



City of Richmond

Report to Council

To: Richmond City Council

Date: June 10, 2021

From: Cecilia Achiam
Chair, Development Permit Panel

File: DV 20-907740

Re: Development Permit Panel Meeting Held on January 27, 2021

Staff Recommendation

That the recommendation of the Panel to authorize the issuance of a Development Variance Permit (DV 20-907740) for the property at 6460 No. 5 Road be endorsed, and the Permit so issued.

Cecilia Achiam
Chair, Development Permit Panel
(604-276-4122)

WC/SB:blg

Panel Report

The Development Permit Panel considered the following item at its meeting held on January 27, 2021.

DV 20-907740 – HARNEK BINDRA – 6460 NO. 5 ROAD
(January 27, 2021)

The Panel considered a Development Variance Permit application to vary the provisions of Richmond Zoning Bylaw 8500 to reduce the minimum interior side yard setback for agricultural buildings and structures from 4.5 m to 3.0 m to permit the existing single-family dwelling to be converted into an agricultural building on a site zoned “Agriculture (AG1)”.

Taj Bindra, representing the applicant, provided a brief presentation, noting that: (i) there was no active blueberry farm operation when the property was bought in late 2018; (ii) the existing residential building on the property will be retained and repurposed for agricultural use; (iii) the garage of the existing building will be demolished to allow for access to the farm; (iv) the proposal would be economically and environmentally advantageous; and (v) interior and exterior renovations to the existing building are proposed to make it more suitable to its intended agricultural use.

In reply to Panel queries, Taj Bindra noted that: (i) the proposed storage on the second floor can be accessed from the ground floor through the existing stairs; and (ii) there will be changes on the existing second floor to remove components that are not necessary for the repurposed building.

In reply to a Panel query, staff acknowledged that the proposal is consistent with the zoning of the subject site and the proposed interior side yard setback variance is necessary to allow the conversion of the existing residential building into an agricultural building.

Staff noted that: (i) converting the building into an agricultural building will support the farm operations and is consistent with the City’s objectives related to the repurposing of existing buildings as a way to reduce the amount of material directed to a landfill; (ii) the conversion of the building from residential uses to agricultural will be secured by a legal agreement specifying the building may only be used for agricultural purposes; (iii) the building will not impact Environmentally Sensitive Areas (ESAs) on the site; (iv) an interior side yard setback variance is proposed for the existing building; and (v) letters of support for the application have been provided by owners of adjacent properties to the north and south.

No correspondence was submitted to the Development Permit Panel regarding the application.

The Panel expressed support for the project and appreciated the applicant’s proposal to repurpose the existing residential building for agricultural use.

The Panel recommends that the Permit be issued.



City of Richmond

Report to Council

To:	Richmond City Council	Date:	June 14, 2021
From:	Cecilia Achiam Chair, Development Permit Panel	File:	01-0100-20-DPER1- 01/2021-Vol 01
Re:	Development Permit Panel Meeting Held on January 27, 2021		

Panel Recommendation

That the applicant continue to coordinate and work with staff for further design development with regard to the four areas identified in the staff memorandum from the Director, Development (dated January 18, 2021), which include the activation of the north side of the proposed Capstan Canada Line Station, service use mitigation, public realm coordination, and bird strike mitigation.

Cecilia Achiam
Chair, Development Permit Panel
(604-276-4122)

SB:blg
Att.

Panel Report

The Development Permit Panel considered the following item at its meeting held on January 27, 2021.

CAPSTAN CANADA LINE STATION – TRANSLINK – NO. 3 ROAD AND
CAPSTAN WAY
(January 27, 2021)

The Panel received a presentation on the proposed design of the future Capstan Canada Line Station on No. 3 Road at Capstan Way.

It is noted that the design of this station falls outside the regular City of Richmond design review process. The Richmond Access Agreement (RAA) exempts the Canada Line project from the normal City of Richmond rezoning, Development Permit and Building Permit processes and provides for an alternative review process known as the Design Advisory Process (DAP). The DAP is intended to simulate the Development Permit process, with the exception that there is no associated formal City approval of the design. The DAP includes public consultation, and presentations by TransLink and its consultants to the City's Advisory Design Panel and Development Permit Panel.

Architect, Nick Foster, of OMB Architects, provided a brief presentation, including:

- The design of the proposed Capstan Canada Line station responds to its neighbourhood context and has considered future increases in ridership.
- The design of the proposed station has been driven by the fact that unlike other existing Canada Line stations in Richmond, the proposed station cannot be attached to the existing guideway for structural reasons.
- The proposed station is modeled on and an improvement of the existing Lansdowne and Aberdeen Canada Line Stations.
- TransLink is not responsible for building the public realm around the Capstan Canada Line station but is coordinating with the City to integrate the station and public realm plans.
- The station building is fully glazed and transparent except for certain portions on its northern (back) façade.
- A commercial retail unit (CRU) is proposed inside the station.
- Public Art will be installed inside and outside the station.

Staff noted that: (i) the proposed station is subject to an alternative design process with comments provided to TransLink to guide ongoing design efforts; (ii) the design and construction of the transit plaza and other public realm spaces and features surrounding the proposed station are not included in TransLink's scope of work; (iii) design development and TransLink's coordination with staff is needed with regard to north side activation, service use mitigation, public realm coordination, and bird strike considerations in the building design; (iv) design development and coordination between TransLink and staff in certain areas will ensure a smooth transition from conceptual design to actual operation; and (v) staff is asking TransLink to take proactive measures for the proposed station if they had previous experience with bird strikes on their existing stations.

In response to a Panel query, staff acknowledged that: (i) at the rezoning stage, the neighbouring Concord Galleria project had agreed to provide two accessible washrooms that could be used by people in the area including transit riders; and (ii) Concord Galleria is responsible for the maintenance of these washrooms.

In reply to Panel queries, Nick Foster and Tomer Curiel, of TransLink, noted that: (i) there is no public vehicular access from the kiss-and-ride area to the station plaza; (ii) bird roosting and fly through are more of a concern to TransLink stations than bird strikes and there are design improvements on the proposed Capstan Canada Line station to address bird-related concerns; (iii) TransLink will consider installing signage for public washroom wayfinding; (iv) the CRU can only be accessed by the public from outside the station; and (v) the design intent for the CRU is to be as visually transparent as possible from the outside.

No correspondence was submitted to the Development Permit Panel regarding the Canada Line Capstan Station design.

The Panel recommends that the applicant continue to coordinate and work with staff for further design development with regard to the four areas identified in the staff report, which include the activation of the north side of the proposed Capstan Canada Line Station, service use mitigation, public realm coordination, and bird strike mitigation.

Subsequent to the meeting, TransLink provided a response to the Panel's recommendation in the attached letter and revised station design, dated May 31, 2021 (Attachment 1). Staff have reviewed the response and are generally satisfied with the overall station design and the applicant's commitments to continued engagement with City staff.

- North Side Activation – TransLink has provided additional details and architectural drawings to support potential future programming and activation of the north side with public art and events. To facilitate the potential activation of this area, staff will bring forward for Council consideration a management and operations plan as part of the City's Capstan Station Integration Strategy, which may include a memorandum of understanding (MOU) between the City and TransLink if needed.
- Service Use Mitigation – TransLink has provided additional drawings and information regarding operation activities and requirements. City staff to continue to work with TransLink on details.
- Public Realm Coordination – TransLink is committed to continuing to work with City staff through the City's Capstan Station Integration Strategy and also continuing to work with City staff regarding review of Servicing Agreements for fronting private developments. Council approved a 2020 capital project for the development of a Capstan Station Integration Strategy. Detailed design work is needed to integrate the public realm, public art, transit plaza, guideway, and City park with the Capstan Station. Information is expected to be brought forward to Council for consideration later this year, and resulting design work is expected to be completed in 2022.
- Bird Strike Mitigation – TransLink has engaged a qualified environmental professional (QEP) identifying bird strike risk is low. TransLink has committed to monitoring for bird strikes and implementing design retrofits should there be an issue.

Translink has made improvements and staff are satisfied with Translink's ongoing commitment to work with staff through the detailed design process. The Panel recommends that the applicant continue to coordinate and work with staff for further design development with regard to the four areas identified in the staff report, which include the activation of the north side of the proposed Capstan Canada Line Station, service use mitigation, public realm coordination, and bird strike mitigation.

May 31st 2021

Suzanne Carter-Huffman
Senior Planner / Urban Design
City of Richmond - Planning & Development
6911 No. 3 Road,
Richmond
V6Y 2C1
BC

Re : Capstan Station – DAP Step 9 : Final Design Report

Dear Suzanne,

Please consider this letter and the attached 'DAP Step 9 - Final Design Report' as TransLink's formal response to the City of Richmond's Advisory Report and memo.

BACKGROUND

As part of the Design Approval Process for Capstan Station, TransLink presented to the City of Richmond's Development Permit Panel (DPP) on January 27, 2021. The DPP agenda included a memorandum from the City's Director of Development dated January 18, 2021(attached at the end of this letter).

The memo indicates that City of Richmond staff are supportive of the proposed station design provided that additional design development and coordination is undertaken concerning the following 4 items:

1. North Side Activation
2. Service Use Mitigation
3. Public Realm Coordination
4. Bird Strike mitigation

The following pages provide an item-by-item response to these items. The written responses are to be read in conjunction with the 'Step 9 DAP Final Design Report' dated May 31st, 2021, which includes an Appendix including diagrams/drawings as referenced.

TransLink can confirm there have been no material adjustments to the station design as previously presented other than the inclusion of minor features to address these City of Richmond comments and requests.

CITY OF RICHMOND: COMMENT + REQUEST #1

North Side Activation

The station's north side is located at the key crossroads for pedestrians and cyclists moving between the station, kiss-and-ride, and community centre. The station design turns its back on this area, leaving the City to activate this important space and take steps to discourage vandalism.

Design development is required to facilitate the City's implementation, at the City's sole cost, of temporary public art and activation programs (e.g. power communications, video monitors, and lighting), together with potential station related enhancements

TRANSLINK RESPONSE

The north side of the station carefully balances the needs of pedestrians with station operations (maintenance, garbage collection, delivery, emergency management, etc.). TransLink agrees that this area presents opportunities to enhance the public realm connection and act as a gateway/crossroads. TransLink has therefore already taken multiple steps with the station design and made significant improvements over the base case design of Aberdeen and Lansdowne stations that form TransLink's obligations under the funding agreement with the City.

These include:

- (1) Carefully locating platform support columns to accommodate pedestrian desire lines to/from the No.3 Road crosswalk
- (2) creating an enclosed area for garbage within the building in place of a fenced-off publicly visible compound.
- (3) selection of a considered material palette and high-quality cladding that improves on the unwelcoming raw concrete aesthetic prevalent at Aberdeen and Lansdowne stations.
- (4) creating a dynamic sculpted façade and platform soffit which provides a unique exterior spatial experience appropriate for showcasing City public art and/or activation program elements.
- (5) improving on CPTED concerns by eliminating blind 90 degree or inset corners.
- (6) improving on the station envelope shape to better align with constraints on-site including No.3 road to ensure a safe bike lane, responding to the architectural shape of the Concord development, and incorporating an angled façade that explicitly acknowledges the park.
- (7) working with the City directly in coordinating the ground plane, including TransLink maintenance requirements.
- (8) sculpting the new steel structural columns which support the platform.
- (9) enhanced feature lighting of this sculpted form.

These provide the City with a high-quality environment on the north side of the station which the City can propose and fund additional improvements such as public art or ground plane enhancements that are outside of TransLink's remit. TransLink looks forward to working with the City's consultant for activating the public realm and park.

Continued :

Following consultation with the City of Richmond staff, it was agreed the north side of the station offers a foil and a dynamic exterior space for showcasing public art. It was agreed that TransLink would enhance the design, at the north side of the station, to provide elements and physical infrastructure to enable the City of Richmond to curate a temporary Public Art / Activation program. The art program in this location would be led by the City of Richmond.

TransLink is committed to:

1. Working with the City to determine how the physical and logistical parameters of public art can be successfully balanced with TransLink's station access, safety, delivery, and maintenance needs
2. Collaborating with the City during detailed design to determine the required physical infrastructure as described below.
3. Providing permanent steel fixing points on the platform soffit and feature 'H columns' to facilitate attachment of public art – **refer to Appendix ITEMS 1-5 for locations and structural loading capacities (highlighted in red).**
4. Providing multiple locations for exterior power and data outlets and conduits to stub outs at grade. The City will be providing power and locate supporting controls remote from the station – **refer to Appendix ITEMS 1-5**
5. Facilitating potential lighting, projector, and monitor points for showcasing public art (above grade only) – **refer to Appendix ITEMS 1-5.**
6. Working with City staff to develop an MOU agreement between TransLink and the City of Richmond for administration and implementation of the Public Art on an ongoing basis.

Supporting drawings relevant to this response are in the APPENDIX at the end of the Final Design Report

- **ITEM 1 – PUBLIC ART INFRASTRUCTURE - ARCHITECTURAL**
- **ITEM 2 – PUBLIC ART INFRASTRUCTURE - ARCHITECTURAL**
- **ITEM 3 – PUBLIC ART INFRASTRUCTURE - ELECTRICAL**
- **ITEM 4 – PUBLIC ART INFRASTRUCTURE - STRUCTURAL**
- **ITEM 5 – PUBLIC ART INFRASTRUCTURE – STRUCTURAL**

CITY OF RICHMOND: COMMENT + REQUEST #2

Service Use Mitigation

Efforts to activate the station's north side could be undermined if design or operation of station-related service uses (e.g. vehicle access and garbage holding/pick-up) are insensitive to City objectives for the functionality, appearance, cleanliness and amenity of this important public space.

Further clarity is required from TransLink to confirm how the station's and commercial unit's service operations will be conducted to a standard that ensures these operations do not unnecessarily conflict with public use of the area. In addition, TransLink should outline how the operators will be held accountable for adhering to those standards.

TRANSLINK RESPONSE

TransLink and the City of Richmond have been working collaboratively to develop the layout of the north side of the station. As this area will serve multiple user needs, the layout needs to recognize and minimize the needs of pedestrians, cyclists, operations, and emergency vehicles that may at times conflict. TransLink has identified 3 main user groups related to station operations: (1) Metro Vancouver Transit Police; (2) the commercial retail unit; and (3) Canada Line concessionaire Intransit BC (ITBC) and its operator Protrans (PT). Please refer to Appendix ITEM 6 for the parking spot numbers mentioned below.

1. **Metro Vancouver Transit Police [MVTP] Operations**

TransLink has reviewed this section with representatives of MVTP, who are in agreement with the uses described herein:

- *Use 1: Emergency management*
Emergency management may include medical, life safety, or public safety emergencies occurring on operational trains, at Capstan Station, or along the guideway in the vicinity of Capstan Station. In cases that require emergency management, MVTP will access the site as required. Vehicles may access the site through any of the fire truck access points, or other means as necessitated by the situation. These incidents may also include support from local first responders, local fire/police services, and/or ITBC/PT.
- *Use 2: Regular operations*
For regular operations, MVTP will park vehicles in parking spots 1, 2, 3. Access to parking spots 5, 6 will be limited and will be defined in the terms of the "Guideway and Station Statutory Right of Way" [SRW] and will include:
 - (i) have the capacity for a maximum of two (2) vehicles;
 - (ii) access during daytime hours will be limited as much as possible
 - (iii) access during daytime hours will generally be limited to emergency or atypical situations

2. **Commercial Retail Unit [CRU] Operations**

TransLink will include language in its lease agreement for the CRU operator to reinforce the following uses:

- *Use 1: Parking*
The CRU operator will not be provided dedicated parking for the operator, its employees, or customers.
- *Use 2: Deliveries loading/unloading*
The CRU operator will generally use parking spots 1, 2, 3 for loading/unloading deliveries as necessitated by the type of retail. As long as the movement of deliveries is hand-powered (individual pieces, dollies, hand carts,...) there will be no time limitations for these deliveries.
- *Use 3: Garbage/Recycling*
An enclosed garbage room is being provided at the northwest corner of Capstan Station. The CRU operator will bring garbage and recycling from the CRU to this location by hand, where it will be stored until the appropriate time for removal by a private garbage/recycling collection service. The garbage/recycling vehicle will utilize parking spots 3, 4. The CRU operator will use reasonable and appropriate efforts to coordinate the

timing of garbage/recycling collection such that garbage/recycling bins will not be stored outside of the garbage room for extended periods. The CRU operator will be responsible for ensuring the bins are located in an organized manner both before and after collection and will be responsible for ensuring the cleanliness of the collection operation and garbage room.

- Use 4: Major renovations

Should the CRU operator entertain major renovations or require exceptions, the CRU operator be required to coordinate with TL and ITBC/PT and submit a request to the City for an exemption that will be treated as a temporary road use permit which the City, acting reasonably, will not withhold. As a condition of any exemption, the CRU operator will be required to use industry best practice safety measures when requiring more direct vehicular access to the station.

3. **Canada Line Operations**

TransLink has reviewed this section with the current concessionaire for the Canada Line Intransit BC [ITBC] and its operator Protrans [PT], who are in agreement with the uses described herein, and TransLink will include this language in its agreement with ITBC/PT. Should the contractual relationship for operations and maintenance of this station change at a future point, these uses would persist and TransLink would either deliver them directly or assign them to another third party.

- Use 1: Emergency management

Emergency management may include medical, life safety, or public safety emergencies occurring on operational trains, at Capstan Station, or along the guideway in the vicinity of Capstan Station. In cases that require emergency management, ITBC/PT will access the site as required. Vehicles will generally access the site through the fire truck access point north of the site, recognizing that when justified by the specifics of the situation, ITBC/PT may access by any of the fire truck access points or other means. These may include support from local first responders, local fire/police services, and/or MVTP.

- Use 2: Loss of Mains Power

Should the station experience a power failure or require a shut down of mains power for maintenance purposes, ITBC/PT may require a generator to support station systems. The generator would be delivered on a trailer truck and would require a physical connection to a generator hook-up point located north of the station. As such, the generator would need to reside in parking spots 3,4. Access may also be required for refueling and for the removal of the generator. ITBC/PT would not be required to request an exemption for these purposes, however, ITBC/PT would be required to use industry best practice safety measures.

- Use 3: regular operations and maintenance

For regular operations and maintenance, staff will use parking spots 1, 2, 3. This includes staff, cleaning crews, minor regular maintenance, etc. Access to parking spots 5, 6 will be governed by the terms of the SRW (already quoted above).

Other third-party service providers (compass fare gate systems, automatic train control systems provider, wayfinding services, etc.) will be directed by TransLink to adhere to the same conditions.

- Use 4: major maintenance

Should major maintenance or renovation activities require exceptions to the guidelines herein and the terms of the SRW, the contracted service provider will be required to submit a request to the City for an exemption that will be treated as a temporary road use permit which the City, acting reasonably, will not withhold. As a condition of any exemption, the service provider will be required to use industry best practice safety measures when requiring more direct vehicular access to the station

Supporting drawings relevant to this response are in the APPENDIX at the end of the Final Design Report

- ITEM 6 – TRANSLINK OPERATIONAL AREAS
- Page 16 of Final Design Report

CITY OF RICHMOND: COMMENT + REQUEST #3

Public Realm Coordination

TransLink's ongoing station design must be coordinated with the City's public realm and Capstan Station Integration design processes to ensure that a high-amenity urban environment is achieved including, among other things, well considered weather protection, bike storage and circulation, kiss-and-ride operations, lighting, seating, wayfinding, and strategies for temporary vendor/market/busker activities and special events.

