BCIT Capital Plan Overview
2025/26 - 2029/30

With over 45,000 students enrolled annually (17,200 full-time and 28,300 part-time), BCIT plays a central role in province's economy by offering practical career credentials for key employment sectors. BCIT's Five Year Capital Plan for 2025/26 - 2029/30 will support our leadership role in demonstrating best practices in sustainable building design and infrastructure.

The BCIT Five-Yearly Capital Plan contains six projects estimated at $255.0 million that closely align with Provincial development goals, including the pathways identified in Stronger BC – Jobs & Training, CleanBC, and the Climate Preparedness and Adaptions Strategy.

The BCIT Board of Governor's approved this 2025/26 - 2029/30 Capital Plan on June 24th, 2024.

1. Cybersecurity System Upgrade (SE12 data centre) ($6.0 M)

A condition assessment identified the need to upgrade existing cybersecurity infrastructure. The scope of work includes provision of a unified security architecture, centralized IoT management, securing various student, staff and research system access controls and provision of a unified security incident event management system. This comprehensive security upgrade plan has an anticipated design and implementation timeline of 2 - 3 years.

2. Trades + Technology Complex ($18.0 M)
Carpentry Shop Renewal (NE04) + Piping Pavilion (NE06) + Welding Pavilion (NE08)

The Trades + Technology Complex proposal will enhance the Institute's standing as the largest Trades education provider in British Columbia and provide a hub of flexible learning spaces that will be adaptable to evolving industry requirements.

Carpentry, Piping and Welding trades programs are identified as critical high priority program areas. This project would enhance and improve the functioning of existing student learning areas by renewing the Carpentry Shop (NE04) and adding a Piping Pavilion beside the Piping Shop (NE06) and adding a Welding Pavilion beside the Welding Shop (NE08).

3. Trades + Technology Complex ($29.0 M)
Steel Trades Building and Yard Renewal (NE12)

A comprehensive building system renewal is planned for the Steel Trades Building (NE12) that would involve electrical, mechanical, HVAC and life safety upgrades. The renewal work would include upgrades to learning spaces, washroom and common areas, sustainability, structural seismic and building envelope improvements. The project scope includes re-configuration of the steel trades works yard to include a new Iron worker tower, enhancements to steel rebar and boiler maker work areas, and a new steel gouging facility.

4. Trades + Technology Complex ($37.0 M)
Electrical Trades Building (SE01)

A comprehensive building system renewal is planned for the Electrical Trades Building (SE01) that would involve electrical, mechanical, HVAC and life safety infrastructure upgrades. The renewal work would include upgrades to learning spaces, washroom and common areas, sustainability, structural seismic and building envelope improvements. The heating system upgrades include full electrification to eliminate gas boilers and significantly reduce carbon emissions.

5. Centre for Indigenous Learning, Ecological Restoration & Climate Adaptation ($105.0 M)

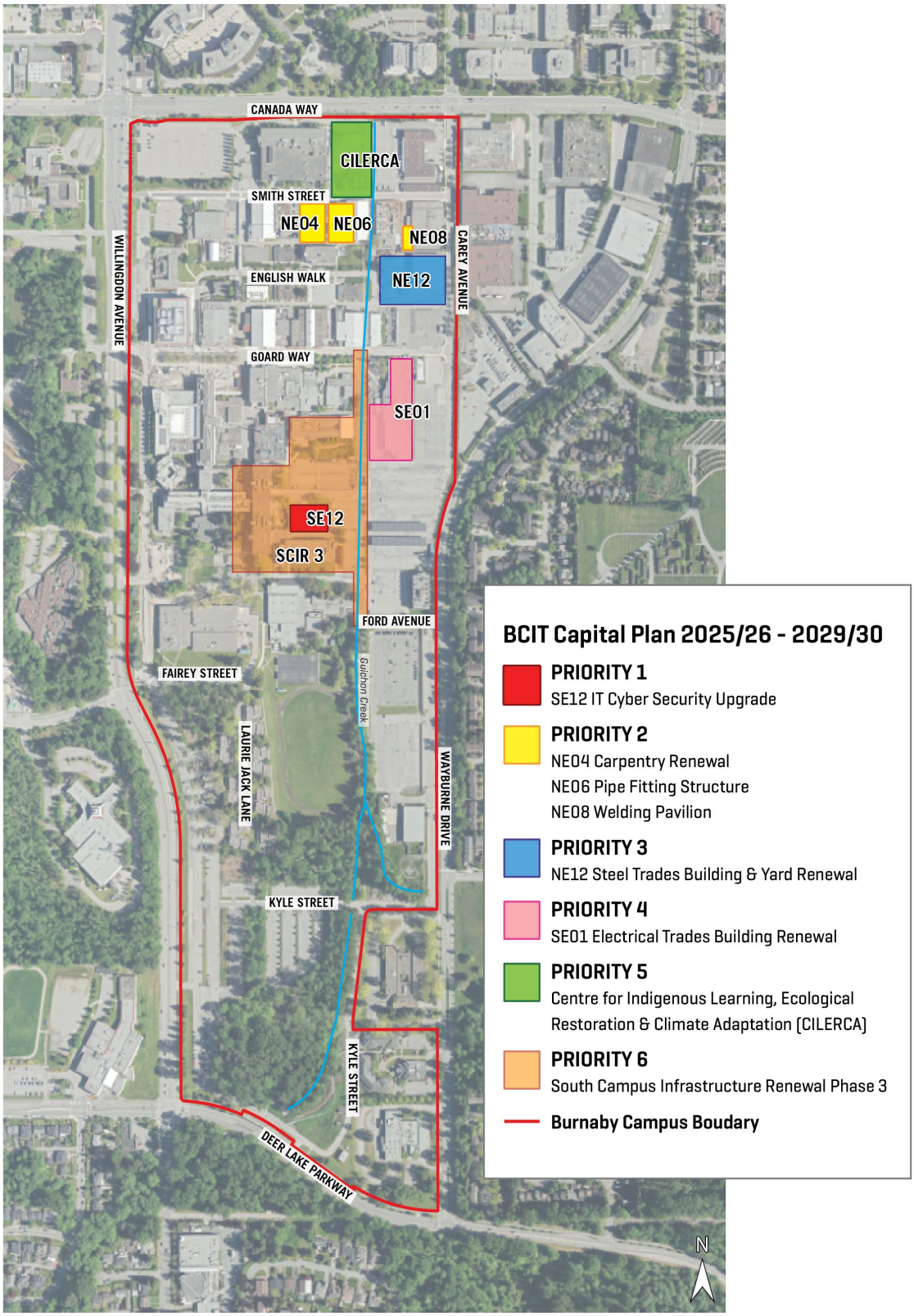
The proposed Centre for Indigenous Learning, Ecological Restoration & Climate Adaptation (CILERCA) would provide a modern facility for key education programs related to Indigenous Learning, ecological restoration and climate change adaptation, based on a strong foundation of the First Nations knowledge and practices in managing natural resources and land. With the planned daylighting of Guichon Creek, the building will serve as a living lab for sustainable design. This project is aligned with Provincial skilled labour economic recovery, Indigenous reconciliation and sustainability objectives.

