City of Richmond

Agenda

Development Permit Panel

Council Chambers, City Hall
6911 No. 3 Road

Wednesday, June 28, 2017
3:30 p.m.

Minutes

Motion to adopt the minutes of the Development Permit Panel meeting held on June 14, 2017.

1. Development Permit 17-766428

(REDMS No. 5406662 v. 5)

APPLICANT: Shaw Communications Inc.

PROPERTY LOCATION: 8480 River Road

Director's Recommendations

That a Development Permit be issued which would permit the construction of a new telecommunications services building and renovate an existing building at 8480 River Road on a site zoned "Light Industrial (IL)".

2. New Business

3. Date of Next Meeting: July 12, 2017

4. Adjournment

City of Richmond

Minutes

Development Permit Panel
Wednesday, June 14, 2017

Time:	3:30 p.m.
Place:	Council Chambers Richmond City Hall
Present:	Joe Erceg, Chair Cathryn Volkering Carlile, General Manager, Community Services John Irving, Director, Engineering

The meeting was called to order at 3:35 p.m.

Minutes

It was moved and seconded
That the minutes of the meeting of the Development Permit Panel held on May 24, 2017, be adopted.

CARRIED

1. Development Permit 15-700007
(REDMS No. 5334450)

APPLICANT: LANDA Elmbridge Holdings Ltd.

PROPERTY LOCATION: 7100 Elmbridge Way

INTENT OF PERMIT:

1. Permit the construction of a (15) storey, 26,128 m2 (281,241 ft2), mixed commercial and residential use tower and podium building at 7100 Elmbridge Way on a site zoned "Downtown Commercial (CDT1)"; and
2. Vary the provisions of Richmond Zoning Bylaw 8500 to:
   (a) Reduce the parking rate from the standard City-wide parking rate to the City Centre Zone 2 parking rate; and
   (b) Allow the unenclosed balconies on building levels 3-16 to project into the required front yard by up to 3.0 m.

Applicant's Comments

Arno Matis, Arno Matis Architecture, Inc., provided background information on the proposed development and highlighted the following:

- the proposed new building form meets the guidelines and requirements for the project;
- the terraced forms of the two towers are inspired by Richmond's topography and geography;
- the horizontally-expressed tower forms are visually broken with vertical accents to mitigate the massing of the towers;
- the tower forms are seamlessly integrated with the podium;
- commercial/retail spaces are located on the ground floor with residential units above;
- 14 affordable housing units are proposed for the project;
- outdoor plaza spaces are proposed along the street frontages including the public plaza at the corner of Elmbridge Way and Gilbert Road and outdoor café seating along the Gilbert Road frontage;
- significant setbacks from street frontages are required for the proposed development; and
- the main entrances to the towers are highlighted with entry features.

In response to a query from the Panel, Mr. Matis noted that the balcony projections on residential building levels three to sixteen into the required building setback occur at the northwest corner of the building.

Joseph Fry, Hapa Collaborative Landscape Architects, briefed the Panel on the main landscaping features of the project and highlighted the following:

- the proposed landscaping reflects the language of the building;
- sedimentary rock layering and terracing are used to create zones on the podium level which provide outdoor spaces and amenities for residents;
- the dragon's walk, a stone-paved promenade, unifies the podium landscape and provides pedestrian circulation in the entire podium landscape;
- grade transitions between the finished elevations of the street and the building's ground floor were appropriately managed to incorporate outdoor plaza spaces and provide accessibility to building entries; and
- public art is proposed to be located at the corner of Elmbridge Way and Gilbert Road and a specimen tree will be planted at the corner to replace the tree that was removed due to road widening.

Panel Discussion

In response to queries from the Panel, Mr. Fry stated that (i) the BC Hydro and street lighting kiosk midway along the Gilbert Road frontage is approximately 1.5 meters high at street elevation and will be screened with soft landscaping to mitigate its impact to adjacent patios, (ii) the proposed public art will be incorporated in an elevated small plaza with feature planter and specimen deciduous tree at the corner of Gilbert Road and Elmbridge Way, and (iii) the decision for the public art piece to be incorporated at the corner plaza has yet to be finalized.

In response to queries from the Panel, Mr. Matis noted that (i) the balconies on building levels 3 to 16 will only project into the required front yard setback and not beyond the property line of the subject site, (ii) the yellow glass guards of balconies are translucent and provide verticality and visual interest to the building facades, and (iii) rooftop decks can be accessed by a roof hatch.

In response to queries from the Panel, Janet Digby, Planner 3, noted that (i) there will be a covenant related to airport restrictions on building height which regulates construction of additional structures on rooftop decks, (ii) the height of railings on rooftop decks complies with the height restriction, and (iii) the applicant supports the installation of hose bibs on rooftop decks for maintenance of plants.

In response to queries from the Panel, Mr. Matis acknowledged that (i) vehicular entries are provided off Elmbridge Way and the City lane, (ii) a layby along the City lane and a truck loading space within the building at the north end of the site are proposed, (iii) garbage and recycling storage areas are proposed to be located within the building at the north and south ends of the development, (iv) residential units are located at the City lane elevation on the third, fourth and fifth levels, and (v) the affordable housing units are proposed to be located throughout the development.

Staff Comments

Wayne Craig, Director, Development, advised that (i) the proposed parking variance is supported by staff as it is consistent with Council policy for the use of City Centre parking rates in lieu of the standard parking rates where developments provide affordable housing units, and (ii) staff also support the proposed variance to allow the unenclosed balconies on building levels 3 to 16 to project onto the required front yard.

Mr. Craig further advised that (i) all of the 14 affordable housing units and 10 percent of market rental housing units will have Basic Universal Housing (BUH) features, (ii) the project will be connected to the Oval District Energy Utility, (iii) the applicant will provide a public art contribution of approximately $212,000, (iv) the project provides comprehensive indoor amenity spaces, (v) the building will be designed to meet the City's aircraft noise requirements, and (vi) there will be Servicing Agreements for frontage improvements along Gilbert Road, Elmbridge Way, and the City lane as well as upgrading of fronting utilities.

In response to a query from the Panel, Mr. Craig acknowledged that the City could still review the landscaping in the plaza at the northwest corner of the site after the finalization of the public art piece to be installed in the plaza.

Gallery Comments

None.

Correspondence

Anne Lerner, 12633 No. 2 Road (Schedule 1)

Mr. Craig noted that in her letter, Ms. Lerner expressed concern regarding the parking situation in the City and indicated that she does not support the proposed parking variance. In addition, Ms. Lerner expressed concern regarding the balcony encroachments and potential impacts on skyline and views.

In response to a query from the Panel, Mr. Craig confirmed that (i) the proposed variance related to balcony projections into the front yard setback is a result of road widening, and (ii) the proposed parking variance is consistent with Council policy to encourage developments to provide affordable housing units.

Panel Decision

It was moved and seconded

1. ***That a Development Permit be issued which would permit the construction of a (15) storey, 26,128 m^2 (281,241 ft^2), mixed commercial and residential use tower and podium building at 7100 Elmbridge Way on a site zoned "Downtown Commercial (CDT1)"; and***
2. ***Vary the provisions of Richmond Zoning Bylaw 8500 to:***
   - ***(a) reduce the parking rate from the standard City-wide parking rate to the City Centre Zone 2 parking rate; and***
   - ***(b) allow the unenclosed balconies on building levels 3-16 to project into the required front yard by up to 3.0 m.***

CARRIED

2. New Business

It was moved and seconded
That the meetings of the Development Permit Panel scheduled on Wednesday, August 9, 2017 and Wednesday, August 23, 2017 be cancelled.

CARRIED

3. Date of Next Meeting: June 28, 2017

4. Adjournment

It was moved and seconded
That the meeting be adjourned at 4:00 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, June 14, 2017.

Joe Erceg
Chair

Rustico Agawin
Auxiliary Committee Clerk

Schedule 1 to the Minutes of the Development Permit Panel meeting held on Wednesday, June 14, 2017.

MayorandCouncillors

From: annel200 . <annel200@gmail.com>
Sent: Friday, 9 June 2017 00:26
To: Day,Carol; MayorandCouncillors
Subject: Development Permit Panel meeting

7100 Elmbridge Way.
DP 15-700007
Zoning Bylaw 8500

Landa Elmbridge Holdings

Parking is so horrendous everywhere I think the city should abandon the concept of the City Centre Zone2 parking rate. The intent was good but a total failure. People aren't abandoning car ownership. Instead, the streets throughout Richmond are suddenly overfilled with parked cars because of the lessening of required condo/residential parking. **Require this development to supply the standard city-wide parking rate number of spaces.**

My second comment: **deny** their request to extend the unenclosed balconies on levels 3 -16 **up to 3 meters into the front yard (10 FEET)**. They knew the legal building parameters when they proposed their development. Our skyline/views already have large swaths totally blocked by massive buildings allowed to build too close to each other. Stop this now! Allowing this will delete more skyline views enjoyed by all residents.

The only benefit if this request is granted accrues to the builder's profits. The resulting increased square footage of the apartment/condo increases the price to buyers, **moving these units further out of the reach of local/family/middle class buyers.**

If an unenclosed balcony is a feature of the apartments, the architects must draw their plans to meet the city bylaws and not intrude into our air space/views.

Please submit this to the panel meeting. I am going overseas tomorrow and will not be able to attend to present my view in person.

Anne (Lerner)
12633 No. 2 Road

City of Richmond

Report to Development Permit Panel

To:	Development Permit Panel	**Date:**	June 12, 2017
From:	Wayne Craig Director, Development	**File:**	DP 17-766428
Re:	**Application by Shaw Communications Inc. for a Development Permit at 8480 River Road**		

Staff Recommendation

That a Development Permit be issued which would permit the construction of a new telecommunications services building and renovate an existing building at 8480 River Road on a site zoned "Light Industrial (IL)".

Wayne Craig
Director, Development

MM:blg
Att.2

Staff Report

Origin

Shaw Communications Inc. has applied to the City of Richmond for permission to develop a new 182 m^2 (1,959 ft^2) telecommunications services building at 8480 River Road on a site zoned "Light Industrial (IL)". The 809.5 m^2 (8,713 ft^2) site also currently contains a two-storey, 134 m^2 (1,442 ft^2) service building which will have its upper floor removed and the 67 m^2 (721 ft^2) ground floor level renovated. The proposal is consistent with the current "Light Industrial (IL)" zoning of the site. The applicant will also be constructing frontage improvements along River Road and up-grading the City's utility service connections via a City Work Order prior to Building Permit issuance.

Development Information

Please refer to the attached Development Application Data Sheet (Attachment 1) for a comparison of the proposed development data with the relevant bylaw requirements.

Background

Development surrounding the subject site is as follows:

- To the north, a light industrial building on a site zoned "Light Industrial (IL)".
- To the east, a vacant site zoned "Light Industrial (IL)"; under an in-process rezoning application for a large, high-density development including hotel, retail and office uses (RZ12-598104).
- To the south, a vacant site zoned Light Industrial (IL)"; under an in-process rezoning application for a large, high-density development including hotel, retail and office uses (RZ12-598104).
- To the west, River Road and a large vacant site zoned Light Industrial (IL)"; under a rezoning application for a large, high-density development including hotel, retail and office uses (RZ12-598104) and which is currently used seasonally for the Richmond Night Market.

Staff Comments

The proposed scheme attached to this report has satisfactorily addressed the significant urban design issues and other staff comments identified as part of the review of the subject Development Permit application. In addition, it complies with the intent of the applicable sections of the Official Community Plan Development Permit Guidelines and is generally in compliance with the City Centre Area Plan (CCAP) Development Permit Area Guidelines.

Analysis

Development Access and Frontage Works

The existing vehicle driveway leading onto River Road will remain in its current location on the north portion of the site. The developer will be responsible for the design and construction of River Road frontage works through a City Work Order for a new 2.0 m (6.6 ft.) wide concrete

sidewalk and 1.5 m (5.0 ft.) wide treed boulevard. The City Work Order, which will also include service connection upgrades, will be completed at the applicant's cost as a condition of Building Permit issuance.

Parking
The project will provide three (3) parking spaces and accommodate one (1) on-site SU9 (medium) loading truck as required under Zoning Bylaw 8500.

Tree Retention and Replacement
The applicant has submitted a Certified Arborist's Report which identifies on-site and off-site tree species, assesses tree structure and condition, and provides recommendations on tree retention and removal relative to the proposed development. The Report assesses two (2) live bylaw-sized trees on the subject property and two (2) trees on the neighbouring property to the north.

The City's Tree Preservation staff have reviewed the findings of the Arborist's Report and support the Arborist's findings, with the following comments:

- Two (2) live bylaw-size trees are proposed to be removed from the subject property.
- Two (2) trees located on adjacent neighbouring properties are identified to be retained and protected as per the project arborist's recommendations.

The applicant has agreed to plant four (4) trees on the lot, satisfying the 2:1 replacement ratio established in the OCP.

