MAP 16C

2015 April 09

# EXECUTIVE SUMMARY

This land use amendment application seeks to replace the 1995 Direct Control District (53Z95), with a new DC Direct Control District based on the Centre City Mixed Use District (CC-CX). The proposed Direct Control District would acknowledge the adjacent CP rail corridor, provides a range of bonus initiatives relevant to the location of the site within the downtown and allows for, but does not actively encourage residential development adjacent to the CP rail corridor.

# PREVIOUS COUNCIL DIRECTION

None

# ADMINISTRATION RECOMMENDATION(S)

That Calgary Planning Commission recommends **APPROVAL** of the proposed Land Use Amendment.

# RECOMMENDATION(S) OF THE CALGARY PLANNING COMMISSION

That Council hold a Public Hearing on Bylaw 79D2015; and

- ADOPT the proposed redesignation of 1.26 hectares ± (3.12 acres ±) located at 1111 9 Avenue SW (Plan 1423LK, Block 37) from DC Direct Control District to DC Direct Control District to accommodate mixed use development, in accordance with Administration's recommendation; and
- 2. Give three readings to the proposed Bylaw 79D2015.

#### **REASON(S) FOR RECOMMENDATION:**

The use of the Centre City Mixed Use District (CC-CX) is considered to be compatible with the land use to the south within the Beltline and provides a transition from the more intensive development of the downtown, acknowledging the CP rail corridor.

Administration considers that the proximity to the CP rail corridor provides for both a unique characteristic and specific site constraint that does not allow for the use of any of the standard land use districts in the Bylaw.

# ATTACHMENT

1. Proposed Bylaw 79D2015

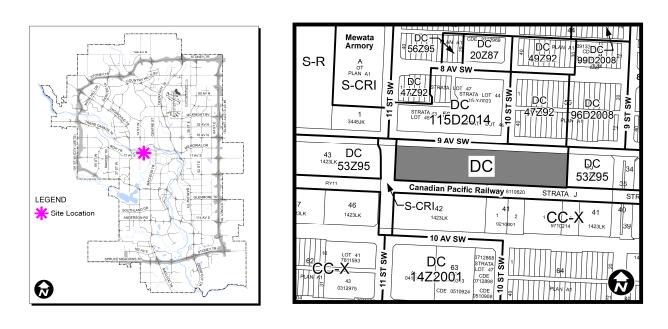
# CALGARY PLANNING COMMISSION REPORT TO COUNCIL 2015 JUNE 15

ISC: UNRESTRICTED CPC2015-080 LOC2014-0061 Page 2 of 29

#### LAND USE AMENDMENT DOWNTOWN WEST END (WARD 8) 9 AVENUE SW AND 11 STREET SW BYLAW 79D2015

**MAP 16C** 

# LOCATION MAPS





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# ADMINISTRATIONS RECOMMENDATION TO CALGARY PLANNING COMMISSION

Recommend that Council **ADOPT**, by bylaw, the proposed redesignation of 1.26 hectares  $\pm$  (3.12 acres  $\pm$ ) located at 1111 – 9 Avenue SW (Plan 1423LK, Block 37) from DC Direct Control District **to** DC Direct Control District to accommodate mixed use development with guidelines (APPENDIX II).

Moved by: R. Wright

**Carried: 4 – 1** Opposed: M. Logan

Reasons for Opposition from Mr. Logan:

- This application seems to be premature relative to a policy on rail corridor boundary condition.
- The DC definitions extend beyond a simple DC(CC-X) with rail corridor edge and would be more appropriate if presented with a development permit.

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#### Applicant:

# <u>Landowner:</u>

Dialog

Albari Holdings Ltd

Planning Evaluation Content	Issue	Page
Density	Vee	5
Is a <b>density increase</b> being proposed.	Yes	5
Land Use Districts		
Are the changes being proposed <b>housekeeping</b> or <b>simple bylaw amendment</b> .	Yes	5
Legislation and Policy		
Does the recommendation create <b>capital budget</b> impacts or concerns.	No	6
Transportation Networks		
Do different or specific <b>mobility considerations</b> impact this site	No	7
Utilities & Servicing		
Is the site in an area under <b>current servicing</b> review and/or has <b>major infrastructure</b> (water, sewer and storm) concern	No	7
Environmental Issues		_
Other considerations eg. sour gas or contaminated sites	Yes	7
Growth Management		
Does this site have the appropriate <b>growth management</b> direction.	Yes	7
Public Engagement	No	7
Were major comments received from the circulation	No	7

MAP 16C

# PLANNING EVALUATION

# SITE CONTEXT

The subject site is located on the south side of 9 Avenue SW, immediately adjacent to the Canadian Pacific rail corridor and consists of 1.26 hectares (3.12 acres) which is currently occupied by a single story industrial/commercial building, two ancillary buildings and hard surfacing, operated by Metro Ford Sales Ltd.

To the north of the site are surface parking lots and single storey commercial buildings. To the east is a surface parking lot and south, across the rail tracks, are single storey commercial developments.

# LAND USE DISTRICTS

Land Use Bylaw 1P2007 has specific requirements for the use of DC Direct Control Districts, and in this particular case Administration considers that the proximity to the CP rail corridor provides for both a unique characteristic and specific site constraint that does not allow for the use of any of the standard land use districts from the 1P2007 Bylaw.

The existing land use for the site is a DC Direct Control District (Bylaw 53Z95) where the stated purpose is to provide a mix of commercial, light industrial and residential uses which are compatible with each other in certain Downtown areas.

