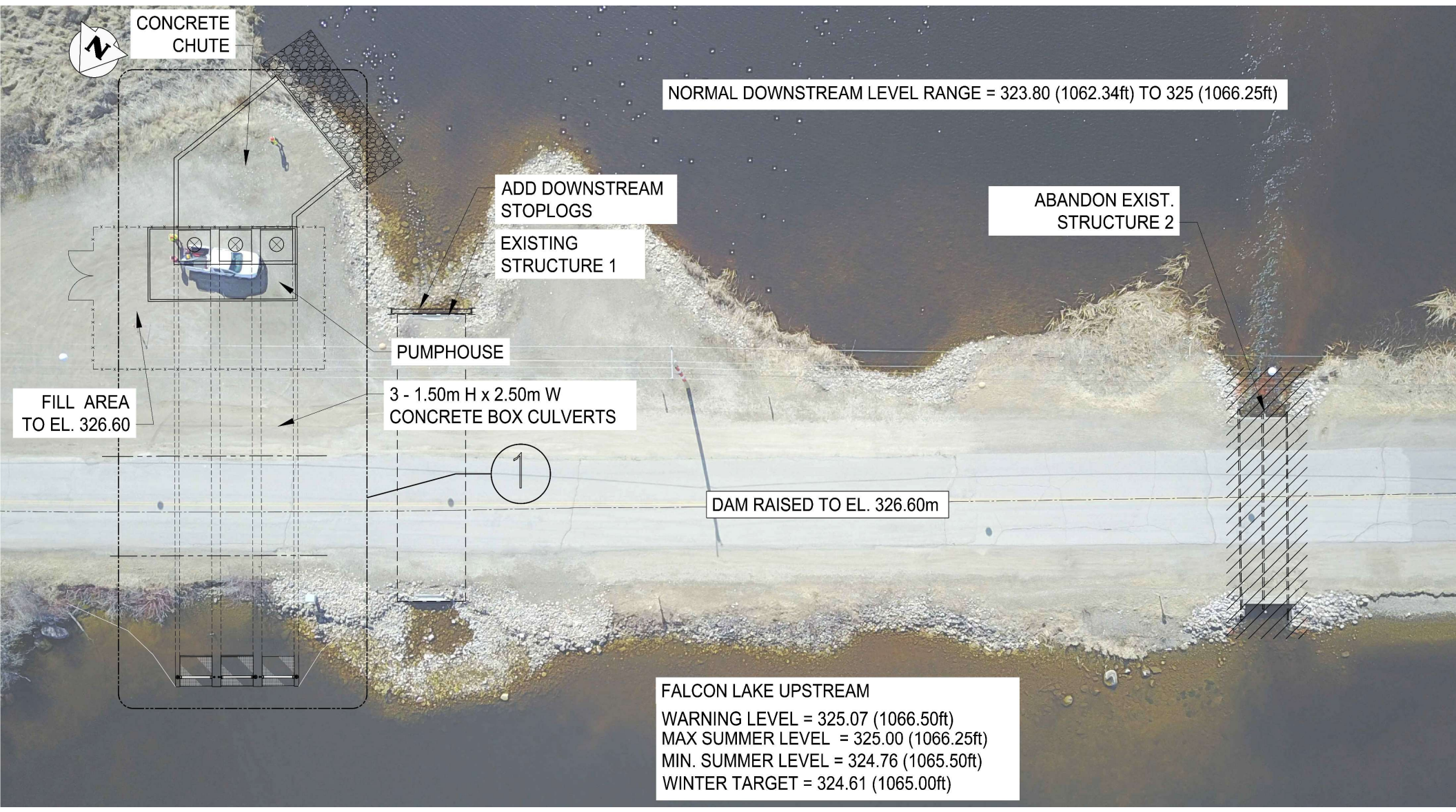
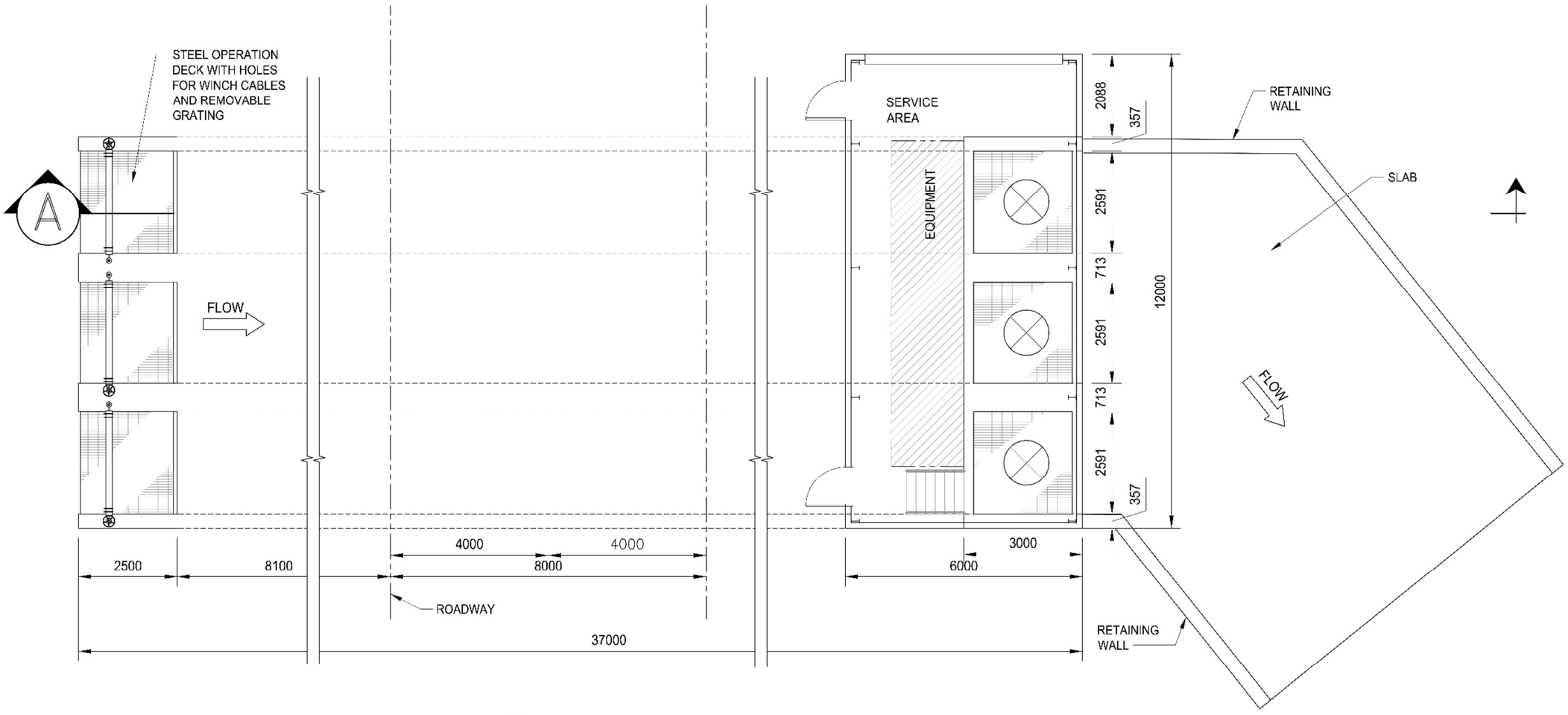
Option 3 – Replace Timber Structure with Permanent Pump Station



