

|                     |   |
|---------------------|---|
| <b>SUBJECT</b>      | <b>MACINNES FIELD UNDERGROUND PARKADE (VANCOUVER)</b> |
| <b>MEETING DATE</b> | <b>JUNE 14, 2017</b>                                  |

Forwarded to the Board of Governors on the Recommendation of the President

**APPROVED FOR  
SUBMISSION**

  
 \_\_\_\_\_  
 Santa J. Ono, President and Vice-Chancellor

|                              |  |                            |              |                              |          |          |  |                      |  |         |  |                      |  |                             |  |                        |                  |                    |  |                  |     |                          |     |
|------------------------------|--|----------------------------|--------------|------------------------------|----------|----------|--|----------------------|--|---------|--|----------------------|--|-----------------------------|--|------------------------|------------------|--------------------|--|------------------|-----|--------------------------|-----|
| <b>DECISION REQUESTED</b>    | <p><b>IT IS HEREBY REQUESTED that the UBC Board of Governors grant BOARD 1 approval for the MacInnes Field Underground Parkade project (Vancouver) with a funding release of \$500,000 to commence schematic design.</b></p> <table> <tr> <td>Preliminary Capital Budget</td> <td>\$12,435,000</td> </tr> <tr> <td>Preliminary Operating Budget</td> <td>\$84,800</td> </tr> <tr> <td>Schedule</td> <td></td> </tr> <tr> <td>Project in Principle</td> <td></td> </tr> <tr> <td>Program</td> <td></td> </tr> <tr> <td>Consultant Selection</td> <td></td> </tr> <tr> <td>Proceed to Schematic Design</td> <td></td> </tr> <tr> <td><b>Funding Release</b></td> <td><b>\$500,000</b></td> </tr> <tr> <td><b>Information</b></td> <td></td> </tr> <tr> <td>Expenses to date</td> <td>\$0</td> </tr> <tr> <td>Funding released to date</td> <td>\$0</td> </tr> </table> | Preliminary Capital Budget | \$12,435,000 | Preliminary Operating Budget | \$84,800 | Schedule |  | Project in Principle |  | Program |  | Consultant Selection |  | Proceed to Schematic Design |  | <b>Funding Release</b> | <b>\$500,000</b> | <b>Information</b> |  | Expenses to date | \$0 | Funding released to date | \$0 |
| Preliminary Capital Budget   | \$12,435,000   |                            |              |                              |          |          |  |                      |  |         |  |                      |  |                             |  |                        |                  |                    |  |                  |     |                          |     |
| Preliminary Operating Budget | \$84,800   |                            |              |                              |          |          |  |                      |  |         |  |                      |  |                             |  |                        |                  |                    |  |                  |     |                          |     |
| Schedule                     |  |                            |              |                              |          |          |  |                      |  |         |  |                      |  |                             |  |                        |                  |                    |  |                  |     |                          |     |
| Project in Principle         |  |                            |              |                              |          |          |  |                      |  |         |  |                      |  |                             |  |                        |                  |                    |  |                  |     |                          |     |
| Program                      |  |                            |              |                              |          |          |  |                      |  |         |  |                      |  |                             |  |                        |                  |                    |  |                  |     |                          |     |
| Consultant Selection         |  |                            |              |                              |          |          |  |                      |  |         |  |                      |  |                             |  |                        |                  |                    |  |                  |     |                          |     |
| Proceed to Schematic Design  |  |                            |              |                              |          |          |  |                      |  |         |  |                      |  |                             |  |                        |                  |                    |  |                  |     |                          |     |
| <b>Funding Release</b>       | <b>\$500,000</b>   |                            |              |                              |          |          |  |                      |  |         |  |                      |  |                             |  |                        |                  |                    |  |                  |     |                          |     |
| <b>Information</b>           |  |                            |              |                              |          |          |  |                      |  |         |  |                      |  |                             |  |                        |                  |                    |  |                  |     |                          |     |
| Expenses to date             | \$0  |                            |              |                              |          |          |  |                      |  |         |  |                      |  |                             |  |                        |                  |                    |  |                  |     |                          |     |
| Funding released to date     | \$0  |                            |              |                              |          |          |  |                      |  |         |  |                      |  |                             |  |                        |                  |                    |  |                  |     |                          |     |
| <b>Report Date</b>           | May 17, 2017   |                            |              |                              |          |          |  |                      |  |         |  |                      |  |                             |  |                        |                  |                    |  |                  |     |                          |     |