Bylaw 53Z95 does not define a maximum Floor Area Ratio (FAR) but does provide for a height restriction to a maximum of 12 metres, with the exception of hotel where this is increased to a maximum of 30 metres.

In addition, Bylaw 53Z95 does not acknowledge the potential risks of developing adjacent to the CP rail corridor or provide for any mitigation measures.

The applicant is seeking a new Direct Control District for the site that increases density, provides for bonus initiatives and includes rules for new development in proximity to rail operations.

The new DC Direct Control District Bylaw seeks to increase density in line with that allowed in the CC-X district on the south side of the CP rail corridor. The maximum density is set out as 5.0 FAR with the ability to provide bonus initiatives that could provide for an additional 7.0 FAR (total maximum 12.0 FAR).

The bonus initiatives that could be provided in exchange for the additional FAR are based on the CR-20 (Downtown) initiatives and listed below. The variations in this list of initiatives comprise no hierarchy of initiatives, an increase in the total maximum FAR for the financial contribution to the Central Business District Improvement Fund and a reduction in the list of community support facilities to match the uses of the CC-X District.

MAP 16C

Item No.	Bonus Initiative	Max. F.A.R
1	PUBLICLY ACCESSIBLE PRIVATE OPEN SPACE	2.0
2	PUBLIC ART – ON SITE	1.0
3	PUBLIC ART – CONTRIBUTION TO PUBLIC ART FUND	1.0
4	GREEN BUILDING FEATURES	2.5
5	BICYCLE STATION	2.0
6	TRANSIT ENHANCEMENTS	0.5
7	COMMUNITY SUPPORT FACILITIES	2.0
8	EXCEPTIONAL DESIGN	1.0
9	CONTRIBUTION TO CENTRAL BUSINESS DISTRICT IMPROVEMENT	2.0

In the standard CC-X district, residential development is not normally required to use bonus initiatives to achieve density. However because of the proximity of the CP rail corridor and the more complex nature of evacuations from multi residential buildings, the proposed DC requires all development above 5.0 FAR to use bonus initiatives. This acknowledges that residential development is possible, but ensures that it is not expressly promoted and this location is not recognized as being a preferred site for residential.

Given the proximity of the site to the CP rail corridor and the emerging Calgary rail corridor guidelines, a specific rule has been included to mitigate any potential impact of a rail accident adjacent to the development site through the provision of a setback and a crash wall. The relaxation rule ensures flexibility to accommodate other alternatives that may be defined in a risk assessment prepared by a qualified professional.

The proposed DC Direct Control District is attached at APPENDIX II.

# **LEGISLATION & POLICY**

The area is located within the West End area identified in the Centre City Plan, which acknowledges its evolving identity. The policies include evolving the West End as a vibrant, primarily residential neighbourhood and retaining the 11 Street SW at-grade crossing of the CP rail corridor. The site is shown as being within the mixed-use area in addition to a CPR special study area.

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The proposed DC Direct Control District acknowledges the mixed use area and because of its proximity to the CP rail corridor does not actively encourage residential uses, despite the rules requiring mitigation. Therefore, contrary to the normal CC-X District rules, even additional FAR for residential uses would require the use of density bonus initiatives.

# **TRANSPORTATION NETWORKS**

A high level Transportation Impact Assessment (TIA) was submitted in support of this application, to evaluate general impacts on the surrounding network and to evaluate the number of access points to the parcel off of 9 Avenue SW that would be appropriate.

A further detailed analysis would be required at the Development Permit stage, when a greater level of detail in respect of the proposed development is known. However, all access to and from the site would be required to come from 9 Avenue SW.

# **UTILITIES & SERVICING**

Development servicing will be determined at both the Development Permit (DP) and Development Site Servicing Plan (DSSP) stages to the satisfaction of Water Resources.

Public water, sanitary and storm utilities exist within the adjacent public right of way for development servicing purposes.

# **ENVIRONMENTAL ISSUES**

The proximity of the site to the CP rail corridor will require further consideration during any Development Permit review.

Any Development Permit application would be required to provide a Development Viability Study to ensure the appropriate mitigation of the potential impacts associated with building near railway operations. In addition, noise and vibrations studies would also be required.

The proposed Direct Control District contains mitigation measures taken from the Guidelines for New Development in Proximity to Railway Operations (May 2013) produced by the Railway Association of Canada and the Federation of Canadian Municipalities.

A Phase 1 Environmental Site Assessment report will be required with the submission of any Development Permit application

Any Development Permit application would be required to submit a sun shadow study to demonstrate that the proposed development would not adversely impact the Mewata Armoury sunlight protection area.

MAP 16C

# ENVIRONMENTAL SUSTAINABILITY

None relative to this application.

#### **GROWTH MANAGEMENT**

None relative to this application.

#### PUBLIC ENGAGEMENT

#### **Community Association Comments**

No comments were received at the time of writing this report.

# **Citizen Comments**

No comments were received at the time of writing this report.

#### **Public Meetings**

No public meetings were conducted for the purposes of this land use.

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# APPENDIX I

# **APPLICANT'S SUBMISSION**

This document is in support of the Land Use Redesignation application for the site 1111 9 Avenue SW. It provides an explanation of the key objectives and the reasoning behind the proposed Land Use Redesignation to Direct Control district.

The existing Metro Ford site is uniquely situated on the south side of 9 Avenue SW between 9 Street SW and 11 Street SW. The intent is to develop a phased high-density residential and multi-use development, to a maximum of 12 FAR.

