

SITE ANALYSIS REPORT
FOR
DPW PROJECT NO. 25-063
IDAHO CORRECTIONAL INSTITUTION
IDAHO DEPARTMENT OF CORRECTIONS

OROFINO, IDAHO

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KELLER PROJECT NO. 208106-124

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IDAHO CORRECTIONAL INSTITUTION - OROFINO SITE ANALYSIS REPORT

A. Introduction

The Idaho Department of Public Works (DPW) in coordination with Idaho Department of Correction (IDOC) is planning to expand the Orofino Idaho Correctional Institution (ICIO) with a new low-security facility. This proposed building will feature approximately 16,000 to 20,000 square feet two-story building with a pad site measuring approximately 130 by 200 feet (dependent on final building square footage). The building is intended to accommodate around 100 residents.

Four potential locations were assessed for the new building, as illustrated in Figure 1. The evaluation criteria included site conditions (such as terrain, available space, and existing structures), utility locations, accessibility, parcel ownership, and safety and risk factors. Each site was ranked based on its performance in each evaluation category.

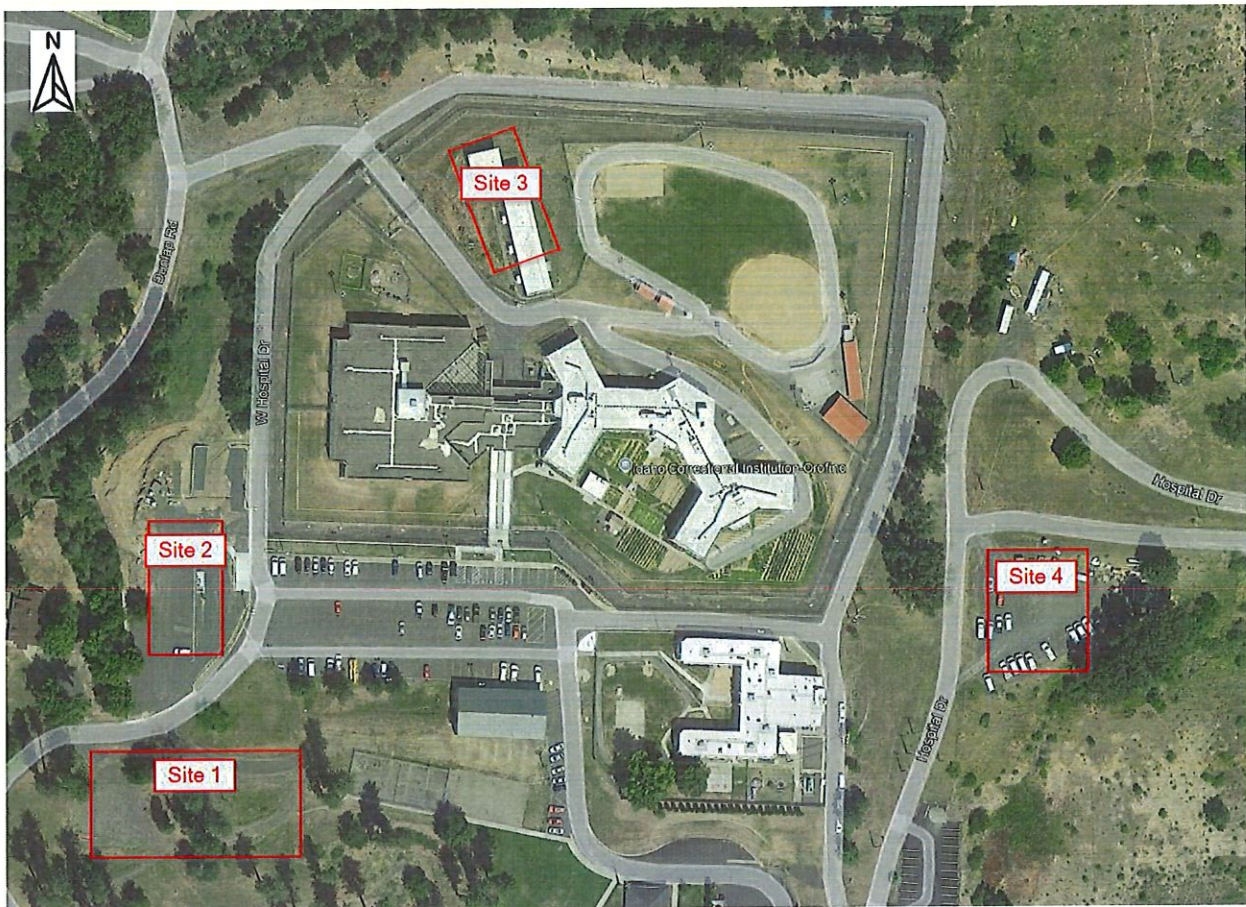


FIGURE 1: SITE LOCATIONS CONSIDERED



B. SITE SUMMARY AND TOPOGRAPHY

Site 1