Conditions of Adjacency

- Surrounding uses in this block of River Road include older, small, single-storey, light industrial buildings and vacant lots. This area is designated under the CCAP as "Urban Centre T5 (45m)"; which provides for potential rezoning applications to facilitate hotel, office and retail developments of up to 45 m (148 ft.) in height and 2.0 FAR plus a 1.0 FAR Village Centre Bonus.
- The adjacent lot to the north at 8500 River Road includes a parking lot in front of a light industrial building. The CCAP includes a future planned potential extension of Douglas Road to the north on this lot.
- Across River Road, to the west, there is a 21.0 acre (8.5 ha) vacant site designated for "Urban Centre T5 (45 m)" and "Urban Centre T5 (25 m)"; which provides for potential rezoning applications to facilitate hotel, office and retail developments of up to 45 m (148 ft.) in height and 2.0 FAR plus a 1.0 FAR Village Centre Bonus.
- River Road will be substantially widened by the future development of this large site to the west while the adjacent site to the south will include new road frontage works similar to those proposed for the subject Shaw site.
- The subject project has been designed to complement these proposed adjacent developments.

Urban Design and Site Planning

- The proposed new single-storey 182 m^2 (1,959 ft^2) front building will be setback at 3.0 m (9.8 ft.) at its closest point to the front property line. The two (2) sections of the building's stepped façade will also be located at 3.3 m (10.7 ft.) and 2.0 m (6.6 ft.) back from the

proposed public sidewalk to be located partially within a 1.06 m (3.5 ft.) wide statutory right-of-way to be registered along the lot's frontage as discussed below.

- The existing 134 m^2 (1,442 ft^2) two-storey building located to the rear of the lot will have its upper floor removed and lower floor renovated to be in keeping with the design of the proposed front, one-storey building.
- The facility's parking lot is located on the north side of the lot with both buildings located to the south.
- The project provides an enhanced, engaging streetscape and casual surveillance of the public realm with a mini-plaza created by the stepping back of part of the building's front elevation.
- The stepping back of a section of the front building façade by 3.3 m (10.7 ft.) from the sidewalk which is generally in-line with the future high density buildings to be constructed to the south.
- The project includes a 1.5 m (5.0 ft.) landscaped buffer strip in the south side setback to the existing vacant lot and potential future high density buildings as envisioned by the CCAP.
- Along north side of the site, there is a proposed 1.0 m (3.3 ft.) wide landscaped buffer strip adjacent the parking lot on the adjacent lot and a 2.0 (6.6 ft.) high solid grey powder-coat, painted metal wall adjacent to the industrial building on the rear of the adjacent lot.

Architectural Form and Character

While the project is comprised of two (2) telecommunication service buildings that are not typically occupied, the front building has been designed to have the appearance of inhabited commercial buildings by including articulated building façades with large window-like glass spandrel panels.

The project's character is further shaped by:

- The use of modern, high quality grey metal panels in combination with the large spandrel glass, window-like panels on the front and part of the south side elevation of the front building.
- There will be a mural included on the wall surrounding the staircase adjacent to the front façade of the building.
- The use of light Cherry finish non-combustible wood-grain panels on the soffits and higher sections of the building and dark charcoal horizontal metal siding on the lower sections of the front building provides visual interest. The existing rear building's vinyl siding is also proposed to be replaced with this same cladding.
- Exterior lighting of the north parking lot is provided by attractive sconce lights affixed to the north side of the building to illuminate the parking lot.
- Two (2) large air handling units, needed for the electronic equipment within the building, will be mounted on a platform located between the front and rear buildings so as to not be visible from River Road.

Landscape Design and Open Space Design

- The side and rear of the site are enclosed with a black chain link fence while the River Road frontage of the site is enclosed by the front building and an architectural security gate with grey metal panels.

- Between the River Road frontage (with new sidewalk and boulevard) and the front building façade, there is a proposed mini plaza with a bench surrounded by planting beds of Oregon Grape, Salal and Blue Oat Grass.
- Three (3) Red Maple trees are proposed to be planted within the front setback and also provides for tree compensation for the two (2) on-site living trees to be removed.
- The 1.5 m (5.0 ft.) south side setback is landscaped with similar shrubs to those planted in the front.

Crime Prevention Through Environmental Design

- The site is completely enclosed with chain link fence, the security gate and the larger front building.
- The elevation of the front building and site landscaping has been designed to create a friendly pedestrian environment that will contribute to creating the surrounding pedestrian-oriented, urban environment.

Legal Agreements

The applicant will be registering three (3) legal agreements on Title as a condition of Development Permit issuance:

- A statutory right-of-way for one-half of the width (1.06 m (3.5 ft.)) of the River Road public sidewalk located on the site and for a future 4.0 m (13.1 ft.) by 4.0 m (13-1 ft.) corner cut at the northwest corner of the lot to allow for the future extension of Douglas Road along the north side of the slot.
- City's standard flood indemnification covenant.
- City's standard aircraft noise and indemnification covenant for aircraft noise non-sensitive uses.

Conclusions

As the proposed development would meet applicable CCAP policies and Development Permit Guidelines, staff recommends that the Development Permit be endorsed, and issuance by Council be recommended.

Mark McMullen
Senior Coordinator - Major Projects
(604-276-4173)

MM:blg

The following are to be met prior to forwarding this application to Council for approval:

- Development Permit Considerations in Attachment 2.

City of Richmond

Development Application Data Sheet

Development Applications Department

DP 17-766428 **Attachment 1**

Address: 8480 River Road

Applicant: Shaw Communications Inc. Owner: Shaw Communications Inc.

Planning Area(s): City Centre

Floor Area Gross: 249 m^2 Floor Area Net: 249 m^2

	Existing	Proposed
Site Area:	809.6 m^2	809.6 m^2
Land Uses:	Telecommunications Service Building	Telecommunications Service Building
OCP Designation:	Commercial	Commercial
Zoning:	Light Industrial (IL)	Light Industrial (IL)
Number of Units:	N/A	N/A

	Bylaw Requirement	Proposed	Variance
Floor Area Ratio:	1.2	0.31	none permitted
Lot Coverage:	Max. 80%	38.8%	
Setback – Front Yard:	Min. 3.0 m	3.0 m	
Setback – Side Yard (South):	Min. 0.0 m	1.5 m for building 0.22 m for air cond. units	
Setback – Side Yard (North):	Min. 0.0 m	>1.5 m	
Setback – Rear Yard:	Min. 0.0 m	1.6 m	
Height (m):	Max. 15 m	7.31 m	
Lot Size:	N/A	809.6	
Total off-street Spaces:	N/A	2	

City of Richmond

ATTACHMENT 2

Development Permit Considerations

Development Applications Department
6911 No. 3 Road, Richmond, BC V6Y 2C1

Address: 8480 River Road **File No.:** DP 17-766428

Prior to approval of the Development Permit, the developer is required to complete the following:

1. Registration of a Statutory Right of Way with a 1.06 m width (for public sidewalk) and a 4.0 m by 4.0 m corner cut at the northeast corner of the property (for the future extension Douglas Road) shown on Schedule 'A' along the entire frontage of 8480 River Road to allow for public pedestrian and vehicle access and public utilities to be constructed by or for the developer under a City Work Order, with on-going City and other public utility company maintenance of the works.
2. Adherence to the arborist reports from McElanney Consulting Services Ltd. dated Februray 14, 2017 and June 5, 2017 regarding the protection tree nos. OS1 and OS2 on the adjacent lot at 8500 River Road.
3. Receipt of a Letter of Credit for landscaping in the amount of $6,605.74 (based on the costs estimate provided by a CSLA registered landscape architect, including 15% contingency).
4. Registration of an aircraft noise indemnity covenant on title.
5. Registration of a flood plain covenant on title identifying a minimum habitable elevation of 2.6 m GSC.
6. City acceptance of the developer's offer to voluntarily contribute $0.23 per buildable square foot (e.g. $451.00) to the City's public art fund.
7. City acceptance of the developer's voluntary contribution in the amount of $490.00 (i.e. $0.25/ft^2 of buildable area, excluding affordable housing) to future City community planning studies, as set out in the City Centre Area Plan.

Prior to Building Permit Issuance, the developer must complete the following requirements:

1. Enter into a City Work Order at the developer's sole cost for the design and construction of the works within and adjacent to River Road. Works include, but may not be limited to the works included the attached Schedule 'A'.
2. Submission of a Construction Parking and Traffic Management Plan to the Transportation Department. Management Plan shall include location for parking for services, deliveries, workers, loading, application for any lane closures, and proper construction traffic controls as per Traffic Control Manual for works on Roadways (by Ministry of Transportation) and MMCD Traffic Regulation Section 01570.
3. Obtain a Building Permit (BP) for any construction hoarding. If construction hoarding is required to temporarily occupy a public street, the air space above a public street, or any part thereof, additional City approvals and associated fees may be required as part of the Building Permit. For additional information, contact the Building Approvals Department at 604-276-4285.

Note:

* This requires a separate application.

- Where the Director of Development deems appropriate, the preceding agreements are to be drawn not only as personal covenants of the property owner but also as covenants pursuant to Section 219 of the Land Title Act.

  All agreements to be registered in the Land Title Office shall have priority over all such liens, charges and encumbrances as is considered advisable by the Director of Development. All agreements to be registered in the Land Title Office shall, unless the Director of Development determines otherwise, be fully registered in the Land Title Office prior to enactment of the appropriate bylaw.

  The preceding agreements shall provide security to the City including indemnities, warranties, equitable/rent charges, letters of credit and withholding permits, as deemed necessary or advisable by the Director of Development. All agreements shall be in a form and content satisfactory to the Director of Development.

- Additional legal agreements, as determined via the subject development's Servicing Agreement(s), Work Order and/or Development Permit(s), and/or Building Permit(s) to the satisfaction of the Director of Engineering may be required including, but not limited to, site investigation, testing, monitoring, site preparation, de-watering, drilling, underpinning, anchoring, shoring,

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piling, pre-loading, ground densification or other activities that may result in settlement, displacement, subsidence, damage or nuisance to City and private utility infrastructure.

- Applicants for all City Permits are required to comply at all times with the conditions of the Provincial *Wildlife Act* and Federal *Migratory Birds Convention Act*, which contains prohibitions on the removal or disturbance of both birds and their nests. Issuance of Municipal permits does not give an individual authority to contravene these legislations. The City of Richmond recommends that where significant trees or vegetation exists on site, the services of a Qualified Environmental Professional (QEP) be secured to perform a survey and ensure that development activities are in compliance with all relevant legislation.

_____ _____

Signed Date

Initial: _____ ___

Schedule 'A'
Engineering Servicing Works

The following works must be constructed via a City Work Order at the developer's cost.

Engineering Works

1. Water Works:

Using the OCP Model, there is 256 L/s of water available at a 20 psi residual at the hydrant located at the southeast corner of River Road and West Road. Based on your proposed development, your site requires a minimum fire flow of 220 L/s.

- At the developers cost, the Developer is required to:
  - At building permit stage, submit Fire Underwriter Survey (FUS) or International Organization for Standardization (ISO) fire flow calculations to confirm the development has adequate fire flow for onsite fire protection. Calculations must be signed and sealed by a Professional Engineer and be based on Building Permit designs at Building Permit stage.

- At the developers cost, the City is to:
  - Complete all proposed watermain tie-ins.
  - Cut and cap at main the existing water service connection.
  - Provide a new service connection off of the existing watermain at River Road frontage.
  - Subject to the City's Fire Department review, provide a fire hydrant at the River Road frontage to meet the City's maximum 75 meter spacing between hydrants.

2. Storm Sewer Works:

- At the Developers cost, the City is to:
  - Cut and cap at main all existing storm service leads in the proposed site.
  - Remove the existing storm service leads and dispose offsite.
  - Provide a new storm sewer service connection off of the existing storm sewer at River Road.
  - Complete all proposed storm sewer tie-ins.

3. Sanitary Sewer Works:

- At the developers cost, the City is to:
  - Cut and cap the existing sanitary service lead at northwest corner of the proposed site.
  - Provide a new sanitary sewer service connection off of the existing sanitary sewer at River Road.
  - Complete all proposed sanitary sewer tie-ins.

4. Frontage Improvements:

- At the Developers cost, the Developer is required to:

  - Provide other frontage improvements as per Transportation requirements (below). Improvements shall be built to the ultimate condition wherever possible.
  - Provide pre-ducting at River Road frontage to facilitate future undergrounding of existing overhead lines.
  - Final confirmation on whether the existing BC Hydro pole at the northeast corner will conflict with the proposed driveway and confirm whether relocation of that pole is required. If required, it is the developer's responsibility to coordinate with private utility companies the relocation/modification of the existing pole.

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- Final confirmation from the developer and utility providers to determine if above ground structures are required now or in the future and coordinate their on-site locations (e.g. Vista, PMT, LPT, Shaw cabinets, Telus Kiosks, etc).
- To provide rights-of-ways to accommodate equipment and future under-grounding of the overhead lines.