The existing DC zoning for the site does not accommodate the required density or range of uses contemplated for this proposed development. Further, the adjacent CR20 zoning in the downtown is not appropriate as it is a bonus/commercial based development strategy. The CC-X zoning to the south in the beltline is outside the boundary, and the contemplated CR-N zoning to the west has not sufficiently evolved to meet our required development schedule.

A new DC zoning, generally based on the CC-X model, would allow for the appropriate range of permitted and discretionary uses, and provide for a density of up to 12 FAR. This density would facilitate a high density, highly integrate multi use development on this important gateway site.

MAP 16C

# APPENDIX II

# PROPOSED DIRECT CONTROL GUIDELINES

#### Purpose

- **1** This Direct Control District is intended to:
  - (a) provide for a mix of commercial, residential, automotive and a limited range of light industrial **uses** on the subject site;
  - (b) provide **development** standards addressing the subject site's proximity to the rail corridor; and,
  - (c) provide a *building* form that is street-oriented at *grade*; and
  - (d) provide the opportunity for a *density* bonus over and above base *density* to achieve public benefit and amenities within the same community.

#### Compliance with Bylaw 1P2007

2 Unless otherwise specified, the rules and provisions of Parts 1, 2, 3 and 4 of Bylaw 1P2007 apply to this Direct Control District.

#### Reference to Bylaw 1P2007

**3** Within this Direct Control District, a reference to a section of Bylaw 1P2007 is deemed to be a reference to the section as amended from time to time.

## **General Definitions**

- 4 In this Direct Control District,
  - (a) "crash wall" means a concrete structure constructed to reduce potential loss of life, damage to property and rail operations by intercepting or deflecting derailed engines and cars, and is designed to take into account variables such as train speed, weight and angle of impact.
  - (b) "Iow occupancy uses" means ancillary areas for storage, motor vehicle parking, bicycle storage facilities, vehicle loading areas, garbage loading and storage, mechanical and electrical equipment rooms and motor vehicle storage associated with an Vehicle Sales – Major and Vehicle Sales – Minor.
  - (c) "*rail corridor*" means land which is owned by a railway company or used by a railway company in the operation of a railway and contains a railway track or tracks.

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### Permitted Uses

5 The *permitted uses* of the Centre City Mixed Use District (CC-X) of Bylaw 1P2007 are the *permitted uses* in this Direct Control District.

# **Discretionary Uses**

- 6 The *discretionary uses* of the Centre City Mixed Use District (CC-X) of Bylaw 1P2007 are the *discretionary uses* in this Direct Control District with the addition of:
  - (a) **Auto Body and Paint Shop;**
  - (b) Auto Service Major;
  - (c) Auto service Minor;
  - (d) Vehicle Rental Major;
  - (e) **Vehicle Rental Minor**;
  - (f) Vehicle Sales Major; and
  - (g) Vehicle Sales Minor.

#### Bylaw 1P2007 District Rules

7 Unless otherwise specified, the rules of the Centre City Mixed Use District (CC-X) of Bylaw 1P2007 apply in this Direct Control District.

#### Floor Area Ratio

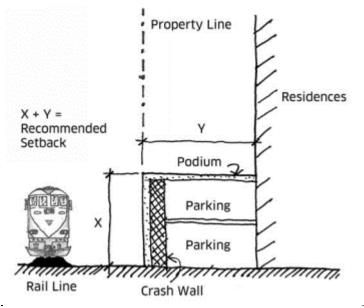
- 8 (1) The maximum *floor area ratio* is 5.0.
  - (2) The maximum *floor area ratio* referenced in subsection (1) may be increased in accordance with the subsections below and the provisions set out in Schedule C to a maximum total of 12.0.
  - (3) The amount of additional *gross floor area* achieved by providing the requirements of the public amenity items in Schedule C are calculated as a *floor area ratio*, an Incentive Ratio or an Incentive Rate.
  - (4) An Incentive Rate indicates that the amount of additional *gross floor area* will be calculated by dividing the cost of the provided public amenity item in Schedule C; or the amount of the contribution to a fund, by the respective Incentive Rate as established by Council for the Commercial Residential District (CR20-C20/R20) of Bylaw 1P2007.
  - (5) Public amenity items that may be provided to achieve additional *gross floor area* are listed in Schedule C.
  - (6) Unless otherwise specified, a public amenity item for which additional gross floor area has been achieved must be maintained on the parcel for so long as the development exists.

**MAP 16C** 

- (7) The *Development Authority* must determine whether a proposed amenity item is appropriate for the *development*.
- (8) Where *low occupancy uses* are located within the *rear setback area*, the gross floor area of the *low occupancy uses* within the *rear setback area* is not included in the calculation used to determine the *floor area ratio*.

# Setback Areas

- 9 (1) Where the *parcel* shares a *rear property line* with a *rail corridor* the *rear setback area* must have a minimum depth of 30 metres.
  - (2) The *rear setback area* set out in subsection (1) may be reduced where a *crash wall* is provided and the combination of the horizontal and vertical distances equal the minimum depth of 30 metres as illustrated in diagram 1 below.
  - (3) The rules in this section may be relaxed by the *Development Authority* if the test for relaxation set out in Bylaw 1P2007 is met.





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# Crash Wall

**10** The design and construction of the *crash wall* must:

- (1) account for the specified track speed;
- (2) account on an impact force height at 0.9 metres above *grade*; and
- (3) be minimum wall height of 2.13 metres above the top of the rail track within the *rail corridor*.
- (4) The rules in this section may be relaxed by the *Development Authority* if the test for relaxation set out in Bylaw 1P2007 is met.