Site 1 features relatively flat terrain with grass and sparse tree cover. Positioned slightly downhill from the main buildings. The site benefits from existing vehicle access and would require minimal grading. While there are no structures currently on the site, a sanitary sewer main runs through its boundaries and would likely need to be relocated if this location is chosen. Additionally, overhead power lines along the east side of the site could interfere with the proposed building placement and may need to be relocated.

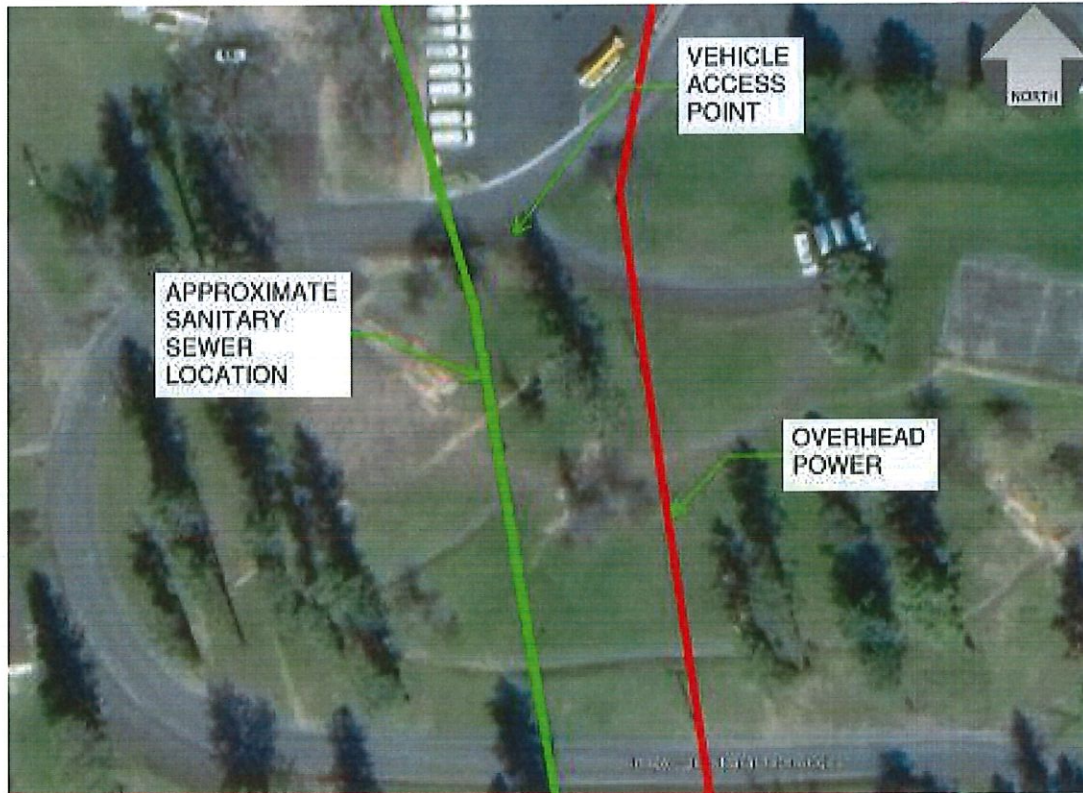


FIGURE 2: SITE 1 ACCESS AND UTILITY LOCATIONS

- Rank: 3/4



Site 2

Site 2 is presently utilized as a gravel parking lot with several outbuildings located at the northern end. The site is at the same approximate elevation as the main facilities, with a gentle slope toward the south. Overhead power lines run along the east side of the lot but are not expected to interfere with the new building. While the building at the north end of the lot might also need to be relocated, prison staff did not view this as a significant restriction. The wash pad location at the central east side will need to be relocated if the new building is located here.

The facility has expressed a desire for food service deliveries from the main ICIO kitchen to be delivered via carts. This site has a direct line of site from the main Administration Building and kitchen deliveries could be walked along the existing sidewalk westerly to the proposed building.

