and Game and Fall River Rural Electric Cooperative. Copies of the letter from the Idaho Department of Fish and Game including the applicable portion of the agreement are included for your information.

The terms of this agreement are being implemented in the present project design. The extension of the bypass reach by 300 feet was also agreed to by the Idaho Fish and Game after review of the proposed amendment as noted in their letter dated January 23, 1985 (refer to Exhibit E appendix).

Several additional meetings have been held with representatives of the Idaho Department of Fish and Game and U.S. Fish and Wildlife Service. Recent correspondence from the above referenced agencies stating approval of the project is enclosed.

As agreed at an April 26, 1985 meeting between representatives of the applicant and the Idaho Department of Fish and Game, the applicant has agreed to either of the following:

1. Provide intake screening acceptable to the Department of Fish and Game consisting of 1/4" mesh screening and approach velocities of not greater than 1/2 foot per second. If the applicant chooses to provide screening for the project, he will need to provide an annual payment of $1150 to mitigate the lost habitat.

2. In lieu of screening, at the option of the applicant, fund the construction of raceways at the Mackay Hatchery at a cost of $60,000 and provide an annual operating fund of $18,400 for the next 35 years (see attached letter from Idaho Department of Fish and Game).

These are the only mitigative measures recommended by the agencies. Both the Idaho Department of Fish and Game and the U.S. Fish and Wildlife Service specify this program would satisfy any need for mitigation due to impacts from the project.

Exhibit E Summary of the application for amendment of the license presents the analysis of the impacts and benefits to be derived from the proposed project changes.

4. The routing of the transmission lines from the project site to the point of delivery at Utah Power & Light distribution system will be within existing easements and rights of way of the Fall River Rural Electric Cooperative. Figure E-4, Vegetation Cover Types, (included for reference) indicates the general cover for the transmission line corridor. From the transformer pole structure to the pole structure on the west rim of the canyon, approximately 1500 LF, 500 ft vertical rise, there will be essentially no disturbance of the vegetation. The aerial span will not require clearing or equipment access during construction except in the immediate vicinity of the pole structures.

From the pole structures at the canyon rim to the point of delivery, approximately 2600 feet, the transmission line will be buried. This section traverses private property which is presently under cultivation. A total estimated area of 1.2 acres would be involved within the easement. Crop replanting or compensation will be made to the property owners as appropriate within the terms of the easement.

The proposed new access road to the project site traverses steep terrain within the project boundary whose primary vegetation cover is sagebrush and grasses with areas of rock outcroppings. Considering the cut and fill areas of the new roadway and the surge tower construction access, an estimated 4.5 to 5.0 acres of vegetation cover could be disturbed. As the application states, revegetating, erosion control and spoils cleanup will be accomplished according to approved practices.

5. Numerous discussions have been held with representatives of the Fish and Wildlife Service, Boise Office. Mr Jim Nee was contacted prior to submittal of the license. The agency was given copies of the application for amendment. Additionally, meetings have been held with Mr. Jim Nee, U.S. Fish and Wildlife Service, and Virgil Moore of Idaho Department of Fish and Game. Letters of approval from each of the agencies are included.

ADDITIONAL INFORMATION

1. On April 5, 1985 copies of Exhibit E of the license application and amendment to application were sent to Mr. Peter Paquet, Northwest Power Planning Council, Portland, Oregon. Mr. Paquet indicated their immediate action for review and comment to FERC. He further indicated that since there were no anadromous fish and that the U.S. Fish and Wildlife Service and Idaho Fish and Game had already reviewed the project documents, the power planning council should have no comment.

2. Copies of the amendment application have been forwarded to the Idaho Department of Health and Welfare, Division of Environment, along with a request for a water quality certificate. After meetings and clarification of the material presented, a water quality certificate was issued on April 16, 1985 (see enclosed copy of April 16, 1985 certificate and June 23, 1982 certificate).

Sincerely,

BINGHAM ENGINEERING

Jay R. Bingham
President

JRB/cs

Enclosures

RECEIVED
APR 5 1985
Salt Lake City, Utah

FEDERAL ENERGY REGULATORY COMMISSION

WASHINGTON, D.C. 20426

OHL-PM
Project No. 5089-003 - Idaho
Fall River Electric Cooperative, Inc.