#### **Required Motor Vehicle Parking Stalls**

- 11 (1) The minimum number of *motor vehicle parking stalls* established in this section must not be exceeded.
  - (2) For Assisted Living, Custodial Care, and Residential Care the minimum number of required *motor vehicle parking stalls* is the requirement referenced in Part 4 of Bylaw 1P2007.

#### (3) For **Dwelling Units** or **Live Work Units**:

- (a) the minimum *motor vehicle parking stall* requirement is 0.5 stalls per *unit*;
- (b) the maximum number of *motor vehicle parking stalls* that may be provided is:
  - (i) 1.0 stalls per *unit* where the *unit's gross floor area* is less than or equal to 125.0 square metres; and
  - (ii) 2.0 stalls per *unit* where the *unit's gross floor area* is greaterthan 125.0 square metres; and
- (c) the *visitor parking stall* requirement is 0.1 stalls per *unit*.
- (4) For a **Hotel**, the minimum number of required *motor vehicle parking stalls* is 1.0 per 3.0 guest rooms.

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- (5) The following *uses* require a parking study to determine the required minimum number of *motor vehicle parking stalls*, *bicycle parking stalls class 1* and *bicycle parking stalls class 2*:
  - (a) Indoor Recreation Facility;
  - (b) Library;
  - (c) Post-secondary Learning Institution.
- (6) Except for **Office** and *uses* listed in subsections (2) through (5), *uses* located on the ground floor do not require **motor vehicle parking stalls**.
- (7) For all other *uses*, the minimum number of required *motor vehicle parking stalls* is 0.7 per 100.0 square metres of *gross usable floor area*.

# **Restricted Parking Area**

- **12** (1) The maximum number of *motor vehicle parking stalls* for *developments* located within the Restricted Parking Area as illustrated on Map 13 of Bylaw 1P2007 is:
  - (a) the minimum number of *motor vehicle parking stalls* required in section 11 where:
    - (i) the *building* has a *floor area ratio* less than or equal to 3.0 when located on a *parcel* equal to or less than 1812.0 square metres;
    - the stalls are required for Assisted Living, Custodial Care, Residential Care, Dwelling Units, Hotel guest rooms or Live Work Units, including visitor parking stalls; or
    - (iii) a *development* has been approved for a cumulative 9300.0 square metres or greater of *gross usable floor area* for *uses* contained in the Sales Group of Schedule A to Bylaw 1P2007; and
  - (b) in all other cases 50.0 per cent of the required *motor vehicle parking stalls* referenced in section 11.
  - (2) A cash-in-lieu payment for the difference between the total number of *motor vehicle parking stalls* required in section 11 and the number of *motor vehicle parking stalls* allowed for in this section must be provided.
  - (3) Payments made under subsection (2) must be in accordance with Council's policy and calculated at the rate per motor vehicle parking stall established by Council at the time the payment is made.

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### **Street Walls**

- (1) Where the *building height* within 6.0 metres of a *property line* shared with a *street* is greater than 36.0 metres, the *building* must provide two of the following features, not including *signs*, to distinguish the base of the *building* from the rest of the *building*:
  - (a) *building* massing;
  - (b) facade articulation;
  - (c) textures;
  - (d) *building* materials; or,
  - (e) a minimum horizontal separation of 3.0 metres from the facade of the podium which is shared with the *street* and portions of the *building* located above the podium.
  - (2) The *building* features in subsection (1) have:
    - (a) a minimum height of 9.0 metres from *grade*; and
    - (b) a maximum height of 24 metres from *grade*.

#### Floor Plate Restrictions

- 14 Each floor of a *building* located partially or wholly above 36.0 metres above *grade*, and containing **Dwelling Units**, **Hotel** suites or **Live Work Units**, has a maximum:
  - (a) *floor plate area* of 930.0 square metres; and
  - (b) horizontal dimension of 44.0 metres.

#### **Tower Separation**

- 15 (1) The minimum horizontal separation between any floor of a *building* located partially or wholly above 36.0 metres above *grade*, and any floor of a *building* located partially or wholly above 36.0 metres above *grade* containing **Dwelling Units, Hotel** suites or **Live Work Units**, is required to be a minimum of 18.0 metres.
  - (2) The minimum horizontal separation between floors of *buildings* located partially or wholly above 36.0 metres above *grade*, containing *Dwelling Units*, Hotel suites or Live Work Units, is required to be a minimum of 24.0 metres.

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# SCHEDULE C

ltem No.	PUBLIC AMENITY ITEMS	
1.1	<b>PUBLICLY ACCESSIBLE PRIVATE OPEN SPACE</b> Publicly accessible private open space is defined as outdoor open space located on the <i>development parcel</i> that is made available to the public through a registered public access easement agreement acceptable to the Development Authority, and is in a location, form, configuration and constructed in a manner acceptable to the Development Authority.	
1.1.1	The maximum incentive floor area ratio for this item is 2.0.	
1.1.2	<ul> <li>Incentive calculation:         <ul> <li>The allowable bonus floor area in square metres is equal to the total construction or restoration cost of the bonus earning item, divided by the average land value per square metre of buildable floor area multiplied by 0.75.</li> <li>Method:</li></ul></li></ul>	
1.1.3	Requirements: A publicly accessible private open space includes the following:	
	(a) a location at <i>grade</i> or within 0.45 metres above or below <i>grade</i> ;	
	(b) a location adjacent to, and accessible from, a public sidewalk;	
	<ul> <li>(c) where the publicly accessible private open space shares a perimeter with a public sidewalk, <i>hard surfaced landscaped area</i> for a minimum of 40.0 per cent of that perimeter to enable direct pedestrian access from the sidewalk;</li> </ul>	
	<ul> <li>(d) a <i>building</i> along a minimum of 70.0 per cent of one side of its perimeter;</li> </ul>	
	<ul> <li>(e) a minimum contiguous area of the lesser of 10.0 per cent of the cumulative <i>parcel</i> area or:</li> </ul>	
	<ul> <li>(i) 250.0 square metres for sites greater than or equal to 1812.0 square metres in area; or</li> </ul>	
	<ul> <li>(ii) 150.0 square metres for sites of less than 1812.0 square metres in area;</li> </ul>	

