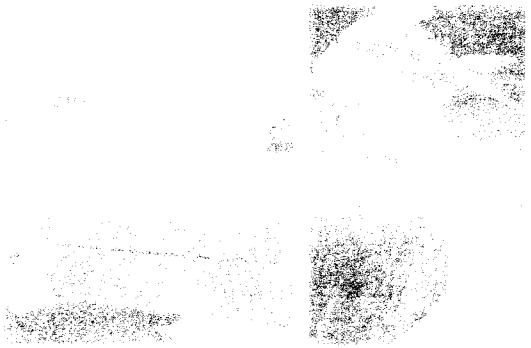
10-6525-07-04-03
To Development Permit Panel - June 14, 2006

BRIDGEPORT STATION

DEVELOPMENT PERMIT PANEL SUBMISSION

JUNE 14TH 2006



PBK ARCHITECTS

VIA ARCHITECTURE

VIA ARCHITECTURE

May 30, 2006

City of Richmond
Development Permit Panel

BRIDGEPORT STATION DESIGN RATIONALE

The architectural design response or expression of the Canada Line station located in the Bridgeport area, presented in the accompanying drawings, has emerged as a synthesis of a number of influencing factors. There is a desire for this station to be a part of the expression of the entire Canada Line project, which will be welcoming, modern, efficient, and elegant in its approach to stations both at the larger scale as a building and in the finer grain of the architectural detailing. In addition, there is a desire to define the station as an expression of the particular neighbourhood and contextual condition which will be emerging, and further, there is a desire to fulfil the programmatic requirements of an efficiently functional station.

Bridgeport Station is unique along the Canada Line located at the "knuckle" where the alignment splits into 2 routes, with one route continuing down No3 Road to serve Richmond, and with the other route crossing over the Moray Channel of the Fraser River to serve the Airport. The centre platform will encourage easy transfers. Approximately 18 buses currently driving into downtown Vancouver will be re-routed to this location with the passengers transferring onto the Canada Line. This station, combined with the bus exchange and an associated park-n-ride facility, will be become perceived as the major intermodal transit hub of the region.

The neighbourhood for Bridgeport Station is currently a very heterogeneous mixture of land use and building types, and will be gradually encouraged, through City of Richmond policies, to transform and improve by upgrading the roads, elimination of rail tracks, and increased recreational, commercial and hotel uses. Also to be developed is a series of greenways, pedestrian links, and a series of parks connecting to a more accessible and active river front. This area, over-shadowed by low-flying aircraft, will also feel more connected to the airport with the direct new transit connection.

Bridgeport Station, combined with the surrounding bus exchange and adjacent park-and-ride facility, will become a major focus of this emerging neighbourhood and the station is intended to be a central focal point or landmark seen from the surrounding streets, and glimpsed from the Oak Street Bridge. The simple linear forms of the building with an elegant curved roof, sitting between the linear concrete guideway beams, will express comfort and enclosure as well as linear movement, and is meant to be understood from afar and up close.

The Canada Line stations will share many system-wide design elements and similar design approaches, although this is to be balanced by each station as a specific local response. Most of the stations will be understood as part of "families" of stations such as the Richmond No. 3 Road cluster of stations. However, the Bridgeport Station is meant to be distinct from the No. 3 Road family with its own unique characteristics and design response since it is in a distinct neighbourhood perceived as different from, and remote from, the commercial district of No 3 Road..

The Bridgeport area has had a long history with river-oriented industrial buildings, and the Bridgeport Station is intended to be evocative of this heritage with a clearly visible steel structure, expressed trusses, metal skin, and simple uncomplicated functional forms. In this language of "skin and bones" there is also an echo of the ships, planes and trains which have been so instrumental in the development of the entire Lower Mainland region. The materials for the Platform Level will be painted steel structural components with standing seam metal roofing. The weather protection walls and guardrails will be frameless glass and the floors, as on all the levels, will be porcelain ceramic tiles. The Mezzanine Level will be mostly frameless glass walls and elevator shafts with exposed concrete guideway beams. At the Grade Level the service rooms will be finished with good quality concrete masonry units and painted metal panels with areas of metal louvers.

The micro climate of the Bridgeport area, and this station in particular-with an exposed platform 13 metres above the ground-has encouraged a design response of the cantilevered roof canopy to express an enveloping and sheltering roof form and an asymmetrical glass enclosure for protection of patrons from the prevailing east and south winds. Protection from wind and wind-driven rain at all levels is provided by glazed walls and overhanging roofs

This emphasis on glazing is an important expression of this station for maximizing views at each level and especially the platform level overlooking the flat landscape of Richmond, glimpses of the Fraser River, possible far views north to the North Shore mountains, and south to Mount Baker. In addition the glazing has an important CPTED function emphasizing transparency, visibility, and surveillance to increase patron security.

The architectural image of this station seen as a form in the landscape and also carried through in the detailing which will be experienced by patrons as they pass through this building, will be strongly characterized by an emphasis on horizontality. The building form has a long extruded horizontal roof and platform form and this is carried through the horizontality of the mezzanine level. This expression continues through the detailing of the glazing and the walls. This horizontal emphasis will connect this station with most or all of the Canada Line stations, it will be symbolic of dynamic transit movement, and it will also be reminiscent of many transit stations from other eras in other cities. It is particularly appropriate to the low horizontal delta landscape of Richmond and even the linear horizontality of the nearby Fraser River.