This new centre will provide research and teaching centre that will solidify BCIT's role as the leader in reconciliation and ecological restoration. The centre will allow for expansion of the Ecological Restoration department's MSc and BSc programs, and support associated programs such as Fish, Wildlife and Recreation, and Forest and Natural Areas Management.

6. South Campus Infrastructure Renewal - Phase 3 ($60.0 M)

This project is aligned with Provincial resilience and sustainability objectives, including the BC Hydro program to transition electrical services in the Willingdon corridor to 25kV service (from the current 12.5kV service).

This project will replace a section of the degraded Guichon storm culvert with an ecologically restorative stream channel as outlined in the BCIT *Campus Plan*. Replacement of underground utilities along the Roper corridor also supports core educational building service reliability and provide modern infrastructure required by future development on campus.


CANADA WAY
CILERCA
SMITH STREET
NE04
NE06
NE08
NE12
ENGLISH WALK
WILLINGDON AVENUE
CAREY AVENUE
GOARD WAY
SE01
SE12
SCIR 3
FORD AVENUE
FAIREY STREET
Guichon Creek
LAURIE JACK LANE
WAYBURNE DRIVE
KYLE STREET
KYLE STREET
DEER LAKE PARKWAY
N
BCIT Capital Plan 2025/26 - 2029/30
PRIORITY 1
SE12 IT Cyber Security Upgrade
PRIORITY 2
NE04 Carpentry Renewal
NE06 Pipe Fitting Structure
NE08 Welding Pavilion
PRIORITY 3
NE12 Steel Trades Building & Yard Renewal
PRIORITY 4
SE01 Electrical Trades Building Renewal
PRIORITY 5
Centre for Indigenous Learning, Ecological Restoration & Climate Adaptation (CILERCA)
PRIORITY 6
South Campus Infrastructure Renewal Phase 3
Burnaby Campus Boudary

Project Overview				
Institution	**Campus**	**Category**	**Priority in Category**	**Program Type**
BCIT	Burnaby	IM/IT - Security & Privacy	1	Public Safety / Security

Project Title

Institute Cybersecurity Upgrade Project

Brief Project Description

Cybersecurity Protection for Facilities, Research and Campus Networks

Project Definition

Project Scope

Rebuild BCIT's cybersecurity network protection end-to-end, including Internet of Things (IoT) related endpoints and securing building operations, supply chain operations, research related critical infrastructure like Smart Grids and IT related networks interconnecting various zones across five BCIT campuses across lower mainland.

Project Objectives

- Rebuild BCIT's cybersecurity protection from end to end using a unified approach, including the following scope areas:
  - Unified Security Architecture across business and academic functions.
  - Centralized IoT management and security
  - Securing Operational Technologies (Industrial Control Systems)
  - Securing Research Networks (Smart Grid, etc)
  - Securing Student Sandbox environments
  - Securing Bring Your Own Devices (BYOD) for the community
  - Securing Student Labs both on-premises and cloud
  - Secure Virtual Desktop Infrastructure (VDI) environment
  - Securing and monitoring of East-West network traffic and protection of data centre (micro-segmentation)
  - Building a Unified Security Incident Event Management (SIEM) Implementation
  - Securing and integrating distance learning tools

Key Risks

Project Risk(s)	Proposed Mitigation Strategy
Available technical expertise within BCIT	BCIT has formed a team dedicated to implementing Cybersecurity upgrades
Availability of specialized cybersecurity consultants	BCIT will utilize BCNET qualified consultant service options.

