



Regina Planning Commission

**Wednesday, August 4, 2021
4:00 PM**

Henry Baker Hall, Main Floor, City Hall



OFFICE OF THE CITY CLERK

**Public Agenda
Regina Planning Commission
Wednesday, August 4, 2021**

Approval of Public Agenda**Adoption of Minutes**

Minutes of the meeting held on July 7, 2021.

Tabled and Administration Reports

RPC21-47 Supplemental Report - Discretionary Use - 5826 Rochdale Boulevard - PL202000248

Recommendation

That Regina Planning Commission:

Attach this supplemental report, including the additional noise assessment information prepared by FDI acoustics dated July 23, 2021 (Appendix A), to report RPC21-41 Discretionary Use – 5826 Rochdale Boulevard – PL202000248, as Appendix D, for City Council's information.

RPC21-41 Discretionary Use - 5826 Rochdale Boulevard - PL202000248

Recommendation

Regina Planning Commission recommends that City Council:

1. Approve the discretionary use for a proposed Service Trade, Wash–Light (Car Wash) land use located at 5826 Rochdale Boulevard, being Lot A, Blk/Par O, Plan 86R00275, subject to the following standards and conditions:
 - a) the development shall be generally consistent with the plans, including the installment of a solid acoustic barrier fence (1.83 metres) along the north and west property lines, attached to this report as Appendices A3.1 - A3.3 inclusive prepared by AECOM dated March 8, 2021 and June 23, 2021 and the noise impact assessment prepared by FDI Acoustics dated June 18, 2021 and appended to this report as Appendix C; and



OFFICE OF THE CITY CLERK

- b) the development shall comply with all applicable standards and regulations in *Regina Zoning Bylaw, 2019-19*.
2. Authorize the Development Officer to issue a development permit with respect to the application, subject to the applicant making payment of any applicable fees or charges and entering into a development agreement if one is required.
3. Approve these recommendations at its meeting on July 14, 2021, following the required public notice.

RPC21-48 MR4 Naming - Horizon Station Park

Recommendation

The Regina Planning Commission recommends that City Council:

1. Approve The Towns MR4 be named Horizon Station Park.
2. Approve this recommendation at its meeting on August 11, 2021.

RPC21-49 Zoning Bylaw Amendment - Regina Bypass and 9th Avenue North - PL202100088

Recommendation

Regina Planning Commission recommends that City Council:

1. Approve the application to rezone the properties located at NE ¼ Sec 32 Twp 17 Rge 20 W2M identified as MU1 and MU2 within Appendix A-1 from UH – Urban Holding Zone to PS – Public Service Zone.
2. Instruct the City Solicitor to prepare the necessary bylaw(s) to give effect to the recommendations, to be brought forward to the meeting of City Council following approval of the recommendations and the required public notice
3. Approve these recommendations at its meeting on August 11, 2021.



OFFICE OF THE CITY CLERK

RPC21-50 Discretionary Use Application - 628 Victoria Avenue - PL202100084

Recommendation

Regina Planning Commission recommends that City Council:

1. Approve the discretionary use application for the proposed development of “Agriculture, Animal Support” located at 628 Victoria Avenue, being Lots 2-6, Block 216, Plan DV270 in the Arcola Subdivision, subject to compliance with the following development standards and conditions:
 - a. The development shall be generally consistent with the plans attached to this report as Appendix A-3.1 and A-3.2, prepared by JMA Architecture, dated April 30, 2021, except that said plans shall be revised to comply with the requirements of Table 4B.T.3.3 of the Zoning Bylaw, specifically:
 - i. the window glazing must be revised to meet the active wall standards prescribed in Table 4B.T.3.3 (1) b of the Zoning Bylaw; or
 - ii. the front yard setback must be increased to 3.0m in accordance with clause 4B.T.3.3 (2)(c) of the Zoning Bylaw.
 - b. Except as otherwise specified in this approval, the development shall comply with all applicable standards and regulations in *The Regina Zoning Bylaw, 2019-19*.
 - c. Prior to issuance of any building permit in relation to the development, the applicant shall submit revised plans, satisfactory to the City, confirming compliance with the Zoning Bylaw in accordance with clause a of this recommendation.
2. Authorize the Development Officer to issue a development permit with respect to the application, upon the Applicant making payment of any applicable fees or charges and entering into a development agreement if one is required.
3. Approve these recommendations at its meeting on August 11, 2021, following the required public notice.



OFFICE OF THE CITY CLERK

RPC21-51 Ring Road Grade Crossing Relocation – Preliminary Design Procurement

Recommendation

Regina Planning Commission recommends that City Council:

1. Authorize the Executive Director of City Planning & Community Development, or their designate, to initiate a public procurement to engage consulting and professional engineering services for the design and construction for the delivery of a preliminary design scope of project deliverables for the Ring Road Grade Crossing Relocation Initiative.
2. Authorize the Executive Director of City Planning & Community Development, or their designate, to negotiate, award and approve an agreement between the City of Regina and the highest ranked proponent of a public procurement process.
3. Authorize the City Clerk to execute the necessary agreements with the highest ranked proponent after review and approval by the City Solicitor.
4. Approve these recommendations at its meeting on August 11, 2021.

Adjournment

AT REGINA, SASKATCHEWAN, WEDNESDAY, JULY 7, 2021

AT A MEETING OF REGINA PLANNING COMMISSION
HELD IN PUBLIC SESSION

AT 4:00 PM

These are considered a draft rendering of the official minutes. Official minutes can be obtained through the Office of the City Clerk once approved.

Present: Councillor John Findura, in the Chair
Councillor Terina Shaw
Councillor Shanon Zachidniak (Videoconference)
John Aston (Videoconference)
Frank Bojkovsky (Videoconference)
Biplob Das (Videoconference)
Adrienne Hagen Lyster (Videoconference)
Cheri Moreau (Videoconference)
Tak Pham (Videoconference)
Kathleen Wilson (Videoconference)
Celeste York (Videoconference)

Also in Attendance: Council Officer, Elaine Gohlke
Legal Counsel, Cheryl Willoughby (Videoconference)
Executive Director, City Planning & Community Development,
Diana Hawryluk
Director, Planning & Development Services, Autumn Dawson
Senior City Planner, Michael Cotcher (Videoconference)
Senior City Planner, Ben Mario (Videoconference)
City Planner II, Michael Sliva (Videoconference)

(The meeting commenced in the absence of Ms. Wilson.)

APPROVAL OF PUBLIC AGENDA

Councillor Terina Shaw moved, AND IT WAS RESOLVED, that the agenda for this meeting be approved, as submitted, and that the delegations be heard in the order they are called by the Chairperson.

ADOPTION OF MINUTES

Councillor Shanon Zachidniak moved, AND IT WAS RESOLVED, that the minutes for the meeting held on June 2, 2021 be adopted, as circulated.

ADMINISTRATION REPORTS

RPC21-41 Discretionary Use - 5826 Rochdale Boulevard - PL202000248

Recommendation

Regina Planning Commission recommends that City Council:

1. Approve the discretionary use for a proposed Service Trade, Wash–Light (Car Wash) land use located at 5826 Rochdale Boulevard, being Lot A, Blk/Par O, Plan 86R00275, subject to the following standards and conditions:
 - a) the development shall be generally consistent with the plans, including the installment of a solid acoustic barrier fence (1.83 metres) along the north and west property lines, attached to this report as Appendices A3.1 - A3.3 inclusive prepared by AECOM dated March 8, 2021 and June 23, 2021 and the noise impact assessment prepared by FDI Acoustics dated June 18, 2021 and appended to this report as Appendix C; and
 - b) the development shall comply with all applicable standards and regulations in *Regina Zoning Bylaw, 2019-19*.
2. Authorize the Development Officer to issue a development permit with respect to the application, subject to the applicant making payment of any applicable fees or charges and entering into a development agreement if one is required.
3. Approve these recommendations at its meeting on July 14, 2021, following the required public notice.

(Ms. Wilson joined the meeting.)

The following addressed the Commission:

- Debb Buhnai;
- Pat Probyn; and
- Gabrielle Donoff, representing WSP Canada Inc.; Jonathan Paul, representing ctm Design Services Ltd; Joseph Scholtz, representing AECOM; James Farquharson, representing FDI acoustics and Jolene Rempel, representing Shell Canada.

Councillor Terina Shaw moved that the recommendation contained in the report be concurred in.

Biplob Das moved that this report be tabled to allow Administration to provide the following additional information to Regina Planning Commission:

- 1. Combine Table 7 and Table 8 in the FDI acoustics Noise Impact Assessment to create a new Table 9 that shows the cumulative sound levels;**
- 2. An additional noise contour map for the cumulative sound levels; and**
- 3. The Assessment include an increase from one vehicle to seven vehicles idling while waiting to enter the automatic car wash.**

The Clerk called the vote on the motion.

| | In Favour | Against |
|-------------------------------------|------------------|----------------|
| Frank Bojkovsky | ✓ | |
| Biplob Das | ✓ | |
| Adrienne Hagen Lyster | ✓ | |
| Cheri Moreau | ✓ | |
| Tak Pham | ✓ | |
| Kathleen Wilson | | ✓ |
| Celeste York | ✓ | |
| John Aston | ✓ | |
| Councillor Terina Shaw | | ✓ |
| Councillor Shanon Zachidniak | | ✓ |
| Councillor John Findura | ✓ | |
| | 8 | 3 |

The motion was put and declared CARRIED.

(Ms. Moreau left the meeting.)

RPC21-42 Discretionary Use - 1730 Cowan Crescent - PL202100040

(Celeste York declared a conflict of interest, citing her daughter's employment with 1080 Architecture Planning + Interiors, and her grandchildren attending Gard'Amis Daycare abstained from discussion and voting, and temporarily left the meeting.)

Recommendation

Regina Planning Commission recommends that City Council:

1. Approve the discretionary use application for the proposed development of "Institution, Day Care" located at 1730 Cowan Crescent, being Lot 40, Block 33, Plan GE191 in the Hillsdale Neighbourhood, subject to compliance with the following development standards and conditions:

- a. The development shall comply with all applicable standards and regulations in the *Regina Zoning Bylaw, 2019-19*.
2. Authorize the Development Officer to issue a development permit with respect to the application, upon the applicant making payment of any applicable fees or charges and entering into a development agreement if one is required.
3. Approve these recommendations at its meeting on July 14, 2021, following the required public notice.

Julie Pedneault, representing Gard'Amis Daycare, and LeeAnn Croft, representing 1080 Architecture and Gard'Amis Daycare, addressed the Commission.

Adrienne Hagen Lyster moved that the recommendation contained in the report be concurred in.

(Mr. Bojkovsky left the meeting.)

The Clerk called the vote on the motion.

| | In Favour | Against |
|------------------------------|-----------|---------|
| John Aston | ✓ | |
| Biplob Das | ✓ | |
| Adrienne Hagen Lyster | | ✓ |
| Tak Pham | ✓ | |
| Kathleen Wilson | ✓ | |
| Councillor Terina Shaw | ✓ | |
| Councillor Shanon Zachidniak | ✓ | |
| Councillor John Findura | ✓ | |
| | 7 | 1 |

The motion was put and declared CARRIED.

RPC21-43 Discretionary Use - 1205 15th Avenue - PL202100056

Recommendation

Regina Planning Commission recommends that City Council:

1. Approve the discretionary use application for the proposed development of "Food and Beverage, Restaurant" located at 1205 15th Avenue, being Lot 19, Block 469, Plan OLD33, Ext 124 in the Heritage Neighbourhood, subject to compliance with the following development standards and conditions:
 - a. The development shall be generally consistent with the plans attached to this report as Appendix A-3.1 and A-3.2, prepared by

Eggtopia;

- b. Except as otherwise specified in this approval, the development shall comply with all applicable standards and regulations in the *Regina Zoning Bylaw, 2019-19*.
2. Authorize the Development Officer to issue a development permit with respect to the application, upon the applicant making payment of any applicable fees or charges and entering into a development agreement if one is required.
3. Approve these recommendations at its meeting on July 14, 2021, following the required public notice.

Mark Bologna, representing Eggtopia, addressed the Commission.

(Ms. York returned to the meeting.)

Biplob Das moved that the recommendation contained in the report be concurred in.

The Clerk called the vote on the motion.

| | In Favour | Against |
|------------------------------|-----------|---------|
| Biplob Das | ✓ | |
| Adrienne Hagen Lyster | ✓ | |
| Tak Pham | ✓ | |
| Kathleen Wilson | ✓ | |
| Celeste York | ✓ | |
| John Aston | ✓ | |
| Councillor Terina Shaw | ✓ | |
| Councillor Shanon Zachidniak | ✓ | |
| Councillor John Findura | ✓ | |
| | 9 | 0 |

The motion was put and declared CARRIED.

RPC21-44 Concept Plan Amendment - The Towns - PL202000238

Recommendation

Regina Planning Commission recommends that City Council:

1. Approve the application to amend the Towns Concept Plan by redesignating the land uses within the area identified as the subject property and adopt, by resolution, the amended plan as set out in Appendix A-3 and Appendix A-4.

2. Approve these recommendations at its meeting on July 14, 2021, after the required public notice.

Cathy Lawrence, representing Terra Developments Inc., addressed the Commission.

Councillor Terina Shaw moved that the recommendation contained in the report be concurred in.

The Clerk called the vote on the motion.

| | In Favour | Against |
|-------------------------------------|-----------|----------|
| Councillor Terina Shaw | ✓ | |
| John Aston | ✓ | |
| Biplob Das | ✓ | |
| Adrienne Hagen Lyster | ✓ | |
| Tak Pham | ✓ | |
| Kathleen Wilson | ✓ | |
| Celeste York | ✓ | |
| Councillor Shanon Zachidniak | ✓ | |
| Councillor John Findura | ✓ | |
| | 9 | 0 |

The motion was put and declared CARRIED.

RECESS

Pursuant to the provisions of Section 34 (13.1) of City Council's Procedure Bylaw No. 9004, Councillor Findura called for a 5 minute recess.

Regina Planning Commission recessed at 6:36 p.m.

(Mr. Aston left the meeting.)

Regina Planning Commission reconvened at 6:43 p.m.

RPC21-45 Zoning Bylaw Amendment - The Towns, Phase 2 Stage 2 (PL202100004)

Recommendation

Regina Planning Commission recommends that City Council:

1. Approve the application to rezone portions of lands located at 3000 Woodland Grove Drive, SW 14-17-19-2 Ext 12, within the Towns Concept Plan Phase 2, Stage 2 as shown in Appendix A-1 as follows:

- a. Part of Block 33, 36 and 37 from UH – Urban Holding Zone to RU - Residential Urban Zone.
- b. Parcel J2 from R1 - Residential Detached Zone to RH - Residential High-Rise Zone.
- c. Parts of Block 34 from UH – Urban Holding Zone to RL - Residential Low-Rise Zone.

All subject to approval of the Towns Concept Plan amendment (Project No. PL202000238)

2. Instruct the City Solicitor to prepare the necessary bylaw(s) to give effect to the recommendations, to be brought forward to the meeting of City Council following the required public notice.
3. Approve these recommendations at its meeting on July 14, 2021.

Cathy Lawrence, representing Terra Developments Inc., addressed the Commission.

Councillor Shanon Zachidniak moved that the recommendation contained in the report be concurred in.

The Clerk called the vote on the motion.

| | In Favour | Against |
|-------------------------------------|-----------|----------|
| Councillor Shanon Zachidniak | ✓ | |
| Biplob Das | ✓ | |
| Adrienne Hagen Lyster | ✓ | |
| Tak Pham | ✓ | |
| Kathleen Wilson | ✓ | |
| Celeste York | ✓ | |
| Councillor Terina Shaw | ✓ | |
| Councillor John Findura | ✓ | |
| | 8 | 0 |

The motion was put and declared CARRIED.

RPC21-46 Zoning Bylaw Amendment - The Towns, Phase 2 Stage 1 (PL202000256)

Recommendation

Regina Planning Commission recommends that City Council:

1. Approve the application to rezone portions of land located at 3000 Woodland Grove Drive, SW 14-17-19-2 Ext 12, within the Towns Concept Plan Phase 2, Stage 1, as shown in Appendix A-1, from UH – Urban Holding Zone to RL - Residential Low-Rise Zone, subject to approval of the the Towns Concept Plan Amendment (PL202000238).

2. Approve the application to apply the LA - Lane Access Overlay Zone to a portion of proposed RU – Residential Urban Zone, within the Block 2 and Block 6, subject to approval of the the Towns Concept Plan Amendment (Project No. PL202000238).
3. Instruct the City Solicitor to prepare the necessary bylaw(s) to give effect to the recommendations, to be brought forward to the meeting of City Council following the required public notice.
4. Approve these recommendations at its meeting on July 14, 2021.

Cathy Lawrence, representing Terra Developments Inc., addressed the Commission.

Adrienne Hagen Lyster moved that City Council:

1. **Approve the application to rezone portions of land located at 3000 Woodland Grove Drive, SW 14-17-19-2 Ext 12, within the Towns Concept Plan Phase 2, Stage 1, as shown in Appendix A-1, from UH – Urban Holding Zone to RL - Residential Low-Rise Zone, subject to approval of the the Towns Concept Plan Amendment (PL202000238).**
2. **Approve the application to apply the LA - Lane Access Overlay Zone to a portion of proposed RL - Residential Low-Rise Zone, within the proposed Block 32 and Block 33, subject to approval of the Towns Concept Plan Amendment (Project No. PL202000238).**
3. **Instruct the City Solicitor to prepare the necessary bylaw(s) to give effect to the recommendations, to be brought forward to the meeting of City Council following the required public notice.**
4. **Approve these recommendations at its meeting on July 14, 2021.**

The Clerk called the vote on the motion.

| | In Favour | Against |
|------------------------------|-----------|---------|
| Councillor Terina Shaw | ✓ | |
| John Aston | ✓ | |
| Biplob Das | ✓ | |
| Adrienne Hagen Lyster | ✓ | |
| Tak Pham | ✓ | |
| Kathleen Wilson | ✓ | |
| Celeste York | ✓ | |
| Councillor Shanon Zachidniak | ✓ | |
| Councillor John Findura | ✓ | |
| | 9 | 0 |

The motion was put and declared CARRIED.

ADJOURNMENT

Councillor Terina Shaw moved, AND IT WAS RESOLVED, that the meeting adjourn.

The meeting adjourned at 6:55 p.m.

Chairperson

Secretary



Supplemental Report - Discretionary Use - 5826 Rochdale Boulevard - PL202000248

| | |
|---------------------|---------------------------------------|
| Date | August 4, 2021 |
| To | Regina Planning Commission |
| From | City Planning & Community Development |
| Service Area | Planning & Development Services |
| Item No. | RPC21-47 |

RECOMMENDATION

That Regina Planning Commission:

Attach this supplemental report, including the additional noise assessment information prepared by FDI acoustics dated July 23, 2021 (Appendix A), to report RPC21-41 Discretionary Use – 5826 Rochdale Boulevard – PL202000248, as Appendix D, for City Council’s information.

ISSUE

Regina Planning Commission, at its July 7, 2021 meeting, considered report RPC21-41 Discretionary Use - 5826 Rochdale Boulevard - PL202000248 for a proposed Service Trade, Wash – Light (car wash) at 5826 Rochdale Boulevard. Before making its recommendation to City Council, Regina Planning Commission requested the following additional information for consideration of the proposed development:

1. Combine Table 7 and Table 8 in the Noise Impact Assessment prepared by FDI acoustics to create a new Table 9 that shows the cumulative sound levels of existing traffic combined with the proposed car wash development.
2. Add an additional noise contour map to the noise assessment showing the cumulative sound levels.

3. Revise the noise assessment to increase the analysis from one vehicle to seven vehicles idling while waiting to enter the automatic car wash to represent peak use.

The report was tabled to a future meeting of Regina Planning Commission to allow Administration to prepare a supplemental report that included the additional information.

IMPACTS

None with respect to this report.

OTHER OPTIONS

None with respect to this report.

COMMUNICATIONS

Interested parties, including residents of the residential condominium building to the north of the subject property, were informed that report RPC21-41 Discretionary Use - 5826 Rochdale Boulevard - PL202000248 would be considered for a second time, along with this supplemental information, at the August 4, 2021 meeting of Regina Planning Commission.

DISCUSSION

The applicant has revised the Noise Impact Assessment by FDI acoustics and attached as Appendix A to incorporate supplemental information requested by Regina Planning Commission. The cumulative effect of taking existing traffic along McCarthy Boulevard and Rochdale Boulevard combined with sound produced from the proposed car wash and increasing the number of vehicles idling from one to seven slightly increases the sound levels at or beyond the property lines of the car wash site by approximately 5 to 8 decibels (dB) or approximately 53 to a maximum of 62 dB will be experienced by the residential building to the north during the day. The resulting noise levels are still compliant with the acceptable thresholds for daytime and nighttime noise levels for mixed-use zones of 70 dB and 60 dB respectively in accordance with *The Noise Abatement Bylaw No. 6980*.

Based on the revised acoustic assessment information provided by the applicant and prepared by FDI acoustics at Regina Planning Commission's request, the Administration continues to support a recommendation of approval for this application.

DECISION HISTORY

Regina Planning Commission, at its July 7, 2021 meeting, requested additional noise analysis information before making a recommendation to City Council on report RPC21-41 Discretionary Use - 5826 Rochdale Boulevard - PL202000248.

Respectfully Submitted,

Respectfully Submitted,



Autumn Lawson, Director, Planning & Development Services

7/29/2021



Diana Hawryluk, Executive Director, City Planning & Community Dev.

7/29/2021

Prepared by: Michael Cotcher, Senior City Planner

ATTACHMENTS

Appendix A Supplemental Rpt

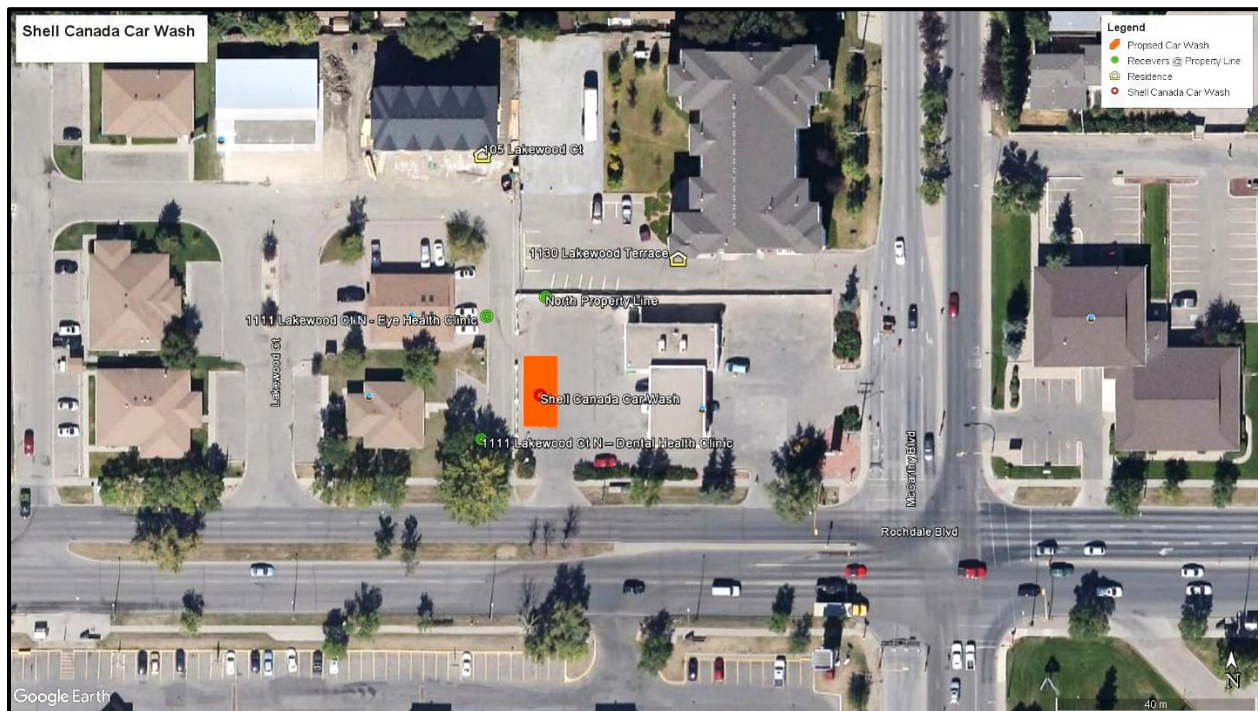


Noise Impact Assessment

CTM Design Services Ltd.