Functionally this station is intended to be simple and straightforward and easily understood by both arriving and departing patrons. This means that the architecture is intended to be organized in a clear, simple and linear arrangement with everything visible, without hiding places, and with a flow of spaces and circulation that expresses simplicity, clarity and safety.

DESIGNED Designer DATE
DRAWN Author DATE
CHECKED Checker DATE
APPROVAL Approver DATE

REFERENCE DRAWING

DWG No	DESCRIPTION

REVISIONS

DATE	BY	DESCRIPTION	REV

CANADA LINE TRANSIT

PROFESSIONAL SEAL

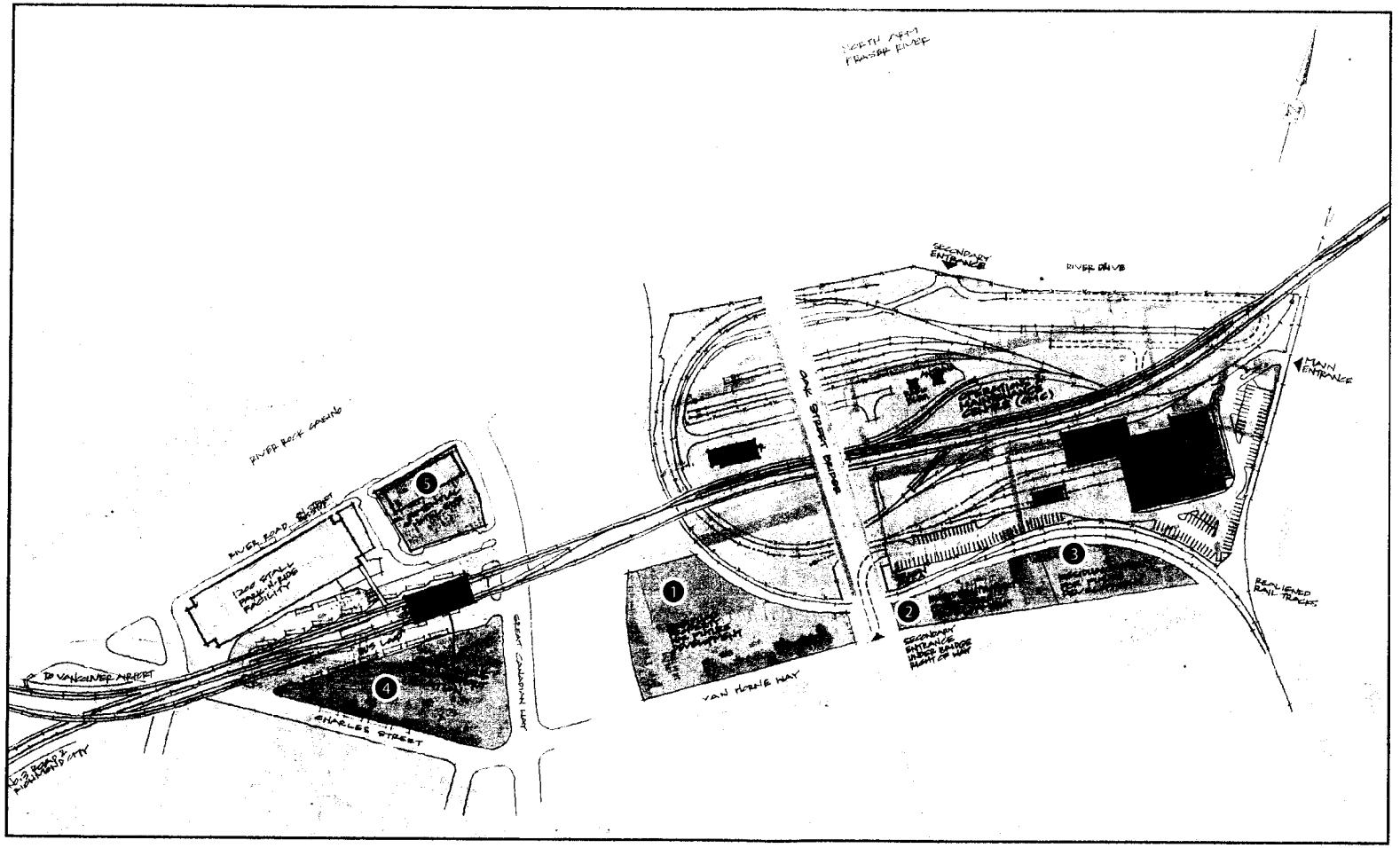
1800 - 1075 West Georgia Street
Vancouver, B.C.
Canada V6E 3C9
SNC·LAVALIN
PBK ARCHITECTS
VIA ARCHITECTURE