Options Considered

- BCIT has been actively reviewing the security architecture with expert vendors and it's evident that the size of BCIT's operations is unique and aligned with large university environments.
- BCIT has reviewed shared security services from BCNET and given the size of BCIT, BCNET is not able to scale to BCIT's network size and complexity.
- BCIT can leverage BCNET as a procurement vehicle to build an Integrated Security Architecture as they have relationships with all the major vendors.

Current Situation

- Cyber Security at BCIT is currently haphazard with no unified Security Architecture making it easier to miss things.
  - Complex network architecture and lack of next-generation firewall capabilities
  - Absence of network access control (NAC) on wired and wireless networks
  - No centralized monitoring of industrial control systems (ICS) and little insight to ICS systems
  - BCIT has specific IT logging capabilities but lacks SIEM and is not able to correlate disparate security events to paint a full picture of potential threats from other inter-connected networks.
  - ICS security is managed in an inconsistent fashion.
  - Some of our legacy systems prevent protecting everything at the same level.
  - "Identity assets" is foundational to good security and while BCIT is making strides in their identity, it is still not in a position to fully support a Zero Trust architecture.

- BCIT received $1.0 Million Ministry funding for this project in FY24/25. A Cybersecurity Upgrade project team has been formed and procurement for specialized cybersecurity consultants is underway.

- Impact if project not fully funded.
  - As recently experienced by other Provincial agencies, there is a real threat of cybersecurity attacks that can be extremely disruptive to Institute continued educational operations.
  - BCIT's network size and complexity requires immediate attention.
  - BCIT will continue to be partially blind and especially in the Industrial Networks.
  - BCIT will continue to be more reactive vs proactive and strategic with our security stance.

Strategic Alignment

Institution Priorities	Government Priorities
BCIT's strategic plan highlights a key commitment to redesign processes and systems. Cybersecurity touches people, processes and technologies and the investments are aligned to improve overall security of systems and operations across the Institute.	Cybersecurity protection investments align with Provincial Government priorities for investment in new training and employment opportunities in several ways, such as Skills Development; Protection of Critical Infrastructure; and Innovation.

Project Budget ($ millions)

Total Project Cost	Provincial Funding	PSI Contribution
$6.0	$6.0	$0.0

The cost estimate identified for this project was based on BCIT staff expertise (both offices under CISO and CIO), in consultation with expert venders/partners that work in the field of cybersecurity and with BCNET.

With Ministry funding of $1.0 M approved in FY24/25, a cybersecurity upgrade project team has been established at BCIT. The initial process of project planning is underway to assess current state of security posture. This work will lead to procurement of specialized cybersecurity hardware through BCNET pre-qualified roster. A multi-year phased approach is being recommended to deliver the project stated goals and objectives. The project team is focused on delivering the initial **Phase 1** with the initial $1.0m funding. It is expected that the multi-year project will be delivered in three Phases. **Phase 1** being the initial phase that has been funded.

Project Schedule

Target Approval Date	Target Start Date	Target Completion Date
March 2025	June 2025	March 2027

Phase 1 – funded

Pre-Project	Status	Timeline	Project Implementation	Timeline
Preliminary Planning	Complete	June - July 2024		
Project Initiation	Underway	July - August 2024		
			Project Execution	August - September 2024
			Project Implementation	September – December 2024
			Project Monitoring	December 2024 – January 2025
			Project Closure	February – March 2025

Phase 2 and Phase 3 – the two subsequent phases will be strategic extensions of Phase 1 delivering security of critical operations across BCIT.

Project Overview

Institution	Campus	Category	Priority in Category	Program Type
BCIT	Burnaby	New Priority Investments	1of 4	Trades

Project Title

Trades & Technology Shop Renewal – Carpentry Shop (NE04) + Piping Pavilion (NE06) + Welding Pavilion (NE08)

Brief Project Description

This project involves interior renovations and small addition to the Carpentry Shop (NE04) and the provision of a Piping Pavilion (NE06) and Welding Pavilion (NE08) to improve the quality, efficiency, and life safety conditions of existing indoor and outdoor instructional areas.

Project Definition

Project Scope

The BCIT Trades & Technology Complex Business Case (submitted to the Ministry June 2020) comprises a series of phased projects that will replace and modernize existing functionally inadequate buildings and enhance and expand the Institute's Trades & Technology instructional space.

This project involves interior renovations and small addition to the Carpentry Shop (NE04) and the provision of a new Piping Pavilion (NE06) and a new Welding Pavilion (NE08) to improve the quality, efficiency and life safety conditions of existing instructional areas. The provision of covered, outdoor instructional space is a sustainable and cost effective means to increase instructional areas for piping and welding programs.

Project Objectives

- Provide modern trades learning spaces and facilities.
- Increase student intake, including Indigenous persons, and reduce waitlists.
- Support programs that align with emerging opportunities for skilled personnel presented by high-tech industries, such as construction, renewable energy, and pipelines.
- Improve the Campus' profile, specifically the Trades program's image and recruitment opportunities.
- Provide industry partnership and journeyman upgrading opportunities.
- Provide safer workshops and outdoor work areas that are more functional and use space more efficiently.

Key Risks

Project Risk(s)	Proposed Mitigation Strategy
A widening gap between student learning needs and antiquated facilities	Provision of renewed shop facilities that improve the quality of the learning environment
Inability to achieve Stronger BC trades training priorities	New pavilions will expand program intake capacity
Existing facilities are antiquated and do not meet current safety standards	Renewal of space will improve functional operations and improve student safety

Options Considered

Status Quo. This option does not address functional requirement and program expansion opportunities.