[	(f)	a depth that is not greater than 3.0 times the <i>street</i> frontage;	
	(g)	<ul> <li>a maximum combined width of all entranceways to Office of the greater of:</li> <li>(i) 25.0 per cent of the <i>building</i> frontages forming the public square's perimeter; and</li> </ul>	
		(ii) 15.0 metres;	
	(h)	<ul> <li>(h) where mechanical systems or equipment are located inside the perimeter of the publicly accessible private open space, they must be screened and their surface areas are not included in the area calculation of the public open space;</li> </ul>	
	(i)	public seating as individual fixed seats or bench seating;	
	<ul> <li>(j) hard surfaced areas that exceed any minimum standards for <i>hard</i> <i>surfaced landscaped areas</i> as established in this Bylaw;</li> </ul>		
	(k)	a maximum cumulative total of 50.0 per cent of the area of the public square used as an <b>Outdoor Café</b> ;	
	(I)	where an <b>Outdoor Café</b> is enclosed by a fence, a fence design that can be removed; and	
	(m)	ensured public access 24 hours a day, seven days a week through a public access agreement.	
1.2	Publi susp into a	<b>IC ART – ON SITE</b> c art is publicly accessible art of any kind that is permanently ended, attached to a wall or other surface, or otherwise integrated a <i>development</i> . It is privately owned and must be an original piece in any style, expression, genre or media, created by a recognized	
1.2.1	The m	aximum incentive <i>floor area ratio</i> for this item is 1.0.	
1.2.2	<ul> <li>Incentive calculation:</li> <li>Where a <i>development</i> provides public art – on site the Incentive Rate is Incentive Rate 1.</li> <li>Method:</li> <li>Incentive gross floor area (square metres) = value of the artwork (\$)</li> </ul>		
		ed by Incentive Rate 1 (\$).	

1.2.3	<b>Requirements:</b> Public art – on site includes the following:	
	(a) artwork, the minimum value of which must be \$200000.00	
	<ul> <li>(b) the work of a recognized artist, i.e. created by a practitioner in the visual arts;</li> </ul>	
	(c) a location in a publicly accessible area; and	
	(d) a minimum of 75.0 per cent of the artwork located either:	
	(i) outdoors, at <i>grade</i> and visible from the public sidewalk;	
	<ul> <li>(ii) on the <i>building's</i> exterior and visible from the public sidewalk; or</li> </ul>	
	(iii) in an indoor park and visible from the publicly accessible <i>landscaped</i> areas or the public sidewalk at all times.	
1.3	PUBLIC ART – CONTRIBUTION TO PUBLIC ART FUND           Public art – contribution to public art fund is a financial contribution to a civic fund with the purpose of providing art on public land in the downtown.	
1.3.1	The maximum incentive <i>floor area ratio</i> for this item is 1.0.	
1.3.2	<ul> <li>Incentive calculation:         <ul> <li>Where a <i>development</i> provides a contribution to the public art fund the Incentive Rate is Incentive Rate 2.</li> </ul> </li> <li>Method:         <ul> <li>Incentive <i>gross floor area</i> (square metres) = value of the contribution to the public art fund (\$) divided by Incentive Rate 2 (\$).</li> </ul> </li> </ul>	
1.4	GREEN BUILDING FEATURES Green building features are physical components of a <i>building</i> that contribute to improving the local environment adjacent to the <i>building</i> . Improvements focus on enhancing air quality, reducing stormwater runoff, and improving the visual environment.	
1.4.0	(a) The maximum incentive <i>floor area ratio</i> for items 1.4.1 to 1.4.6 is a cumulative total of 2.5 for any combination of items 1.4.1 to 1.4.6.	
	(b) <b>Incentive calculation</b> : See incentive items 1.4.1 to 1.4.6.	
1.4.1	<b>ENVIRONMENTAL ROOF</b> An environmental roof is a roof that is designed to retain stormwater on site or to contain plants.	

1.4.1 (a)	The maximum incentive <i>floor area ratio</i> for this item is 0.7.	
(,		
1.4.1 (b)	Incentive calculation:	
	Where a <i>development</i> provides an environmental roof the Incentive	
	Ratio is 1:5.	
	Method:	
	Incentive gross floor area (square metres) = surface area of	
	environmental roof (square metres) multiplied by 5.0.	
1.4.1 (c)	Requirements:	
	An environmental roof includes the following:	
	(a) roof area that is:	
	<ul> <li>(i) permanently planted with vegetation and equipped with a growing medium and irrigation systems; or</li> </ul>	
	(ii) equipped with water collection and/or filtration systems	
	designed to collect rainwater for reuse or to minimize stormwater runoff; and	
	(b) walkways necessary for maintenance with a maximum width of	
	1.0 metre.	
1.4.2	GREEN WALL	
	A green wall is an indoor vertical, soft surfaced landscaped area. The	
	diagram in 1.4.2 (d) illustrates a potential implementation of the	
	requirements of 1.4.2 (c).	
1.4.2 (a)	The maximum incentive <i>floor area ratio</i> for this item is 1.0.	
1.4.2 (b)	Incentive Calculation:	
	Where a <i>development</i> provides a green wall the Incentive Ratio is 1:5	
	based on the vertical surface area of the green wall.	
	Method:	
	Incentive <i>gross floor area</i> (square metres) = vertical surface area (square metres) multiplied by 5.0.	