- Locate all above ground utility cabinets and kiosks required to service the proposed development within the developments site (see list below for examples). A functional plan showing conceptual locations for such infrastructure shall be included in the development process design review. Please coordinate with the respective private utility companies and the project's lighting and traffic signal consultants to confirm the right of way requirements and the locations for the aboveground structures. If a private utility company does not require an aboveground structure, that company shall confirm this via a letter to be submitted to the City. The following are examples of SRWs that shall be shown in the functional plan and registered prior to SA design approval:

    - BC Hydro Vista - Confirm SRW dimensions with BC Hydro
    - BC Hydro PMT – Approximately 4mW X 5m (deep) – Confirm SRW dimensions with BC Hydro
    - BC Hydro LPT – Approximately 3.5mW X 3.5m (deep) – Confirm SRW dimensions with BC Hydro
    - Street light kiosk – Approximately 2mW X 1.5m (deep)
    - Traffic signal controller cabinet – Approximately 3.2mW X 1.8m (deep)
    - Traffic signal UPS cabinet – Approximately 1.8mW X 2.2m (deep)
    - Shaw cable kiosk – Approximately 1mW X 1m (deep) – show possible location in functional plan. Confirm SRW dimensions with Shaw
    - Telus FDH cabinet - Approximately 1.1mW X 1m (deep) – show possible location in functional plan. Confirm SRW dimensions with Telus

5. General Items:

- At the developers cost, the Developer is required to provide, prior to the Work Order being completed, a geotechnical assessment of preload and soil preparation impacts on the existing utilities (e.g., AC watermain, etc.) fronting or within the development site and provide mitigation recommendations.

Transportation Works

1. Along the entire River Road frontage, the developer is responsible for the design and construction of a new 2.0m wide concrete sidewalk, 1.5m wide treed boulevard, 0.15m wide curb/gutter, while maintaining/providing a min. 6.0m wide paved driving surface and 1.0m wide paved shoulder to the railway with necessary transitions to the existing roadway on either side of the subject lot.

2. A driveway letdown (as opposed to curb return as proposed) needs to be provided off River Road.

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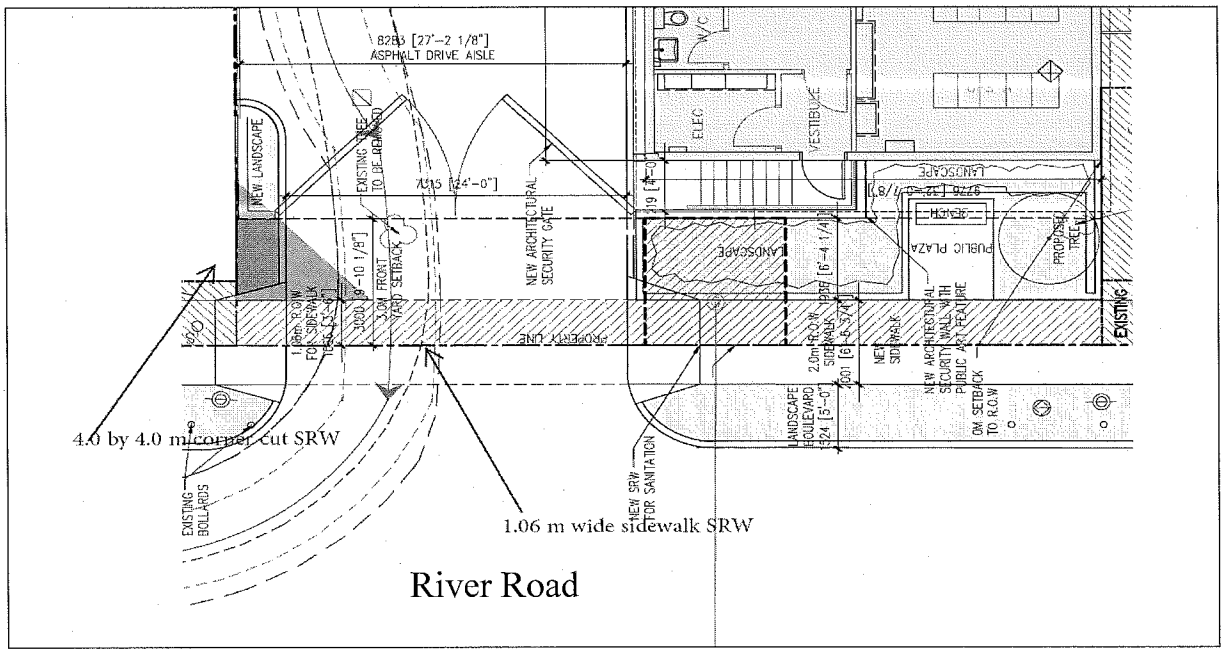
4.0 by 4.0 m corner cut SRW
1.06 m wide sidewalk SRW
River Road
EXISTING BOLLARDS
NEW SRW FOR SANITATION
NEW LANDSCAPE
EXISTING TREE TO BE REMOVED
8285 [27'-2 1/8"]
ASPHALT DRIVE AISLE
7315 [24'-0"]
NEW ARCHITECTURAL SECURITY GATE
PROPERTY LINE
3.0M FRONT YARD SETBACK
LANDSCAPE
ELEC
VESTIBULE
W/C
PUBLIC PLAZA
PROPOSED TREE
EXISTING
NEW SIDEWALK
NEW ARCHITECTURAL SECURITY WALL WITH PUBLIC ART FEATURE
0M SETBACK TO R.O.W.

City of Richmond

Development Permit

No. DP17-766428

To the Holder:	SHAW COMMUNICATIONS INC.
Property Address:	8480 RIVER ROAD
Address:	C/O KATHLEEN GIBNEY WENSLEY ARCHITECTURE 301 - 1444 ALBERNI STREET VANCOUVER, BC V6G 2Z4

1. This Development Permit is issued subject to compliance with all of the Bylaws of the City applicable thereto, except as specifically varied or supplemented by this Permit.
2. This Development Permit applies to and only to those lands shown cross-hatched on the attached Schedule "A" and any and all buildings, structures and other development thereon.
3. Subject to Section 692 of the Local Government Act, R.S.B.C.: buildings and structures; off-street parking and loading facilities; roads and parking areas; and landscaping and screening shall be constructed generally in accordance with Plans #DP17-766428-1 to #DP17-766428-9 attached hereto.
4. Sanitary sewers, water, drainage, highways, street lighting, underground wiring, and sidewalks, shall be provided as required.
5. As a condition of the issuance of this Permit, the City is holding the security in the amount of $6,605.74 to ensure that development is carried out in accordance with the terms and conditions of this Permit. Should any interest be earned upon the security, it shall accrue to the Holder if the security is returned. The condition of the posting of the security is that should the Holder fail to carry out the development hereby authorized, according to the terms and conditions of this Permit within the time provided, the City may use the security to carry out the work by its servants, agents or contractors, and any surplus shall be paid over to the Holder. Should the Holder carry out the development permitted by this permit within the time set out herein, the security shall be returned to the Holder. The City may retain the security for up to one year after inspection of the completed landscaping in order to ensure that plant material has survived.
6. If the Holder does not commence the construction permitted by this Permit within 24 months of the date of this Permit, this Permit shall lapse and the security shall be returned in full.

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7. The land described herein shall be developed generally in accordance with the terms and conditions and provisions of this Permit and any plans and specifications attached to this Permit which shall form a part hereof.

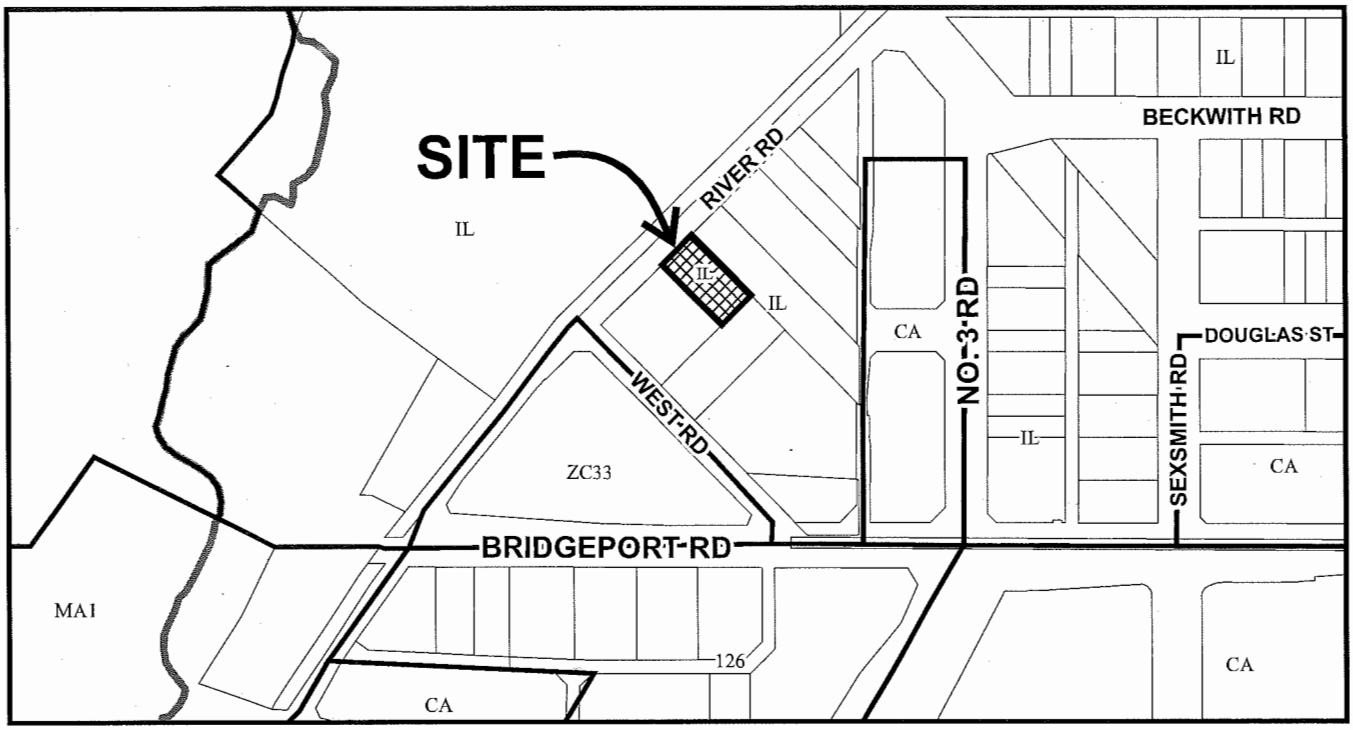
   This Permit is not a Building Permit.

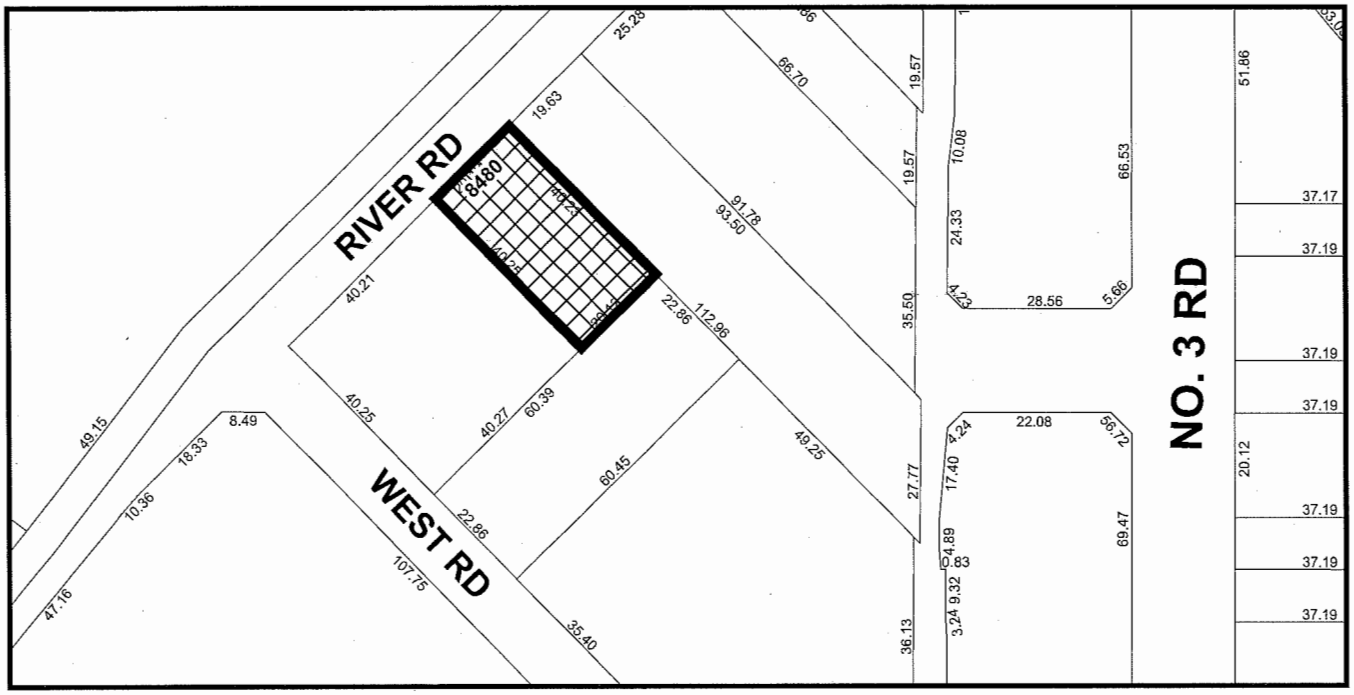
AUTHORIZING RESOLUTION NO. ISSUED BY THE COUNCIL THE DAY OF , .

