



City of Richmond

Report to Committee

To: Public Works and Transportation Committee

To PW+T - August 21, 2002
Date: August 6, 2002

From: Gordon Chan, P. Eng.
Director, Transportation

File: 4105-01

Re: **Proposed Access Improvements at the Palms Development (7080 and 7088 St. Albans Road and 8433 Bennett Road)**

Staff Recommendation

That a new right-in/right-out driveway on Granville Avenue (east of St. Albans Road) be approved at the Palms development (7080 and 7088 St. Albans Road and 8433 Bennett Road).

Gordon Chan, P. Eng.
Director, Transportation

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CONCURRENCE OF GENERAL MANAGER

Staff Report

Origin

The Palms development (7080 and 7088 St. Albans Road and 8433 Bennett Road) is a four-phase residential development of which two phases have been completed. Residents occupying the first phase of the development are concerned with the existing access at St. Albans Road and have made a presentation to Planning Committee on May 7, 2002. At that meeting, the following referral was given to staff:

That access to 7080 and 7088 St. Albans Road, and 8433 Bennett Road, be referred to Transportation staff:

- 1. in order that the traffic volumes at the access and the adjacent intersections be monitored; and*
- 2. to determine whether an additional access from Granville Avenue to the site would alleviate the traffic volumes on St. Albans.*

This report presents the issues raised by the residents, an assessment of the issues, and recommended improvements to enhance access to this development.

Analysis

Staff have met with the Palms Strata Council Chair, the developer (Bosa) and his consultant to discuss the access issue. The consultant has completed a traffic study on the matter. The following summarizes the study findings and the proposed access and circulation improvements. The documentation of the traffic assessment is contained in Attachment 1.

Issues Raised by Residents

The concerns were related to conflicts with waste/recycling loading activities at the on-site parkade entrance and that there is only a single driveway on St. Albans Road serving this development.

Existing Traffic Conditions

A review of available data indicated that traffic turning volumes at the Palms access is relatively low. Observations conducted at this access did not reveal any significant vehicular delay. There have not been any traffic collisions reported at this location. Based on these findings, it was concluded that the concerns raised by the Palms residents were not due to high traffic volumes on St. Albans Road.

Comparison of Access for Similar Developments

A review of access for similar developments identified only one comparable project in terms of size and access configuration. However, the adjacent street of that development has a significantly lower traffic volume than that on St. Albans Road. Also, unlike the Palms development, there are no adjacent commercial developments creating vehicular conflicts with residential traffic.

Further Discussions with Residents

Based on further discussion with the Palms residents and review of the overall access configuration in the area, staff concluded that the problems were primarily due to the short “back-to-back” left-turn bays on St. Albans Road. These left-turn bays serve both southbound left-turns into the Palms site and northbound left-turns into the St. Albans Place plaza on the west side of the road. The close proximity of the Palms and plaza driveways only allow for minimal vehicle storage in the left-turn bays. Any traffic queue with more than one vehicle would impede the through traffic movements on St. Albans Road.

Study Conducted by Consultant

To update the 1997 traffic study completed for the initial development application, Bosa retained a traffic consultant to carry out a review of the issues. Staff have completed an assessment of the study findings and obtained further feedback from the Palms residents. The following conclusions of the traffic report were found to be acceptable (Attachment 2):

- *The residents should resolve the issue of waste and recycling trucks blocking the existing parkade access with the waste management company(s);*
- *For future development phases, an alternative location along the private lane other than at the existing parkade entrance should be used for waste and recycling loading; and*
- *A right-in/right-out access on Granville Avenue should be provided as it would improve traffic operation on St. Albans Road, and the impact of the new driveway to eastbound traffic as well as to pedestrians and cyclists on Granville would be minimal.*

Rationale for Granting a New Driveway on Granville Avenue

The introduction of a new driveway on Granville Avenue would be inconsistent with the City’s objective to discourage direct access on the arterial road network and would conflict with the City Centre Transportation Plan to promoting Granville Avenue/Garden City Road as a downtown bypass. However, a new driveway on Granville Avenue can be supported based on the existing constraints at the single access on St. Albans Road and the short left-turn bays. These constraints would result in greater access difficulties when this development is completed to its ultimate stage. A new right-in/right-out access on Granville Avenue would divert some of the site traffic from St. Albans Road and could improve traffic operations on St. Albans Road.