**Presented By** Louise Cowin, Vice-President Students  
 Andrew Simpson, Vice-President Finance & Operations  
 Philip Steenkamp, Vice-President External Relations  
 Debbie Harvie, Managing Director, University Community Services  
 John Metras, Managing Director, Infrastructure Development  
 Michael White, Associate Vice-President Campus & Community Planning  
 Aubrey Kelly, President & CEO, UBC Properties Trust

**EXECUTIVE SUMMARY**

A new one-level underground parking facility is proposed to be developed beneath the planned new MacInnes Field to address visitor parking demand for destinations such as Aquatic Centre, Alumni Centre, AMS Nest, Bookstore and commercial sites along University Boulevard. A recently completed parking study indicates that an additional 175 parking spaces are required to meet projected visitor demand in this area.

The proposed MacInnes Field Parkade will include approximately 210 parking spaces to accommodate visitor parking needs as well as car share and commercial/service vehicles. Space for bicycle parking will also be provided.



Table 1 illustrates the results of this review and recommended supply of short-term public/visitor parking.

**Table 1 – Summary of Precinct Short-term Parking Demand Analysis**

| Use   | Midday Peak Parking Demand (# of spaces) | Evening Peak Parking Demand (# of spaces) |
|---|--|---|
| Total Precinct Demand <sup>1</sup>            | 208                                      | 236                                       |
| Existing Available Parking Supply             | 38                                       | 61  |
| <b>Recommended Additional Precinct Supply</b> | <b>170</b>                               | <b>175</b>                                |

**Options Development and Evaluation**

A range of options to address the visitor parking requirement was assessed against a set of evaluation criteria. These criteria included: 1) alignment with UBC-wide objectives and policies, 2) alignment with University Boulevard precinct design guidelines and neighbourhood plan, 3) ability to meet near-term parking and access needs while enabling adaptation to changing needs over time, and 4) cost effectiveness and best use of available resources.

Options assessed included: 1) optimization of existing parking supply, 2) leverage of new building site developments, 3) re-allocation of public space, 4) adding capacity to an existing parkade, and 5) options for one, two and three level underground parking beneath the planned new MacInnes Field.

**Preferred Option**

Based on the evaluation, construction of a one-level MacInnes Field Parkade performed best against the criteria for the following reasons:

- Sufficient visitor parking is supplied in the precinct with a one-level structure, strengthening gateway role and viability of a diversity of local businesses and UBC facilities.
- Central/consolidated nature of visitor parking may improve legibility and UBC's relationship to broader community.
- Estimated capital cost of \$12.4M compared to \$18.9M a two-level and \$26.6M three-level option.
- Estimated net revenue, after operating and debt service costs, of (\$0.97M) at low-demand projections to \$1.17M at high-demand. Because a one-level facility meets the demand for visitor parking, revenue estimates for two- and three-level options are comparable.
- Loan payback period from 10 years for high-demand projections to 22 years for moderate demand. The two- and three-level options only generate enough

<sup>1</sup> Figure includes a +15% uplift, which is typically applied for high turnover “transient” parking, to allow for drivers to find a stall without excessive search time.

revenue to payback higher capital costs under high-demand scenarios that would not meet UBC’s other transportation objectives (payback periods of 14 and 23 years, respectively).

