

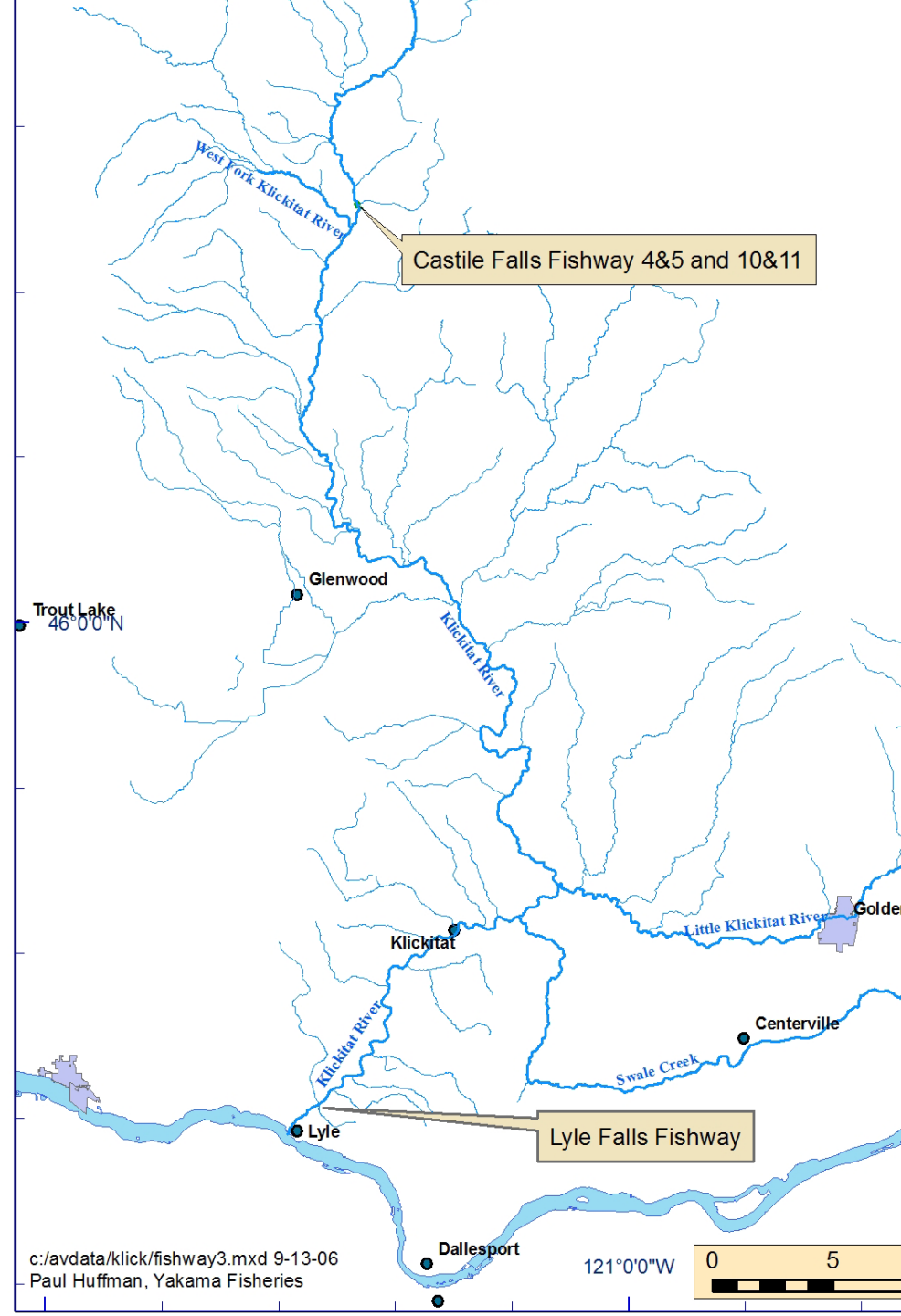
Klickitat Fishway

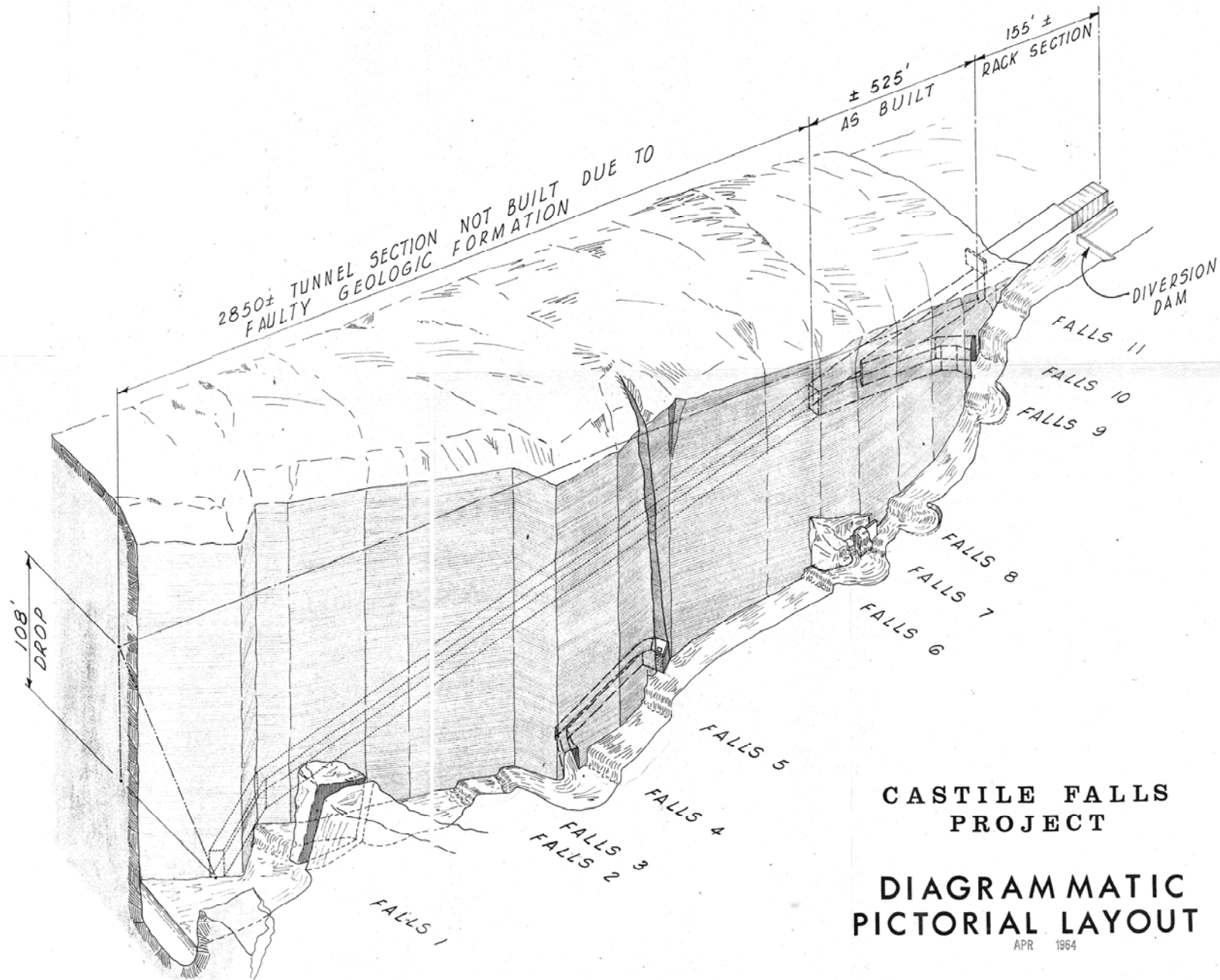
Project

*One Down,
One to Go!*

Bill Sharp

Yakama Nation