Actions To Date

The Palms Strata Council has contacted the waste management company and the City to request them to ensure that the parkade entrance is not blocked by any waste and recycling trucks (Attachment 3). As part of the next development phase, Bosa has agreed to designate an alternative area away from the existing parkade entrance to accommodate waste and recycling loading activities. The consultant has also provided confirmation that the proposed right-in/right-out driveway on Granville Avenue would not result in any adverse impacts on Granville Avenue traffic (Attachment 4).

Staff Recommendation

Based on the above assessment, it is recommended that a new right-in/right-out driveway, the design of which is subject to acceptable city standards, be approved on Granville Avenue. As there is an existing restrictive covenant registered on the subject property which allows one access on Granville Avenue to be used for visitors parking only, the proposed new access on

Granville Avenue would require an amendment to this covenant to permit its use by the residents. In addition, Bosa must make an application to amend the existing development permit to allow the access onto Granville Avenue. They could simply include this in the application they are about to make regarding architectural modifications to Phase 4 of the development.

Financial Impact

There is no financial impact to the City as the developer will bear all costs associated with the recommended improvements, including modifications to the design of future phases of the project to allow for the new access on Granville Avenue. A letter from the developer confirming this commitment is contained in Attachment 5.

Conclusion

The Palms residents have concerns about the on-site circulation and the single access on St. Albans Road serving the development. To address the former problem, the Palms Strata Council has committed to resolving this issue with the waste management companies. To avoid similar problems with future phases, Bosa has agreed to designate an alternative area away from the parkade entrance to accommodate waste and recycling loading activities. Staff concluded that the St. Albans Road access issue was not related to the capacity of St. Albans Road. The access difficulties were due to the short left-turn bays serving both the Palms development and the St. Albans Place plaza resulting in incidents of vehicular conflicts. To address the latter concern and not to worsen the situation when the Palms development is expanded to its ultimate stage, staff support the approval of a new right-in right-out driveway on Granville Avenue as part of the future phases of this development. All associated costs are to be borne by the developer.



Donna Chan, P. Eng.
Transportation Engineer

DC:dc

APPENDIX**Technical Review of the Palms Development Access**

The technical review of the existing access at the Palms Development includes information on the functions of Granville Avenue, the existing development and layout of the Palms site, the future development plans of this project, a comparison of access of similar developments, and a review of traffic data.

1. Functions of Granville Avenue

Granville Avenue is classified as a major arterial road which is also a designated bicycle route and a City Centre bypass route. One of the objectives of the City is to eliminate or minimize private driveways on the arterial road system. The City Centre Transportation Plan also promotes the use of Granville Avenue/Garden City Road as a downtown bypass to improve circulation. For these reasons, a new driveway initially proposed in 1997 as part of the Palms development for use by the general traffic was not supported by the City.

2. Existing Development and Layout of the Site

At present, there are two access points for the Palms development. The primary access has a driveway on St. Albans Road which forms an internal private cul-de-sac lane to the site. The other access is off Bennett Road serving only part of a separate townhouse development to the south with no vehicular connection to the private cul-de-sac. The overall site layout is presented in Attachment 2.

Two phases have been constructed to date comprising of one high-rise tower with 116 units and one separate complex of 29 townhouse units. Of these townhouse units, 19 units are served by Bennett Road. The other 10 townhouse units and the high-rise units are served by the private east-west lane which connects onto St. Albans Road.

In 1997, a traffic study was conducted by the developer's traffic consultant for the development. The study stated that the main driveway access to the site located on St. Albans Road is expected to operate well within capacity and with minimal delay. At that time, a right-in/right-out access off Granville Avenue was proposed to only serve 15 visitor stalls. However, the City did not support this driveway on Granville Avenue for reasons noted in Section 1 above. The traffic consultant agreed that removing that access would not impact the development significantly as the utilization of this driveway would be negligible.