Non-Capital Site Option. The off-site lease option is also deemed not viable. These programs are an integral part of the overall trades training taught at BCIT. Students need to be in proximity to other shops, structures, and classrooms within the larger Trades' training complex.

New & Renewed Facilities. Preferred. This option best meets project objectives.

Current Situation

CURRENT STATUS	USE	EXISTING SIZE	ADDITIONAL NEW SPACE	YEAR BUILT	FACILITY CONDITION INDEX	VFA REPLACEMENT VALUE	BUILDING OUTCOME	PROGRAM FTE 2023/24
NE04 Carpentry Shop	Classroom /Shop	2,057 m^2	157 m^2	1959	0.34	$16,484,833	Renovated + Addition	921
NE06 Piping Shop	Classroom /Shop	2,571 m^2	1,570 m^2	1961	0.67	$13,192,583	Addition	648
NE08 Welding Shop	Classroom /Shop	2,395 m^2	150 m^2	1981	0.38	$11,178,269	Addition	169

Strategic Alignment

Institution Priorities

- This project aligns with Stronger BC and assists in the implementation of its economic plan, particularly with BCIT's training for the jobs of tomorrow.
- This project aligns with BCIT's Vision and Mission to renew Trades facilities and expand opportunities for growth in training programs and is fully aligned with the BCIT Burnaby Campus Plan

Indigenous Reconciliation (Declaration Act)

- BCIT's Indigenous Initiatives Office participates in the design process for all major capital projects.
- During the design phase, Indigenous Initiatives will focus on design issues, such as culturally appropriate interior and exterior design, sustainability, and safe spaces for Indigenous students.
- When facilities are nearing occupancy, Indigenous Initiatives will focus on partnership opportunities; cultural awareness and cultural safety workshops for staff, faculty, and students; indigenizing curriculum; and Indigenous student support services.

Environmental, Social, Governance Framework for Capital (ESGFC) Eligibility

Eligibility: Yes

Sustainability, diversity equity and inclusion, health and safety

Climate Change (CleanBC)

- Renewal of the Carpentry Shop (NE04) will include modernization of existing HVAC and Lighting systems with high efficiency infrastructure.
- The new Piping and Welding pavilions will meet STEP 4 energy code design requirements.
- This proposal will assist in the expansion of the Trades workforce that support low carbon industries

Child Care

Not applicable

Mass Timber & Wood First	Labour & Employment
The existing Carpentry Shop (NE04) and Welding Shop (NE06) are wood-frame construction. Therefore, wood building materials will be used for this proposal, wherever feasible.	This project aligns with Stronger BC and assists in the implementation of its economic plan, particularly with BCIT's Trades training in Carpentry, Piping and Welding.

Project Budget ($ millions)		
Total Project Cost	**Provincial Funding**	**PSI Contribution**
$18.0	$15.3	$2.7

Class Level and Year of Cost Estimate: Quantity Surveyor prepared Class D Cost Estimates Prepared in March 2024

Capital Funding Assumptions: 15% BCIT Fundraising target = $2.7 Million.

$1.5 Million donor contribution secured (to date) for Welding Pavilion (NE08) component.

Operating Funding Assumptions: This proposal involves renovation of existing indoor and outdoor space with high performance infrastructure so it is assumed that there will be no significant operational cost impacts.

Project Schedule		
Target Business Plan Approval Date	**Target Construction Start Date**	**Target Occupancy Date**
October 2025	June 2027	December 2028

Key Timing Assumptions: It is assumed Notional Approval granted by Ministry April 2025.

Construction scopes would be bundled and tendered under one construction contract (if practical) with phased completion of project components. BCIT has already started design process for Welding Pavilion (NE08) with $1.5 M donation with intent to expedite construction for this component targeted for Summer 2025.

Project Overview				
Institution	**Campus**	**Category**	**Priority in Category**	**Program Type**
BCIT	Burnaby	New Priority Investments	2 of 4	Trades

Project Title

Trades and Technology Complex – Steel Trades Building and Work Yard Renewal (NE12)

Brief Project Description

This project involves a comprehensive building system renewal including electrical, mechanical, HVAC and life safety upgrades. The renewal work includes upgrades to learning spaces, gender inclusive washroom, building accessibility, sustainability, structural seismic and building envelope improvements.

Project Definition

Project Scope

The BCIT Trades & Technology Complex Business Case (submitted to the Ministry June 2020) comprises a series of phased projects that will replace and modernize existing functionally inadequate buildings and enhance and expand the Institute's Trades & Technology instructional space.

This project involves a comprehensive building system renewal including electrical, mechanical, HVAC and life safety upgrades. The renewal work includes upgrades to learning spaces, gender inclusive washroom, building accessibility, sustainability, structural seismic and building envelope improvements.

The project scope includes re-configuration of the steel trades works yard to include a new Iron worker tower, enhancements to steel rebar and boiler maker work areas, and a new steel gouging facility.

It should be noted that the Gantry Crane project, currently in the design phase, will function as an extension to the Steel Trades works yard and complement the educational programming within the overall facility.

Project Objectives

- Provide modern trades learning spaces and facilities.
- Increase student intake, including Indigenous persons, and reduce waitlists.
- Support programs that align with emerging opportunities for skilled personnel presented by high-tech industries, such as construction, renewable energy, and pipelines.
- Improve BCIT Trades program's image and recruitment opportunities.
- Provide industry partnership and journeyman upgrading opportunities.
- Reduce energy use and operating costs.
- Provide safer workshops and outdoor work areas that are more functional and use space more efficiently.
- Demonstrate "Living Lab" principles by employing leading edge building science principles in design and construction.