TRANSLINK RESPONSE

TransLink and the City of Richmond have been working collaboratively, to develop the layout of the north side of the station. These discussions have included designers from the adjacent developers who are delivering various portions of the public realm and supporting municipal infrastructure, specifically as it relates to grades, the bike path, fire truck access, and operational requirements for Canada Line and Capstan Station in particular. As this area will serve multiple user needs, the layout needs to recognize the needs of pedestrians, cyclists, operations, and emergency vehicles and minimize conflicts. In support thereof:

1. TransLink is committed to supporting the City of Richmond through its Capstan Station Integration strategy once the City's integration consultant is retained.
2. TransLink has identified operational areas in the attached sketches that need to be accounted for in the City's public realm concept. These include:
 - a. The area immediately in front of Capstan Station's entry must remain completely unencumbered. TransLink proposes that this area be extended to the first column immediately south of the entry,
 - b. The areas immediately adjacent to operational doors at both the north and east sides of the station must remain completely unencumbered as they provide emergency exiting and are required for operational uses.
 - c. The areas encompassing the operational parking spots (1,2,3,4,5, and 6) must remain completely unencumbered, as well as vehicle circulation paths to access and maneuvers into these spots.
 - d. The pedestrian desire lines from Capstan Station's entry to the bus stop along No. 3 Road and to the general pedestrian circulation lanes east of the station should remain reasonably unencumbered with consideration of universal accessibility principles.
 - e. Pedestrian desire lines east of Capstan Station from the intersection of No.3 Road and Capstan Way all the way through to the Pinnacle private road should remain reasonably unencumbered with consideration for universal accessibility principles. This pedestrian flow also needs to consider a connection east/west to the bus stop; to the pedestrian crosswalk; and to the kiss-and-ride.
 - f. The areas encompassing the cycling infrastructure should remain reasonably accessible by cyclists from the bike lane.
3. A maintenance envelope is required, including a 1m unencumbered area around the entire building envelope, as well as a larger reasonably unencumbered area to allow for man lifts, movement of materials, and other activities that support maintenance.
4. The requirements of various utility providers are still being coordinated including the BC Hydro pad-mounted transformer; communication vaults for Shaw, Telus, and Novus; and municipal civil infrastructure (hydrants, manholes, etc.).

Supporting drawings relevant to this response are in the Appendix at the end of the Final Design Report

- ITEM 6 – TRANSLINK OPERATIONAL AREAS
- Page 16 of Final Design Report

CITY OF RICHMOND : COMMENT + REQUEST #4

Bird Strike Mitigation

The Advisory Design Panel identified concerns about potential implications of the proposed glazing on wildlife in the area.

TransLink has indicated that they will monitor the situation post-construction, however, staff believe that a QEP should be consulted prior to construction so that mitigation measures (e.g. special glass treatments) could be implemented as part of initial construction.

TRANSLINK RESPONSE

TransLink has consulted with a QEP (Golder Associates, now a part of WSP), who conducted a bird strike risk analysis based on both building characteristics and the landscape context for Capstan Station. While the building characteristics generally present a high-risk rating, the landscape context is considered low except for the north portion of the east façade where the station borders on the future park area. The QEP thus concluded that the risk of bird strikes at Capstan Station is low, except for the north end of the east façade. TransLink will therefore provide the following mitigation measures :

- TransLink will work with the City of Richmond and review the proposed tree distribution for the park to reduce reflections. TransLink notes that since a fire truck lane is required along the east facade, vegetation should be a fair distance from the station and well below the elevated section of platform glazing.
- As the park vegetation matures, TransLink will consult with a QEP, and should the bird strike issue be confirmed TransLink will develop a monitoring program.
- Should the monitoring program identify issues, then TransLink will develop retrofits.

Should you require any further information to support the responses outlined above please contact the sender.

Kind Regards

A handwritten signature in black ink, appearing to be 'NF', enclosed within a large, loopy circular stroke.

Nick Foster RIBA
Principal



To: Development Permit Panel
From: Wayne Craig
Director, Development
Date: January 18, 2021
File: 08-4105-10-01/2021-Vol 01
Re: TransLink Capstan Canada Line Station

Origin

The purpose of this memorandum is to provide the Development Permit Panel with an overview of TransLink's proposed design (Attachment 1) for the new Capstan Canada Line Station in order that Panel members may provide input as provided for under the terms of the Richmond Access Agreement.

Background

On Nov 30, 2004, the City of Richmond, Canada Line Rapid Transit Inc. and TransLink executed the Richmond Access Agreement (RAA). The RAA grants TransLink access to City streets and lands on which the Canada Line rapid transit system and its facilities operate. The RAA exempts the Canada Line project from rezoning, Development Permit and Building Permit approvals for all transit related infrastructure and fixed facilities within the City of Richmond.

The RAA provides for an alternative review process called the Design Advisory Process (DAP) by which the City of Richmond provides advice to TransLink and its consultants on the design of new Canada Line related fixed facilities, including the new Capstan Canada Line Station. The design development for all of the existing Canada Line stations within the City followed the DAP process.

The DAP is intended to simulate the Development Permit process, with the exception that there is no associated formal City approval of the design. The DAP includes public consultation, and presentations by TransLink and its consultants to the City's Advisory Design Panel and Development Permit Panel over an approximately 16 week timetable. TransLink initiated the start of the DAP process with their design submission on October 23, 2020. The City of Richmond cannot require the Capstan Canada Line Station project to comply with the City's preferences regarding the design, but expects TransLink to act in good faith to attempt to address the City's suggestions and requests.

In 2012, the City of Richmond and TransLink executed the Capstan Station Funding Agreement and the City amended the City Centre Area Plan (CCAP) and Zoning Bylaw to permit bonus density in return for voluntary developer cash contributions to the Capstan Station Reserve (for station construction and related improvements) from development projects within the Capstan Village area. In December 2019, the City of Richmond transferred funds from the Reserve to TransLink for the design and construction of the new station. Under the Funding Agreement, TransLink has 30 months from the date of the transfer of the funds to deliver the station.

The design and construction of the transit plaza and other public realm spaces and features surrounding the proposed station (including kiss-and-ride, parking, loading, and services vehicle facilities for TransLink and station-related uses) are outside TransLink's scope of work. Those public realm features will be designed and constructed by fronting developments through the City's Servicing Agreement and public art processes. This design work will be guided in part by the City's Capstan Station Integration (consultant) Study planned for later this year, the purpose of which is to prepare a strategy aimed at supporting the Capstan Village centre as a distinct, high amenity, multi-modal mobility hub and the village's principal focus for civic life, commercial activity, and community celebration. The Council-approved Capstan Station Integration concept is included in Attachment 2.

Location and Surrounding Development

The station is located on the east side of No. 3 Road approximately 55 m north of Capstan Way in the heart of Capstan Village in the City Centre Area Plan.

Surrounding context includes:

- To the North: Proposed development by Pinnacle Living (ZT 18-827860/DP 18-821292) for a high-rise office/hotel/residential development, including a private road along its south (City park) frontage secured by the City with a Statutory Rights-of-Way (SRW) for public access (i.e. for eastbound traffic between No. 3 Road and Carscallen Way) and station-related kiss-and-ride use. The proposed Development Permit has been endorsed by this Panel.
- To the South: Capstan Way, including greenway/bikeway features, beyond which are low-rise commercial buildings designated for future high-rise, mixed-use development.
- To the West: No. 3 Road, beyond which is the proposed Yuanheng Viewstar high-rise, mixed-use development (ZT 19-872212/DP 17-794169), including a City community centre (to be completed in December 2023) and a new signalized intersection allowing pedestrians to cross No. 3 Road between the community centre and station. The proposed Development Permit is under staff review.
- To the East: City park; an earlier approved phase of Pinnacle Living's development (RZ 12-610011/DP 16-735564), including an Early Childhood Development (ECD) Hub to be completed in early 2021; and Concord Pacific's approved Galleria high-rise (RZ 17-769242/DP 17-787403), mixed-use development (which is responsible for completing the transit plaza and park through the City's Servicing Agreement review/approval processes).

Consultation

TransLink held a virtual open house to share the station design concept with the public. The virtual open house ran from November 16 – 23, 2020 and had over 2,200 visitors. The website and its content remain open and available to the public to view and will be updated as the design is further refined. A copy of TransLink's Capstan Engagement Summary Report is attached (Attachment 3).

Advisory Design Panel

The proposed design was presented to the City's Advisory Design Panel (ADP) on December 2, 2020. TransLink has provided a letter addressing notable design revisions and responses to the ADP comments (Attachment 4).

Summary

Site Planning

TransLink proposes to construct the new Capstan Canada Line Station in the heart of the Capstan Village community, surrounded by public amenities and at the crossroads of a planned multi-modal transportation network aimed at maximizing first-to-last kilometre connectivity. The station location was determined through the original Canada Line planning process and cannot be changed due to the location of the existing guideway and its foundations. Pre-design studies determined that, due to geotechnical, operational, and cost issues, it was not feasible to integrate the station with fronting development, re-orient its entrance (i.e. from the south to the park or north), or add a second entrance. Nevertheless, the station design incorporates a variety of measures aimed at enhancing the transit rider experience and the building's fit with its surroundings.

- Massing of the station has been slimmed and tapered to maximize pedestrian circulation along the station's east side adjacent to Concord Galleria and the width of the off-street bike path along No. 3 Road on the station's west side.
- A commercial retail space, 75 m² in size (as allowed by the RAA and DAP), is proposed at grade, adjacent to the station entrance, where it will help animate the public realm, complement commercial uses along Concord's frontage, and provide casual surveillance of the station entry and adjacent bus stop.
- Pedestrian and cyclist access to the station concourse and commercial space is provided from the south via a large, day-lit, weather-protected entrance that will activate the adjacent transit plaza and help to support it as a venue for temporary food and market vendors.
- Parking and loading for service vehicles is provided north of the station with access via the new private (SRW) road to be constructed by Pinnacle.
- Kiss-and-ride facilities will be conveniently located along the new private (SRW) street north of the City park provided through the adjacent development.
- Public washroom facilities, serving the transit station, and the City park are being provided as part of the adjacent development.
- Platform support columns are designed and located to minimize conflicts with bike circulation, pedestrian desire lines, and emergency vehicle access.
- As demonstrated by a shadow study (taking into account approved adjacent development), the station's proposed form will result in negligible shadow impacts on the park.

Built Form and Character

The proposed station design is modeled on the Canada Line's existing Lansdowne and Aberdeen Stations (as required by the Richmond Access Agreement) and satisfies all of TransLink's technical and operational requirements. The gross area of station is 1,550 m², including 949 m² at grade (i.e. concourse, commercial unit, ancillary spaces, and vertical circulation) and 601 m² at the platform level. The proposed design aims to create a high-quality facility that can accommodate future capacity demands, passenger safety, and accessibility while providing for a distinct, contemporary identity that will complement Capstan Village.

- In anticipation of forecasted future passenger ridership, extended 52.5 m long station platforms, capable of accommodating three-car trains, are provided instead of the two-car configuration typical of existing Canada Line stations.
- To help reduce congestion and enhance passenger comfort/convenience, the proposed design includes wider platforms and additional escalators. Ticket kiosks and fare gates are located away from stairs/escalators/elevators and the arrangement of ancillary uses is compact to further reduce bottlenecks and maximize the size and transparency of the public concourse.
- The pavilion-like, two-storey station house is designed as an open-air structure with glazing on three sides to enhance views in and out, reduce the building's visual bulk, maximize daylighting, and contribute towards a light, bright, welcoming character.
- The materials palette includes wood, steel, and glass, similar to that of the Aberdeen and Lansdowne Stations, together with deeper coloured metal panels to add contrast and feature lighting to enhance the station's north side and platform soffits.
- The station roof includes modularized acoustic mass timber panels (with integrated chases to conceal services) over the platforms and glazing above the guideway that will minimize noise impacts on nearby residents.
- The transparency of the station and signage around its entrance will assist with wayfinding.

Public Art

Capstan Village is designated as part of the CCAP arts district and objectives of the Council-approved Capstan Station Integration concept (Attachment 2) encourage that arts and culture play key roles in placemaking and activation of the public realm within the village centre area.

- TransLink is proposing to provide public art inside the station (as per its own public art policy) in the form of mural walls adjacent to the station's vertical circulation. The station's extensive clear glazing will allow for the artworks to be visible to/enjoyed by both transit riders within the station and members of the public in the City park and along No. 3 Road.
- The installation of public art outside the station (e.g., within the public realm) is not part of TransLink's scope of work and will be the responsibility of the City of Richmond with funding from voluntary developer contributions. Nevertheless, TransLink has indicated a willingness to support the City by providing permanent fixing points on the platform soffit and columns north of the station, together with related features (e.g., electrical conduits), to facilitate the City's installation of temporary artworks, plaza activation measures, and necessary infrastructure (the details of which shall be determined through the Capstan Station Integration Study).

Sustainability

- The station house is an open-air structure and its public areas do not require separate heating and cooling systems.
- Building placement and materials were chosen to maximize daylight and energy efficiency.

Crime Prevention Through Environmental Design (CPTED)

- Clear glazing is proposed to maximize transparency to/from the station's internal public areas at both ground level and the platforms.
- The commercial retail space is strategically placed at the station's entrance to provide passive surveillance of the plaza, bus stop and station concourse areas.
- Lighting will be incorporated to maximize visibility in and around the building.
- The north side of the station has been designed to minimize hidden corners.
- The station is secured after operating hours through the use of a security grille. CCTV cameras, located within the station and platform area only, provide an additional level of security.

Staff Comments/Requests

Based on staff's review of TransLink's attached submission (Attachment 1), staff are supportive of the proposed station design provided that additional design development and coordination is undertaken with regard to the following areas:

- 1) North Side Activation: The station's north side is located at the key crossroads for pedestrians and cyclists moving between the station, park, kiss-and-ride, and community centre. The station design turns its back on this area, leaving the City to activate this important space and take steps to discourage vandalism. Design development is required regarding the measures to be incorporated by TransLink in the platform columns/soffit to facilitate the City's implementation, at the City's sole cost, of temporary public art and activation programs (e.g., power, communications, video monitors, and lighting), together with potential related station enhancements.
- 2) Service Use Mitigation: Efforts to activate the station's north side could be undermined if the design or operation of station-related service uses (e.g., vehicle access and garbage holding/pick-up) are insensitive to City objectives for the functionality, appearance, cleanliness, and amenity of this important public space. Further clarity is required from TransLink to confirm how the station's and commercial unit's service operations will be conducted to a standard that ensures these operations do not unnecessarily conflict with public use of the area. In addition, TransLink should outline how the operators will be held accountable for adhering to those standards.
- 3) Public Realm Coordination: TransLink's ongoing station design must be coordinated with the City's public realm and Capstan Station Integration design processes to ensure that a high-amenity urban environment is achieved including, among other things, well considered weather protection, bike storage and circulation, kiss-and-ride operations, lighting, seating, wayfinding, and strategies for temporary vendor/market/busker activities and special events.

- 4) Bird Strike Mitigation: The Advisory Design Panel identified concerns about potential implications of the proposed glazing on wildlife in the area. TransLink has indicated that they will monitor the situation post-construction, however, staff believe that a QEP should be consulted prior to construction so that mitigation measures (e.g., special glass treatments) could be implemented as part of the initial construction.

Next Steps

City staff are committed to continuing to work with TransLink to refine the design of the Capstan Canada Line Station to attempt to address the specific requests from staff noted in this memorandum prior to TransLink and its consultants finalizing the station design. Once received, the final station design will be forwarded to Council, together with the Development Permit Panel Chair's Report for information.



Wayne Craig
Director, Development
(604-247-4625)

SCH/JR:blg

Attachments:

- Attachment 1 – Design Package and Architectural Drawings
- Attachment 2 – Capstan Station Integration Concept
- Attachment 3 - Capstan Engagement Summary Report
- Attachment 4 – Letter Response to ADP Comments, dated December 22, 2020

Development Permit Panel
Wednesday, January 27, 2021

Panel Decision

It was moved and seconded

That a Development Variance Permit be issued which would vary the provisions of Richmond Zoning Bylaw 8500 to reduce the minimum interior side yard setback for agricultural buildings and structures from 4.5 m to 3.0 m to permit the existing single-family dwelling to be converted into an agricultural building at 6460 No. 5 Road on a site zoned "Agriculture (AG1)".

CARRIED

3. CAPSTAN CANADA LINE STATION – TRANSLINK – PRESENTATION AND OVERVIEW OF THE PROPOSED STATION DESIGN

(REDMS No. 6604237 v. 2)

APPLICANT: TransLink

PROPERTY LOCATION: No. 3 Road and Capstan Way

Applicant's Comments

Nick Foster, OMB Architects, with the aid of a visual presentation (copy on file, City Clerk's Office) provided background information on the proposed development including its site context, design objectives, the Capstan Village Neighbourhood, precedents, site plan, design of the platform and station building, and floor plans, highlighting the following:

- the design of the proposed Capstan Canada Line station responds to its neighbourhood context and has considered future increases in ridership;
- the design of the proposed station has been driven by the fact that unlike other existing Canada Line stations in Richmond, the proposed station cannot be attached to the existing guideway due to structural reasons,
- the proposed station is modeled on and an improvement of the existing Lansdowne and Aberdeen Canada Line Stations;
- TransLink is not responsible for building the public realm around the Capstan Canada Line station but is coordinating with the City to integrate the station and public realm plans;
- the station building is fully glazed and transparent except for certain portions on its northern (back) facade;
- a commercial retail unit (CRU) is proposed inside the station; and
- public art will be installed inside and outside the station.

Development Permit Panel

Wednesday, January 27, 2021

Staff Comments

Ms. Smith noted that (i) the proposed station is subject to an alternative design process with comments provided to TransLink to guide ongoing design efforts, (ii) the design and construction of the transit plaza and other public realm spaces and features surrounding the proposed station are not included in TransLink's scope of work, and (iii) design development and TransLink's coordination with staff is needed with regard to north side activation, service use mitigation, public realm coordination, and bird strike considerations in the building design.

In addition, Suzanne Carter-Huffman, Planner 3, noted that (i) design development and coordination between TransLink and staff in certain areas will ensure a smooth transition from conceptual design to actual operation, and (ii) staff is asking TransLink to take proactive measures for the proposed station if they had previous experience with bird strikes on their existing stations.

In reply to a query from the Panel, Ms. Carter-Huffman acknowledged that (i) at the rezoning stage, the neighbouring Concord Galleria project had agreed to provide two accessible washrooms that could be used by people in the area including transit riders, and (ii) Concord Galleria is responsible for the maintenance of these washrooms.

Panel Discussion

In reply to queries from the Panel, Mr. Foster and Tomer Curiel, TransLink, noted that (i) there is no public vehicular access from the kiss-and-ride area to the station plaza, (ii) bird roosting and fly through are more of a concern to TransLink stations than bird strikes and there are design improvements on the proposed Capstan Canada Line station to address bird-related concerns, (iii) TransLink will consider installing signage for public washroom wayfinding, (iv) the CRU can only be accessed by the public from outside the station, and (v) the design intent for the CRU is to be as visually transparent as possible from the outside.

Gallery Comments

None.

Correspondence

None.

Development Permit Panel
Wednesday, January 27, 2021

Panel Decision

It was moved and seconded

That the applicant continue to coordinate and work with staff for further design development with regard to the four areas identified in the staff report, which include the activation of the north side of the proposed Capstan Canada Line Station, service use mitigation, public realm coordination, and bird strike mitigation.

CARRIED

4. New Business

It was moved and seconded

That the Development Permit Panel meeting tentatively scheduled on Wednesday, February 10, 2021 be cancelled.

5. Adjournment

It was moved and seconded

That the meeting be adjourned at 4:52 p.m.

CARRIED

Certified a true and correct copy of the Minutes of the meeting of the Development Permit Panel of the Council of the City of Richmond held on Wednesday, January 27, 2021.

