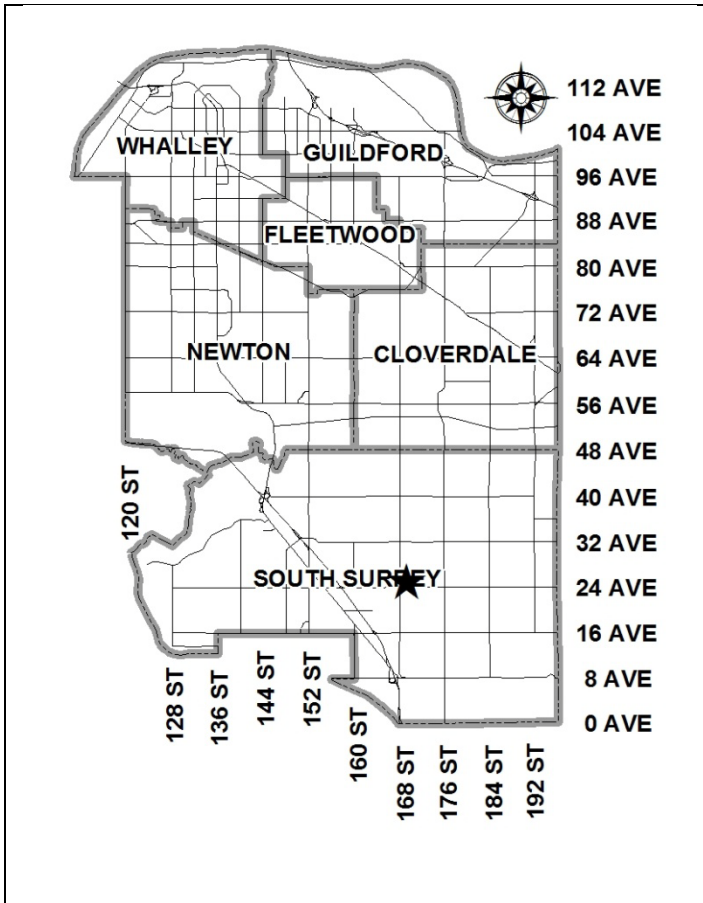


City of Surrey
PLANNING & DEVELOPMENT REPORT

File: 7912-0029-00

Planning Report Date: July 23, 2012



PROPOSAL:

- Development Permit
- Development Variance Permit

in order to permit the development of a new 9,142 sq.m. (98, 407 sq.ft.) Aquatic Centre in the Grandview Heights area.

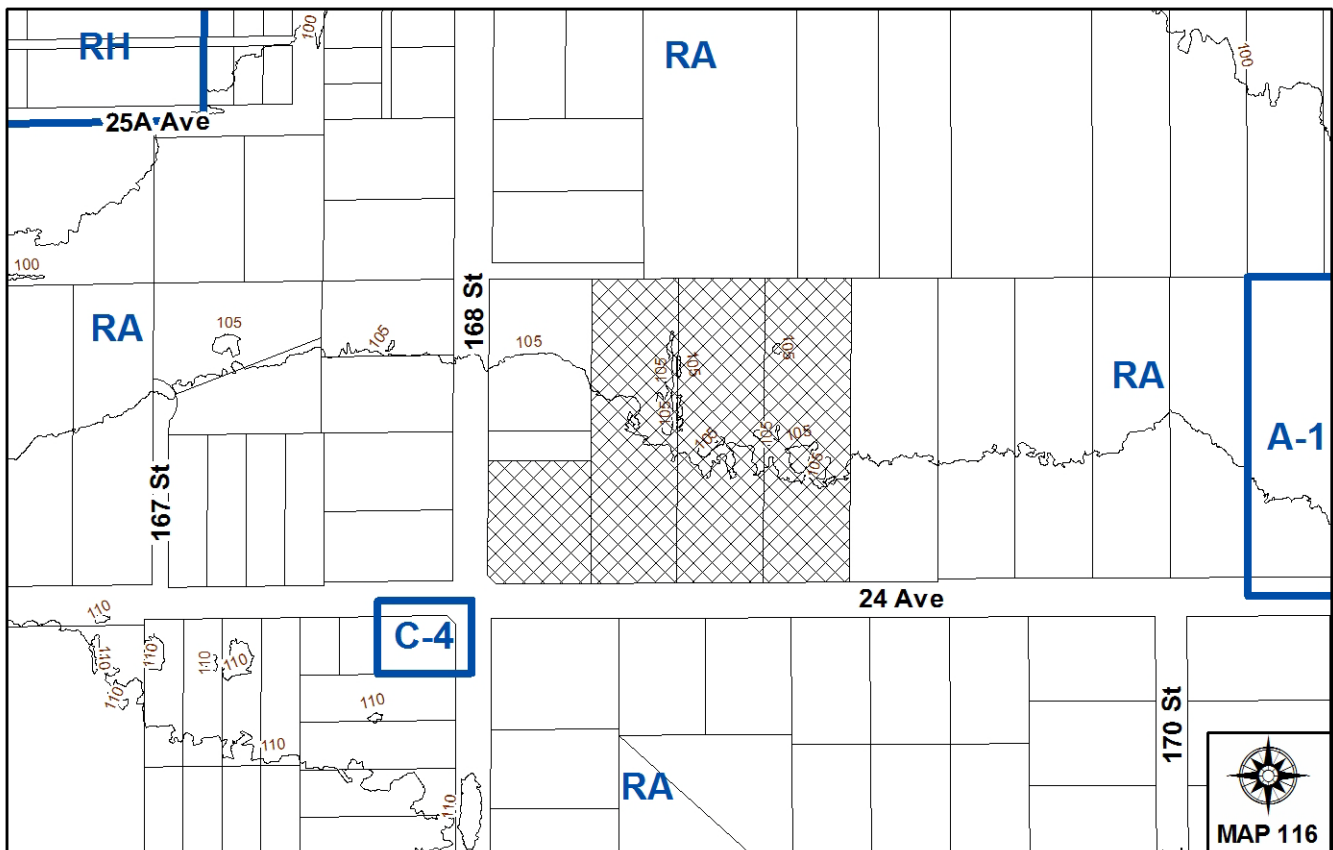
LOCATION: 16809, 16847, 16891, 16917 – 24 Avenue

OWNER: City of Surrey

ZONING: RA

OCP DESIGNATION: Suburban

LUP DESIGNATION: Suburban Residential and Linkages (Multi-Use Pathway)



RECOMMENDATION SUMMARY

- Approval to draft Development Permit.
- Approval for Development Variance Permit to proceed to Public Notification.

DEVIATION FROM PLANS, POLICIES OR REGULATIONS

- The proposal requires a Development Variance Permit (DVP) for reduced side yard setbacks.

RATIONALE OF RECOMMENDATION

- The proposed Grandview Heights Aquatic Centre was announced as part of the City's 2011 capital budget under the Build Surrey Program in order to enhance the services provided to Surrey residents.
- The aquatic centre will include a *Fédération Internationale de Natation* (FINA) certified 50 metre (164 feet) competition venue pool with a dive tower and spectator seating, a leisure pool, waterslide, separate adult and family hot pools, sauna and steam rooms, a fitness centre and other related amenity and support space.
- The proposed building form is appropriate for this part of Grandview Heights and meets the design guidelines in the Official Community Plan (OCP).
- The proposed DVP for reduced setbacks achieves a more urban and pedestrian streetscape and is required to accommodate the large footprint of the proposed building.
- Sustainable design strategies are integral to the design of this facility in accordance with LEED (Leadership in Energy and Environmental Design) Silver standards.

RECOMMENDATION

The Planning & Development Department recommends that:

1. Council authorize staff to draft Development Permit No. 7912-0029-00 generally in accordance with the attached drawings (Appendix II).
2. Council approve Development Variance Permit No. 7912-0029-00 (Appendix V) varying the following, to proceed to Public Notification:
 - (a) In Section A.1 (a) iv of Part 4 General Provisions of Zoning By-law, 1993, No. 12000, as amended, to reduce the minimum side yard setbacks from 14.5 metres (48 feet) to 5 metres (16 feet).

REFERRALS

Engineering: The Engineering Department has no objection to the project subject to the completion of Engineering servicing requirements as outlined in Appendix III prior to the issuance of a Building Permit including the review and acceptance of a final Transportation Impact Study (TIS).

Parks, Recreation & Culture: No concerns.

Fire: No concerns.

School District: No comments.

SITE CHARACTERISTICS

Existing Land Use: Single family homes on large lots.

Adjacent Area:

Direction	Existing Use	OCP/LUP or NCP Designation	Existing Zone
North:	Single family homes on large lots.	Suburban/ Suburban Residential (1-2 upa)	RA
East and South (Across 24 Avenue):	Single family homes on large lots.	Suburban/ Suburban Residential (1-2 upa) and Linkages (Multi-Use Pathway)	RA
West (Across 168 Street):	Single family homes on large lots.	Suburban/Mixed Use- Commercial and Residential (30-45 upa) and Multi-Use Pathway	RA

DEVELOPMENT CONSIDERATIONS

Context:

- As part of delivering the Build Surrey Program and recreational services to residents of Surrey, City Council has approved the design and construction of the Grandview Heights Aquatic Complex to enhance the services provided to Surrey residents. The project is fully funded and completion is expected in the summer of 2014.
- The Grandview Heights Aquatic Complex is proposed to be located at the corner of 24 Avenue and 168 Street in South Surrey. Growth in South Surrey is migrating eastward towards this area of Grandview Heights. Currently, the surrounding area is rural residential, however, with the recent approval of two Neighbourhood Concept Plans (NCP), Orchard Grove and Sunnyside Heights, it is anticipated that approximately 15,000 residents are expected to move to this part of Grandview Heights in the next few years as these neighbourhoods build out.
- Multi-use greenways are planned in this neighbourhood, providing connectivity and transportation choice including bicycling and walking to the venue from existing and planned neighbourhoods.