1.4.2 (c)	<ul> <li>Requirements:</li> <li>A green wall includes the following: <ul> <li>(a) a minimum vertical surface area of 20.0 square metres;</li> <li>(b) a minimum of 80.0 per cent of its vertical surface area covered vegetation;</li> </ul> </li> </ul>	l by
	(c) a location indoors at <i>grade</i> ;	
	(d) where located at-grade level, it fronts on to and is visible from the public sidewalk, grade level open space or on-site pedestr space.	
1.4.2 (d)	Diagram: (not to scale)	
	Green Wall	
	Side Front	
	Structure/irrigation system - natural plants - indoors - visible	
1.4.3	<b>BIORETENTION STRUCTURE</b> A bioretention structure is a structural framework that is inserted into the soil that transfers loads from the surface through the soil layers. The purpose of the structure is to retain and filter stormwater on site, to support evapotranspiration of retained stormwater and provide uncompacted planting soil for trees. The diagram in 1.4.3 (d) illustrates potential implementation of the requirements of 1.4.3 (c).	
1.4.3 (a)	The maximum incentive floor area ratio for this item is 1.5.	
1.4.3 (b)	Incentive calculation: Where a <i>development</i> provides a bioretention structure 0.1 <i>floor area</i> <i>ratio</i> for every 100.0 square metres of installed bioretention structure.	·····

1.4.3 (c)	Requirements:           A bioretention structure includes the following:
	(a) a minimum area of:
	<ul> <li>(i) 250.0 square metres for sites equal to or greater than 1812.0 square metres in area; or</li> </ul>
	<ul> <li>(ii) 150.0 square metres for sites of less than 1812.0 square metres in area;</li> </ul>
	<ul> <li>(b) a structural grid with a minimum depth of 0.4 metres to transfer surface loads through the soil layers;</li> </ul>
	<ul> <li>(c) installation in a location greater than 0.75 metres horizontal distanc from a <i>street</i>;</li> </ul>
	(d) a design to retain stormwater and either:
	(i) slowly discharge it into the municipal storm sewer system; or
	(ii) re-use it on site; and
	(iii) prevent seepage into groundwater below;
	<ul> <li>(e) a design to accommodate municipal utility and infrastructure systems;</li> </ul>
	(f) a location not above the first <i>storey</i> ;
	(g) a location within 0.5 metres of the <i>grade</i> of the adjoining public sidewalk where installed in planters or raised beds; and
	(h) Where they occupy the same area, no application in combination with incentive item 1.4.1.
1.4.3 (d)	Diagram: (not to scale)

# CALGARY PLANNING COMMISSION REPORT TO COUNCIL 2015 JUNE 15

# LAND USE AMENDMENT DOWNTOWN WEST END (WARD 8) 9 AVENUE SW AND 11 STREET SW BYLAW 79D2015

	Bioretention Section Structure	
	Min. area: 250.0 m <sup>2</sup> for sites equal or greater than 1812.0m <sup>2</sup> area 150.0 m <sup>2</sup> for sites less than 1812.0m <sup>2</sup> area 150.0 m <sup>2</sup> for sites less than 1812.0m <sup>2</sup> area Structure/load-bearing system Grade Grade Water release to sewer system Water releation	
1.4.4	ON-SITE COGENERATION FACILITY An on-site cogeneration facility is equipping a <i>building</i> with combined heat and power or combined heat, power and cooling machinery to serve the <i>building</i> .	
1.4.4 (a)	The maximum incentive floor area ratio for this item is 2.0.	
1.4.4 (b)	Incentive calculation: Where a <i>development</i> provides an on site cogeneration facility: (a) the additional <i>floor area ratio</i> for the connection to <i>district energy</i> infrastructure is 0.5;	
	(b) the additional <i>floor area ratio</i> for every <i>storey</i> of the <i>building</i> for the first 25 <i>storeys</i> above <i>grade</i> is 0.05; and	
	(c) the additional <i>floor area ratio</i> for every <i>storey</i> of the <i>building</i> above 25 <i>storeys</i> above <i>grade</i> is 0.025.	