Cecilia Achiam
Chair

Rustico Agawin
Committee Clerk

TRANSLINK CAPSTAN STATION DAP STEP 9 - FINAL DESIGN REPORT



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01 INTRODUCTION

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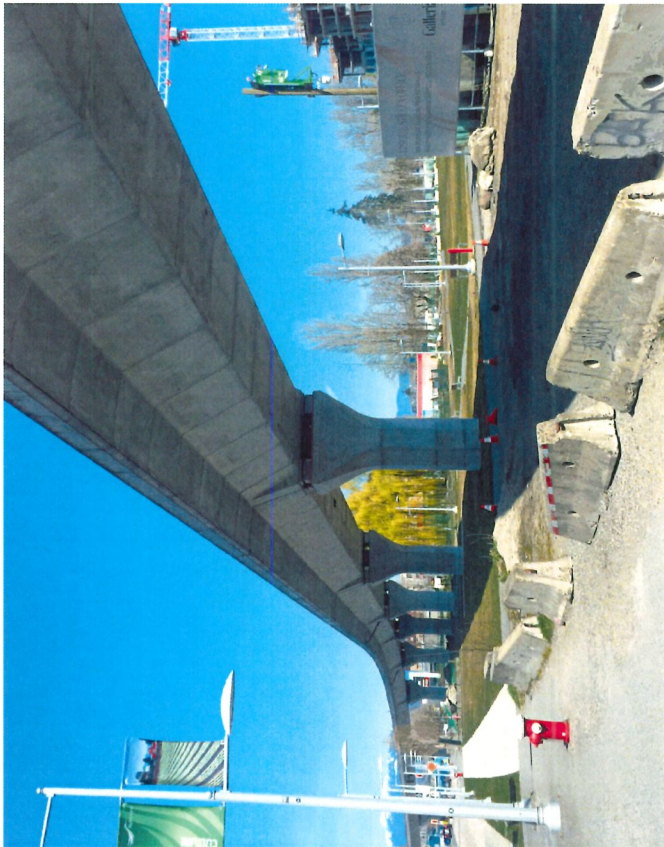
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01

INTRODUCTION
BACKGROUND + DESIGN OBJECTIVES

INTRODUCTION

Capstan Station is a new infill station located near the intersection of Capstan Way and No.3 Road in Richmond, B.C. halfway between the existing Bridgeport and Aberdeen stations. The station will serve the emerging Capstan Village neighbourhood at the northern edge of Richmond's current City Center.



PROJECT BACKGROUND

In 2012, the Capstan Station Funding Agreement was signed between the City of Richmond and TransLink to plan for the construction of the Capstan Station on the Canada Line. This was a unique funding arrangement through which the City collected funds from developers in the area in exchange for density bonuses to help raise the necessary money for the project. This was an innovative approach to building projects and delivering an improved customer service, while lessening the burden on taxpayers.

In late 2017, the City of Richmond had raised the necessary funds for TransLink to begin work on a concept design for the station. In December 2019, TransLink and the City agreed to the design concept. TransLink has since been working collaboratively with the City and other stakeholders to progress the design and ensure it meets the City's objective of a connected, liveable neighbourhood.

The station is being built to support the growing development in the area and to provide customers with convenient access to the SkyTrain network.

The Canada Line network was built to accommodate a station at this location at a point in the future once customer demand for service and funding became available. That time is now, so TransLink can accommodate the ridership demand anticipated well into the future.

As Richmond continues to welcome more residents, this exciting project will deliver a safe, efficient, and environmentally sustainable transportation option for the Capstan Village area, which projects up to 16,000 residents once nearby developments are completed.

TransLink has worked closely with the City of Richmond to advance design work. The station will be integrated with the nearby roads and buildings, and will meet the City's objectives for the area, such as developing connected, transit-oriented neighbourhoods. TransLink will be responsible for the station itself, while the City will manage the nearby amenities, roads, bike lanes, and public realm.

STATION DESIGN OBJECTIVES

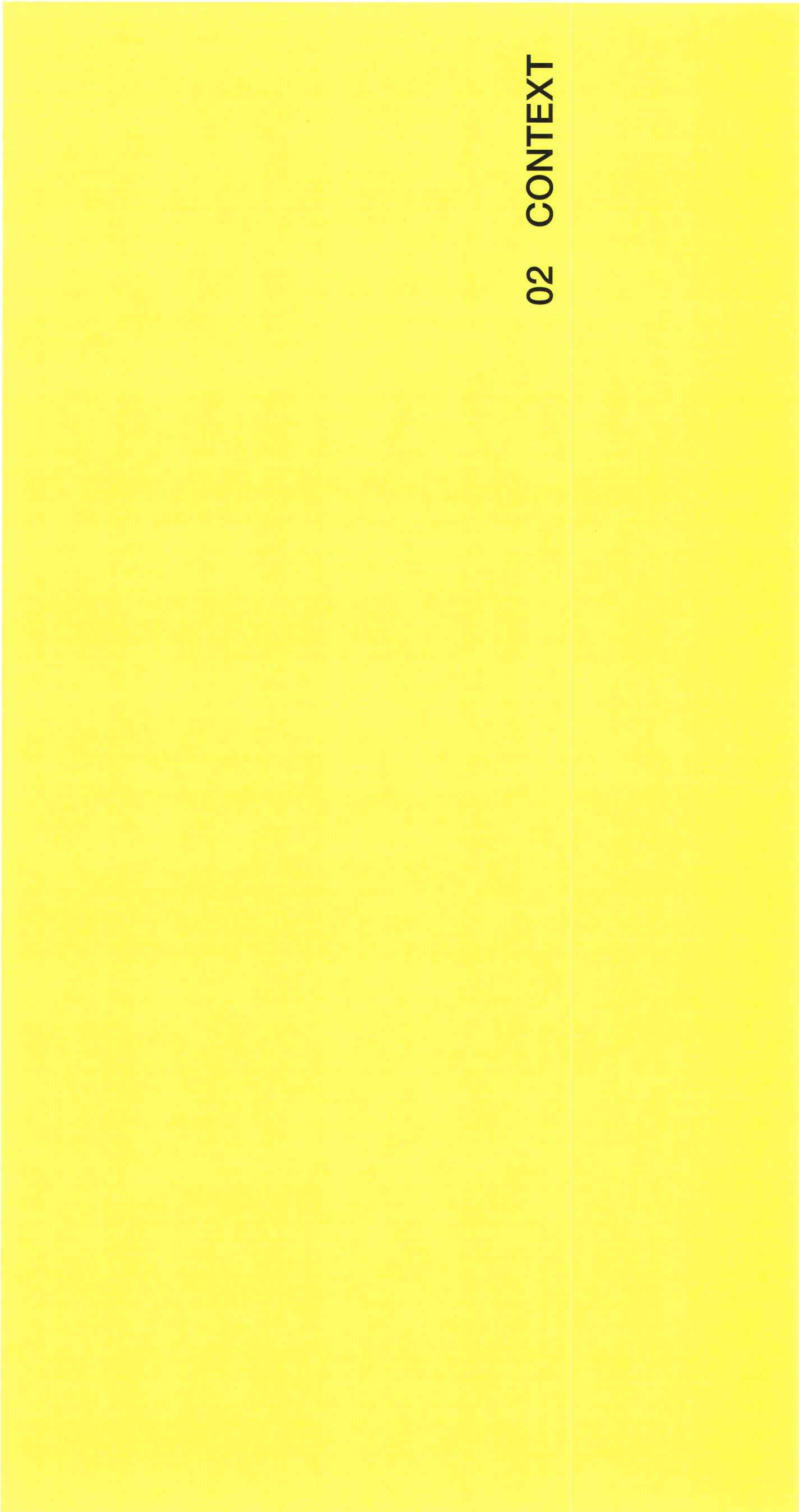
The project's design objectives seek to create a high-quality station designed to accommodate future capacity + exit times, passenger safety and accessibility while establishing an appropriate identity and relationship with the emergent Capstan Village neighbourhood. The following objectives have been identified as important considerations :

- Target the station's future capacity and exit times to accommodate passenger ridership forecast
- Optimize passenger and pedestrian safety in and around the station including CPTED considerations
- Optimize accessibility, way finding, and lighting in and around the station
- Maximize the station transparency at both ground level and platform level
- Support the station's integration with the surrounding urban environment
- Consider ongoing guideway operations balanced with adjacent development site activities throughout construction
- Optimize inter-modal connections between nearby bus stops, kiss and ride and the new SkyTrain station.
- Establish how road geometries and the bike network can safely separate cyclists and vehicles throughout the station area.

PUBLIC REALM DESIGN OBJECTIVES

The station building design anticipates a high-quality public realm which addresses the station, adjacent park and transit plaza. TransLink's design and construction for Capstan Station supports the surrounding public realm design which is being led by adjacent developers and the City of Richmond as a separate project. All representation of the public realm in this document is 'indicative only' and represents design elements outside of TransLink's scope and by others. It is shown to assist the City review process only.

TransLink looks forward to being a stakeholder in this City-led public realm design process to ensure the station and it's requirements are well integrated.

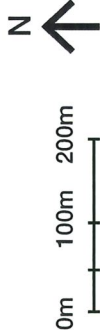
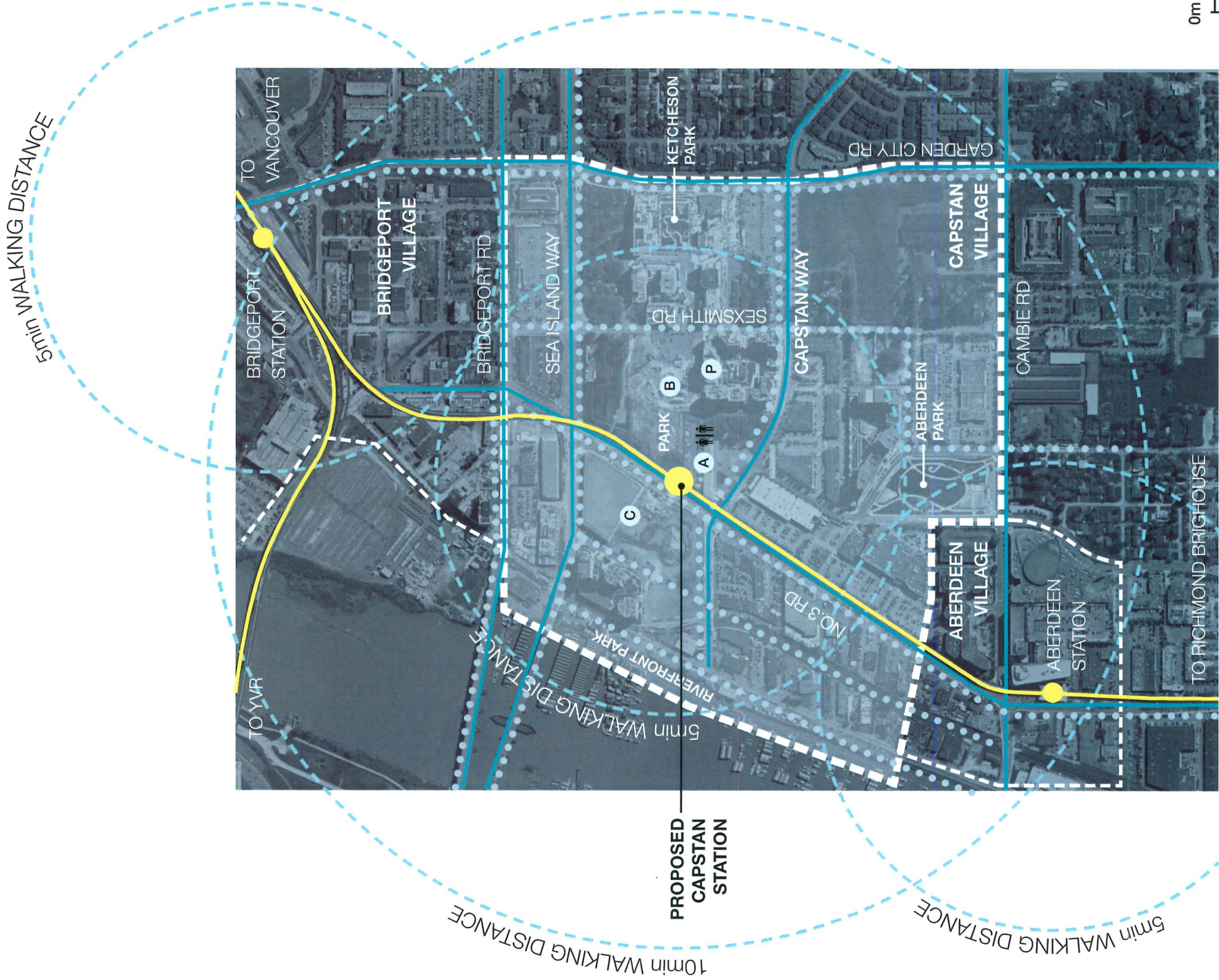


02 CONTEXT

WALKING DISTANCE

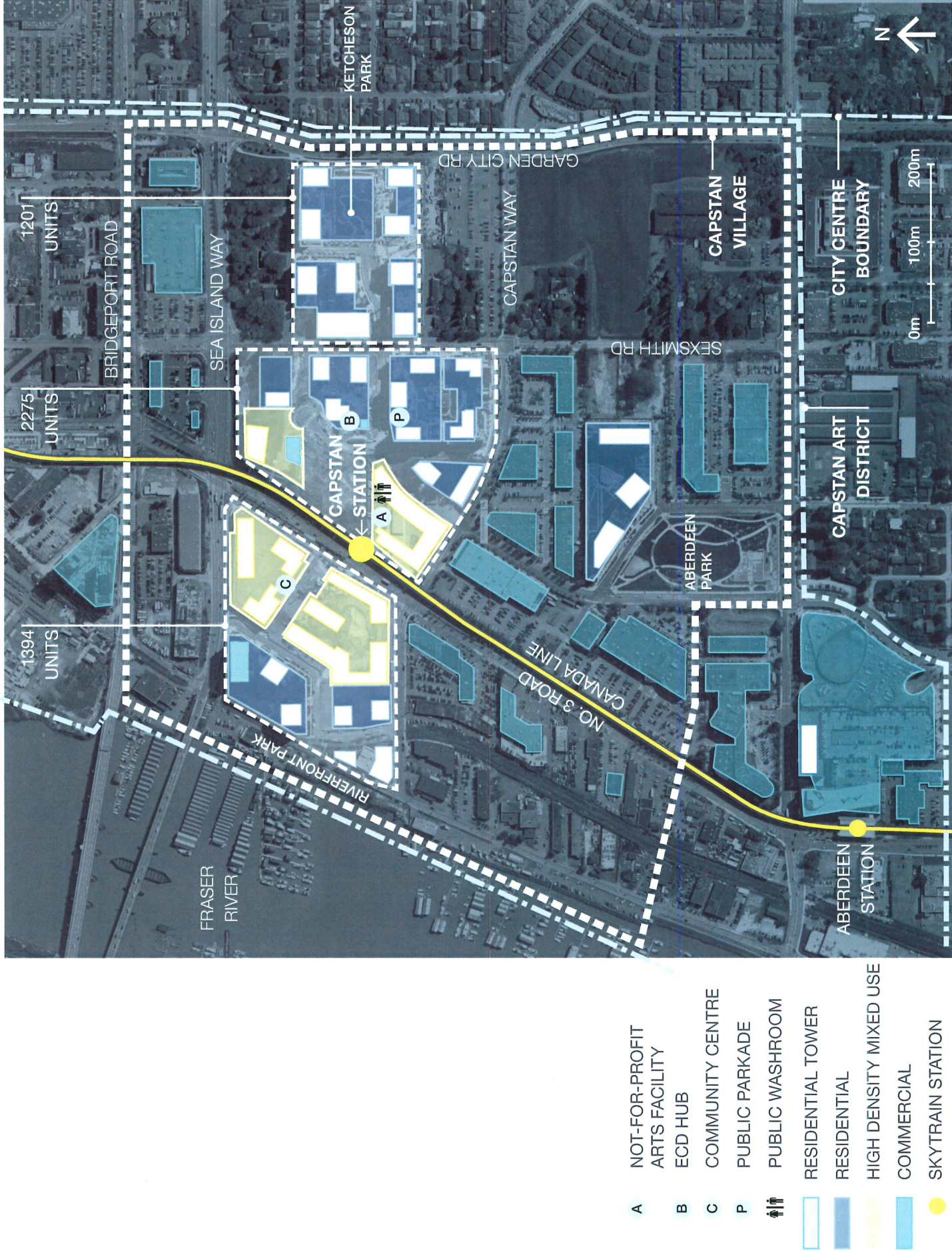
- 5-minute walk: 400 m
- 10-minute walk: 800 m

- A NOT-FOR-PROFIT ARTS FACILITY
- B ECD HUB
- C COMMUNITY CENTRE
- P PUBLIC PARKADE
- Public Washroom
- SKYTRAIN STATION
- CANADA LINE
- MAJOR ROADWAY
- CYCLE ROUTE



CAPSTAN VILLAGE

- City Centre Area Plan: Capstan Village “Artists District”. A zone of medium- to high-density, mixed residential/commercial uses, including:
- High density mixed use, high- and mid-rise multiple-family housing;
 - Artist studios, galleries, live/work spaces, and related activities;
 - Village-focussed, pedestrian oriented retail, restaurant, and local commercial uses;
 - City Centre/airport “gateway” office uses oriented to Sea Island Way;
 - Two blocks west of No. 3 Road, a distinctive marina waterfront;
 - Park;
 - New community center;
 - not-for-profit arts facility
 - Early Childhood Development (ECD) Hub



- A NOT-FOR-PROFIT ARTS FACILITY
- B ECD HUB
- C COMMUNITY CENTRE
- P PUBLIC PARKADE
- Public WASHROOM
- RESIDENTIAL TOWER
- RESIDENTIAL
- HIGH DENSITY MIXED USE
- COMMERCIAL
- SKYTRAIN STATION

02

CONTEXT SITE PHOTOS



1. LOOKING NORTHEAST FROM CAPSTAN WAY TO ENTRANCE SIDE OF PROPOSED STATION



2. FUTURE NO. 3 RD PEDESTRIAN CROSSING TO WEST OF PROPOSED STATION



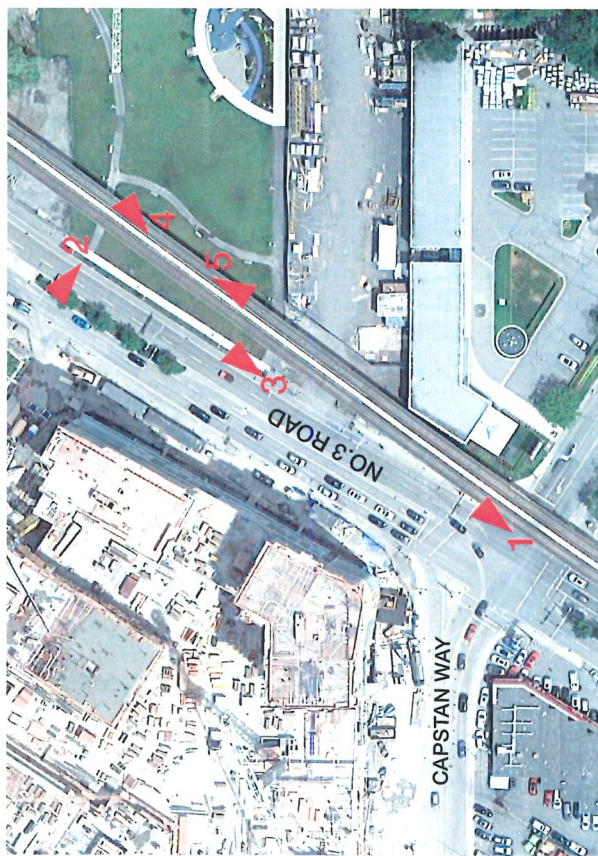
3. EXISTING CONDITION OF NO. 3 RD ADJACENT TO PROPOSED STATION



4. PARK TO NORTH EAST OF PROPOSED STATION



5. LOOKING SOUTHWEST TO REAR SIDE OF PROPOSED STATION



02

CONTEXT

REVIEW OF ABERDEEN STATION

DESIGN BACKGROUND

The Office of McFarlane Biggar architects + designers (omb) was retained by TransLink in May 2020 to undertake detailed design services for the new Capstan Station.

The proposed design responds to both TransLink's original 2005 Canada Line design guidelines and current 2020 TransLink Design standards.

TransLink's original intent was for Capstan Station to replicate the neighboring Aberdeen and Lansdowne Stations' functional planning and identity.