Key Risks

Project Risk(s)	Proposed Mitigation Strategy
Building does not meet seismic, life safety and accessibility standards	Whole asset renewal will address building code compliance requirements
A widening gap between student learning needs and antiquated facilities	Provision of renewed classroom, shop and works yard facilities that improve the quality of the learning environment

Inability to achieve Stronger BC trades training priorities	Renewed learning facilities will improve the quality of learning experience and permit modest increase to student intake levels.

Options Considered

Status Quo. This option does not address functional requirements and program expansion opportunities.

Non-Capital Site Option. The off-site lease option is also deemed not viable. These programs are an integral part of the overall trades training taught at BCIT. Students need to be in proximity to other shops, structures, and classrooms within the larger Trades' training complex.

Renewed Facilities. Preferred. This option best meets project objectives.

Current Situation

CURRENT STATUS	USE	EXISTING SIZE	ADDITIONAL NEW SPACE	YEAR BUILT	FACILITY CONDITION INDEX	VFA REPLACEMENT VALUE	BUILDING OUTCOME	PROGRAM FTE 2023/24
NE12 Steel Trades Shop	Classroom /Shop	2,935 m^2	0	1972	0.55	$10,803,533	Renovated	454

Strategic Alignment

Institution Priorities

- This project aligns with the Clean BC and Social components of the Environmental, Social and Governance Framework for Capital (ESGFC) by providing gender inclusive washrooms, building accessibility upgrades and energy efficiency upgrades.
- This project aligns with Stronger BC and assists in the implementation of its economic plan, particularly with BCIT's training for the jobs of tomorrow.
- This project aligns with BCIT's Vision and Mission to renew Trades education facilities and is fully aligned with the BCIT Burnaby Campus Plan.

Indigenous Reconciliation (Declaration Act)

- BCIT's Indigenous Initiatives Office participates in the design process for all major capital projects.
- During the design phase, Indigenous Initiatives will focus on design issues, such as culturally appropriate interior and exterior design, sustainability, and safe spaces for Indigenous students.
- When facilities are nearing occupancy, Indigenous Initiatives will focus on partnership opportunities; cultural awareness and cultural safety workshops for staff, faculty, and students; indigenizing curriculum; and Indigenous student support services.

Environmental, Social, Governance Framework for Capital (ESGFC) Eligibility

Eligibility: Yes

Sustainability, diversity, equity and inclusion, health and safety

Climate Change (CleanBC)

- This project contributes to a strong sustainable economy that works for everyone, and directly supports the Clean BC Strategy.
- Renewal of the Steel Trades (NE12) will include modernization of existing HVAC and Lighting systems with high efficiency infrastructure.

Child Care

Not applicable

Mass Timber & Wood First	Labour & Employment
This project involves the renewal of an existing concrete and steel building therefore Mass Timber is not a viable option for this project.	This project aligns with Stronger BC and assists in the implementation of its economic plan, particularly with BCIT's training in Steel Trades.

Project Budget ($ millions)		
Total Project Cost	**Provincial Funding**	**PSI Contribution**
$29.0	$24.6	$4.4

Class Level and Year of Cost Estimate: Quantity Surveyor Class D Estimate prepared in March 2024

Capital Funding Assumptions: 15% BCIT Fundraising Target = $4.4 Million

Operating Funding Assumptions: This Whole Asset Renewal proposal involves renovation of existing indoor and outdoor space with high performance infrastructure so it is assumed that there will be no significant operational cost impacts.

Project Schedule		
Target Business Plan Approval Date	**Target Construction Start Date**	**Target Occupancy Date**
January 2026	June 2027	December 2028

Key Timing Assumptions: It is assumed Notional Approval granted by Ministry April 2025.

The original feasibility study would need to be updated to schematic design to reflect recent building code changes and to prepare a Class C cost estimate for Ministry business plan approval.

Project Overview				
Institution	**Campus**	**Category**	**Priority in Category**	**Program Type**
BCIT	Burnaby	New Priority Investments	3 of 4	Trades

Project Title

Trades and Technology Complex – Electrical Trades Building Renewal (SE01)

Brief Project Description

This project involves a comprehensive building system renewal including electrical, mechanical, HVAC and life safety upgrades. The renewal work includes upgrades to learning spaces, gender inclusive washroom, building accessibility, sustainability, structural seismic and building envelope improvements. The heating system upgrades include full electrification to eliminate gas boilers and significantly reduce carbon emissions.

Project Definition

Project Scope

The BCIT Trades & Technology Complex Business Case (submitted to the Ministry June 2020) comprises a series of phased projects that will replace and modernize existing functionally inadequate buildings and enhance and expand the Institute's Trades & Technology instructional space.

This project involves comprehensive building system renewal including electrical, mechanical, HVAC and life safety infrastructure upgrades. The renewal work would include upgrades to learning spaces, gender inclusive washrooms, sustainability, structural seismic and building envelope improvements. The heating system upgrades include full electrification to eliminate gas boilers and significantly reduce carbon emissions.

It should be noted that the Ministry approved Electrical Trades Technology Innovation Addition will function as an extension to the Electrical Trades Building and complement the educational programming within of the overall facility.