Proposed Facility:

- The proposed 9,142 square metre (98, 407 square feet) aquatic centre complex will include:
 - a *Fédération Internationale de Natation* (FINA) certified 50 metre (164 feet) competition venue pool with a 10 metre (33 feet) high dive tower and spectator seating for up to 1,000 people. FINA is the International Federation recognized by the International Olympic Committee (IOC) for administering international competitions in the aquatic sports including: swimming, diving, synchronized swimming, water polo and open water swimming;
 - a leisure pool with a waterslide;
 - separate family and adult hot pools;
 - sauna and steam rooms;
 - a fitness and wellness centre including a weight room, cardio equipment, spinning class space and stretching areas; and
 - support spaces for both pools including universal change room facilities, staff spaces, a food service and spectator viewing/seating areas.
- In general, the programming of the aquatic centre includes a shallower pool on the West side of the building and a deeper pool on the East side of the building. Hence, the West side of the building is intended for leisure aquatic activities and the East side is intended for competitive aquatic activities.
- The aquatic complex is expected to be a World-class facility, meeting the City's goals under the Sustainability Charter, Wood First Policy, and Civic Centre Access Initiative. The aquatic complex has been designed to be inclusive and universally accessible, embracing the City's diverse culture. The Grandview Heights Aquatic Complex will target LEED (Leadership in Energy and Environmental Design) Silver certification.

- The City wants to be prepared to host international level aquatic competitions. The design of the aquatic facility is intended to allow for this possibility by ensuring that the facility can expand and adapt. Areas have been identified for future expansion including permanent and temporary overlays that are necessary to host such events. This includes the provision for:
 - a phase 2 expansion at the East side of the site consisting of a 25 metre (82 feet) pool and/or dive tower and associated support spaces; and
 - the possibility of installing a temporary facility in the parking lot area in order to accommodate a second, 50 metre (164 feet) pool, spectator seating and support spaces.
- This site is located in a possible future service area for the City-owned district energy utility, Surrey City Energy. Consideration has been given to the integration of mechanical systems at this site with a future district energy system serving the planned growth in the area.

Zoning By-law Compliance:

- The Zoning By-law permits public facilities such as aquatic centres to be located in any zone, provided that all the minimum setbacks are equal to or greater than either the height of the principal building or the setbacks prescribed in the underlying zone.
- Based on the proposed 14.5 metre (48 feet) average height of the building and the underlying zoning, the proposed aquatic centre is required to be sited a minimum of 14.5 metres (48 feet) from all lot lines. Building setback relaxations are proposed for the side yards in order to allow for a more urban and pedestrian oriented development and to accommodate the large footprint of the building. A DVP is required to facilitate this development as shown in Table 1.

Table 1: Setback Relaxation Comparison

	RA Zone	Proposed Height of Building/ Required Minimum Setback	Proposed Setbacks (DVP Requested)
Side Yard #1 (24 Avenue- South)	7.5 m (25 ft)	14.5 m (48 ft)	5 m (16 ft)
Side Yard #2 (North)	7.5 m (25 ft)	14.5 m (48 ft)	5 m (16 ft)

- The Zoning By-law requires that three (3) parking stalls are provided for every 100 square metres (1,075 square feet) of gross floor area excluding mechanical rooms. For the purposes of determining the required parking for the aquatic centre, Table 2 shows the breakdown of the gross floor area and excludes the area for mechanical rooms.

Table 2: Breakdown of Gross Floor Area for Parking

	Total Gross Floor Area
Aquatic Centre –pools and associated amenity areas	6,594 sqm (70,980 sqft)
Mechanical rooms and storage of associated equipment	2,548 sqm (27,427 sqft)
Total	9,142 sqm (98,407 sqft)

- Based on the proposed 6,594 square metre (70,980 square feet) size of the aquatic centre, excluding mechanical rooms, a total of 198 parking stalls are required. A parking study was completed for this facility, recommending that a total of 234 parking stall are needed. In

accordance with the study recommendations, 234 parking stalls are proposed, which exceeds the requirements of the Zoning By-law.

- The proposed 234 surface parking stalls include seven (7) disabled parking stalls. A parking study was completed by Bunt and Associates Engineering Limited to examine parking demands for this new facility. The study reviewed other recreation centres and aquatic facilities in the Lower Mainland by surveying peak demands in parking. The study also examined typical industry standard rates and the City's Zoning By-law requirements. Typical peak parking demands for aquatic centres occur during weekday evening public swims and weekend morning public swims. Peak parking demands also occur during special events and swim meets. The parking study concluded that the proposed 234 parking stalls meets the needs of the proposed facility.

Access and Circulation:

- The following road dedication requirements have been identified for the existing arterial roads fronting the site including:
 - 8.442 metres (28 feet) for the future widening of 24 Avenue;
 - 4.942 metres (16 feet) for the widening of 168 Street; and
 - 5 metre (16 feet) by 5 metre (16 feet) corner cut at the intersection of 24 Avenue and 168 Street.
- In order to improve the circulation of the site, local road dedication and/or off-site statutory right-of-ways (SROWs) are required as follows:
 - 10.5 metres (34 feet) for the construction of 25 Avenue; and
 - 3 metre (10 feet) by 3 metre (10 feet) corner cut at the intersection of 25 Avenue and 168 Street.
- Vehicular access to the aquatic centre will be provided primarily from 24 Avenue, with a secondary entrance on 168 Street via an extension of 25 Avenue. Both accesses lead to a surface parking lot located on the North side of the building. The parking is situated at the same grade as the main pool deck, with a dedicated drop-off area located close to the lobby entry. Views from the double height lobby, as well as views into and out of the public circulation corridor on the main level and the fitness space above, allow for eyes on the street to make the plaza and drop-off area safer in accordance with Crime Prevention Through Environmental Design (CPTED) principles.
- Bicycle racks are proposed in close proximity to the main entrance to the building and car sharing is being considered in order to provide transportation choice to area residents visiting the facility.
- Multi-use pathways are planned on the East side of 168 Street and 24 Avenue, providing connectivity and transportation choice including bicycling and walking to the venue from existing (Morgan Heights and North Grandview) and planned neighbourhoods (Orchard Grove and Sunnyside Heights). These multi-use greenways include:
 - a 4 metre (13 feet) paved surface within a 6 metre (20 feet) SROW on 24 Avenue. The SROW is pinched to 3.5 metres (11.5 feet) to accommodate the large footprint of the building; and
 - a 4 metre (13 feet) paved surface within a 2.7 metre (9 feet) SROW on 168 Street.

Tree Management and Landscaping:

- Guy Exley, ISA Certified Arborist of ACL Arbortech Consulting Limited, prepared an Arborist Assessment for the site. The Arborist Assessment states that there a total of 261 trees on the site or potentially impacted by off-site works on 24 and 25 Avenue. Majority of the trees are Alder, Cottonwood, Birch and Maple. There are occasional conifers, mostly planted in rows along property lines and road frontages. The Arborist Assessment included the health of the trees and ranked the trees as Suitable, Marginal and Unsuitable for Retention as shown in Table 3.

Table 3: Summary of Arborist Assessment

Condition/ Health of Trees	Quantity
Suitable for Retention	28
Marginal for Retention	40
Unsuitable for Retention	100
Untagged Alder and Cottonwood Trees (Unsuitable for Retention)	67
Off-Site Trees (affected by off-site works)	26
Total	261

- The Arborist Assessment indicated that the vast majority of the trees, a total of 233, are marginal or unsuitable for retention or are impacted by off-site works. These trees are predominantly Alder, Cottonwood and other pioneer tree species. The Assessment recommends protecting six (6) trees buffering an adjacent residence. The remaining twenty-two (22) trees that are suitable for retention will be removed in order to accommodate the large building footprint of the aquatic centre and associated amenities. Despite the removal of trees on the site, the proposal includes the planting of 108 new trees which will help offset the removal of the suitable trees. The remaining trees will be protected in accordance with the Parks Standard Tree Protection specifications.
- The landscaping that is proposed to surround the aquatic centre has a distinctive civic character. It features an entry plaza with generous seating opportunities and bike racks leading to the main entrance of the building.
- At the corner of 24 Avenue and 168 Street, a pool patio space is proposed with a sloped lawn area for both casual everyday use and larger community events. The patio area will include a stepped deck, sloped lawn for sunning and lounging and different benches including casual and lounge seating.
- The proposed landscaping will be unified by a consistent paving pattern in pedestrian areas, a diverse planting palette, and geometric landscape elements that speak to the building's angled form.
- Stormwater from the site will be collected using bioswales and directed towards a proposed stormwater detention pond at the North edge of the property near 25 Avenue. The rain water features surrounding the building will be integrated into the design of the building.

PRE-NOTIFICATION

- A Development Proposal Sign was installed on the site to inform adjacent property owners about the proposed development. Staff received requests for information only as a result of the Development Proposal Sign.
- According to Council Policy, the mail out of pre-notification letters is not a requirement for Development Permit applications. Although not required, the design process for the aquatic centre has included two (2) public open houses and ongoing public outreach using Facebook (www.facebook.com/grandviewaqua), Twitter (Twitter@GrandviewAqua) and a website (<http://grandviewaqua.ca/>).
- The first public open house was held on Tuesday, March 6, 2012 at the South Surrey Indoor Pool, and later in the day at the South Surrey Recreation Centre. Questionnaires were provided for this open house, which sought input from the public regarding the range of leisure amenities and activities that should be provided. Approximately 300 questionnaires were received and the feedback was generally positive. Overall, the respondents felt that the competitive pool and leisure pool were equally important features and more than half of the respondents indicated that abundant natural light, and good water and air quality, were important attributes of the facility.