APR 0 1 1985

Mr. Jay R. Bingham
Bingham Engineering
165 Wright Brothers Drive
Salt Lake International Center
Salt Lake City, UT 84116

Subject: Fall River Electric Cooperative Inc.'s application for amendment of license of the Felt Water Power Project No. 5089.

Dear Mr. Bingham:

Your application for the subject project has been reviewed by staff. The application for the subject project does not conform to the relevant requirements of the Commission's regulations. In addition, review of your application indicates that additional information is needed to evaluate fully the proposed project. A listing of the deficiencies and the additional information is enclosed as Schedule A.

Pursuant to Section 4.31(d) of the Commission's regulations, you have 90 days from the date of this letter to correct the deficiencies in your application. Further, pursuant to Section 4.31(f) of the Commission's regulations, you have 90 days from the date of this letter to provide the additional information requested, or a schedule indicating when the additional information will be filed with the Commission. The additional information need not be included in the copies of the application but may be submitted separately.

If the information requested is not received by the Secretary of the Commission within the time frame indicated, your application may be rejected; therefore, you are advised to contact Mr. Sat Goel in the Division of Project Management at (202) 376-9816, if you have any questions concerning the substance of what must be provided in order to satisfy fully the information requested in Schedule A.

Any submittals made pursuant to this letter should be filed with: Kenneth F. Plumb, Secretary, Federal Energy Regulatory Commission, 825 North Capitol Street, N.E., Washington, D.C. 20426.

Authority to act on this matter is delegated to the Director, Office of Hydropower Licensing, under §375.314 of the Commission's regulations, 49 Fed. Reg. 29,369 (1984)(Errata issued July 27, 1984)(to be codified at 18 C.F.R. §375.314).

Sincerely,

for Quentin A. Edson
Director, Office of
Hydropower Licensing

Enclosure:
Schedule A

cc: Mr. McNeill Watkins II
Bishop, Liberman, Cook, Purcell
and Reynolds
1200 17th Street, NW
Washington, DC 20036

Schedule A

Project No. 5089-003--Idaho

DEFICIENCIES

Exhibit E

Under § 4.201(5) of the Commission's regulations, the Applicant must file a revised Exhibit E, conforming to the requirements of § 4.51(f). More detailed information is necessary than is provided in the February 5, 1985, filing. The Exhibit E must be revised to include: a Report on water use and quality [18 CFR at § 4.51(f)(2)]; and a Report on fish, wildlife, and botanical resources [18 CFR at § 4.51(f)(3)].

The Report on fish, wildlife, and botanical resources in 18 CFR at § 4.51(f)(3) must include the following specific information:

(1) a description of the fishery resource, including species composition and relative abundance, based on the results of fish sampling conducted for the bypassed reach of the Teton River;

(2) an assessment of the impacts of the proposed 20 cubic feet per second minimum flow release on the quantity of aquatic habitat available to the indigenous game fish species (with emphasis on cutthroat trout) of the bypassed reach, including an evaluation of the impacts of alternative minimum flow releases on the amount of aquatic habitat located within the bypassed reach, as well as comments from the U.S. Fish and Wildlife Service (FWS) and the Idaho Department of Fish and Game (DFG) on the assessment and the proposed minimum flow release;

(3) specific mitigative measures necessary to minimize adverse impacts to riparian vegetation, to wildlife resources that utilize riparian habitat, and to other area fish and wildlife resources that would be impacted by the construction and operation of the proposed project, as well as comments from the FWS and the DFG on the adequacy of the measures and a discussion of any measures proposed by the agencies;

(4) a site-specific description of the environment of the transmission line route and a description of the maintenance techniques for the transmission line right-of-way; and

(5) evidence that the Exhibit E was prepared after consultation with the FWS.

ADDITIONAL INFORMATION

Under the requirements in 18 CFR at § 4.31(f), the application may be dismissed unless the following additional information or a schedule for filing the additional information is provided within 90 days from the date of this letter.

(1) Since the proposed project is located within the Columbia River Basin, the Applicant should provide evidence of consultation with the Northwest Power Planning Council, and a discussion of how the proposed project would take into account the Columbia River Basin Fish and Wildlife Program (under Section 1204 of the Program).