Project Objectives

- Provide modern trades learning spaces and facilities.
- Increase student intake, including Indigenous persons, and reduce waitlists.
- Support programs that align with emerging opportunities for skilled personnel presented by high-tech industries, such as construction and renewable energy.
- Provide industry partnership and journeyman upgrading opportunities.
- Reduce energy use and operating costs.
- Provide safer workshops that are more functional and use space more efficiently.
- Demonstrate "Living Lab" principles by employing leading edge building science principles in design and construction.

Key Risks

Project Risk(s)	Proposed Mitigation Strategy
Building does not meet seismic, life safety and accessibility standards	Whole asset renewal will address building code compliance requirements
A widening gap between student learning needs and antiquated facilities	Provision of renewed classroom and laboratory facilities that improve the quality of the learning environment
Inability to achieve Stronger BC trades training priorities	Renewed learning facilities will improve the quality of learning experience and utilization of training facilities

Options Considered

Status Quo. This option does not address functional requirements and program expansion opportunities.

Non-Capital Site Option. The off-site lease option is also deemed not viable. These programs are an integral part of the overall trades training taught at BCIT. Students need to be in proximity to other shops and classrooms within the larger Trades' training complex.

New & Renewed Facilities. Preferred. This option best meets project objectives.

Current Situation

CURRENT STATUS	USE	EXISTING SIZE	ADDITIONAL NEW SPACE	YEAR BUILT	FACILITY CONDITION INDEX	VFA REPLACEMENT VALUE	BUILDING OUTCOME	PROGRAM FTE 2023/24
NE12 Steel Trades Shop	Classroom /Shop	2,935 m^2	0	1972	0.55	$10,803,533	Renovated	454

Strategic Alignment

Institution Priorities

- This project aligns with the Clean BC and components of the Environmental, Social and Governance Framework for Capital (ESGFC) by providing gender inclusive washrooms, building accessibility upgrades and energy efficiency upgrades.
- This project aligns with Stronger BC and assists in the implementation of its economic plan, particularly with BCIT's training for the jobs of tomorrow.
- This project is aligned with BCIT's Vision and Mission to renew Trades education facilities and supports the BCIT Burnaby Campus Plan.

Indigenous Reconciliation (Declaration Act)

- BCIT's Indigenous Initiatives Office participates in the design process for all major capital projects.
- During the design phase, Indigenous Initiatives will focus on design issues, such as culturally appropriate interior and exterior design, sustainability, and safe spaces for Indigenous students.
- When facilities are nearing occupancy, Indigenous Initiatives will focus on partnership opportunities; cultural awareness and cultural safety workshops for staff, faculty, and students; indigenizing curriculum; and Indigenous student support services.

Environmental, Social, Governance Framework for Capital (ESGFC) Eligibility

Eligibility: Yes

Sustainability, diversity, equity and inclusion, health and safety

Climate Change (CleanBC)

- This project contributes to a strong sustainable economy that works for everyone, and directly supports the Clean BC Strategy.
- Renewal of the Electrical Trades building(SE01) will include modernization of existing HVAC and

Child Care

Not applicable

Lighting systems with high efficiency, low-carbon infrastructure.	
Mass Timber & Wood First	**Labour & Employment**
This project involves the renewal of an existing concrete and steel building therefore Mass Timber is not a viable option for this project.	This project aligns with Stronger BC and assists in the implementation of its economic plan, particularly with BCIT's training in Electrical Trades.

Project Budget ($ millions)

Total Project Cost	Provincial Funding	PSI Contribution
$37.0	$31.4	$5.6

Class Level and Year of Cost Estimate: Quantity Surveyor Class D Estimate prepared in March 2024

Capital Funding Assumptions: 15% BCIT Fundraising Target = $5.6 Million

Operating Funding Assumptions: This Whole Asset Renewal proposal involves renovation of existing indoor and outdoor space with high performance infrastructure so it is assumed that there will be no significant operational cost impacts.

Project Schedule

Target Business Plan Approval Date	Target Construction Start Date	Target Occupancy Date
January 2027	June 2028	June 2030

Key Timing Assumptions: It is assumed Notional Approval granted by the Ministry April 2026.

The original feasibility study would need to be updated to schematic design to reflect recent building code changes and to prepare a Class C cost estimate for Ministry business plan approval.

Project Overview				
Institution	**Campus**	**Category**	**Priority in Category**	**Program Type**
BCIT	Burnaby	New Priority Investments	4 of 4	Sciences & Technology

Project Title

Centre for Indigenous Learning, Ecological Restoration and Climate Adaptation (CILERCA)

Brief Project Description

This new facility will provide modern facilities to support and expand existing education programs in Environmental Engineering Technology; Fish, Wildlife & Recreation; Forestry & Natural Areas Management; and Ecological Restoration, supported with an Indigenous Learning Centre and opportunity for co-management of natural resources based on the First Nations culture and knowledge.

Project Definition

Project Scope

- Construction of the new 4-storey learning and applied research facility situated on Canada Way, adjacent to the approved Trades & Technology Centre.
- Total estimated area = 6,655 m^2 (71,600 sf)
- The proposed facility will include a dedicated Indigenous Initiatives gathering space and learning centre, a 144-seat lecture theatre, several student collaboration meeting rooms, two computer labs, 8 classrooms, 5 wet research laboratories, graduate student and faculty workspace, and BCIT's Rivers Institute.