Fisheries - YKFP

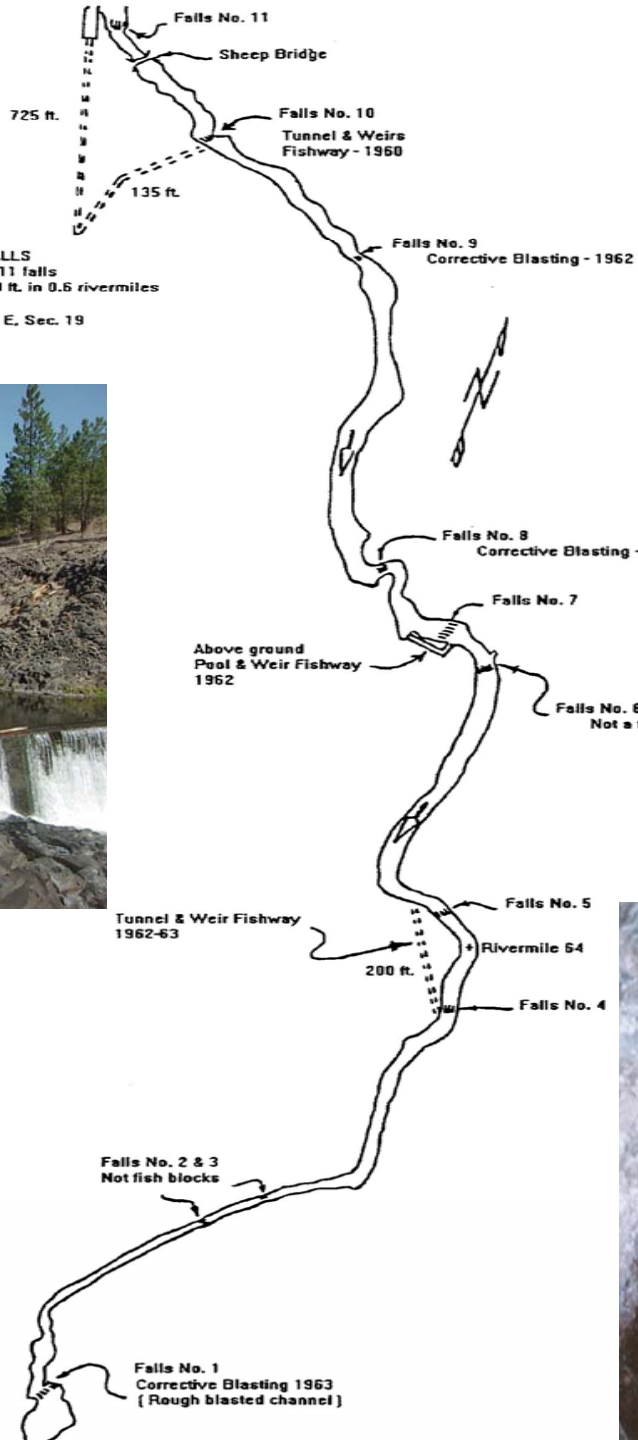




**CASTILE FALLS
PROJECT**

**DIAGRAMMATIC
PICTORIAL LAYOUT**

APR 1964