5826 Rochdale Blvd Regina

Shell Canada Car Wash



Prepared For:

Mr. Jonathan Paul, C.E.T., PMP
CTM Design Services Ltd.

Prepared By:

Mr. Hossein Mehravaran, M.Sc., INCE
Mr. James Farquharson, C.E.T., INCE

Issued: July 23, 2021
Project Number: 316502

Sound Advice • Sound Delivery

Executive Summary

CTM Design Services Ltd. (CTM Design) wanted to determine the environmental noise impact of the proposed Shell Canada Car Wash at 5826 Rochdale Blvd in the City of Regina. CTM Design retained the services of FDI Acoustics to complete a Noise Impact Assessment for the proposed development to determine compliance with the Permissible Sound Levels (PSLs) of the City of Regina Bylaw 6980¹, “The Noise Abatement Bylaw” Section 7.1, Land Use Noises. The assessment also provides the foundation to develop noise control measures for the equipment and operations assessed should the predicted sound levels exceed the PSLs of the City of Regina Bylaw 6980 (Bylaw).

Octave band sound pressure levels related to the significant noise sources associated with the proposed car wash equipment operations were assigned from a combination of manufacturer’s data, FDI Acoustics’ sound pressure level measurement library, or values were calculated following schemes as presented in texts^{2,3}. Following accepted acoustic evaluation practices, the sound pressure level data was used to calculate octave band sound power level values for the significant noise sources associated with the proposed car wash operations. The sound power levels were entered in the Softnoise GmbH Predictor™ Type 7810 noise propagation modelling software. The environmental noise propagation computer model calculated the sound level contribution of the car wash operations at three property line locations following the requirements of the City of Regina Bylaw 6980. The City of Regina Bylaw 6980 Part III, Section 7.1 (a) describes the measurement location at 1.2 metres above the ground level surface at the lot line of the site where the noise originates. FDI Acoustics also used the environmental noise propagation computer model to calculate the sound level contribution of the proposed car wash operations at multiple elevations of the façades of two residential buildings near the site. FDI Acoustics advises the reader the façade receiver points are presented for information purposes and not within the requirements of the Bylaw.

Executive Summary (continued)

Table ES-1 presents the results of the modeling along with the PSLs for the receiver locations.

Table ES-1
Predicted Sound Levels
Shell Canada Car Wash 5826 Rochdale Boulevard, Regina Saskatchewan

| Receiver Location | Daytime Sound Level (dBA L _{eq}) | Nighttime Sound Level (dBA L _{eq}) | Daytime Sound Level (dBA L _{eq}) | Nighttim e Sound Level (dBA L _{eq}) |
|---------------------------------------------------------------------------------------|-----------------------------------------------------|-------------------------------------------------------|-----------------------------------------------------|-----------------------------------------------------------|
| | Without Barrier | | w/ North and West Barrier | |
| Bylaw 6980 Reception Locations | | | | |
| 1111 Lakewood Court North – Eye Health Clinic Property Line (1.2 metres height) | 62.2 | 62.2 | 58.3 | 58.3 |
| 1111 Lakewood Court North – Dental Health Clinic Property Line (1.2 metres height) | 66.9 | 66.9 | 65.3 | 65.3 |
| North Property Line - 1130 Lakewood Terrace (1.2 metres height) | 64.7 | 64.7 | 51.7 | 51.7 |
| Permissible Sound Level (Mixed Use Zone) | 70.0 | 60.0 | 70.0 | 60.0 |
| Other Reception Locations | | | | |
| 1130 Lakewood Terrace – 2 nd Floor Façade (5.0 metres height) | 59.4 | 59.4 | 57.5 | 57.5 |
| 1130 Lakewood Terrace – 3 rd Floor Façade (8.0 metres height) | 58.9 | 58.9 | 58.8 | 58.8 |
| 1130 Lakewood Terrace – 4 th Floor Façade (11 metres height) | 58.3 | 58.3 | 58.2 | 58.2 |
| 105 Lakewood Court – 1 st Floor Façade (1.5 metres height) | 52.8 | 52.8 | 48.7 | 48.7 |
| 105 Lakewood Court – 2 nd Floor Façade (3.5 metres height) | 52.8 | 52.8 | 49.4 | 49.4 |
| Permissible Sound Level (Mixed Use Zone) | 70.0 | 60.0 | 70.0 | 60.0 |

FDI Acoustics Project 316502

The results of the environmental noise propagation model indicate the predicted sound levels from the proposed Shell Canada Car Wash operations are predicted to exceed the nighttime PSLs of Bylaw 6980 at the property line of 1130 Lakewood Terrace and at the property line of 1111 Lakewood Court North. CTM Design has indicated the landscape design of the site will incorporate a 1.8 metre height fence (acoustic barrier) along the north and west property line of the site. The results with the sound barrier in place indicate compliance with the daytime and nighttime PSLs of Bylaw 6980 at the property line of 1130 Lakewood Terrace and daytime compliance at the property line with 1111 Lakewood Court North.

FDI Acoustics notes with the sound barrier in place the results of modelling indicate the Shell Canada Car Wash operations are predicted to comply with the daytime PSL of Bylaw 6980 at the receiver locations assessed. Shell Canada is advised to consider limiting the carwash operations to the bylaw defined daytime hours to satisfy the requirements of the bylaw.

Distribution List:

| Hard Copy | PDF Copy | Client / Association / Company Name |
|-----------|----------|----------------------------------------------------|
| 0 | Yes | Jonathan Paul, PMP, CET – CTM Design Services Ltd. |

FDI Acoustics Project 316502


Revision List:

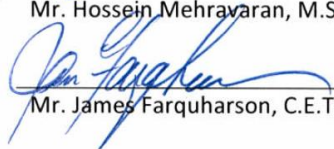
| Revision: | Date: | Issue / Revision |
|-----------|------------|------------------|
| 0 | 06-11-2021 | Draft Report |
| 1 | 06-18-2021 | Final Report |
| 2 | 07-21-2021 | Draft Report |
| 3 | 07-23-2021 | Final Report |

FDI Acoustics Project 316502



Signatures:

Report Prepared By:


 Mr. Hossein Mehravaran, M.Sc., INCE


 Mr. James Farquharson, C.E.T., INCE

Report Reviewed By:

  07/23/2021
 Mr. Josh Malate, P.Eng.

This work is intended solely for CTM Design Services Ltd (the Client). The scope of work and related responsibilities are defined in the Conditions of Assignment between FDI Acoustics and CTM Design Services Ltd. Any use which a third party makes of the work, or any reliance on or decisions to be made based on it, are the responsibility of such third parties. Decisions made or actions taken as a result of our work shall be the responsibility of the parties directly involved in the decisions or actions.

In no event shall the Client copy or use any of the concepts, plans, drawings, specifications, designs, models, reports, photographs, computer software, surveys, calculations, construction and other data, documents, and processes produced by FDI Acoustics in connection with the Rochdale & McCarthy Blvd Shell CWA (the Project) for any purpose other than those noted within this report or in relation to any project other than the Project without the prior written permission of FDI Acoustics. FDI Acoustics shall not unreasonably withhold or deny such consent but shall be entitled to receive additional equitable remuneration in connection with its grant of consent.

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Scope of Work

CTM Design Services Ltd. (CTM Design) wanted to determine the environmental noise impact of the proposed Shell Canada Car Wash at 5826 Rochdale Blvd in the City of Regina. CTM Design retained the services of FDI Acoustics to complete a Noise Impact Assessment for the proposed development to determine compliance with the Permissible Sound Levels (PSLs) of the City of Regina Bylaw 6980¹, “The Noise Abatement Bylaw” Section 7.1, Land Use Noises. The assessment also provides the foundation to develop noise control measures for the equipment assessed should the predicted sound levels exceed the PSLs of the City of Regina Bylaw 6980 (Bylaw).

Method

Octave band sound pressure levels related to the significant noise sources associated with the proposed car wash equipment operations were assigned from a combination of manufacturer’s data and FDI Acoustics’ sound pressure level measurement library or calculated following schemes as presented in texts^{2,3}. Following accepted acoustic evaluation practices, the sound pressure level data was used to calculate octave band sound power level values for the significant noise sources associated with the proposed development equipment. Plans for the development were provided by CTM Design. The development area information supplied by CTM Design was supplemented with information from government and commercial sources. This information formed the input for an environmental noise propagation computer model that calculates the sound level contribution of the car wash operations at three property line locations following the City of Regina Bylaw 6980 and at multiple elevations of the façades of two residential buildings near the site. The City of Regina Bylaw 6980 Part III, Section 7.1 (a) describes the measurement location at 1.2 metres above the ground level surface at the lot line of the site where the noise originates. The building façade receiver points are not within the scope of the Bylaw and are presented for information purposes.

The results of the model are presented as the individual component sound levels of the proposed car wash equipment, the overall car wash facility sound level contribution, the predicted cumulative sound levels for the receiver locations under assessment, and as a study area contour map. The results are reviewed with the predicted sound levels compared with the applicable PSLs to determine compliance. Should the results exceed either the daytime or nighttime PSLs; noise control measures may be developed and evaluated within the noise propagation model. The predicted sound level contribution for each noise control measure after implementation may be reported for the point of interest. Acoustical specifications related to the recommendations are included in the report.

Study Area

The proposed Shell Canada Car Wash development is at 5826 Rochdale Boulevard in the City of Regina, Saskatchewan. The building on site housing the car wash will be situated parallel to the west property line of the site and is west of the existing convenience store and fuel pump islands. The nearest residences border the northeast side of the site and are at 1130 McCarthy Boulevard (also known as the 1130 Lakewood Terrace condominiums). The 1130 Lakewood Terrace condominium development is in a commercial zone and shares a common property line with the Shell Canada 5826 Rochdale Boulevard site. The second residence of interest is northwest of the Shell Canada site at 105 Lakewood Court. The third receiver (Eye Clinic) and a fourth receiver (Dental Clinic) locations are west of the Shell Canada site at 1111 Lakewood Court North. The Lakewood Court receivers are zoned commercial. Available information describes the topography of the area as flat and the landscape as urban with a mix of paved surfaces, asphalt, lawns, and trees. Figure 1 and the report cover (Google Earth image) are maps of the study area indicating the location of the Shell Canada 5826 Rochdale Boulevard site, area residential units, and other area features. Appendix A presents a larger higher rendition map of the study area and a site location plan drawing indicating the location of the proposed car wash, existing structures, and the property lines.

Figure 1
Study Area Map
Shell Canada Car Wash 5826 Rochdale Boulevard, Regina Saskatchewan



Environmental Noise Regulation Criteria

City of Regina Bylaw 6980 a bylaw to prohibit, eliminate and abate, loud, unusual, and unnecessary noise, or noises which annoy, disturb, injure, or endanger the comfort, repose, health, peace, or safety of others within the City of Regina.

Bylaw 6980 Part III, Specific Prohibitions, Section 7.1 Land Use Noises:

- (a) Subject to subsection (b), no person shall cause or permit to be made or continued any noise that exceeds the following standards for a cumulative period greater than 15 minutes in any hour as measured in A-weighted decibels (dBA) using a Type 2 sound level meter at 1.2 metres above the ground level surface at the lot line of the site where the noise originates:

Table 1
City of Regina Bylaw 6980 Land Use Noise Limits
Shell Canada Car Wash 5826 Rochdale Boulevard, Regina Saskatchewan

| Zone | Daytime 7:00 am – 10:00 pm Sound Pressure Level (dBA) | Nighttime 10:00 pm – 7:00 am Sound Pressure Level (dBA) |
|------------------|----------------------------------------------------------------|------------------------------------------------------------------|
| Residential Zone | 60.0 | 55.0 |
| Mixed Use Zone | 70.0 | 60.0 |

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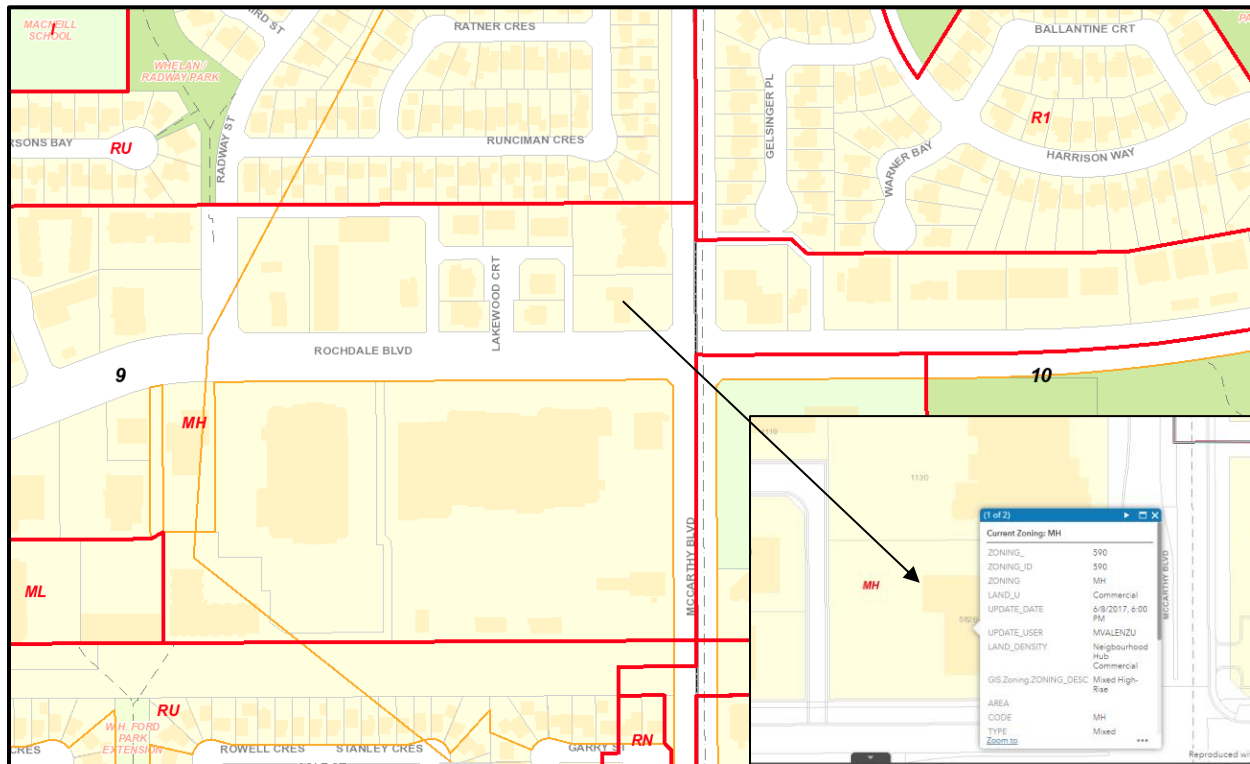
- (b) The following noises shall be exempt from this section:

- (i) Noises from construction or maintenance activities between 7:00 am and 10:00 pm;
- (ii) Noises from safety signals, emergency vehicles and equipment, warning devices and emergency pressure release valves;
- (iii) Noises from motor vehicles, airplanes, and trains; and
- (iv) Ordinary domestic noises at a residential property such as voices or music and noise generated by tools or animals.

The Regina Zoning Bylaw 2019-19, Chapter 4, Mixed-Use Zones defines the regulations for land use and development within this zone. The City of Regina Zoning Map labels the Shell Canada site and abutting properties as “Mixed High-Rise” zone in Commercial Zones categories with zone code “MH”. Figure 2 is a map of the City of Regina Zoning Bylaw 2019 for the study area indicating the location of the proposed site and the applicable zoning for the area. FDI Acoustics notes the residential buildings north of proposed car wash site are within the commercial zone ID 590 with a code MH and thereby fall with the Mixed Use Zone limits of Bylaw 6980.

Environmental Noise Regulation Criteria (continued)

Figure 2
City of Regina Zoning Bylaw 2019 Map
Shell Canada Car Wash 5826 Rochdale Boulevard, Regina Saskatchewan



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Table 2 presents the Permissible Sound Levels applicable to the development as derived from the City of Regina Bylaw 6980 Part III, Section 7.1 (a).

Table 2
Permissible Sound Levels
Shell Canada Car Wash 5826 Rochdale Boulevard, Regina Saskatchewan

| Receiver Location | Daytime Permissible Sound Level (dBA Leq) | Nighttime Permissible Sound Level (dBA Leq) |
|-------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|---------------------------------------------------|
| 1130 Lakewood Terrace (Property Line and Building Façade), 105 Lakewood Court (Building Façade), 111 Lakewood Court North (Property Line) | 70.0 | 60.0 |

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Description of Equipment

The proposed Shell Canada Car Wash consists of a drive through automatic car wash. The significant noise sources associated with the car wash development include dryers, high pressure sprayers, and seven (7) idling vehicles awaiting entry to the car wash. CTM Design has indicated the dryer is an Aerodry Model A45 unit driven by 45 horsepower electric motor. The manufacturer indicates the dryer emits a sound pressure level of 82 dBA at 1.0 metres from the exterior door opening of the car wash. FDI Acoustics has assumed the entrance and exit doors of the car wash are open for 10% and 25% of the operating time, respectively based on information provided by CTM Design. The drying cycle is 60 seconds in duration with the exit door open during drying cycle. The assessment also considers seven vehicles idling waiting to enter to the automatic car wash. The proposed Car Wash building will be contemplated to feature concrete walls, triple pane windows at the east side, and roll up entrance and exit doors. Figure 3 contains architectural renderings of the car wash building as furnished by CTM Design.

Figure 3
Car Wash Perspective View
Shell Canada Car Wash 5826 Rochdale Boulevard, Regina Saskatchewan



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Source Sound Power Levels

FDI Acoustics completed calculations to determine octave band sound power level values for the significant noise sources associated with the equipment. Completion of the calculations followed accepted techniques and practices for the determination of sound power levels from sound pressure levels for large machinery. The sound power values presented in Table 3 are order-ranked from highest to lowest by the overall sum (dBA) per source group.

Table 3
Source Sound Power Levels
Shell Canada Car Wash 5826 Rochdale Boulevard, Regina Saskatchewan

| Sound Source Description | Sound Power Level (dBA re: 10 ⁻¹² W) | | | | | | | | | |
|--------------------------------------------------------------|-------------------------------------------------|------|------|------|------|------|------|------|------|-----------|
| | Octave Band Frequency (Hertz) | | | | | | | | | Sum (dBA) |
| | 31.5 | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 | |
| Automatic Car Wash | | | | | | | | | | |
| Car Wash Exit Door | 46.6 | 58.3 | 75.7 | 68.2 | 73.7 | 73.2 | 69.4 | 9.8 | 88.6 | 89.1 |
| Car Wash Entrance Door | 41.2 | 53.9 | 66.9 | 69.1 | 72.0 | 74.8 | 77.0 | 9.8 | 83.6 | 85.3 |
| Car Wash Building Roof | 54.5 | 65.9 | 66.6 | 63.7 | 74.7 | 68.3 | 64.4 | 71.9 | 67.0 | 78.5 |
| Car Wash Building East Wall (Concrete and Triple Pane Glass) | 44.2 | 55.5 | 56.3 | 61.4 | 71.3 | 56.0 | 58.1 | 65.6 | 60.6 | 73.3 |
| Car Wash Building West Wall | 35.2 | 46.5 | 47.1 | 53.2 | 62.8 | 47.6 | 45.1 | 49.1 | 40.7 | 63.8 |
| Car Wash Building South and North Wall | 28.0 | 39.4 | 44.2 | 50.3 | 60.2 | 45.9 | 44.0 | 48.4 | 40.5 | 61.2 |
| Vehicle - Idling | | | | | | | | | | |
| Vehicle Idling | 55.0 | 62.0 | 69.0 | 71.0 | 74.0 | 77.0 | 77.0 | 71.0 | 64.0 | 82.1 |

Note – Idling vehicle sound power level originates from the Softnoise Predictor V12.01 database. The value represents a late model passenger vehicle at up to 20 kph.

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Noise Propagation Model

The Predictor™ 7810 v12.01, an environmental noise assessment software package from Softnoise GmbH was employed to determine the environmental noise impact of the equipment. The noise prediction program completes complex sound propagation calculations that include the effects of the environment, terrain, and topography. The algorithms used by the model are consistent with international standards, including International Organization for Standardization (ISO) 9613-2:1996 *Acoustics – Attenuation of sound during propagation outdoors – Part 1: Calculation of the absorption of sound by the atmosphere*⁴, *Part 2: General method of calculation*^{5,6}, *Part 3: Recommendations for quality assured implementation of ISO 9613-2 in software according to ISO 17534-1*⁷.

The calculated individual source sound power level complete with information regarding the facility location, equipment layout and the reception location were entered in the model. The propagation algorithms of ISO 9613 consider a downwind condition from each noise source to each receiver. The ISO 9613 method claims to couple the downwind condition with a mild temperature inversion. The ground absorption coefficient ranges between 0.0 – 1.0 where a value of 0.0 (the lowest) depicts reflective (hard) ground with a value of 1.0 (the highest) depicting porous (absorptive) ground. The model was structured to reflect favourable conditions for the propagation of sound from the source to the receiver locations.

Table 4 lists the modelled environmental parameters of the noise propagation model.

Table 4
Noise Model Environmental Parameters
Shell Canada Car Wash 5826 Rochdale Boulevard, Regina Saskatchewan

| Environmental Parameter | Model Input Value |
|-----------------------------------------------------|------------------------------------------------------------------------------------------|
| Ground Attenuation (between development & receiver) | 0 (suitable value for concrete and road) |
| Ground Attenuation (Lawn) | 1 (suitable value for vegetation and porous ground) |
| Receiver Height Above Ground | 1.2m |
| Relative Humidity | 70% |
| Temperature | +15°C |
| Wind Conditions | 1 to 5 m/s (default ISO 9613 – moderate inversion condition, downwind in all directions) |
| Topography | CDEM (Canadian Digital Elevation Model) – 14m*23m height points |

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Results

Table 5 presents the overall predicted sound pressure level and the source sound pressure level contributions as dBA values at the north property line (1130 Lakewood Terrace). The modelling does not include a fence (acoustic barrier) along the property line. The source sound level contribution values are order ranked by the “A” weighted contribution level.

Table 5
Order Ranked Sound Pressure Levels
1130 Lakewood Terrace – North Property Line
Shell Canada Car Wash 5826 Rochdale Boulevard, Regina Saskatchewan

| Source Description | Source Sound Level Contribution (dBA) |
|-------------------------------------------------|---------------------------------------|
| Car Wash Entrance Door | 61.5 |
| Vehicle Idling #2 | 58.5 |
| Vehicle Idling #1 | 55.7 |
| Vehicle Idling #3 | 54.0 |
| Vehicle Idling #4 | 49.4 |
| Vehicle Idling #5 | 46.7 |
| Vehicle Idling #6 | 44.5 |
| Vehicle Idling #7 | 42.7 |
| Car Wash Roof | 41.0 |
| Car Wash Exit Door | 38.2 |
| Car Wash Building north Wall | 34.0 |
| Car Wash Building East Wall (Triple Pane Glass) | 32.5 |
| Car Wash Building West Wall | 26.1 |
| Car Wash Building South Wall | 6.2 |
| Predicted Car Wash Only Contribution Sum | 61.6 |
| Predicted Development Contribution Sum | 64.7 |

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Note: Sound Pressure level values below the reference level of 20 microPascals are indicated by a negative sign preceding the value

Results (continued)

Table 6 presents the overall predicted sound pressure level and the source sound pressure level contributions as dBA values at the north property line (1130 Lakewood Terrace). The modelling reflects the installation of a fence (acoustic barrier) along the north and west property lines. The barrier construction will result no openings or spaces in barrier panels and no openings or spaces between the barrier and the ground. The barrier design will have a minimum Sound Transmission Class (STC) 32 with a noise reflection coefficient of less than 80%. The barrier height is 1.8 metres with 65 metres along north and 30 metres along west of the Shell Canada property line. The source sound level contribution values in Table 6 are order ranked by the “A” weighted contribution level.