1.4.4 (c)	Requirements:An on-site cogeneration facility includes:(a) a combined heat and power, cogeneration or trigeneration system in the <i>building</i> ;		
	<ul> <li>(b) a design to utilize thermal energy resulting from electricity production to heat and/or cool the <i>building</i>;</li> </ul>		
	<ul> <li>high-efficiency cogeneration, meaning an energy efficiency level of 80.0 per cent or greater; and</li> </ul>		
	<ul> <li>(d) an easement with a minimum width of 4.0 metres registered on the certificate of title for the <i>parcel</i> for a thermal pipe from the <i>property line</i> to the <i>building</i> and through the <i>building</i> to the allocated energy transfer station location.</li> </ul>		
1.4.5	ELECTRIC VEHICLE CHARGING STATIONS Electric vehicle charging stations are purpose built, electrical outlets locate in, or adjacent to, selected <i>motor vehicle parking stalls</i> designed to prov battery recharging ability to electric vehicles using the stalls.		
1.4.5 (a)	The maximum incentive <i>floor area ratio</i> for this item is 1.0.		
1.4.5 (b)	Incentive calculation: Where a <i>development</i> provides electric vehicle charging stations the Incentive Rate is Incentive Rate 1. Method: Incentive <i>gross floor area</i> (square metres) = cost of installed charging		
1.4.5 (c)	stations (\$) divided by Incentive Rate 1 (\$).		
1.4.5 (C)	<b>Requirements:</b> An electric vehicle charging station includes the following:		
	<ul> <li>(a) 1.0 battery charging unit with a minimum 220.0 Volt capacity or fast charging ability for each <i>motor vehicle parking stall</i>; and</li> </ul>		
	(b) signage indicating which <i>motor vehicle parking stalls</i> are equipped with charging stations.		

1.4.6 1.4.6 (a)	ADDITIONAL BICYCLE PARKING STALLSAdditional bicycle parking stalls is the provision of supplementary bicycleparking stalls – class 1 and associated change room facilities in additionto the minimum required bicycle parking stalls – class 1 of thedevelopment. The additional bicycle parking stalls – class 1 andassociated facilities provided may be integrated into the stalls and facilitiesrequired by the development with no physical separation.The maximum incentive floor area ratio for this item is 1.0.	
1.4.6 (b)	<ul> <li>Incentive calculation: Where a <i>development</i> provides additional bicycle parking stalls the Incentive Ratio is 1:7.5.</li> <li>Method: Incentive gross floor area (square metres) = gross floor area provided for <i>bicycle parking stalls – class 1</i> and change rooms (square metres) multiplied by 7.5.</li> </ul>	
1.4.6 (c)	Requirements:	
	Additional bicycle parking stalls include the following:	
	<ul> <li>(a) bicycle parking stalls – class 1 located either within the building or in a separate structure on the site;</li> </ul>	
	(b) a change room located either within the <i>building</i> or in a separate structure on the site with a minimum area of 20.0 square metres that contains:	
	(i) 1.0 locker for every 4.0 <i>bicycle parking stalls – class 1</i> ;	
	(ii) 1.0 shower for every 4.0 <i>bicycle parking stalls – class 1</i> ;	
	<ul> <li>(iii) 1.0 grooming station consisting of wash basin, mirror and electrical outlet for every 4.0 <i>bicycle parking stalls – class</i></li> <li><i>1</i>;</li> </ul>	
	(c) an area of 0.4 square metres for each locker and 0.4 square metres for each shower;	
	(d) use only by the tenants of the <i>development</i> ; and	
	<ul> <li>(e) a location together with the minimum required <i>bicycle parking</i> stalls – class 1.</li> </ul>	

1.5	<ul> <li>BICYCLE STATION         A bicycle station is a facility which provides secure bicycle parking for public use either on a long-term basis or on a short-term, on-demand basis. It provides facilities to its users that include showers, lockers, toilets and grooming stations and may also contain space for retail and service activities.     </li> <li>A bicycle station does not replace the required <i>bicycle parking stalls</i> of the <i>use</i>, but is instead intended for use by third parties outside of the</li> </ul>	
	<i>development</i> . The diagram in 1.5.4 illustrates a potential implementation of the requirements of 1.5.3.	
1.5.1	The maximum incentive <i>floor area ratio</i> for this item is 2.0.	
1.5.2	<ul> <li>Incentive calculation:</li> <li>Where a <i>development</i> provides a bicycle station the Incentive Ratio is 1:7.5.</li> <li>Method:</li> <li>Incentive <i>gross floor area</i> (square metres) = <i>gross floor area</i> provided for the bicycle station (square metres) multiplied by 7.5.</li> </ul>	
1.5.3	<ul> <li>Requirements:         <ul> <li>A bicycle station includes the following:</li> <li>(a) bicycle parking stalls – class 1 that are not required bicycle parking stalls – class 1 located either within the building or in a separate structure on the site;</li> </ul> </li> </ul>	
	<ul> <li>(b) a change room located either within the <i>building</i> or in a separate structure on the site containing a minimum of the following facilities:</li> </ul>	
	<ul> <li>(i) 1.0 shower for every 10.0 <i>bicycle parking stalls – class 1</i> greater than the minimum requirement for the first 200.0 <i>bicycle parking stalls – class 1</i>; and</li> </ul>	
	<ul> <li>(ii) 1.0 grooming station consisting of wash basin, mirror and electrical outlet for every 10.0 <i>bicycle parking stalls – class 1</i> greater than the minimum requirement for the first 200.0 bicycle parking stalls – class 1; and</li> </ul>	
	<ul> <li>(iii) 1.0 toilet for every 25.0 <i>bicycle parking stalls – class 1</i> greater than the minimum requirement for the first 100.0 <i>bicycle parking stalls – class 1</i>; and</li> </ul>	

		(iv)	1.0 locker for every 4.0 bicycle <i>bicycle parking stalls</i> – <i>class 1</i> ;
	(c)		by the public and no reservation for the sole use of the tenants e <i>development</i> ;
	(d)		alculation purposes an area of 0.4 square metres for each er and 0.4 square metres for each shower;
	(e)		cycle repair space of at minimum 2.0 metres by 3.0 metres in ension; and
	(f)		re retail and service uses are contained within the Bicycle ion their floor areas are included in the incentive <b>gross floor</b> r;
	(g)	wher	re located in a parkade:
		(i)	is on the closest parkade level to <b>grade</b> and physically separated from the <b>motor vehicle parking stalls</b> ;
		(ii)	no access provided only by stairs;
		(iii)	bicycle lanes in parkade ramps where these are shared with motor vehicles.
1.5.4	Diagra	<b>am:</b> (r	not to scale)
	Disc		Bicycle Station
	Plar	n View	
			Building
			Bicycle Station 1st parkade level I
			Bicycle Station in building at grade     august and
			marked from auto ramps