DELIVERED THIS DAY OF , .

MAYOR

City of Richmond





DP 17-766428
SCHEDULE "A"

Original Date: 04/13/17

Revision Date: 05/04/17

Note: Dimensions are in METRES

ARCHITECTURAL DRAWING LIST:

A000	COVER/ CONTEXT PLAN
A001	SURVEY PLAN
A100	SITE PLAN
A101	VEHICLE TURNING TEMPLATE
A200	FLOOR PLANS BUILDING A & B
A300	PROPOSED ELEVATIONS BLDG A
A301	PROPOSED ELEVATIONS BLDG B
A400	BUILDING SECTIONS
A500	CONTEXT RENDERING
A600	3D RENDERING
A601	3D RENDERING

LANDSCAPE DRAWING LIST:

L1	LANDSCAPE PLAN
L2	LANDSCAPE SPECIFICATIONS

CONTEXT PLAN N.T.S.

LEGAL ADDRESS: LOT 1 , SECTION 21, BLOCK 5 NORTH, RANGE , 6 WEST,
NEW WESTMINSTER DISTRICT, PLAN 782 , PID#002-180-171

DP COMMENT RESPONSE SUBMITTAL JUNE 9, 2017

PROJECT NORTH

TRUE NORTH

Shaw

SHAW COMMUNICATIONS INC.
2728 HOPEWELL PLACE NE,
CALGARY AB

NO.	REVISION	M/D/Y
5	DP COMMENTS RESPONSE SUBMITTAL	06/09/17
4	DP COMMENTS RESPONSE SUBMITTAL	06/05/17
3	RE-ISSUED FOR DP	05/23/17
2	ISSUED FOR COMMENTS	05/17/17
1	ISSUED FOR DEVELOPMENT PERMIT	03/20/17

SEAL:

PROPOSED
SHAW RICHMOND
HUB

8480 RIVER ROAD
RICHMOND, B.C.

Wensley Architecture ltd
301 - 1444 Alberni St.
Vancouver, BC V6G 2Z4
tel 604.685.3529 fax 604.685.4574
office@wensleyarch.com

CONSULTANTS:
STRUCTURAL:
WSP GROUP
MECHANICAL:
RENBOLD ENGINEERING
ELECTRICAL:
TOTCHMORE ENGINEERING LTD.
LANDSCAPE:
PMG LANDSCAPE ARCHITECTS

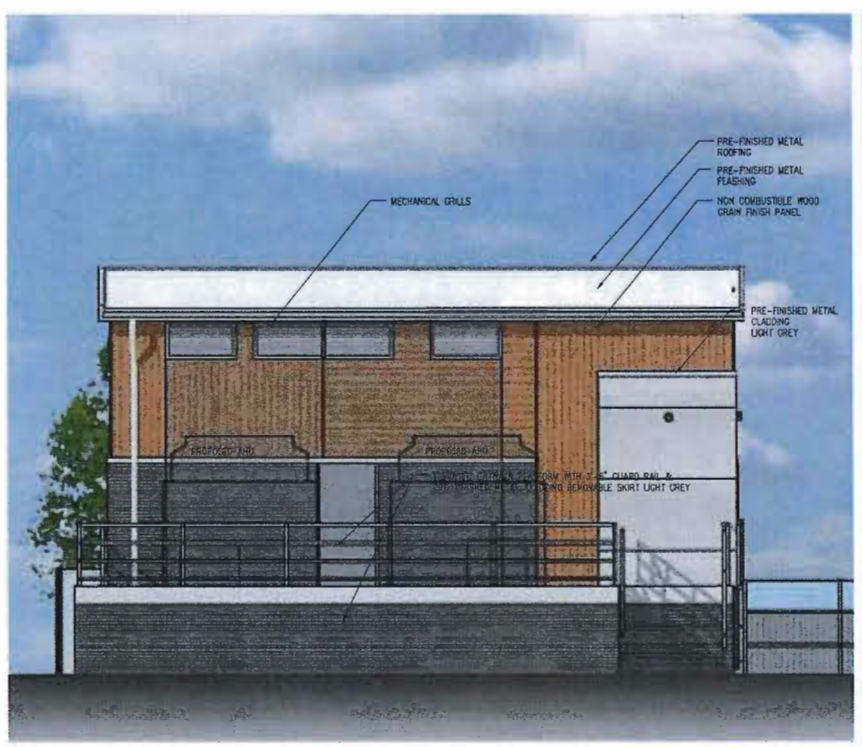
DRAWING TITLE:
COVER

PROJECT NO:	1682	DRAWN BY:	CS
SCALE:	1:100	DRAWING NO:	A000
DATE:	MAY 2017		

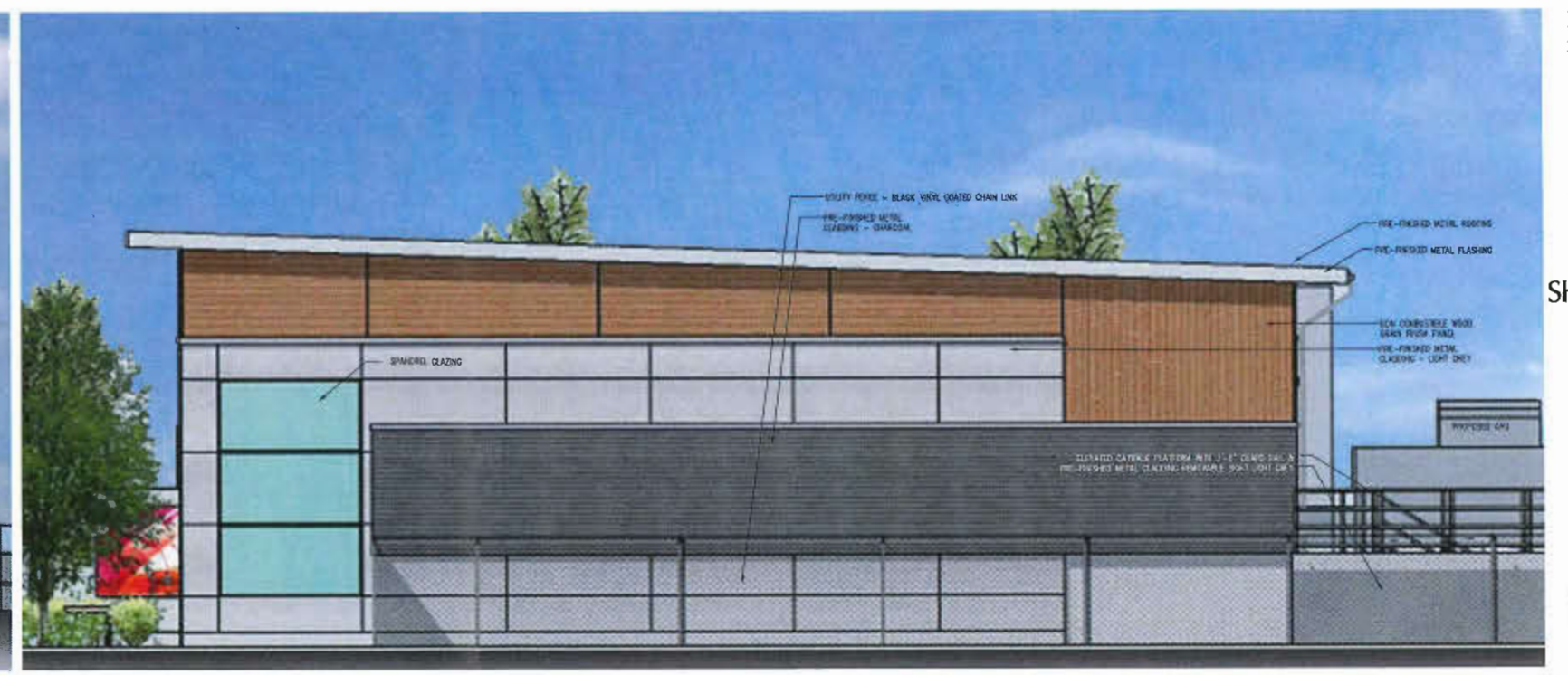
DP 17-766428-1

1 BUILDING ELEVATION (LOOKING PROJECT EAST)
1:50

2 BUILDING ELEVATION (LOOKING PROJECT SOUTH)
1:50



3 BUILDING ELEVATION (LOOKING PROJECT WEST)
1:50



4 BUILDING ELEVATION (LOOKING PROJECT NORTH)
1:50

Shaw

SHAW COMMUNICATIONS INC.
2728 HOPEWELL PLACE NE,
CALGARY AB

NO.	REVISION	M/D/Y
5	DP COMMENTS RESPONSE SUBMITTAL	06/08/17
4	DP COMMENTS RESPONSE SUBMITTAL	06/05/17
3	RE-ISSUED FOR DP	05/23/17
2	ISSUED FOR COMMENTS	05/17/17
1	ISSUED FOR DEVELOPMENT PERMIT	03/20/17

SEAL:

PROPOSED SHAW RICHMOND HUB

8480 RIVER ROAD
RICHMOND, B.C.

Wensley Architecture ltd
301 - 1444 Albert St.
Vancouver, BC V6G 2Z4
tel 604.685.3529 fax 604.685.4574
office@wensleyarch.com

CONSULTANTS:
STRUCTURAL:
WSP GROUP
MECHANICAL:
REINBOLD ENGINEERING
ELECTRICAL:
DESIGNCORE ENGINEERING LTD.
LANDSCAPE:
PMG LANDSCAPE ARCHITECTS

DRAWING TITLE:

ELEVATIONS BUILDING A

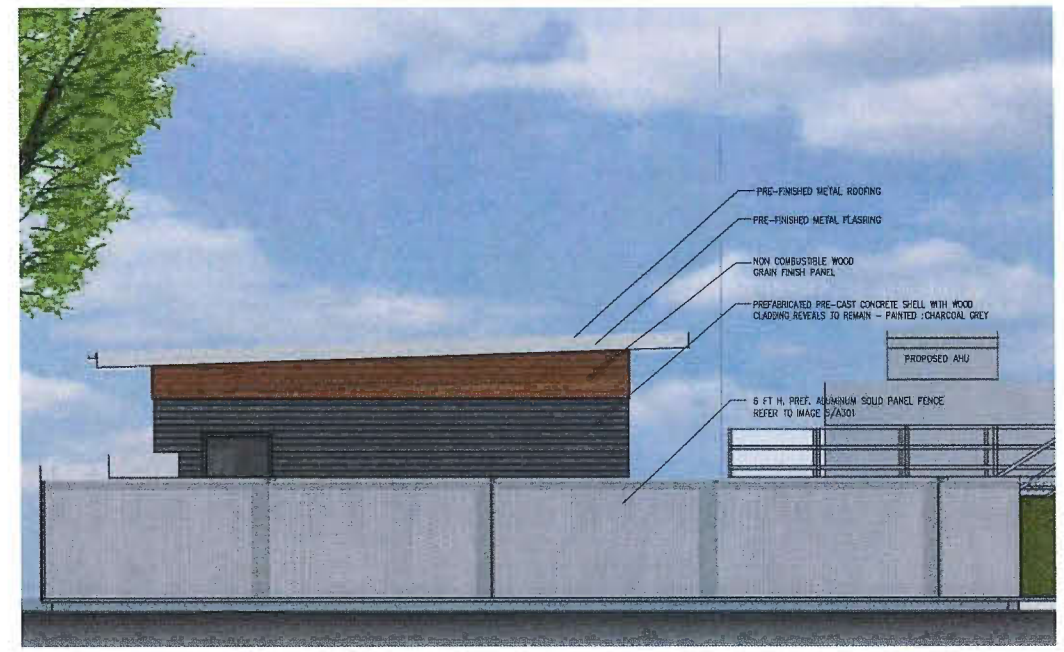
PROJECT NO:	1682	DRAWN BY:	CS
SCALE:	1:100	DRAWING NO:	A300
DATE:	MAY 2017		

DP 17-766428 -6

5 - PREF. ALUM. FENCE

N.T.S. PRECEDENT IMAGE FOR FORM & CHARACTER/MATERIAL OF PREFINISHED ALUMINUM FENCE. COLOUR TO BE LIGHT GREY.