BRIDGEPORT STATION

SCALE
DATE 5 JUNE
CONTRACT No
SUB CONSULTANT PROJECT No
DRAWING No 016876-2100-44DD-BP-0000

CANADA LINE

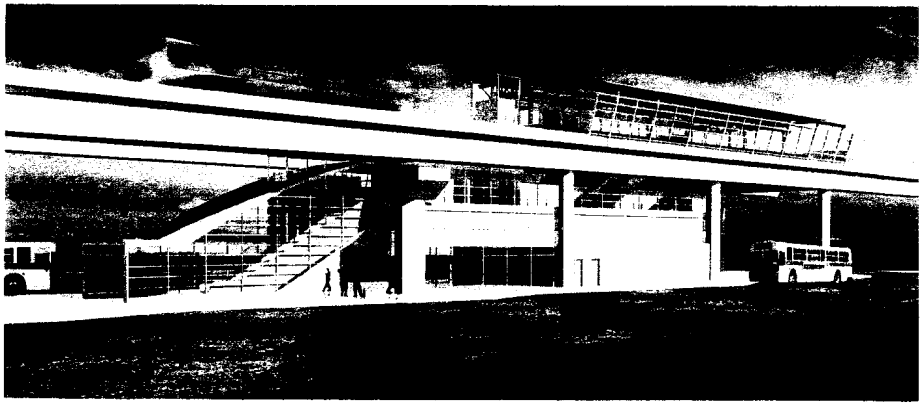
BRIDGEPORT AREA LANDUSE



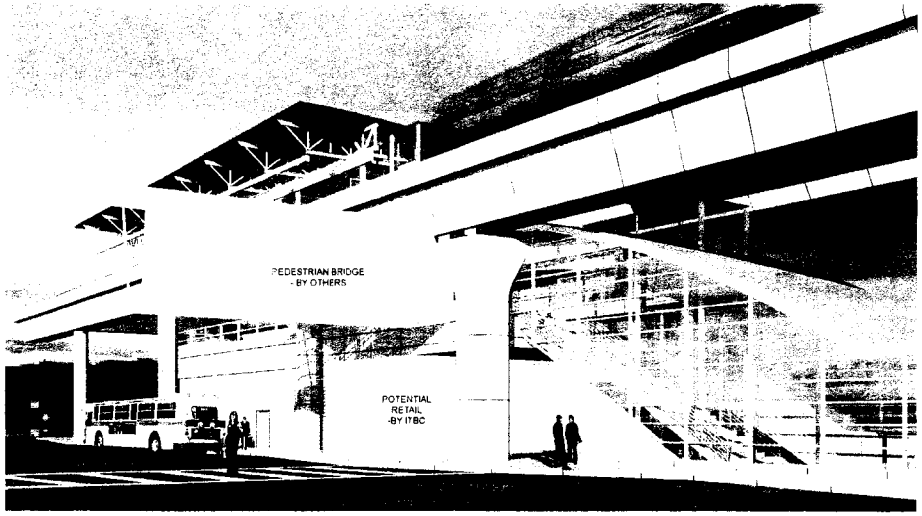
SITE AREAS

Operations and Maintenance Centre (OMC)	
OMC site	6.95 ha
Residual parcel 1	0.95 ha
Residual parcel 2	0.23 ha
Residual parcel 3	0.34 ha
Bridgeport Station	
Station and bus loop	0.83 ha
Car park	0.49 ha
Residual parcel 4	0.70 ha
Residual parcel 5	0.30 ha

VIEW OF PLATFORM



VIEW FROM SOUTH-EAST



VIEW FROM NORTH-WEST

DESIGNED Designer DATE
DRAWN Author DATE
CHECKED Checked DATE
APPROVAL Approved DATE
Rev. SNC USE SHEET size
Rev. PC 594 mm x 420.6mm METRIC

REFERENCE DRAWING

DWG No	DESCRIPTION

REVISIONS

DATE	BY	DESCRIPTION	REV

PROFESSIONAL SEAL

CANADA LINE
TRANSIT

SNC·LAVALIN
PBK ARCHITECTS
1800 – 1075 West Georgia Street
Vancouver, B.C.
Canada V6E 3C9
registered ISO 9001
VIA ARCHITECTURE

BRIDGEPORT STATION

PERSPECTIVES

SCALE
DATE 5 JUNE
DRAWING no. 016876-2100-44DD-BP-4001
CONTRACT no.
SUB CONSULTANT PROJECT no.