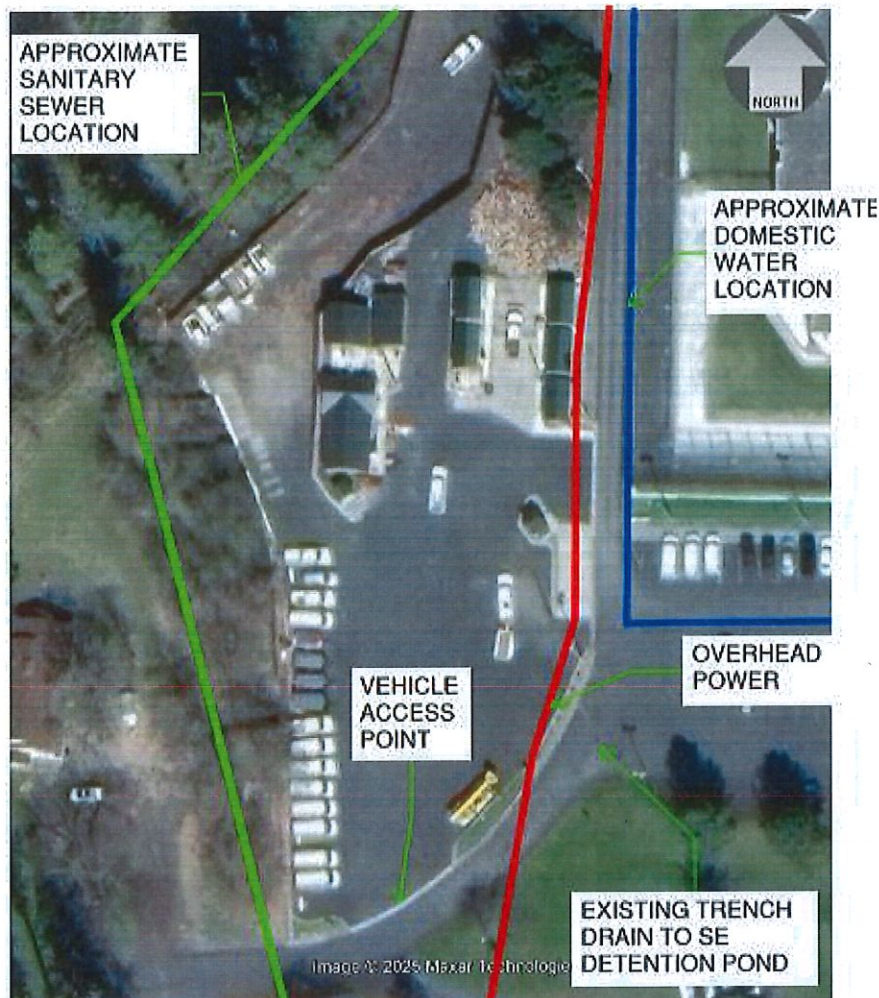


FIGURE 3: SITE 2 ACCESS AND UTILITY LOCATIONS

- Rank: 4/4



Site 3

Site 3 is within the secure facility. The building that was located here was demolished and is seen as the freshly exposed dirt area in figure 4 and the site is currently used as garden space. The site is elevated compared to the main facilities and significantly higher than the road to the north. Developing this site would require extensive grading or the construction of retaining walls. Additionally, accommodating ADA-compliant parking and access could be challenging due to the significant grade variations in the area as well as the secure nature of the perimeter fencing. Construction sequencing and access would be more challenging for this site as well with the need for construction crews to enter and exit the secure facility causing additional construction delays and costs.