Continuing Impact on Water Quality

No long-term impacts on water use or water quality are expected as a result of this project. The deposition of additional sediment load behind Felt Dam is not expected to cause any problems because there is sedimentation already in the impoundment. The reservoir volume and sedimentation are apparently near equilibrium and little additional sediment accumulation is expected.

Agency Recommendations

Documentation of consultation with concerned agencies is included in the Appendix of this exhibit. The Idaho Department of Health and Welfare and the Idaho Department of Water Resources expressed no objections to the project. However, both agencies requested additional information, which will be provided during the design phase.

Water Quality Certificate

A letter requesting a Water Quality Certificate (Section 401, Clean Water Act) is presented in the Exhibit E Appendix.

(3) REPORT ON FISH, WILDLIFE, AND BOTANICAL RESOURCES

Fisheries

Detailed inventories have been carried out downstream of the dam and upstream in the slack water area. R. G. White (1976) performed angler and electrofishing studies in an irrigation withdrawal area 1 mile above Felt Dam. His data on relative abundance of trout species are as follows:

Species	Total Number	Relative Abundance
Rainbow Trout	220	76.2%
Brook Trout	45	15.5%
Cutthroat Trout	24	8.3%

All trout collected were larger than 6 inches (15.2 mm) total length. Mountain whitefish were not present in the angler catch, but made up 68.3 percent of the electrofishing catch. Irving, et al. (1975) found mountain whitefish to be the most abundant species in all sections of the Teton River.

The IDFG annually stocks approximately 13,000 rainbow in the upper valley at a Highway 33 bridge some 8 miles above Felt Dam. Another 10,000 rainbow are stocked in the lower Teton Canyon area.

IDFG conducted creel censuses in 1974, 1975, and 1980 (Jeppson, 1980) throughout the Teton River. Estimated trout catches from the Highway 33 bridge downstream to Teton Dam are shown below:

Species	1974-75	1980
Rainbow Trout	3,533	11,236
Cutthroat Trout	2,954	4,972
Brook Trout	1,226	1,371
Hybrid Trout	--	2,737
TOTALS	7,713	20,316

The estimated trout catches immediately upstream (pool to bridge) and downstream (powerhouse to Bitch Creek) of Felt Dam in 1980 are shown below:

Species	Upstream	Downstream
Rainbow Trout	2,458	614
Cutthroat Trout	0	28
Hybrid Trout	0	118
Brook Trout	0	0
Mt. Whitefish	0	690
TOTALS	2,458	1,450

These census results indicate a good recreational fishery. However, fisherman access is severely restricted in the area of the damsite and recreational use is low. Catchable size trout occur more frequently upstream of the impoundment and below Badger Creek (Jeppson, 1981). Results of a field survey conducted in September 1981 showed that angler catch rates approach three fish per hour in the reservoir, indicating a large resident trout population and a valuable recreational fishery. Hatchery-planted rainbows become resident in the reservoir, and the average weight of angled fish was about 2 pounds. Upstream of the reservoir the catch rate fell to less than one fish per hour of effort. The dominant species was rainbow trout.

The river below the dam to the existing powerhouse is essentially dewatered (except for dam seepage) during most of the year. Fish stranding occurs and small pools form which quickly lose dissolved oxygen and increase in temperature. Fish in these pools become stressed and fish-kills are possible under existing conditions. During the September field survey, a flow of 2 to 5 cfs was observed going over the dam. This flow cleared the pools and stranded fish moved downstream.

The upper canyon area of the Teton River is dominated by rainbow trout and the lower canyon area is dominated by cutthroat trout. The primary movement of trout is downstream. The extreme gradient below the damsite (20 percent slope) has historically inhibited upstream migration, and since 1921 the dam has served as a migratory block. Jeppson (1981) believes some rainbow spawning occurs in the upper canyon area above Felt Dam and in the lower 3 miles of Badger Creek. Runoff has contributed some sediment to the reservoir and upstream areas and deposition could inhibit trout egg incubation; however, the stream carries relatively little sediment and its effect is probably negligible.

In 1968 the Teton River was classified as a Blue Ribbon stream by IDFG. However, natural erosion and bank caving plus increased bank erosion by agriculture and livestock practices have caused severe habitat degradation in lower gradients and valleys downstream of the project until Utah suckers and mountain suckers have become the dominant species in these areas (Jeppson, 1981). Jeppson (1981) indicated that the existing dam has prohibited the upstream movement of Utah suckers. Consequently, the upper Teton River is presently free of this nongame species, which has a history of degrading trout spawning and nursery habitat.