Table 6
Order Ranked Sound Pressure Levels
1130 Lakewood Terrace – North Property Line (with Barrier)
Shell Canada Car Wash 5826 Rochdale Boulevard, Regina Saskatchewan

| Source Description | Source Sound Level Contribution (dBA) |
|-------------------------------------------------|---------------------------------------|
| Car Wash Entrance Door | 47.9 |
| Vehicle Idling #2 | 45.1 |
| Vehicle Idling #1 | 42.0 |
| Vehicle Idling #3 | 42.0 |
| Vehicle Idling #4 | 38.9 |
| Vehicle Idling #5 | 36.5 |
| Car Wash Exit Door | 35.4 |
| Vehicle Idling #6 | 34.9 |
| Vehicle Idling #7 | 33.3 |
| Car Wash Roof | 26.1 |
| Car Wash Building East Wall (Triple Pane Glass) | 22.6 |
| Car Wash Building north Wall | 22.1 |
| Car Wash Building West Wall | 17.1 |
| Car Wash Building South Wall | 3.3 |
| Predicted Car Wash Only Contribution Sum | 48.2 |
| Predicted Development Contribution Sum | 51.7 |

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Note: Sound Pressure level values below the reference level of 20 microPascals are indicated by a negative sign preceding the value

Order ranked sound pressure levels (Table 5 and Table 6) at a distant point of reception may differ from the equipment order ranked sound power levels (Table 3). This can occur due to the frequency composition of each noise source, the physical height of the noise source above the ground, acoustical shielding at the site or the topography between the site and the receiver.

Results (continued)

FDI Acoustics completed additional modelling to examine the contribution of traffic noise at the reception locations. Table 7 presents the overall predicted sound level contribution value from vehicle traffic for the reception locations. The modelling was completed using 2018-2019 traffic count data obtained from the City of Regina. The traffic count data represents average daily traffic volumes with the nighttime traffic assumed as 10% of the average daily traffic volume.

Table 7
Predicted Sound Levels – Road Traffic
Shell Canada Car Wash 5826 Rochdale Boulevard, Regina Saskatchewan

| Receiver Location & Sound Level Description | Daytime Sound Level (dBA Leq) | Nighttime Sound Level (dBA Leq) | Daytime Sound Level (dBA Leq) | Nighttime Sound Level (dBA Leq) |
|------------------------------------------------------------------------------------|----------------------------------------|------------------------------------------|----------------------------------------|------------------------------------------|
| | Without Barrier | | w/ North & West Barrier | |
| Bylaw 6980 Reception Locations | | | | |
| 1111 Lakewood Court North – Eye Health Clinic Property Line (1.2 metres height) | 58.0 | 50.8 | 54.3 | 47.3 |
| 1111 Lakewood Court North – Dental Health Clinic Property Line (1.2 metres height) | 62.4 | 55.2 | 62.5 | 55.2 |
| North Property Line - 1130 Lakewood Terrace (1.2 metres height) | 57.5 | 50.2 | 50.3 | 43.0 |
| Permissible Sound Level (Mixed Use Zone) | 70.0 | 60.0 | 70.0 | 60.0 |
| Other Reception Locations | | | | |
| 1130 Lakewood Terrace – 2 nd Floor Façade (5.0 metres height) | 59.0 | 51.8 | 58.7 | 51.5 |
| 1130 Lakewood Terrace – 3 rd Floor Façade (8.0 metres height) | 59.4 | 52.2 | 59.3 | 52.0 |
| 1130 Lakewood Terrace – 4 th Floor Façade (11 metres height) | 59.5 | 52.2 | 59.4 | 52.2 |
| 105 Lakewood Court – 1 st Floor Façade (1.5 metres height) | 53.8 | 46.6 | 51.5 | 44.4 |
| 105 Lakewood Court – 2 nd Floor Façade (3.5 metres height) | 53.5 | 46.2 | 52.1 | 44.9 |
| Permissible Sound Level (Mixed Use Zone) | 70.0 | 60.0 | 70.0 | 60.0 |

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The predicted traffic noise contribution values provide the reader with an indication of the existing ambient noise environment at the reception locations. The daytime and nighttime PSLs of Bylaw 6980 are also presented for the reception locations assessed.

Results (continued)

Appendix B presents a noise contour map overlaid on the site plan and study area. The car wash noise contour map reflects the daytime or nighttime operations of the car wash when the acoustic barrier is in place along the north and west of property line of the Shell Canada site. The sound levels were calculated at 1.2 metre receiver height from the ground elevation. Appendix B also presents the daytime road traffic sound pressure level contour map and the cumulative noise contour map of the car wash with road traffic noise during daytime period. The acoustic barrier is indicated with solid green line along with receiver locations on the noise contour maps.

Discussion of Results

Table 8 presents the overall predicted sound level contribution values from the proposed carwash operations and the PSLs for the locations assessed. The development sound level contributions are used for determining compliance with the applicable PSLs.

Table 8
Predicted Sound Levels – Car Wash
Shell Canada Car Wash 5826 Rochdale Boulevard, Regina Saskatchewan

| Receiver Location | Daytime Sound Level (dBA L _{eq}) | Nighttime Sound Level (dBA L _{eq}) | Daytime Sound Level (dBA L _{eq}) | Nighttime Sound Level (dBA L _{eq}) |
|---------------------------------------------------------------------------------------|-----------------------------------------------------|-------------------------------------------------------|-----------------------------------------------------|-------------------------------------------------------|
| | Without Barrier | | w/ North & West Barriers | |
| Bylaw 6980 Reception Locations | | | | |
| 1111 Lakewood Court North – Eye Health Clinic Property Line (1.2 metres height) | 62.2 | 62.2 | 58.3 | 58.3 |
| 1111 Lakewood Court North – Dental Health Clinic Property Line (1.2 metres height) | 66.9 | 66.9 | 65.3 | 65.3 |
| North Property Line - 1130 Lakewood Terrace (1.2 metres height) | 64.7 | 64.7 | 51.7 | 51.7 |
| Permissible Sound Level (Mixed Use Zone) | 70.0 | 60.0 | 70.0 | 60.0 |
| Other Reception Locations | | | | |
| 1130 Lakewood Terrace – 2 nd Floor Façade (5.0 metres height) | 59.4 | 59.4 | 57.5 | 57.5 |
| 1130 Lakewood Terrace – 3 rd Floor Façade (8.0 metres height) | 58.9 | 58.9 | 58.8 | 58.8 |
| 1130 Lakewood Terrace – 4 th Floor Façade (11 metres height) | 58.3 | 58.3 | 58.2 | 58.2 |
| 105 Lakewood Court – 1 st Floor Façade (1.5 metres height) | 52.8 | 52.8 | 48.7 | 48.7 |
| 105 Lakewood Court – 2 nd Floor Façade (3.5 metres height) | 52.8 | 52.8 | 49.4 | 49.4 |
| Permissible Sound Level (Mixed Use Zone) | 70.0 | 60.0 | 70.0 | 60.0 |

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Discussion of Results (continued)

The results of the environmental noise propagation model indicate the predicted sound levels from the proposed Shell Canada Car Wash operations are predicted to exceed the nighttime PSLs of Bylaw 6980 at the property line of 1130 Lakewood Terrace. The results with the sound barrier in place indicate compliance with the daytime and nighttime PSLs of Bylaw 6980 at the property line of 1130 Lakewood Terrace.

Table 9 presents the overall predicted cumulative sound level values for the locations assessed. The predicted cumulative sound levels provide insight regarding the overall noise environment including the noise from the proposed car wash development and the traffic noise from Rochdale Boulevard and McCarthy Boulevard. The PSLs of Bylaw 6980 are presented for information purposes.

Table 9
Predicted Cumulative Sound Levels
Shell Canada Car Wash 5826 Rochdale Boulevard, Regina Saskatchewan

| Receiver Location | Daytime Sound Level (dBA L _{eq}) | Nighttime Sound Level (dBA L _{eq}) |
|---------------------------------------------------------------------------------------|-----------------------------------------------------|-------------------------------------------------------|
| | w/ North & West Barriers | |
| <i>Bylaw 6980 Reception Locations</i> | | |
| 1111 Lakewood Court North – Eye Health Clinic Property Line (1.2 metres height) | 59.8 | 58.6 |
| 1111 Lakewood Court North – Dental Health Clinic Property Line (1.2 metres height) | 67.1 | 65.7 |
| North Property Line - 1130 Lakewood Terrace (1.2 metres height) | 54.1 | 52.2 |
| Permissible Sound Level (Mixed Use Zone) | 70.0 | 60.0 |
| <i>Other Reception Locations</i> | | |
| 1130 Lakewood Terrace – 2 nd Floor Façade (5.0 metres height) | 61.2 | 58.5 |
| 1130 Lakewood Terrace – 3 rd Floor Façade (8.0 metres height) | 62.1 | 59.6 |
| 1130 Lakewood Terrace – 4 th Floor Façade (11 metres height) | 61.9 | 59.2 |
| 105 Lakewood Court – 1 st Floor Façade (1.5 metres height) | 53.3 | 50.1 |
| 105 Lakewood Court – 2 nd Floor Façade (3.5 metres height) | 54.0 | 50.7 |
| Permissible Sound Level (Mixed Use Zone) | 70.0 | 60.0 |

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The results presented in Table 9 may be compared with the results presented in Table 7 to examine the overall change in the noise environment with the addition of the proposed car wash. In a comparison of the results the sound levels at the reception locations would experience increases in the daytime sound levels of approximately 5 dB or less. Increases in the noise environment of 5dB or less are generally acceptable.

Conclusion

The results of the noise propagation model indicate the predicted sound levels from the proposed Shell Canada Car Wash operations are predicted to exceed the nighttime PSLs of Bylaw 6980 at the property line of 1130 Lakewood Terrace. CTM Design has indicated the landscape design of the site will incorporate a 1.8 metre height fence (acoustic barrier) along the north and west property lines. The results with the sound barrier in place indicate compliance with the daytime and nighttime PSLs of Bylaw 6980 at the property line of 1130 Lakewood Terrace.

FDI Acoustics notes with the sound barrier in place the results of modelling indicate the Shell Canada Car Wash operations are predicted to comply with the daytime PSL of Bylaw 6980 at the receiver locations assessed. Shell Canada is advised to consider limiting the carwash operations to the bylaw defined daytime hours to satisfy the requirements of the bylaw.

Glossary

Ambient Sound Level

All noises that exist in an area and are not related to the applicant development. Ambient noise may include sounds from other industrial noise sources, transportation sources, animals, and sounds related to the environment.

A-weighted sound level

The sound level as measured on a sound level meter using a setting that emphasizes the middle frequency components similar to the frequency response of the human ear.

C-weighted sound level

The C-weighting approximates the sensitivity of human hearing at industrial noise levels (above about 85 dBA). The C-weightings sound level (i.e., measured with the C-weightings) is more sensitive to sounds at low frequencies than the A-weighted sound level and is sometimes used to assess the low frequency content of complex sound environments.

Calibration

A procedure used for the adjustment of a sound level meter using a reference source of a known sound pressure level and frequency. Field calibration must take place before and after a series of sound level measurements.

dB (decibel) or dBZ

The decibel (dB) is a logarithmic unit of measurement that expresses the magnitude of a physical quantity (usually power or intensity) relative to a specified or implied reference level. Since it expresses a ratio of two quantities with the same unit, it is a dimensionless unit. A decibel is one tenth of a bel (B). A reference pressure of 20 microPascals (μPa) is used because sounds in air at a frequency of 1000 Hz and with a pressure of 20 microPascals (μPa) can just barely be heard by most people.

dBA

The decibel (dB) sound pressure level filtered through the A filtering network to approximate human hearing response.

See dB and A-weighted sound level.

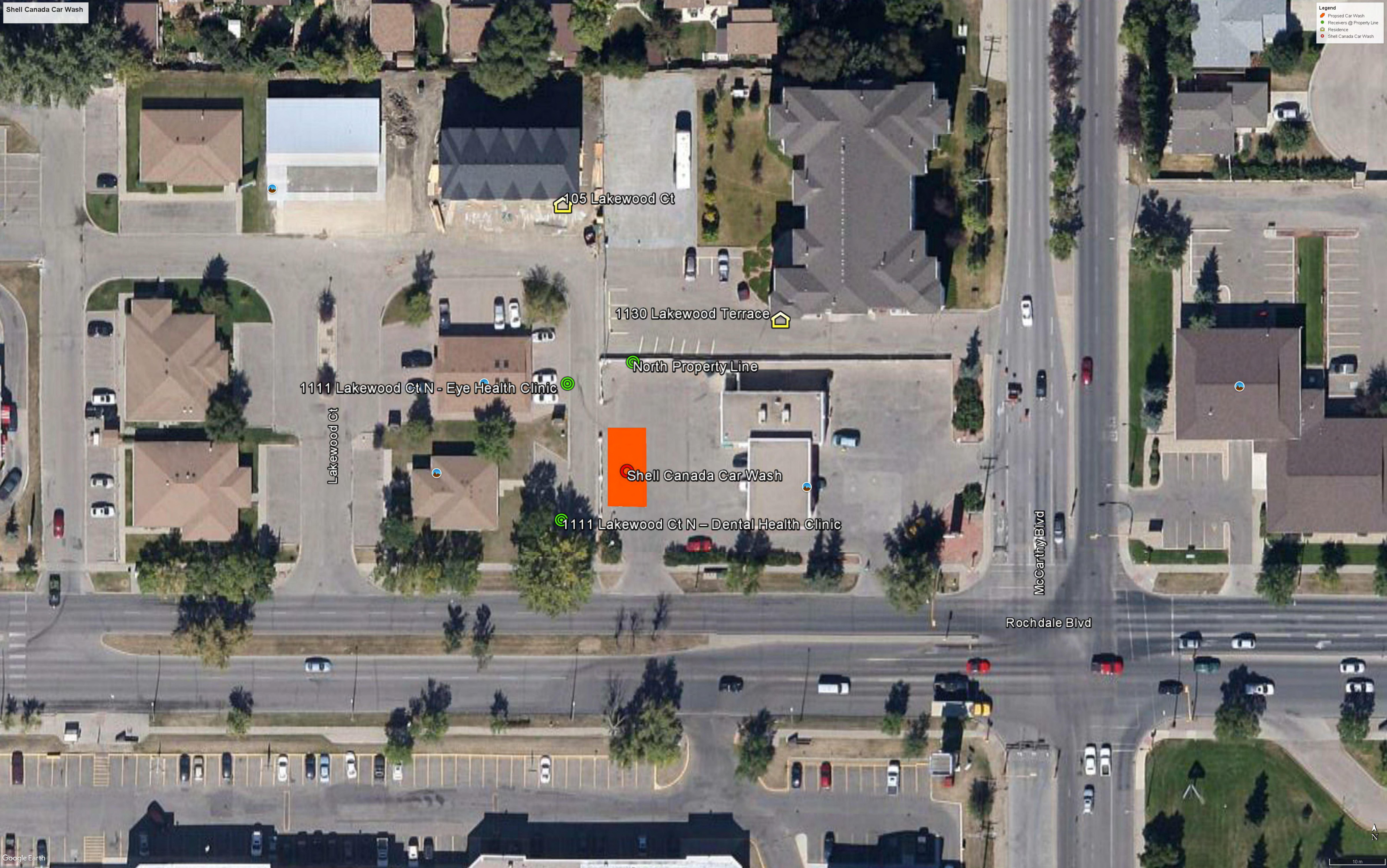
dBZ

The decibel (dB) sound pressure level is adjusted to include the low frequency end of the spectrum. Although less consistent with human hearing than dBA, dBZ can be used to discern the impact of low frequency sound emissions from industrial operations.

| | |
|------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Energy equivalent sound level (L_{eq}) | The L_{eq} is a single-number average, A-weighted sound level that represents cumulative acoustical energy as measured over a specified time interval. This interval should be specified in brackets following the L_{eq} (e.g.: L_{eq} (9) is a nine-hour L_{eq}). |
| ISO 9613-2:1996 | Acoustics- Attenuation of sound during propagation outdoors- Part 2: General method of calculation (International Organization for Standardization) |
| L_{eq} | See Energy equivalent sound level. |
| Noise | Generally understood as unwanted sound. |
| Noise Impact Assessment (NIA) | Identifies the expected sound level emanating from a development as measured at the nearest or most impacted permanently or seasonally occupied dwelling or other reception point as defined by the applicable regulation or bylaw. An NIA also identifies what the permissible sound level is and how it was calculated. |
| Octave | A series of electronic filters separate sound into discrete frequency bands, making it possible to know how sound energy is distributed as a function of frequency. The octave band has a centre frequency that is double the centre frequency of the octave band preceding it. |
| 1/3 Octave | The 1/3 octave band analysis provides a finer breakdown of sound distribution as a function of frequency. |
| Permissible Sound Level (PSL) | The maximum sound level that an applicant development should not exceed at a point of reception. |
| Representative conditions | Those conditions typical for an area and/or the nature of a complaint. Sound levels must be taken only when representative conditions exist; this may necessitate a survey of extensive duration (two or more consecutive nights). |
| Sound monitoring survey | The measurement and recording of sound levels and pertinent related information over a given time period. |
| Sound level meter | An instrument designed and calibrated to respond to sound and to give objective, reproducible measurements of sound pressure levels. It normally has several features that enable its frequency response and averaging times to be changed. |

| | |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sound pressure level | A measurement of the local pressure deviation from the ambient (average, or equilibrium) pressure caused by a sound wave. |
| Sound power level | Expressed in decibels (dB), it is equal to 10 times the logarithm to the base 10 of the ratio of the sound power of the source to a reference sound power level, typically 10^{-12} watts. |
| Spectrum | A wide range or sequence of frequencies. |
| Windscreen | A specialized piece of porous sponge that fits over the microphone to reduce the noise generated by the wind blowing across the microphone. |