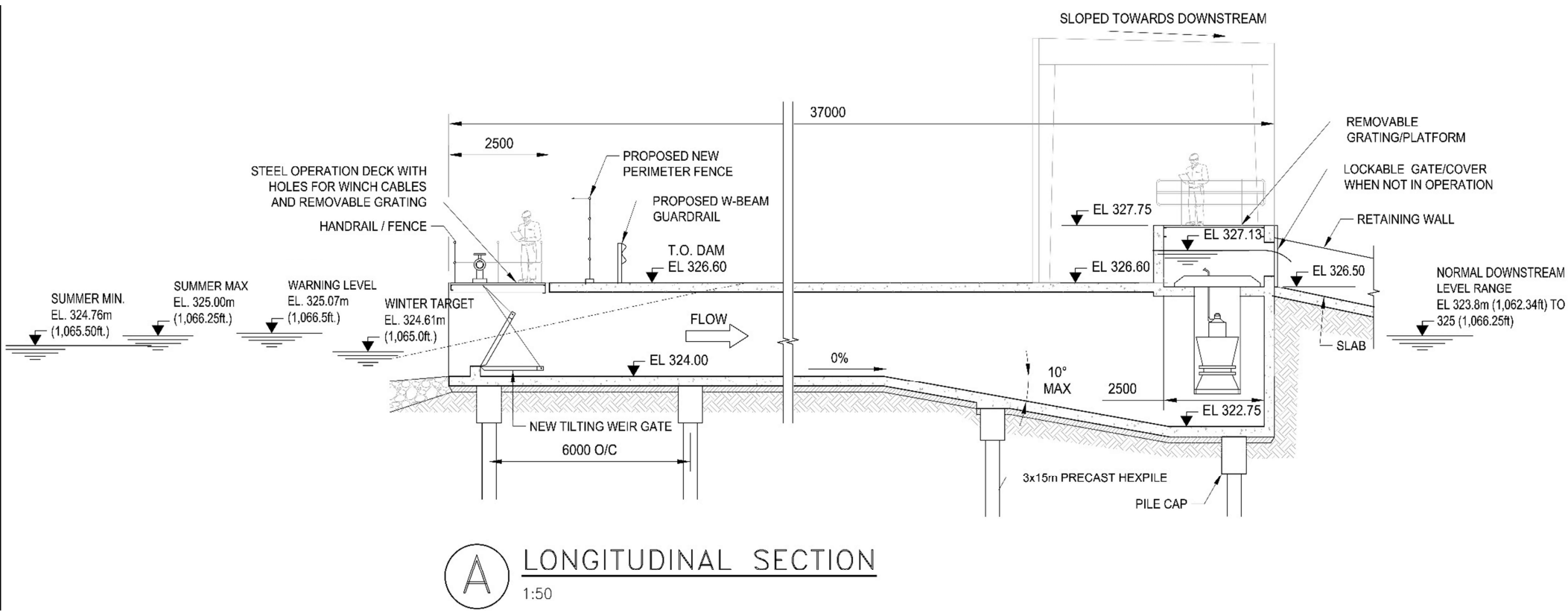
Maximum Upstream Level (1:20 year) = 325.29 m (1067.22 ft.)
Maximum Downstream Level (1:20 year) = 326.03 m (1069.65 ft.)
Approximate days above High Water Warning Level (1:20 year) = 14 days