Wildlife

Wildlife habitat in the vicinity of the Felt Dam consists of three general types. These include a riverine-type habitat, with its associated riparian vegetation; aquatic habitat, occurring in and along the shoreline of the reservoir; and upland habitat, dominated by an overstory of Douglas fir, juniper, or brushy species. Detailed accounts of these vegetative communities are found in the vegetation section.

D. The sluice gate was opened a measured amount to release 10 cfs and sufficient time was allowed for the flow to stabilize throughout the reach. After all observers were satisfied, the flow was increased and the process repeated. Observations were made at discharges of 0, 10, 20, 30, 50, and 100 cfs.

The experiment was totally successful and concluded with agreement between Fall River and IDFG on all major points of dispute. Terms of the agreement are as follows:

1. Fall River will construct a fish ladder capable of operating with flow in the range of 10 to 30 cfs. IDFG will furnish design criteria and review the design of the ladder.

2. The minimum flows release from the dam will be 20 cfs except for 3 months each year during the period of cutthroat trout spawning migration, when the minimum flow release will be 50 cfs. One of the 3 months of 50 cfs minimum flow will be June, which is normally the highest flow month. The 50 cfs flow may not be required throughout all the 3 months to provide for upstream fish passage. IDFG will conduct studies to more closely identify the time frame in the spring during which the cutthroat trout spawning migration takes place.

3. Fall River will pay IDFG a lump sum to provide for mitigation of turbine mortality. IDFG will make estimates of the expected mortality and amount of mitigation.

4. IDFG will break up a few large boulders in the channel to facilitate fish passage. This work will be funded by Fall River.

5. The public will be allowed to walk down the power plant access road for fishing or other recreational purposes; however, the road will not be suitable for public vehicle traffic. Fall River will provide a parking area near the Badger Substation.

6. Fish screens at the penstock intakes will not be required.

With the conclusion of the above agreement, all environmental issues have now been resolved and no known opposition to the project remains. IDFG has agreed to provide a letter for inclusion in this application which will verify their agreement.

(9) LIST OF REFERENCES AND CONTACTS

Graeff, Todd. December 1981. Personal communications. Idaho Department of Parks and Recreation.

Green, T. 1981. Idaho State Historical Society. Personal communication.

Hunter, Ed. December 1981. Personal communications. Idaho Department of Employment, Idaho Falls Regional Office.

Idaho Department of Parks and Recreation. March 1978. Idaho Outdoor Recreation Plan, 1977.

STATE OF IDAHO

DEPARTMENT OF FISH AND GAME 600 SO. WALNUT ST. – P. O. BOX 25
BOISE, IDAHO 83707

February 16, 1982

Fall River Rural Electric Cooperative, Inc.
Box 617
Ashton, ID 83420

Gentlemen:

The Idaho Department of Fish and Game concurs in the attached agreement.

Sincerely,

Jerry M. Conley
Director

Attachment

cc: Paul Otter

(2 vii) Agreement on Fishery Issues between IDFG and Fall River

During discussions between IDFG and Fall River it became apparent that additional information was needed in order to avoid a possible impass over the question of minimum flow requirements in the river between the dam and powerplant.

Consequently Fall River suggested a field trip during which they would regulate the river flow at the diversion dam so all concerned could examine the river at several stages. The trip would have to occur during February before the spring flows exceed the existing turbine capacity so all flow could be diverted through the powerplant. IDFG welcomed the suggestion and the trip took place on February 9, 1982. Four representatives from IDFG attended as did one representative from the U.S. Fish and Wildlife Service.

The demonstration was conducted as follows:

A. The preceding night Fall River shut down the powerplant and spilled all the river flow (approximately 260 cfs) in order to wash the accumulated snow out of the channel and provide the best view of river conditions.

B. Before the demonstration began Fall River restarted the plant and resumed diverting all flow through the plant; so at the beginning flow through the dam was negligible.

C. IDFG deployed their personnel along the river at critical points.

D. The sluice gate was opened a measured amount to release 10 cfs and sufficient time was allowed for the flow to stabilize throughout the reach. After all observers were satisfied, the flow was increased and the process repeated. Observations were made at discharges of 0, 10, 20, 30, 50 and 100 cfs.