DATE: 05/06/2008 11:17 PM
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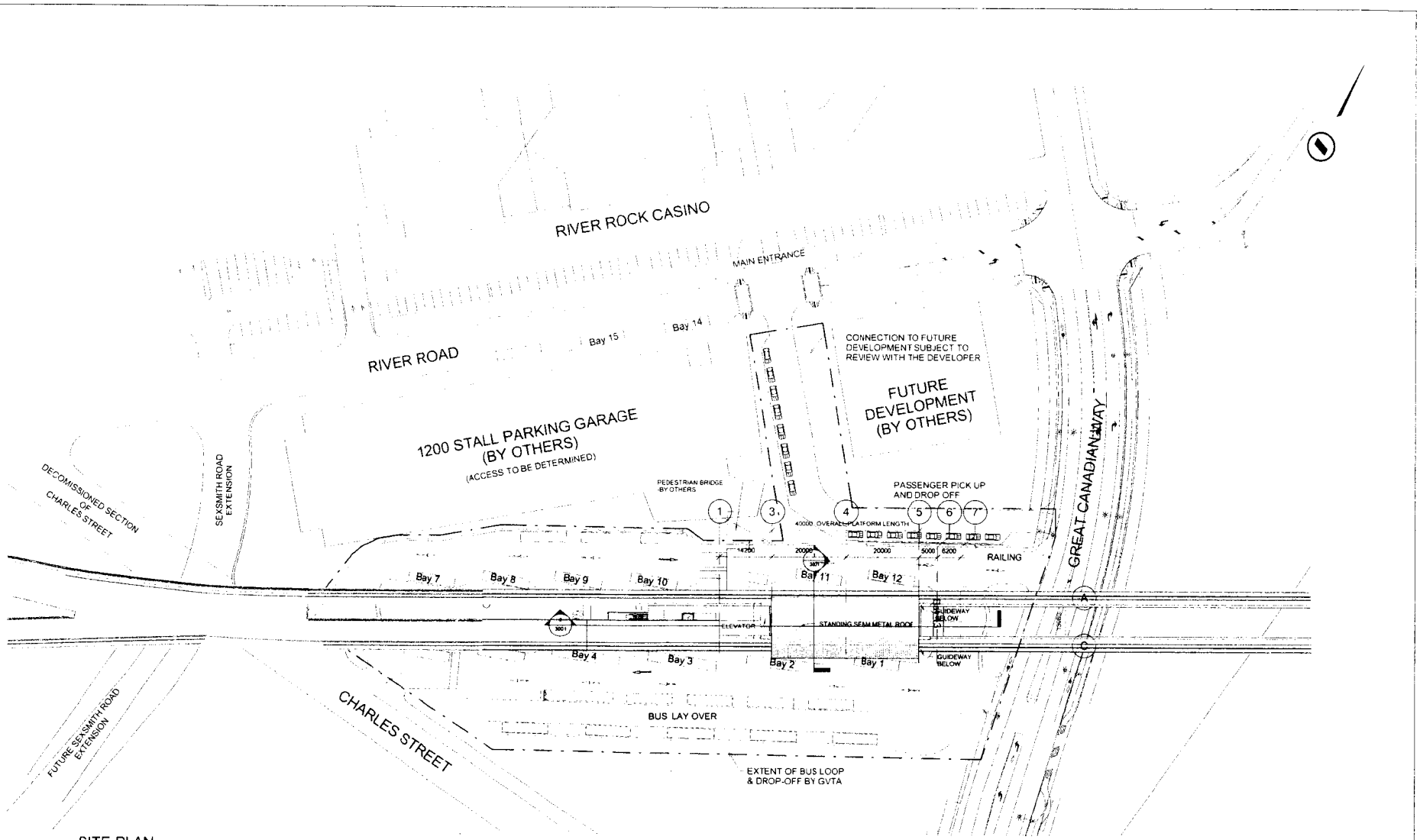


1 SITE PLAN
1 : 500

DESIGNED Designer DATE
DRAWN Author DATE
CHECKED Checker DATE
APPROVAL Approver DATE

REFERENCE DRAWING

DWG No.	DESCRIPTION

REVISIONS

DATE	BY	DESCRIPTION	REV

CANADA LINE TRANSIT

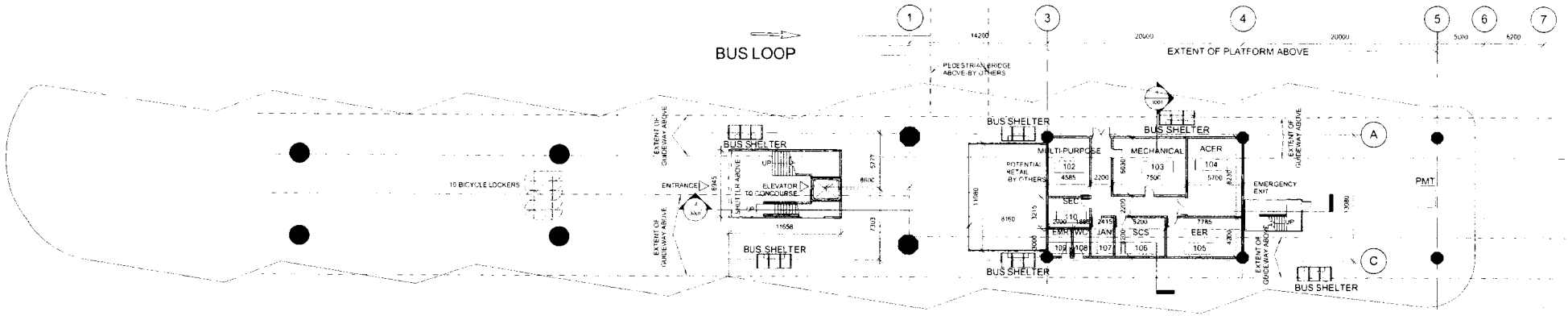
PROFESSIONAL SEAL

SNC·LAVALIN
1800 – 1075 West Georgia Street
Vancouver, B. C.
Canada V6E 3C9

PBK ARCHITECTS
VIA ARCHITECTURE

BRIDGEPORT STATION
SITE PLAN

SCALE 1 : 500 CONTRACT No.
DATE 5 JUNE '09 SUB CONSULTANT PROJECT No.
DRAWING No. 016876-2100-44DD-BP-1001



1 Level 1 GRADE
1 : 200

DESIGNED	Designer	DATE	REFERENCE DRAWING		REVISIONS		
DRAWN	Author	DATE	DWG No	DESCRIPTION	DATE	BY	DESCRIPTION
CHECKED	Checker	DATE					
APPROVAL	Approver	DATE					