Omb's design efforts began with an assessment of Aberdeen Station considering functionality, passenger experience and effective integration between the station architecture and its urban context. Key observations have been considered in conjunction with City of Richmond objectives for the Capstan Village.

ASSESSMENT

Notable issues were identified during the assessment of Aberdeen Station and differences to Capstan highlighted. Key observations in relation to Aberdeen are:

1. Aberdeen Station's platform and roof is structurally supported by the elevated guideway. The new Capstan Station is structurally independent of the elevated guideway. This has a significant impact on the structural design and architectural solution.
2. Capstan is being built with a longer 52.5m platform to accommodate future 3 car trains. This introduces additional exiting demands and the need for double escalators where Aberdeen only has one. Due to exiting distances from the longer platform level the stairs and escalator need to be in a 'stacked' arrangement rather than 'side by side'. This alters the functional layout considerably from Aberdeen.
3. Capstan Station's functional program requirements further differ from Aberdeen with the introduction of a Commercial Retail Unit (CRU) and evolved operational 'back of house' space needs.
4. Aberdeen has a zero setback from the No.3 Road curb edge and bike path which has a significant impact on the station's user experience and for pedestrians navigating the public realm. It was identified that this unsafe condition needed to be dramatically improved at Capstan to safely accommodate the City's proposed bike lane.
5. Aberdeen's interface with grade resulted in a poorly integrated public realm and CPTED issues. Opportunities were identified that enhance integration with the site context by adjusting the station footprint instead of strictly maintaining an orthogonal relationship to the guideway.

The assessment results have been addressed in the Capstan Station design. The proposed design has been based on feedback from TransLink's internal stakeholders, the concessionaire and operator ITBC / Protrans and the City of Richmond.



EXISTING ABERDEEN STATION ON NO.3 ROAD

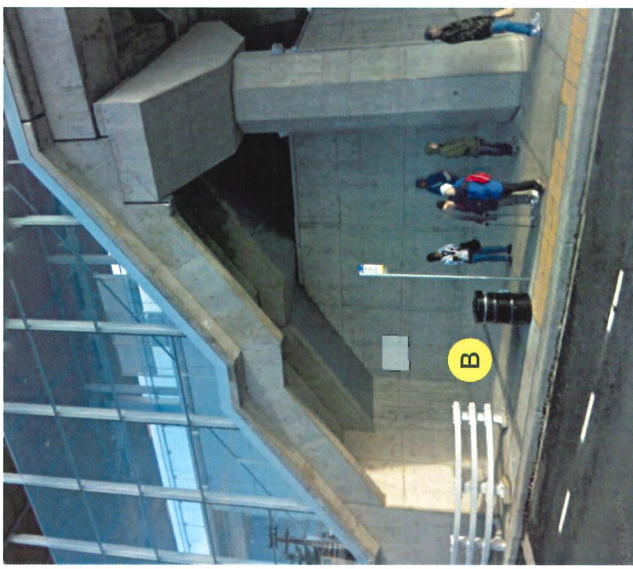
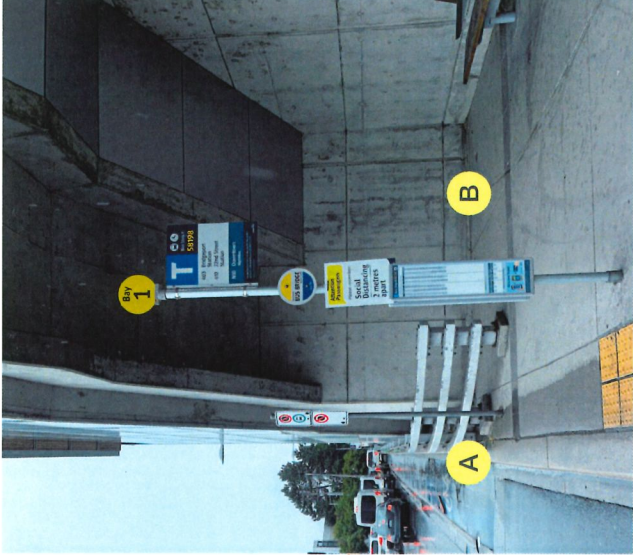
02

CONTEXT

ABERDEEN STATION OBSERVATIONS

NO. 3 ROAD

- A Zero setback creates public safety issue - pedestrians using bike lane is not controlled
- B Dead end sidewalk at bus stop
- C Adjacency of crash barrier and vehicles affects the user experience
- D Windows partially obscured reducing transparency - CPTED



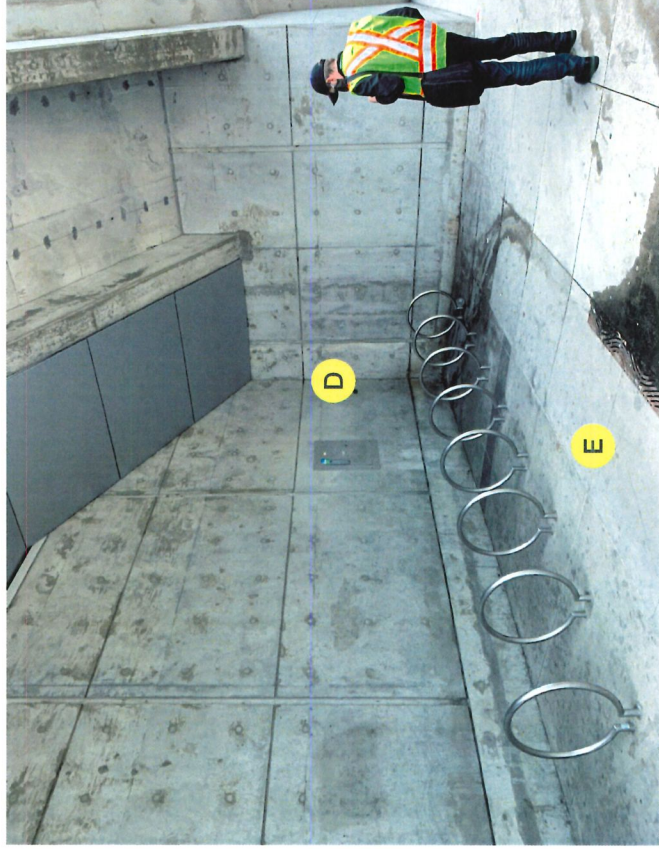
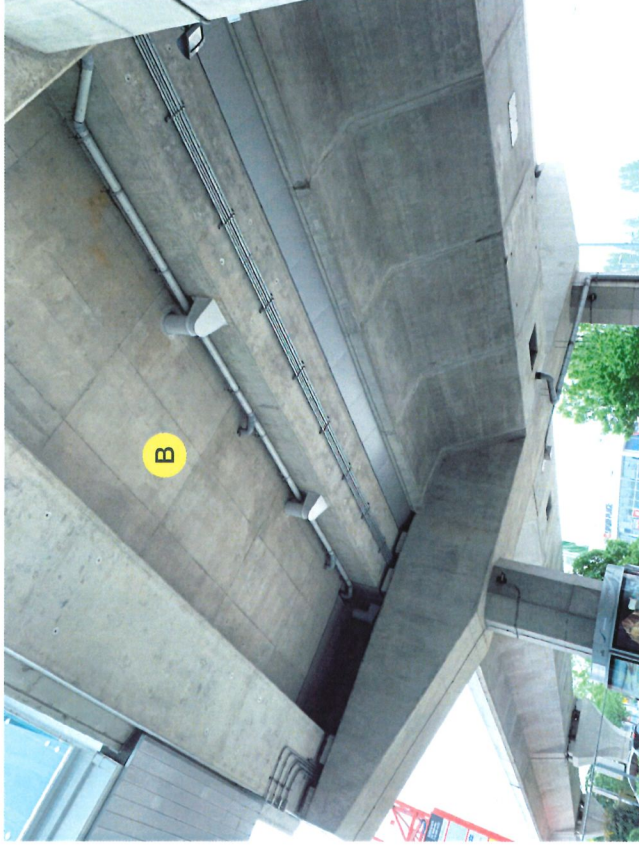
02

CONTEXT

ABERDEEN STATION OBSERVATIONS

REAR OF STATION

- A Poor public realm experience
- B Utilitarian concrete surface treatment and lighting
- C CPTED Lack of program activation or 'eyes on the street'
- D CPTED + Public Safety: Inset 90 degree building corners create isolated hidden spaces
- E Bike racks located away from station entrance



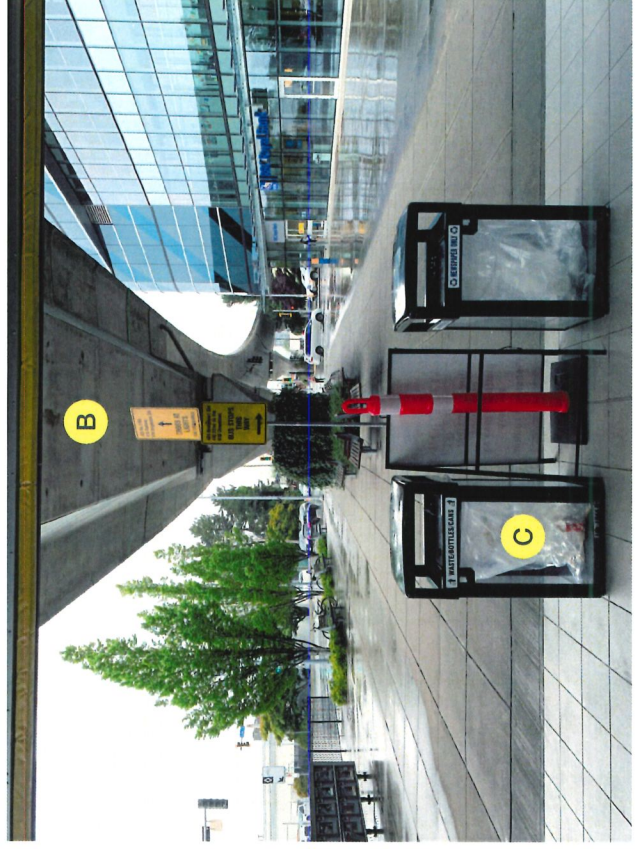
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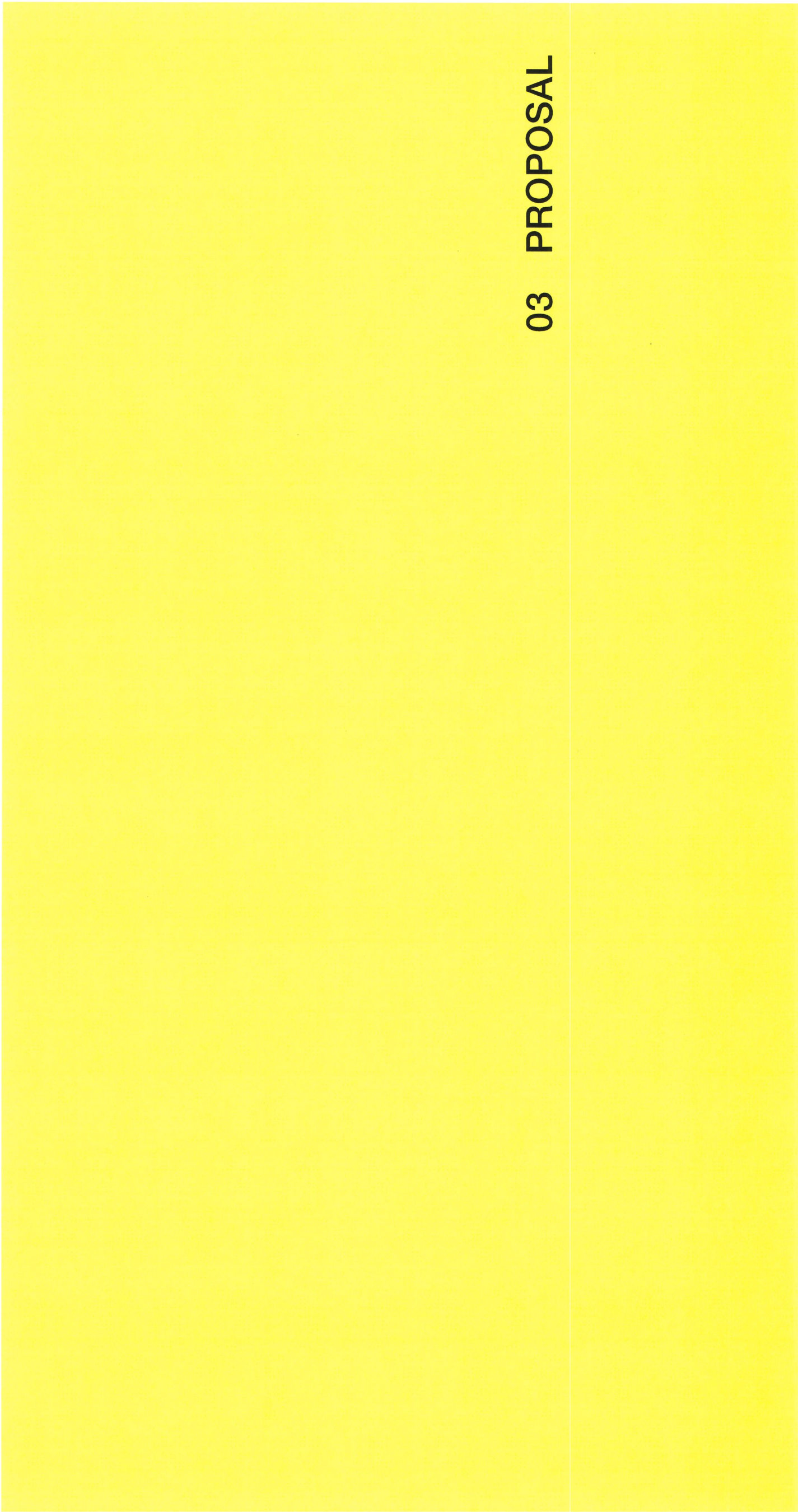
CONTEXT

ABERDEEN STATION OBSERVATIONS

PUBLIC REALM

- A Constrained and pointing relationship to neighbour creates unwelcoming 'pinch point' + unprotected 'wind tunnel'
- B Low guideway provides good rain protection at entry
- C Poor integration of street furniture and wayfinding
- D No public realm lighting or treatment





URBAN DESIGN CONSIDERATIONS

The project addresses a key component of the City of Richmond's Official Community Plan (OCP). A new station at the center of Capstan Village has been identified since the original Canada Line was constructed. Its realization contributes significantly to community building by enabling transit focused development.

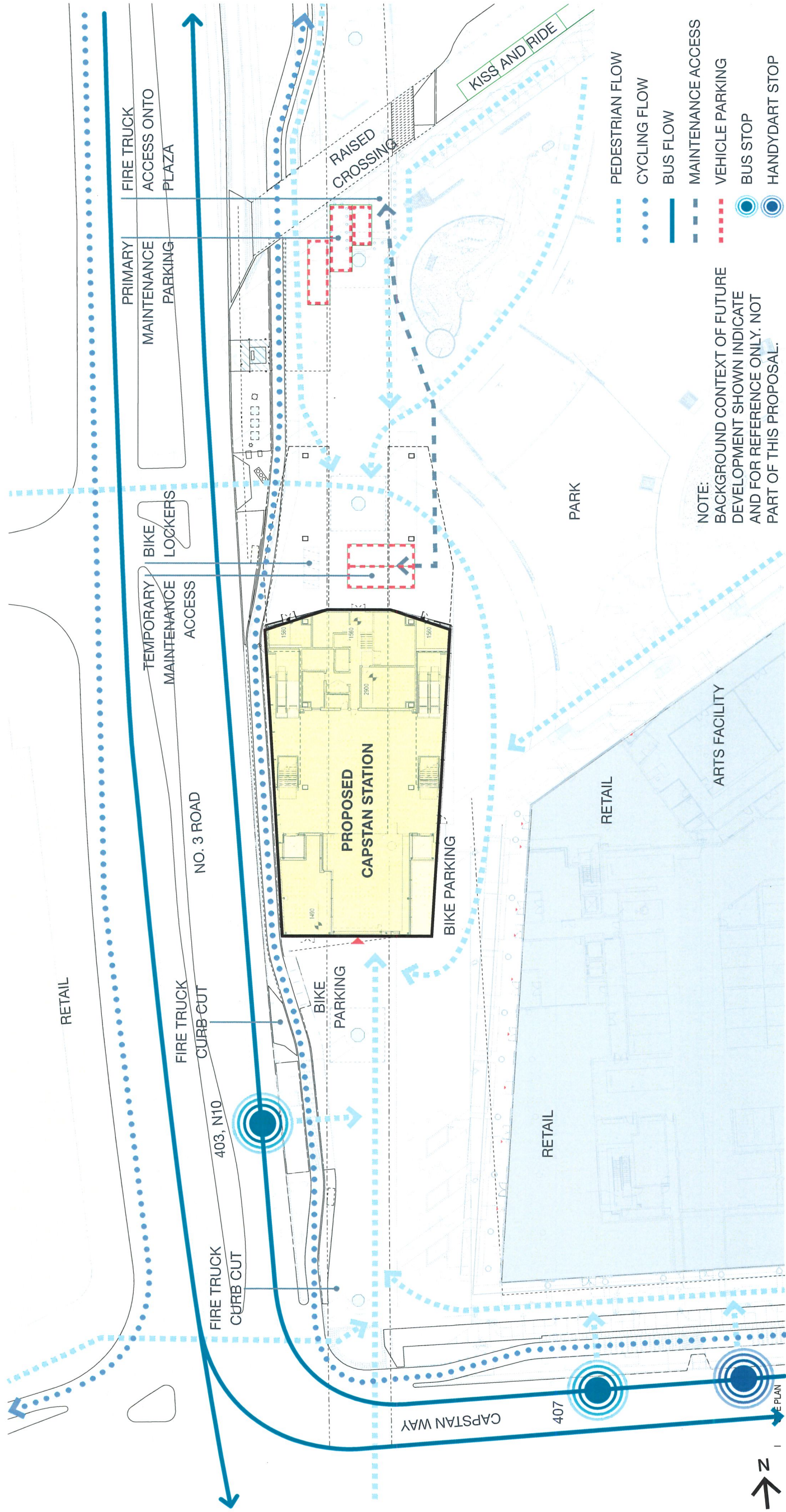
The building's subtle angular form is shaped in response to its urban context and pedestrian flows while anticipating future public realm considerations. At grade, the angled facades are parallel to the geometry of No.3 Road and the new development to the east. This permits a dedicated raised bike path to pass the station on No.3. Road and maximizes the available public realm to the east.

Considerations of visibility, adjacency to bus stops and sun aspect have informed the selection of the south 'market plaza' as the station's entrance. A shadow study of the station highlights the angled form results in very limited shadows being cast on the park are compared to neighboring developments

The building design addresses CPTED considerations by maximizing transparency into and from all public areas. A Commercial Retail Unit (CRU) is strategically located at the station's south facing entrance to facilitate passive surveillance of the station's interior while animating the immediate public realm.

The north side of the station which has been carefully sculpted to avoid inset corners and instead creates a unique spatial experience. The platform soffit is treated and softly lit to elevate the user experience at grade after sunset. It is anticipated the public realm in this area (led by the City of Richmond) will play a significant role in activating this space informed by pedestrian flows from the park and crosswalk across No.3 Road.





03 PROPOSAL DESIGN RATIONALE

CONCEPT

The legacy value of Richmond's Canada Line stations lies in their "kit of parts" modular philosophy and use of wood. The concept developed for the Capstan Station builds on this philosophy and is uniquely articulated to showcase the functions and activities within and around the station in an elegant way.

The new 948 sq.m station house is envisioned as a pavilion extending to the elevated guideway; fully glazed on 3 sides to provide transparency and views through the building. At its edges and underside, it is intentionally shaped, to address the adjacent context and future public realm. The project's massing and architectural layout has been carefully considered to optimize intuitive passenger circulation and wayfinding.