The experiment was totally successful and concluded with agreement between Fall River and IDFG on all major points of dispute. Terms of the agreement are as follows:

1. Fall River will construct a fish ladder capable of operating with flow in the range of 10 to 20 cfs. IDFG will furnish design criteria and review the design of the ladder.

2. The minimum flow release from the dam will be 20 cfs except for 3 months each year during the period of cutthroat trout spawning migration when the minimum flow release will be 50 cfs. One of the 3 months of 50 cfs minimum flow will be June which is normally the highest flow month. The 50 cfs flow may not be required throughout all the 3 months to provide for upstream fish passage. IDFG will conduct studies to more closely identify the time frame in the spring during which the cutthroat trout spawning migration takes place.

3. Fall River will pay IDFG a lump sum to provide for mitigation of turbine mortality. IDFG will make estimates of the expected mortality and amount of mitigation.

4. IDFG will break up a few large boulders in the channel to facilitate fish passage. This work will be funded by Fall River.

5. The public will be allowed to walk down the power-plant access road for fishing or other recreational purposes; however the road will not be suitable for public vehicle traffic. Fall River will provide a parking area near the Badger Substation.

6. Fish screens at the penstock intakes will not be required.

With the conclusion of the above agreement, all environmental issues have now been resolved and no known opposition to the project remains. IDFG has agreed to provide a letter for inclusion in this application which will verify their agreement.



RECEIVED
APR 30 1985
Salt Lake City, Utah

IDAHO DEPARTMENT OF FISH AND GAME
600 South Walnut • Box 25
Boise • Idaho • 83707

April 30, 1985

Mr. Clark Mower
Bingham Engineering
165 Wright Brothers Drive
Salt Lake International Center
Salt Lake City, UT 84116

Re: Turbine mortality and habitat mitigation for Felt Hydroelectric Project. Amendment to Licenses. FERC No. 5089.

Dear Mr. Mower:

As agreed at the April 26, 1985, meeting between you and our staff, screening of the intakes would preclude the need for significant additional mitigation of Felt Dam. If not screened, acceptable mitigation for turbine mortalities would consist of stocking 350,000 cutthroat trout at 200/lb.

The hatchery program will require Fall River Rural Electric to fund the construction of raceways at our Mackay Hatchery at a cost of $60,000. Operating cost for rearing and planting these fish is $18,400 annually to Fall River Rural Electric for the next 35 years. Either screening or hatchery mitigation is aceptable to our Department. We have no problem with the amendment to the licenses being approved at this time, so that construction may begin, so long as agreement on the screening or hatchery program is reached prior to project completion. Screening would have to be functional before start-up.

Screening criteria are set at a 0.25" opening in mesh or screen with a water approach velocity of 0.5 fps or less. The final design would need our approval.

The 350,000-fish figure used for mitigation includes 20,000 fish to offset the loss of habitat in the 300 feet of stream impacted by the amendment to the licenses. If screening occurs, then the natural production of this habitat will have to be mitigated. We estimate this habitat could provide spawning area for 100 female cutthroat trout depositing an average of 2000 eggs with a 10% egg-to-fry survival for a production of 20,000 fingerling trout.

Using the same values as for fish cost without screening, this amounts to $1,150 annual payment for the 35-year life of the project. Thus, if screening is undertaken and the amendment changes are installed, an annual payment of $1,150 would provide the fish necessary to mitigate the lost habitat. This would satisfy our need for habitat acquisition as outlined in our April 4, 1985, letter (page 2, paragraph 2) for the 300 feet of stream.

In that same letter, concerning the amendment of license document, we made statements concerning the benefits claimed to the fishery by the change in discharges (paragraph 2). As further clarification, we recognize that the discharge of spring flows through the existing power plant may provide flows for wetting some spawning that would not have occurred at the 50 cfs passage flow as presently approved in the existing license. It should be recognized that this spawning habitat is less than is wetted with the present existing project for which we asked no direct mitigation in the current, approved licenses. Our previous comments were incorrectly comparing the amendment to the existing conditions and not the approved licenses for the unconstructed project.

We hope this clarification will prove adequate for you to proceed with getting the amendment approved. If you need further assistance, please let us know.