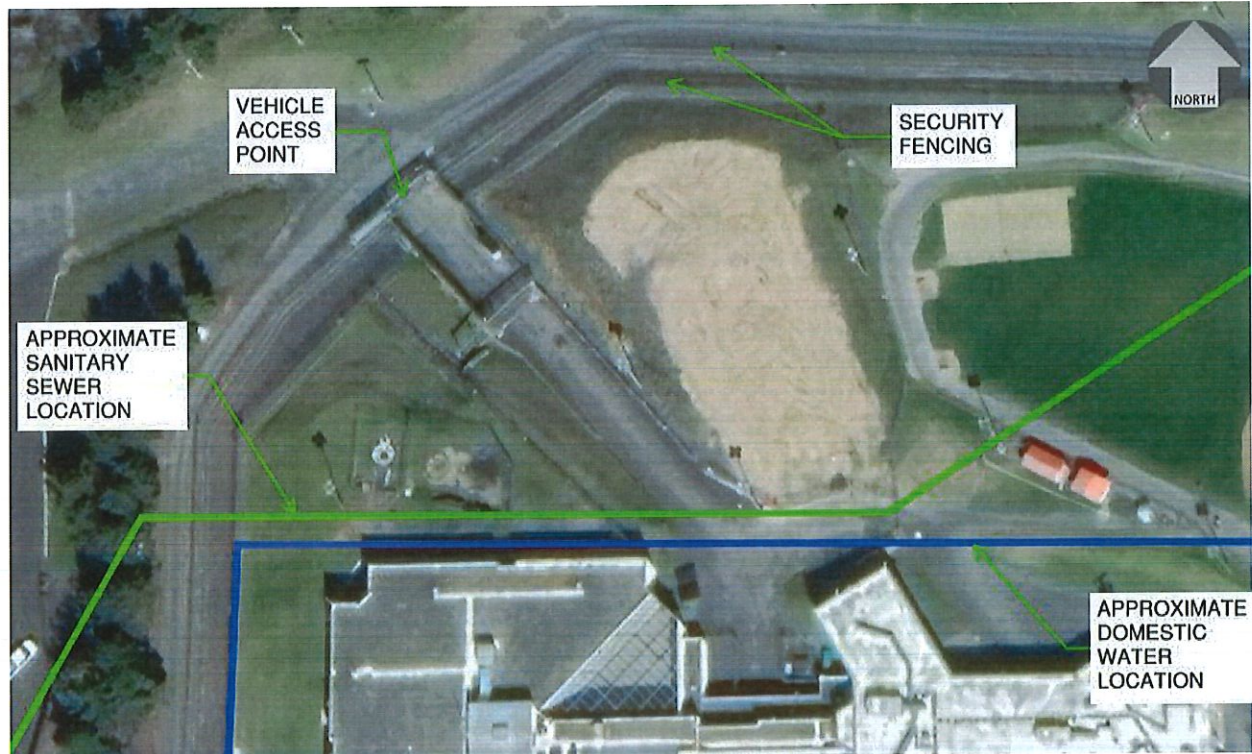


FIGURE 4: SITE 3 ACCESS AND UTILITY LOCATIONS

- Rank: 2/4



Site 4

Site 4 is situated on a gravel lot on the east side of the facility. This site is elevated compared to the main facilities and would require significant grading to establish a suitable footprint for the building and the necessary parking. Additionally, water mains, as indicated in the 1988 water tank plans, run beneath the site and would need to be relocated for construction to proceed or the building footprint would need to accommodate their location along with access roadways or revisions.

