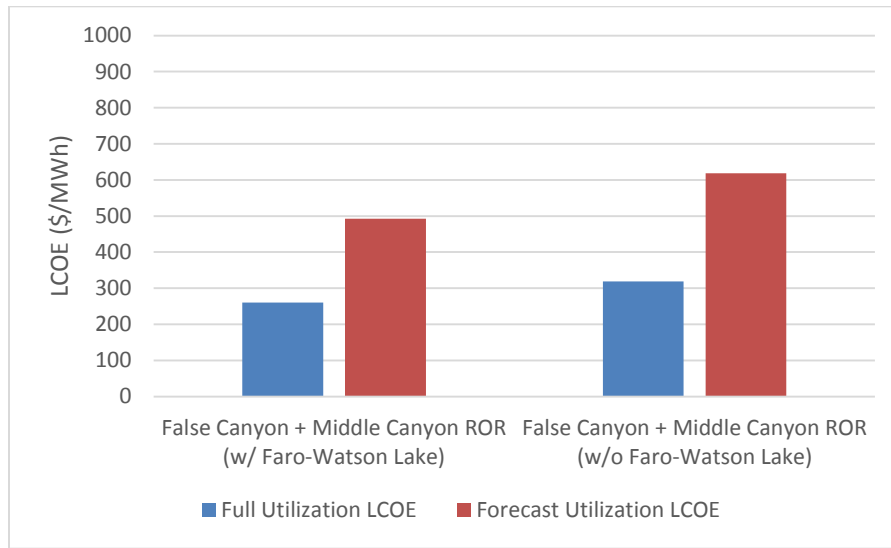


Figure 28: False Canyon + Middle Canyon ROR LCOEs



3.6 Slate Rapids + Hoole Canyon ROR [PELLY-PELLY-0847-B + PELLY-PELLY-0760-A]

Slate Rapids + Hoole Canyon ROR is a cascade of two sites with Slate Rapids located upstream on the Pelly River providing both water storage and generation, and Hoole Canyon ROR located downstream operating as a run-of-river facility with no water storage (but a headpond needed to create head for generation purposes).

3.6.1 Slate Rapids [PELLY-PELLY-0847-B]

Slate Rapids is a potential hydroelectric project on the Pelly River, located in the Pelly River Basin approximately 75 km east of the community of Ross River. The total drainage area is estimated at 5,400 km².

The project includes two dams:

- 1) An upstream diversion dam to direct the river flow towards its western upstream arm down to the power dam. This diversion system restricts the reservoir from expanding into the river downstream eastern arm which would flood a large area of the Yukon.
- 2) A downstream power dam to generate electricity.

The major components of the preliminary project layout for both dams are listed in Table 22. The project components are shown in Figure 29 and Figure 30 and described in more detail as per sections listed in Table 16.

Table 22: Slate Rapids Dams Major Project Components

Component	Diversion Dam Drawing Item	Power Dam Drawing Item	Description Section

Intake Structure	N/A	①	3.1.1
Dam	②	②	3.1.2
Spillway	③	③	3.1.3
Reservoir	④	④	3.1.4
Penstock	N/A	⑤	3.1.5
Powerhouse	N/A	⑥ ²⁶	3.1.6
Fish Conveyance ²⁷	See Note 27	See Note 27	See Note 27
Switchyard	N/A	⑦ ²⁶	3.1.7
Transmission Line	N/A	⑧ ²⁶	3.1.8
Access Infrastructure (Roads & Bridge)	⑨	⑨	3.1.9
Temporary Construction Works	⑩	⑩	3.1.10

²⁶ The powerhouse, switchyard and transmission line are not shown on the drawing because their location is further downstream of the dam. The transmission line is expected to follow approximately the access road from the switchyard to the interconnection point.

²⁷ At this stage of study, upstream fish passage is expected to be facilitated via fish ladder. During subsequent phases of development, different alternatives may be considered including, but not limited to, mechanical lifts or trap-load-haul operations. Downstream fish passage is expected to be facilitated through fish friendly turbines (e.g. Kaplan Turbine).