3. Future Development Plans for the Palms

When the Palms development is ultimately expanded with the four phases in place, there would be 349 residential plus six commercial units. All but 19 townhouse units would be served by the private east-west lane which connects onto St. Albans Road. Table 1 summarizes the number of units for each phase of development. There are four commercial units located at the base of the existing high-rise tower which open onto St. Albans Road/Granville Avenue. The remaining two commercial units would be located at the base of the new tower.

Table 1: Summary of Number of Dwelling Units at the Palms

Phase	Building/Complex	Status	Number of Units	Access
Phase 1	Tower 1: Monaco	Existing	116 residential units 4 commercial units	Access off private east-west road
Phase 2	Townhouses: Sonterra	Existing	29 residential units 2 commercial units	12 units- Access off private east-west road 19 units- Access off of Bennett Rd
Phase 3	Tower 2: Coronado Next Planned Phase	Future	99 residential units	Access off private east-west road
Phase 4	Low-rise: Clio	Future	105 residential units	Access off private east-west road
Total			349 residential units 6 commercial units	

Photographs 1 to 3 show the St. Albans Road access to the Palms development, the private east-west driveway at the Palms development, and the loading area adjacent to the parkade entrance respectively. Photograph 4 and Figure 1 show the existing left-turn lane configuration on St. Albans Road.

4. Comparison of Access of Similar Residential Developments

To determine whether or not the existing single access at the Palms development is adequate, research on access provisions for a number of residential developments in the City Centre was conducted. The results of this comparison are summarized in Table 2.

Table 2: Access for Other Residential Developments in the City Centre

Complex name	Address	Street Number	No. of Units	No. of Access Points	Comments
Rosario Gardens (Tower A)	Cooney Rd	6119	95	One driveway off lane shared by both buildings	lane exits to Cooney and Buswell (via cross access)
Rosario Gardens (Tower B)	Saba Rd	8297	101		
Imperial Grand	Granville Ave	7500	108	Moffatt (1)	
Golden Leaf Towers	Granville Ave	7680/7700/ 7760	128	Minoru (1)	
Centre Pointe	Lansdowne Rd	8811/8831/ 8851/8871	392	Lansdowne (1) Garden City (1)	Both right-in right-out only
Regency Park Towers	Minoru Blvd	6611/6631/ 6651	546	Minoru Blvd (2) Minoru Gate (1)	driveway off of Minoru Gate shared with the Richmond Cultural Centre
Dorchester Circle	Moffatt Road	7291/7293/ 7295/7297	337	Moffatt (1)	
The Palms	St Albans	7080	349 ultimately	St Albans Rd (1); one driveway off of Bennett for 19 units	116 units existing

(1) denotes one driveway

(2) denotes two driveways

Based on the results presented in Table 2, staff found only one comparable residential complex of similar size with a single access and that is Dorchester Circle on Moffatt Road. However, the Dorchester Circle access on Moffatt Road is considerably different from the Palms access on St. Albans Road as:

- the traffic volume on Moffatt Road is significantly less than that on St. Albans Road (3,000 vehicles per day vs. 15,000 vehicles per day respectively);
- there are no traffic movement conflicts with vehicular traffic using adjacent driveways on Moffatt Road; and
- there are no commercial developments on Moffatt Road.

5. Review of Traffic Data and Problems

Traffic Volumes - The existing traffic volume at the Palms access on St. Albans Road during the weekday afternoon peak period was in the order of 45 vehicles per hour in both directions. The daily traffic volume on St. Albans Road was found to be 15,000 vehicles which is considered to be typical for a local arterial road within the City Centre.

Observation on Traffic Delays - A traffic delay analysis of the existing driveway at St. Albans Road conducted on Friday May 17, 2002 and on Wednesday May 22, 2002 indicated that in each of the morning and afternoon peak half-hour periods, there were 13 to 14 vehicular movements observed at the driveway. The observed longest delay was 10 seconds. The majority of these movements were made within 5 seconds.