1 - BUILDING ELEVATION (LOOKING PROJECT EAST)
1:50



2 - BUILDING ELEVATION (LOOKING PROJECT SOUTH)
1:50

3 - BUILDING ELEVATION (LOOKING PROJECT WEST)
1:50

4 - BUILDING ELEVATION (LOOKING PROJECT NORTH)
1:50

Shaw

SHAW COMMUNICATIONS INC.
2728 HOPEWELL PLACE NE,
CALGARY AB

NO.	REVISION	M/D/Y
5	DP COMMENTS RESPONSE SUBMITTAL	06/09/17
4	DP COMMENTS RESPONSE SUBMITTAL	06/05/17
3	RE-ISSUED FOR DP	05/23/17
2	ISSUED FOR COMMENTS	05/17/17
1	ISSUED FOR DEVELOPMENT PERMIT	03/29/17

SEAL:

PROPOSED SHAW RICHMOND HUB

8480 RIVER ROAD
RICHMOND, B.C.

Wensley Architecture ltd
301 - 1444 Alberni St.
Vancouver, BC V6G 2Z4
tel 604.685.3529 fax 604.685.4574
office@wensleyarch.com

CONSULTANTS:
STRUCTURAL
WSP GROUP
MECHANICAL:
REINHOLD ENGINEERING
ELECTRICAL:
DESIGNCORE ENGINEERING LTD.
LANDSCAPE:
PMG LANDSCAPE ARCHITECTS

DRAWING TITLE:
ELEVATIONS
BUILDING B

PROJECT NO:	1682	DRAWN BY:	CS
SCALE:	1:100	DRAWING NO:	A301
DATE:	MAY 2017		

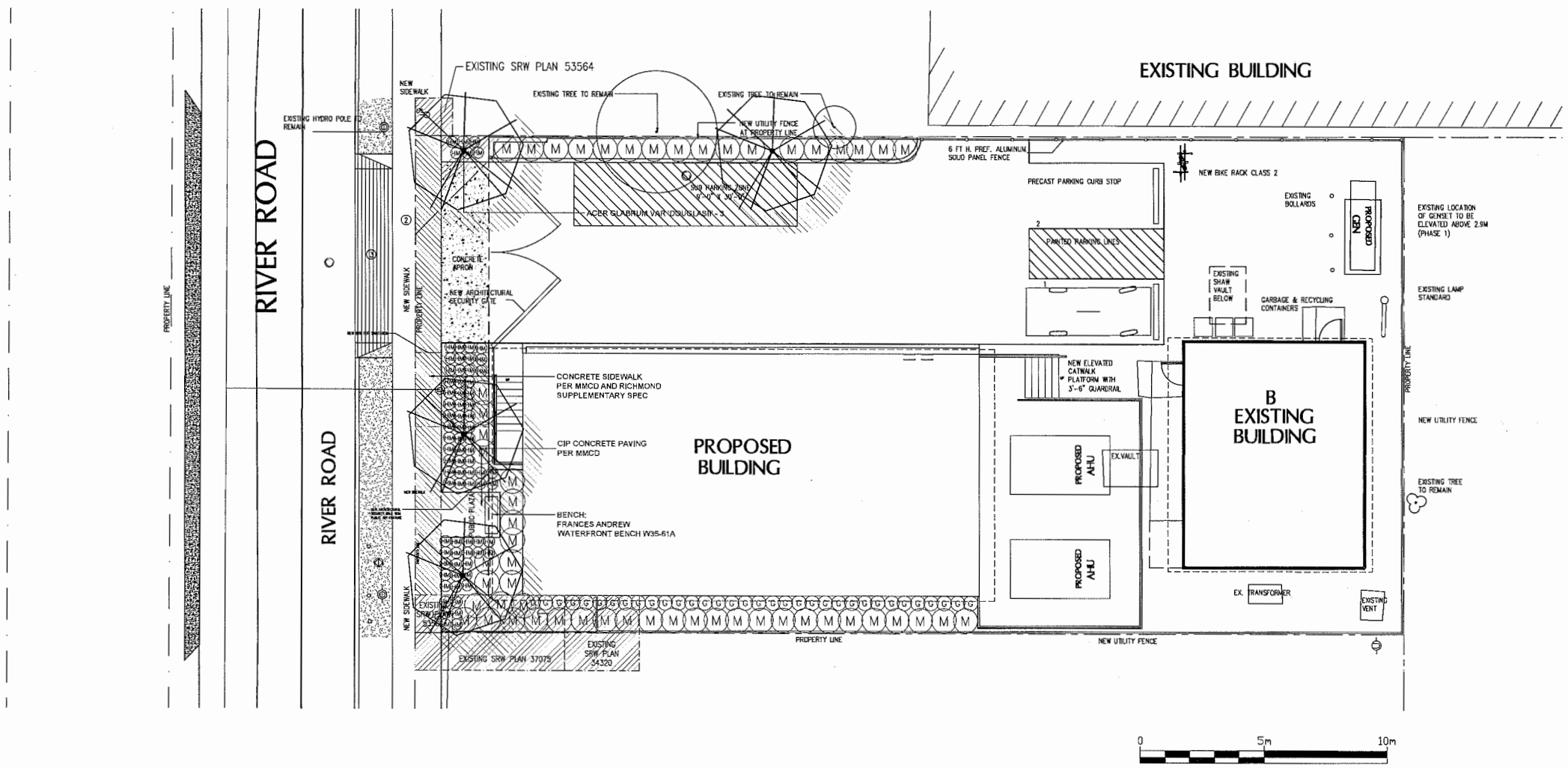
DP 17-706428-7

PLANT SCHEDULE

PMG PROJECT NUMBER: 17-018

KEY	QTY	BOTANICAL NAME	COMMON NAME	PLANTED SIZE / REMARKS
TREE				
(X)	4	ACER GLABRUM VAR. DOUGLASII	DOUGLAS MAPLE	6CM CAL; 1.5M STD., B&B
SHRUB				
(M)	56	MAHONIA AQUIFOLIUM	OREGON GRAPE HOLLY	#2 POT; 40CM
GRASS				
(HM)	77	HELICTOTRICHON SEMPERVIRENS	BLUE OAT GRASS	#1 POT; 46CM
GC				
(G)	34	GAULTHERIA SHALLON	SALAL	#1 POT; 20CM

NOTES: * PLANT SIZES IN THIS LIST ARE SPECIFIED ACCORDING TO THE CANADIAN LANDSCAPE STANDARD, LATEST EDITION. CONTAINER SIZES SPECIFIED AS PER CNLA STANDARDS. BOTH PLANT SIZE AND CONTAINER SIZE ARE THE MINIMUM ACCEPTABLE SIZES. * REFER TO SPECIFICATIONS FOR DEFINED CONTAINER MEASUREMENTS AND OTHER PLANT MATERIAL REQUIREMENTS. * SEARCH AND REVIEW: MAKE PLANT MATERIAL AVAILABLE FOR OPTIONAL REVIEW BY LANDSCAPE ARCHITECT AT SOURCE OF SUPPLY. AREA OF SEARCH TO INCLUDE LOWER MAINLAND AND FRASER VALLEY. * SUBSTITUTIONS: OBTAIN WRITTEN APPROVAL FROM THE LANDSCAPE ARCHITECT PRIOR TO MAKING ANY SUBSTITUTIONS TO THE SPECIFIED MATERIAL. UNAPPROVED SUBSTITUTIONS WILL BE REJECTED. ALLOW A MINIMUM OF FIVE DAYS PRIOR TO DELIVERY FOR REQUEST TO SUBSTITUTE. SUBSTITUTIONS ARE SUBJECT TO CANADIAN LANDSCAPE STANDARD - DEFINITION OF CONDITIONS OF AVAILABILITY. ALL LANDSCAPE MATERIAL AND WORKMANSHIP MUST MEET OR EXCEED CANADIAN LANDSCAPE STANDARD'S LATEST EDITION. ALL PLANT MATERIAL MUST BE PROVIDED FROM CERTIFIED DISEASE FREE NURSERY



pmg LANDSCAPE ARCHITECTS
Suite C100 - 4185 Still Creek Drive
Burnaby, British Columbia, V5C 6G9
p: 604 294-0011 ; f: 604 294-0022

SEAL:

NO.	DATE	REVISION DESCRIPTION	DR.
4	2017.06.12	NORTH PL LANDSCAPE BED	
3	2017.06.05	CITY RESUBMISSION	
2	2017.05.23	REVISED LANDSCAPE	MM
1	2017.03.13	REVISED LANDSCAPE	YR

CLIENT:

PROJECT:

SHAW BUILDING

8480 RIVER ROAD
RICHMOND, B.C.

DRAWING TITLE:

LANDSCAPE PLAN

DATE: 17.FEB.15
SCALE: 1:100
DRAWN: MM
DESIGN: MM
CHK'D:

DRAWING NUMBER:

L-1

OF 2

17018-5.ZIP

PMG PROJECT NUMBER: **17-018**

DP 17-700428 - 8

PART ONE GENERAL REQUIREMENTS

1.1 REFERENCES

.1 CCDC Doc 2 2008
Comply with all articles in the General Conditions of Contract in conjunction with this section unless superseded by other Contract Documents.

.2 Canadian Landscape Standard, latest edition, prepared by The Canadian Society of Landscape Architects and the Canadian Landscape & Nursery Association, jointly. All work and materials shall meet standards as set out in the Canadian Landscape Standard unless superseded by this specification or as directed by Landscape Architect with written instruction.

.3 MASTER MUNICIPAL SPECIFICATIONS & STANDARD DETAILS, 2003 edition, prepared by the Consulting Engineers of British Columbia, Roadbuilders and Heavy Construction Association, and the Municipal Engineers Division

.4 STANDARD FOR LANDSCAPE IRRIGATION SYSTEM, 2003 Prepared by the Irrigation Industry Association of British Columbia.

.5 MUNICIPAL BYLAWS AND ENGINEERING SPECIFICATIONS WHERE NOTED.

1.2 TESTING

.1 A current test more than one month) test for all growing medium to be used on this site is required. Provide and pay for testing by an independent testing facility pre-approved by the Landscape Architect. Deliver growing medium test results to Landscape Architect for review and approval prior to placement. Refer to Section 3.4 Growing Medium Testing for procedure.

.2 Owner reserves the right to test or re-test materials. Contractor responsible to pay for testing if materials do not meet specification.

1.3 SUBMITTALS

.1 Any alternate products differing from that contained in the contract documents must be pre-approved by the Landscape Architect.

.2 Submittals to consist of product sample or manufacturer's product description.

1.4 SITE REVIEW

.1 Under the terms of the Landscape Architect's Contract with the Owner and where the Landscape Architect is the designated reviewer, the Landscape Architect will observe construction as is necessary in their opinion to confirm conformance to the plans and specifications. Contact Owners Representative to arrange for site observation at the appropriate times. Allow two days notice. Observation schedule may include but will not be limited to the following:

.1.1 Start Up Site Meeting, General Contract-Prior to any site disturbance, a meeting with the general contractor to review tree preservation issues, general landscape issues and municipal requirements.

.1.2 Start Up Site Meeting, Landscape Contract (if separate)-At the start of work with Owner's Representative, Site Superintendent and Landscape Contractor; a meeting is to be held to review expected work and to verify the acceptability of the subgrade and general site conditions for the Landscape Contractor. Provide growing medium test results for this meeting.

.1.3 Progress Site Visits: To observe materials and workmanship as necessary through the course of the work. Review of different aspects of the work may be dealt with on any single visit. Such elements may include: Site Layout, Rough Grading, Growing Medium – quality, depths, finish grading; Drainage and Drainage Materials; Lawns or Grass areas; Planting–plant material including negotiations with suppliers, nursery inspections, plant sizes, quality, quantity, planting practice and layout, tree support; Mulch; Irrigation Systems; Play Equipment; Site Furniture, and other elements of the site development where the Landscape Architect is the designated reviewer such as: Pedestrian Paving, Fencing, Non-structural walls and stairs, Unit Paving.

.1.4 Substantial Performance: Review of all work, accounting of all substitutions, deletions; plant counts, preparations of deficiency list, and recommendations for completion.

.1.5 Certificate of Completion Upon the declaration of Substantial Performance, a recommendation for the issuance of the Certificate of Completion will be made to the Payment Certifier as defined in the contract.

.1.6 Deficiency Review Prior to the completion of the holdback period, check for completion of deficiencies. Once completed, a Schedule 'C' will be issued where required.

.1.7 Warranty Review Prior to the completion of the warranty period (+/- 11 months after issuance of the Certificate of Completion), review all warranty material and report recommendations for warranty replacement.

1.5 WORKMANSHIP

.1 Unless otherwise instructed in the Contract Documents, the preparation of the subgrade shall be the responsibility of the General Contractor. Placement of growing medium constitutes acceptance of the subgrade by the Landscape Contractor. Any subsequent corrections to the subgrade required are the responsibility of the Landscape Contractor.

.2 All work and superintendence shall be performed by personnel skilled in landscape contracting. In addition, all personnel applying herbicides and/or pesticides shall hold a current license issued by the appropriate authorities.

.3 A site visit is required to become familiar with site conditions before bidding and before start of work.

.4 Confirm location of all services before proceeding with any work.

.5 Notify Landscape Architect of any discrepancies. Obtain approval from Landscape Architect prior to deviating from the plans.