CANADA LINE RAPID TRANSIT

PROFESSIONAL SEAL

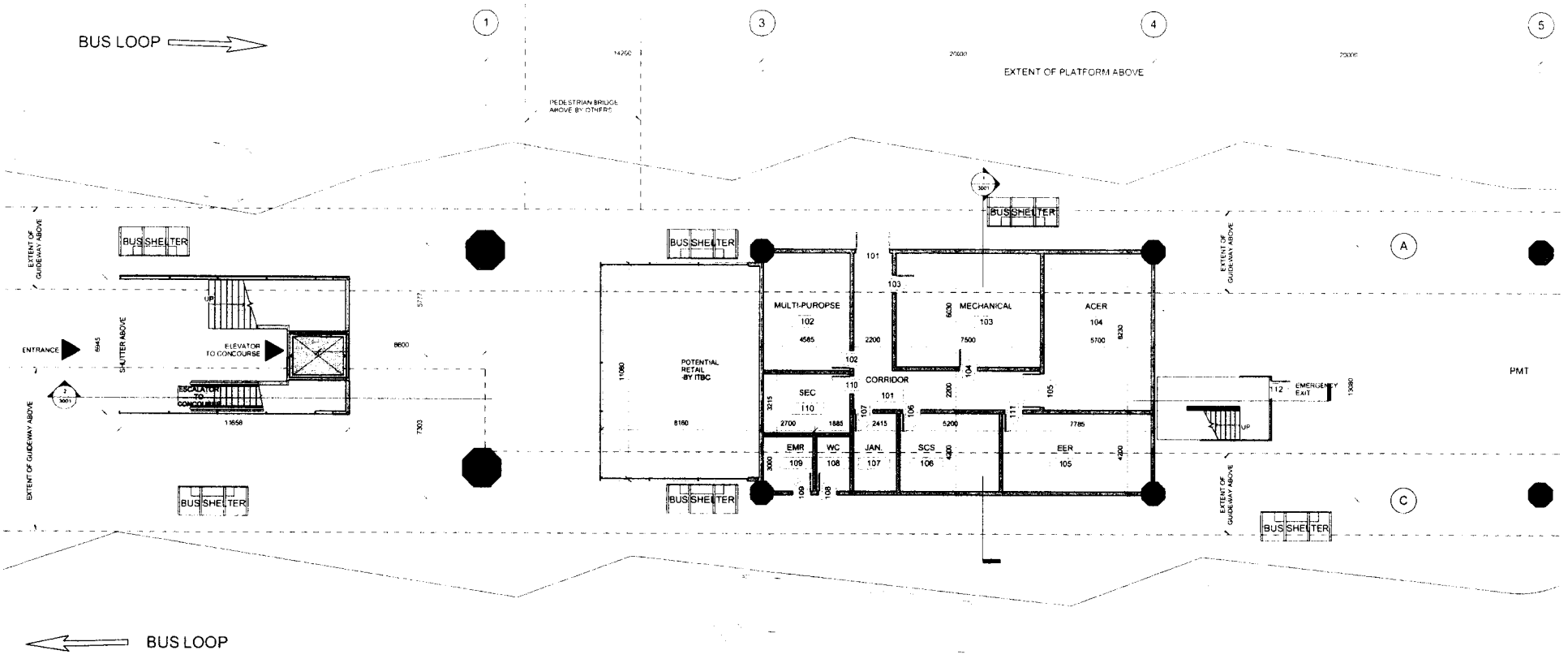
SNC·LAVALIN
1800 – 1075 West Georgia Street
Vancouver, B.C.
Canada V6E 3C9
Certified ENG 9001

PBK ARCHITECTS
VIA ARCHITECTURE

BRIDGEPORT STATION

GRADE LEVEL PLAN

SCALE 1 : 200 | CONTRACT No | SUB CONSULTANT
DATE 5 JUNE | PROJECT No
DRAWING No 01 | 016876-2100-44DD-BP-1002



DESIGN & CONSTRUCTION
OF BUS LOOP BY GVTA

1 Level 1 GRADE
1 : 100

DESIGNED	Designer	DATE
DRAWN	Author	DATE
CHECKED	Checker	DATE
APPROVAL	Approver	DATE