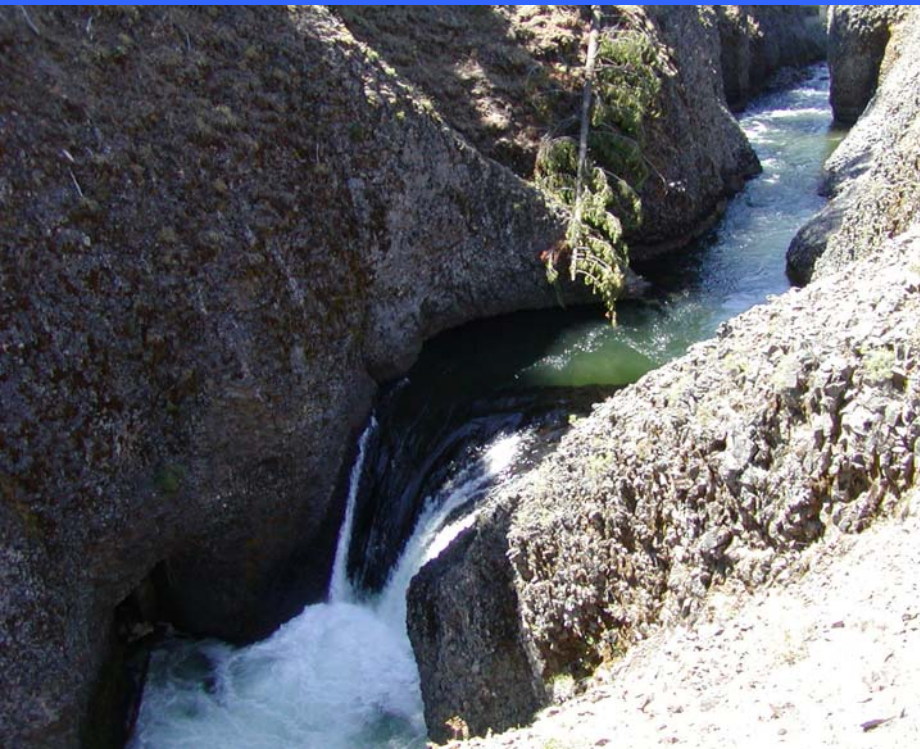
Castile Falls Fishway

Falls #10

CASTILE FALLS
A series of 11 falls
dropping 80 ft. in 0.6 rivermiles
T 9 N, R 13 E, Sec. 19