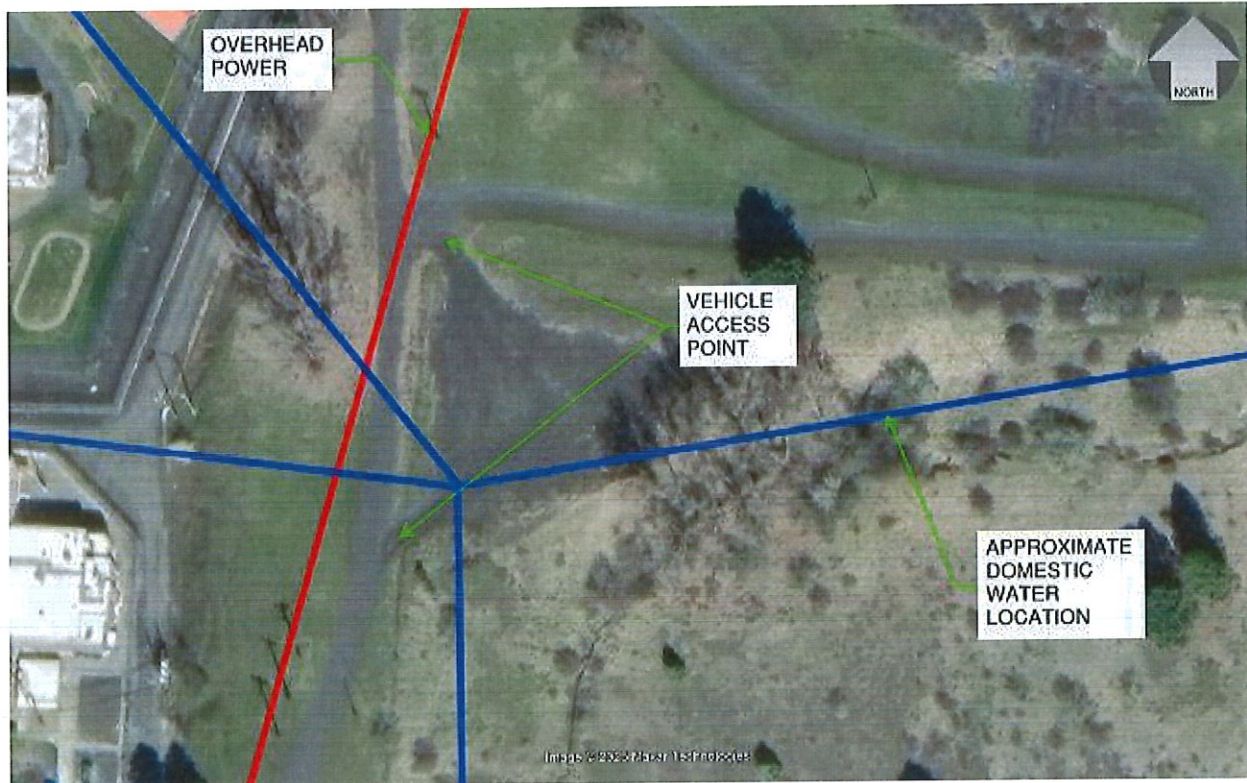


FIGURE 5: SITE 4 ACCESS AND UTILITY LOCATIONS

- Rank: 1/4

C. UTILITIES AND INFRASTRUCTURE

Site 1

Water: The site can be supplied with water from a water tower located east of the facility and 10-inch water mains looping around the main facility. The additional water demand from the new building is not expected to impact the existing water distribution system and a water service and fire service line would extend to the new building from this main. However, an additional fire hydrant would need to be installed to comply with International Fire Code standards.

Power: Overhead power lines currently run along the east side of the site and may need to be relocated underground. Preliminary coordination with Avista indicates that the existing power infrastructure is expected to be adequately sized to meet the demands of the new building.



Storm: Stormwater will need to be collected and managed through the construction of a new detention or retention facility.

Sewer: The facility's sewer main runs through the middle of Site 1 and will need to be relocated to construct on this site. Once relocated, the new building can connect to the main and it is expected that the existing 6-inch pipe can serve the new building without resizing.

- Rank: 2/4

Site 2

Water: The site can be supplied with water from a water tower located east of the facility, and the additional demand from the new building is not expected to affect the existing water distribution system. Installation of a new fire hydrant may be required. Additionally, a water service from the existing 10-inch main to the east of this location is necessary as well as a fire line for fire suppression infrastructure.

Power: Overhead power lines run along the east side of the site but are not expected to interfere with the new building. Preliminary coordination with Avista indicates that the existing power infrastructure is expected to be adequately sized to meet the demands of the new building.

Storm: Stormwater will need to be collected and managed through the construction of a new detention or retention facility. There is also the possibility for some stormwater to be routed to an existing detention pond southeast of this location. There is an existing trench drain across the access road that leads to existing stormwater detention southeast of the site. This system could be retrofit to include some of the stormwater from the building footprint, but likely a new system could be situated southwest of the building as that is the downstream side of the site.

Sewer: The sewer main for the entire facility runs along the west side of the site and is suitable to provide sewer service to the new building.

- Rank: 3/4

Site 3

Water: The site can be supplied with water from a water tower located east of the facility, and the additional demand from the new building is not expected to impact the existing water distribution system. This location would require a new water service and fire supply line to the building from the 10-inch water main located south of the building location.

Power: Underground power infrastructure serving the surrounding buildings is available. Preliminary coordination with Avista indicates that the existing power infrastructure is expected to be adequately sized to meet the demands of the new building.

Storm: Stormwater will need to be collected and managed through the construction of a new detention or retention facility.

Sewer: Existing sewer lines near the proposed building site can be utilized to provide sewer service for the new building. A service could extend from the building and tie into the existing sewer collection main south of the building. This site is located above the 'Muffin Monster' which would provide sewage grinding prior to the wastewater entering the city sewer system.

- Rank: 4/4

Site 4

Water: Water can be provided to the site via a water tower east of the facility and the additional water demand required by the new building is not expected to impact the rest of the water distribution system. This location would require the installation of an additional fire hydrant to meet International Fire Code



standards. Additionally, water mains directly connecting to the water tower run near or under the proposed building footprint. These would need to be relocated if this site is selected.