Appendix A – Study Area Map

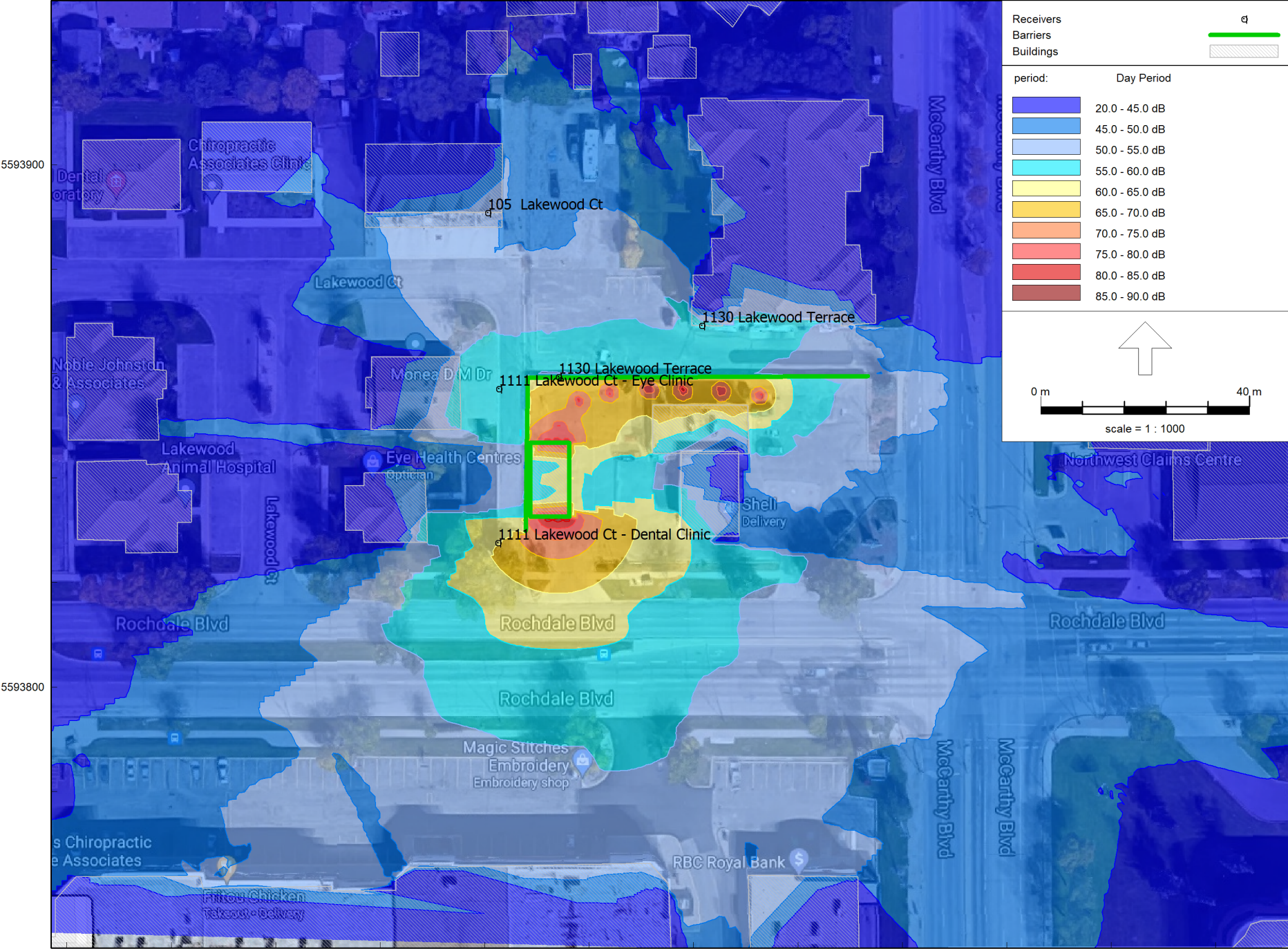


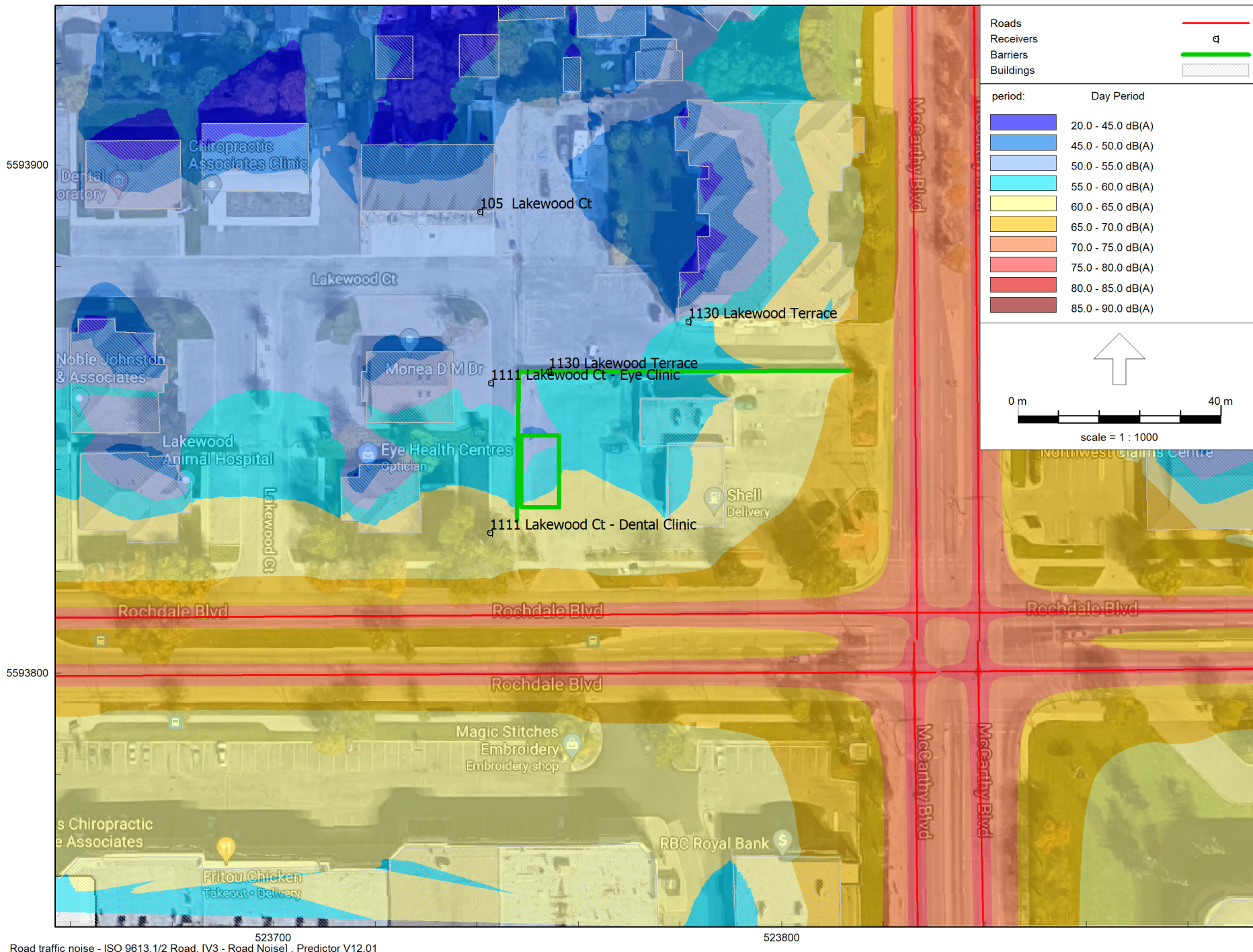
Appendix B – Noise Contour Maps

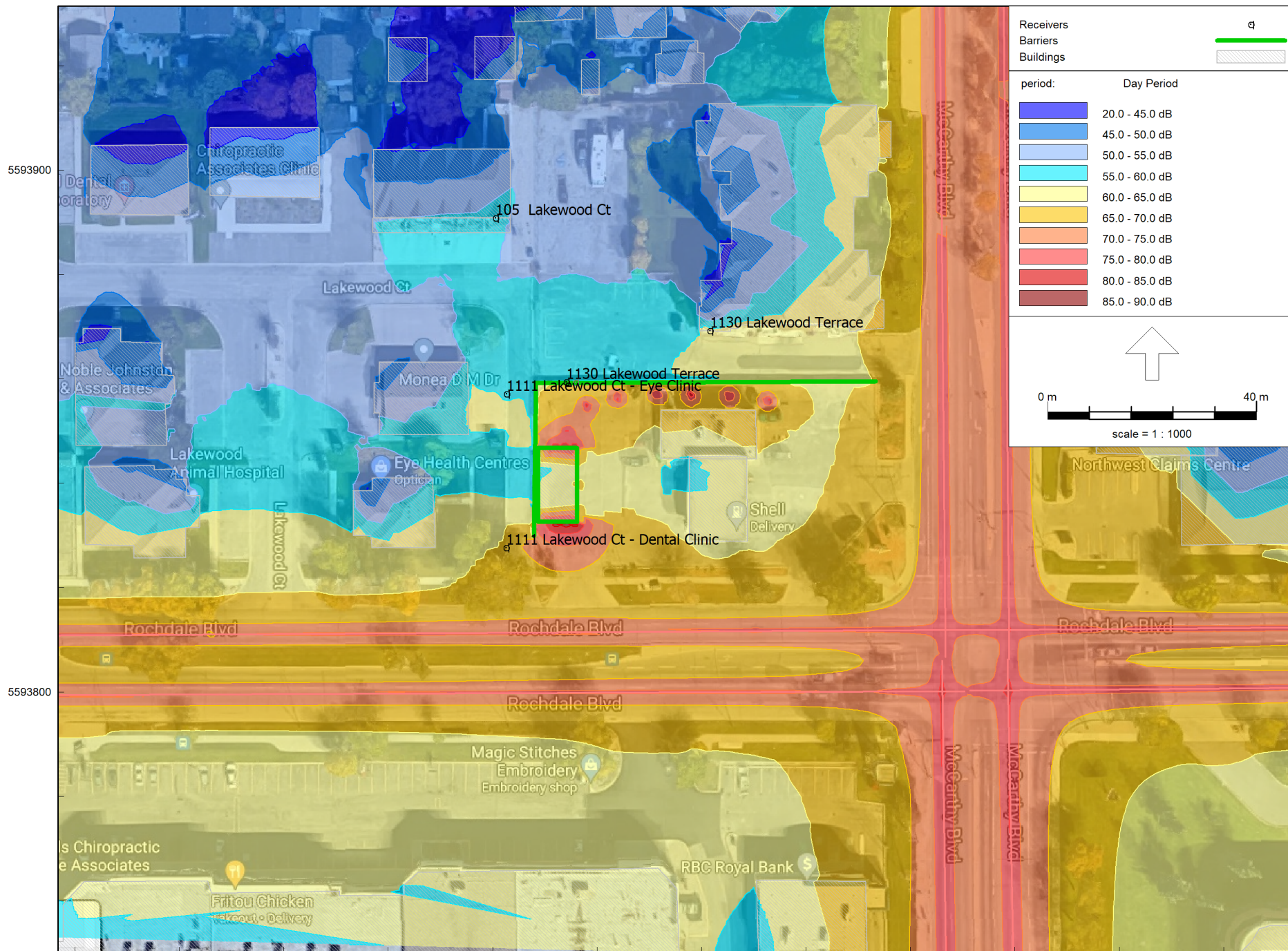
Sound pressure level contribution contour map of the CTM Design Shell Canada Car Wash 5826 Rochdale Blvd Regina with the proposed 1.8 metre height acoustic barrier. The noise contour map reflects a receiver height of 1.2 metres.

Existing daytime road traffic sound pressure level contribution contour map with the proposed acoustic barrier. The noise contour map reflects a receiver height of 1.2 metres.

Cumulative sound pressure level contribution contour map of the CTM Design Shell Canada Car Wash along with existing daytime road traffic noise with the proposed 1.8 metre height acoustic barrier.







Appendix C – References

1. City of Regina, Bylaw 6980, The Noise Abatement Bylaw, September 30, 2019.
2. Crocker, M.J., [Handbook of Noise and Vibration Control](#), John Wiley & Sons. New York, NY, 2007.
3. Bies, D.A. and Hansen, C.H., [Engineering Noise Control Theory and Practice](#), Third Edition, Spon Press. New York, NY, 2003.
4. International Organization for Standardization (ISO 9613-1), [Attenuation of sound during propagation outdoors - Part 1: Calculation of the absorption of sound by the atmosphere](#), Approved 1993.
5. International Organization for Standardization (ISO 9613-2), [Attenuation of sound during propagation outdoors - Part 2: General method of calculation](#), Approved 1996.
6. International Organization for Standardization (ISO 1996-2:2007), [Description, measurement, and assessment of environmental noise - Part 2: Determination of environmental noise levels](#), Approved 2007 (Revises ISO 1996-2:1987 Acoustics – Description and measurement of environmental noise – Part 2: Acquisition of data pertinent to land use).
7. International Organization for Standardization (ISO/TR 17534-3), [Acoustics – Software for the calculation of sound outdoors – Part 3: Recommendations for quality assured implementation of ISO 9613-2 in software according to ISO 17534-1](#), Approved 2015.

Appendix D – Practitioner Experience

Mr. James Farquharson, CET, INCE is the founder and Principal Consultant of FDI Acoustics. Mr. Farquharson is certified as an Engineering Technologist (Petroleum) by The Association of Science and Technology Professionals of Alberta. Mr. Farquharson is a member of the Institute of Noise Control Engineers (INCE) and a Life Member of the Society of Petroleum Engineers (SPE). Mr. Farquharson has 32 years of experience in the preparation of environmental noise impact assessments and industrial noise control studies. Mr. Farquharson served as member of the Alberta Energy and Utilities Board (now the AER) Noise Control Directive 99-8 Review Committee that resulted in the current version of Directive 038. Mr. Farquharson also served as committee member in the development of the current City of Calgary Community Standards Bylaw 5M2004 (Part 9 Noise). Mr. Farquharson has appeared before the Alberta Energy Regulator, the Alberta Utilities Commission, and the Natural Resources Conservation Board as an expert in the preparation of Environmental Noise Impact Assessments. Mr. Farquharson has previously completed environmental noise assessment of car washes in Calgary, Edmonton, and Winnipeg during his career. Mr. Farquharson provided modelling oversight, report preparation, and project review in the completion of this assessment.

Mr. Hossein Mehravaran, M.Sc. is a Senior Acoustical Consultant employed with FDI Acoustics since 2014. Mr. Mehravaran graduated from the University of Tehran in 1995 with a B.Sc. in applied Physics. Mr. Mehravaran graduated from the University of Tehran in July 1999 with a M.Sc. and a teaching certificate. Mr. Mehravaran is a member of the Institute of Noise Control Engineers (INCE). Mr. Mehravaran has 19 years of experience as an Acoustical Consultant and specializes in environmental noise modelling and environmental noise monitoring. Mr. Mehravaran has completed assessments for car washes in Calgary and Edmonton during his career. Mr. Mehravaran completed the environmental noise modelling and report preparation in the completion of this assessment.



Discretionary Use - 5826 Rochdale Boulevard - PL202000248

| | |
|--------------|---------------------------------------|
| Date | July 7, 2021 |
| To | Regina Planning Commission |
| From | City Planning & Community Development |
| Service Area | Planning & Development Services |
| Item No. | RPC21-41 |

RECOMMENDATION

Regina Planning Commission recommends that City Council:

1. Approve the discretionary use for a proposed Service Trade, Wash–Light (Car Wash) land use located at 5826 Rochdale Boulevard, being Lot A, Blk/Par O, Plan 86R00275, subject to the following standards and conditions:
 - a) the development shall be generally consistent with the plans, including the installment of a solid acoustic barrier fence (1.83 metres) along the north and west property lines, attached to this report as Appendices A3.1 - A3.3 inclusive prepared by AECOM dated March 8, 2021 and June 23, 2021 and the noise impact assessment prepared by FDI Acoustics dated June 18, 2021 and appended to this report as Appendix C; and
 - b) the development shall comply with all applicable standards and regulations in *Regina Zoning Bylaw, 2019-19*.
2. Authorize the Development Officer to issue a development permit with respect to the application, subject to the applicant making payment of any applicable fees or charges and entering into a development agreement if one is required.
3. Approve these recommendations at its meeting on July 14, 2021, following the required public notice.

ISSUE

The applicant, WSP Canada INC. and property owner Shell Canada, propose to develop a 'Service Trade, Wash - Light' (Car Wash) land use at 5826 Rochdale Boulevard. The subject property is zoned MH - Mixed High-Rise Zone under *Regina Zoning Bylaw, 2019* (Zoning Bylaw) where Service Trade, Wash - Light is a discretionary use. The subject property currently contains an existing convenience store and gas bar, which are existing permitted uses in the MH – Mixed High-Rise Zone. The proposed car wash is in addition to these existing uses.

All properties in the city of Regina are assigned a zoning designation under the Zoning Bylaw. Within each zoning designation, land uses can be permitted, not permitted (i.e. prohibited) or discretionary. Discretionary uses require a public and technical process and review by the Regina Planning Commission and City Council's approval to proceed.

This application is being considered pursuant to *The Planning & Development Act, 2007* (Act); *Design Regina: The Official Community Plan Bylaw No. 2013-48* (OCP) and the Zoning Bylaw, including suitability based on the prescribed evaluation criteria for discretionary uses established in Part IE.3. The proposal has been assessed and deemed to comply with all applicable policies, regulations and standards.

Pursuant to subsection 56(3) of the Act, City Council may establish conditions for discretionary uses based on the nature of the proposal (e.g. site, size, shape, the arrangement of a building) and aspects of site design (e.g. landscaping, site access, parking, loading), but not including architectural details.

IMPACTS

Financial Impacts

The subject area currently receives a full range of municipal services, including water, sewer and storm drainage. The applicant will be responsible for the cost of any new, or changes to existing, infrastructure that may be required to directly or indirectly support any proposed development that may follow, in accordance with City standards and applicable legal requirements. The applicant is responsible for paying the applicable development levy.

Environmental Impacts

The City of Regina has a community goal of achieving net zero emissions and sourcing of net zero renewable energy by 2050. In support of this, City Council has asked Administration to provide energy and greenhouse gas implications of recommendations so that they can evaluate the climate impacts of their decisions. The development of this car wash will not likely result in an increase in overall trips to car washes in the city. It will likely result in residents using this car wash instead of another, resulting in net neutral greenhouse gas emissions overall.

Accessibility Impact

As per the Zoning Bylaw, Chapter 4, subpart 4B.6.2(1), a minimum of two per cent of the required parking stalls shall be provided in the form of accessible parking stalls in the MH – Mixed High-Rise Zone. As no parking stalls are required by the total floor area of the proposed building, no accessible parking stalls are required. However, one has been proposed by the applicant.

Policy/Strategic Impact

The proposed development supports the following OCP goals/ policies:

- Section C, Goal 3, Policy 3.8: *Require intensification in built or approved neighbourhoods to be compatible with the existing built form and servicing capacity.*

The proposed location is identified within a built or approved neighbourhood that utilizes existing services.

OTHER OPTIONS

1. Approve the application subject to specific development standards or conditions being attached as amendments to the plan, in accordance with section 1E.3.8 of the Zoning Bylaw.
2. Refer the application back to Administration. If City Council has specific concerns with the proposal, it may refer the application back to Administration to address or make a recommendation on those points and direct that the report be reconsidered by Planning Commission or brought directly back to Council following such further review.
3. Deny the application. Development of a “Service Trade, Wash – Light” land use will not proceed on the subject property if City Council rejects the application. If Council defeats or does not move a recommendation to approve (with or without conditions), Council must consider an alternate motion to reject the application. The motion must include the reasons for the denial based on the evaluation criteria.

COMMUNICATIONS

The applicant and other interested parties will receive a copy of the report and notification of the meeting to appear as a delegation in addition to receiving a written notification of City Council’s decision. Public notice of City Council’s consideration of this application will be given in accordance with *The Public Notice Policy Bylaw, 2020*. The applicant will receive written notification of Council’s decision in accordance with *The Planning and Development Act, 2007*.

DISCUSSION

Proposal

The application proposes to develop a Service, Trade, Wash-Light (Car Wash) within the property located at 5826 Rochdale Boulevard, where a convenience store and gas bar currently exist. The proposed car wash is in addition to these uses. The proposed development will include a 114.5 square meter car wash shown in Appendix A-3.1 to A-3.2.

Consideration

The development, as proposed, conforms with the Zoning Bylaw. The land use and zoning related details are summarized in the following table:

| Land Use Details | Existing | Proposed |
|---------------------------------|-------------------------------|-------------------------------------|
| Zoning | MH - Mixed High-Rise | MH - Mixed High-Rise |
| Land Use | Convenience Store and Gas Bar | Service Trade Was -Light (Car Wash) |
| Building area (m ²) | 167.75 | 114.5 |

| Zoning Analysis | Required | Proposed |
|------------------------------------|--------------------------------------------------------------|----------|
| Number of Parking Stalls | 2 (1 stall/150m ² of gross floor area on site) | 3 |
| Maximum Site Coverage | 65% | 18% |
| Minimum Lot Frontage (m) | 6 | 65.4 |
| Minimum Lot Area (m ²) | 250 | 2,622 |
| Maximum Building Height (m) | 15 | 5.5 |

Access to the subject property is provided by a right-in-right-out drive-way on Rochdale Boulevard and via a right-in-right-out drive-way access from McCarthy Boulevard, as shown in Appendix A-3.1.

The surrounding properties are in the MH - Mixed High-Rise Zone and include a four-storey residential building to the north, professional offices (dentist and optometrist offices) to the west, commercial buildings (financial institution and Co-op grocery store) to the south, office buildings (SGI Claims Centre) to the east.

This application is deemed compliant with all applicable policies and regulations in the Zoning Bylaw. Based on the Administration's evaluation of the proposal for the land use, development standards, and criteria established in Part 1E.3 of the Zoning Bylaw, the development is deemed a suitable use for the proposed location. The site currently caters to vehicular traffic as there are existing gas bar and convenience store on site. Administration has worked with the applicant to

revise their proposed plans to address adverse effects from adding a car wash to the site explained below.

Community Engagement & Analysis

In accordance with the public notice requirements of *The Public Notice Policy Bylaw, 2020*, neighbouring property owners within 75 metres of the proposed development received written notice of the application, and a public notification sign was posted on the subject site. The proposal was sent to the Twin Lakes Community Association and the Walsh Acres/Lake Ridge/Garden Ridge Community Association for comments and Administration did not receive responses.

The City received 30 opposition letters/signatures. The majority of those in opposition, 26/30, were from the same adjacent multi-unit residential building to the north at 1130 McCarthy Boulevard North. A summary of public comments and Administration's responses is attached as Appendix B. The concerns expressed are mostly regarding potential noise, vehicle emissions and privacy.

The car wash is proposed to be located in a suitable position for this site to reduce potential negative impacts. The applicant proposes to install a 1.83 metre (six-foot) high acoustic barrier fence along the north and west property lines (Appendix A-3.1 and Appendix C) as a condition of approval to address residents' concerns about privacy and noise.

The main source of the noise for a car wash of this nature, the car wash dryer, is proposed to face south toward Rochdale Boulevard, away from the residential building north of the site. Based on the nature of the concerns expressed by residents and the proximity of the condominium development to the north, Administration required the applicant to submit a noise impact assessment from the source to the residential property to the north to determine the level of compliance with the *Noise Abatement Bylaw No. 6980*. Section 7.1 of the bylaw includes noise level thresholds, measured in decibels, based on the zone. The noise thresholds stated in the bylaw cannot exceed 15 cumulative minutes in any hour. For mixed-use zones, the allowable noise levels are 60 decibels from 10:00 pm to 7:00 am and 70 decibels from 7:00 am to 10:00 pm (not exceeding 15 minutes). For reference, 70 decibels (dBa) is comparable to a vacuum cleaner and 60 dBa is comparable to a conversation at a restaurant or background music.¹

The applicant has examined and modelled noise levels that will be generated by the proposed car wash and to show impacts on surrounding properties in a noise impact assessment conducted by FDI Acoustics (Appendix C). The noise impact assessment shows that with a solid noise barrier fence along the north and west property boundaries that the site will meet the *Noise Abatement Bylaw* at all hours, modelled at 49 dBa at the north property line shared with the residential development. For further analysis, the noise impact assessment can be viewed in the Appendix C. Administration is satisfied that the applicant has sufficiently managed sound and other nuisances in

¹ Source from IAC Acoustics, Comparative Examples of Noise Levels, <https://www.iacacoustics.com/blog-full/comparative-examples-of-noise-levels.html> Accessed April 29, 2021

their proposal.

DECISION HISTORY

City Council's approval is required pursuant to Part V of *The Planning and Development Act, 2007*.

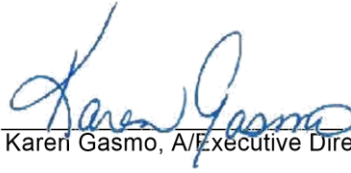
Respectfully Submitted,

Respectfully Submitted,



Autumn Lawson, Director, Planning & Development Services

6/24/2021



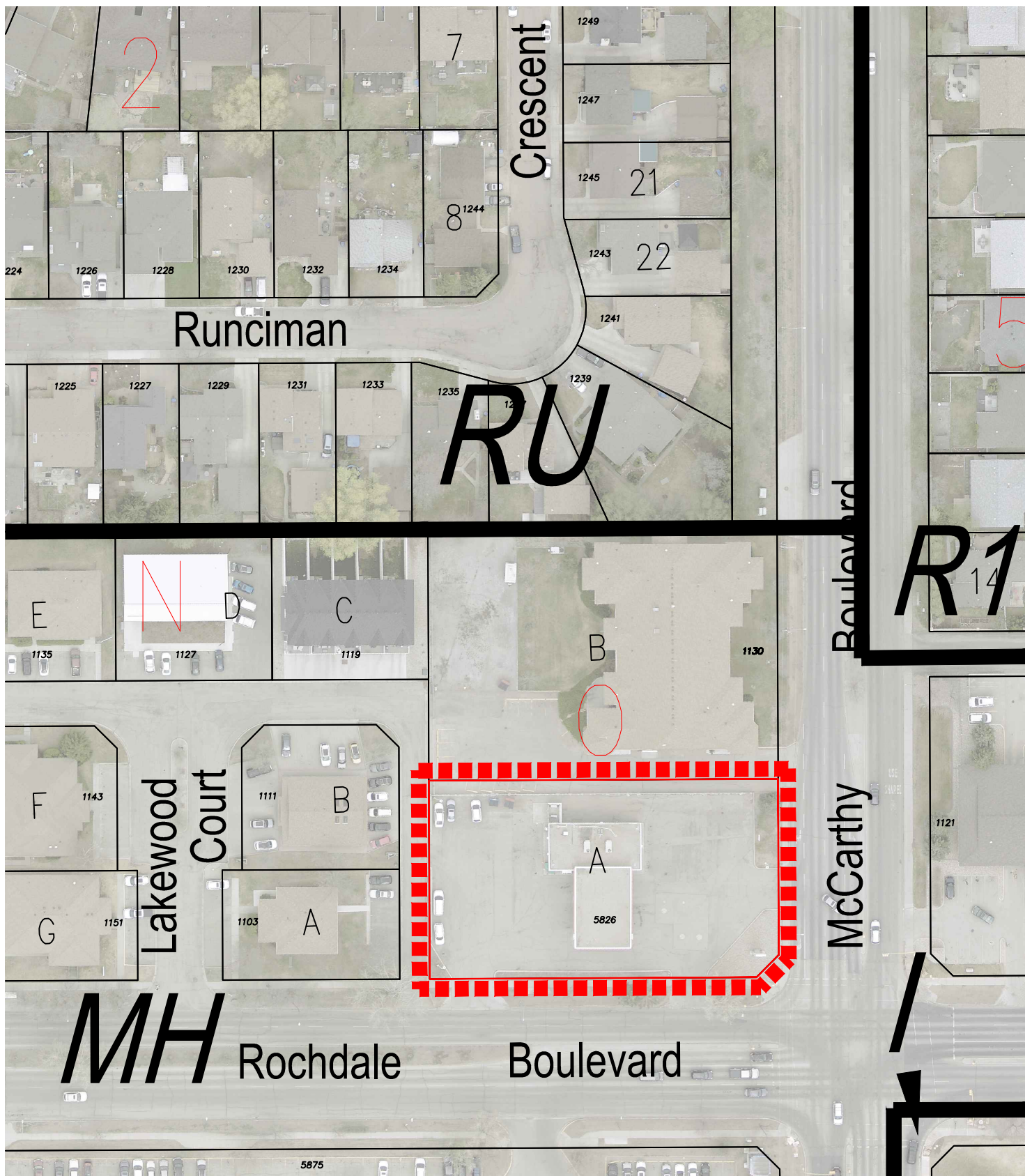
Karen Gasmo, A/E Executive Director

6/30/2021

Prepared by: Kimberly Hemm, City Planner I

ATTACHMENTS

Appendix A-1
Appendix A-2
Appendix A-3.1
Appendix A-3.2
Appendix A-3.3
Appendix B
Appendix C