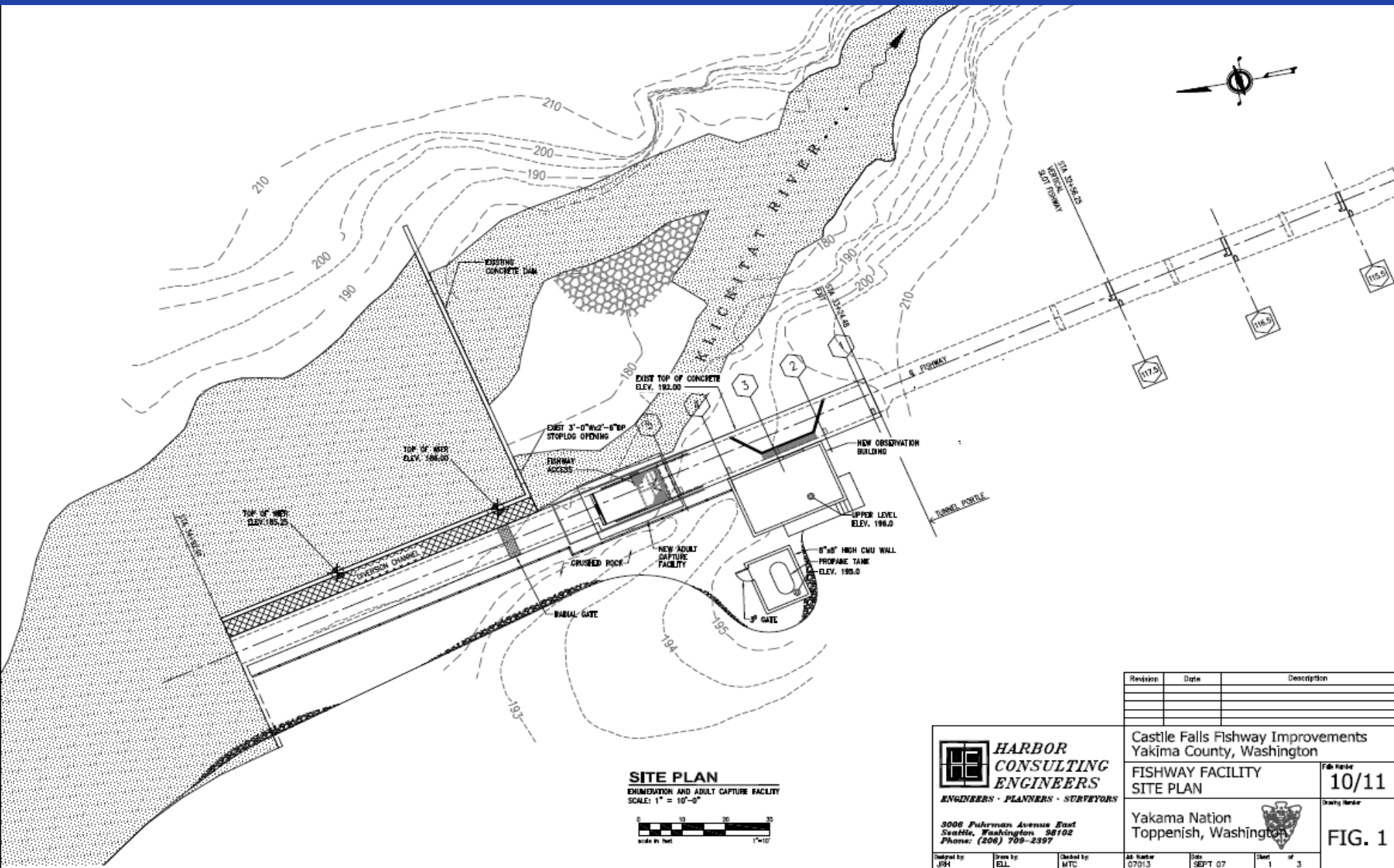


Castile Falls 10 Fishway Completed upgrades



Castile Falls 10 Fishway

Proposed Counting Station



SITE PLAN
 ENUMERATION AND ADULT CAPTURE FACILITY
 SCALE: 1" = 10'-0"



Revision	Date	Description

HARBOR CONSULTING ENGINEERS
 ENGINEERS · PLANNERS · SURVEYORS
 3006 Pulman Avenue East
 Seattle, Washington 98102
 Phone: (206) 709-2397