Power: Overhead power runs along the west side of the site. Preliminary coordination with Avista indicates that the existing power infrastructure is expected to be adequately sized to meet the demands of the new building.

Storm: Stormwater will need to be collected and directed to a new stormwater detention or retention facility.

Sewer: There are no known sewer mains near this site. Therefore, a sewer main extension would need to be constructed as part of the new building development.

- Rank: 1/4

D. SITE ACCESSIBILITY

Site 1

Site 1 has vehicle access on the northwest side and provides sufficient space for ADA parking. However, designated pedestrian access from the main buildings to Site 1 will need to be constructed to ensure ADA compliance and provide a safe walkway for staff to transport food and equipment from the main facility.

- Rank: 4/4

Site 2

Site 2 has vehicle access on the south and north sides and provides sufficient space for ADA parking. However, designated pedestrian access from the main buildings to Site 2 will need to be constructed to ensure ADA compliance and provide a safe walkway for staff to transport food and equipment from the main facility.

- Rank: 4/4

Site 3

Site 3 is within the controlled perimeter of the site making access to the site burdensome for staff and residents. Further, the location and topography of the site provide limited parking spaces and limited ADA access routes.

- Rank: 1/4

Site 4

Site 4 has vehicle access at the west side of the site but the site is small and would not have space for parking or maneuvering large vehicles. Pedestrian access from the main buildings would be difficult to provide, and ADA standards for pedestrian access could not reasonably be met. Food and equipment would need to be transported to the site by vehicle.