Date of Photography : 2018



Subject Property

Project PL202000248

Civic Address/Subdivision

5826 Rochdale
Lot(s) A, Block O, Plan No. 86R00275



Date of Photography: 2018



Subject Property

Project PL202000248

Civic Address/Subdivision

5826 Rochdale
Lot(s) A, Block O, Plan No. 86R00275

ANSI D 864mm x 559mm
Checked: JP/DJ Approved: PE
Project Management Initials: Designer: PE
Last Plotted: 2021-03-10
Filename: 2020058_C102.0.DWG

SITE NOTES

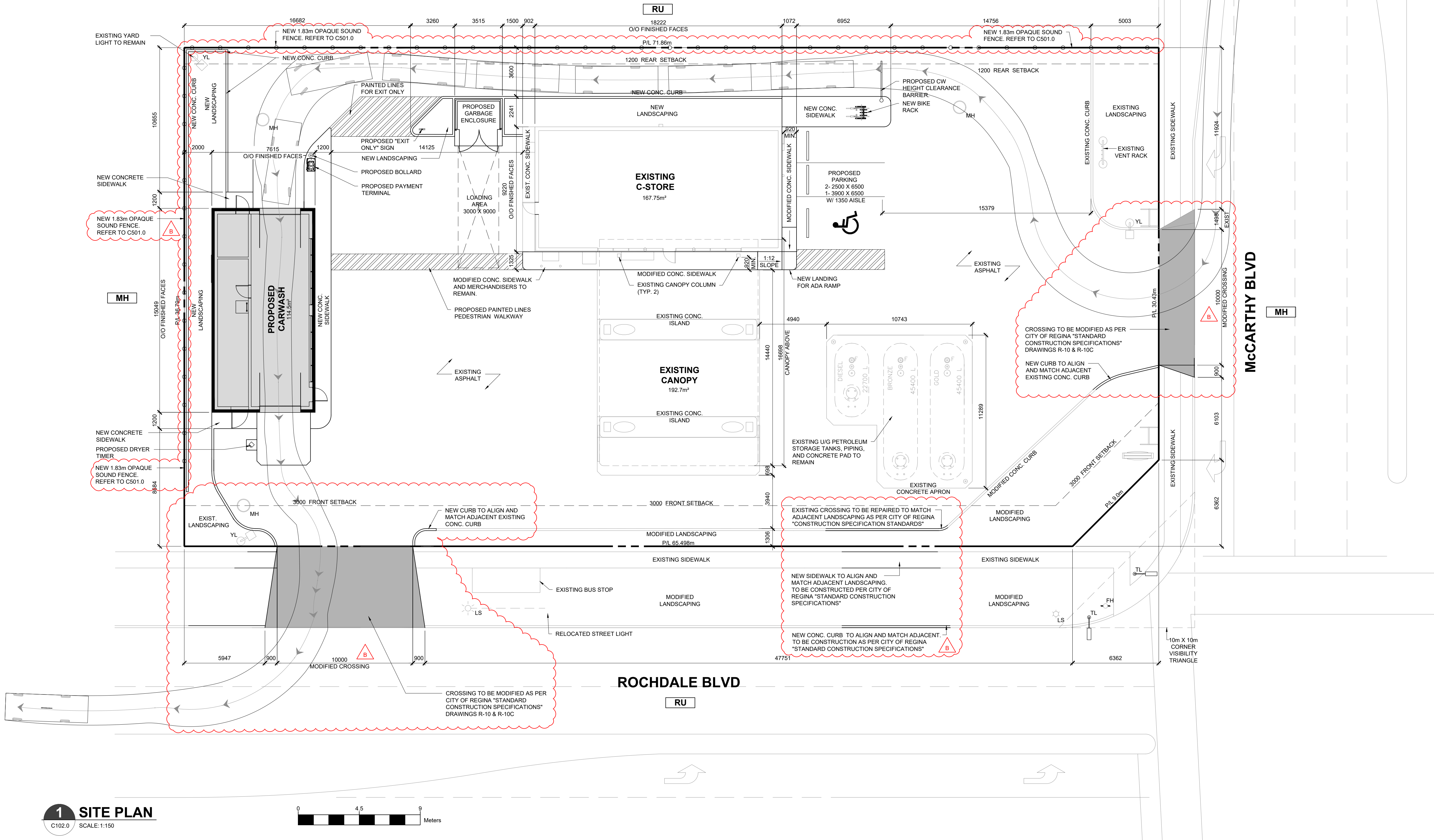
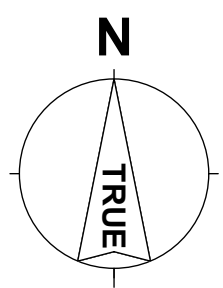
| | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| LEGAL DESCRIPTION LOT A BLK / PAR O PLAN NO 86R00275 EXTENSION 0 AS DESCRIBED ON CERTIFICATE OF TITLE 86R00275 | LANDSCAPING REQUIREMENTS 10% OF LOT AREA REQUIRED TO BE LANDSCAPED EXIST. SOFT LANDSCAPING = 49.17m ² NEW SOFT LANDSCAPING = 127.40m ² EXIST. HARD LANDSCAPING = 157.48m ² NEW HARD LANDSCAPING = 37.85m ² TOTAL LANDSCAPING = 371.90m² (14.2%) | BICYCLE REQUIREMENTS 2 SHORT TERM BICYCLE PARKING SPACES ARE REQUIRED TOTAL: 2 PARKING STALLS ARE REQUIRED / 1 ADA STALL PROPOSED PARKING REGULAR 2500 X 6500 2 HANDICAP 3900 X 6500 1 TOTAL: 3 PARKING STALLS LOADING 3000 X 9000 1 BICYCLE PARKING PROVIDED BICYCLE RACK PROVIDED |
| MUNICIPAL ADDRESS 5826 ROCSDALE BOULEVARD REGINA, SK | SETBACKS(YARDS): FRONT: 3m INTERIOR: 0m REAR: 1.2m EXTERIOR: 0m | |
| ZONING MH - MIXED HIGH-RISE ZONE | PARKING REQUIREMENTS C-STORE & CARWASH 1.00 PER 75m ² OF GFA AFTER 150m ² OF GFA (282.34m ² - 150m ²) / 75m ² = 2.00 STALLS REQUIRED FUEL SALES NO REQUIREMENTS SPECIFIED 2% OF PARKING SPACES TO BE ACCESSIBLE PARKING SPACES | |
| LOT AREA ±2,622.40m ² (262 HECTARE / .648 ACRES) | | |
| LOT COVERAGE EXISTING C-STORE: 167.75m ² EXISTING CANOPY: 192.70m ² PROPOSED CARWASH: 114.5m ² TOTAL LOT AREA: 2,622.40m ² = 18.11% FAR = 0.1 | | |

GENERAL NOTES

- ALL DIMENSIONS ARE IN MILLIMETERS EXCEPT CONC. CURB RADII WHICH ARE NOTED IN METERS.
- ALL CONSTRUCTION WITHIN THE LEASE LINES IS NEW U.N.O.
- DRAWING IS NOT TO BE SCALED.
- ALL DIMENSIONS TO BE CHECKED & VERIFIED ON THE SITE, BY SURVEY, PRIOR TO ANY CONSTRUCTION. ANY DISCREPANCIES ARE TO BE REPORTED TO THE ENGINEER BEFORE PROCEEDING.
- CONTRACTOR TO ENSURE THAT ALL CONSTRUCTION ON MUNICIPAL PROPERTY IS TO THE LATEST MUNICIPAL STANDARDS.
- GC SHALL PROVIDE AS BUILT DRAWINGS INCLUDING AS BUILT GRADE, BUILDING, ETC. UPON COMPLETION OF THE WORK, WITH ADDITIONAL COPY TO THE AUTHORITY HAVING JURISDICTION UPON REQUEST. GRADING SHALL INCLUDE FLOOR ELEVATIONS, YARD ELEVATIONS, CONTOURS ON 0.1m INCREMENTS, RIM ELEVATIONS OF ALL CBs, MHs, AND THE INVERT OF ALL PIPES WHERE THEY ENTER/LEAVE CBs AND MHs. THE AS BUILTS SHALL BE IN BOTH HARD COPY AND ELECTRONIC COPY IN AUTOCAD 2015 OR EARLIER FORMAT.

LEGEND

| | | | |
|------------------------|--------|---------------------------|-------|
| IRON SURVEY POST FOUND | ● FdJP | LIGHT STANDARD (DBL) | □ YL |
| MANHOLE | ○ MH | TELEPHONE PEDESTAL | □ TP |
| GRATED-TOP MANHOLE | ○ GTMH | EXISTING CONC. CURBS | ===== |
| CATCH BASIN | □ CB | NEW CONC. CURBS | ===== |
| FIRE HYDRANT | ○ FH | PREFIX (EX.) = EXISTING | EX. |
| POWER POLE | ○ PP | VENT | V |
| TRAFFIC LIGHT | ○ TL | FILL | F |
| TRAFFIC SIGN/SIGN POST | □ TS | LEVEL MONITOR | LM |
| LIGHT STANDARD (SGL) | ○ LS | INTERSTITIAL MONITOR | IM |
| | □ YL | SUBMERSIBLE TURBINE PUMP | STP |



Appendix A-3.1



PROJECT

Shell Canada Products
Rochdale Blvd &
McCarthy Blvd

5826 Rochdale Blvd
Regina, SK

CLIENT

Shell Canada

400-4th Avenue SW

Calgary, AB T2P 0J4

403.252.4554 tel

www.shell.ca

CONSULTANT

AECOM Canada Ltd

4th Floor, 3292 Production Way

Burnaby, BC V5A 4R4

604.444.6400 tel 604.294.8597 fax

www.aecom.com

CTM Design Services Ltd.

210, 340 Midpark Way SE

Calgary, AB T2X 1P1

403.640.0990 tel

www.ctmdesign.ca



REGISTRATION

LOT DESCRIPTION

LOT A BLK / PAR O PLAN NO. 86R00275
EXTENSION 0 AS DESCRIBED ON
CERTIFICATE OF TITLE 86R00275

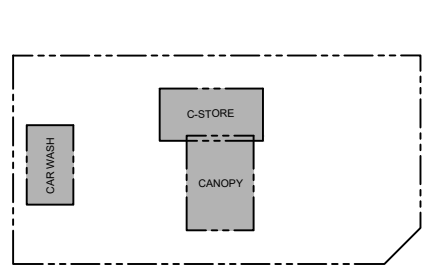
ISSUE/REVISION

| DATE | DESCRIPTION |
|------------|---------------------------|
| 2021-03-08 | REVISED, RE-ISSUED FOR DP |
| 2020-08-10 | ISSUED FOR DP |
| 2020-04-17 | ISSUED FOR CLIENT REVIEW |
| 2020-03-25 | ISSUED FOR CLIENT REVIEW |

DRAWN BY

AW

KEY PLAN



GLOBAL PROJECT ID NUMBER

C10114

SHEET TITLE

SITE

SITE PLAN

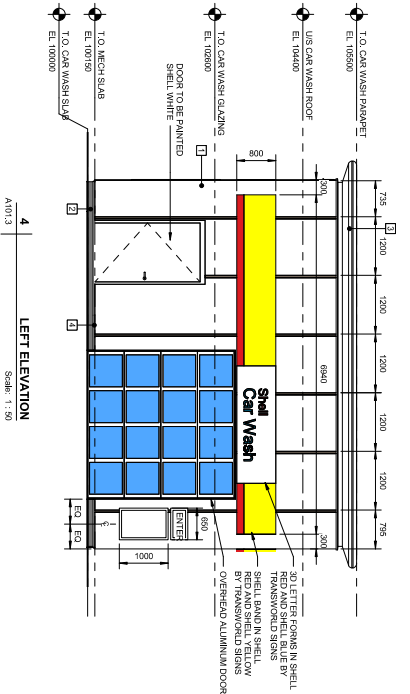
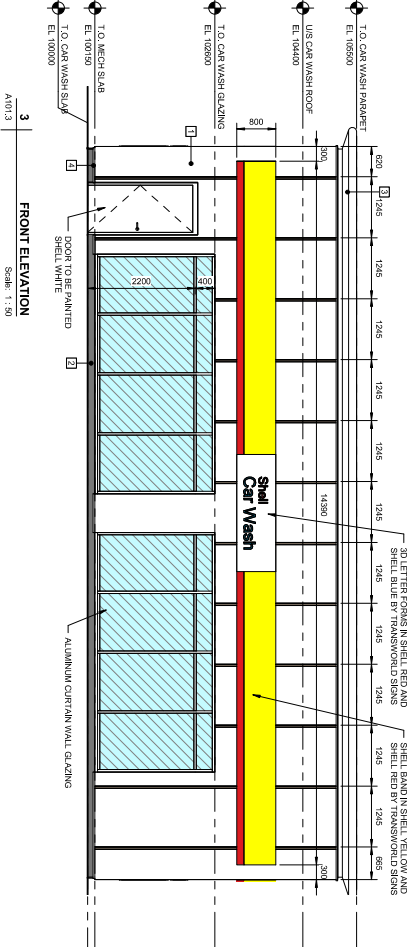
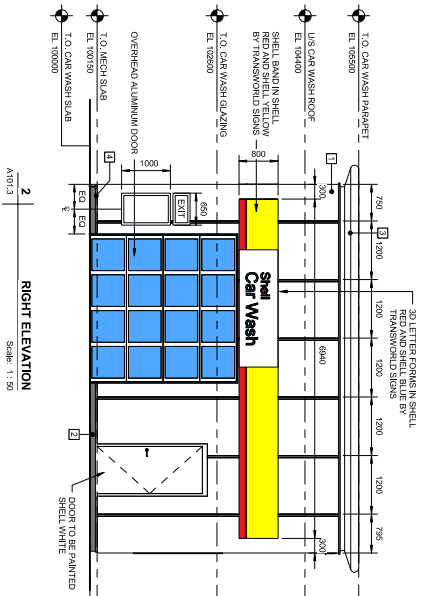
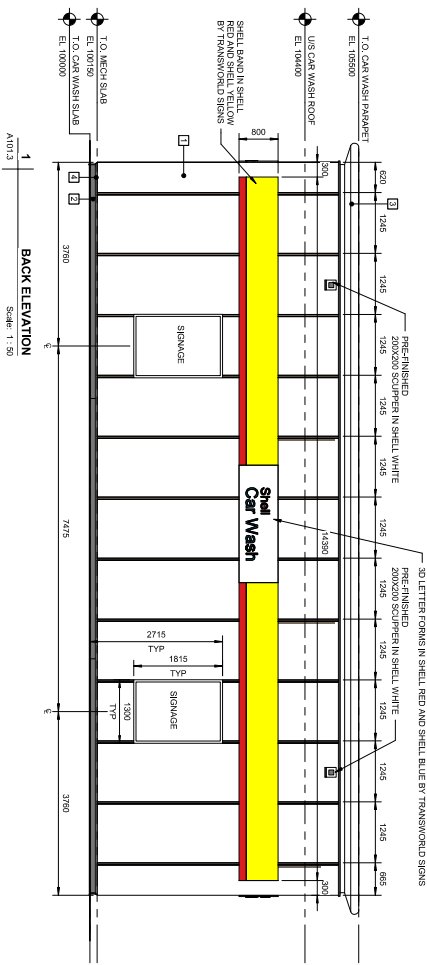
CTM DESIGN FILE NAME

2020058_C102.0

SHEET NUMBER

C102.0

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AECOM

PROJECT

Shell Canada Products
Rochdale Blvd &
McCarthy Blvd

5525 Rochdale Boulevard
Regina, SK
S4S 0G7

CLIENT

Shell Canada
400-4th Avenue SW
Calgary, AB T2P 0J4
403.252.4554 (tel)
www.shell.ca

CONSULTANT

AECOM Canada Ltd
4th Floor, 2292 Production Way
Burnaby, BC V5A 4R4
Calgary, AB T2P 0J4
403.252.4554 (tel)
www.aecom.com

CTM Design Services, Ltd
C/O - 3600 Highway 56
Calgary, AB T2C 1P1
403.604.6449 (tel)
www.ctmdesign.ca

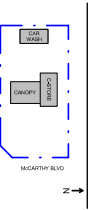
REGISTRATION

ISSUE/REVISION

| REV | DATE | DESCRIPTION |
|-----|------------|------------------------|
| 1 | 2020-08-11 | ISSUED FOR DEVELOPMENT |
| 2 | 2020-08-11 | ISSUED FOR DEVELOPMENT |

DRAWN BY

KEY PLAN



GLOBAL PROJECT ID NUMBER

C10114

SHEET TITLE

CAR WASH
EXTERIOR ELEVATIONS

AECOM FILE NAME

A201.3-EXE-RWBX

SHEET NUMBER

A201.3

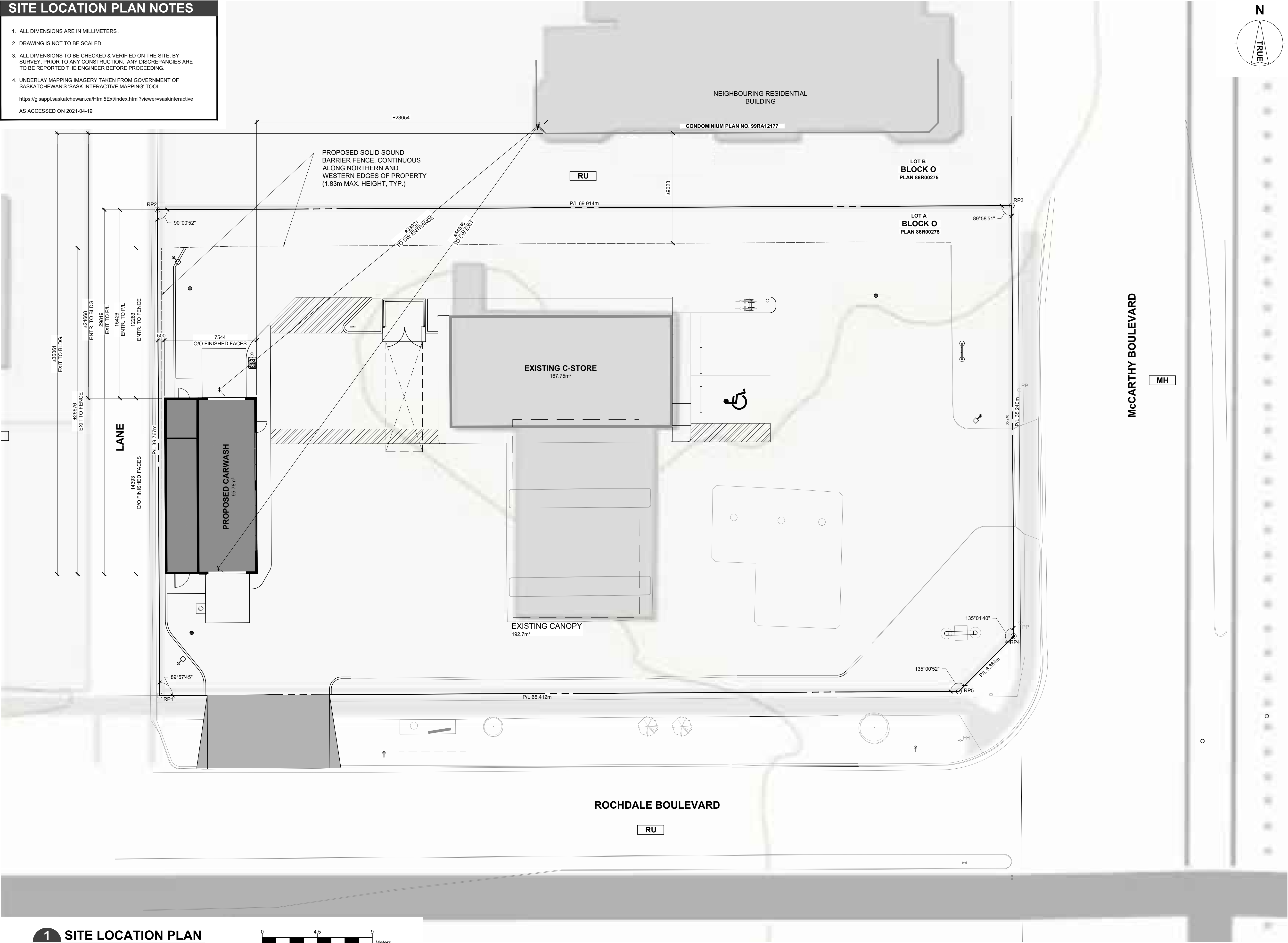
SITE LOCATION PLAN NOTES

1. ALL DIMENSIONS ARE IN MILLIMETERS .

2. DRAWING IS NOT TO BE SCALED.

3. ALL DIMENSIONS TO BE CHECKED & VERIFIED ON THE SITE, BY SURVEY, PRIOR TO ANY CONSTRUCTION. ANY DISCREPANCIES ARE TO BE REPORTED THE ENGINEER BEFORE PROCEEDING.

4. UNDERLAY MAPPING IMAGERY TAKEN FROM GOVERNMENT OF SASKATCHEWAN'S 'SASK INTERACTIVE MAPPING' TOOL:
<https://gisappli.saskatchewan.ca/html5Ext/index.html?viewer=saskinteractive>
AS ACCESSED ON 2021-04-19



1

SITE LOCATION PLAN

C108.0 / SCALE: 1:150

0

4.5

9

Meters

Appendix A-3.3

AECOM

PROJECT

Shell Canada Products
Rochdale Blvd &
McCarthy Blvd

5826 Rochdale Blvd
Regina, SK

CLIENT

Shell Canada

400-4th Avenue SW
Calgary, AB T2P 0J4
403.252.4554 tel
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CONSULTANT

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CTM Design Services Ltd.
225, 340 Midpark Way SE
Calgary, AB T2X 1P1
403.640.0990 tel
www.ctmdesign.ca

ctm

Design Services Ltd

REGISTRATION

LOT DESCRIPTION
LOT A BLK / PAR O PLAN NO. 86R00275
EXTENSION 0 AS DESCRIBED ON
CERTIFICATE OF TITLE 86R00275

ISSUE/REVISION

| 1 | 2021-06-23 | RE-ISSUED FOR DP |
|-----|------------|------------------|
| 0 | 2021-04-19 | ISSUED FOR DP |
| I/R | DATE | DESCRIPTION |

DRAWN BY

PE

KEY PLAN

CANOPY

C-STORE

CANOPY

ROCHDALE BLVD

MC CARTHY BLVD

REGINA, SK

GLOBAL PROJECT ID NUMBER

C10114

SHEET TITLE

SITE

SITE LOCATION PLAN

CTM DESIGN FILE NAME

2020058_C108.0

SHEET NUMBER

C108.0

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Public Consultation Summary

| Response | Number of Responses | Issues Identified |
|-----------------------------------------------------|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Completely opposed</i> | 30 | <ul style="list-style-type: none"> • Increased noise • Increased traffic • Pollution (including emissions from vehicles, chemicals from the car wash, and light pollution) • Water pressure and potential sewer issues • Proximity to other car washes • Privacy • Walkability • Property value • Littering |
| <i>Accept if many features were different</i> | 0 | N/A |
| <i>Accept if one or two features were different</i> | 0 | N/A |
| <i>I support this proposal</i> | 0 | N/A |

Note: 26/30 of the responses were from the adjacent multi unit residential building.