Traffic Accident Statistics - Staff also examined the statistics on reported traffic accidents near the Palms access on St. Albans Road and found that there had been no accidents reported at this location from 1998 to 2000. During the period analyzed, there had only been one minor accident in the vicinity which occurred at the commercial driveway on the west side of the road opposite to the Palms driveway.

6. Conclusion

Based on the above review of traffic data and site observations, it was concluded that the concerns raised by the residents at the Palms were not due to high traffic volumes on St. Albans Road. The access to St. Albans Road is found to be operating within its capacity and at acceptable levels of service on weekdays.

Upon discussions with the Strata Council Chair, it was further pointed out that problems were encountered periodically by the residents while making the southbound left-turns. Staff concluded that the problems experienced by the residents were mainly due to the short storage length of the "back-to-back" left-turn bays on St. Albans Road serving both southbound left-turning traffic into the Palms development and northbound left-turning traffic into the St. Albans Place plaza on the west side of the road. The close proximity of the two driveways allow for minimal vehicle storage in the left-turn bays. Any traffic queue in excess of one vehicle would impede the through traffic movements on St. Albans Road.



Photograph 1: Access to The Palms on St. Albans Road - Facing North



**Photograph 2: Private East-West Lane at the Palms - Facing East
(Parkade Entrance under Yellow Overhead Sign)**

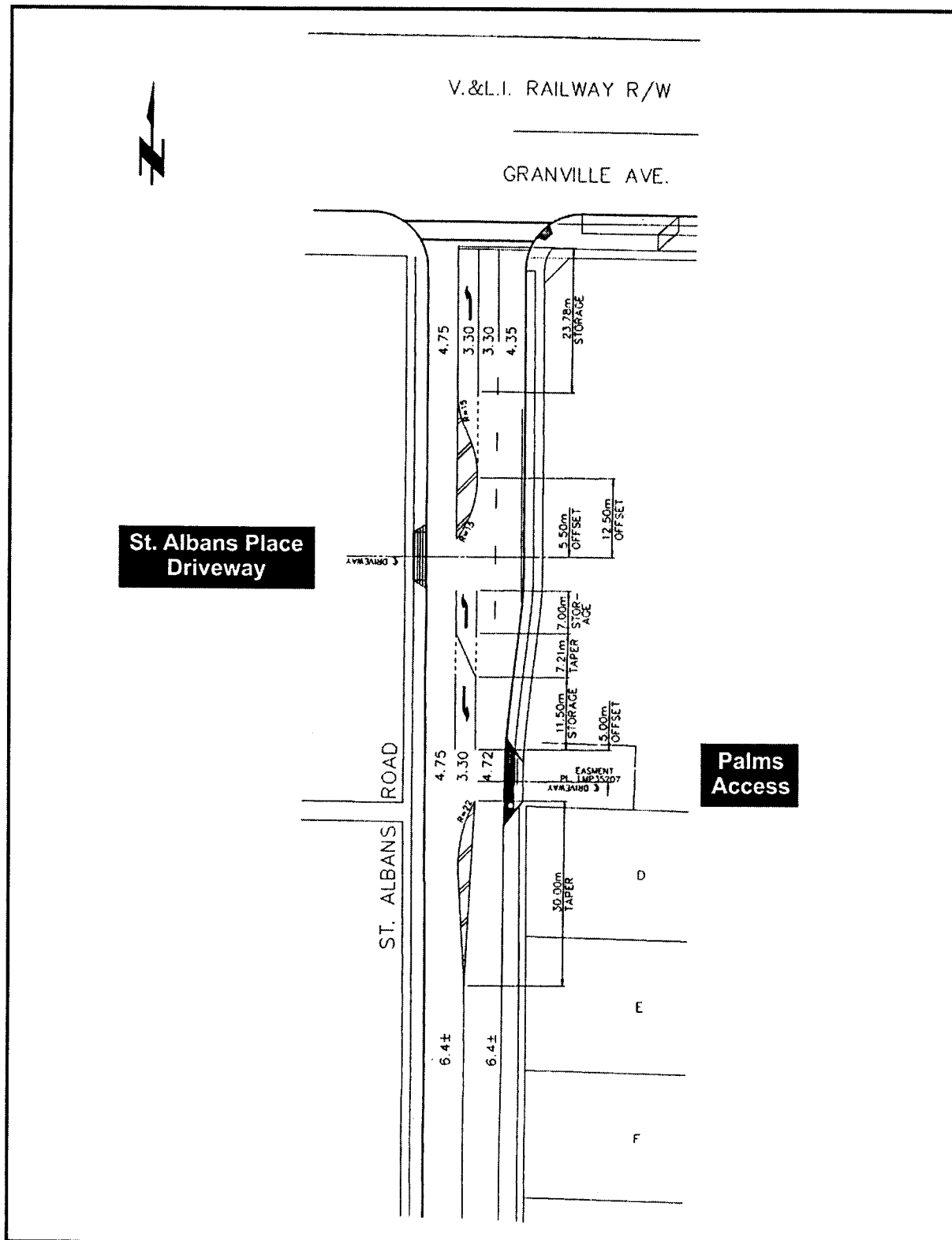


Photograph 3: Existing Waste/Recycling Loading Area at Parkade Entrance - Facing North