.6 Take appropriate measures to avoid environmental damage. Do not dump any waste materials into water bodies. Conform with all federal, provincial and local statutes and guidelines.

.7 Collect and dispose of all debris and/or excess material from landscape operations. Keep paved surfaces clean and repair damage resulting from landscape work. Repairs are to be completed prior to final acceptance.

.8 Where new work connects with existing, and where existing work is altered, make good to match existing undisturbed condition.

1.6 WARRANTIES

.1 Guarantee all materials and workmanship for a minimum period of one full year from the date of Certificate of Completion.

.2 Refer to individual sections for specific warranties.

PART TWO SCOPE OF WORK

2.1 SCOPE OF WORK

.1 Other conditions of Contract may apply. Confirm Scope of Work at time of tender.

.2 Work includes supply of all related items and performing all operations necessary to complete the work in accordance with the drawings and specifications and generally consists of the following:

.2.1 Retention of Existing Trees where shown on drawings.
.2.2 Finish Grading and Landscape Drainage.
.2.3 Supply and placement of growing medium.
.2.4 Testing of imported growing medium and/or site topsoil.
.2.5 Supply and incorporation of additives to meet requirements of soil test and Table One.
.2.6 Preparation of planting beds, supply of plant material and planting.
.2.7 –
.2.8 Preparation of lawn areas, supply of materials and sodding.
.2.9 Supply and placement of bark mulch.
.2.10 Maintenance of planted and seeded/sodded areas until accepted by Owner.
.2.11 SEPARATE PRICE: Establishment Maintenance, Section 3.11.
.2.12 Other work: Work other than this list, not specified by Landscape Architect.

2.2 MATERIALS

.1 Growing Medium Conform to Canadian Landscape Standard for definitions of imported and on-site topsoil. Refer to Table One below.

TABLE ONE: PROPERTIES OF GROWING MEDIUM FOR LEVEL 2 GROOMED AND LEVEL 3 MODERATE AREAS
Canadian System of Soil Classification Textural Class: "Loamy Sand" to "Sandy Loam".

Applications	Low Traffic Areas: Trees and Large Shrubs	High Traffic Areas: Lawn Areas	Planting Areas and Planters
Growing Medium Types	2L	2H	2P
Feature	Percent Of Dry Weight of Total Growing Medium		
Coarse Gravel: larger than 20mm	0 – 1%	0 – 1%	0 – 1%
All Gravel: larger than 2mm	0 – 5%	0 – 5%	0 – 5%
	Percent Of Dry Weight of Growing Medium Excluding Gravel		
Sand: larger than 0.05mm smaller than 2.0mm	50 – 85%	70 – 90%	60 – 80%
Silt: larger than 0.002mm smaller than 0.05mm	10 – 25%	0 – 15%	10 – 25%
Clay: smaller than 0.002mm	0 – 25%	0 – 15%	0 – 25%
Clay and Silt Combined	maximum 35%	maximum 15%	maximum 35%
Organic Content (coast)	3 – 10%	3 – 5%	10 – 20%
Organic Content (interior)	3 – 5%	3 – 5%	15 – 20%
Acidity (pH)	6.0 – 7.0	6.0 – 7.0	4.5 – 6.5
Drainage	Percolation shall be such that no standing water is visible 60 minutes after at least 10 minutes of moderate to heavy rain or irrigation.		

.2 Fertilizer: An organic and/or inorganic compound containing Nitrogen (N), Phosphate (P5), and Potash (potable (2) in proportions required by soil test.

.3 Lime: Ground agricultural limestone. Meet requirements of the Canadian Landscape Standard.

.4 Organic Additive: Commercial compost product to the requirements of the Canadian Landscape Standard, latest edition and pre-approved by the Landscape Architect. Recommended suppliers: The Answer Garden Products, Fraser Richmond Soils & Fibre, Stream Organics Management.

.5 Sand: Clean, washed pump sand to meet requirements of the Canadian Landscape Standard.

.6 Composted Bark Mulch: 19mm (3/4") minus Fir/Hemlock bark chips and fines, free of chunks and sticks, dark brown in colour and free of all soil, stones, roots or other extraneous matter. Fresh orange in colour bark will be rejected.

.7 Herbicides and Pesticides: If used, must conform to all federal, provincial and local statutes. Appliers must hold current licenses issued by the appropriate authorities in the area.

.8 Filter Fabric: A non-biodegradable blanket or other filtering membrane that will allow the passage of water but not fine soil particles. (Such as MIRAFI 140 NL, GEOLON H40 OR AMOCO 4545 or alternate product pre-approved by the Landscape Architect.)

.9 Drainage Piping if required: Schedule 40 PVC nominal sizes.

.10 Drain Rock: Clean, round, inert, durable, and have a maximum size of 19mm and containing no material smaller than 10mm.

.11 Plant Material: To the requirements of the Canadian Landscape Standard. Refer to 3.3, Plants and Planting. All plant material must be provided from a certified disease free nursery. Provide proof of certification.

.12 Sod: Refer to individual sections in this specification.

.13 Supplier and installers of segmental block walls to provide engineered drawings for all walls signed and sealed drawings for all walls, individually, in excess of 1.2m, or combinations of walls collectively in excess of 1.2m. Installations must be reviewed and signed off by Certified Professional Engineer; include cost of engineering services in Tender price.

.14 Miscellaneous: Any other material necessary to complete the project as shown on the drawings and described herein.

PART THREE SOFT LANDSCAPE DEVELOPMENT

3.1 RETENTION OF EXISTING TREES

.1 Prior to any work on site – protect individual trees or plant groupings indicated as retained on landscape plans as vegetation retention areas.

.1.1 In some instances the Landscape Architect will tag trees or areas to remain. Discuss tree retention areas at a start-up meeting with the Landscape Architect.

.2 A physical barrier must be installed to delineate clearing boundaries. Refer to physical barrier detail. If detail not provided, comply with local municipal requirements.

.3 No machine travel through or within vegetation retention areas or under crowns of trees to be retained is allowed.

.4 Do not stockpile soil, construction materials, or excavated materials within vegetation retention areas.

.5 Do not park, fuel or service vehicles within vegetation retention areas.

.6 No debris fires, clearing fires or fresh burning shall be permitted within vegetation retention areas.

.7 No excavations, drain or service trenches nor any other disruption shall be permitted within vegetation retention areas without a review of the proposed encroachment by the Landscape Architect.

.8 Do not cut branches or roots of retained trees without the approval of the Landscape Architect.

.9 Any damage to existing vegetation intended for preservation will be subject to evaluation by an I.S.A. Certified Arborist using the "Guide for Plant Appraisal", Eighth Edition, 1992.

.9.1 Replacement planting of equivalent value to the disturbance will be required. The cost of the evaluation and of the replacement planting will be the responsibility of the General Contractor and or the person(s) responsible for the disturbance.

.10 In municipalities with specific tree retention/replacement bylaws ensure compliance to bylaws.

.11 In situations where required construction may disturb existing vegetation intended for preservation, contact Landscape Architect for review prior to commencing construction.

3.2 GRADES

.1 Ensure subgrade is prepared to conform to depths specified in Section 3.5, Growing Medium Supply, below. Where planting is indicated close to existing trees, prepare suitable planting pockets for material indicated on the planting plan. Shape subgrade to eliminate free standing water and conform to the site grading and drainage plan.

.2 On slopes in excess of 3:1 French subgrade across slope to 150mm (6") minimum at 15m (5 ft) intervals minimum.

.3 Scarify the entire subgrade immediately prior to placing growing medium. Re-cultivate where vehicular traffic results in compaction during the construction procedures. Ensure that all planting areas are smoothly contoured after light compaction to finished grades.

.4 Eliminate standing water from all finished grades. Provide a smooth, firm and even surface and conform to grades shown on the Landscape Drawings. Do not exceed maximum and minimum gradients defined by the Canadian Landscape Standard.

.5 Construct swales free to line and grade, smooth and free of sags or high points. Minimum slope 2%, maximum side slopes 10%. Assure positive drainage to collection points.

.6 Slope not to exceed the following maximums: Rough Grass 3:1, Lawn 4:1, Landscape plantings 2:1.

.7 Finished soil/mulch elevation at building to comply with municipal requirements.

.8 Inform Landscape Architect of completion of finish grade prior to placement of sand, sod, plants or mulch.

3.3 LANDSCAPE DRAINAGE

.1 Related Work: Growing medium and Finish Grading, Grass areas, Trees Shrubs and Groundcovers, Planters, Crib Walls.

.2 Work included: Site finish grading and surface drainage. Installation of any drainage systems detailed on landscape plans. Note: Catch basins shown on landscape plans for coordination only, confirm scope of work prior to bid.

.2.1 Coordinate all landscape drainage work with rest of site drainage. Refer to engineering drawings and specifications for connections and other drainage work.

.2.2 Determine exact locations of all existing utilities and underground utilities prior to commencing work, which may not be located on drawings and conduct work so as to prevent interruption of service or damage to them. Protect existing structures and utility services and be responsible for damage caused.

.2.3 Plumber drains on slab: Refer to Section 3.10, Installing Landscapes on Structures.

.3 Execution

.3.1 Do trenching and backfilling in accordance with engineering details and specifications.

.3.2 Lay drains on prepared bed, true to line and grade with inverts smooth and free of sags or high points. Ensure barrel of each pipe is in contact with bed throughout full length.

.3.3 Commence laying pipe at outlet and proceed in upstream direction.

.3.4 Lay perforated pipes with perforations at 8pm and 4pm positions.

.3.5 Make joints tight in accordance with manufacturer's directions.

.3.6 Do not allow water to flow through the pipes during construction except as approved by Engineer.

.3.7 Make watertight connections to existing drains, new or existing manholes or catchbasins where indicated or as directed by Landscape Architect.

.3.8 Plug upstream ends of pipe with watertight clean out caps.

.3.9 Surround and cover pipe with drain rock in uniform 150mm layers by various depths as shown in details, minimum 300mm.

.3.10 Cover drain rock with non-woven filter cloth lap all edges and seams minimum 150mm.

.3.11 Assure positive drainage.

.3.12 Back fill remainder of trench as indicated.

.3.13 Protect subdrains from floatation during installation.

3.4 GROWING MEDIUM TESTING

.1 Submit representative sample of growing medium proposed for use on this project to an independent laboratory. Provide test results to Landscape Architect prior to placing. Test results to include:

.1.1 Physical properties, % content of gravel, sand, silt, clay and organics.

.1.2 Acidity (pH) and quantities of lime or sulphur required to bring within specified range.

.1.3 Nutrient levels of principle and trace elements and recommendations for required soil amendments.

.1.4 Carbon/Nitrogen level.

3.5 GROWING MEDIUM SUPPLY AND PLACEMENT

.1 Supply all growing medium required for the performance of the Contract. Do not load, transport or spread growing medium when it is so wet that its structure is likely to be damaged.

.2 Supply all growing medium admixtures as required by the soil test. Amended growing medium must meet the specification for growing medium as defined in Table One for the various areas.

.2.1 Thoroughly mix required amendments into the full depth of the growing medium.

.2.2 Special mixes may be required for various situations. Refer to drawing notes for instructions.

.3 Place the amended growing medium in all grass and planting areas. Spread growing medium in uniform layers not exceeding 6" (150mm), over unfrozen subgrade free of standing water.

.4 Minimum depths of growing medium placed and compacted to 80%:

.4.1 On-grade:
.4.11 Seeded and sodded lawn.....6" (150mm)
.4.12 Plant planted shrubs & groundcovers.....15" (400mm)
.4.13 Groundcover only areas, if defined on plan.....9" (225mm)
.4.14 Tree & large shrub pits.....depth to conform to depth of rootball – width shall be at least twice the width of the root ball with saucer shaped sides.

.5 Manually spread growing medium/planting soil around existing trees, shrubs and obstacles.

.6 In perimeter seeded grass areas, feather growing medium out to nothing at edges and blend into existing grades.

.7 Finished grades shall conform to the elevations shown on landscape and site plans.

PART THREE SOFT LANDSCAPE DEVELOPMENT - CONT

3.6 LAWN AREAS – SODDING

.1 General: Treat all areas defined as lawn areas on the landscape plan between all property lines of the project including all boulevards to edge of roads and lanes.

.2 Growing Medium: Comply with Section 2.2.1, Growing Medium. Prior to sodding, request an inspection of the finished grade, and depth and condition of growing medium by the Landscape Architect.

.3 Time of Sodding: Sod from April 1st to October 1st. Further extensions may be obtained on concurrence of the Landscape Architect.

.4 Sod Supply: Conform to all conditions of Canadian Landscape Standard, Section 8, B.C. Standard for Turfgrass Sod.

.5 Specified Turfgrass by area: Refer to Table 2 below.

TABLE 2 SPECIFIED TURFGRASS BY AREA

Area	Description	Quality Grade	Major Species
CLASS 1	Lawn, all areas mined on drainages as lawn in urban development sites including boulevard grass	No. 1 Premium	Kentucky Blue for sun, Fescues for shade
CLASS 2	Grass – public parks, industrial and institutional sites	No. 2 Standard	same
CLASS 3	Rough Grass	see hydroseeding	
SPECIAL			

.6 Lime: The lime shall be as defined in Section 2.2.3, Materials. Apply all rates recommended in required soil test. Refer to Section 3.4 for method.