REFERENCE DRAWING

DWG No	DESCRIPTION

REVISIONS

DATE	BY	DESCRIPTION	REV

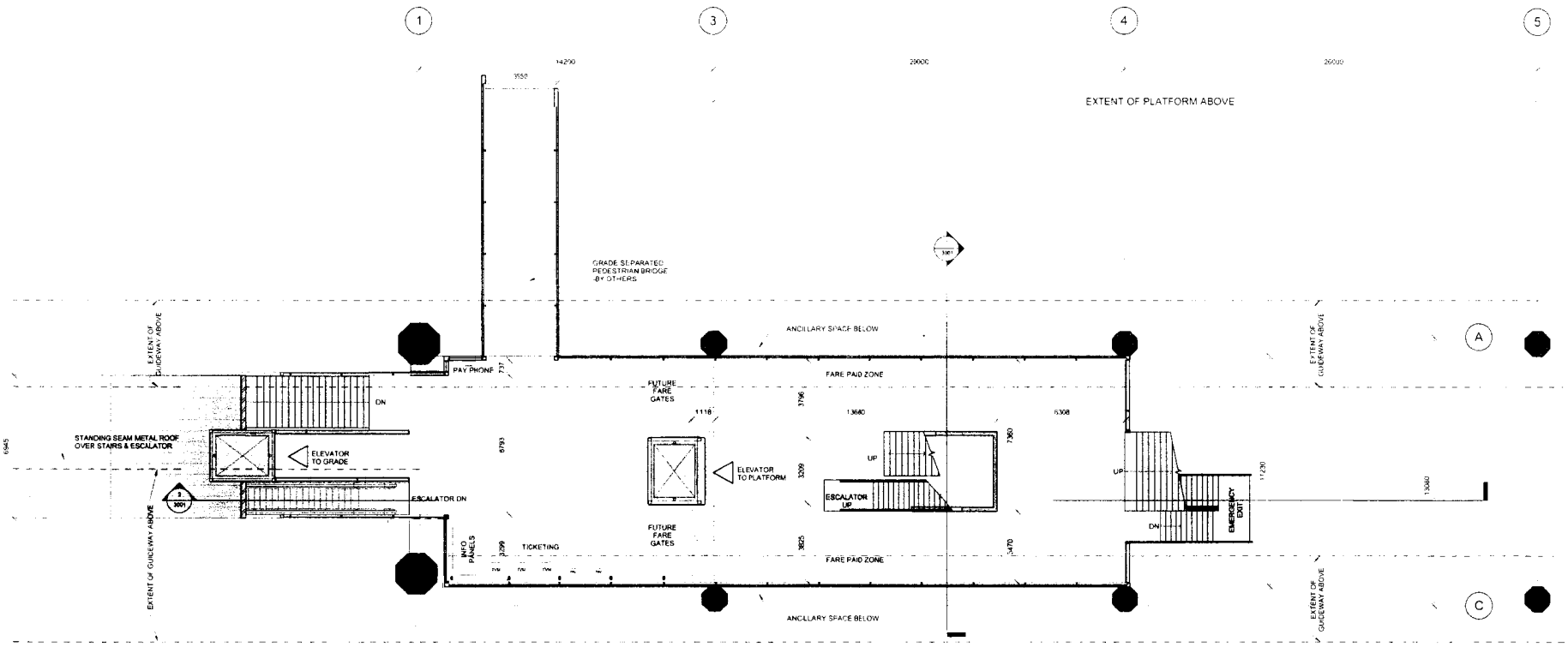
CANADA LINE TRANSIT

SNC·LAVALIN
1800 – 1075 West Georgia Street
Vancouver, B.C.
Canada V6E 3C9
Certified ISO 9001

PBK ARCHITECTS
VTA ARCHITECTURE

BRIDGEPORT STATION
GRADE LEVEL PLAN

SCALE 1 : 100 CONTRACT No.
DATE 5 JUNE
DRAWING No. 016876-2100-44DD-BP-1003



1 Level 2 CONCOURSE

1 : 100

DESIGNED Designer	DATE	REFERENCE DRAWING	REVISIONS
DRAWN Author	DATE	DWG NO / DESCRIPTION	DATE / BY / DESCRIPTION / REV
CHECKED Checker	DATE		
APPROVAL Approver	DATE		
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CANADA LINE TRANSIT

PROFESSIONAL SEAL

SNC·LAVALIN 1800 – 1075 West Georgia Street Vancouver, B.C. Canada V6E 3C9 ISO 9001

PBK ARCHITECTS VIA ARCHITECTURE

BRIDGEPORT STATION

CONCOURSE LEVEL PLAN

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DATE 5 JUNE
DRAWING No. 016876-2100-44DD-BP-1004
SUB CONSULTANT PROJECT No.

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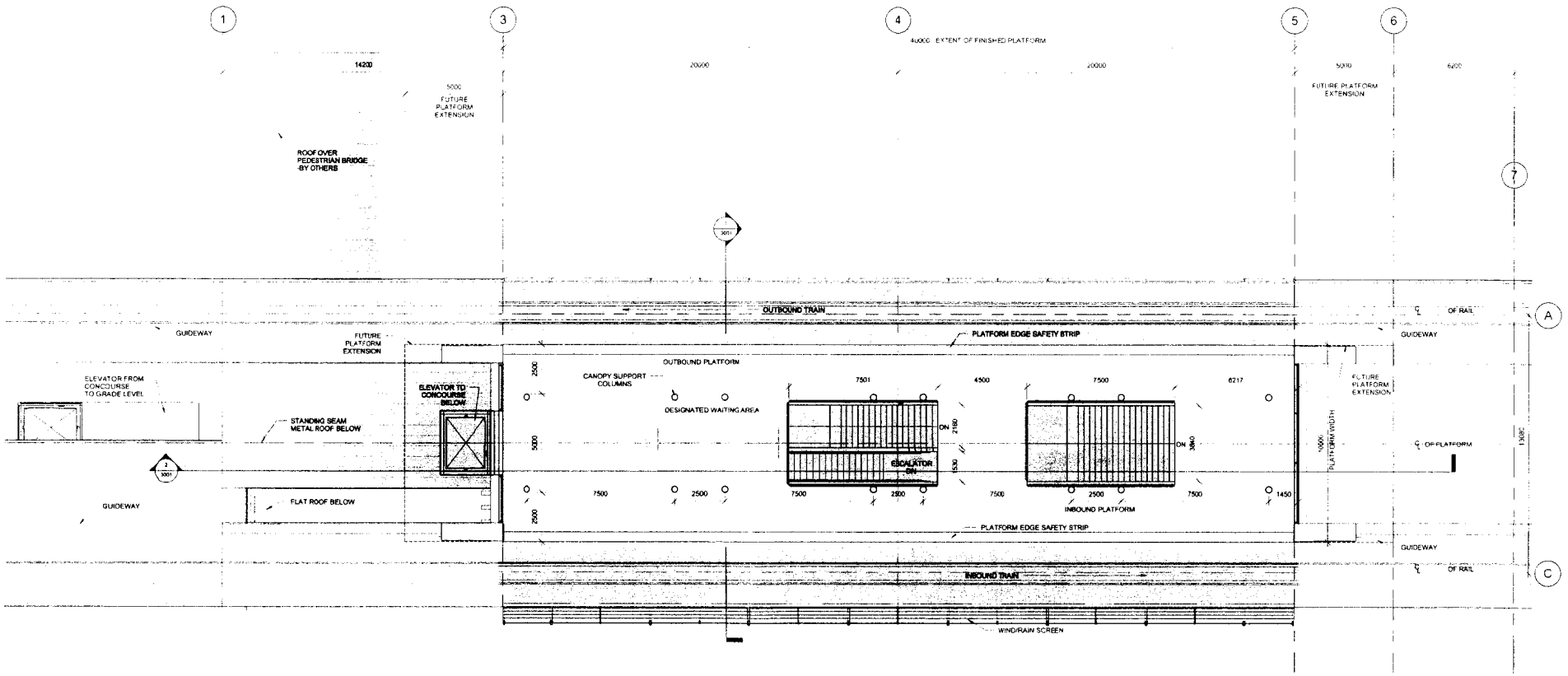