- Rank: 2/3



E. SITE OWNERSHIP

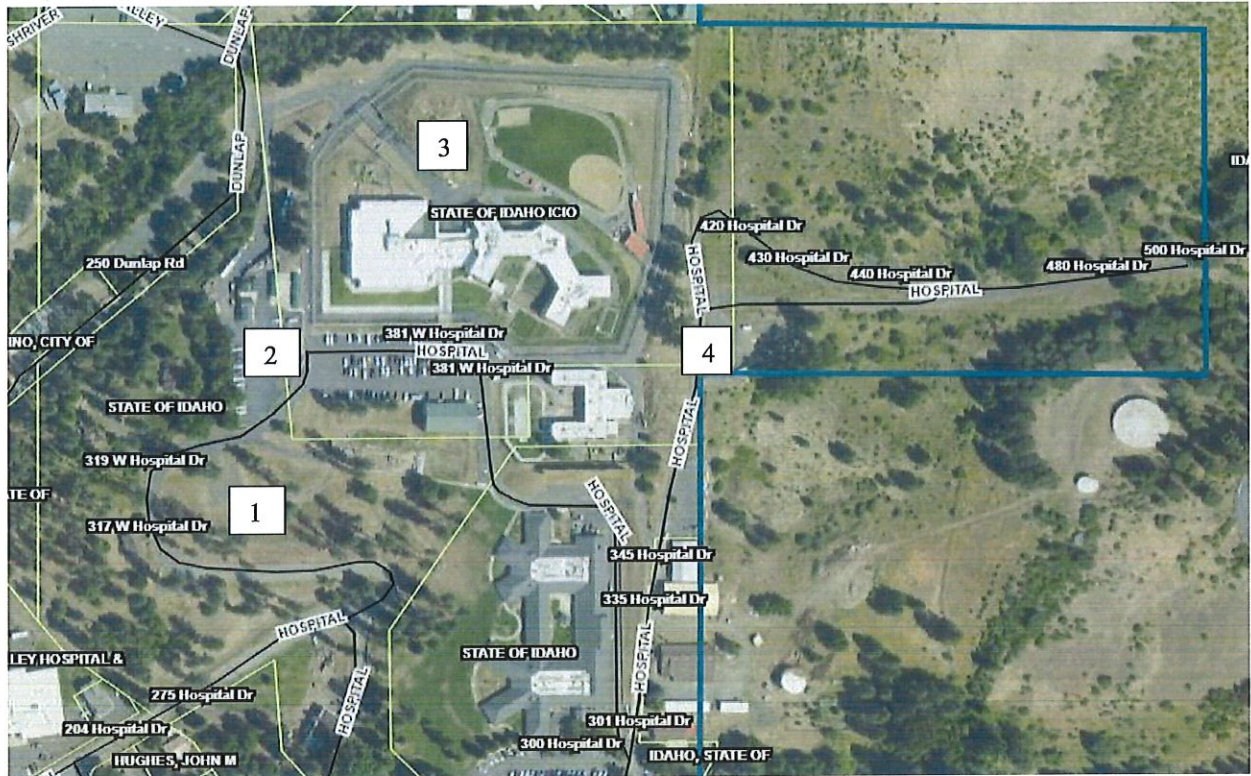


FIGURE 6: CLEARWATER COUNTY ASSESSOR MAP

Site 1

The Clearwater County parcel map shows this site as owned by the State of Idaho but does not specify a department or agency. The county parcel map is not a legal delineation of property ownership so site ownership would need to be confirmed prior to site development.

- Rank: 3/4

Site 2

The Clearwater County parcel map shows a parcel boundary running through the middle of the site. The western parcel is owned by the State of Idaho but does not specify a department or agency. The eastern side of the site is owned by the State of Idaho Department of Correction. This split parcel ownership would need to be resolved prior to the building construction. The county parcel map is not a legal delineation of property ownership so site ownership would need to be confirmed prior to site development.

- Rank: 2/4

Site 3

The Clearwater County parcel map shows this site as owned by the State of Idaho Department of Correction. Given that this site is located within the secure facility perimeter, property ownership is well established and is not expected to be a project hurdle.



- Rank: 4/4

Site 4

The Clearwater County parcel map shows a parcel boundary running through the middle of the site with one parcel owned by the State of Idaho without specifying a department or agency noted. The other parcel is listed as owned by the State of Idaho Department of Correction. This split parcel ownership would need to be resolved prior to the building construction. The county parcel map is not a legal delineation of property ownership so site ownership would need to be confirmed prior to site development.

- Rank: 2/4

F. SAFETY AND RISK

Site 1

Site 1 does not pose any unforeseen safety and risk concerns. Expected risks related to correction facility management and winter vehicle and pedestrian movement would be of concern but these issues are not specific to this site location

- Rank: 4/4

Site 2

Site 2 does not pose any unforeseen safety and risk concerns. Expected risks related to correction facility management and winter vehicle and pedestrian movement would be of concern but these issues are not specific to this site location

- Rank: 4/4

Site 3

Site 3 is within the secure facility fencing. This is a concern during both the construction process and after the site is in use. Having additional people and equipment in the facility during construction would require additional staff and poses a risk to staff, residents, and construction personnel. Further, once the site has been developed, residents of the low security facility would be required to enter and leave the facility through the secure fencing which would require staff to monitor and facilitate additional movement to and from the secure facility.

- Rank: 2/4

Site 4

Site 4 has steep slopes leading from the main facility to the proposed building site. While not excessively steep, these slopes may present a risk during winter months due to snow, slush, and ice, making access more challenging and potentially hazardous.

- Rank: 1/4



G. RECOMMENDATIONS

Each of the above sections were assigned a percentage weight of the total project. A decision matrix was developed using those weights and the scores noted in each section above. This evaluation resulted in site 2 being the highest ranked site followed by site 1, site 3, and site 4.

TABLE 1: DECISION MATRIX EVALUATION

Criteria	Weight	Site 1		Site 2		Site 3		Site 4	
		Rating	Weighted Score	Rating	Weighted Score	Rating	Weighted Score	Rating	Weighted Score
Summary and Topography	0.25	3	0.75	4	1	2	0.5	1	0.25
Utilities and Infrastructure	0.25	2	0.5	3	0.75	4	1	1	0.25
Accessibility	0.2	4	0.8	4	0.8	1	0.2	2	0.4
Ownership	0.1	3	0.3	2	0.2	4	0.4	2	0.2
Safety and Risk	0.2	4	0.8	4	0.8	2	0.4	1	0.2
Total:			3.15		3.55		2.5		1.3

Building on site 2 is expected to provide the best results at the lowest cost. Minimal grading will be necessary, existing utilities will not need to be relocated, and the proximity to the main facilities will provide the easiest access for staff and residents moving between buildings. The property boundaries near site 2 will need to be established by a licensed surveyor but no other major concerns have been identified that would detract from the site's merits. In Figure 7, the potential building footprints or pad areas are shown with one at 16,000 square feet and the other at 20,000 square feet. To accommodate existing site features such as retaining walls and modular buildings to the north, the footprint could be altered to fit within the site; the exhibit is meant to show the potential for the two configurations.