Castile Falls Fishway Improvements
 Yakima County, Washington

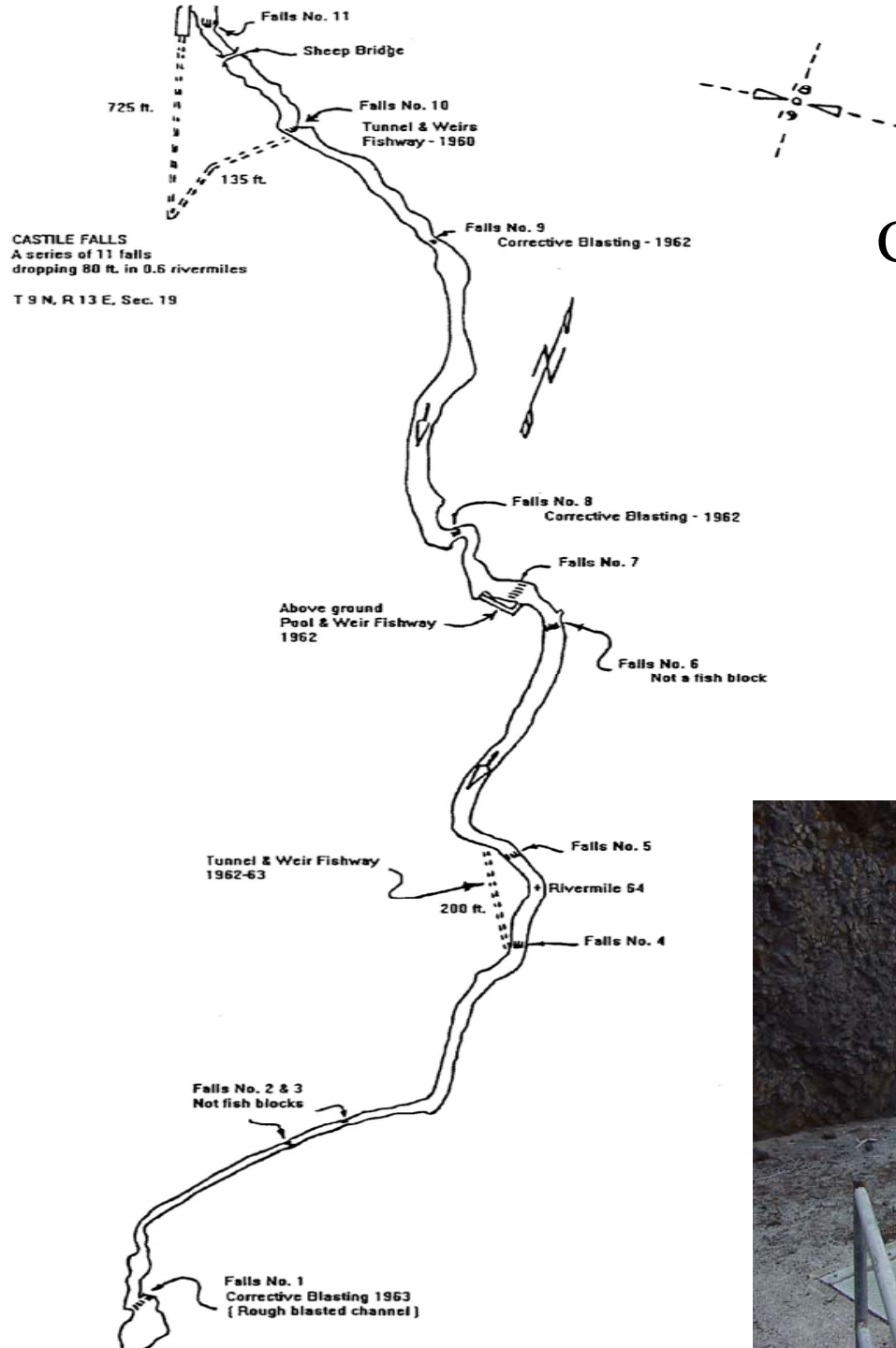
FISHWAY FACILITY SITE PLAN

Yakama Nation
 Toppenish, Washington

File No: **10/11**
 Sheet 1 of 3

Drawn by: JPH
 Check by: ELL
 Date: SEPT 07

FIG. 1



Castile Falls Fishway

Falls 4/5





Castile Falls 4/5 Fishway Safety Walkway

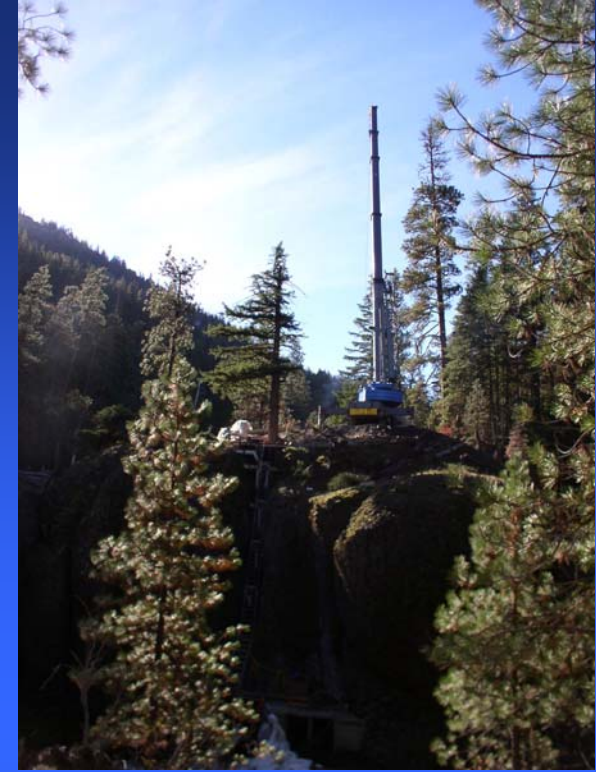
Castile Falls 4/5

Fishway

Challenging working conditions



Castile Falls 4/5 Fishway Completed Upgrades



Lyle Falls Fishway No.5

Lyle Fall Fishway Reconstruction

- Current Conditions
- Proposed Design & Benefits

Constructed 1952 – 1955

150-feet in length

13 vertical slot fishway

Falls height ~ 17 feet



Lyle Falls Fishway - Current Condition

- Poorly Positioned Fishway Entrance
- Inadequate Attraction Water Supply
- Over-energized Resting Pools
- Inadequate Low Flow Water Supply
- Gravel-impacted Fishway Exit Channel



Maximum and Minimum Passage Flows at Lyle Falls over Three Migration Pathways:

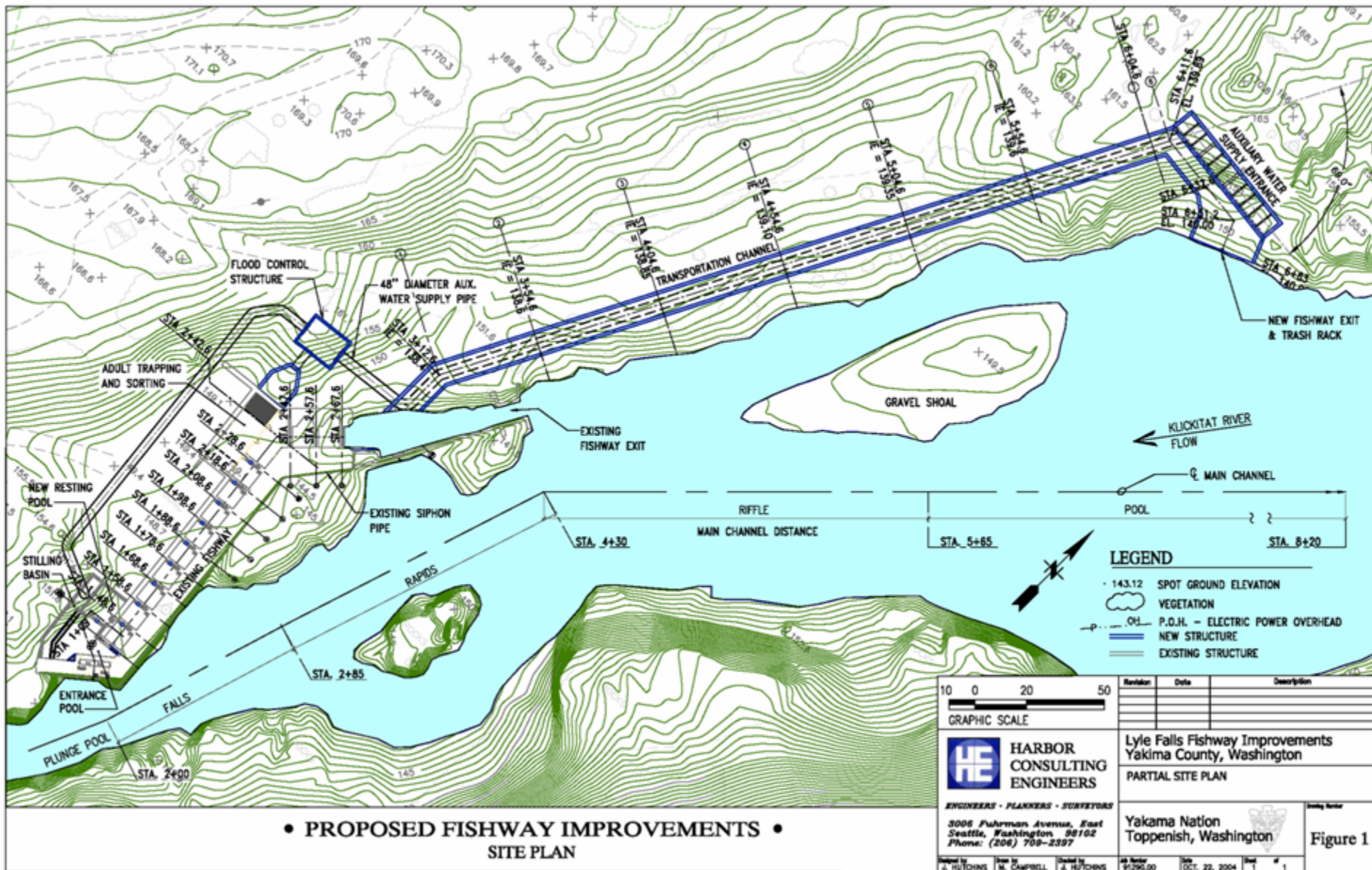
Jumping the Falls

Ascending the Existing Fishway

Ascending the Proposed Fishway

	Natural Falls	Existing Fishway	Proposed Fishway
Lower Flow Threshold (cfs)	1,000	900	500
Upper Flow Threshold (cfs)	5,000	2,000	5,000

Proposed - Lyle Falls Fishway & Collection Facility





**HARBOR
CONSULTING
ENGINEERS**

3006 Fuhrman Avenue, East
Seattle, Washington 98102
Phone: (206) 708-2397

Lyle Falls Fishway Improvement

Sketch of Modified Fishway

Yakama Nation
Toppenish, Washington



Project Benefits:

**Design Fishway to meet Federal
& State Passage Criteria**

**Effectively Monitor Klickitat
Basin Escapement**

**Increased Passage of Klickitat
Anadromous Stocks**

**Implement Hatchery Reform
Measures - proper broodstock
collection**