Figure 29: Slate Rapids Diversion Dam Layout

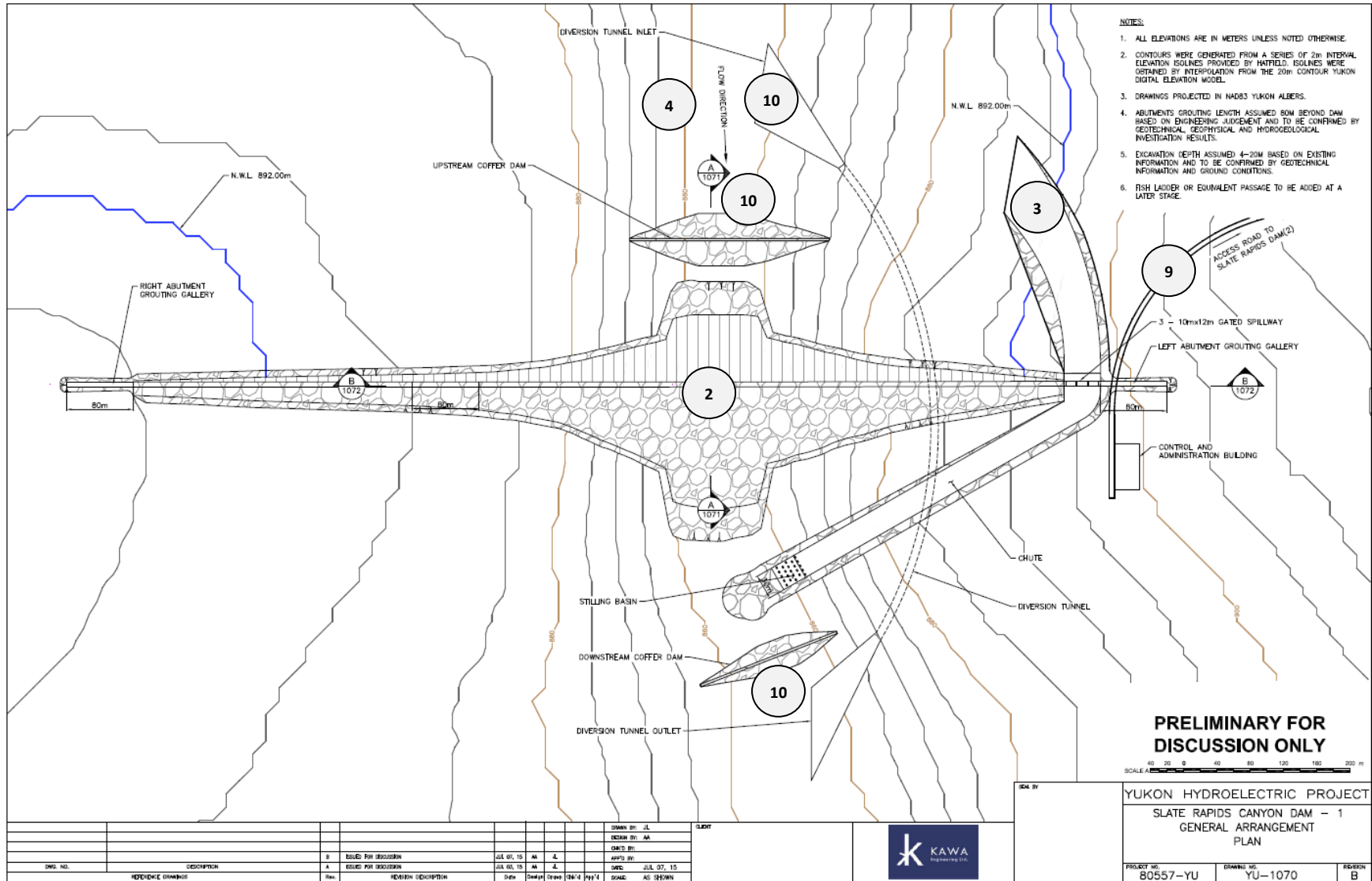


Figure 30: Slate Rapids Power Dam Layout