Project Objectives

- The proposed new centre will provide a modern facility for key education and applied research programs related to Indigenous learning, ecological restoration, and climate change adaptation, based on a strong foundation of First Nations knowledge and practices in managing natural resources and land.
- With the planned daylighting of Guichon Creek, the building will serve as a living lab for sustainable design.
- The centre will allow for expansion of the Ecological Restoration department's MSc and BSc programs, and support associated programs, such as Fish, Wildlife and Recreation; and Forest & Natural Areas Management.
- As these programs are founded in First Nations learnings and practices of managing natural resources and land, this project also includes an Indigenous gathering and learning space to support learners attending programs by providing a prominent ground level space near the main entry of the building.
- The project will provide modern teaching and research spaces to replace BCIT's existing scattered facilities. This building will solidify BCIT as a leader in ecological restoration and climate adaptation by integrating several complementary programs at one location.

Key Risks

Project Risk(s)	Proposed Mitigation Strategy
Impact on future recruitment of students and faculty	Provision of a modern and integrated facility to provide opportunities for interprofessional collaboration
Impact on leadership position in ecological restoration training	Provision of modern wet science labs to improve quality of learning experience
Limit the ability to contribute towards DRIPA commitments	Provision of a dedicated Indigenous gathering and learning space to support learners

Options Considered

- Status Quo. This option does not address program expansion opportunities, or the consolidation of existing functionally inadequate facilities.
- Non-Capital Site Option. The off-site lease option is also deemed not viable. Students and faculty need to be in proximity to other classrooms and resources within the BCIT Campus.
- Renovation. BCIT has concluded it is impractical to renovate and enlarge the SE04 building, as this poor quality, single-storey building does not have sufficient site area to accommodate the CILERCA building programs
- **New Centre**. **Preferred**

Current Situation

- This facility will accommodate 242 student FTE in the following programs: Environmental Engineering Technology (64 FTE); Fish, Wildlife & Recreation (64 FTE); Forestry & Natural Areas Management (64 FTE); and Ecological Restoration (50 FTE).
- This project will permit the eventual removal of Building SE04 that is has sub-standard educational spaces with an FCI = 0.45
- Ecological Restoration is a new and rapidly developing industry intimately integrated with climate change adaptation. BCIT is an educational pioneer in this field since establishing its first courses in 2009 and has become a leading educational institution in Canada for these programs.
- BCIT offers students phased opportunities to incrementally obtain credentials from Diploma to Master of Science degree. BCIT offers Canada's first professional graduate degree specializing in restoring degraded ecosystems.

Strategic Alignment

Institution Priorities	**Indigenous Reconciliation (Declaration Act)**
• This project aligns with the Mass Timber, Clean BC, and components of the Environmental, Social and Governance Framework for Capital (ESGFC) • Unique spaces, courses, and programs will support reconciliation and provide education opportunities for Indigenous learners in areas such as ecological restoration, forest and watercourse environments and the bio economy. • This project also aligns with *Stronger BC*, and assists in the implementation of its economic plan, particularly with BCIT's training for the jobs of tomorrow. • This project is aligned with BCIT's Vision and Mission to renew Trades education facilities and supports the BCIT Burnaby Campus Plan.	Courses and spaces within the building will contribute to BCIT's response to DRIPA, and include: • Culturally appropriate Indigenous services and gathering space, and a Student Liaison Office to provide province-wide ecological restoration outreach training programs for First Nations. • Programs to directly support, train, and increase participation of Indigenous learners, and collaborative support for First Nations in Ecological Restoration initiatives. • Indigenous Liaison Office will serve to support students in their educational pursuits. • Working with First Nations in-community to provide direction, training, and agency with respect to ecological restoration.
Environmental, Social, Governance Framework for Capital (ESGFC) Eligibility	
Eligibility: Yes	Sustainability, diversity, equity and inclusion, health and safety
Climate Change (CleanBC)	**Child Care**
This project directly contributes to the Climate and Preparedness and Adaptation Strategy, and CleanBC and supports four of its pathways to build resilience:	No applicable

• Enhancing partnerships with Indigenous peoples • Integrating climate adaptation into decision-making • Expanding climate education This high performance (Energy Code STEP 4) building would be zero carbon and utilize mass timber structural design.	
Mass Timber & Wood First	**Labour & Employment**
Where permitted by building code, the building will utilize engineered wood and mass timber products, and serve as an important demonstration "living lab" opportunity for students and researchers, promoting sustainable building design.	• Restoration of damaged environments is a significant activity around the world, and CILERCA will contribute toward recognition of BC as a leader in ensuring a clean and sustainable economy. • Unique spaces, courses, and programs will support reconciliation and provide education opportunities for Indigenous learners in areas such as ecological restoration, forest and watercourse environments and the bio economy. • This project also aligns with *Stronger BC*, and assists in the implementation of its economic plan, particularly with BCIT's training for the jobs of tomorrow.

Project Budget ($ millions)

Total Project Cost	Provincial Funding	PSI Contribution
$105.0	$89.2	$15.8

Class Level and Year of Cost Estimate: Quantity Surveyor Class D Estimate prepared in April 2021

Capital Funding Assumptions: 15% BCIT Fundraising Target = $15.8 Million

Operating Funding Assumptions: This new facility would have an estimated operating cost of $700,000 per annum.