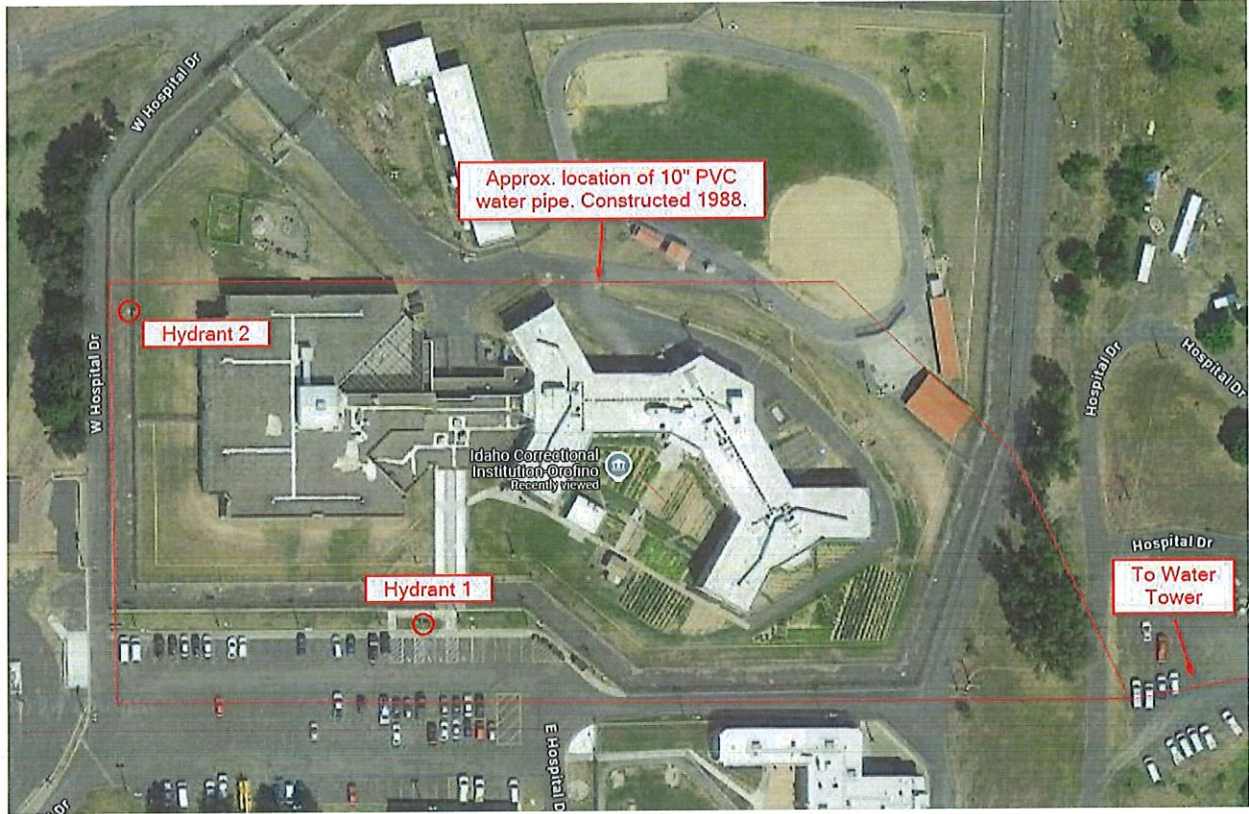


FIGURE 7: SITE 2 BUILDING AREA OPTIONS



SUPPLEMENTARY INFORMATION

HYDRANT FLOW TESTS



APPROXIMATE HYDRANT AND WATER MAIN LOCATIONS

Test 1		
Flow Hydrant (Hydrant 1)		
Item	Static	Residual
Pitot Reading (psi)	65	50
Flow (gpm)	-	1187
Theoretical Available Fire Flow @ 20 psi (gpm)	2148	
Closed Hydrant (Hydrant 2)		
Item	Static	Residual
Pressure (psi)	65	55
Pressure Drop During Flow (psi)	10	

Test 2		
Flow Hydrant (Hydrant 2)		
Item	Static	Residual
Pitot Reading (psi)	65	50
Flow (gpm)	-	1187
Theoretical Available Fire Flow @ 20 psi (gpm)	2148	
Closed Hydrant (Hydrant 1)		
Item	Static	Residual
Pressure (psi)	65	60
Pressure Drop (psi)	5	

HYDRANT FLOW TEST RESULTS