(In response to the feedback, the indoor air quality, lighting and experience of the facility was enhanced by the introduction of two (2) outdoor pool patio areas at either end of the proposed building. A sun and shadow analysis was completed in order to maximize the natural lighting of the facility while minimizing glare for competitive pool activities.)

- The second open house was held in the evening on Wednesday, June 27, 2012 at the South Surrey Recreation Centre. The proposed site plan, elevations, models and material boards were presented including the following:
 - one model representing the building form and massing within the overall site context, including a rough massing of the proposed future Phase 2 addition;
 - a second more detailed model showing the building's exterior treatment and relationship to the landscape; and
 - a third model of the dive platform configuration and the proposed glazing treatment in this area.

Approximately 150 people attended the second open house and the feedback was generally positive. Residents were interested to find out when the facility would be constructed and open to the public.

- Both open houses were advertised through direct mail outs to residents in the area surrounding the site, as well as through newspaper ads in the Peace Arch News and the NOW newspaper. Posters and flyers were posted in recreation centres and on the City's website.

DESIGN PROPOSAL AND REVIEW

- The aquatic centre has been designed by Hughes Condon Marler Architects (HCMA). The proposed development was reviewed by the Advisory Design Panel (ADP) on May 3, 2012 and June 28, 2012 (Appendix IV) and ADP comments have been satisfactorily addressed. The proposed development was evaluated based on compliance with the design guidelines in the Official Community Plan (OCP).

Site Planning and Orientation:

- The building is sited on the corner of 24 Avenue and 168 Street and its scale and strong presence on the corner are conceived of as the first step in a larger vision of a denser and more urbanized building form for this part of Grandview Heights. Mixed use, commercial and residential land uses, up to six (6) stories in height are planned for the West side of 168 Street in the Orchard Grove and Sunnyside Height NCPs. The proposed aquatic centre will complement the planned development by providing a significant presence on the street with the intent to create a sense of arrival at the street corner.
- The aquatic centre is sited to account for new multi-use pathways for pedestrians and cyclists along 24 Avenue and 168 Street. The building is also sited so that the more public and playful spaces of the leisure pool are showcased at the corner. These pathways will view into the pool areas and will encourage movement around the building and into the entrance off the parking side.
- Areas North of the building will be used for parking and the main entrance anticipates that most people will arrive by vehicle and enter from the parking lot.
- There is a 3 metre (10 feet) change in grade from the back of the building to the front of the building (high to low). The pool level will be pulled down to the level of the parking entry. Therefore, directly outside the 24 Avenue pathway, there will be a dropped down sunken patio area.

Design and Character:

- The nature of water is the main source of inspiration for the building design and particularly the roof. The Architect has described the process of development for the roof form as follows:
 - consideration of the static form of water is represented by a straight line;
 - then, as there is activity, the line starts to move, and the surface starts to fluctuate, and the wave patterns begin; and
 - this beginning of wave patters informs the idea for the roof form– a waved surface that overlaps the pool below. The height of the natatorium creates a box shape, with a catenary wave roof spanning the entire building.
- The side walls of the proposed aquatic centre are buttresses to enable the roof to be a clear span. The building needs to accommodate a 15 metre (49 feet) high waterslide at the West side of the building and a 10 metre (33 feet) high dive tower with 5 metre (16 feet) overhead clearance at the East side of the building. The centre structure counteracts the wave form and supports the middle of the roof. This site then presents the opportunity for a fluctuating wave form as the roof structure.

- Different wave forms were explored by the architectural team, which in turn informed the structure needed for the roof. The roof is proposed to be constructed of wood lam beams. Buttress forms will be used at either end of the building to support the roof, and will also support the platforms to be inserted between the buttresses.
- The buttress forms are inspired in part by Italian futurist architecture, as well as the Washington DC airport, velodrome in London built for the 2012 Olympics, and the Portuguese Expo buildings from 1998. All these buildings use buttresses to make the roof appear lightweight over an open space below.
- Leisure Activities on the West Side of Building:
 - The proposed undulating and wave inspired roof form rises to suit the height required for the water slide at the West side of the building, and provides direct views into the leisure pool while bringing an urban scale and animated views into the pool from the public plaza.
 - The pool deck is located 3 metre (10 feet) below the plaza grade, and this grade change allows for more expansive views into the leisure pool and provides a landscape buffer and a protected outdoor pool deck.
 - On the second level, is a large fitness area, with cardio machines overlooking the pool.
- Competitive Activities on the East Side of Building:
 - The main lap pool at the East side of the building requires a slightly quieter expression and the roof form again rises up again to a high point over the anchoring element of the competitive 10 metre (33 feet) high dive tower.
 - On the second level above the competitive pool, is the main spectator seating for the dive tank and competition pool with a seating capacity of up to 1,000 people.

Public Art:

- The City of Surrey has supported the implementation of artworks within its civic facilities and public open space such as parks and greenways since 1998 when it adopted a Public Art Policy.
- In accordance with the City's Public Art Policy, a Public Art Project with a budget of \$310, 000 is underway for the proposed aquatic facility. This Public Art Project will have a highly visible iconic presence, exterior to the building at the main entrance with an opportunity to connect through the building. The artwork will be experienced as an unfolding visual narrative as people enter and move through the aquatic centre. The intended theme is an expression of flow, transition and transformation.
- To date, an artist call for expressions of interest was held and over 90 submissions from around the world were submitted. Six (6) artists were shortlisted to develop a concept in detail. The next steps will be for the shortlisted artists to present their concepts to the selection panel, followed by a recommendation to Council in September 2012.

SUSTAINABILITY CONSIDERATIONS

- Sustainable design strategies are integral to the design of this facility in accordance with LEED (Leadership in Energy and Environmental Design) Silver standards. The following are some of the sustainable design strategies being used for this project:
 - Water Efficient Design:
 - High efficiency fixtures and fittings to minimize water use;
 - Vegetation that requires no irrigation or that uses a drip fed irrigation system using harvested rainwater from the site; and
 - Use of cisterns for flushing toilets and urinals.
 - Energy Performance:
 - Volumetric efficiency of the proposed building. The building volume created by the hung roof is 20% less than a typical truss roof, making the building more efficient to heat and cool;
 - Full heat recovery from the natatorium to heat the pools;
 - Efficient lighting design, including occupant and daylight control lighting;
 - Passive design to maximum day lighting of the facility and to minimize the need for light fixtures where possible; and
 - Metering to enable measurement and verification of energy use.
 - Stormwater Design Strategy:
 - Use of bioswales and rain water features in the landscape design in order to mitigate significant storm events.
 - Low Volatile Organic Compounds (VOCs) and Responsibly Sourced Materials:
 - Materials will be selected, where practical and cost effective, from local sources and recycled content; and
 - All paints, sealants, adhesives and flooring will be selected to have minimal VOCs.

BY-LAW VARIANCE AND JUSTIFICATION

(a) Requested Variance:

- To reduce the minimum side yard setbacks on both the North and South (24 Avenue) sides of the building from 14.5 metres (48 feet) to 5 metres (16 feet).

Justification for Variance:

- The proposed setbacks are required to help achieve a more urban and pedestrian streetscape. The objective in locating the building at the corner of 168 Street and 24 Avenue is to create a strong urban presence at the corner. The aquatic centre will be the first step in a larger vision for a denser and more urban building form in this part of Grandview Heights. These objectives, combined with the large building footprint required to accommodate the programming for the aquatic centre makes it challenging to provide the required setbacks in the Zoning By-law.

INFORMATION ATTACHED TO THIS REPORT

The following information is attached to this Report:

- Appendix I. Lot Owners, Action Summary and Project Data Sheets
- Appendix II. Proposed Site Plan, Building Elevations, Landscape Plans and Perspective
- Appendix III. Engineering Summary
- Appendix IV. ADP Comments
- Appendix V. Development Variance Permit No. 7912-0029-00

original signed by Nicholas Lai

Jean Lamontagne
General Manager
Planning and Development

CL/kms

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Information for City Clerk

Legal Description and Owners of all lots that form part of the application:

1. Agent: Names: Melissa Higgs, Stuart Rothnie & Darryl Condon
Hughes Condon Marler Architects (HCMA)
Address: 1508 West 2nd Avenue, Suite 300
Vancouver BC
V6J 1H2
Tel: 604-732-6620
2. Properties involved in the Application
 - (a) Civic Addresses: 16809, 16847, 16891 , 16917 – 24 Avenue
 - (b) Civic Address: 16809 - 24 Avenue
Owner: City of Surrey
PID: 009-927-832
Lot 6 Except Firstly: North 62 Feet Secondly: Part Dedicated Road on Plan BCP26761;
Section 19 Township 7 New Westminster District Plan 14320
 - (c) Civic Address: 16847 - 24 Avenue
Owner: City of Surrey
PID: 009-927-875
Lot 7 Section 19 Township 7 New Westminster District Plan 14320
 - (d) Civic Address: 16891 - 24 Avenue
Owner: City of Surrey
PID: 009-984-429
Lot 8 Section 19 Township 7 New Westminster District Plan 14320
 - (e) Civic Address: 16917 - 24 Avenue
Owner: City of Surrey
PID: 009-927-891
Lot 9 Section 19 Township 7 New Westminster District Plan 14320
3. Summary of Actions for City Clerk's Office
 - (a) Proceed with Public Notification for Development Variance Permit No. 7912-0029-00 and bring the Development Variance Permit forward for issuance and execution by the Mayor and City Clerk.