Project Schedule

Target Business Plan Approval Date	Target Construction Start Date	Target Occupancy Date
March 2027	March 2029	January 2031

Key Timing Assumptions: It is assumed Notional Approval granted by the Ministry April 2026.

The original feasibility study would need to be updated to schematic design to reflect recent building code changes and to prepare a Class C cost estimate for Ministry business plan approval.

Project Overview

Institution	Campus	Category	Priority in Category	Program Type
BCIT	Burnaby	Routine Capital	1	Other

Project Title

South Campus Infrastructure Project – Phase 3

Brief Project Description

An overall Business Case for the South Campus Infrastructure Project was presented to the Ministry. Phase 1 ($14.6 M) was completed September 2022. Phase 2 ($48 M) was approved by the Ministry and is scheduled for completion Q1 2029. Phase 3 involves replacement of underground utilities along Roper Avenue and services to several academic buildings, including removal of a section of stormwater culvert to create a daylighted channel of Guichon Creek.

Project Definition

Project Scope

- The Phase 3 scope of work includes replacement of underground utilities along Roper Avenue and services to the following buildings: Renewable Resources (SE04), Business (SE06), Broadcast Centre (SE10), Computing & Academic Studies and Health Sciences (SE12), and Library (SE14).
- This phase also features the implementation of Guichon Creek channel daylighting and ecological restoration, including enhancements to the pedestrian public realm on both sides of the daylighted stream channel. Phase 3 has a project value of $60.0 million. Project costing will be refined as part of Phase 2 schematic design process.

Project Objectives

- Maintain business continuity for the entire South Campus.
- Upgrade critical deferred maintenance conditions related to electrical equipment reaching end of life.
- Provide a modern 25kV electrical distribution system, including distribution redundancy.
- Replace underground utilities – stormwater, sewer, gas, and water.
- Align future developments with the *Burnaby Campus Plan*, and above-ground master planning by providing a utility corridor for the South Campus.
- Significant improvement to pedestrian accessibility by removing existing barriers to mobility.

Key Risks

Project Risk(s)	Proposed Mitigation Strategy
BC Hydro 25kV conversion will make existing 12.5kV distribution system obsolete	BCIT has regular contacts with BC Hydro to provide status updates on BCIT high voltage distribution renewal work.
System failure and costs associated with unplanned disruptions	BCIT has been implementing a phased renewal program Phase 1 complete 2022. Phase 2 design work underway.
Continued deterioration of the Guichon Creek culvert.	BCIT recently completed a sink hole repair by replacing a section of culvert with an open creek channel design.

Options Considered

Given the risk electrical failure poses to maintaining BCIT's educational operations, phased replacement of the electrical distribution system is required. Furthermore, based on recent culvert failures and sinkholes, the Guichon Creek culvert also requires phased renewal.

Current Situation

- A condition assessment shows the majority of electrical, water, gas, storm, and sewer services to the southern part of campus are past serviceable life and pose a high risk of failure and business continuity. This project is aligned with Provincial resilience and sustainability objectives.
- BC Hydro is transitioning electrical services in the Willingdon corridor to 25kV service (from the current 12.5kV). The planned service change adds to the urgency for upgrading electrical distribution infrastructure to match the system recently installed in the North Campus.
- This project will replace a section of the decaying Guichon Creek storm culvert with an ecologically restorative stream channel, as outlined in the *Campus Plan*. Modernization of this infrastructure also supports core educational building service reliability and will provide modern infrastructure required for future development on campus.
- Project business case was submitted to the Ministry in July 2020. The Ministry provided capital grants for Phase 1 underground utility replacement on White Avenue and Fairy Street valued at $14.6 million completed in 2022. In addition, the Ministry approved Phase 2 funding ($48 million).

Strategic Alignment

Institution Priorities	Government Priorities
• This initiative underpins and supports BCIT's *Strategic Plan* for renewal and the creation of resiliency for its Burnaby Campus. • This project is aligned with the long term development framework outlined in the BCIT Burnaby Campus Plan.	• This project aligns with Stronger BC and assists in the implementation of its economic plan, particularly with BCIT's training for the jobs of tomorrow. • BC Hydro is transitioning electrical services in the Willingdon corridor to 25kV services (from the current 12.5kV). The planned changes add to the urgency for upgrading electrical distribution to match the system recently installed in the North Campus.

Project Budget ($ millions)

Total Project Cost	Provincial Funding	PSI Contribution
$60.0	$60.0	$0.0

- The Ministry has reviewed the overall *Business Case* for the South Campus Infrastructure Project and has funded the Phase 1 and Phase 2 scopes of work. Phase 1 valued at $14.6 million was completed Sept 2022. Phase 2 valued at $48 million design process underway, with planned completion Q1 2029.
- There is no increase to operational costs associated with this linear infrastructure renewal project.
- There would be a reduction in unplanned "emergency" repair work that currently occurs with end-of-life infrastructure, such as recent stormwater pipe sinkhole repairs. A recent Guichon culvert sink hole has resulted in a $3.7 million emergency repair.

Project Schedule

Target Approval Date	Target Start Date	Target Completion Date
March 2028	July 2029	July 2032

- The Ministry has reviewed the overall *Business Case* for the South Campus Infrastructure Project and has funded the Phase 1 and Phase 2 scopes of work. Phase 1 valued at $14.6 million was completed Sept 2022. Phase 2 is in the design phase planned completion Q1 2029.
- The overall project schedule assumes Ministry notional approval in March 2028, construction start in July 2029 and project completion July 2032.