1 Level 3 PLATFORM
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DESIGNED Designer DATE
DRAWN Author DATE
CHECKED Checker DATE
APPROVAL Approver DATE

REFERENCE DRAWING

DWG No	DESCRIPTION

REVISIONS

DATE	BY	DESCRIPTION	REV

CANADA LINE TRANSIT

PROFESSIONAL SEAL

1800 – 1075 West Georgia Street
Vancouver, B. C.
Canada V6E 3C9
SNC·LAVALIN
PBK ARCHITECTS
VIA ARCHITECTURE

BRIDGEPORT STATION

PLATFORM LEVEL PLAN

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DATE 5 JUNE SUB CONSULTANT
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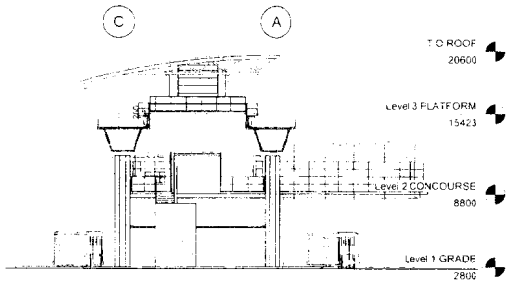
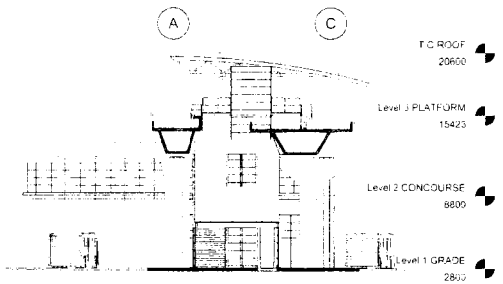


1 East Elevation
1 : 200



2 West Elevation
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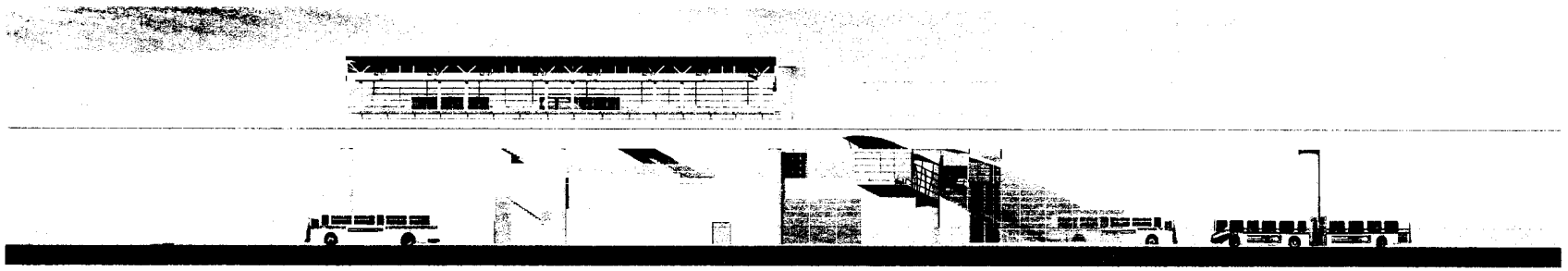
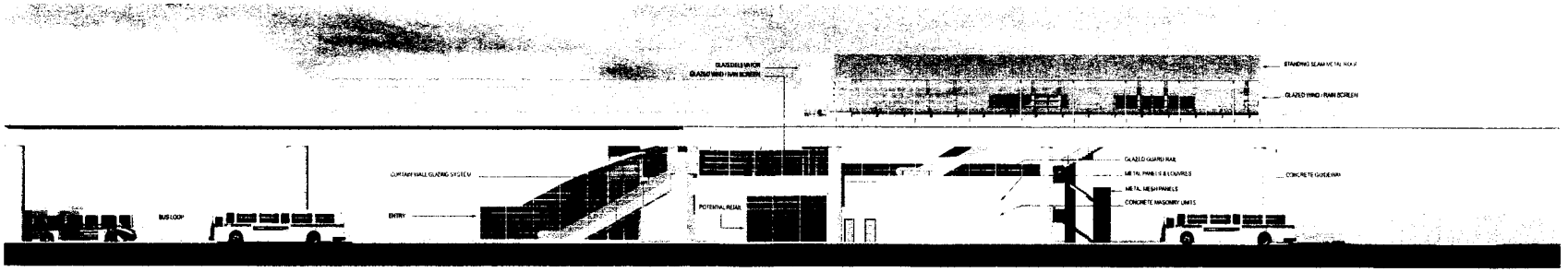