- Cost-effectively addresses the core problem without undermining broader mode share objectives and TDM strategies

Detailed results of the evaluation were provided to the Board in April 2017.

**MacInnes Field Parkade – Preliminary Function Program**

The new MacInnes Field will be designed to:

- accommodate on one level approximately 210 vehicles during periods of peak visitor demand (evenings);
- include facilities for the parking of bikes, carshare vehicles, facilities operations/service vehicles;
- enable future adaptation for alternative uses, such as academic/commercial uses, in the interest of long-term resiliency (e.g. level floorplate, adequate ceiling heights, etc.);
- avoid conflicts with existing and planned transit infrastructure, including the new UBC Bus Exchange, Trolley Loop on University Boulevard, and future Rapid Transit.

A number of alternative access arrangements (off University Boulevard at the Nest; off Student Union Boulevard under Athlete’s walk; and between Central and War Memorial Gym, off University Boulevard) were developed to a sketch-level to confirm feasibility and inform the overall project cost estimate. Access from University Boulevard adjacent to the AMS Nest is preferred. Further analysis and design development is needed to confirm the final access arrangement.

**BENEFITS**  
Learning,  
Research,  
Financial,  
Sustainability &  
Reputational

The project will provide the following benefits:

- New visitor parking spaces to accommodate increasing demand for short-term parking in the University Boulevard precinct associated with new facilities such as the Aquatic Centre, Alumni Centre, AMS Nest, Bookstore, University Boulevard commercial uses. Adequate visitor parking is important to the on-going success of these public-facing facilities and businesses.
- New bicycle parking and carshare parking to help commuters and visitors shift to alternate transportation modes.

**RISKS**  
Financial,  
Operational &  
Reputational

Potential project risks and risk mitigation strategies include:

- Capital Cost – Construction cost risks will be managed through provision of contingency and cost allowances as well as coverage under the Retained Risk policy, though current market conditions still contain risk until contracts are fixed.
- Parking Occupancy – Occupancy risks associated with this project are limited as demand for visitor parking in the University Boulevard precinct is growing with completion of the above noted new facilities. An independent parking assessment

by Bunt & Associates identified a shortfall of 170-175 spaces to meet short-term visitor parking needs in the precinct.

- Financing Capacity – Treasury has confirmed that there is sufficient liquidity to provide internal financing for the project.

**COSTS**  
Capital &  
Lifecycle  
Operating

**Preliminary Capital Budget**

The total capital cost for the project is currently estimated at \$12.4m. This estimate was prepared by UBC Properties Trust based on a schematic layout prepared by Read Jones Christoffersen Engineers, a quantity survey estimate by James Bush & Associates and a construction estimate by Heatherbrae Builders.

| <b>Project Capital Cost Breakdown</b> | <b>\$</b>           |
|---------------------------------------|---------------------|
| <b>Construction Costs</b>             |                     |
| Construction                          | 9,000,000           |
| Public Realm                          | 500,000             |
| Site Servicing                        | 150,000             |
| Contingency                           | <u>450,000</u>      |
| <b>Total Construction</b>             | <b>10,100,000</b>   |
| <b>Cash Allowances</b>                |                     |
| FF+E                                  | 25,000              |
| Security/Moving/Keying                | 25,000              |
| Audio Visual                          | <u>25,000</u>       |
| <b>Total Cash Allowances</b>          | <b>75,000</b>       |
| <b>Soft Costs</b>                     |                     |
| Consultant Budget                     | 1,010,000           |
| Project Management                    | 560,000             |
| Preconstruction/Permits/Insurance     | <u>110,000</u>      |
| <b>Total Soft Costs</b>               | <b>1,680,000</b>    |
| <b>Building Subtotal</b>              | <b>11,855,000</b>   |
| GST                                   | <u>200,000</u>      |
| <b>Building Total</b>                 | <b>12,055,000</b>   |
| Construction Period Financing         | 260,000             |
| Retained Risk                         | 120,000             |
| <b>Project Total</b>                  | <b>\$12,435,000</b> |
| Number of Stalls                      | 210                 |
| Gross Building Area (sf)              | 60,000              |
| Construction Cost per Stall           | \$43,000            |
| Project Cost per Stall                | \$59,000            |
| Project Cost per Square Foot          | \$207               |