The new architectural identity seeks to reduce elements and integrate engineering and building systems to respond to the needs of today and of the future. TransLink's 1250mm design module is rigorously respected to organize the stations new parts, yet subtly expressed with increased transparency and daylighting on a 3750mm module.



PROPOSED FUNCTIONAL LAYOUT

The station is a single entrance and elevated side platform arrangement. The south facing entrance engages a future public plaza with visible connection the No.3 Road Bus stop. A generous wood entry canopy extends the width of the building and encompasses a CRU shell space adjacent the ticket hall. This CRU location provides high visibility and passive surveillance opportunities into the station entry concourse. The entrance concourse is generous and allows for intuitive wayfinding to vertical circulation.

Ancillary uses have been efficiently centralized between escalators to ensure a compact arrangement with a service space above for electrical and mechanical. The north façade, which faces the park and No.3 road, provides a highly visible service area. Given its exposure to the park and pedestrian desire lines this area is considered and given an architectural identity. Its sculpted form contributes to a new dynamic well lit public space under the guideway.

Vertical conveyance elevators, escalators and stairs are articulated to read as part of the station house, extending vertically to platform level either side of the existing guideway. This double height volume provides passengers with a unique spatial experience, while transitioning between grade and platform levels, with natural daylight and views to the surrounding Capstan Village and park. Glazed escalators and elevators are proposed for vertical conveyance devices.

The 601 sq.m platform is 52.5 meters in length to accommodate future 3 car trains. Platform widths are 3m to meet the Canada Line guidelines and generously spaced structural columns preserve clear visibility and wayfinding. A modularized acoustic DLT mass timber roof incorporates service chases for initial and future electrical requirements. Transparency at platform level maximises the visible connection to the surrounding street scape while emphasizing the platform roof as a warm inviting place.



Artistic Rendering - Looking Southwest

03

PROPOSAL DESIGN RATIONALE

MATERIALS – FABRIC - STRUCTURE

The material palette is consistent with the Aberdeen Station design and proposes an evolved palette of wood, steel, glazing and a rich contrasting metal colour to infuse warmth into the station's spaces and a civic quality to the center of Capstan Village and future public plaza. The palette seeks to provide a quiet sophisticated response to the eclectic neighbouring developments.

The kit of parts philosophy which guided the original CL designs and neighbouring Aberdeen Station has informed the new station's approach to structure and prefabricated construction solutions.

Structural mass Dowel Laminated Timber lumber (DLT) panels are proposed for the station house entry roof and platform roof. Both the station house and platform ceilings have been carefully considered and treated as elevations with integrated acoustic treatment in the DLT and metal ceiling panels where required. Superstructure is painted steel rather than concrete to facilitate prefabrication and the most appropriate light weight solution to the substructure which is piles.

Clear and fritted glazing is proposed fixed directly to secondary steelwork members. Tiling is proposed for all front of house floor finishes and sealed concrete and laminate for back of house spaces. Wayfinding is being provided to meet TransLink's current standards.



Artistic Rendering - Looking North

03

PROPOSAL
DESIGN RATIONALE

ACCESSIBILITY STRATEGY

The accessibility design for Capstan Station adheres to the BC Building Code and TransLink's Building Code Criteria which is further augmented by TransLink's own design Station Design Manuals. These address additional physical accessibility requirements which are incorporated into the design. The design has been reviewed and will continue to be reviewed by TransLink's internal 'Access Transit' group to ensure all aspects are considered and integrated. Physical details include but are not limited to :

- Accessible station faregate arrays with RFID readers
- Elevators escalators and stairs to each platform
- 'Surge' zones, which allocate additional space at potential congestion points such as elevators and stairs
- Continuous Platform edge tactile warning strips
- Dedicated waiting areas at platform level with seating
- Seating adjacent to elevators
- Strategically located cane detection throughout the station for visually impaired customers
- PA system engineered to achieve high standards for speech audibility. Acoustic surfaces are provided to achieve this at Platform level and Concourse level
- Comprehensive lighting engineered to strategically achieve high lighting levels
- Comprehensive passenger wayfinding directing passengers
- Handy Dart bus bay on Capstan Way

SUSTAINABILITY

Throughout the new Capstan station building, passive sustainable design is achieved through thoughtful material selection, compact building form, and precise building placement to maximize daylight and energy efficiency. The station is considered an exterior open-air structure and as such public areas are unconditioned. As a baseline, the CRU and ancillary spaces will comply with applicable energy codes. Sustainable design considerations for the public realm outside the building footprint are being lead by the City of Richmond and are not part of the project.

The project incorporates the following green building strategies:

- Improved Access to Public Transit
- High Quality and Durable Building Materials
- Use of Mass Timber as both structure and finish
- Maximum access to Natural Daylight
- Construction Waste Management Plan
- Bike Parking

TRANSLINK PUBLIC ART

Consistent with TransLink's public art policy, TransLink is exploring opportunities to enhance the customer experience through the provision of public art. This process is being lead by TransLink's internal public art expert. While TransLink has not finalized the public art, the focus of TransLink's public art is on customers' experience. As such the Public Art will be located inside the station so it is experienced by all passengers. Images, including a placeholder art graphic, are shown below to indicate how potential art locations are experienced from both inside and outside the station. Opportunities for providing public art outside the station and within the public realm are being lead by the City of Richmond separately from this project.



03 PROPOSAL

CITY CURATED PUBLIC ART / ACTIVATION PROGRAM

NORTH SIDE OF STATION

TransLink recognises the north side of the station is a key nexus and gateway to Capstan Village and any design adjustments to activate and program the area need to balance station access and maintenance requirements.

Following consultation with the City of Richmond staff it was agreed the north side of the station offers a foil and a dynamic exterior space for showcasing public art. It was agreed that TransLink would adjust the design, at the north side of the station, to provide elements and physical infrastructure to enable the City of Richmond to curate a temporary Public Art / Activation program. The program in this location would be led by the City of Richmond.

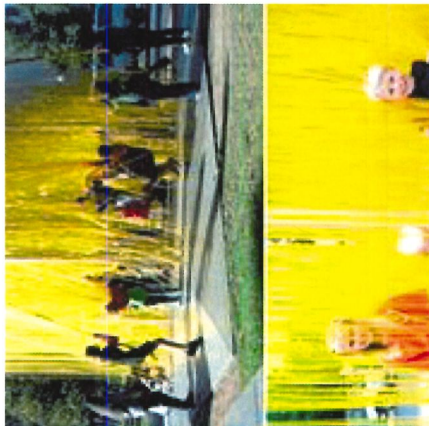
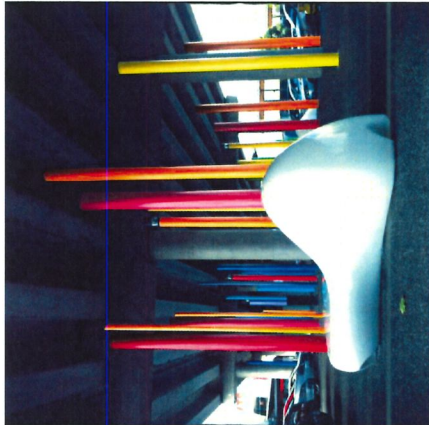
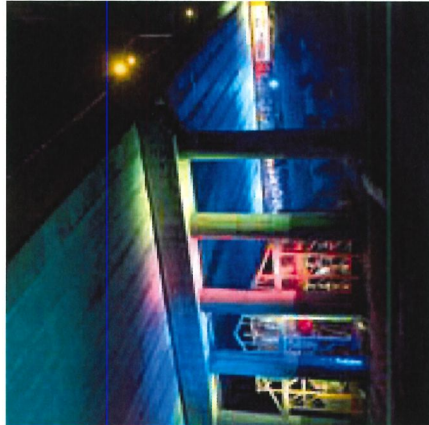
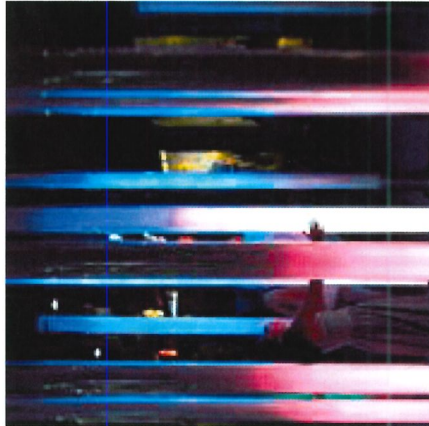
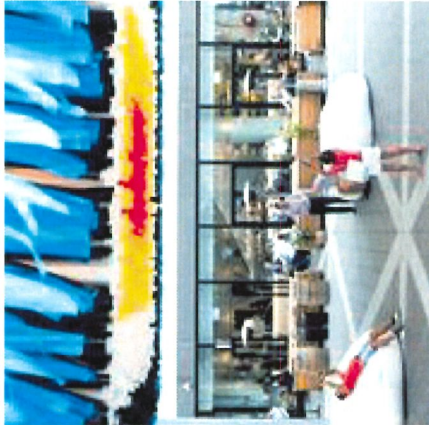
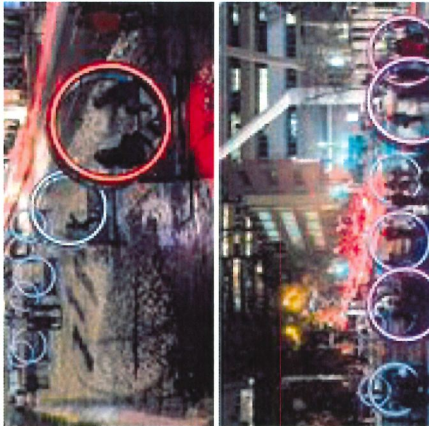
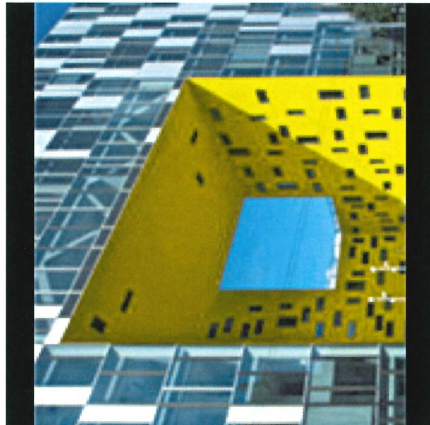
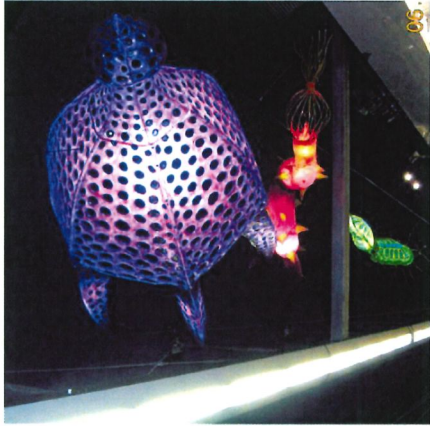
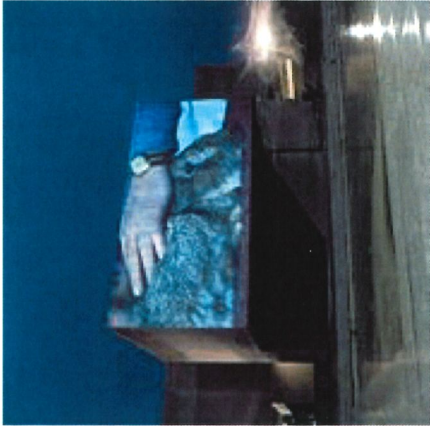
TransLink is committed to:

- Working with the City to determine how the physical and logistical parameters of public art can be successfully balanced with TransLink's station access, safety, delivery, and maintenance needs
- Collaborating with the City during detailed design to determine the required physical infrastructure as described below.
- Providing permanent fixing points on the platform soffit and feature 'H columns' to facilitate attachment of public art – refer to Appendix ITEMS 1-5 for locations and structural loading capacities (highlighted in red).
- Providing multiple locations for exterior power and data outlets and conduits to stub outs at grade. The City will be providing power and locate supporting controls remote from the station – refer to Appendix ITEMS 1-5
- Facilitating potential lighting, projector, and monitor points for showcasing public art (above grade only) – refer to Appendix ITEMS 1-5.
- Working with City staff to develop an MOU agreement between TransLink and the City of Richmond for administration and implementation of the Public Art on an ongoing basis.



Location of potential City of Richmond Public Art / Activation program

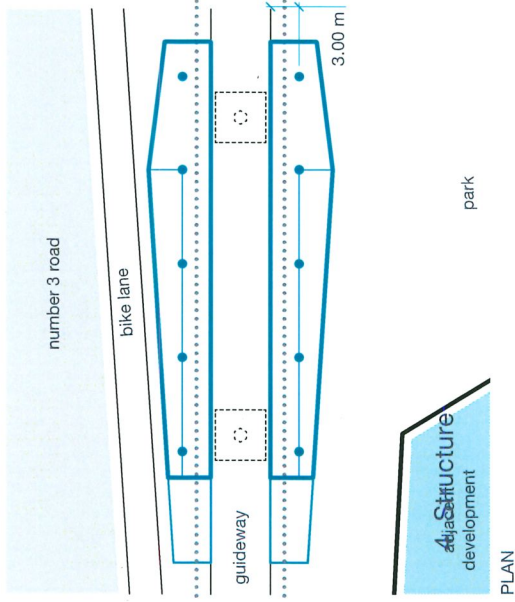
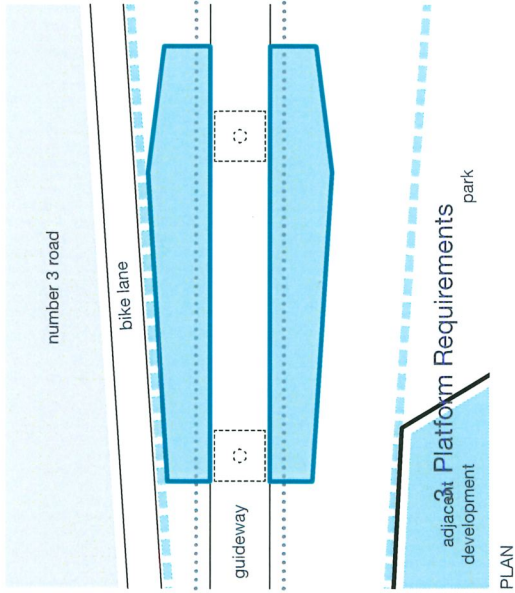
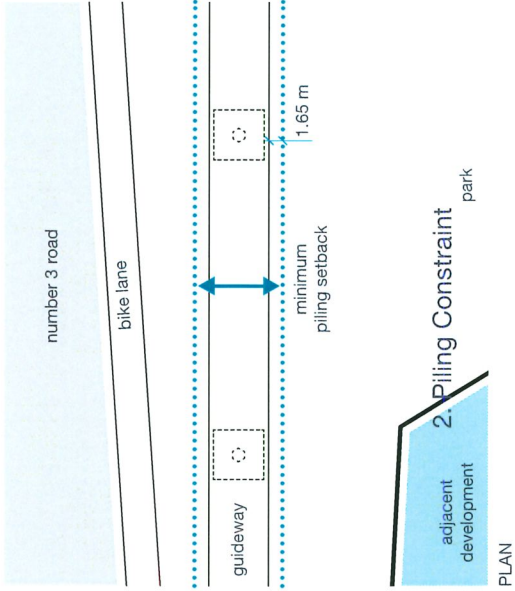
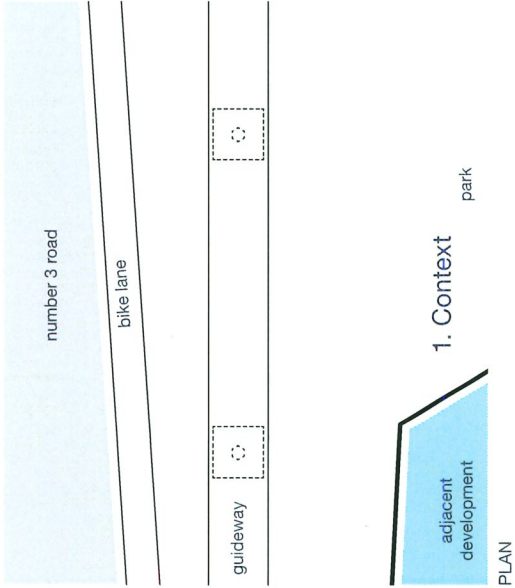
03 PROPOSAL CITY CURATED PUBLIC ART / ACTIVATION PROGRAM - PRECEDENTS



03 PROPOSAL PLAN DIAGRAM

The plan diagrams below are a “step by step” illustration of the design intent and how the proposed station responds to context and design parameters.

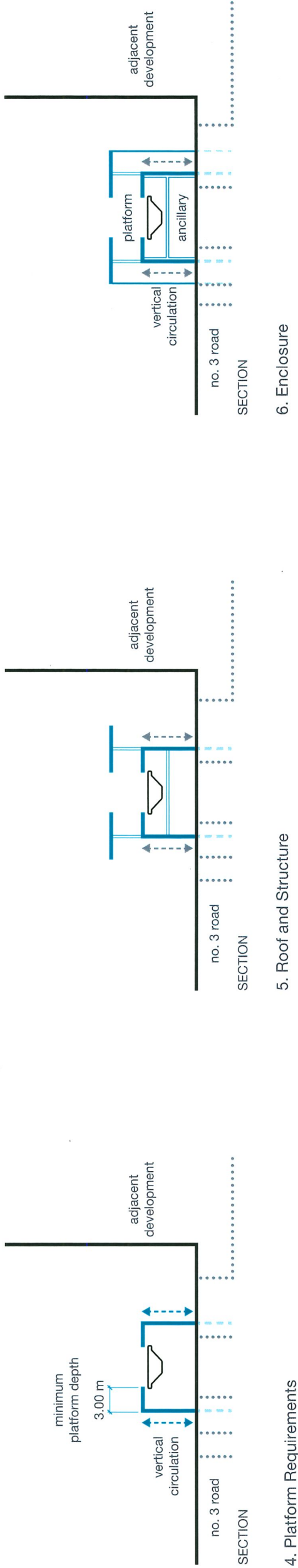
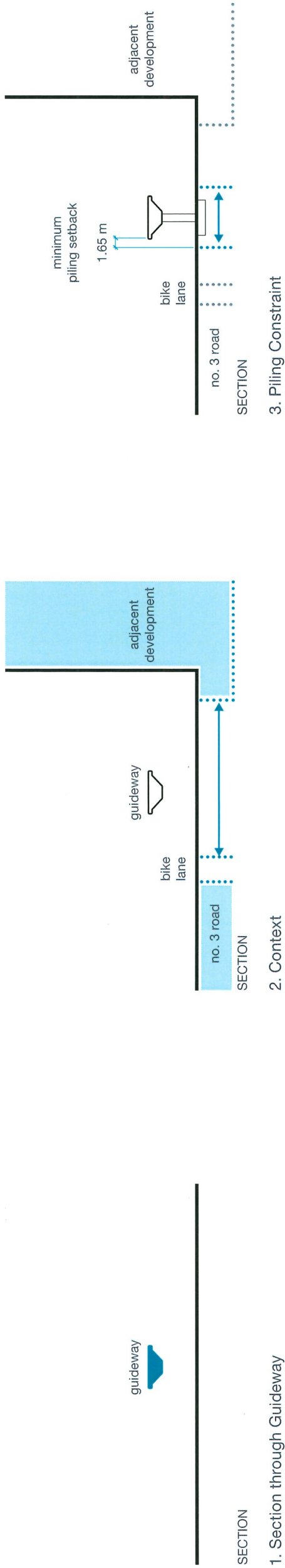
CNCL – 779