North Elevation



South Elevation

DESIGNED Designer DATE	REFERENCE DRAWINGS		REVISIONS				
DRAWN Author DATE	DWG No	DESCRIPTION	DATE	BY	DESCRIPTION	REV	
CHECKED Approver DATE							
APPROVAL Approver DATE							
PW-SNC-0808 - SHEET.dwg Rev: A1 558.8mm x 431.8mm METRIC							

CANADA LINE TRANSIT

PROFESSIONAL SEAL

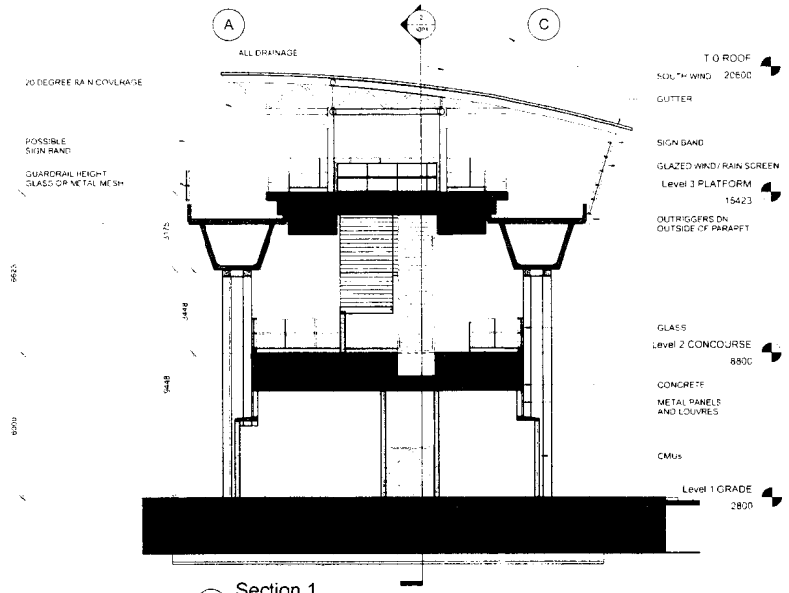
SNC·LAVALIN
1800 - 1075 West Georgia Street
Vancouver, B.C.
Canada V6E 3C9
Certified ISO 9001

PBK ARCHITECTS
VIA ARCHITECTURE

BRIDGEPORT STATION

ELEVATIONS

SCALE 1 : 200 CONTRACT No
DATE 5 JUNE SUB-CONSULTANT PROJECT No
DRAWING No 016876-2100-4400-BP-2001



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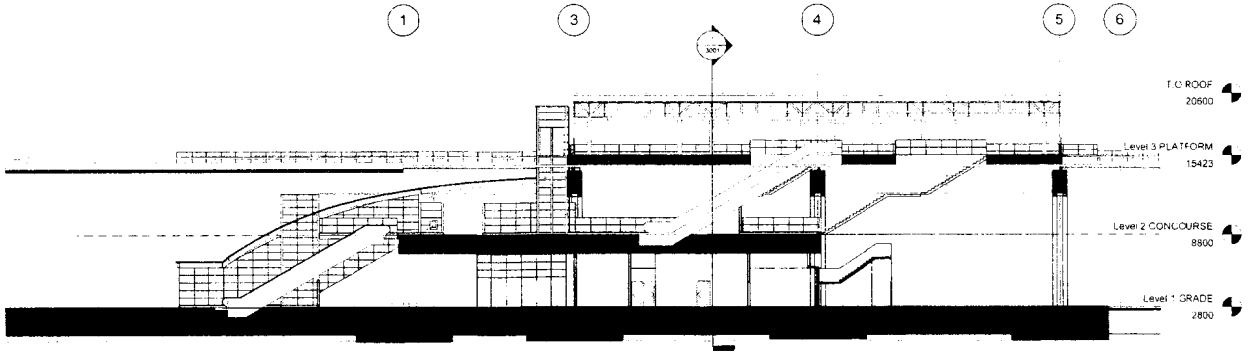

2 Section 2
1 : 200

DESIGNED Designer DATE
DRAWN Author DATE
CHECKED Checker DATE
APPROVAL Approver DATE

REFERENCE DRAWING

DWG. No	DESCRIPTION

REVISIONS

DATE	BY	DESCRIPTION	REV

CANADA LINE TRANSIT

PROFESSIONAL SEAL

SNC·LAVALIN
1800 – 1075 West Georgia Street
Vancouver, B.C.
Canada V6E 3C9
PBK ARCHITECTS
VIA ARCHITECTURE

BRIDGEPORT STATION

SECTIONS

SCALE As CONTRACT No
DATE
DRAWING No 016876-2100-44DD-8P-3001