1. **Issue: Noise**

Administration's Response:

All properties must abide by the Noise Abatement Bylaw No. 6980, which has regulations for allowable sound thresholds (measured in decibels) based on the zone. As per section 7.1 of the Noise Abatement Bylaw, where a development will exceed the stated decibel levels in the bylaw based on the zone, it must not be for more than 15 cumulative minutes in any given hour. As a mixed-use zone, sound thresholds for the subject site are 60 decibels from 10:00 pm to 7:00 am, and 70 decibels from 7:00 am to 10:00 pm. The applicant has provided information below that the maximum duration within any hour would be 12 minutes and noise will not exceed the day time or night time noise levels, in compliance with the noise bylaw. Administration required the applicant to undertake a noise impact assessment prepared by qualified experts and worked with them on mitigative measures to manage noise at the property lines (e.g. installation of acoustic barriers on west and north property lines, quieter dryer technology). Further, the site has been designed to consider impacts to surrounding land uses including facing the exit with the dryer to the south towards Rochdale Boulevard and away from the residential property to the north. This will help ensure that noise is mostly projected towards Rochdale Boulevard.

Applicant's Response/Analysis:

- The proposed development will include the Aerodry Model A45 unit dryer system driven by 45

horsepower electric motor, which is quieter than standard drying systems. A quieter dryer system is proposed in consultation with City Administration on mitigative measures to manage noise from the development.

- The noise impact assessment conducted by FDI Acoustics shows that with the proposed fence or sound barrier along the north and west property lines that the car wash falls within the Noise Abatement Bylaw regulations. The decibel level from the proposed car wash to the north property line is 49 decibels, which is well below either the daytime or night time thresholds outlined in the Noise Abatement Bylaw. The analysis shows that the residential building to the north is more impacted by traffic noise from McCarthy Boulevard than the proposed car wash. (see page 10 of the report)

| Receiver Location | Daytime Sound Level (dBA L _{eq}) | Nighttime Sound Level (dBA L _{eq}) | Daytime Sound Level (dBA L _{eq}) | Nighttime Sound Level (dBA L _{eq}) |
|------------------------------------------------------------------------------------|--------------------------------------------|----------------------------------------------|--------------------------------------------|----------------------------------------------|
| | Without Barrier | | w/ North Barrier | |
| 1111 Lakewood Court North – Eye Health Clinic Property Line (1.2 metres height) | 61.3 | 61.3 | 57.3 | 57.8 |
| 1111 Lakewood Court North – Dental Health Clinic Property Line (1.2 metres height) | 66.9 | 66.9 | 65.3 | 65.3 |
| Permissible Sound Level (Mixed Use Zone) | 70.0 | 60.0 | 70.0 | 60.0 |
| North Property Line - 1130 Lakewood Terrace (1.2 metres height) | 62.6 | 62.6 | 49.0 | 49.0 |
| 1130 Lakewood Terrace – 2 nd Floor Façade (5.0 metres height) | 52.9 | 52.9 | 52.7 | 52.7 |
| 1130 Lakewood Terrace – 3 rd Floor Façade (8.0 metres height) | 52.6 | 52.6 | 52.6 | 52.6 |
| 1130 Lakewood Terrace – 4 th Floor Façade (11 metres height) | 52.2 | 52.2 | 52.2 | 52.2 |
| 105 Lakewood Court – 1 st Floor Façade (1.5 metres height) | 50.4 | 50.4 | 46.4 | 46.4 |
| 105 Lakewood Court – 2 nd Floor Façade (3.5 metres height) | 50.4 | 50.4 | 47.9 | 47.9 |
| Permissible Sound Level (Residential Zone) | 60.0 | 55.0 | 60.0 | 55.0 |

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- Appendix A-3.3 confirms the following:
 - The entrance of the car wash is 11.9 metres (36’8”) from the north property line.
 - The exit of the car wash is 26.9 metres (88.3) from the north property line.
 - The exit of the car wash is 35.2 metres (115.5’) from the residential development; alternatively, if measured on an angle the distance is 43.9 m.
- The exit of the car wash is 32.8 metres (107’7”) from the residential development. The washing cycle for the car wash is 4 mins and the drying cycle is an additional 60 seconds (total operating time of 5 minutes). Therefore, the maximum length of time the dryer will be operating in 1 hour is 12 minutes. The detailed calculation is as follows: 60 min ÷ 5 min per wash = 12 car washes per hour. 1 min x 12 car washes = 12 minutes operating time per hour for the dryer

2. Issue: Traffic Flow Impact

Administration’s Response:

The Zoning Bylaw requires five queuing spaces for a truck or car wash to be provided on-site. The proposed plan currently allows for approximately ten queuing spaces. The existing road network

including Rochdale Boulevard and McCarthy Boulevard are arterial roadways that can accommodate any anticipated demand created by the development. McCarthy Boulevard and Rochdale Boulevard intersection is fully signalized, and the site has sufficient access/egress points to address the site circulation and traffic safety.

3. Issue: Emissions and pollution emissions from vehicles, chemicals from the car wash, and light pollution

Administration's Response:

The development of this car wash will not likely result in an increase in overall trips to car washes in the city. It will likely result in residents using this car wash instead of another, resulting in net neutral greenhouse gas emissions overall as outline in the environment implications section of this report.

Outdoor lighting is regulated under the Community Standards Bylaw, where it does not permit any outdoor lighting to shine directly into the living room or sleeping areas of adjacent dwellings. Administration has made the applicant aware of this requirement.

Applicant's Response:

The sediment free wastewater from the car wash does go to septic / wastewater connection point after going through a grit separator sump and proceptor which scrubs the water of waxes and oils.

4. Issue: Water pressure and potential sewer issues.

Administration's Response:

City Engineering staff have reviewed this proposal and determined that there is sufficient infrastructure capacity to accommodate the proposed development.

5. Issue: Proximity to Similar Land Use

Administration's Response:

The Zoning Bylaw does not regulate separation distances between businesses of this type. Applications are considered on a site by site basis for compliance with the land use and development standards and processes of the Zoning Bylaw.

6. Issue: Privacy

Administration's Response:

The applicant will install a 1.83 metre (6-foot) solid acoustic barrier fence along the north and west property lines, which will add to screen the vehicles queueing for the car wash. This is addressed as a condition of approval and will need to be installed prior to opening of the car wash.

7. Issue: Walkability

Administration's Response:

Pedestrian access to and from the site is not changing. Rochdale Boulevard and McCarthy Boulevard have sidewalks adjacent to the site and as indicated there are traffic signals at this intersection to assist

in safe pedestrian movement.

8. Issue: Property Value

Administration's Response:

Development in established neighbourhoods often generates concerns about the impact on property values. Administration acknowledges that residents have these concerns but is not aware of any evidence that such development will have a negative impact on surrounding property values. The potential impact in this regard cannot be determined conclusively in advance, but will be affected by the perceptions, experiences and resultant actions of individual households, over time.

9. Issue: Littering

Administration's Response:

Any complaints regarding litter would be investigated by City Bylaw Enforcement Staff, to determine compliance with the Community Standards Bylaw 2016-2.

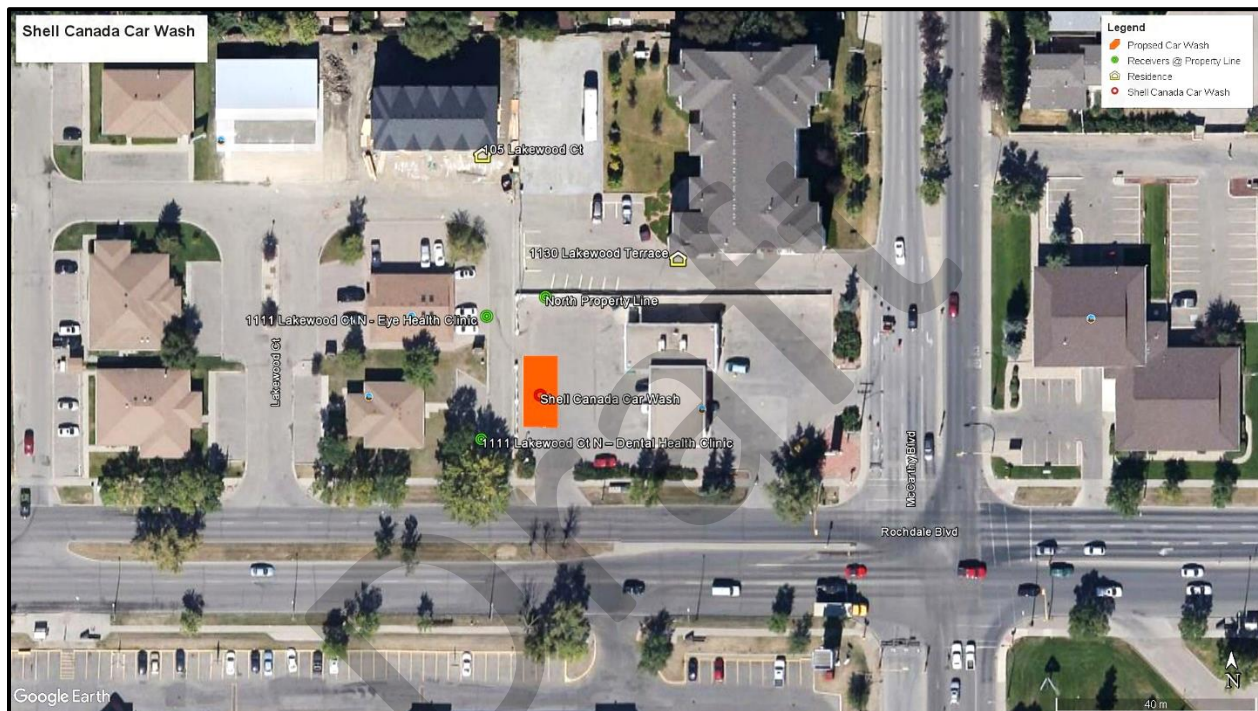


Noise Impact Assessment

CTM Design Services Ltd.

5826 Rochdale Blvd Regina

Shell Canada Car Wash



Prepared For:

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Issued: June 10, 2021
Project Number: 316501

Sound Advice • Sound Delivery

Executive Summary

CTM Design Services Ltd. (CTM Design) wanted to determine the environmental noise impact of the proposed Shell Canada Car Wash at 5826 Rochdale Blvd in the City of Regina. CTM Design retained the services of FDI Acoustics to complete a Noise Impact Assessment for the proposed development to determine compliance with the Permissible Sound Levels (PSLs) of the City of Regina Bylaw 6980¹, “The Noise Abatement Bylaw” Section 7.1, Land Use Noises. The assessment also provides the foundation to develop noise control measures for the equipment assessed should the predicted sound levels exceed the PSLs of the City of Regina Bylaw 6980 (Bylaw).

Octave band sound pressure levels related to the significant noise sources associated with the proposed car wash equipment operations were assigned from a combination of manufacturer’s data and FDI Acoustics’ sound pressure level measurement library or calculated following schemes as presented in texts^{2,3}. Following accepted acoustic evaluation practices, the sound pressure level data was used to calculate octave band sound power level values for the significant noise sources associated with the proposed equipment. The sound power levels were entered in the Softnoise GmbH Predictor™ Type 7810 noise propagation modelling software. The environmental noise propagation computer model calculated the sound level contribution of the car wash operations at three property line locations and at multiple elevations of the façades of two residential buildings near the site.

Table ES-1 presents the results of the modeling along with the PSLs for the receiver locations.

Table ES-1
Predicted Sound Levels
Shell Canada Car Wash 5826 Rochdale Boulevard, Regina Saskatchewan

| Receiver Location | Daytime Sound Level (dBA L _{eq}) | Nighttime Sound Level (dBA L _{eq}) | Daytime Sound Level (dBA L _{eq}) | Nighttime Sound Level (dBA L _{eq}) |
|----------------------------------------------------------------|-----------------------------------------------------|-------------------------------------------------------|-----------------------------------------------------|-------------------------------------------------------|
| | Without Barrier | | w/ North Barrier | |
| 1111 Lakewood Court North – Eye Health Clinic Property Line | 61.3 | - | 61.3 | - |
| 1111 Lakewood Court North – Dental Health Clinic Property Line | 66.9 | - | 66.9 | - |
| Permissible Sound Level (Mixed Use Zone) | 70.0 | - | 70.0 | - |
| North Property Line - 1130 Lakewood Terrace | 62.6 | 62.6 | 49.7 | 49.7 |
| 1130 Lakewood Terrace – 1 st Floor | 52.9 | 52.9 | 52.8 | 52.8 |
| 1130 Lakewood Terrace – 2 nd Floor | 52.6 | 52.6 | 52.6 | 52.6 |
| 1130 Lakewood Terrace – 3 rd Floor | 52.2 | 52.2 | 52.2 | 52.2 |
| 105 Lakewood Court – 1 st Floor | 50.4 | 50.4 | 46.5 | 46.5 |
| 105 Lakewood Court – 2 nd Floor | 50.4 | 50.4 | 48.0 | 48.0 |
| Permissible Sound Level (Residential Zone) | 60.0 | 55.0 | 60.0 | 55.0 |

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Executive Summary (continued)

The results of the environmental noise propagation model indicate the predicted sound levels from the proposed Shell Canada Car Wash operations are predicted to exceed the daytime and nighttime PSLs of Bylaw 6980 at the property line with 1130 Lakewood Terrace. CTM Design has indicated the landscape design of the for site may incorporate a 1.8 metre height fence (acoustic barrier) along the north property line. FDI Acoustics notes with the sound barrier in place the results of modelling indicate the Shell Canada Car Wash operations are predicted to comply the daytime and nighttime PSLs of Bylaw 6980 at the receiver locations assessed.

Draft

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Scope of Work

CTM Design Services Ltd. (CTM Design) wanted to determine the environmental noise impact of the proposed Shell Canada Car Wash at 5826 Rochdale Blvd in the City of Regina. CTM Design retained the services of FDI Acoustics to complete a Noise Impact Assessment for the proposed development to determine compliance with the Permissible Sound Levels (PSLs) of the City of Regina Bylaw 6980¹, “The Noise Abatement Bylaw” Section 7.1, Land Use Noises. The assessment also provides the foundation to develop noise control measures for the equipment assessed should the predicted sound levels exceed the PSLs of the City of Regina Bylaw 6980 (Bylaw).

Method

Octave band sound pressure levels related to the significant noise sources associated with the proposed car wash equipment operations were assigned from a combination of manufacturer’s data and FDI Acoustics’ sound pressure level measurement library or calculated following schemes as presented in texts^{2,3}. Following accepted acoustic evaluation practices, the sound pressure level data was used to calculate octave band sound power level values for the significant noise sources associated with the proposed development equipment. Plans for the development were provided by CTM Design. The development area information supplied by CTM Design was supplemented with information from government and commercial sources. This information formed the input for an environmental noise propagation computer model that calculates the sound level contribution of the car wash operations at three property line locations and at multiple elevations of the façades of two residential buildings near the site.

The results of the model are presented as the individual component sound levels of the proposed car wash equipment, the overall facility sound level contribution, the predicted sound levels for the receiver locations under assessment, and as a study area contour map. The results are reviewed with the predicted sound levels compared with the applicable PSLs to determine compliance. Should the results exceed either the daytime or nighttime PSLs; noise control measures may be developed and evaluated within the noise propagation model. The predicted sound level contribution for each noise control measure after implementation may be reported for the point of interest. Acoustical specifications related to the recommendations are included in the report.

Environmental Noise Regulation Criteria

Bylaw 6980, a City of Regina bylaw to prohibit, eliminate and abate, loud, unusual, and unnecessary noise, or noises which annoy, disturb, injure, or endanger the comfort, repose, health, peace or safety of others within the city of Regina.

Bylaw 6980 Part III, Specific Prohibitions, Section 7.1 Land Use Noises:

- (a) Subject to subsection (b), no person shall cause or permit to be made or continued any noise that exceeds the following standards for a cumulative period greater than 15 minutes in any hour as measured in A-weighted decibels (dBA) using a Type 2 sound level meter at 1.2 metres above the ground level surface at the lot line of the site where the noise originates:

Table 1
City of Regina Bylaw 6980 Land Use Noises
Shell Canada Car Wash 5826 Rochdale Boulevard, Regina Saskatchewan

| Zone | Daytime 7:00 am – 10:00 pm Sound Pressure Level (dBA) | Nighttime 10:00 pm – 7:00 am Sound Pressure Level (dBA) |
|------------------|----------------------------------------------------------------|------------------------------------------------------------------|
| Residential Zone | 60.0 | 55.0 |
| Mixed Use Zone | 70.0 | 60.0 |

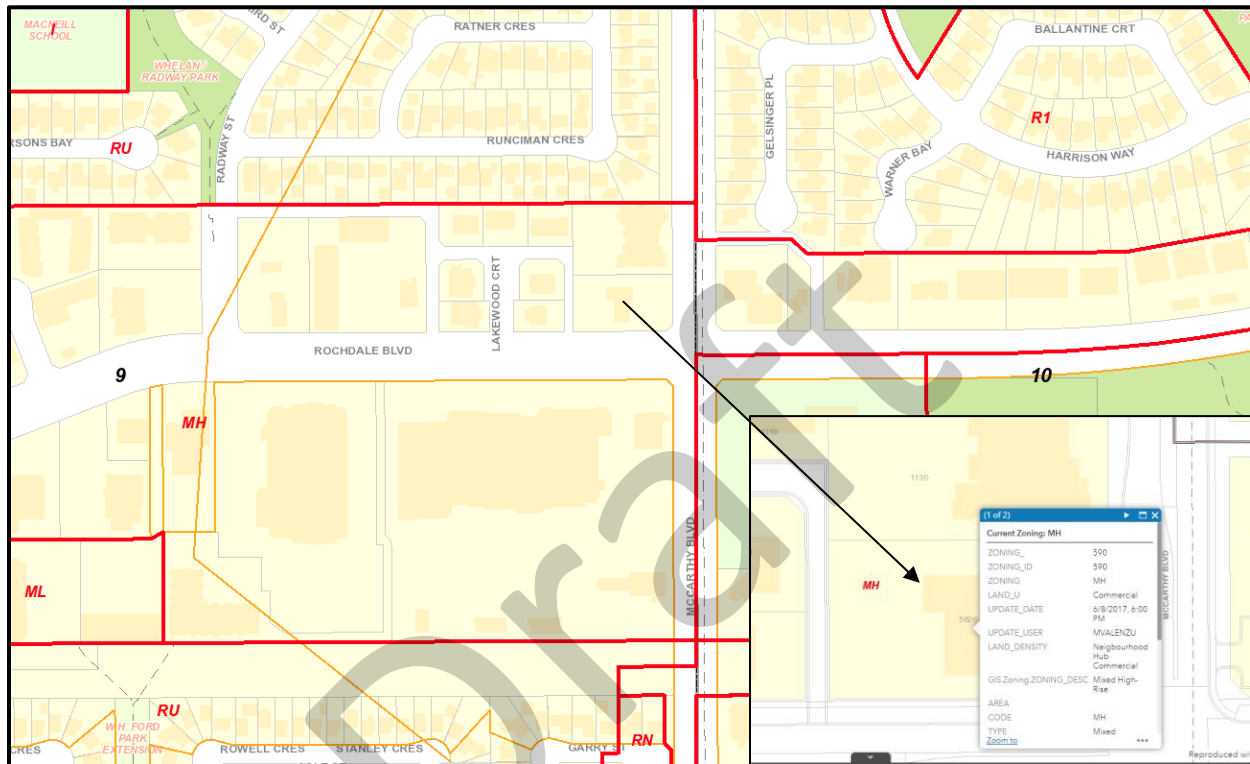
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- (b) The following noises shall be exempt from this section:
- (i) Noises from construction or maintenance activities between 7:00 am and 10:00 pm;
 - (ii) Noises from safety signals, emergency vehicles and equipment, warning devices and emergency pressure release valves;
 - (iii) Noises from motor vehicles, airplanes, and trains; and
 - (iv) Ordinary domestic noises at a residential property such as voices or music and noise generated by tools or animals.”

The Regina Zoning Bylaw 2019-19, Chapter 4, Mixed-Use Zones defines the regulations for land use and development within this zone. In City of Regina Zoning Map this area is considered as “Mixed High-Rise” zone in Commercial Zones categories with zone code “MH”. Figure 2 is a map of the City of Regina Zoning Bylaw 2019 for the study area indicating the location of the proposed site and the applicable zoning for the area. FDI Acoustics notes the residential buildings north of proposed car wash site are within the commercial zone ID 590 with a code MH.

Environmental Noise Regulation Criteria (continued)

Figure 2
City of Regina Zoning Bylaw 2019 Map
Shell Canada Car Wash 5826 Rochdale Boulevard, Regina Saskatchewan



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Table 2 presents the Permissible Sound Levels applicable to the development as derived from City of Regina Bylaw 6980 Part III, Section 7.1 (a). CTM Design indicated the City of Regina requested that the residential buildings north of the site be considered as a Residential Zone. The developments west of the site at 111 Lakewood Court North are in a Commercial Zone.

Table 2
Permissible Sound Levels
Shell Canada Car Wash 5826 Rochdale Boulevard, Regina Saskatchewan

| Receiver Location | Daytime Permissible Sound Level (dBA L _{eq}) | Nighttime Permissible Sound Level (dBA L _{eq}) |
|-------------------------------------------------------------------------------------------------|--------------------------------------------------------------|----------------------------------------------------------------|
| 1130 Lakewood Terrace (Property Line and Building Façade), 105 Lakewood Court (Building Façade) | 60.0 | 55.0 |
| 111 Lakewood Court North (Property Line) | 70.0 | - |

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Description of Equipment

The proposed Shell Canada Car Wash consists of a drive through automatic car wash. The significant noise sources associated with the car wash development include dryers, high pressure sprayers, and an idling vehicle. CTM Design has indicated the dryer is an Aerodry Model A45 unit driven by 45 horsepower electric motor. The manufacturer indicates the dryer emits a sound pressure level of 82 dBA at 1.0 metres from the exterior door opening of the car wash. FDI Acoustics has assumed the entrance and exit doors of the car wash are open for 10% and 25% of the operating time, respectively based on information provided by CTM Design. The drying cycle is 60 seconds in duration with the exit door open during drying cycle. The assessment also considers one vehicle idling waiting to enter to the automatic car wash. Figure 3 contains architectural renderings of the car wash building as furnished by CTM Design.

Figure 3
Car Wash Perspective View
Shell Canada Car Wash 5826 Rochdale Boulevard, Regina Saskatchewan



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Source Sound Power Levels

FDI Acoustics completed calculations to determine octave band sound power level values for the significant noise sources associated with the equipment. Completion of the calculations followed accepted techniques and practices for the determination of sound power levels from sound pressure levels for large machinery. The sound power values presented in Table 3 are order-ranked from highest to lowest by the overall sum (dBA) per source group.

Table 3
Source Sound Power Levels
Shell Canada Car Wash 5826 Rochdale Boulevard, Regina Saskatchewan

| Sound Source Description | Sound Power Level (dBA re: 10 ⁻¹² W) | | | | | | | | | |
|----------------------------------------|-------------------------------------------------|------|------|------|------|------|------|------|------|-----------|
| | Octave Band Frequency (Hertz) | | | | | | | | | Sum (dBA) |
| | 31.5 | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 | |
| Automatic Car Wash | | | | | | | | | | |
| Car Wash Exit Door | 46.6 | 58.3 | 75.7 | 68.2 | 73.7 | 73.2 | 69.4 | 9.8 | 88.6 | 89.1 |
| Car Wash Entrance Door | 41.2 | 53.9 | 66.9 | 69.1 | 72.0 | 74.8 | 77.0 | 9.8 | 83.6 | 85.3 |
| Car Wash Building Roof | 54.5 | 65.9 | 66.6 | 63.7 | 74.7 | 68.3 | 64.4 | 71.9 | 67.0 | 78.5 |
| Car Wash Building East Wall | 44.2 | 55.5 | 56.3 | 61.4 | 71.3 | 56.0 | 58.1 | 65.6 | 60.6 | 73.3 |
| Car Wash Building West Wall | 35.2 | 46.5 | 47.1 | 53.2 | 62.8 | 47.6 | 45.1 | 49.1 | 40.7 | 63.8 |
| Car Wash Building South and North Wall | 28.0 | 39.4 | 44.2 | 50.3 | 60.2 | 45.9 | 44.0 | 48.4 | 40.5 | 61.2 |
| Vehicle - Idling | | | | | | | | | | |
| Vehicle Idling | 55.0 | 62.0 | 69.0 | 71.0 | 74.0 | 77.0 | 77.0 | 71.0 | 64.0 | 82.1 |

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Noise Propagation Model

The Predictor™ 7810 v12.01, an environmental noise assessment software package from Softnoise GmbH was employed to determine the environmental noise impact of the equipment. The noise prediction program completes complex sound propagation calculations that include the effects of the environment, terrain, and topography. The algorithms used by the model are consistent with international standards, including International Organization for Standardization (ISO) 9613-2:1996 *Acoustics – Attenuation of sound during propagation outdoors – Part 1: Calculation of the absorption of sound by the atmosphere*⁴, *Part 2: General method of calculation*^{5,6}, *Part 3: Recommendations for quality assured implementation of ISO 9613-2 in software according to ISO 17534-1*⁷.