.7 Fertilizer: Refer to Section 2.2.2 Materials. Apply specified fertilizer at rates shown in the required soil test. Apply with a mechanical spreader. Cultivate into growing medium 48 hours prior to sodding. Apply separately from lime.

.8 Sodding: Prepare a smooth, firm, even surface for laying sod. Lay sod staggered with sections closely butted, without overlapping or gaps, smooth and even with adjoining areas and not lightly. Water to obtain moisture penetration of 3" to 4" (7 – 10cm). Comply with requirements of Canadian Landscape Standard Section 8, BC Standard for Turfgrass Sod.

.9 Maintenance: Begin maintenance immediately after sodding and continue for 60 days after Substantial Completion and until accepted by the Owner. Protect sodded areas from damage with temporary wire or twine fences complete with signage until lawn is taken over by the Owner. Water to obtain moisture penetration of 3" to 4" (7–10cm) at intervals necessary to maintain sufficient growth. Keep grass cut at height of between 1-1/2" (4cm) and 2" (5cm). Provide adequate protection of sodded areas against damage until the turf has been taken over by Owner. Repair any damaged areas, re-grade as necessary. Aeration may be required if in the Landscape Architect's opinion, drainage through the sod base medium is impaired.

.10 Acceptance of Lawn Areas: The turf shall be reasonably well established, with no apparent dead spots or bare spots and shall be reasonably free of weeds (In Canadian Landscape Standard, Section 10 Maintenance Level 2 (Approved). Use herbicides if necessary for weed removal unless other conditions of contract forbid their use. After the lawn has been cut at least twice, areas meeting the conditions above will be taken over by the Owner.

3.7 PLANTS AND PLANTING

.1 Conform to planting layout as shown on Landscape Plans.

.2 Obtain approval of Landscape Architect for layout and preparation of planting prior to commencement of planting operations.

.3 Make edge of beds with smooth clean defined lines.

.4 Time of Planting:

.4.1 Plant trees, shrubs and groundcovers only during periods that are normal for such work as determined by local weather conditions when seasonal conditions are likely to ensure successful adaptation of plants to their new locations.

.5 Standards:

.5.1 All plant material shall conform to the requirements of the Canadian Landscape Standard, latest edition, unless exceeded by drawing Plant Schedule or this specification.

.5.11 Refer to Canadian Landscape Standard, Section 9, Plants and Planting, and to British Columbia Standard for Container Grown Plants for minimum standards.

.5.12 Refer to Plant Schedule for specific plant and container sizes and comply with requirements.

.5.2 Plant material obtained from areas with less severe climatic conditions shall be grown to withstand the site climate.

.6 Review:

.6.1 Review at the source of supply and/or collection point does not prevent subsequent rejection of any or all planting stock at the site.

.7 Availability:

.7.1 Area of search includes the Lower Mainland and Fraser Valley. Refer to Plant Schedule for any extension of area.

.7.2 Supply proof of the availability of the specified plant material within 30 days of the award of the Contract.

.8 Substitution:

.8.1 Obtain written approval of the Landscape Architect prior to making any substitutions fo the specified material. Non-approved substitutions will be rejected.

.8.2 Allow a minimum of 5 days prior to delivery for request to substitute.

.8.3 Substitutions are subject to Canadian Landscape Standard – definition of Conditions of Availability.

.9 Plant Species & Location:

.9.1 Plants shall be true to name and of the height, caliper and size of root ball as shown on the landscape/site plan plant schedule. Caliper of trees is to be taken 6" (15cm) above grade.

.9.2 Plant all specified species in the location as shown on the landscape drawings. Notify Landscape Architect if conflicting rock or underground/overhead services are encountered.

.9.3 Deviation of given planting location will only be allowed after review of the proposed deviation by the Landscape Architect.

.10 Excavation:

.10.1 Trees and large shrubs: Excavate a saucer shaped tree pit to the depth of the rootball and to at least twice the width of the rootball. Assure that finished grade is at the original grade the tree was grown at.

.11 Drainage of Planting Holes:

.11.1 Provide drainage of planting pits where required, ie. on sloped conditions, break out the side of the planting pit to allow drainage down slope, and in flat conditions, mound to raise the rootball above impervious layer. Notify the Landscape Architect where the drainage of planting holes is limited.

.12 Planting and Fertilizing Procedures:

.12.1 Plant all trees and shrubs with the roots placed in their natural growing position. If burlapped, loosen around the top of the ball and cut away or fold under. Do not pull burlap from under the ball. Carefully remove containers without injuring the rootballs. After settled in place, cut twine. For wire baskets, clip and remove top three rows of wire.

.12.2 Fill the planting holes by gently firming the growing medium around the root system in 6" (15cm) layers. Settle the soil with water. Add soil as required to meet finish grade. Leave no air voids. When 2/3 of the topsoil has been placed, apply fertilizer as recommended by the required soil test at the specified rates.

.12.3 Where planting is indicated adjacent to existing trees, use special care to avoid disturbance of the root system or natural grades of such trees.

.12.4 Where trees are in lawn areas, provide a clean cut mulched 900mm (3 ft.) diameter circle centered on the tree.

.13 Staking of Trees:

.13.1 Use two 2"x2"x8' stakes, unless superseded by municipal requirements. Set stakes minimum 2 ft. in soil. Do not drive stake through rootball.

.13.2 Leave the tree carefully vertical.

.13.3 Tie with pre-approved commercial, flat woven polypropylene fabric belt, minimum width 19mm (3/4"). Approved product: ArborTie - available from DeepRoot.

.13.4 Coniferous Trees over 6 ft. height: Guy with three 2-strand wires (11 gauge). Drive three stakes equidistant around the tree completely below grade.

.13.5 Trees 4 ft. – as Wood or Concrete Decks: Guy as above using three deadmen 3mm. 2"x2"x6" buried in the maximum possible depth instead of stakes.

.13.6 Mark all guy wires with visible flagging material.

.14 Pruning:

.14.1 Limit pruning to the minimum necessary to remove dead or injured branches. Preserve the natural character of the plants, do not cut the leader. Use only clean, sharp tools. Make all cuts close and cut to the branch collar leaving no stubs. Shape affected areas so as not to retain water. Remove damaged material.

.15 Mulching:

.15.1 Mulch all planting areas with an even layer of mulch to 2-1/2 – 3" (65 – 75mm) depth. Confirm placement of mulch in areas labeled "Groundcover Area" on drawings. Mulch a 3 ft. (900mm) diameter circle around trees in lawn areas, leave a clean edge.

.16 Acceptance:

.16.1 The establishment of all plant material is the responsibility of the Landscape Contractor.

.17 Plant Material Maintenance:

.17.1 Maintain all plant material for 60 days after landscape work has received a Certificate of Completion.

.17.2 Watering: Conform to Canadian Landscape Standard, Section 13.3.2 – Watering and generally as follows:

.17.2.1 Water to supplement natural rainfall such that the soil moisture content is kept to 50% to 100% of field capacity. Water to the full depth of the root zone each time. The Owner is responsible to supply water at no extra cost to the Contract. Confirm source of water prior to beginning work.

.17.3 Use appropriate measures to combat pests or diseases damaging plant material. Comply with all local governing statutes and guidelines for chemical control.

.17.4 Plant material which fails to survive shall be replaced in the next appropriate season as determined by the Landscape Architect.

.17.5 Repair tree guards, stakes, and guy wires, when necessary.

.17.6 Maintain areas relatively weed free. (Appearance level 2, Canadian Landscape Standard, Chapter 13).

.17.7 Maintain mulch to specified depths.

.18 Plant Warranty:

.18.1 Replace all unsatisfactory plant material except those designated "Specimen" for a period of one (1) year after the Certificate of Completion. Replace all unsatisfactory plant material designated "Specimen" for a period of two (2) years after the Certificate of Completion. Replace all unsatisfactory trees and shrubs and continue to replace these until the specified number is complete and satisfactory to the Landscape Architect. Such replacement shall be subject to the notification, inspection and approval as specified for the original planting, and shall not constitute an extra to the Contract.

.18.2 These Plants, identified as hardy within one zone of the Canada Department of Agriculture local class for the area, specified by the Landscape Architect and installed by the Landscape Contractor which are killed through below normal temperatures Below the average of the extreme minimum temperatures officially recorded in the area concerned, the last 10 years), will not be replaced without cost of replacement borne by the Owner.

.18.3 A review may be requested during the latter part of the warranty growing season. All plant material showing well developed foliage, healthy growth and bud forming, will then be taken over.

.18.4 For all plant material, the Landscape Architect reserves the right to extend the Contractor's responsibility for another growing season if, in his opinion, leaf development and growth is not sufficient to ensure future satisfactory growth.

.18.5 Where the Owner is responsible for plant maintenance and has not provided adequate maintenance, the plant replacement section of the contract may be declared void. The Landscape Architect shall determine whether maintenance has been satisfactory using the Canadian Landscape Standard, Section 13, Maintenance as the guide. The required maintenance standard is a minimum of Level Three – Medium. Refer to Section 3.11, Establishment Maintenance.

.18.6 The Landscape Contractor is responsible to replace any plant material or repair any construction included in the Contract that is damaged or stolen until the issuance of the Certificate of Completion.

.18.7 Deviation from the specifications may require extension of the Warranty Period as determined by the Landscape Architect.

PART THREE SOFT LANDSCAPE DEVELOPMENT - CONT

3.8 ESTABLISHMENT MAINTENANCE Provide a separate price for this section!

.1 Intent: The intent of "establishment" maintenance is to provide sufficient care to newly installed plant material for a relatively short period of time to ensure or increase the long term success of the planting. The objective is the adaptation of plants to a new site in order to obtain the desired effect from the planting while reducing the rate of failure and unnecessary work associated with improper establishment. Establishment of maintenance procedures apply to all new and retained vegetation including cultivated turfgrass areas and new trees and shrubs.

.2 Maintenance Period: Provide maintenance of installed landscaping for 12 months following substantial completion.

.3 Related Standards and Legislation: Canadian Landscape Standard, latest edition; Fertilizer Code, B.C. Pesticide Control Act.

.4 Site Review: In addition to the inspections at substantial completion, at final progress draw application, and at the end of the guarantee period, there should be three other reviews during the 12 months attended by the Contractor and a designated representative of the Owner. Maintain a logbook and reporting procedures and submit to the designated representative.

.5 Scheduling: Prepare a schedule of anticipated visits and submit to designated representative at start-up. Maintenance operations shall be carried out predominately during the growing season between March 1st and November 30th, however visits at other times of the year may be required.

.6 Maintenance Level: Comply with B. C. Landscape Standard, Section 14, Table 14.2, Maintenance Level 2 "Groomed".

.7 Materials: Comply with Part Two of this specification.

.7.1 Fertilizers: To the requirements of the Canadian Landscape Standard, Formulations and rates as required by soil testing.

.8 Plant Material Establishment:

.8.1 Watering: During the first growing season, water new plants at least every ten (10) days between April 1st and July 31st, and every twenty (20) days between August 1st and September 15th. Minimum 25 gallons per tree per application. During the second growing season, water new plants at least every twenty days between April 1 and July 31 and once between August 1st and September 31st. Apply water at a rate and duration such that the water content reaches field capacity to the full depth of the growing medium. Apply water again when the water content reaches 25% of field capacity. Provide soil irrigate with water in the event that any automatic irrigation system malfunctions or has not been completely installed. Scheduled applications of water shall be missed only when rainfall has penetrated the soil fully as required.

.8.2 Weeds: Maintain watches in the original areas and in the original depths.

.8.3 Weed Control: Remove all weeds from all areas at least once per month during the growing season by hoeing or cultivation to a minimum depth of 50mm, hand-pulling, or, if necessary, by the use of herbicides.

.8.4 Pest and Disease Control: Inspect all planted areas for pests and diseases periodically and at least every two months during the growing season by an experienced person. Carry out treatment for pests or diseases promptly and consistently for maximum effectiveness. Comply with all B.C. Pesticide Control Act and municipal requirements.

.8.5 Tree Support: Maintain stakes, guy wires and ties one full growing season. Check ties at least every two months to ensure that they are not causing a depression in the bark. Loosen, repair or replace ties as necessary. Remove all stakes guy wires and ties after the first growing season except where large trees require continuing support in the opinion of the Landscape Architect. All flagging of guy wires shall be visible and in good repair.

.8.6 Pruning: Inspect all trees and shrubs at least every two months during the growing season; prune to remove all dead, weak or diseased wood. Maintain the natural shape of the plant. Carry out clipping or shaping only if required in the maintenance contract for specific varieties or conditions.

.8.7 Fertilizing: Once during the twelve month period of establishment maintenance fertilize shrubs, trees and groundcovers according to soil analysis requirements.