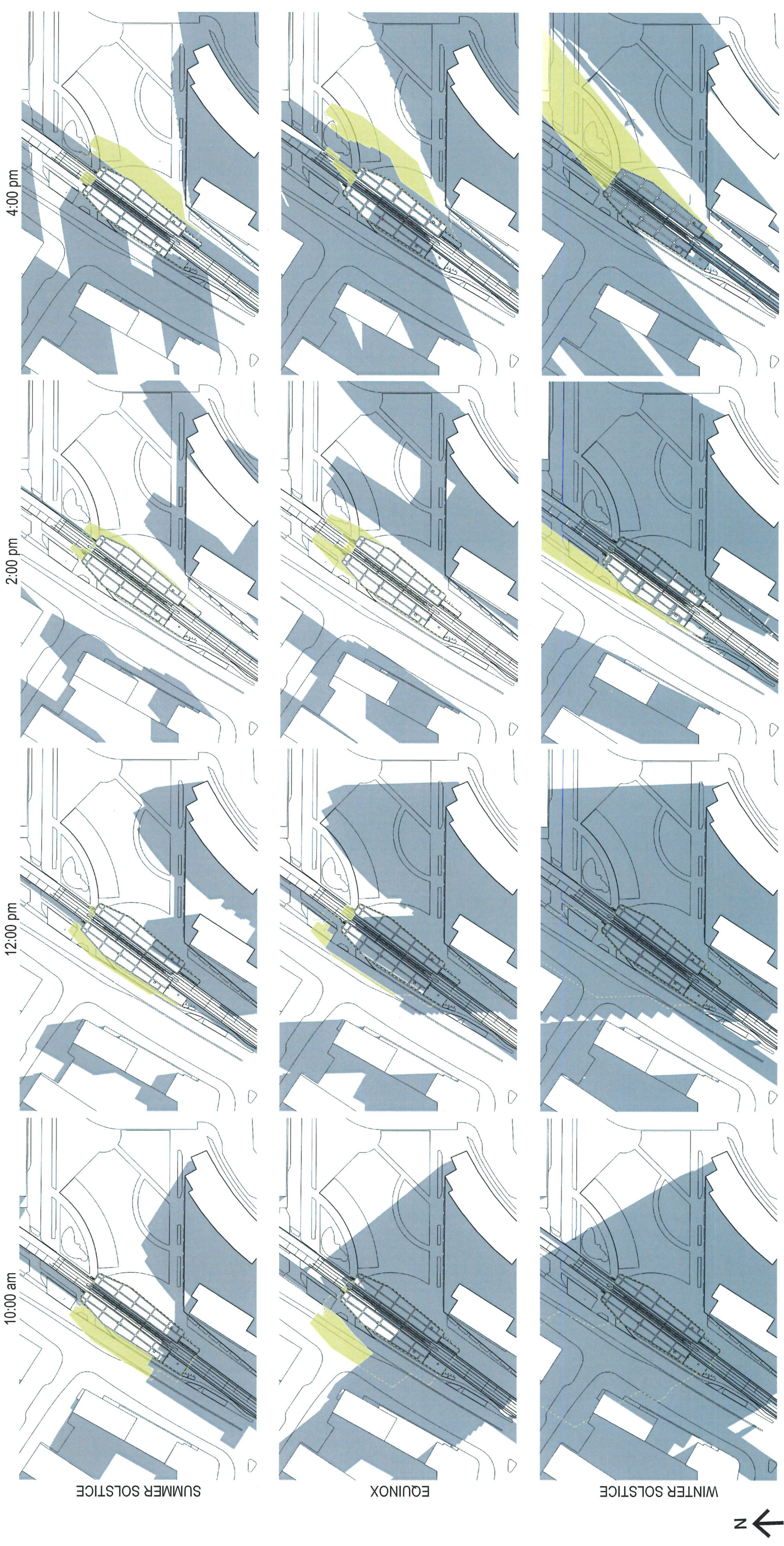
03

PROPOSAL
SECTION DIAGRAM

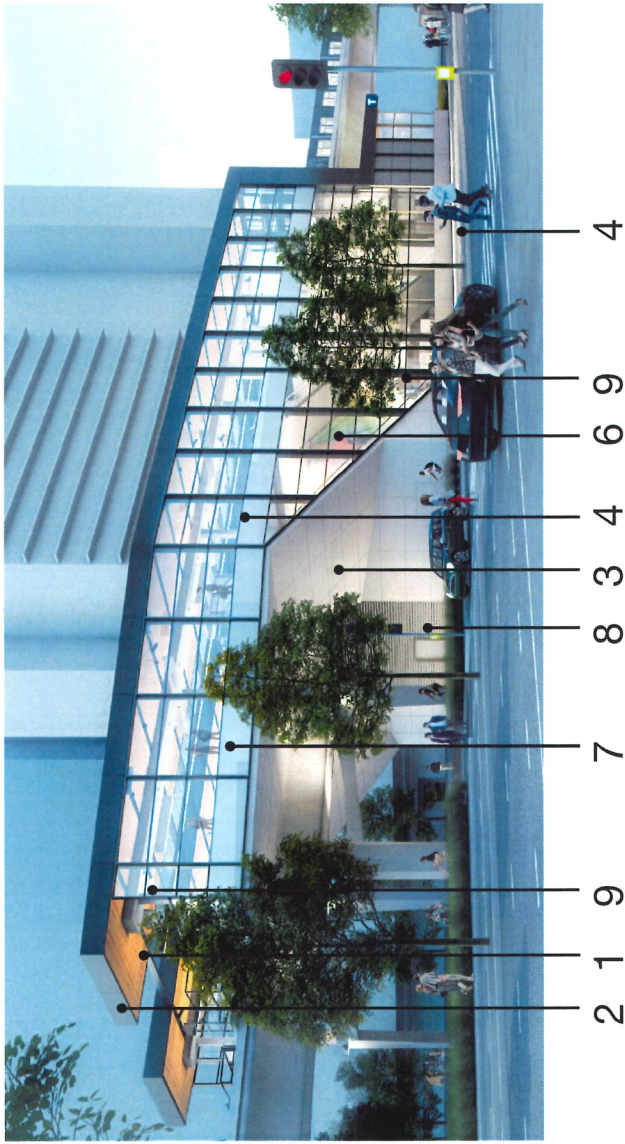
The section diagrams below are a “step by step” illustration of the design intent and how the proposed station responds to context and design parameters.



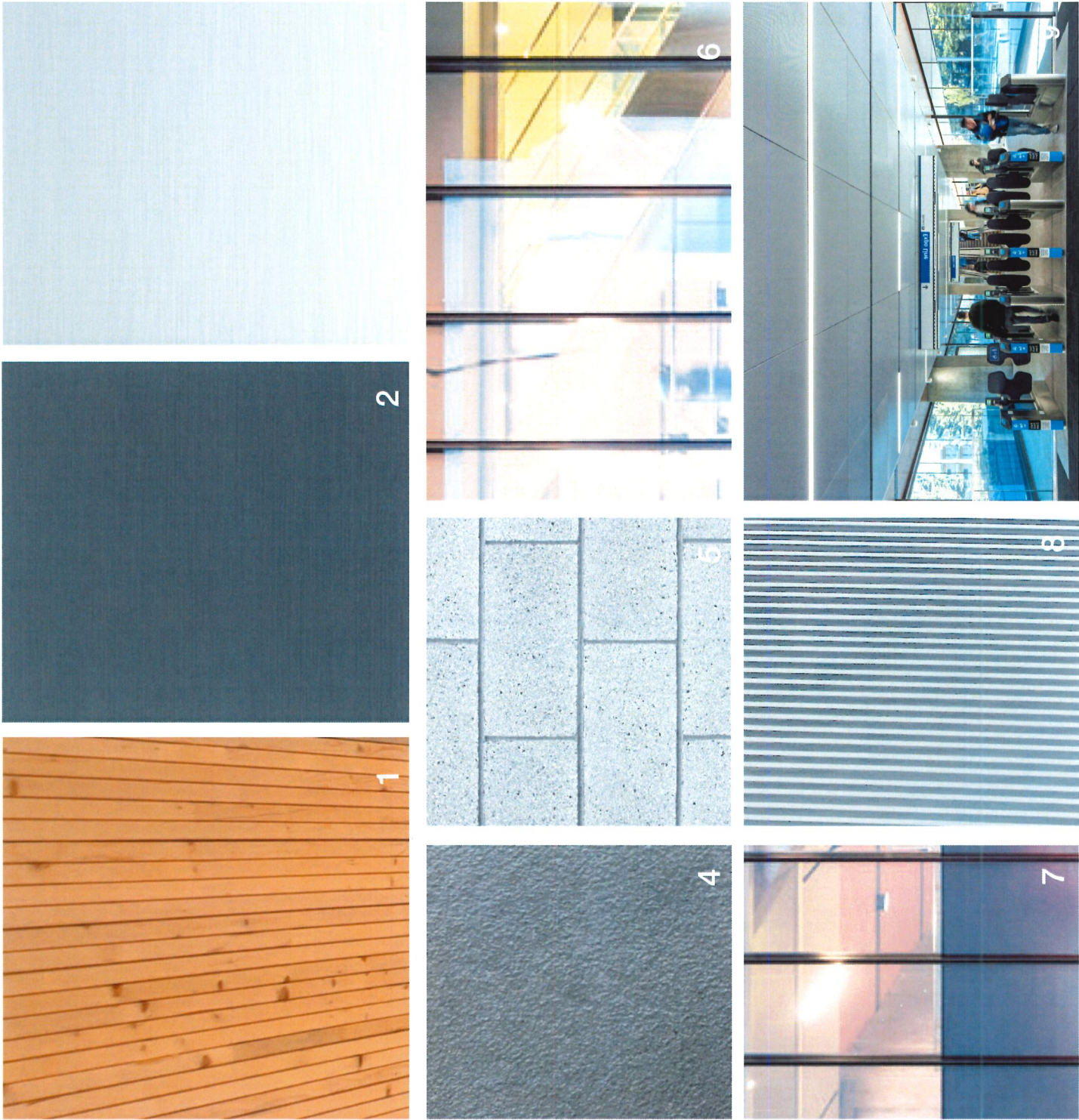
03 PROPOSAL SHADOW ANALYSIS



CNCL – 781



CNCL – 782

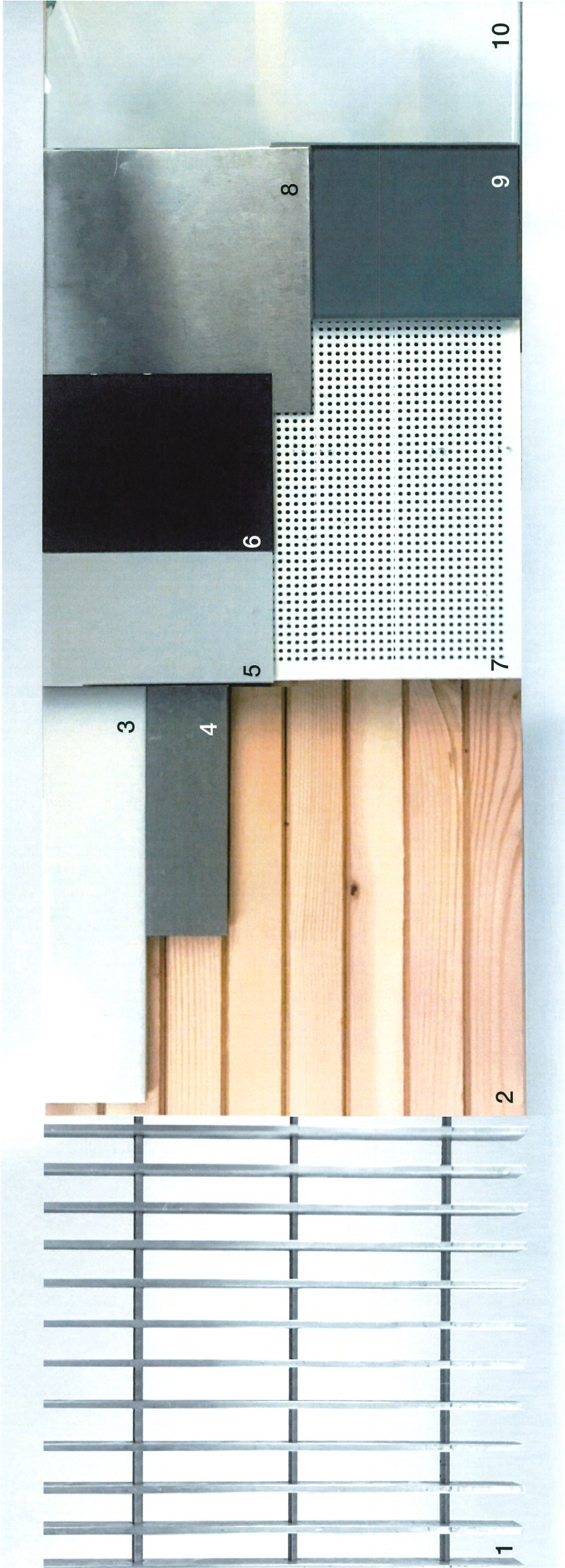


- 1 Mass Timber
- 2 Dark grey metal panel
- 3 Light grey metal panel
- 4 Porcelain floor tile
- 5 Painted CMU wall (BOH, inside station only)
- 6 Clear glazing
- 7 Back painted glass
- 8 Light grey metal louvre
- 9 White metal acoustic ceiling panel (inside station only)
- 10 Exterior gypsum board ceiling - no image, (inside station only)
- 11 Resilient and concrete flooring - no image, (BOH, inside station only))

03

PROPOSAL
MATERIAL BOARD

CNCL – 783



- 1

Metal grille bar
- 2

DLT
- 3

White wall tile
- 4

Porcelain floor tile
- 5

Dark grey metal panel
- 6

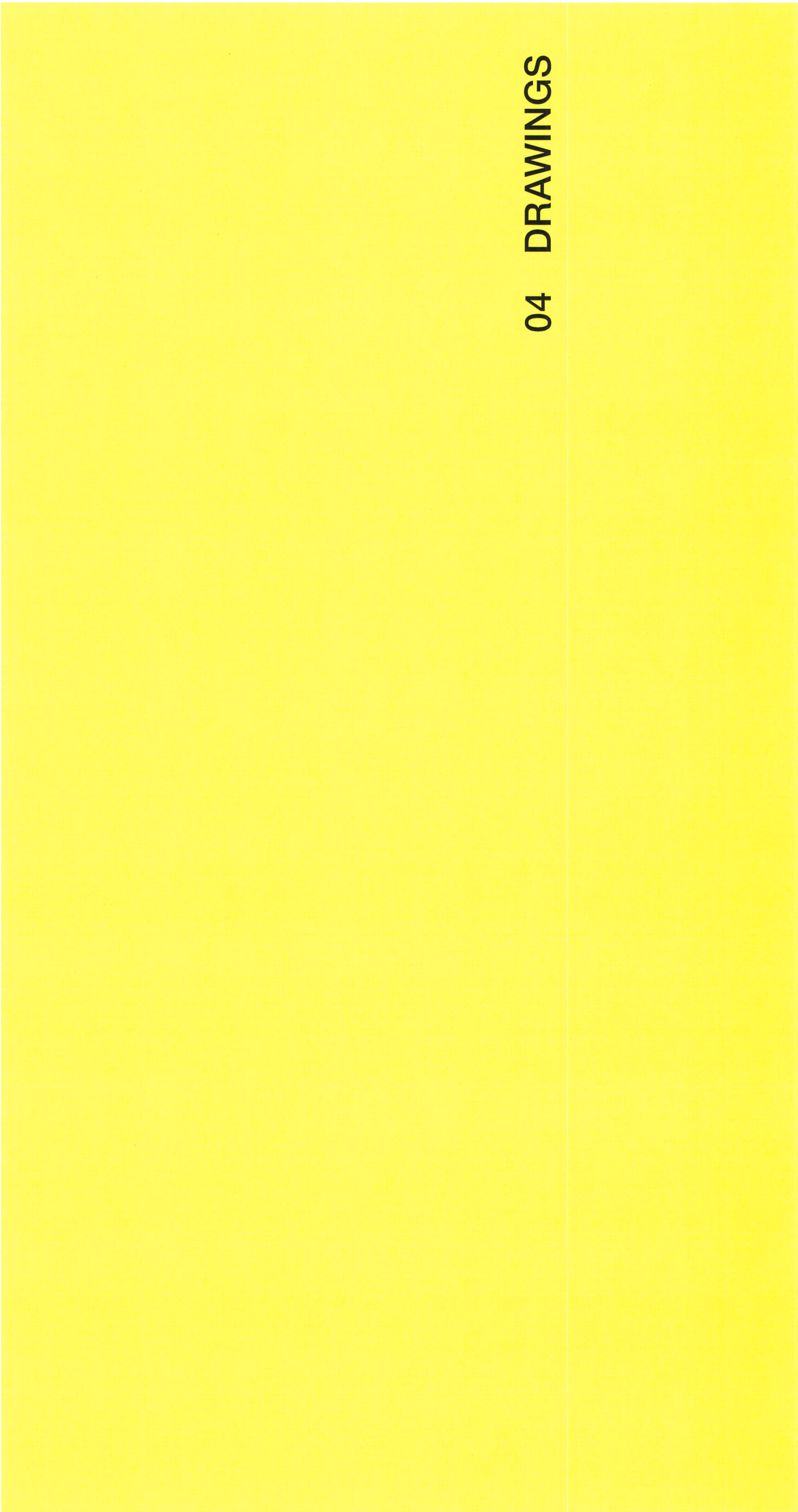
Light grey metal panel
- 7

White metal acoustic ceiling panel (inside staion only)
- 8

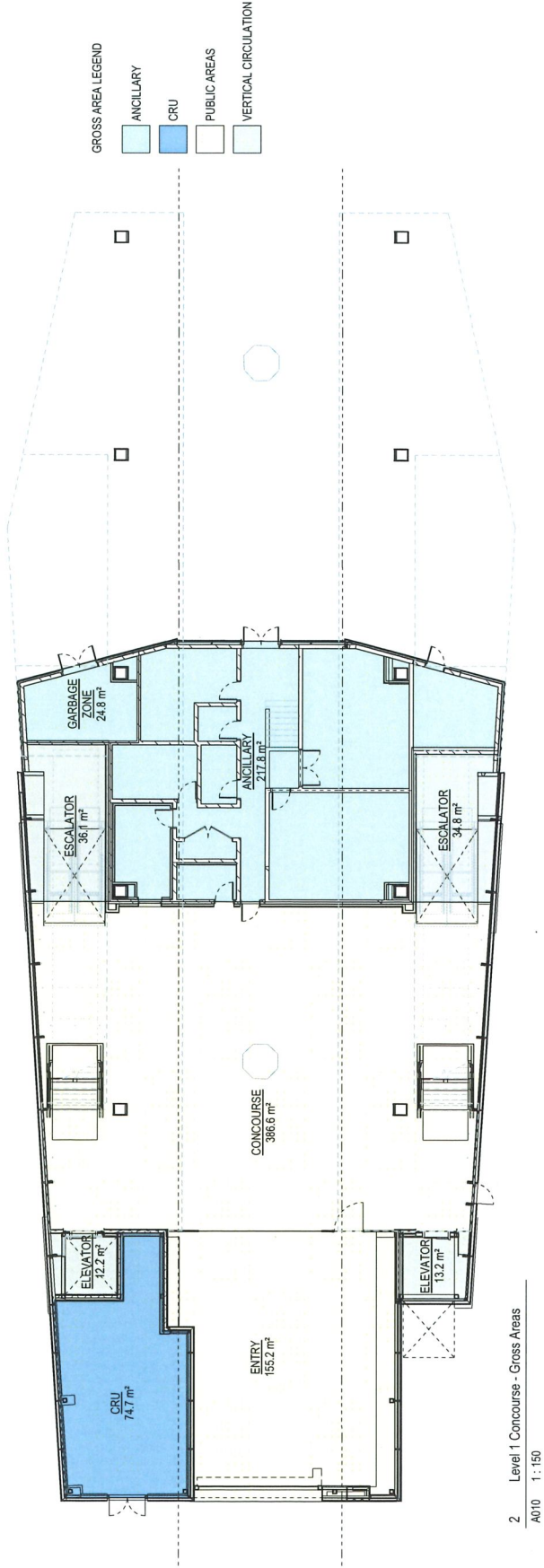
Stainless steel
- 9

Back painted glass
- 10

Clear glazing



04 DRAWINGS



2

Level 1 Concourse - Gross Areas

A010

1:150

GROSS AREAS CONCOURSE	
Name	Gross Area
ANCILLARY	
ANCILLARY	217.8 m²
GARBAGE ZONE	24.8 m²
CRU	
CRU	74.7 m²
PUBLIC AREAS	
CONCOURSE	386.6 m²
ENTRY	155.2 m²
VERTICAL CIRCULATION	
ELEVATOR	13.2 m²
ESCALATOR	34.8 m²
ESCALATOR	36.1 m²
Grand total	955.4 m²