TRANSIT ENHANCEMENTS			
Transit enhancements is the construction of structures either as part of a <b>building</b> or as a separate structure that provide shelter from the elements to transit service users and that provide an amenity and design standard exceeding standard transit facilities.			
The maximum incentive <i>floor area ratio</i> for this item is 0.5.			
Incentive calculation:			
Where a <i>development</i> provides a transit shelter the Incentive Rate is Incentive Rate 1. Method:			
of the public transit shelter (\$) divided by Incentive Rate 1 (\$).			
Requirements: A transit enhancement includes the following:			
(a) a location on the <i>parcel</i> and adjacent to, and accessible from, a			
public sidewalk;			
(b) construction to a standard approved by the <i>Development</i>			
Authority;			
(c) public access during transit operating hours;			
(d) climate controlled from October to May; and			
(e) exterior walls that consist primarily of windows that are clear glazed except where the walls abut a <i>building</i> and where they contain structural elements of the <i>building</i> .			
COMMUNITY SUPPORT FACILITIES			
Community support facilities are spaces allocated to specific <b>uses</b> that			
have been determined by <i>The City</i> to support community activity and functionality.			
The maximum incentive <i>floor area ratio</i> for this item is 2.0.			
The maximum incentive noor area ratio for this item is 2.0.			
Incentive calculation:			
Where a <i>development</i> provides community support facilities the			
Incentive Ratio is 1:1. Method:			
Incentive gross floor area (square metres) = gross floor area provided			
for the community support facility (square metres) multiplied by 1.0.			

1.7.3	Requirements:				
	Community support facilities includes the following:				
	(a) provision of space for one or more of the following <b>uses</b> :				
	(i) Assisted Living;				
	(ii) Child Care Service;				
	(iii) Community Recreation Facility;				
	(iv) Custodial Care;				
	(v) Fitness Centre;				
	(vi) Indoor Recreation Facility;				
	(vii) Instructional Facility;				
	(viii) Library;				
	(ix) Performing Arts Centre;				
	(x) Place of Worship – Medium;				
	(xi) Place of Worship – Small;				
	(xii) Post Secondary Learning Institution;				
	(xiii) Protective and Emergency Service;				
	(xiv) Residential Care;				
	(xv) School – Private;				
	(xvi) Service Organization;				
	(xvii) Social Organization; and				
	(xviii)Supermarket;				
	<ul> <li>(b) the identification in floor plans of the proposed <i>building</i> of the space that is to be allocated to the community support facility; and</li> </ul>				
	(c) the requirement for a <i>development permit</i> upon change of <i>use</i> .				
1.8	EXCEPTIONAL DESIGN				
	Exceptional design is such that it incorporates architectural and urban design features and/or technologies that are deemed by the <b>Development Authority</b> to significantly enhance through visual and functional impacts the character of the urban environment.				
1.8.1	The maximum incentive <i>floor area ratio</i> for this item is 1.0.				
1.8.2	Incentive calculation: Where a <i>development</i> has been determined by the <i>Development</i> <i>Authority</i> to provide the requirements of 1.8.3, the additional <i>floor area</i> <i>ratio</i> is 1.0.				

1.8.3	Requirements:			
	<ul> <li>Exceptional design includes two or more of the following:</li> <li>(a) <i>building</i> massing, orientation and façade design not commonly implemented in the CR20-C20/R20 and CC-X Districts and that contributes to a memorable skyline and urban environment;</li> </ul>			
	<ul> <li>(b) <i>building</i> envelope designs employing materials or technology that have a positive effect on the public realm and are not commonly implemented in the CR20-C20/R20 and CC-X Districs;</li> </ul>			
	<ul> <li>(c) a floor plan that is not typical of Office buildings in the CR20- C20/R20 and CC-X Districts;</li> </ul>			
	<ul> <li>(d) improvements to the pedestrian environment in terms of sunlight penetration;</li> </ul>			
	(e) a positive contribution through architecture, urban design and uses to the vibrancy and activity of the pedestrian environment and the building's interfaces with the public realm at grade.			
1.9	CONTRIBUTION TO CENTRAL BUSINESS DISTRICT IMPROVEMENT FUND RATE 2 Financial contributions to a dedicated fund to be used to support off-site public realm improvements in the CR20-C20/R20 district. Off site public realm improvements include, but are not limited to, improvements to public sidewalks, squares and parks and the acquisition of land for public squares and parks.			
1.9.1	The maximum incentive <i>floor area ratio</i> for this item is 2.0.			
1.9.2	<ul> <li>Incentive calculation:</li> <li>Where a <i>development</i> provides a contribution to the <i>Central Business</i></li> <li><i>District Improvement Fund</i> Rate 2 the applicable Incentive Rate is Incentive Rate 2.</li> <li>Method</li> <li>The incentive gross floor area (square metres) = contribution amount (\$) divided by Incentive Rate 2 (\$).</li> </ul>			
1.9.3	A contribution must be made to the <b>Central Business District</b> Improvement Fund for the development.			