The calculated individual source sound power level complete with information regarding the facility location, equipment layout and the reception location were entered in the model. The propagation algorithms of ISO 9613 consider a downwind condition from each noise source to each receiver. The ISO 9613 method claims to couple the downwind condition with a mild temperature inversion. The ground absorption coefficient ranges between 0.0 – 1.0 where a value of 0.0 (the lowest) depicts reflective (hard) ground with a value of 1.0 (the highest) depicting porous (absorptive) ground. The model was structured to reflect favourable conditions for the propagation of sound from the source to the receiver locations.

Table 4 lists the modeled environmental parameters of the noise propagation model.

Table 4
Noise Model Environmental Parameters
Shell Canada Car Wash 5826 Rochdale Boulevard, Regina Saskatchewan

| Environmental Parameter | Model Input Value |
|-----------------------------------------------------|------------------------------------------------------------------------------------------|
| Ground Attenuation (between development & receiver) | 0 (suitable value for concrete and road) |
| Ground Attenuation (Lawn) | 1 (suitable value for vegetation and porous ground) |
| Receiver Height Above Ground | 1.2m |
| Relative Humidity | 70% |
| Temperature | +15°C |
| Wind Conditions | 1 to 5 m/s (default ISO 9613 – moderate inversion condition, downwind in all directions) |
| Topography | CDEM (Canadian Digital Elevation Model) – 14m*23m height points |

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Results

Table 5 presents the overall predicted sound pressure level and the source sound pressure level contributions as dBA values at the north property line (1130 Lakewood Terrace the most impacted residence). The modelling does not include a fence (acoustic barrier) along the property line. The source sound level contribution values are order ranked by the “A” weighted contribution level.

Table 5
Order Ranked Sound Pressure Levels
1130 Lakewood Terrace – North Property Line
Shell Canada Car Wash 5826 Rochdale Boulevard, Regina Saskatchewan

| Source Description | Source Sound Level Contribution (dBA) |
|-------------------------------------------------|---------------------------------------|
| Car Wash Entrance Door | 61.5 |
| Vehicle Idling #1 | 55.7 |
| Car Wash Roof | 41.0 |
| Car Wash Exit Door | 38.2 |
| Car Wash Building North Wall | 34.0 |
| Car Wash Building East Wall (Triple Pane Glass) | 32.5 |
| Car Wash Building West Wall | 26.1 |
| Car Wash Building South Wall | 6.2 |
| Predicted Development Contribution Sum | 62.6 |

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Note: Sound Pressure level values below the reference level of 20 microPascals are indicated by a negative sign preceding the value

Results (continued)

Table 6 presents the overall predicted sound pressure level and the source sound pressure level contributions as dBA values at the north property line (1130 Lakewood Terrace the most impacted residence). The modelling reflects the installation of a fence (acoustic barrier) along the north property line. The barrier construction will result no openings or spaces in barrier panels and no openings or spaces between the barrier and the ground. The barrier design will have a minimum Sound Transmission Class (STC) 32 with the surface of the barrier facing the Shell Canada property being acoustically absorptive having a noise reflection coefficient of less than 20%. The barrier height is 1.8 metres. The source sound level contribution values in Table 6 are order ranked by the “A” weighted contribution level.

Table 6
Order Ranked Sound Pressure Levels
1130 Lakewood Terrace – North Property Line (with Barrier)
Shell Canada Car Wash 5826 Rochdale Boulevard, Regina Saskatchewan

| Source Description | Source Sound Level Contribution (dBA) |
|-------------------------------------------------|---------------------------------------|
| Car Wash Entrance Door | 48.4 |
| Vehicle Idling #1 | 42.5 |
| Car Wash Exit Door | 35.5 |
| Car Wash Roof | 26.4 |
| Car Wash Building East Wall (Triple Pane Glass) | 23.1 |
| Car Wash Building North Wall | 22.8 |
| Car Wash Building West Wall | 17.6 |
| Car Wash Building South Wall | 3.4 |
| Predicted Development Contribution Sum | 49.7 |

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Note: Sound Pressure level values below the reference level of 20 microPascals are indicated by a negative sign preceding the value

Order ranked sound pressure levels (Table 5 and Table 6) at a distant point of reception may differ from the equipment order ranked sound power levels (Table 3). This can occur due to the frequency composition of each noise source, the physical height of the noise source above the ground, acoustical shielding at the site or the topography between the site and the receiver.

Results (continued)

FDI Acoustics completed additional modelling to examine the contribution of traffic noise at the reception locations. Table 7 presents the overall predicted sound level contribution value from vehicle traffic for the reception locations. The modelling was completed using 2018-2019 traffic count data obtained from the City of Regina. The traffic count data represents average daily traffic volumes with the nighttime traffic assumed as 10% of the average daily traffic volume.

Table 7
Predicted Sound Levels – Road Traffic
Shell Canada Car Wash 5826 Rochdale Boulevard, Regina Saskatchewan

| Receiver Location & Sound Level Description | Daytime Sound Level (dBA L _{eq}) | Nighttime Sound Level (dBA L _{eq}) |
|----------------------------------------------------------------|-----------------------------------------------------|-------------------------------------------------------|
| | Without North Barrier | |
| 1111 Lakewood Court North – Eye Health Clinic Property Line | 58.0 | 50.8 |
| 1111 Lakewood Court North – Dental Health Clinic Property Line | 62.4 | 55.2 |
| Permissible Sound Level (Mixed Use Zone) | 70.0 | 60.0 |
| North Property Line - 1130 Lakewood Terrace | 57.5 | 50.2 |
| 1130 Lakewood Terrace – 1 st Floor | 59.0 | 51.8 |
| 1130 Lakewood Terrace – 2nd Floor | 59.4 | 52.2 |
| 1130 Lakewood Terrace – 3 rd Floor | 59.5 | 52.2 |
| 105 Lakewood Court – 1 st Floor | 53.8 | 46.6 |
| 105 Lakewood Court – 2 nd Floor | 53.5 | 46.2 |
| Permissible Sound Level (Residential Zone) | 60.0 | 55.0 |

The traffic noise values provide the reader with an indication of the existing ambient noise environment. The daytime and nighttime PSLs of Bylaw 6980 are also presented for the receiver locations assessed.

Appendix B presents a noise contour map overlaid on the site plan and study area. The car wash noise contour map reflects the daytime or nighttime operations of the car wash when the acoustic barrier is in place along the north of property line of the Shell Canada site. The sound levels were calculated at 1.2 metre receiver height from the ground elevation. Appendix B also presents the daytime road traffic sound pressure level contour map. The receiver locations are indicated on the noise contour maps.

Discussion of Results

Table 8 presents the overall predicted sound level contribution values from the proposed carwash operations and the PSLs for the locations assessed. The development sound level contributions are used for determining compliance with the applicable PSLs.

Table 8
Predicted Sound Levels – Car Wash
Shell Canada Car Wash 5826 Rochdale Boulevard, Regina Saskatchewan

| Receiver Location | Daytime Sound Level (dBA L _{eq}) | Nighttime Sound Level (dBA L _{eq}) | Daytime Sound Level (dBA L _{eq}) | Nighttime Sound Level (dBA L _{eq}) |
|----------------------------------------------------------------|-----------------------------------------------------|-------------------------------------------------------|-----------------------------------------------------|-------------------------------------------------------|
| | Without Barrier | | w/ North Barrier | |
| 1111 Lakewood Court North – Eye Health Clinic Property Line | 61.3 | - | 61.3 | - |
| 1111 Lakewood Court North – Dental Health Clinic Property Line | 66.9 | - | 66.9 | - |
| Permissible Sound Level (Mixed Use Zone) | 70.0 | - | 70.0 | - |
| North Property Line - 1130 Lakewood Terrace | 62.6 | 62.6 | 49.7 | 49.7 |
| 1130 Lakewood Terrace – 1st Floor | 52.9 | 52.9 | 52.8 | 52.8 |
| 1130 Lakewood Terrace – 2nd Floor | 52.6 | 52.6 | 52.6 | 52.6 |
| 1130 Lakewood Terrace – 3rd Floor | 52.2 | 52.2 | 52.2 | 52.2 |
| 105 Lakewood Court – 1st Floor | 50.4 | 50.4 | 46.5 | 46.5 |
| 105 Lakewood Court – 2nd Floor | 50.4 | 50.4 | 48.0 | 48.0 |
| Permissible Sound Level (Residential Zone) | 60.0 | 55.0 | 60.0 | 55.0 |

FDI Acoustics Project 316501

The results of the environmental noise propagation model indicate the predicted sound levels from the proposed Shell Canada Car Wash operations are predicted to exceed the daytime and nighttime PSLs of Bylaw 6980 at the property line with 1130 Lakewood Terrace. The results with the sound barrier in place indicate compliance with the daytime and nighttime PSLs of Bylaw 6980 at the receiver locations assessed.

Conclusion

The results of the environmental noise propagation model indicate the predicted sound levels from the proposed Shell Canada Car Wash operations are predicted to exceed the daytime and nighttime PSLs of Bylaw 6980 at the property line with 1130 Lakewood Terrace. CTM Design has indicated the landscape design of the for site may incorporate a 1.8 metre height fence (acoustic barrier) along the north property line. FDI Acoustics notes with the sound barrier in place the results of modelling indicate the Shell Canada Car Wash operations are predicted to comply the daytime and nighttime PSLs of Bylaw 6980 at the receiver locations assessed.

Glossary

Ambient Sound Level

All noises that exist in an area and are not related to the applicant development. Ambient noise may include sounds from other industrial noise sources, transportation sources, animals, and sounds related to the environment.

A-weighted sound level

The sound level as measured on a sound level meter using a setting that emphasizes the middle frequency components similar to the frequency response of the human ear.

C-weighted sound level

The C-weighting approximates the sensitivity of human hearing at industrial noise levels (above about 85 dBA). The C-weightings sound level (i.e., measured with the C-weightings) is more sensitive to sounds at low frequencies than the A-weighted sound level and is sometimes used to assess the low frequency content of complex sound environments.

Calibration

A procedure used for the adjustment of a sound level meter using a reference source of a known sound pressure level and frequency. Field calibration must take place before and after a series of sound level measurements.

Cumulative Sound Level

All AER and AUC regulated facility sound as predicted in the environmental noise model plus the ambient sound level. The cumulative sound level is used for determination of compliance with the allowable PSLs in the preparation of a Noise Impact Assessment.

dB (decibel) or dBZ

The decibel (dB) is a logarithmic unit of measurement that expresses the magnitude of a physical quantity (usually power or intensity) relative to a specified or implied reference level. Since it expresses a ratio of two quantities with the same unit, it is a dimensionless unit. A decibel is one tenth of a bel (B). A reference pressure of 20 microPascals (μPa) is used because sounds in air at a frequency of 1000 Hz and with a pressure of 20 microPascals (μPa) can just barely be heard by most people.

dBA

The decibel (dB) sound pressure level filtered through the A filtering network to approximate human hearing response.

See dB and A-weighted sound level.

dBZ

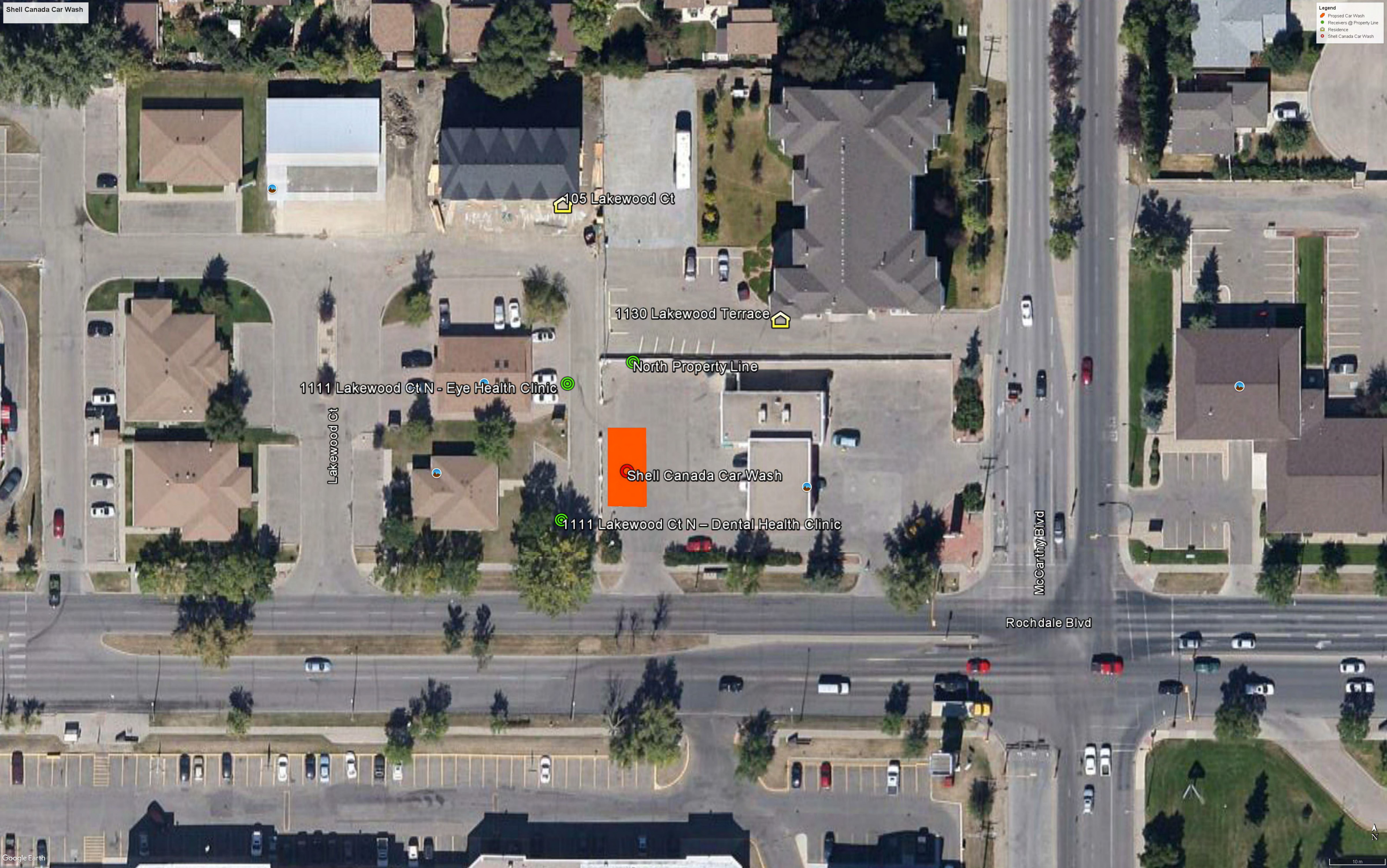
The decibel (dB) sound pressure level is adjusted to include the low frequency end of the spectrum. Although less consistent with human hearing than dBA, dBZ can be used to discern the impact of low frequency sound emissions from industrial operations.

| | |
|------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Energy equivalent sound level (L_{eq}) | The L_{eq} is a single-number average, A-weighted sound level that represents cumulative acoustical energy as measured over a specified time interval. This interval should be specified in brackets following the L_{eq} (e.g.: L_{eq} (9) is a nine-hour L_{eq}). |
| ISO 9613-2:1996 | Acoustics- Attenuation of sound during propagation outdoors- Part 2: General method of calculation (International Organization for Standardization) |
| L_{eq} | See Energy equivalent sound level. |
| Noise | Generally understood as unwanted sound. |
| Noise Impact Assessment (NIA) | Identifies the expected sound level emanating from a development as measured at the nearest or most impacted permanently or seasonally occupied dwelling or other reception point as defined by the applicable regulation or bylaw. An NIA also identifies what the permissible sound level is and how it was calculated. |
| Octave | A series of electronic filters separate sound into discrete frequency bands, making it possible to know how sound energy is distributed as a function of frequency. The octave band has a centre frequency that is double the centre frequency of the octave band preceding it. |
| 1/3 Octave | The 1/3 octave band analysis provides a finer breakdown of sound distribution as a function of frequency. |
| Permissible Sound Level (PSL) | The maximum sound level that an applicant development should not exceed at a point of reception. |
| Representative conditions | Those conditions typical for an area and/or the nature of a complaint. Sound levels must be taken only when representative conditions exist; this may necessitate a survey of extensive duration (two or more consecutive nights). |
| Sound monitoring survey | The measurement and recording of sound levels and pertinent related information over a given time period. |
| Sound level meter | An instrument designed and calibrated to respond to sound and to give objective, reproducible measurements of sound pressure levels. It normally has several features that enable its frequency response and averaging times to be changed. |

| | |
|---------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sound pressure level | A measurement of the local pressure deviation from the ambient (average, or equilibrium) pressure caused by a sound wave. |
| Sound power level | Expressed in decibels (dB), it is equal to 10 times the logarithm to the base 10 of the ratio of the sound power of the source to a reference sound power level, typically 10^{-12} watts. |
| Spectrum | A wide range or sequence of frequencies. |
| Tonal components (low frequency noise) | <p>A test for the presence of tonal components consists of two parts. The first must demonstrate that the sound pressure level of and one of the linear, (Z-weighted), 1/3 octave bands between 20 and 250 Hz is 10 dBZ or more than the sound pressure level of at least one of the adjacent bands within two 1/3 octave bands widths. In addition, there must be a minimum of a 5 dBZ drop from the band containing the tone within two bandwidths on the opposite side.</p> <p>The second part is that the tonal component must be a pronounced peak clearly obvious within the spectrum.</p> |
| Windscreen | A specialized piece of porous sponge that fits over the microphone to reduce the noise generated by the wind blowing across the microphone. |

Appendix A – Study Area Map

Draft

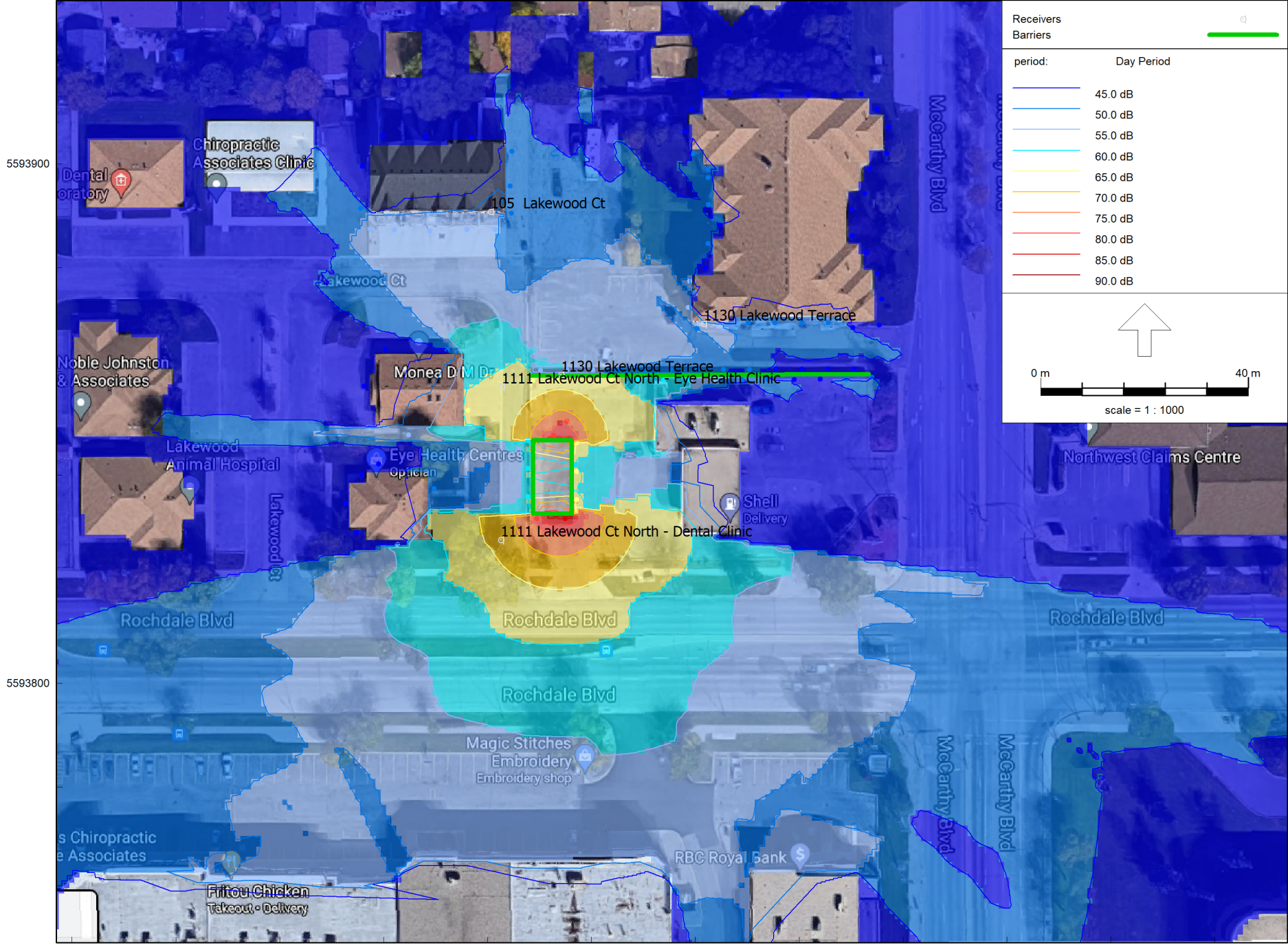


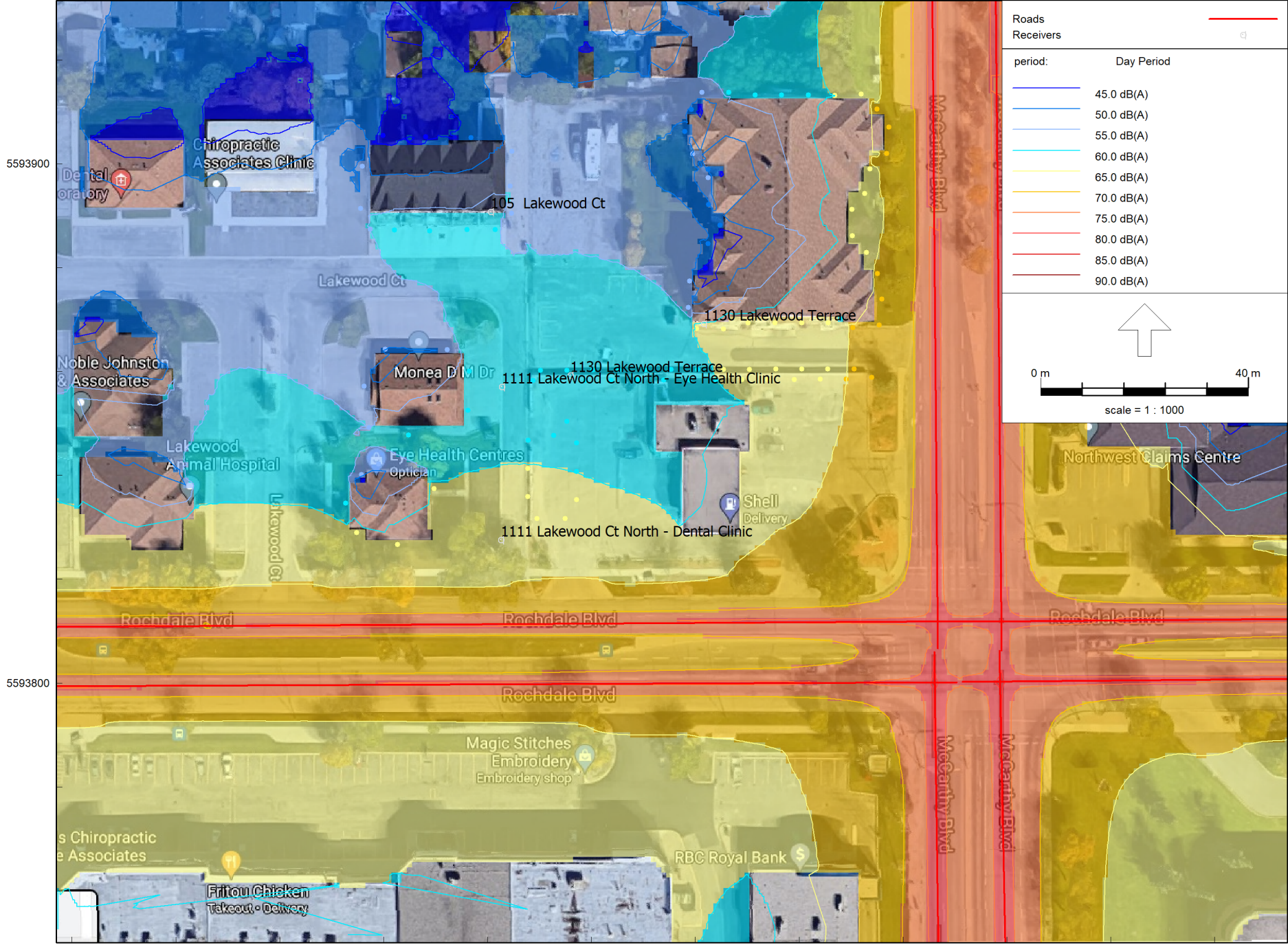
Appendix B – Noise Contour Maps

Sound pressure level contribution contour map of the CTM Design Shell Canada Car Wash 5826 Rochdale Blvd Regina with proposed acoustic barrier resulted from car wash operation at 1.2 metre height during daytime and nighttime period.