1

Level 2 Concourse - Gross Areas

A010

1:150

GROSS AREAS PLATFORM	
Name	Gross Area
PLATFORM	
PLATFORM EAST	292.2 m²
PLATFORM WEST	291.9 m²
VERTICAL CIRCULATION	
ELEVATOR	12.2 m²
ELEVATOR	11.8 m²
Grand total	608.0 m²

NOTE: DRAWING TO BE READ IN COLOR

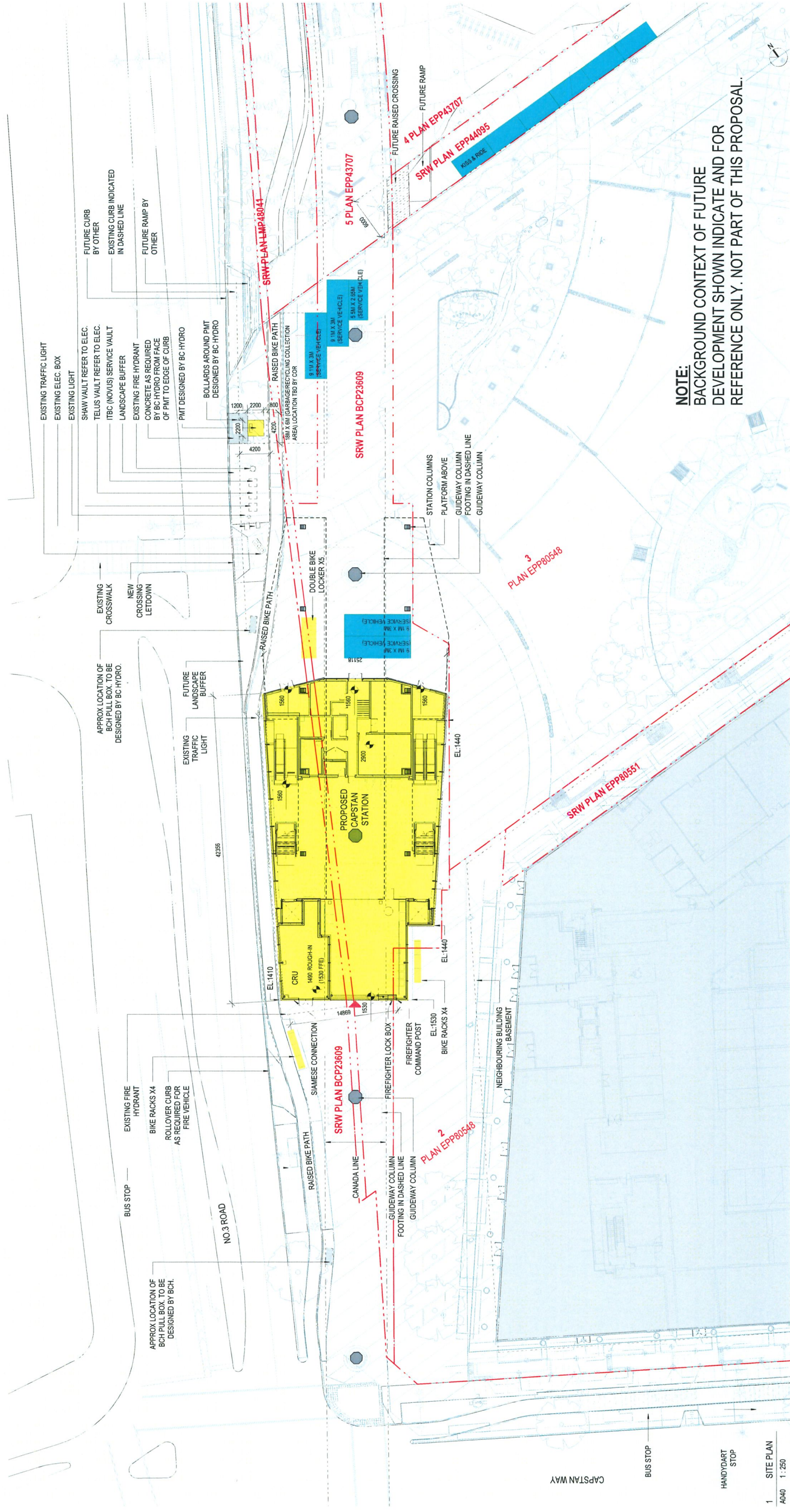


DRAWINGS TRANSLINK

STATION WORKS BY TRANSLINK

ENABLING WORKS BY OTHERS TO SUPPORT STATION OPERATIONS

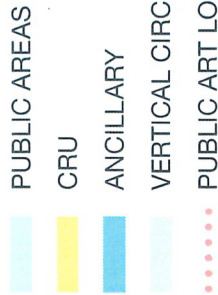
SCOPE BY OTHERS



NOTE:
BACKGROUND CONTEXT OF FUTURE
DEVELOPMENT SHOWN INDICATE AND FOR
REFERENCE ONLY. NOT PART OF THIS PROPOSAL.

DRAWINGS

FLOOR PLAN - STREET LEVEL



DRAWINGS

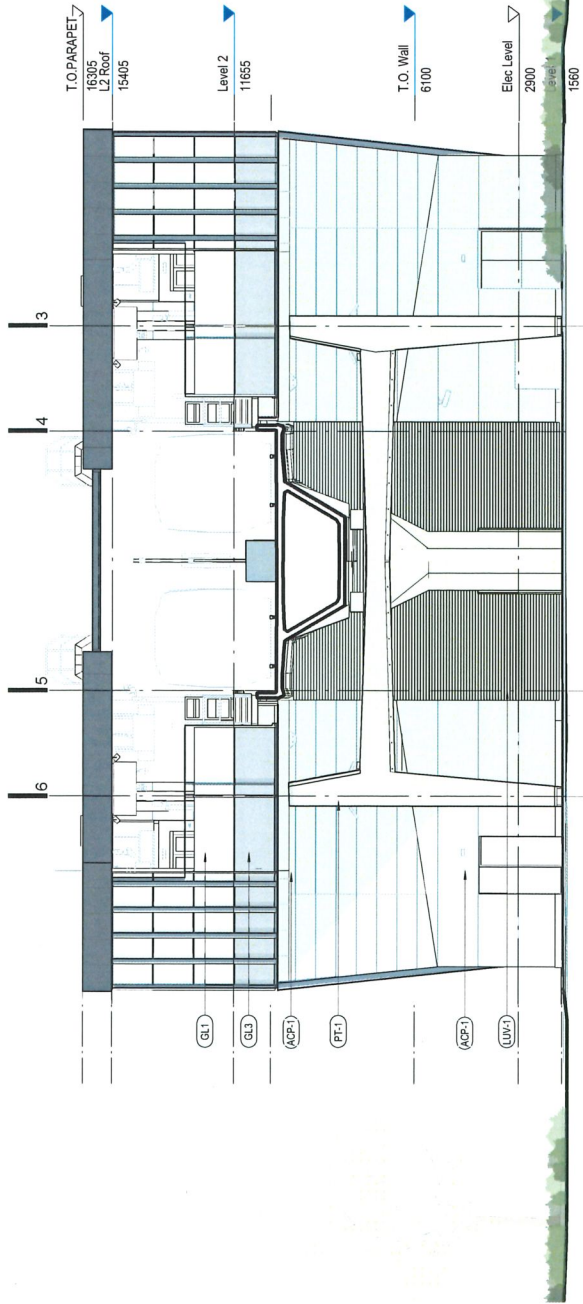


FLOOR PLAN - ROOF LEVEL

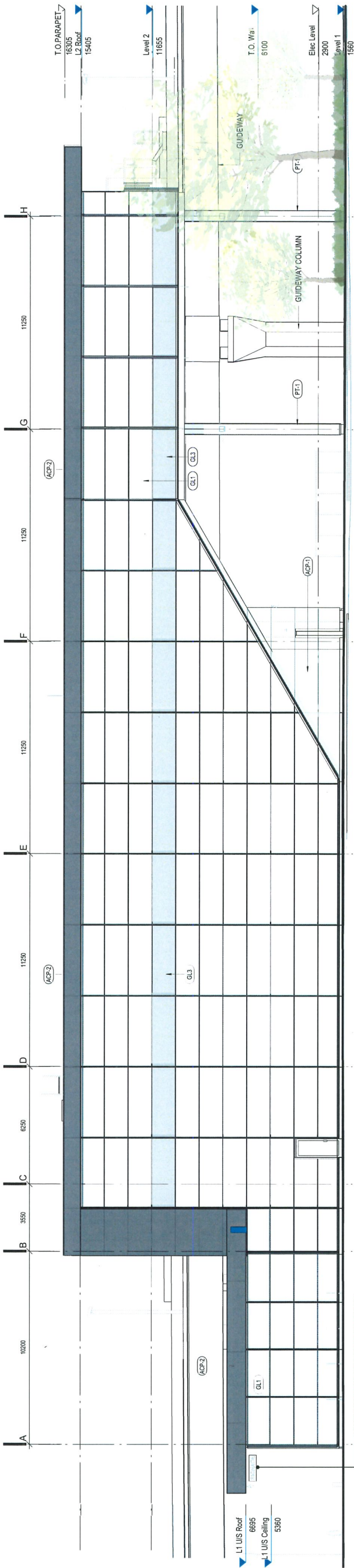
CNCL – 790



MATERIAL LEGEND	
CODE	
ACP-1	METAL PANEL - LIGHT GREY
ACP-2	METAL PANEL - DARK GREY
GL1	CLEAR GLAZING
GL3	BACK PAINTED GLASS - LIGHT GREY
LUV-1	METAL LOUVRE - LIGHT GREY
MET	METAL GRATING
PT-1	STEEL PAINTED - LIGHT GREY

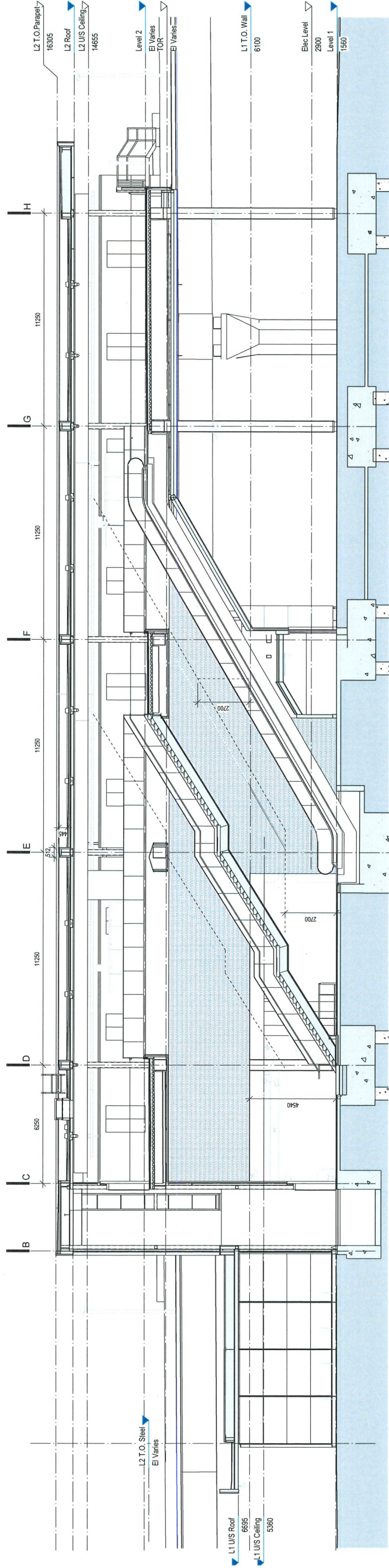
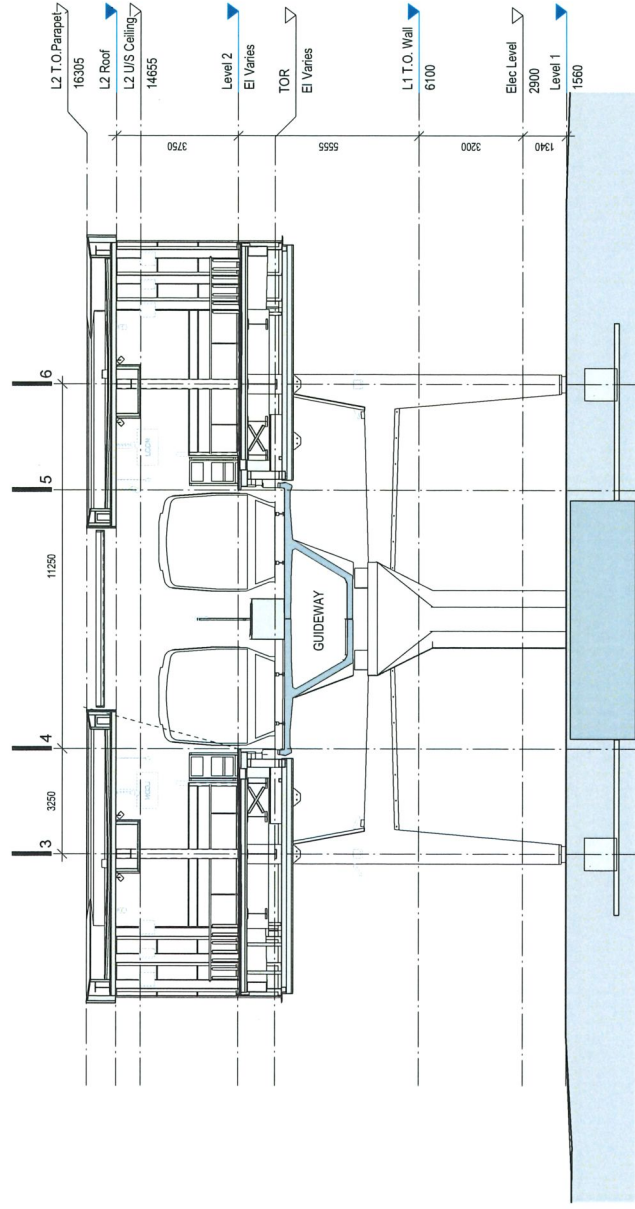
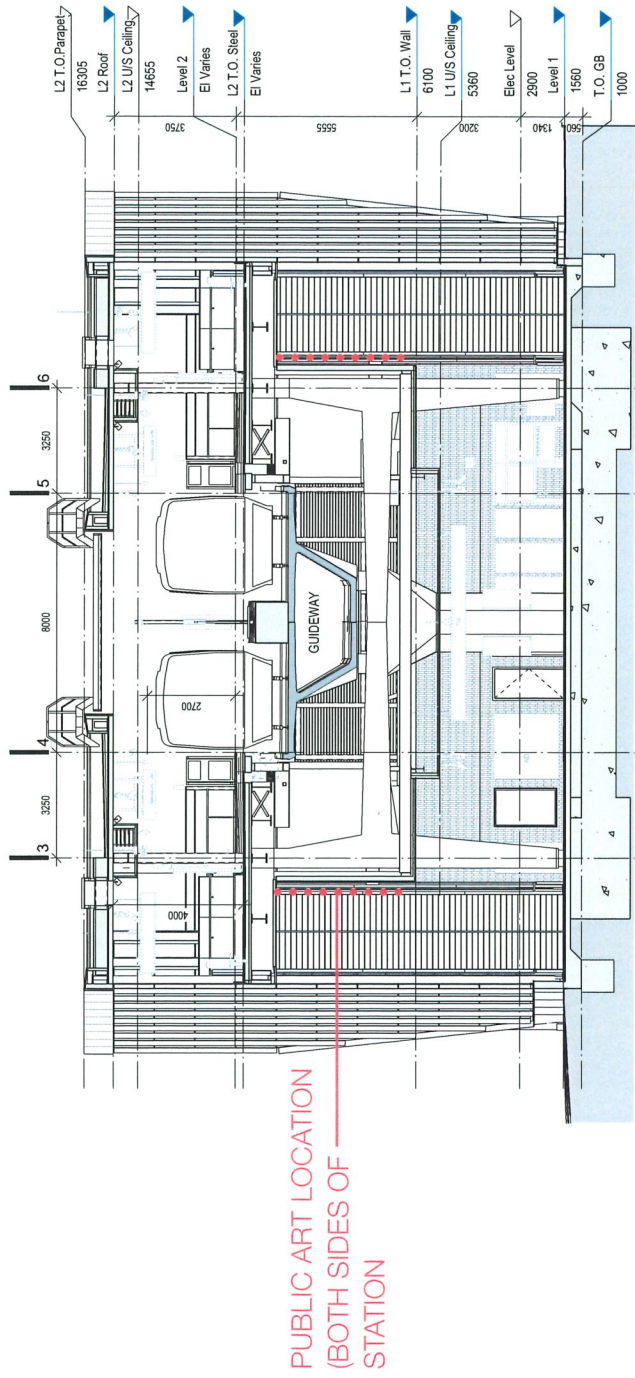