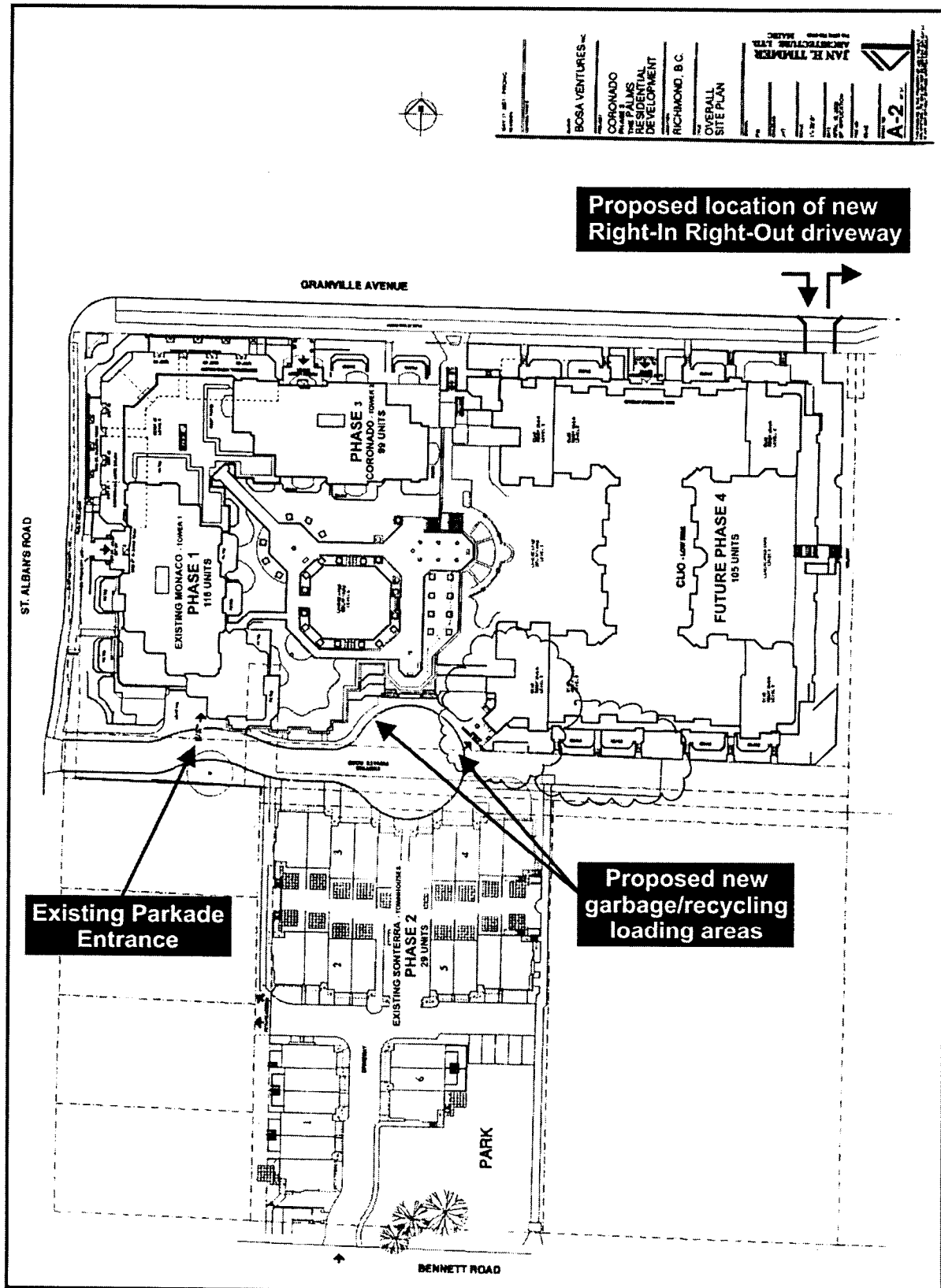


Photograph 4: Back-to-Back Left Turn Bays on Albans Road - Facing North

FIGURE 1

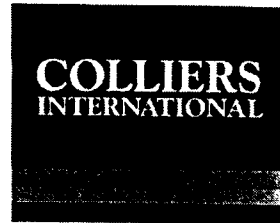


Existing Lane Configuration on St. Albans Road near the Palms Access



The Palms Development Site Plan and Recommended Improvements

COPY



July 10, 2002

Smithrite Disposal
4180 Dawson St.
Burnaby, B.C.
V5C 4B1

Real Estate Management Services
200 Granville Street
15th Floor, Granville Square
Vancouver, British Columbia
Canada V6C 2R6
Telephone (604) 681-4111
Fax (604) 681-2911
www.colliers.com

Attention: Mr. Jonathan Williams

Dear Mr. Williams,



**Re: Account #1819 The Monaco – Strata Plan LMS 4084
7080 St. Albans Road, Richmond, B.C.**

Please be advised due to building construction on the next phase of the above noted Strata Corporation there will be changes made to the pick-up procedures for the garbage and recycling services.

In order to accommodate the increased number of vehicles, which will be leaving and entering the underground parkade, the City of Richmond has requested the garbage and recycling pick-up locations be relocated to the door at the South west side of the Monaco apartment Tower.

By making this change the City in conjunction with the owners hope to mitigate the interference with the traffic flow to and from the building by ensuring the large trucks used for the garbage and recycling pick-up are parked away from the main vehicle entrance.

Once the renovations to the new pick up location have been completed you will be further notified to ensure the proper procedures are followed.

Please also in order to mitigate vehicle interference while picking up at the existing location please ensure the garbage and recycling trucks do not block the parkade entrance.

Should you have any further questions, please contact the undersigned.

Yours truly,
**COLLIERS MACAULAY
NICOLLS INC.**
Managing Agent

A handwritten signature in black ink, appearing to be "Chris McInnes".

Chris McInnes
Property Manager, Residential Division
On behalf of the Strata Council for Strata Plan LMS 4084

CM/crb

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re Garbage & Recycling Jul 16/02

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July 10, 2002

City of Richmond Environmental Programs
6911 No. 3 Road
Richmond, B.C.
V6Y 2C1

Attention: Mrs. Emy Lai

Dear Mrs. Lai,

**Re: The Monaco – Strata Plan LMS 4084
7080 St. Albans Road, Richmond, B.C.**

RECEIVED
07/10/02
RC

**COLLIERS
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Yours truly,
**COLLIERS MACAULAY
NICOLLS INC.**
Managing Agent



Chris McInnes
Property Manager, Residential Division
On behalf of the Strata Council for Strata Plan LMS 4084