ADVANTAGES	DISADVANTAGES
Pumping reduces days above the high water warning level by 45 days compared to existing conditions (1:20 year event).	Requires over 750 m of dam raise due to higher downstream water levels. Dam raise will impact aquatic habitat.
Lowest number of days above high water warning level of the 3 options.	Disruption and alteration of downstream wetland. Downstream impacts may trigger environment act license requirements and further stakeholder consultations.
Modest reductions in overall lake levels.	A more detailed water management plan would need to be developed.
Permanent installation all equipment stored onsite allowing pumping to begin sooner than Option 2.	The dam will become an outright barrier to fish passage while the pumps are in operation.
No restriction to road.	Public safety measures required at pump outlet.
Pumping can be initiated for smaller events than Option 2.	Largest Footprint and impacts to adjacent land use.
Provides operational safety and flexibility compared to the current structure.	Potential operating noise. Aesthetic impact, intrusive.
	Highest long term operation and maintenance costs.
	Highest capital cost and longest construction schedule.

Option 3 – Replace Timber Structure with Permanent Pump Station



1 BOX CULVERT & PUMPHOUSE PLAN
1:50



A LONGITUDINAL SECTION
1:50

Falcon Lake Dam
Outlet Replacement Alternatives
Open House

KGS GROUP

Manitoba