**Preliminary Operating Budget**

Operating and maintenance costs as well as debt service costs for the facility will be covered by Parking & Access Control Services through parking revenue. The annual operations and maintenance cost is estimated at \$84,800.

**FINANCIAL**  
Funding  
Sources, Impact  
on Liquidity

**Funding & Financing**

The \$12.4m capital cost is proposed to be internally financed (5.75%, 25 years) with debt service paid from parking revenue. The project proforma becomes cash flow positive in Year 10 of operation in a medium demand scenario. The capital cost is paid back in Year 21. The negative cash flow in the first nine years of operation averages approximately \$27,000/year (starting at \$70,000 in Year 1 and declining to \$3,500 in Year 9). This negative cash flow can be covered within the overall Parking and Access Control Services operating budget. Sufficient liquidity exists to finance the loan.

An additional capital outlay is assumed at Year 25 to replace the parkade roof membrane. Net operating revenue will be sufficient to repay a five-year loan for the related capital cost. This work could be synergized with replacement of the overlaying MacInnes Field turf surface.

**SCHEDULE**  
Implementation  
Timeline

**Preliminary Schedule**

| Project Milestone        | Completion Date |
|--------------------------|-----------------|
| Executive Approval       | Mar 28, 2017    |
| Board Information Report | Apr 2017        |
| Board 1                  | Jun 2017        |
| Board 2+3                | Sep 2017        |
| Construction Start       | Sep 2017        |
| Completion/Occupancy     | Dec 2018        |
| Board 4                  | Sep 2020        |

**CONSULTATION**  
Relevant Units,  
Internal &  
External  
Constituencies

**Consultation**

A working group comprised of staff from Campus and Community Planning, Student Housing & Hospitality Services, Parking & Access Services, Athletics & Recreation and UBC Properties Trust was established to develop and evaluate a suite of potential strategies to address the visitor parking capacity gap identified by the Bunt & Associates parking study. The working group developed the multiple account evaluation framework used to evaluate the shortlist of options that emerged. Evaluation criteria were informed by UBC’s strategic campus-wide and precinct-specific policy objectives, as articulated in the Land Use Plan, Vancouver Campus Plan, Transportation Plan, and University Boulevard Neighbourhood Plan.

**Prior Approvals**

Executive approval to move forward with the MacInnes Field Parkade project was received on March 28, 2017. Initial Board support for the project was given in April 2017 subject to completion of the standard major capital project approval process.

**Project Management**

UBC Properties Trust will provide project management services for the project. The architect and design team from the adjacent Site D (Focal) project will be assigned to this project by UBC Properties to ensure an efficient and integrated design.

|                       |  |  |                |              |
|-----------------------|--|--|----------------|--------------|
| <b>UBCPT COMMENTS</b> | Date of Review:  | May 17, 2017   | Signed off by: | Aubrey Kelly |
|                       | Complete for all reports that include a property component | UBC Properties Trust supports this project including the proposal to combine the construction with the adjacent Focal mixed-use project. |                |              |

|                             |  |
|-----------------------------|--|
| <b>Previous Report Date</b> | April 13, 2017   |
| <b>Decision</b>             | For Information (University Boulevard Sub-area Plan and Parking Update)  |
| <b>Action / Follow Up</b>   | Prepare a Board 1 approval submission for the MacInnes Field Parkade project for presentation at the June 2017 Board of Governors meeting. |

**Attachment 1 – Proposed MacInnes Field Parkade Site within University Boulevard/Gage South Precinct**