Sincerely,

Jerry M. Conley
Director

cc: USFWS (Wolflin)
Region X EPA (Ross)
Shoshone-Bannock Tribes
Region 6

United States Department of the Interior

FISH AND WILDLIFE SERVICE

BOISE FIELD OFFICE
4696 Overland Road, Room 576
Boise, Idaho 83705

April 30, 1985

Kenneth Plumb, Secretary
Federal Energy Regulatory Commission
825 N. Capitol Street, N.E.
Washington, D.C. 20426

Re: Felt Dam Hydro Project
License Amendment, FERC #5089

Dear Mr. Plumb:

The proposed amendment would move the powerhouse 300 feet downstream from the licensed, but unconstructed, project. In 1982 the U.S. Fish and Wildlife Service (FWS), in concert with the Idaho Department of Fish and Game (IDFG) obtained needed fish mitigation from the licensee during the original license negotiations. The proposed license amendment prompted the IDFG to seek further mitigation for fishery impacts. The FWS supports the mitigation measures agreed to by the licensee and the IDFG and described in the IDFG letter to the FERC of April 30, 1985.

We understand that, in addition to mitigation measures for the licensed project, the licensee will either screen the turbine intakes or provide funds for stocking 350,000 cutthroat trout at 200/lb. into the Teton River. These fish include 20,000 cutthroat trout to offset the lost habitat in the additional 300 feet of stream under the amendment. The 20,000 fish, or their equivalent, must be provided whether or not screening occurs. Further, it is vital that, before project construction is completed, the licensee reach agreement with FWS and IDFG on whether screening or hatchery fish will be provided by the licensee.

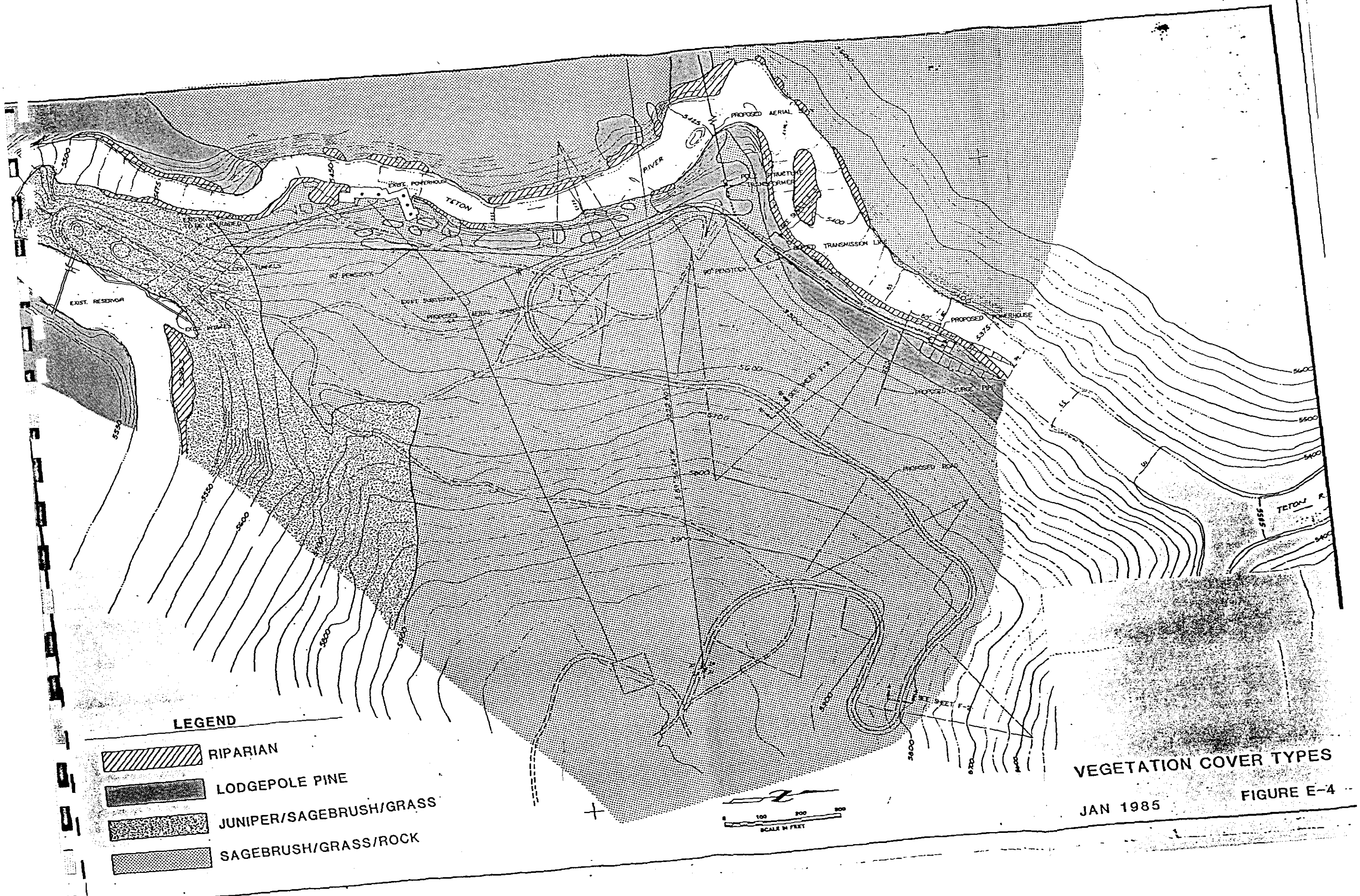
Finally, the FWS has reviewed the proposed amendment from the standpoint of the Endangered Species Act of 1973, as amended. We know of no endangered, threatened, or candidate species that would be affected in the area of project influence at this time.