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cc Garbage & Recycling Jul 10/02

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Vancouver, BC V6E 2R1

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B U N T
& ASSOCIATES

MEMORANDUM

CITY OF RICHMOND

DATE

1 - 2002

RECEIVED

URBAN DEVELOPMENT

DATE: July 17, 2002

TO: Dale Bosa **FAX NO:** (604) 299-6460

COPIES: Donna Chan **FAX NO:** (604) 276-4177

FROM: Sarah Dirksen **No. of Pg.** 3
(incl. cover)

PROJECT: THE PALMS – RICHMOND, BC

SUBJECT: QUEUE ANALYSIS – GRANVILLE AVENUE ACCESS

As requested, we have reviewed the Granville Avenue Access for queuing at the parking garage gate.

The proposed driveway and gate placement will accommodate two vehicles in line, waiting to enter the parking garage. The attached sketch illustrates the queuing storage for this driveway.

As a basis for the queuing analysis, we conducted a 2 hour survey at the existing driveway on St. Albans Road, on July 11, 2002 from 4pm to 6pm. The survey involved recording vehicle arrival times, the length of time it took vehicles to enter the parking garage (processing time) and the queue lengths that occurred.

As per our June 7, 2002 report, it is anticipated that in the PM peak hour, there will be 34 vehicles entering the Granville Avenue driveway. Using single-channel queuing formulas and the processing times observed at the existing driveway, the probability of a two-car queue was calculated. This calculation indicates that 99.6% of the time a 2 vehicle or less queue can be expected at the Granville driveway, which can be accommodated by the proposed design.

The maximum number of vehicles observed in the system at one time at the existing driveway was 3 vehicles, and this occurred once over the two-hour period. Based on a 27 vehicle per hour arrival rate observed at the existing

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& ASSOCIATES

driveway and considering the estimated 34 vehicle per hour arrival rate for the Granville driveway, it is estimated that the maximum queue at the Granville driveway could be 3 or 4 vehicles. Since a 2 car or less queue will likely occur 99.6% of the time, the probability of 3 or 4 cars queued at the Granville driveway is less than 0.5%. This suggests that there is less than a 0.5% probability that vehicles will queue onto Granville Avenue, waiting to access the site driveway.

These calculations are somewhat conservative as they are based upon an average processing time of 16 seconds, as was observed at the existing gate. The new driveway design and gate placement will likely not allow for placement of a keypad entry system, and therefore a remote push-button entry opener from within a car is recommended. This type of system would have a quicker processing time, likely half that of the keypad system, and therefore the probability of queuing would decrease, as more vehicles could be processed each minute. Assuming a 10 seconds average processing time, the probability of 2 vehicles or less in a queue is 99.92%, and the probability of a 3 or 4 car queue is less than 0.08%.

* * * *

We trust this information will be of assistance to you. Should you have any questions regarding our findings, please do not hesitate to contact us at 604.685.6427.