NORTH ELEVATION



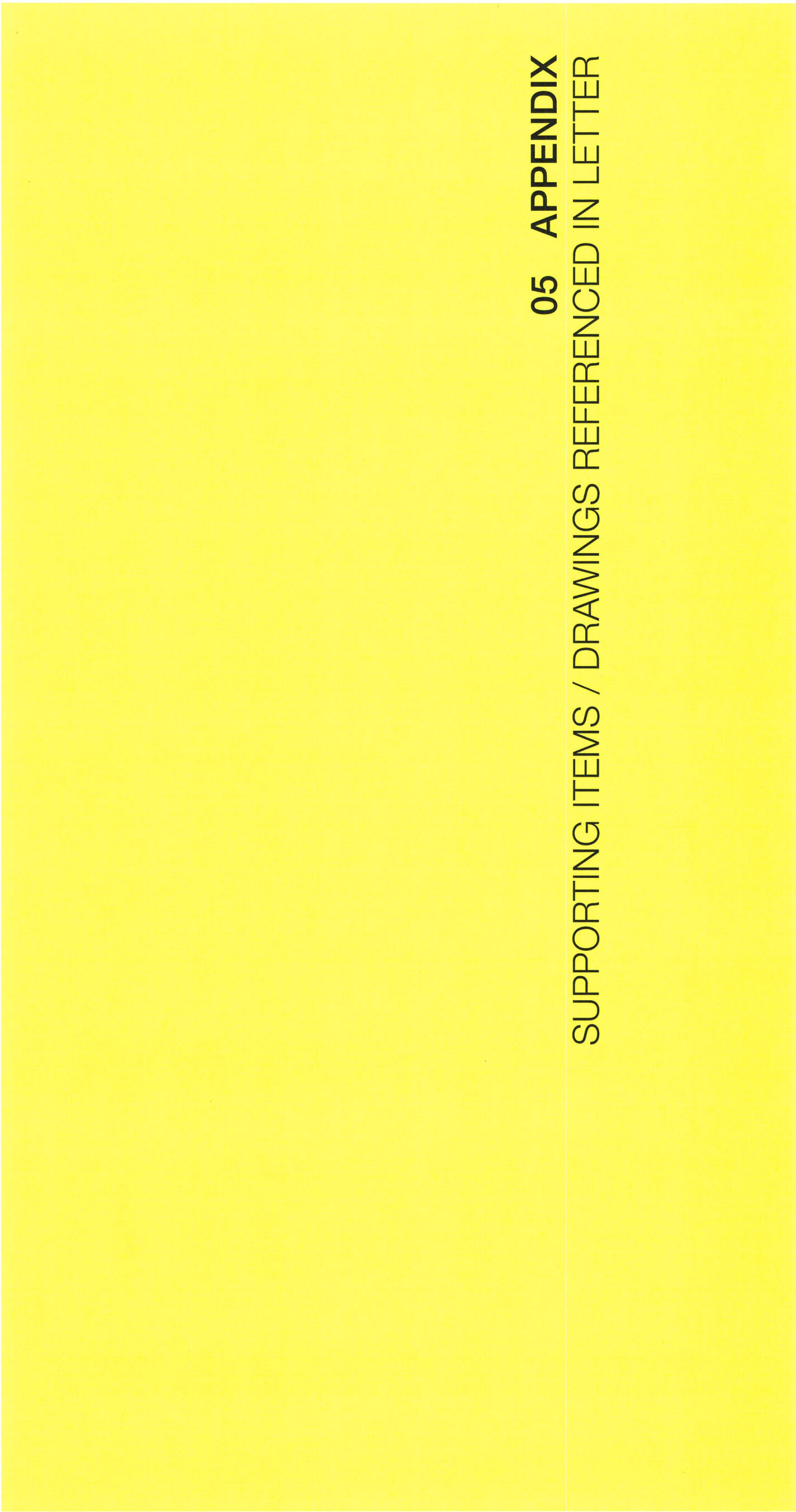
EAST ELEVATION

04 DRAWINGS SECTIONS

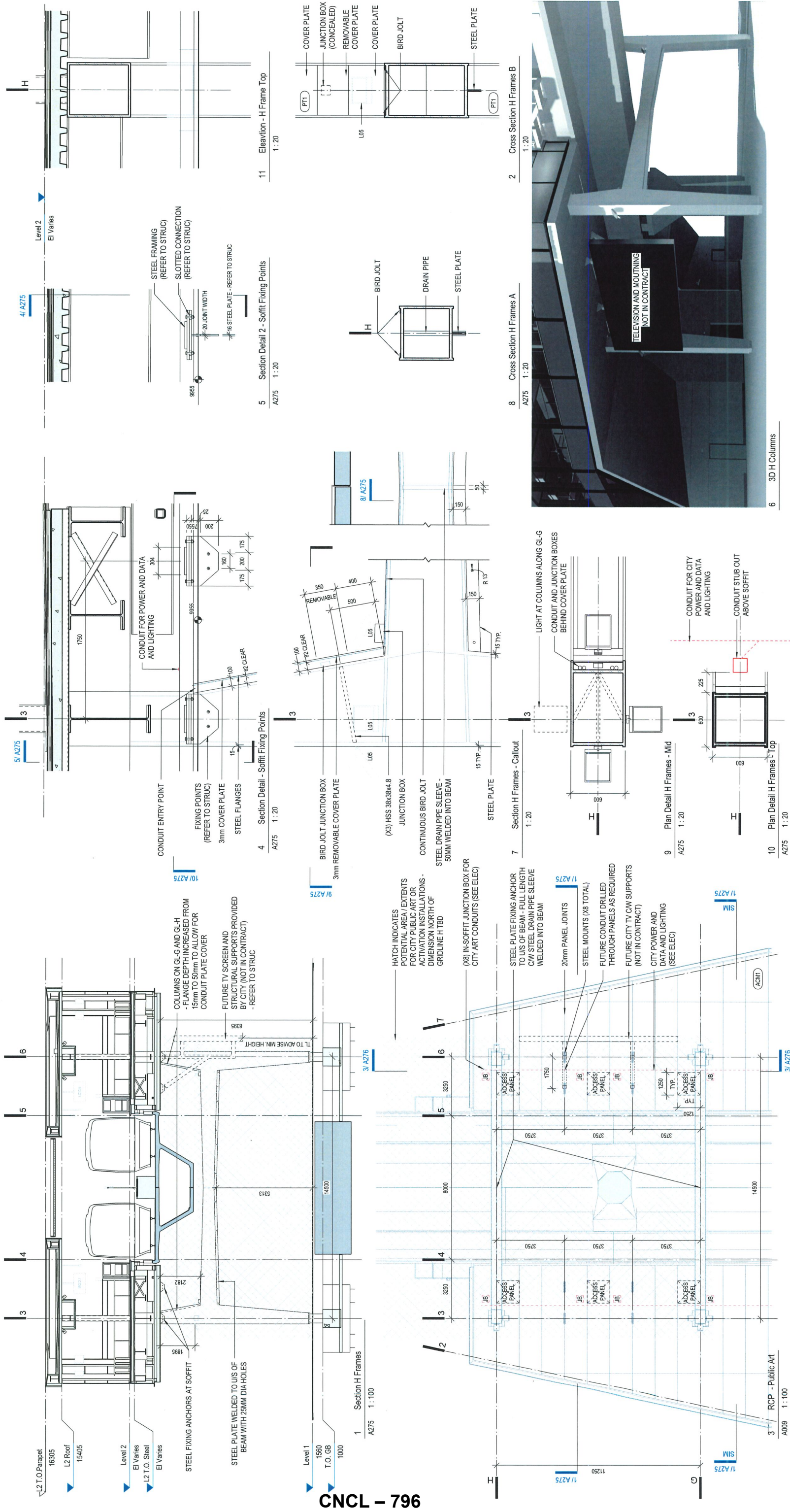




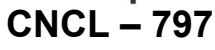
THANK YOU



05 APPENDIX
SUPPORTING ITEMS / DRAWINGS REFERENCED IN LETTER



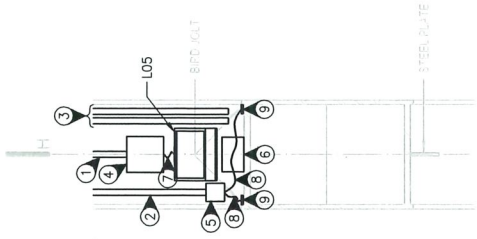
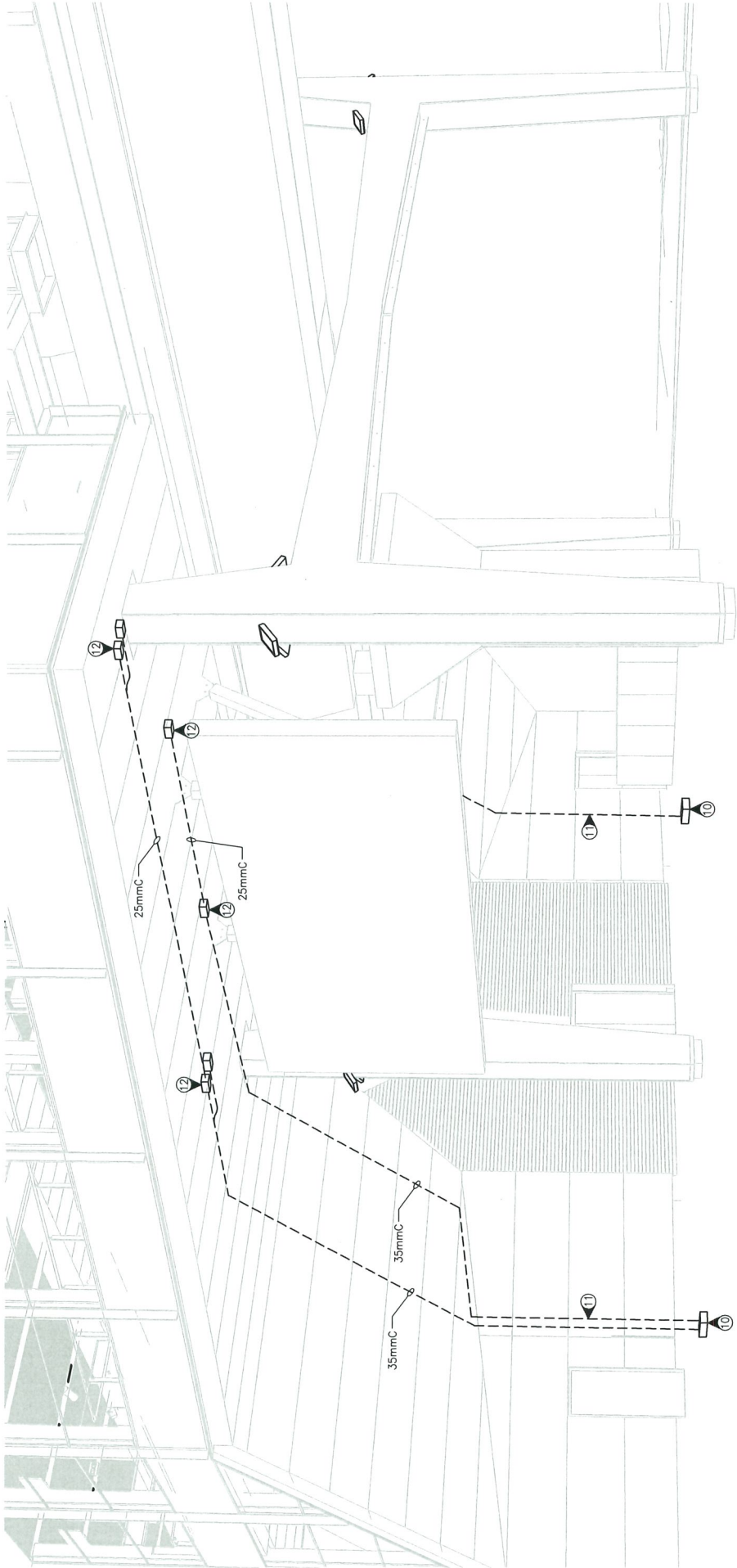
PUBLIC ART INFRASTRUCTURE - ARCHITECTURAL



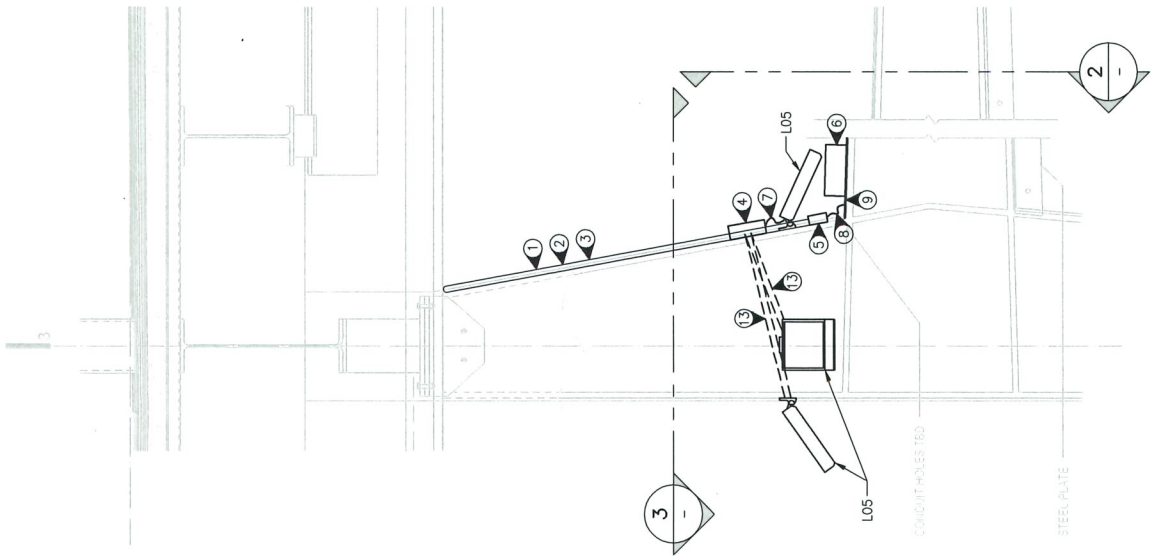
ITEM 3

PUBLIC ART INFRASTRUCTURE - ELECTRICAL

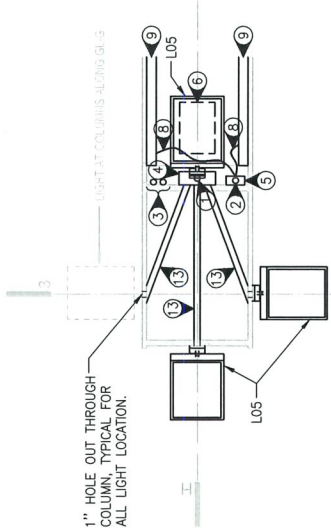
CNCL – 798



2
DETAIL
N.T.S.



1
H-FRAME CONDUIT ROUTE
DETAIL
N.T.S.



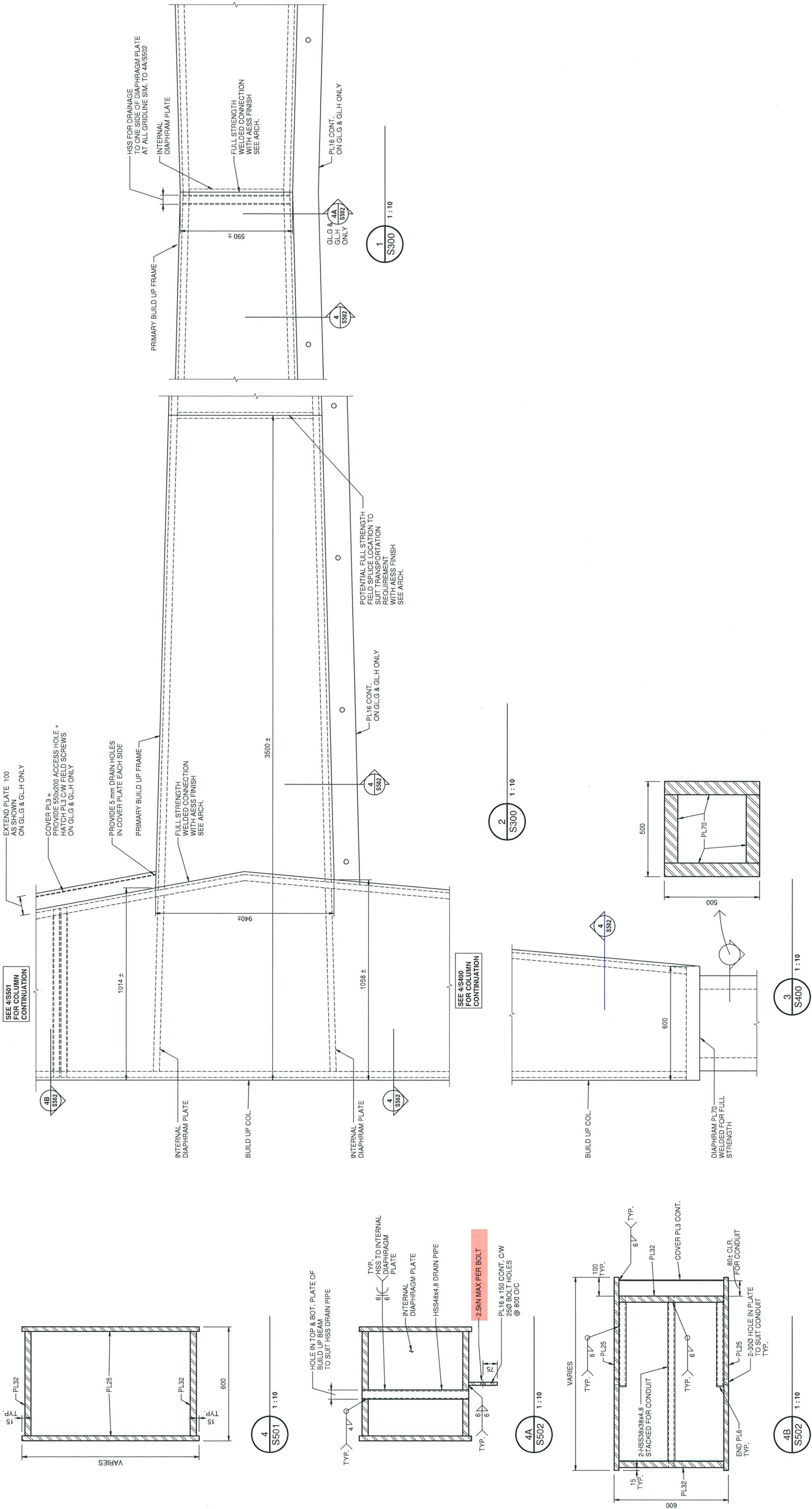
3
DETAIL
N.T.S.

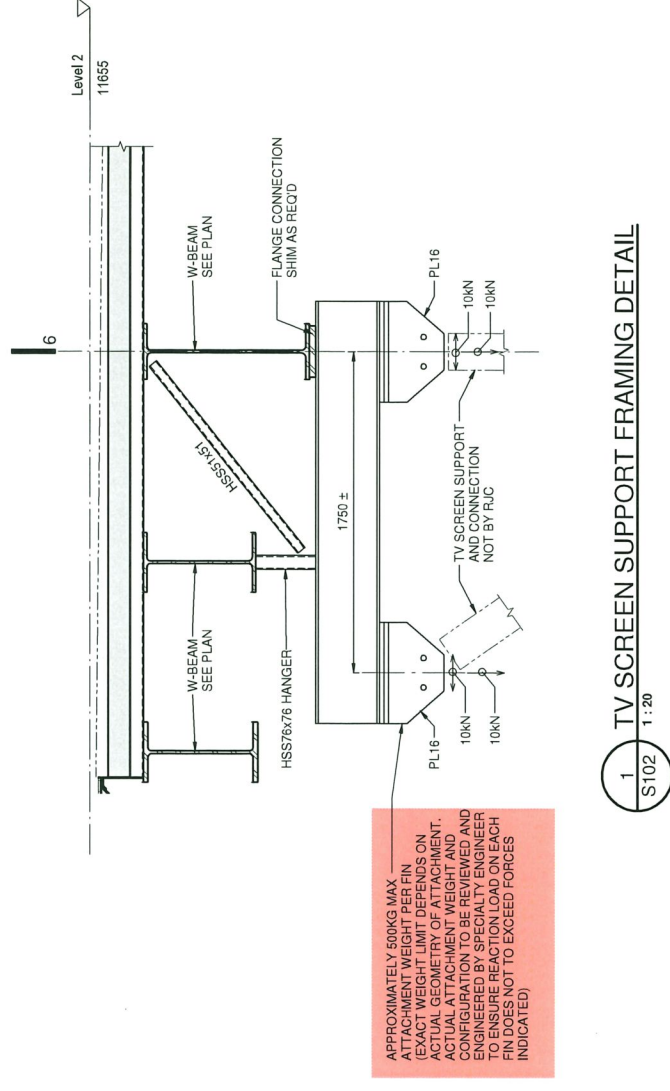
GENERAL NOTES:

1. ALL CONDUIT SHALL BE 1" (ID) 1-5/16" (OD).

DRAWING KEY NOTES

- 1 CAPSTAN EXTERIOR LIGHTING CONDUIT.
- 2 BIRD JOLT CONDUIT.
- 3 CITY ART LIGHTING CONDUITS STUBBED AND CAPPED.
- 4 8" x 8" x 3" JUNCTION BOX.
- 5 4" x 4" x 2" JUNCTION BOX.
- 6 CBX-ST 279mm (L) x 192mm (W) x 118mm (H).
- 7 CAPSTAN EXTERIOR LIGHTING FLEXIBLE CONDUIT TO LIGHT.
- 8 FLEXIBLE CONDUIT TO BIRD JOLT TRACK.
- 9 BIRD JOLT TRACK.
- 10 IN-GROUND JUNCTION BOX FOR CITY ART LIGHTING CONDUITS. 1 x POWER AND 1 x LOW VOLTAGE.
- 11 CITY ART LIGHTING CONDUITS.
- 12 IN-CEILING JUNCTION BOX FOR CITY ART LIGHTING CONDUITS.
- 13 1" (ID) 1-5/16" (OD) OR SIMILAR PIPE INTERNAL TO COLUMN. REFER TO STRUCTURAL DRAWINGS.





TRANSLINK OPERATIONAL AREAS

NOTE:
BACKGROUND CONTEXT OF FUTURE
DEVELOPMENT SHOWN INDICATE AND FOR
REFERENCE ONLY. NOT PART OF THIS WORK.