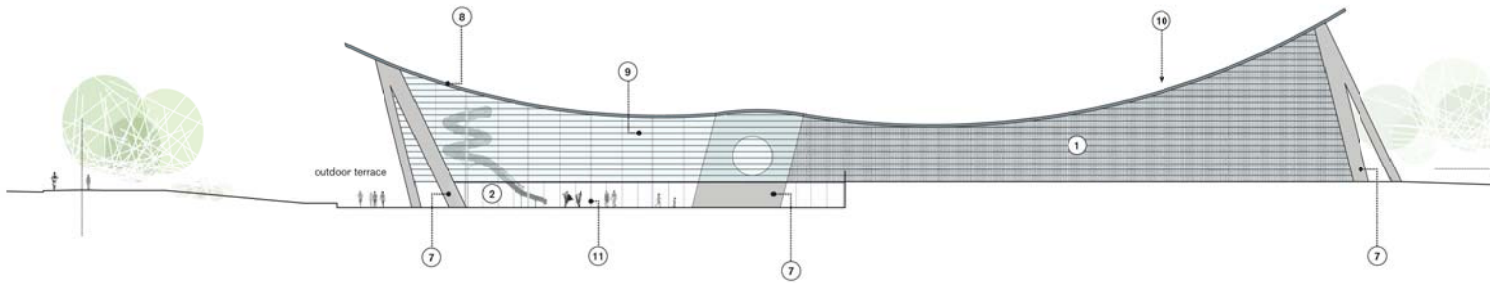
DEVELOPMENT DATA SHEET

Existing Zoning: RA

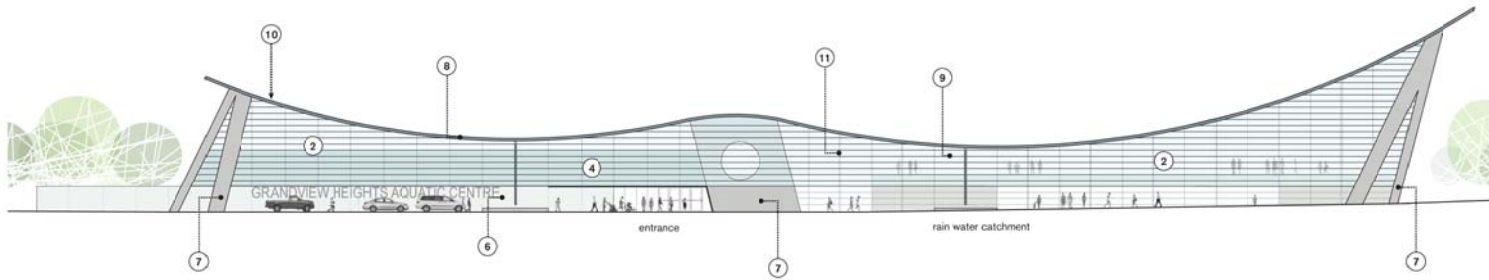
Required Development Data	Minimum Required / Maximum Allowed	Proposed
LOT AREA* (in square metres)		
Gross Total		36,857 sqm
Road Widening area		1,967 sqm
Undevelopable area		959 sqm SROW
Net Total		33,931 sqm
LOT COVERAGE (in % of net lot area)		
Buildings & Structures		15%
Paved & Hard Surfaced Areas		47%
Total Site Coverage		62%
SETBACKS (in metres)		
Front (168 Street)	14.5 m	Min. 16 m
Rear	14.5 m	Min. 65 m
Side #1 (24 Avenue- South)	14.5 m	Min. 5 m
Side #2 (North)	14.5 m	Min. 5 m
BUILDING HEIGHT (in metres/storeys)		
Principal		14.5 m average height
Accessory		
FLOOR AREA: Institutional		9,142 sqm
TOTAL BUILDING FLOOR AREA		9,142 sqm
PARKING (number of stalls)		
Institutional	198	234
Total Number of Parking Spaces	198	234
Number of disabled stalls	3	7
Number of small cars		

** If the development site consists of more than one lot, lot dimensions pertain to the entire site.*

Heritage Site	NO	Tree Survey/Assessment Provided	YES
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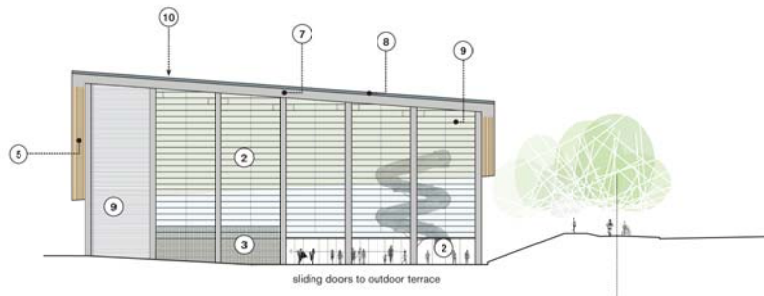


1 SOUTH ELEVATION
1/200

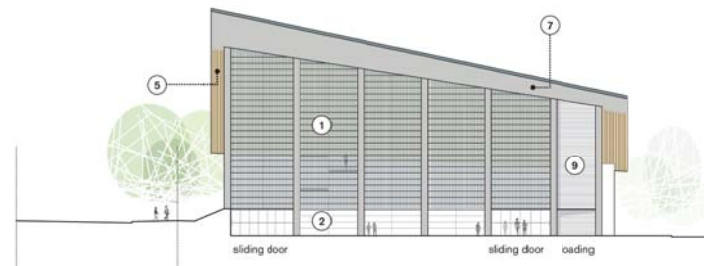


2 NORTH ELEVATION
1/200

- MATERIALS**
- 1 Fritted glass
 - 2 Clear glass
 - 3 Translucent glass
 - 4 Opaque spandrel glass
 - 5 Wood glulam roof
 - 6 Glazed brick
 - 7 Architectural concrete
 - 8 Zinc
 - 9 Aluminium curtain wall mullion / Mechanical louvres
 - 10 SBS roof
 - 11 Interior curtain wall support



3 WEST ELEVATION
1/200



4 EAST ELEVATION
1/200

JOB TITLE

Grandview Heights
 Aquatic Centre
 Surrey, BC

SHEET TITLE

COLOURED ELEVATIONS

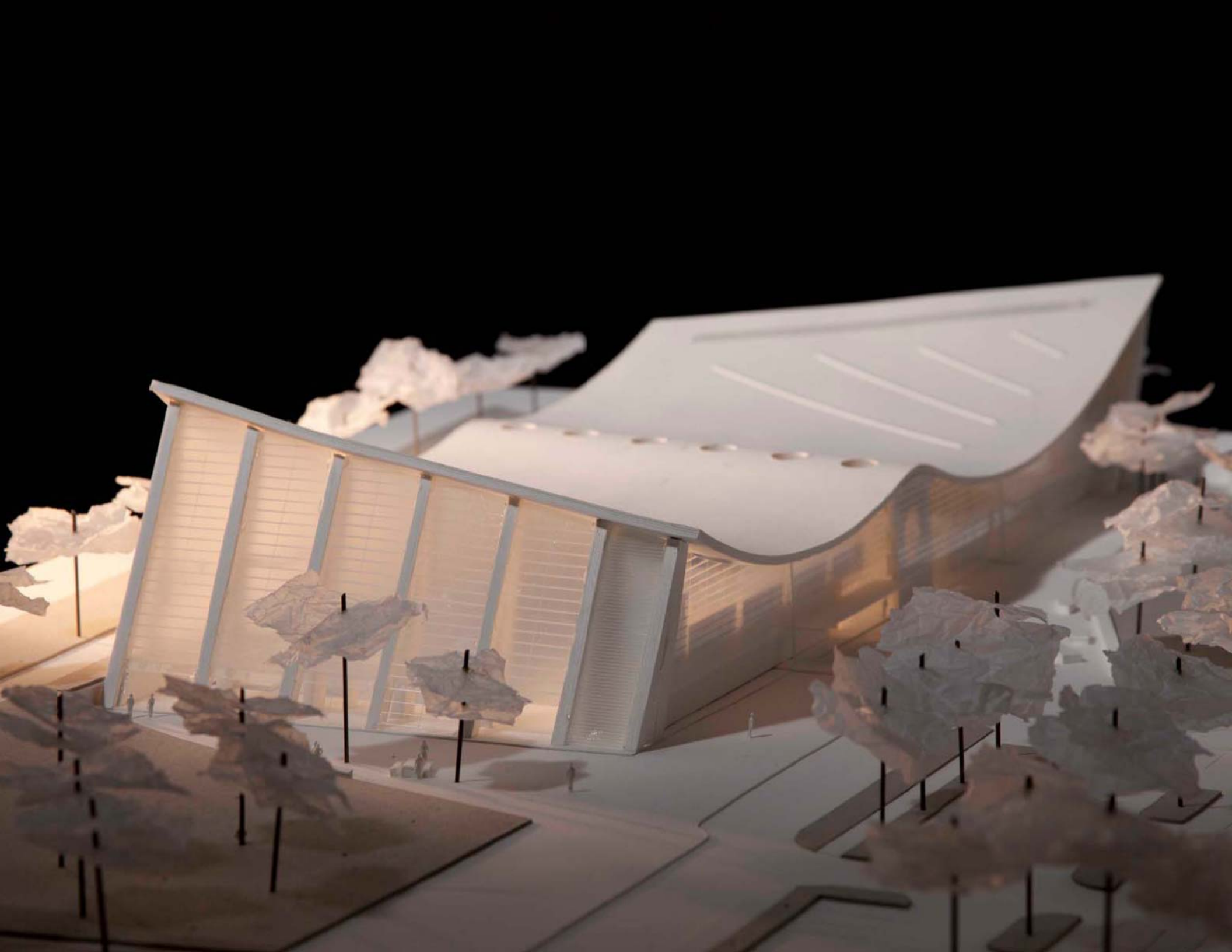
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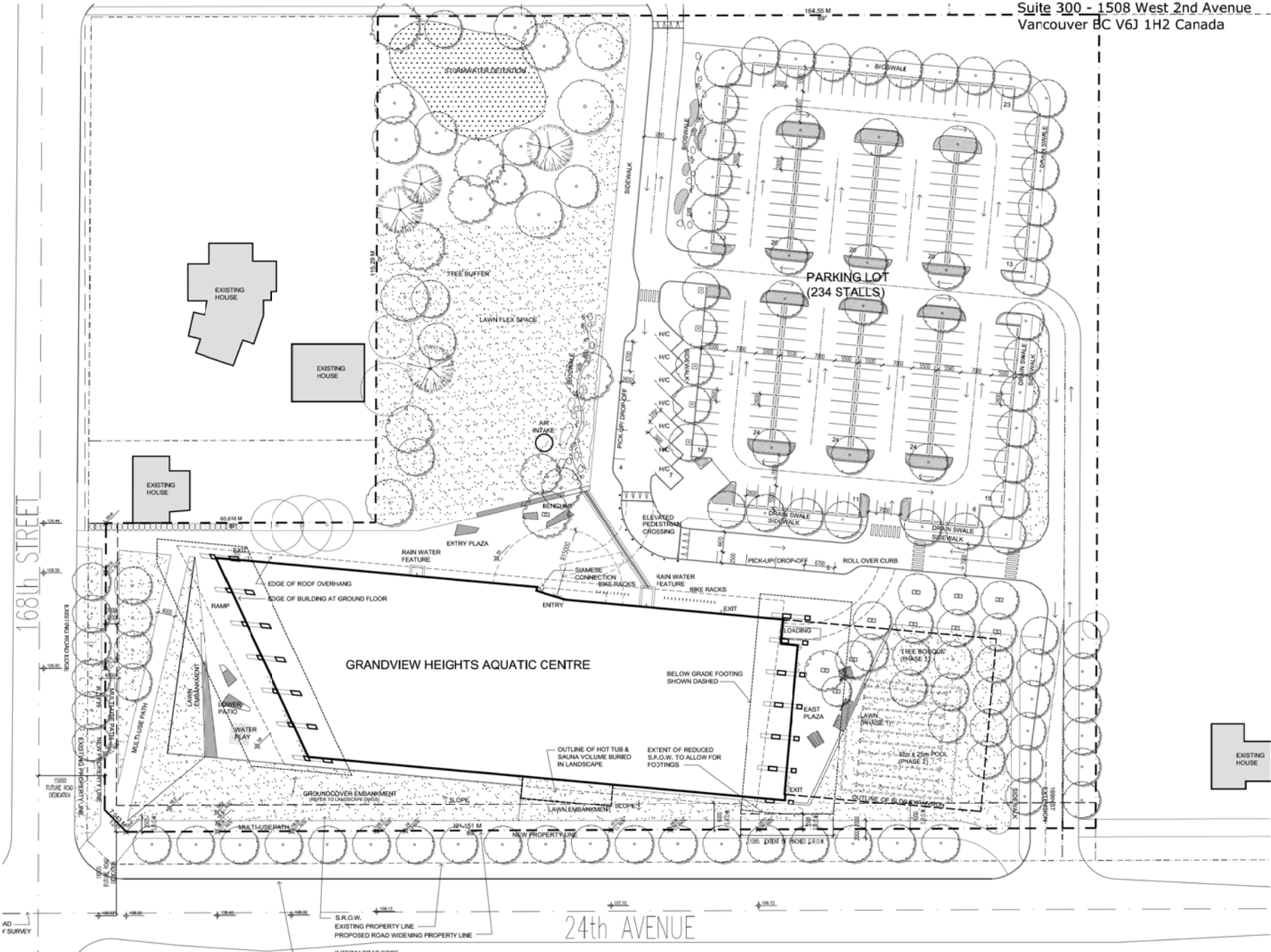
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Revision:









JOB TITLE

Grandview Heights
 Aquatic Centre

Surrey, BC

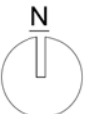
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SITE PLAN

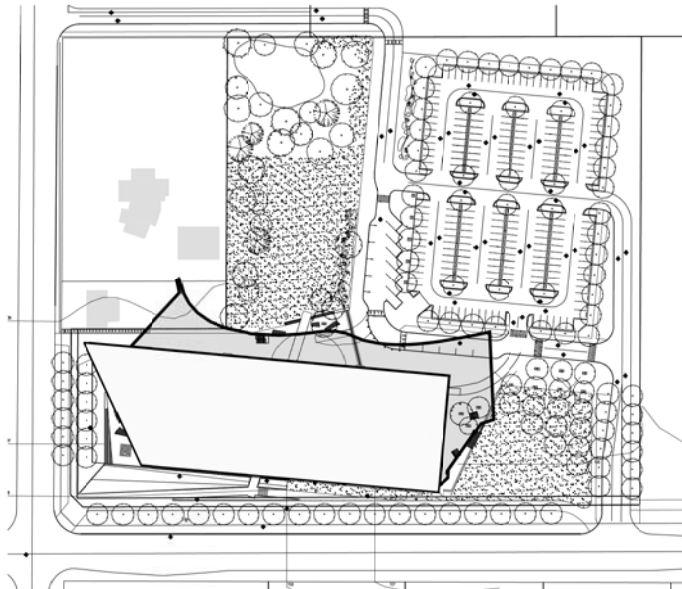
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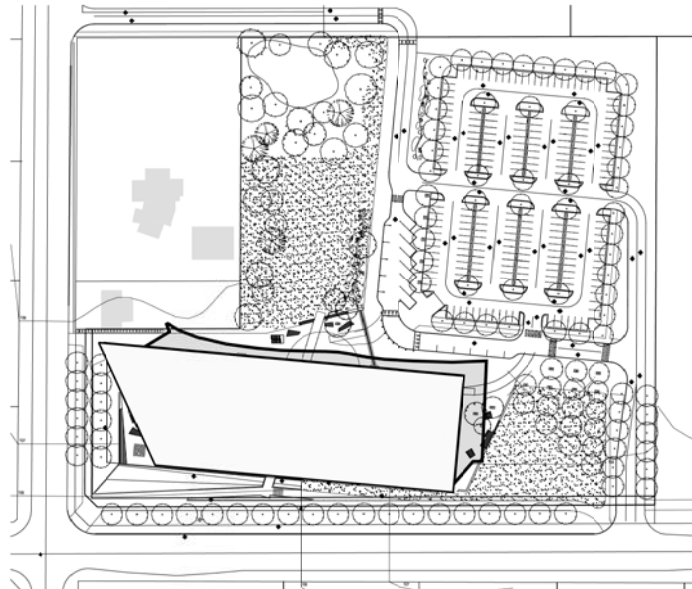
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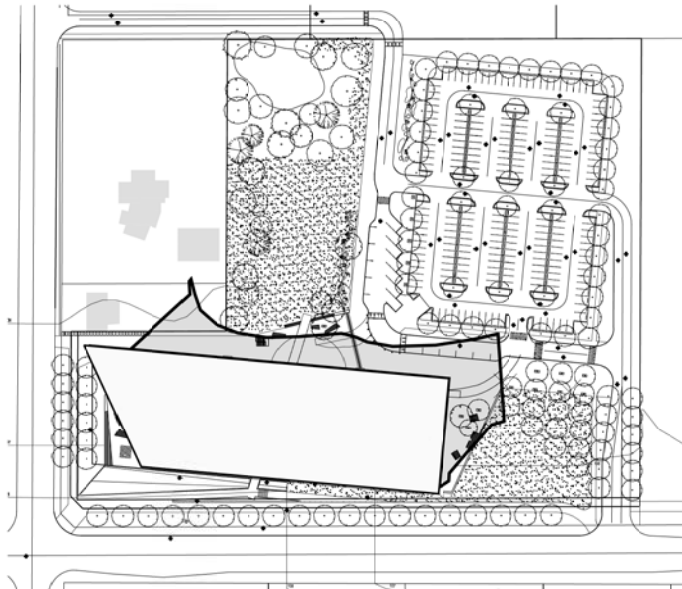
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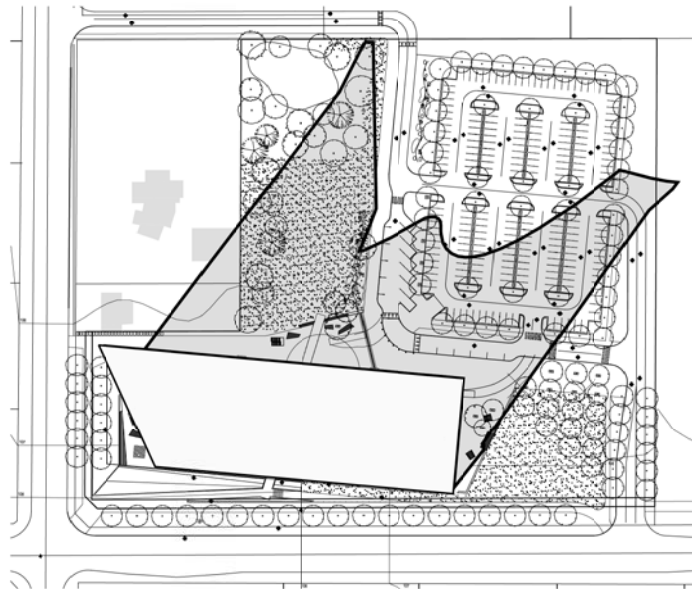
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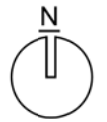
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 Grandview Heights
 Aquatic Centre
 Surrey, BC