Regards,



Sarah Dirksen, EIT
Transportation Analyst

Page 2

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604 685 6579

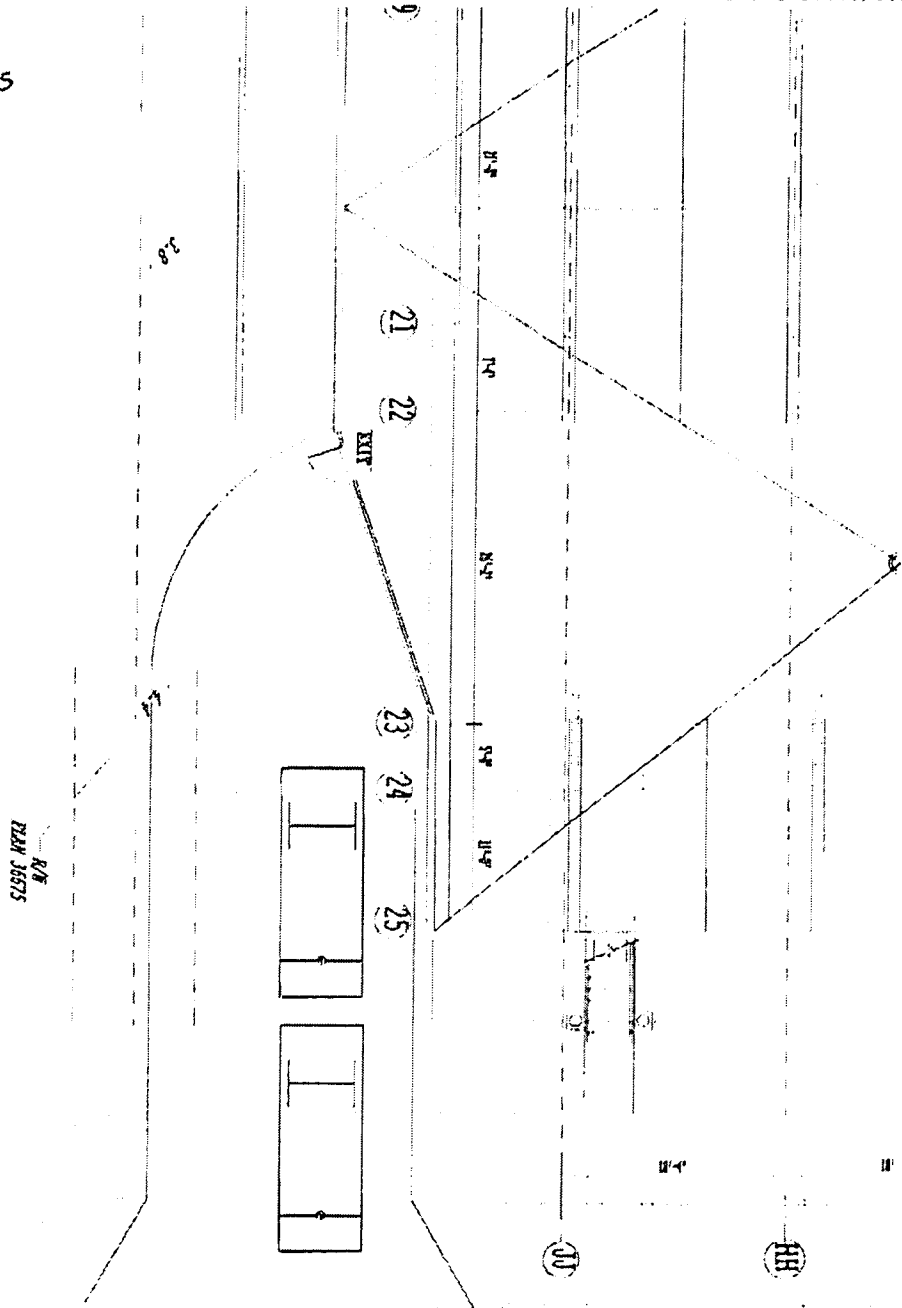
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Bosa - The Palms
July 2002



Granville Avenue

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08/07/2002 13:37 FAX 604 299 6460

BOSA CONSTRUCTION

002



August 7, 2002

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www.bosaVentures.com

City of Richmond
6911 No. 3 Road
Richmond, B.C.
V6Y 2C1

Attention: Donna Chan, Transportation Dept.

Dear Ms. Chan

RE: The Palms - Garbage Loading Ramp

As per our conversations pertaining to the above-mentioned loading ramp, I would like to confirm in writing that Bosa Ventures (Richmond) Inc. agree to bear all the costs associated with the recommended improvements, which will include: for future development phases we will provide an alternative location along the private lane other than at the existing parkade entrance for waste and recycling loading. Also if approved a right in/right-out access on Granville Avenue.

If there are any further questions regarding the above, please feel free to contact the undersigned.

Yours truly,
BOSA VENTURES (RICHMOND) INC.

A handwritten signature in black ink, appearing to be "Dale Bosa", written in a cursive style.

Dale Bosa

DB/td

AUG 07 2002 13:48

604 299 6460

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