Sincerely yours,

John P. Wolflin
Field Supervisor

cc: next page

cc: USDI, REO, Portland
FWS, SE, Boise (1-4-85-SP-147)
FWS, EC, Washington, D.C.
FWS, R-1, Portland
IDFG, Hdqtrs., Boise (V. Moore)
IDFG, Region 6, Idaho Falls
Shoshone-Bannock Tribes, Ft. Hall



VEGETATION COVER TYPES

JAN 1985 FIGURE E-4

STATE OF IDAHO

DEPARTMENT OF HEALTH
AND WELFARE

DIVISION OF ENVIRONMENT
Statehouse
Boise, Idaho 83720

April 16, 1985

COMMENTS

Mr. Kenneth F. Plumb, Secretary
Federal Energy Regulatory Commission
825 North Capitol Street, N.E.
Washington, D.C. 20426

REFERENCE TO: FERC #5089, Felt Hydroelectric Project,
Fall River Rural Electric Cooperative,
Teton County, Idaho

Dear Secretary Plumb:

We have reviewed the proposed application for amendment of the Felt Hydroelectric Project License and the applicant's March 18, 1985 response to our comments.

If the applicant minimizes the environmental impacts during the construction of the project, we feel that our June 23, 1982 water quality certification is still valid.

Sincerely,

Larry L. Koenig

Larry L. Koenig, Manager
Source Control Section

LLK:lab

cc: Fred Springer, FERC
Gordon Hopson/Mark Torf
~~George~~ Smith

F1

STATE OF IDAHO

DEPARTMENT OF HEALTH AND WELFARE

DIVISION OF ENVIRONMENT
Statehouse
Boise, Idaho 83720

June 23, 1982

Mr. C. C. Dawsey
Manager of Engineering
Fall River Rural Electric Cooperative, Inc.
714 Main St.
Ashton, Idaho 83420

Reference to: Felt Dam Hydroelectric Project
FERC #5089 Teton River
Teton County - Water Quality Certification

Dear Mr. Dawsey:

We have reviewed "Exhibit E" of the License Application for Fall River Rural Electric Cooperative, Inc., Felt Hydroelectric Project No. 5089. The Division of Environment finds that as long as environmental impacts are minimized during construction, the facility will not impact the water quality of the Teton River.

From this determination, we certify under Section 401 of Public Law 92-500 that the facility will comply with applicable requirements of Sections 301, 302, 303, and 307 of PL 92-500 and will not violate Idaho Water Quality Standards and Wastewater Treatment Requirements

Sincerely,

Lee W. Stokes, Ph.D.
Administrator

LWS:chh

cc: Al Murrey/Larry Koenig
Gordon Hopson/John Moeller
Felt - Plant

RECEIVED
FEB 8 1983
Salt Lake City, Utah