SHEET TITLE
 SHADOW STUDIES

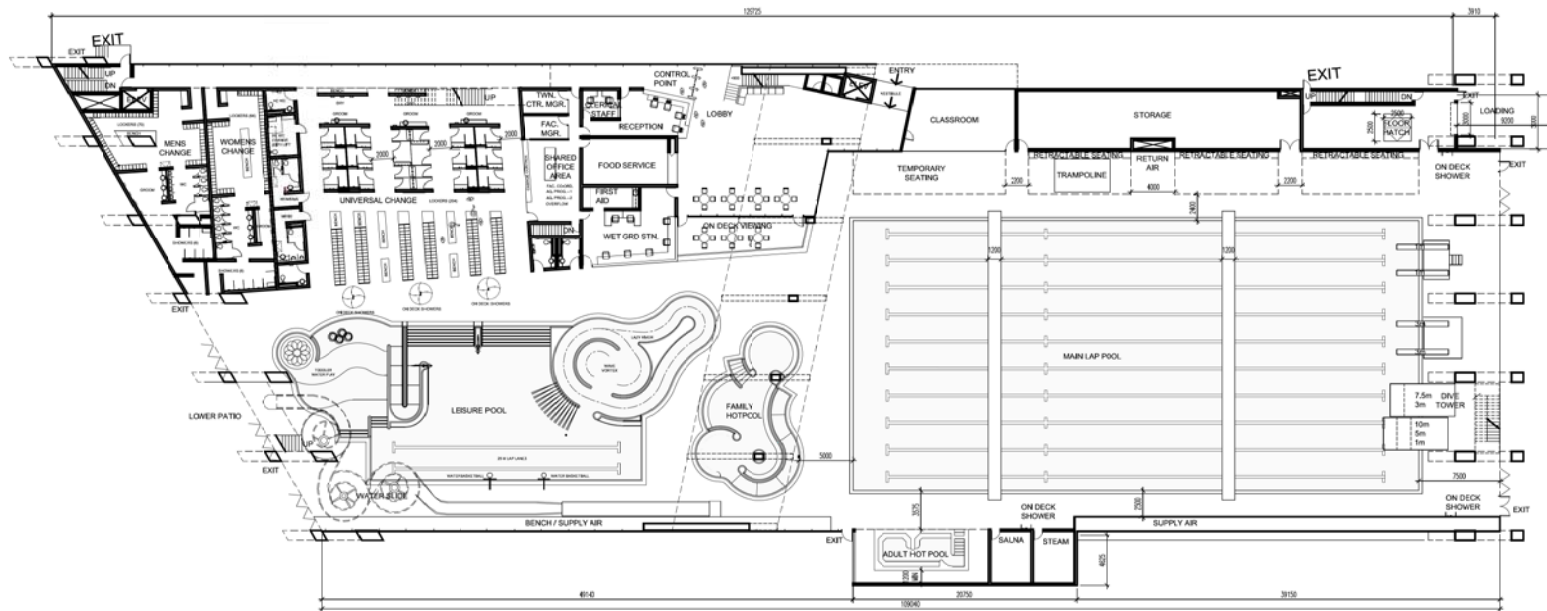
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 Job No. 1213

Date JULY 11, 2012
 Scale 1:3000
 Reference:

SHEET NUMBER



Revision:



JOB TITLE

Grandview Heights
 Aquatic Centre

Surrey, BC

SHEET TITLE

GROUND FLOOR PLAN

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 Job No.

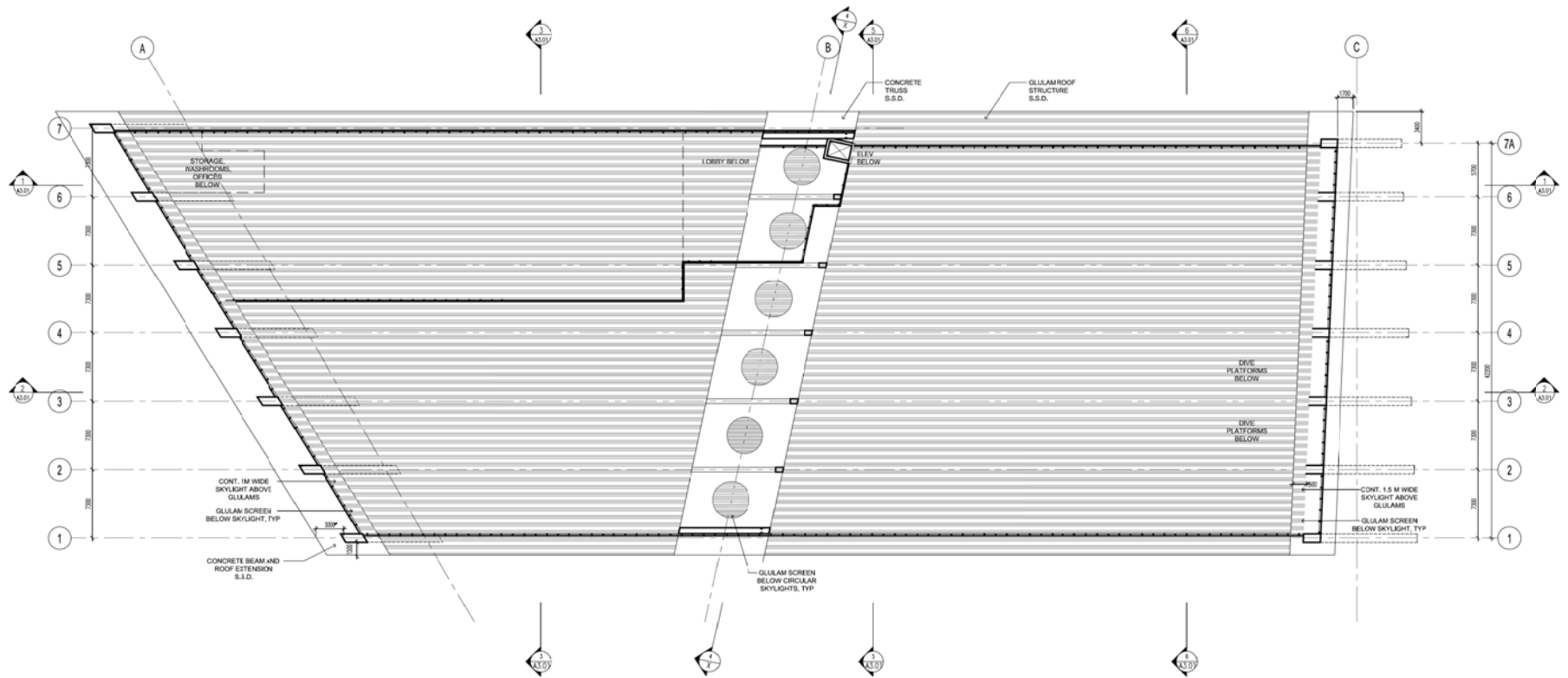
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Date JULY 11, 2012
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SHEET NUMBER



Revision:



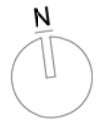
JOB TITLE
 Grandview Heights
 Surrey, BC

SHEET TITLE
 REFLECTED CEILING
 PLAN

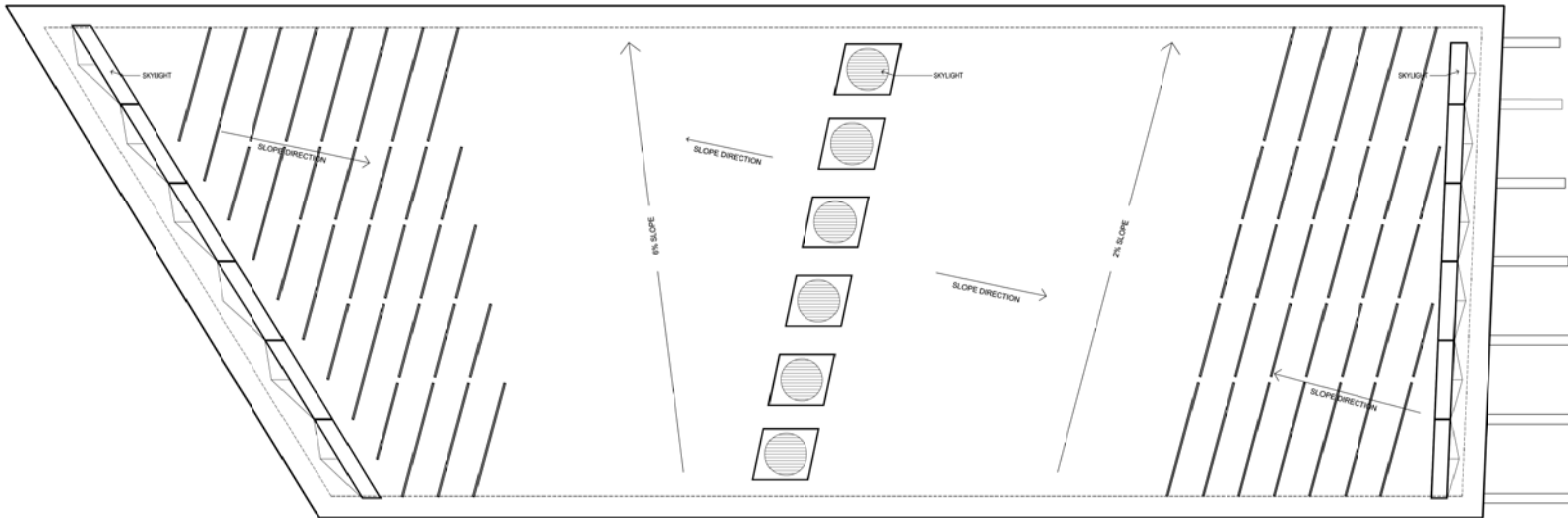
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Date JULY 11, 2012
 Scale 1:700
 Reference:

SHEET NUMBER



Revision:



JOB TITLE

Grandview Heights
 Aquatic Centre
 Surrey, BC

SHEET TITLE

ROOF PLAN

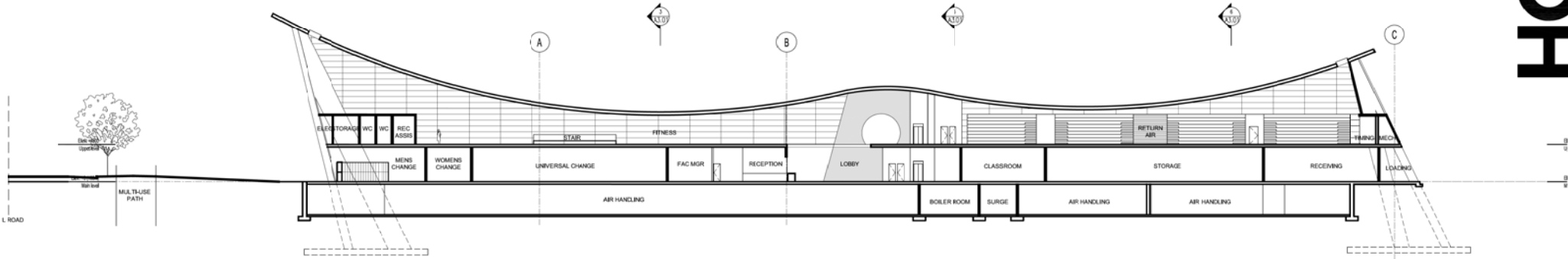
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Date JULY 11, 2012
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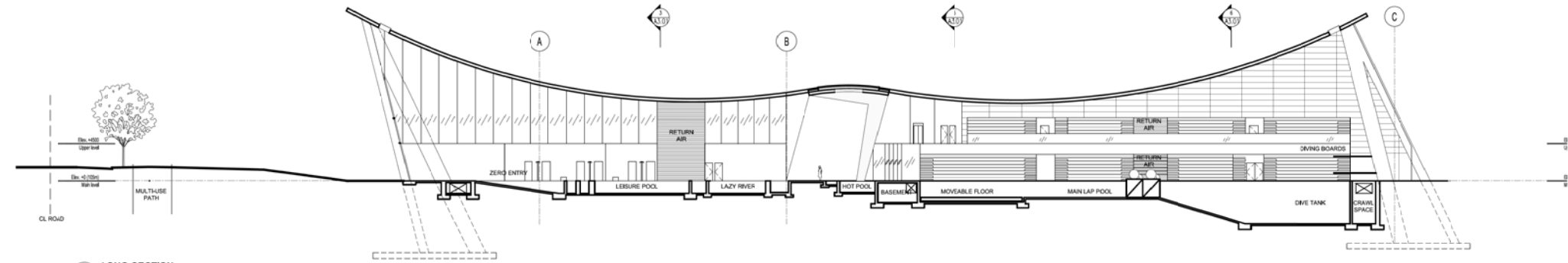
SHEET NUMBER



Revision:



1 LONG SECTION
1:200



2 LONG SECTION
1:200

JOB TITLE

**Grandview Heights
 Aquatic Centre**
 Surrey, BC

SHEET TITLE

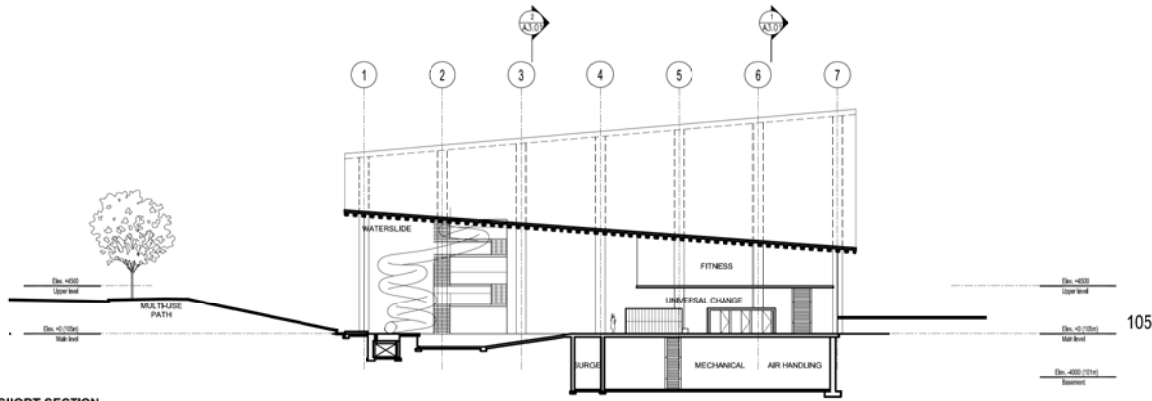
LONG SECTIONS

Drawn
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 Job No. 1213

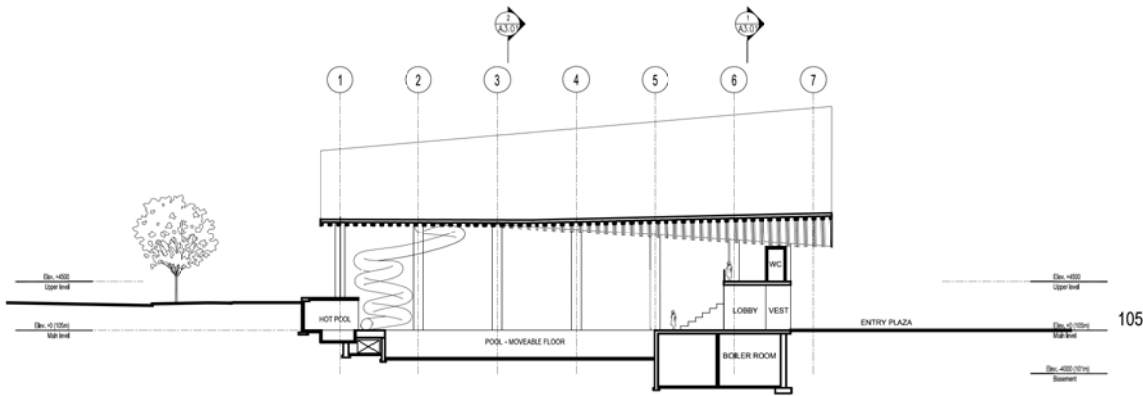
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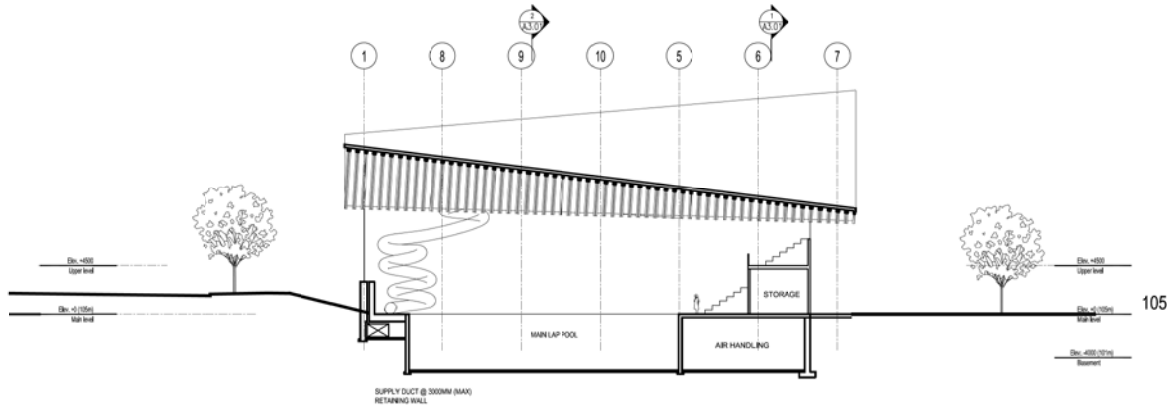
Revision:



3 SHORT SECTION
1/70



4 SHORT SECTION
1/70



5 SHORT SECTION
1/70

JOB TITLE

Grandview Heights
 Aquatic Centre
 Surrey, BC

SHEET TITLE

SHORT SECTIONS

Drawn
 Checked
 Job No.

1213

Date JULY 11, 2012
 Scale 1:700
 Reference:

SHEET NUMBER

Revision:

Present:

Chair – D. Lee
Panel Members:
W. Francl
T. Wolf
B. Shigetomi
T. Ankenman
D. Lee
S. Vincent
M. Searle

Guests:

Mathew Cheng, Matthew Cheng Architect Inc.
Pat Campbell, PMG Landscape Architects Ltd.
Colin Hogan, Focus Architecture Inc.
Mary Chan Yip, PGM Landscape Architects
Patrick Cotter, Cotter Architects
Rob Whetter, Cotter Architects
Mark van der Zalm, van der Zalm & Associates
Hermann Nuessler, Bosa Properties
Darryl Condon, HCMA Architects
Melissa Higgs, HCMA Architects
Chris Phillips, Phillips Farevaag Smallenberg
Paul Dabbs, Omicron
Jordan Levine, Omicron
Harve Fuller, Sanford Design Group
Meredith Johnson, M2 Landscape Architects

Staff Present:

T. Ainscough, City Architect -
Planning & Development
H. Bello, Senior Planner – Planning
& Development
M. Rondeau, Senior Planner –
Planning & Development
M. Jørgensen, Associate Planner –
Planning & Development

4. 6:30 PM

File No.:	7912-0029-00
New or Resubmit:	Resubmit
Last Submission Date:	May 3, 2012(workshop)
Description:	Grandview Aquatic Centre
Address:	Corner of 24 Avenue and 168 Street
Developer:	Scott Groves, Manager, Civic Facilities, City of Surrey
Architect:	Melissa Higgs, Stuart Rothnie and Darryl Condon, HCMA Architects
Landscape Architect:	Chris Phillips, Phillips Farevaag Smallenberg
Planner:	Catherina Lisiak
Urban Design Planner:	Hernan Bello

The Project Architect presented an overview of the site plan, building plans, elevations, cross sections, and streetscapes and highlighted the following:

- The subject property is located at the northeast corner of 24 Avenue and 168 Street.
- The original design concept was presented to the ADP panel two months ago.
- The subject property provides an entry point to a larger precinct but represents a challenge given the need to address changing land-uses as the surrounding neighbourhood expands.
- The building was inspired by water in motion (i.e. rolling waves) and reflects a design that accommodates programmatic requirements (i.e. 10 metre diving tower and waterslide tower).
- The primary building entrance is accessed directly from the adjacent parking lot. In addition, pedestrian connectivity is provided from the multi-use pathway on 24 Avenue. A second access point is provided across the internal bridge through the

central building. The proposed asymmetrical framework reduces the amount of structural support required around the bridge.