.9 Grass Areas Establishment:

.9.1 Watering: Use hoses and sprinklers, irrigation systems or other methods to apply water to Class 1 and Class 2 grassed areas (Canadian Landscape Standard, Section 7, Lawns and Grasses) such that the grass is maintained in a turgid condition. Supply and irrigate with water in the event of any irrigation system malfunction, or incomplete installation at no expense to the owner. Apply water to prevent parching or erosion of the soil. Apply water at a rate and duration so that the water content in the growing medium reaches field capacity to the full depth of the growing medium. Apply water again when the water content reaches 25% of field capacity.

.9.2 Weed, Insect and Disease Control: Inspect grass areas each time they are mowed for weeds, insect pests, and diseases and treat promptly when necessary by appropriate manual methods, or by the use of chemicals in compliance with the B.C.S.L.A./B.C.L.N.A. Landscape Standard latest edition. Kill broadleaf weeds in grassed areas by a general application of a suitable herbicide if the weed population exceeds 10 Broadleaf weeds or 50 annual weeds or weedy grasses per 46 square meters. This application shall reduce the weed population to zero.

.9.3 Fertilizing: According to soil analysis.

.9.4 Liming: According to soil analysis

.9.5 Mowing and Trimming – All areas: The first four cuts shall be a sharp rotary type mower. Excess grass clipping shall be removed after each cut. Mow all grassed areas with a sharp reel or rotary mower when the grass reaches a height of 60mm. Mow to a height of 40mm. Edge with a mechanical vertical cutting edger once per year in March. Remove all grass clippings after each cut.

.9.6 Aeration: Aeration not required in the first growing season. If necessary, in the second growing season, aerate in early May with a suitable mechanical corer. Core to a depth of 100mm. (4"), and remove cores.

.9.7 Repairs: Re-grade, re-seed or re-sod when necessary to restore damaged or failing grass areas. Match the grass varieties in the surrounding area. Re-sod, if required, throughout the growing season. Re-seed between April 1st and April 15th or between September 1st and September 15th. Protect re-seeded areas and keep moist until the first mowing.

pmg LANDSCAPE ARCHITECTS
Suite C100 - 4185 Still Creek Drive
Burnaby, British Columbia, V5C 6G9
p: 604 294-0011 ; f: 604 294-0022

SEAL:

NO.	DATE	REVISION DESCRIPTION	DR.
3	2017 08 05	CITY RESUBMISSION	
2	2017 05 23	REVISED LANDSCAPE	MM
1	2017 03 13	REVISED LANDSCAPE	VR

CLIENT:

PROJECT:

SHAW BUILDING

8480 RIVER ROAD
RICHMOND, B.C.

DRAWING TITLE:

LANDSCAPE SPECI□ICATIONS

DATE: 17.FEB.15
DRAWING NUMBER:
SCALE:
DRAWN: MM
DESIGN: MM
CHK'D:
L-□
OF 2
PMG PROJECT NUMBER: **17-018**

17018-4.ZIP

DP 17-700428 -9

Shaw

SHAW COMMUNICATIONS INC.
2728 HOPEWELL PLACE NE,
CALGARY AB

NO.	REVISION	M/D/Y
5	DP COMMENTS RESPONSE SUBMITTAL	06/09/17
4	DP COMMENTS RESPONSE SUBMITTAL	06/05/17
3	RE-ISSUED FOR DP	05/23/17
2	ISSUED FOR COMMENTS	05/17/17
1	ISSUED FOR DEVELOPMENT PERMIT	03/20/17

SEAL:

PROPOSED SHAW RICHMOND HUB

8480 RIVER ROAD
RICHMOND, B.C.

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MECHANICAL:
REINHOLD ENGINEERING
ELECTRICAL:
DESIGNCORE ENGINEERING LTD.
LANDSCAPE:
PMG LANDSCAPE ARCHITECTS

DRAWING TITLE:

RENDERING CONTEXT

PROJECT NO:	1882	DRAWN BY:	CS
SCALE:	N.T.S.	DRAWING NO:	A500
DATE:	MAY 2017		

DP 17-766428 - Reference

Shaw

SHAW COMMUNICATIONS INC.
2728 HOPEWELL PLACE NE,
CALGARY AB

NO.	REVISION	M/D/Y
5	DP COMMENTS RESPONSE SUBMITTAL	06/06/17
4	DP COMMENTS RESPONSE SUBMITTAL	06/05/17
3	RE-ISSUED FOR DP	05/23/17
2	ISSUED FOR COMMENTS	05/17/17
1	ISSUED FOR DEVELOPMENT PERMIT	03/20/17

SEAL:

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ELECTRICAL:
DESIGNCORE ENGINEERING LTD.
LANDSCAPE:
PMG LANDSCAPE ARCHITECTS

DRAWING TITLE:
RENDERING 1

PROJECT NO:	1882	DRAWN BY:	CS
SCALE:	1:100	DRAWING NO:	A600
DATE:	MAY 2017		

DP 17-700460 - Reference

Shaw

SHAW COMMUNICATIONS INC.
2728 HOPEWELL PLACE NE,
CALGARY AB

NO.	REVISION	M/D/Y
5	DP COMMENTS RESPONSE SUBMITTAL	06/09/17
4	DP COMMENTS RESPONSE SUBMITTAL	06/05/17
3	RE-ISSUED FOR DP	05/23/17
2	ISSUED FOR COMMENTS	05/17/17
1	ISSUED FOR DEVELOPMENT PERMIT	03/20/17

SEAL:

PROPOSED SHAW RICHMOND HUB

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MECHANICAL:
RUNNELD ENGINEERING
ELECTRICAL:
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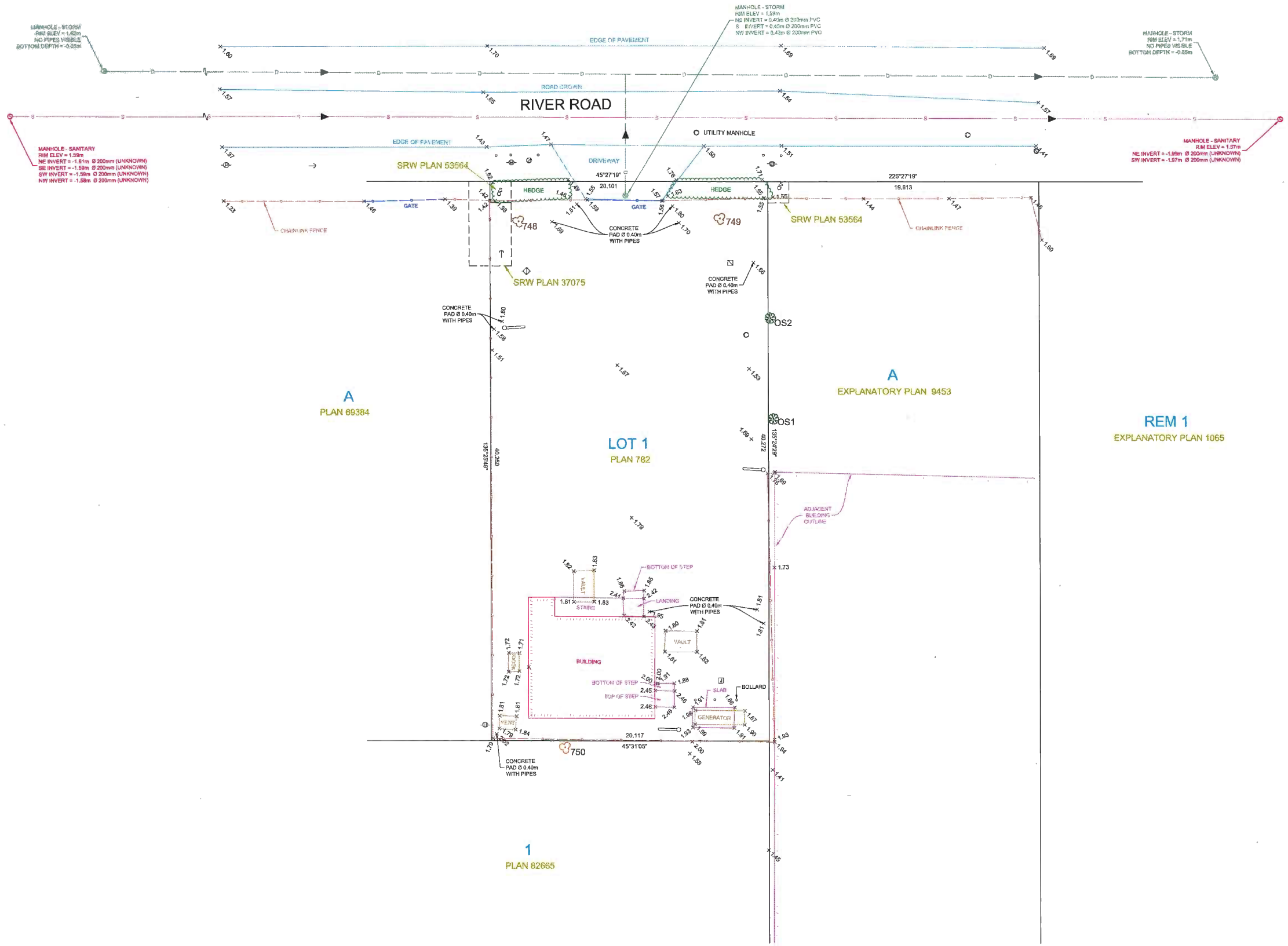
LANDSCAPE:
PMG LANDSCAPE ARCHITECTS

DRAWING TITLE:
RENDERING 2

PROJECT NO:	1682	DRAWN BY:	CS
SCALE:	1:100	DRAWING NO:	A601
DATE:	MAY 2017		

DP 17-766428 - Reference



LEGEND:

×3.802	DENOTES ELEVATION
m	DENOTES METRE(s)
	BOLLARD
	CATCH BASIN - MANHOLE
	CATCH BASIN (TOP INLET)
	GUY WIRE
	JUNCTION BOX
	LAMP STANDARD
	MANHOLE - UTILITY
	MANHOLE - SANITARY
	MANHOLE - STORM
	POLE - HYDRO
	POLE - HYDRO/TELEPHONE POLE
	POLE WITH TRANSFORMER
	SANITARY INSPECTION CHAMBER
	TREE - CONIFEROUS
	TREE - DECIDUOUS

NOTES:

-DISTANCES ARE IN METRES

-DIMENSIONS ARE DERIVED FROM PLAN FIELD MEASUREMENTS.
-ELEVATIONS ARE GEODETIC, IN METRES
DERIVED FROM INTEGRATED MONUMENT NO. 77H4602
ELEVATION = 1.718m (CVD28GVRD)
LOCATED AT THE INTERSECTION OF SEAMITH ROAD
AND BRIDGEPORT RD, CITY OF RICHMOND.

-THIS PARCEL MAY BE AFFECTED BY THE FOLLOWING DOCUMENTS:

STATUTORY RIGHT OF WAY	F52468	BRITISH COLUMBIA HYDRO AND POWER AUTHORITY
STATUTORY RIGHT OF WAY	RD58945	TOWNSHIP OF RICHMOND

ZONING REGULATION AND PLAN UNDER THE AERONAUTICS ACT (CANADA) FILED 10.2.1981 UNDER NO. T17084 PLAN NO. 61216

LEGAL DESCRIPTION:

PID #: 002-180-171

LOT 1
SECTION 21, BLOCK 5 NORTH, RANGE 6 WEST
NEW WESTMINSTER DISTRICT
PLAN 782

THIS TOPOGRAPHIC PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROFESSIONAL REFERENCE MANUAL AND IS CERTIFIED CORRECT THIS 25th DAY OF JANUARY, 2017.

JASON G. HAMEL, BCLS, CLS ©
THIS DOCUMENT IS NOT VALID UNLESS ORIGINALLY SIGNED AND SEALED.

Rev	Date	Description	Surv	Drawn	App'd
0	2017-01-23	TOPOGRAPHIC SURVEY PLAN	AC/MR	EA	JH

0 1:150 6

ORIGINAL DWG SIZE: ANSI D (22" x 34")
ALL DIMENSIONS ARE IN METRES

McElhanney
McElhanney Associates Land Surveying Ltd.
Suite 2300
13450 - 102 Avenue
Surrey BC
Canada V3T 5X3
Tel 604 596 0391

Approved Sealed

KATHLEEN GIBNEY c/o WENSLEY ARCHITECTURE LTD.
301-1444 ALBERNI STREET, VANCOUVER, B.C. V6G 2Z4

TOPOGRAPHIC SURVEY PLAN OF 8480 RIVER ROAD RICHMOND, B.C.

Drawing No. 63782-01

Project Number 2112-63782 | Rev. 0

DESTROY ALL PRINTS BEARING PREVIOUS REVISION

DP 17-700428 – Reference

DATE: 2017-01-25, 14:09 FILE: L:\DATA\63750-63799\63782-0 Sheet - 8480 River Rd Bill with 211110.0 Drawings\10.1 Civil 3D\63782-01 Topo.dwg
McElhanney AHSB ID - 15-05-22