

Capital Project Stage Gate: OSU-Cascades 46-Acre Site Reclamation

BACKGROUND

The OSU-Cascades 46-Acre Site Reclamation and Academic Building 2 (AB2) projects are included in the Ten-Year Capital Forecast. Given the unique nature of the reclamation project, there is less distinction between the phases of the project related to schematic design (Stage Gate 1 approval) and design development (Stage Gate 2 approval). For this reason, the university is presenting the reclamation project for Stage Gate 2 approval.

PROJECT DESCRIPTION, SCOPE AND PROGRAM

In January 2017, the Board approved the acquisition of the 72-acre demolition landfill to complete the 128 acres OSU-Cascades campus in southwest Bend. The site is made up of three distinct areas:

1. a developed 10-acre site with three buildings and associated private roads, parking lots, and utilities;
2. an adjacent 46-acre site that includes forested areas and a pumice mine with excavated depths up to 100 feet; and
3. a 72-acre former Deschutes County construction and demolition landfill.

This project is the first phase of redevelopment of the pumice mine and landfill into land that is usable for expansion of the 10-acre campus and in accordance with the [OSU-Cascades Master Plan](#). The Master Plan was approved by the City of Bend in 2018 and codified in Bend Development Code (Section 2.7.3500).

The scope of this project includes the 46-acre site reclamation and a small portion of the academic building 2 (AB2) project. OSU-Cascades determined that combining the scope of the site reclamation with AB2 site development as one contracted construction project would reduce overall project risk. The 46-acre site reclamation project involves reuse of suitable landfill material, properly blended with other materials on-site to fill and regrade both the pumice mine and landfill to create a buildable campus. OSU-Cascades has already completed a Materials Management Pilot Study (MMPS) to test the methodology for blending landfill material with landfill cover soil and material from the pumice mine into suitable engineered fill. The AB2 site development scope includes the development of the building site pad, grading for campus entrance, roads, and parking required for AB2. Work on AB2 beyond this initial effort will be brought to the Board for stage gate approval in the future.

The developed land will provide space for: (1) a new campus entrance, (2) campus roads, (3) infrastructure, (4) Academic Building 2 (opening August 2021), (5) a student success center, (6) future residence halls, and (7) future academic buildings.

ESTIMATED TOTAL PROJECT BUDGET, FUNDING AND TIMELINE

The university has completed the design phase of the reclamation project through 30% design (design development). The design estimate for the project, estimated in April 2019, estimates the total project costs at \$13.4M including design, construction, and contingencies. As shown in the tables below, the project will be funded by State of Oregon XI-Q bond funds (specifically, \$9.0M from the 46-Acre Site Reclamation XI-Q Bond and \$4.5M from the Academic Building 2

XI-Q Bond). Given the nature of the project and its funding, a pro forma is not included in this report.

	XI-Q Bonds	XI-G Bonds	Gifts	TOTAL		XI-Q Bonds	XI-G Bonds	Gifts	TOTAL
46 Acre Site Reclamation (SRR)	\$9M			\$9M	SRR & AB2 Site Work CM/GC	\$9M (SRR) \$4.5M (AB2)			\$13.5M
Academic Building 2 (AB2)	\$29M	\$10M	\$10M	\$49M	AB2 CM/GC	\$24.5M	\$10M	\$10M	\$44.5M
TOTAL	\$38M	\$10M	\$10M	\$58M	TOTAL	\$38M	\$10M	\$10M	\$58M

The reclamation project is expected to be completed in the summer of 2020.

IDENTIFICATION OF RISKS AND PROPOSED MITIGATIONS

Fortis Construction was selected in April 2019 as the Construction Manager/General Contractor for the project. In order to mitigate early schedule risks, Fortis will start a portion of the work early via a sole-source bid to a pre-qualified sub-contractor. The majority of the work will be logically bundled and bid under standard procedures. There is a budgeted 10% contingency specifically for unauthorized wastes that may be encountered during landfill remediation. In addition, there is also a 14% contingency for unknown site conditions.

Risks	Consequences & Mitigations
Availability of Fill	<p><i>The amount of material in the landfill and mine suitable for structural backfill may not be enough to meet the elevations necessary for future use of the land.</i></p> <p>Mitigation Plans:</p> <ol style="list-style-type: none"> Utilize the MMPS to identify the material blending ratios necessary for engineered fill as well as the amount of material in the landfill. Identify additional sources of fill from onsite. Identify additional sources of fill from offsite. Make a scope plan to remediate the mine with lower elevations.
Discovery of prohibited waste in landfill.	<p><i>Although significant due diligence has been done, full understanding of waste cannot be known until it is uncovered.</i></p> <p>Mitigation Plans:</p> <ol style="list-style-type: none"> Prospective Purchaser Agreement in place with Department of Environmental Quality (DEQ) to limit OSU liability to DEQ. Purchase and Sale Agreement with Deschutes County shares financial risk for some waste. General contractor with solid background in landfill remediation will help avoid delays due to inexperience or poor management. Align with DEQ/Deschutes County/OSU EHS and other stakeholders on what we would do in certain circumstances before those items arise. Utilize ~10% contingency set aside specifically for hazardous waste. Consider design changes to defer cleanup of any heavily contaminated areas and keep overall project on schedule.

<i>Reclamation and remediation process may be more time consuming than estimated.</i>	<p><i>Unknown conditions reduce production rates below estimated.</i></p> <p>Mitigation Plans:</p> <ol style="list-style-type: none"> 1. Utilize the MMPS as a means for testing the estimate assumptions. 2. Utilize general contractor and subs that have necessary bandwidth for solid production. 3. Review cost of utilizing screened fill versus onsite harvested fill.
<i>Unforeseen environmental conditions create air, water, soil quality impacts during work.</i>	<p><i>Hazardous waste that is encountered needs to be handled with caution in order to remove chances of migration.</i></p> <p>Mitigation Plans:</p> <ol style="list-style-type: none"> 1. Utilize lessons learned during MMPS. 2. Hire a general contractor experienced with this type of work. 3. Utilize recommendations of DEQ/Design Team/EHS/Construction team in developing material handling plans. 4. Develop hazardous material execution plan and team that will engage when hazardous waste is encountered. 5. Setup perimeter monitoring that aligns to DEQ and EHS best-known methods for this type of work.

TOTAL COST OF OWNERSHIP

No OSU debt will be used to fund this project. Estimated operating costs for the reclaimed land in current dollars are \$30,000/year for storm water management, fence maintenance, and repairs. This amount is already carried in OSU-Cascades operating 30-year forecast. Since this project accomplishes reclamation and remediation of currently blighted land, but does not install any capital improvements on that land, there is no projected capital renewal cost over the life of the asset, which is assumed to be infinite.

Education and General Fund – Forecasted Total Cost of Ownership OSU-C 46-Acre Site Reclamation	
ITEM	COST
Acquisition (including closing costs)	\$8.1M
Total improvement project cost	\$9.0M
Total debt service for the acquisition and improvements (30 yrs – 5.25%)	\$0M
Operations and maintenance (30 yrs, \$30K/year land maintenance – escalated 3% annually)	\$1.0M
Capital renewal (30 yrs – 3%)	\$0M
Total cost of ownership	\$18.1M

RECOMMENDATION

Staff recommend that the Finance & Administration Committee recommend to the Board approval of a total capital project budget of \$13.4M for the OSU-Cascades site reclamation project and advancing of the project to the construction phase.