- The building is divided into competitive training facilities and leisure pool space. The glazing system will control direct sunlight with translucent window treatments on the south and east building façade that gradates toward transparent window treatments on the western elevation. The proposed window treatment reduces direct sunlight reflecting off the pool surface. The textured pattern will change depending on the person's location within the proposed building.
- The proposed building will include a suspended cable-like structure with central roof support and concrete anchoring buttresses. The current roof proposal is comprised of paired glue-lam wood beams created in three pre-fabricated segments with insulated plywood located between each wood cable. The roofline slopes northward to capture rainwater while curves help retain sliding snow with skylights located above the internal bridge which provides natural lighting.
- The entry lobby abuts the adjacent staircase and provides direct access to the internal bridge. Several change rooms are located nearby the leisure pool area directly below the second-floor fitness centre. In the competitive training pool area, the spectator seating retracts to provide greater floor area for programs/activities with further program space located in the basement.
- The exterior building façade is painted white with clear anodized glazing. Additional building articulation is provided along the northern façade to assist patrons in locating the entrance and includes a drop-off/pick-up area, public plaza as well as overhead hanging canopies.
- The mechanical equipment is located within the basement and draws fresh air from outside the building with large aquabowl panels situated around the buttresses for cross-ventilation.
- The architect no longer proposes an exterior ramp along the northern building façade.
- The building is designed to allow for future expansion phases along the eastern façade.

The Landscape Architect reviewed the landscape plans and highlighted the following:

- A wider boulevard is anticipated on 24 Avenue which includes a future multi-use pathway.
- The program activities are parking intensive. Therefore, extensive greenery is proposed which includes on-site trees and shrubs as well as bio-swales the funnel into a detention pond system.
- The subject property includes three central outdoor spaces:
 - A front entry at-grade with public plaza, outdoor seating areas and fire truck access. The rainwater is collected through a scupper and eventually funnelled through natural bio-swales and stormwater detention systems located within the adjacent parking lot.
 - The eastern building façade includes a designated loading area and recycling facility with public open space and seating areas (tables and benches) for outdoor activities.
 - The western building façade will benefit from southern exposure and includes operable doors near the water play area, outdoor seating, public lawn space and groundcover with transparent glazed fencing located around the outer edge.
- A mid-block pedestrian connection is provided through the internal bridge.

- The architect proposes integrated paving bands and durable outdoor furniture (e.g. wedge shapes) which provide greater flexibility for public seating areas and outdoor sunbathing.
- The lower patio near 24 Avenue & 168 Street will include an outdoor children's play area.
- The intersection of materials is exaggerated to accommodate grade changes and includes the use of steel elements to highlight transitions or changes in materials along the exterior facade.

In response to questions the following information was provided by the project architect:

- The architect proposes two separate entrances: [1] an access point from the lower-level and northern parking lot; as well as [2] an access point at the upper-level from the proposed multi-use pathway on 24 Avenue. In order to reduce CPTED concerns, the internal bridge is fully enclosed within the proposed building with increased public surveillance and good sign lines from the entry-level control desk and second-level fitness space. No public access is allowed outside regular business hours. A ramp could be installed in future along the northern façade.
- The pool surface glare is reduced by glazing that gradates from translucent to transparent and strategic placement of waterslide towers, life-guard stations as well as additional landscaping.
- In future phases of possible expansion, a singular control point is currently anticipated along the eastern building façade. The future expansion would probably include a competitive pool facility not leisure space. May need two additional 50 metre pools for major sporting events.

ADVISORY DESIGN PANEL STATEMENT OF REVIEW

Grandview Aquatic Centre

Corner of 24 Avenue and 168 Street, Future Grandview NCP 5

File No. 7912-0029-00

It was

Moved by W. Francl

Seconded by T. Ankenman

That the Advisory Design Panel (ADP) recommends

that the applicant address the following recommendations and revise and resubmit to planning staff.

Carried

STATEMENT OF REVIEW COMMENTS

Pedestrian Circulation

- Ad-hoc planning could result in increased on-the-ground monitoring of access points.
- A well-designed pedestrian circulation system is required from 24 Avenue toward the northern building elevation so the internal bridge is not viewed as a primary access point.

Form and Character

- The proposed building is well-executed, interesting and visually attractive.
- The architect proposes a beautiful architectural expression and appealing roofline silhouette.
- The overall design provides the appearance of transparency and movement from east to west.
- An attractive water feature is located adjacent to the public plaza at 24 Avenue & 168 Street.
- The internal bridge proposal will provide visible motion along the upper-concourse level and includes windows at the upper-bridge level with public views toward the adjacent parking lot.
- The second-floor fitness centre should align better with the activity space below.
- The internal staircase should provide an attractive visual feature along the northern elevation.
- The pedestrian entrance located along the northern building elevation is fairly small compared to the scale of the proposed building. The entry should be elegant and provide visual interest (e.g. attractive roofline).

CPTED

- The proposed building creates CPTED issues and necessitates better surveillance of outdoor leisure areas near 24 Avenue & 168 Street. However, the architect proposes reflective glass surfaces which should improve views toward the outdoor leisure space and/or public plaza.
- The pedestrian entrance on 24 Avenue could benefit from including a coffee shop which provides an additional control point. In addition, a buzzer system could be installed with rough-in provided for cameras and/or automatic door systems to control access as well as improve response times if a criminal incidence occurs along the internal bridge structure.
- The current design enables a person to throw objects from the internal bridge into pool areas.

Sustainability

- Filtering rainwater through a bio-swale system is considered positive.

The Developer made the following comments on the Statement of Review:

- The comments are helpful.
- The architect will resolve CPTED concerns regarding the proposed internal bridge.

HCMA Responses to ADP Statement of Review Comments:

Concern was expressed at the second ADP presentation regarding CEPTED issues related to the pedestrian entry on the south side of the building. The proposed entry was via a bridge that passed from an entry vestibule through the natatorium volume and over the pools to bring visitors to the reception desk in the lobby on the north side. Concerns regarding individuals throwing items off of the bridge into the pool were related to the distance of this entry point from any staff control point, along with a lack of program elements (such as a coffee shop) located adjacent to the bridge for passive overlook/security. Given the number of concerns raised, the design team looked at this

element more closely with the client group and ultimately decided to remove it the bridge and the south pedestrian entrance. As a result, the building has been moved east on the site to allow for a larger plaza space at the corner of 168th and 24th Ave., with an enhanced pedestrian pathway leading around the northwest corner of the building and to the entrance on the north.

CITY OF SURREY

(the "City")

DEVELOPMENT VARIANCE PERMIT

NO.: 7912-0029-00

Issued To: CITY OF SURREY
("the Owner")

Address of Owner: 14245 - 56 Avenue
Surrey, BC
V3X 3A2

1. This development variance permit is issued subject to compliance by the Owner with all statutes, by-laws, orders, regulations or agreements, except as specifically varied by this development variance permit.
2. This development variance permit applies to that real property including land with or without improvements located within the City of Surrey, with the legal description and civic address as follows:

Parcel Identifier: 009-927-832

Lot 6 Except Firstly: North 62 Feet Secondly: Part Dedicated Road on Plan BCP26761; Section 19 Township 7 New Westminster District Plan 14320

16809 - 24 Avenue

Parcel Identifier: 009-927-875

Lot 7 Section 19 Township 7 New Westminster District Plan 14320

16847 - 24 Avenue

Parcel Identifier: 009-984-429

Lot 8 Section 19 Township 7 New Westminster District Plan 14320

16891 - 24 Avenue

Parcel Identifier: 009-927-891

Lot 9 Section 19 Township 7 New Westminster District Plan 14320

16917 - 24 Avenue

(the "Land")

3. (a) As the legal description of the Land is to change, the City Clerk is directed to insert the new legal description for the Land once title(s) has/have been issued, as follows:

Parcel Identifier:

- (b) If the civic address(es) change(s), the City Clerk is directed to insert the new civic address(es) for the Land, as follows:

4. Surrey Zoning By-law, 1993, No. 12000, as amended is varied as follows:
 - (a) In Section A.1 (a) iv of Part 4 General Provisions of Zoning By-law, 1993, No. 12000, as amended, to reduce the side yard setbacks from 14.5 metres (48 feet) to 5 metres (16 feet).
5. The Land shall be developed strictly in accordance with the terms and conditions and provisions of this development variance permit.
6. This development variance permit shall lapse if the Owner does not substantially start any construction with respect to which this development variance permit is issued, within two (2) years after the date this development variance permit is issued.
7. The terms of this development variance permit or any amendment to it, are binding on all persons who acquire an interest in the Land.
8. This development variance permit is not a building permit.

AUTHORIZING RESOLUTION PASSED BY THE COUNCIL, THE DAY OF , 20 .
ISSUED THIS DAY OF , 20 .

Mayor – Dianne L. Watts

City Clerk – Jane Sullivan