Existing road traffic sound pressure level contribution contour map without proposed acoustic barrier at 1.2 metre height during daytime period.

Draft





Appendix C – References

1. City of Regina, Bylaw 6980, The Noise Abatement Bylaw, September 30, 2019.
2. Crocker, M.J., [Handbook of Noise and Vibration Control](#), John Wiley & Sons. New York, NY, 2007.
3. Bies, D.A. and Hansen, C.H., [Engineering Noise Control Theory and Practice](#), Third Edition, Spon Press. New York, NY, 2003.
4. International Organization for Standardization (ISO 9613-1), [Attenuation of sound during propagation outdoors - Part 1: Calculation of the absorption of sound by the atmosphere](#), Approved 1993.
5. International Organization for Standardization (ISO 9613-2), [Attenuation of sound during propagation outdoors - Part 2: General method of calculation](#), Approved 1996.
6. International Organization for Standardization (ISO 1996-2:2007), [Description, measurement, and assessment of environmental noise - Part 2: Determination of environmental noise levels](#), Approved 2007 (Revises ISO 1996-2:1987 Acoustics – Description and measurement of environmental noise – Part 2: Acquisition of data pertinent to land use).
7. International Organization for Standardization (ISO/TR 17534-3), [Acoustics – Software for the calculation of sound outdoors – Part 3: Recommendations for quality assured implementation of ISO 9613-2 in software according to ISO 17534-1](#), Approved 2015.



MR4 Naming - Horizon Station Park

| | |
|---------------------|---------------------------------------|
| Date | August 4, 2021 |
| To | Regina Planning Commission |
| From | City Planning & Community Development |
| Service Area | Parks, Recreation & Cultural Services |
| Item No. | RPC21-48 |

RECOMMENDATION

The Regina Planning Commission recommends that City Council:

1. Approve The Towns MR4 be named Horizon Station Park.
2. Approve this recommendation at its meeting on August 11, 2021.

ISSUE

Terra Developments Inc. (Terra) has submitted a request to the City of Regina (City) for the name Horizon Station to be assigned to the Towns MR4 (see Appendix A).

IMPACTS

Policy Impacts

Civic Naming Committee Guideline

The Civic Naming Committee Guideline (Guideline) requires the Administration to consider requests from developers, Community Associations and Zone Boards for names to be assigned to parks. Names are first submitted to an internal Civic Naming Committee, which considers the names within the context of the Civic Naming Committee Guideline, adopted by Council in November 2018 (CR18-116). Upon approval by the Civic Naming Committee, names can be assigned to streets or public park space with Council approval.

The Guideline states that ‘Developers collaborate with the Civic Naming Committee to work toward achieving a target of 25 per cent of street and 50 per cent of park names within a concept plan bearing a name with an Indigenous connection’. Horizon Station is the second of four parks planned for the Towns. The remaining two parks will need to have names with an Indigenous connection in order to meet the 50 per cent target.

Cultural Plan

The Civic Naming Guideline contributes to the harmony of the city by providing an opportunity for Community Associations as well as other public groups to participate in public process, allowing them to be informed and engaged in what is happening within their community. Park naming also supports the objectives of the *Regina Cultural Plan*, to “*ensure that the naming of streets, parks and other civic assets is done to celebrate Regina’s unique history and cultural diversity and that it tells the whole story of Regina.*”

Financial Impacts

There are no financial implications for the City related to the naming of the park. All park signage will be installed within the park at the expense of the developer.

OTHER OPTIONS

If the Regina Planning Commission chooses, they can deny the name Horizon Station and refer the report back to Administration to work with the Developer, the Community Association, and the Zone Board to select another name to bring forward for consideration.

COMMUNICATIONS

The name Horizon Station was submitted to the Civic Naming Committee and approved for use. Once approved for use by the Civic Naming Committee, in accordance with park naming procedures, the name was shared with the Arcola East Community Association and East Zone Board, as representatives of their residents and recreation zone. Both were supportive of the name.

If the name is approved by City Council, The Towns MR4 parcel will contain a park sign with a decal that explains the significance of the name for those that visit the space.

DISCUSSION

When Terra began the design of the park space in the Towns, they reached out to the grade six class at St. Gabriel School to provide feedback. As part of the process, they took the class to parks and playgrounds throughout the city to discuss what they liked about the spaces and what they thought could be improved upon. Based on that feedback, as well as needs identified through the *Recreation Master Plan*, the design of the park was completed with a train theme. When

construction is finished the park will contain a regulation size athletic field, a boarded rink, small non-boarded skating loop, warm-up shelter that resembles a train station, picnic area, neighbourhood dog park and a partially accessible playground with a train theme. Based on the theme for the design of the park the grade six class at St. Gabriel School, also selected the name Horizon Station to submit to the Civic Naming Committee for approval.

This name also fits with the overall concept of The Towns Subdivision, which pays tribute to the many communities that were developed along the province's early rail lines to support the function of the steam engines. This type of theme naming is currently allowed under the current Civic Naming Committee Guideline. The names used for the theme of this neighbourhood were also approved by the Civic Naming Committee. Additional rationale for the name is included in Terra's submission to the Civic Naming Committee attached as Appendix B.

Given that the community organizations representing residents of the Arcola East Neighbourhood are supportive of the proposed name and the name aligns with the Civic Naming Guideline, Administration recommends approval be granted to assign the name Horizon Station to the Towns MR4.

DECISION HISTORY

In accordance with the Civic Naming Guideline, City Council approval is required to name park spaces.

Respectfully Submitted,

Respectfully Submitted,



Laurie Shalley, Director, Parks, Recreation & Cultural Services

7/21/2021



Diana Hawryluk, Executive Director, City Planning & Community Dev.

7/28/2021

Prepared by: Janine Daradich, Manager, Planning and Partnerships

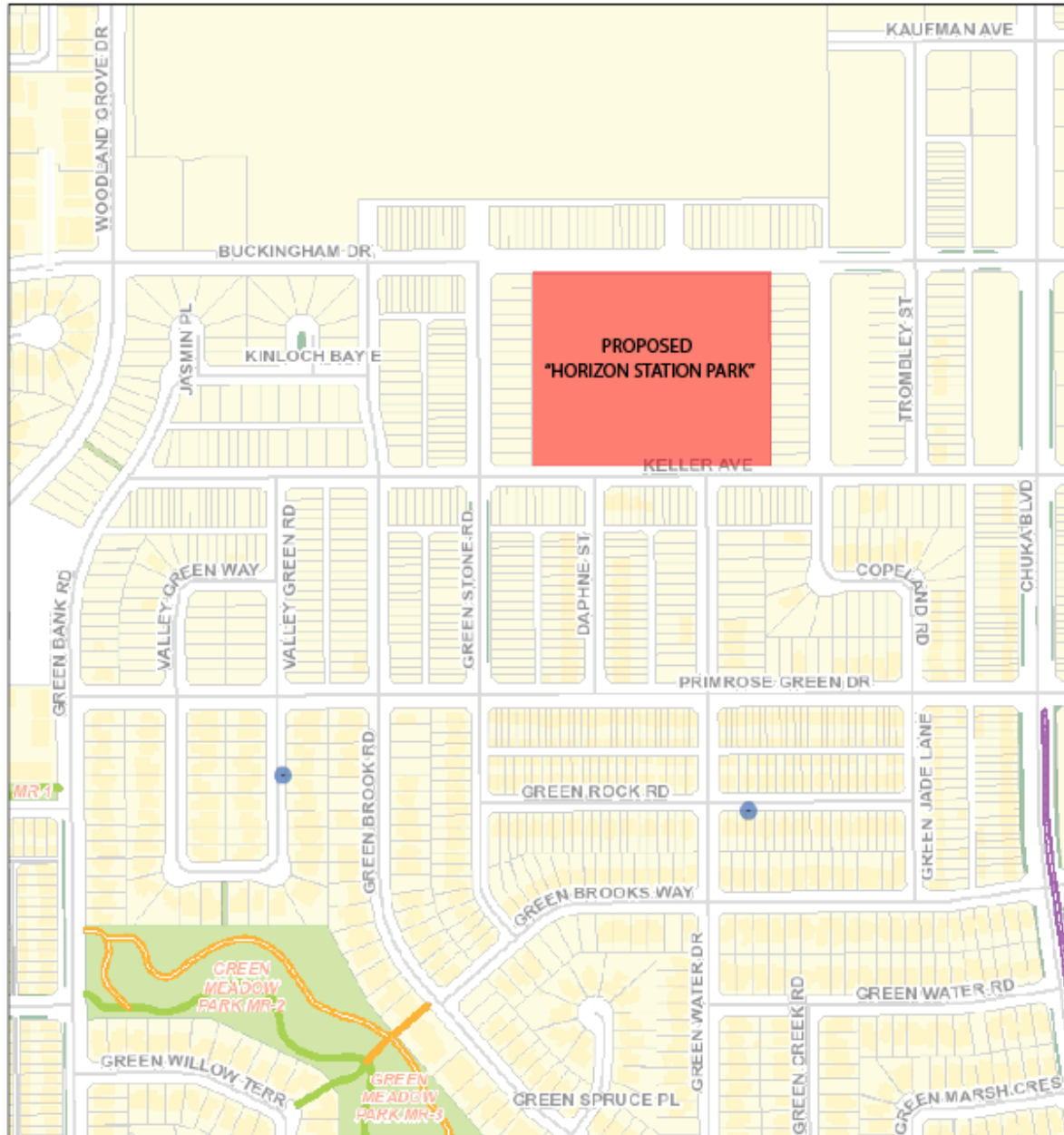
ATTACHMENTS

Appendix A - Horizon Station Park Map

Appendix B - Park Naming Letters

Appendix A

HORIZON STATION PARK





#14 – 3710 Eastgate Drive
Regina, Saskatchewan S4Z 1A5
Telephone: 306-924-0445 – Regina
Fax: 306-761-0340
Email: cathy@terrainc.ca

February 24, 2021

City of Regina
Parks, Recreation & Cultural
Services Department, 6th Floor
PO Box 1790
2476 Victoria Ave
Regina, SK

Attention: Community Consultant, Recreation Facility Department

Dear Sirs,

For your consideration, Terra Developments Inc. ('Terra') would like to submit the park name: **Horizon Station Park** for MR4 located in The Towns Development. This name was developed by a Grade Six class at St Gabriel school, which is a neighbour to The Towns community. Terra is proud to be able to put this name forward on behalf of the class, as well to present their rationale of how they thought up of this park name. Listed below are the elements along with a brief description the class worked with to assemble the park name.

The Towns Concept:

The overall concept of The Towns is based on paying homage to ghost towns and dying communities within the province. Saskatchewan has a very rich history of small towns that many of us either have roots from, or, have no idea even existed. The Towns was created to bring back the essence of these small towns and villages through the use of street names, amenities and landscaping elements. The vibe of the neighbourhood is meant to evoke the basics of small-town living through a sense of community, all while living within the City.

MR4 Park Theme:

Back in the day Saskatchewan had a very robust network of rail lines. The vast lands caused many issues for transporting goods across the province, so, the rail lines were built in the necessity for commerce and trade. As much as the rail lines created a sense of economy and connection, it also created the development of new communities. Many small towns and settlements were built as little hubs to support the function of the steam engines. Because the train engines ran on steam, they needed

consistent stops every 8-10 miles to fill up with water. Water tanks were positioned along the rail and the concept of small communities began to grow around them. These water stops were the main economic driver for most of these towns, but, once diesel and gas became more popular, the need for the water stops ended. Eventually, these small communities were abandoned as people had to move to more central areas to find work. The elements and features of MR4 have been designed and selected to replicate a train station.

Horizon:

Horizon, SK was a village established in 1917 after the Canadian Pacific Railway ran through the land. Wikipedia states that the story behind how the village was named comes from a dispute that happened between two surveyors; one was working for the Grand Trunk Pacific, the other for the Canadian Pacific Railway. The location of Horizon is the exact point of land where the two rail lines came together, and after a comment by one of the surveyors "It looks as if we have come to the horizon", the name was created.

This story of Horizon not only aligns with the definition of the word ... "where the earth meets the sky", but, it represents the imagery of Saskatchewan's farm lands intersecting with the living skies. Metaphorically, the story represents two parties coming together, which also aligns with The Towns purpose of community and bringing people together.

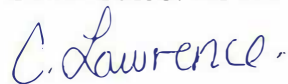
Station:

The word station can be defined by a stopping place along a route, which is the intent of the MR space. The park is meant to be the focus for the community and an area of central gathering and congregation. The reference to a station also aligns well with the train theme, and the intent to mimic the look of a train station.

Please accept this as letter as the formal submission to name MR4 of The Towns to be Horizon Station Park. Also included in this letter is the work the students presented to Terra, they came up with five (5) park names to select from. These attachments are for information only.

Kind Regards,

TERRA DEVELOPMENTS INC



Cathy Lawrence

Attachments: Student Work Sheets

PERSUASION MAP

by: **Jake M**

Appendix B-3

Park Name

Introduction

There is a new park being built in The Towns area and our class has the honour of naming it. I think we should name the park 'The Horizons Stationary Park' or for short, 'HSP'.

Main Reason 1

A horizon is the line at which the earth's surface and the sky appear to meet.

Main Reason 2

A horizon could also mean to expand your experience with things, like food or music.

Main Reason 3

Horizon was a small town in Saskatchewan that became a ghost town on Dec 31, 1973.

Facts or Examples

1 A synonym for horizon is border, even though this park is gonna be crossing the borders of 'normal'

2 -parks.

3

Facts or Examples

1 The park expands its horizon beyond just a park, as it has 2 skating rinks, a resting place, and a t

2 -rain themed park.

3 Expanding your horizons in life is good, as the more experiences you have, the wiser you are.

Facts or Examples

1 Horizon, SK was made in 1912 after the Canadian pacific railway ran through the land.

2 It now has a status of just a hamlet, south-east of Assinaboia.

3

Conclusion

In conclusion, i think 'The Horizons Stationary Park'/'HSP' would be a great name to label the new park in The Towns coming in 2021.

Horizon Station Park

Jomi

- Horizon was a town in Saskatchewan that no longer exists.
- The park has a train theme and the reason Horizon even existed is because of the Canadian Pacific Railway. It doesn't exist anymore, so it won't confuse 911.
- We can name the little elements in the park other ghost towns.
- The Playground can be called The Train.

Chandler Park

By logan

I think that we should name the park the Chandler park. My first reason is that Chandler was a town in Saskatchewan that was built in the area Cymri rural Municipality, the site was abandoned by the Canadian Northern Railway in 1927 with the railway being abandoned in 1931 (so it is a ghost town). It was also built by a railway and the main theme of the park is trains. But the big reason is that Chandler is the name of a person the mr beast YouTube channel, so most kids will recognize the name and adults will probably recognize it from the town.

Amulet Park By Aden

Amulet was once a town that existed in Saskatchewan and apparently picking a Saskatchewan town name that once existed is a good choice for a name. Another reason why I picked this name was because it has a train in the design of the park, and Amulet had a complete train station. I also wanted to keep the name that I chose semi related to the train theme. The last and final reason on why I chose this name is because it is an easy name to pronounce for all ages. And since no other road or park is named or has the word amulet in it's name it won't confuse a 911 receiver if there were to be an emergency.

Train Park

Freddie

I think we should name it the train Park because most people will call it the "train Park" no matter what the name is. For example there is a park in my area that me and pretty much everyone that goes there calls it The red park when its called something totally different. Also theres no streets or other Parks named that. Its also very easy to pronounce and the 9-1-1 operators will understand.

Posiwin Park

I think poswin is a good name because it's easy to say and gives an opportunity to learn Cree words. Naming elements will be easy for the name because you can either use train vocab, Cree words or Cree train Vocab. While all that they still keep with the train theme!

I did not have anything in mind.

Iron Horse park/iron poswin park

back

The reason I like this name is because it has some reasoning behind on why I want to be called it iron horse park. The first reason I would like it to be iron horse park is because it has indigenous background to it. The first part of its indigenous background is that first nations would call trains iron horses because trains at the time were made from iron, so they called them iron horses. The second reason I think it would be a good idea to name it train park is that it would respect the indigenous word by naming the park after iron horse park. Another reason I think we should name it iron horse park is that indigenous people would go to this park and know the reasoning behind its reasoning for its name. One other idea to name the park iron horse is that it sounds like a name the public would enjoy. The final reason I feel like this would be a good name is that indigenous people have been left out so I think that it would make them feel included in the reason of the park name.



Zoning Bylaw Amendment - Regina Bypass and 9th Avenue North - PL202100088

| | |
|---------------------|---------------------------------------|
| Date | August 4, 2021 |
| To | Regina Planning Commission |
| From | City Planning & Community Development |
| Service Area | Planning & Development Services |
| Item No. | RPC21-49 |

RECOMMENDATION

Regina Planning Commission recommends that City Council:

1. Approve the application to rezone the properties located at NE ¼ Sec 32 Twp 17 Rge 20 W2M identified as MU1 and MU2 within Appendix A-1 from UH – Urban Holding Zone to PS – Public Service Zone.
2. Instruct the City Solicitor to prepare the necessary bylaw(s) to give effect to the recommendations, to be brought forward to the meeting of City Council following approval of the recommendations and the required public notice
3. Approve these recommendations at its meeting on August 11, 2021.

ISSUE

Dream Asset Management Corporation (Applicant) and the Saskatchewan Ministry of Agriculture (Owner) propose to rezone the subject properties, being proposed parcels MU1 – Municipal Utility 1 and MU2 – Municipal Utility 2, from UH - Urban Holding Zone to PS – Public Service Zone to facilitate infrastructure development to support the future Coopertown neighbourhood. These properties are located south of 9th Avenue North and east of the Regina Bypass.

Property owners can submit applications to change the zoning designation of their property. This requires an amendment to the *Regina Zoning Bylaw 2019-19* (Zoning Bylaw) and requires review by Regina Planning Commission (RPC) and approval of the amendment by City Council. These applications include a public and technical review process in advance of consideration by RPC and Council.

This application is being considered pursuant to *The Planning and Development Act, 2007* (Act); *Design Regina: The Official Community Plan Bylaw No. 2013-48* (OCP) and Zoning Bylaw. The proposal has been assessed and is deemed to comply with the Act, OCP (Part A) and the Zoning Bylaw.

IMPACTS

Financial Impacts

Typically, applicants are responsible for the cost of any new, or changes to existing, infrastructure that may be required to directly or indirectly support any proposed development that may follow, in accordance with City standards and applicable legal requirements.

The infrastructure upgrades will be paid for by the developer unless other arrangements are negotiated and approved through Council during future subdivision and servicing agreement review.

Environmental Impact

City Council set a community goal for the City of Regina of achieving net-zero emissions and sourcing of net-zero renewable energy by 2050. In support of this goal, City Council asked Administration to provide energy and greenhouse gas implications of recommendations so that Council can evaluate the climate impacts of its decisions.

The recommendations in this report are for property rezoning which has limited direct impacts on energy consumption and greenhouse gas emissions. Subsequent development on the land will facilitate stormwater (drainage channel) and wastewater services (Coopertown Lift Station). The construction of those services will be reviewed in accordance with City policy at the time of development, including the following:

- For the drainage channel, the City will ensure there are minimal impacts on the aquifer and the connection to Wascana Creek.
- For the Coopertown Lift Station, the City will ensure the energy required to operate the lift station is appropriate and offset by other benefits such as reductions in flooding and enhancing operational efficiencies and safety. It should be noted that more energy intensive equipment may be necessary with the larger infrastructure as preliminary analyses have shown the depth of this lift station is governed by the

potential trunk to redirect flows effectively.

Policy/Strategic Impact

The proposed development complies with OCP – Part A policies and is consistent with the following OCP – Part A goals/ policies:

- Section D4, Goal 1, Policy 6.2: *Ensure new and reconstructed infrastructure follows industry best practices and overall City standards for design and construction.*

Construction of the proposed development will align with the industry best practices and City standards.

- Section D4, Goal 3, Policy 6.7A: *Utilize municipal utility parcels for stormwater management where combining stormwater management and open space is not appropriate*

Parcel MU1 (a municipal utility parcel) is not included within an approved Concept Plan. The usage of a municipal utility parcel allows infrastructure to be built without impacting an existing neighbourhood.

The proposed development is consistent with OCP: Part B.17: Coopertown Neighbourhood Plan

- Policy 5.3.2: *The location of major wastewater infrastructure (e.g. mains and facilities) should be in general accordance with Figure 12 of this Plan.*

The Coopertown Lift Station is identified to be in the general location of the proposed development.

OTHER OPTIONS

Alternative options would be:

1. Refer the application back to Administration. If City Council has specific concerns with the proposal, it may refer it back to Administration for further review.
2. Deny the application and the lands would remain in the UH – Urban Holding Zone.

COMMUNICATIONS

The Applicant and other interested parties will receive a copy of the report and notification of their right to appear as a delegation at the Council meeting when the application will be

considered. The Applicant will receive written notification of City Council's decision in accordance with *The Planning and Development Act, 2007*.

DISCUSSION

Proposal

The intent of the proposed rezoning is to accommodate infrastructure required for the future development of the Coopertown Neighbourhood. A stormwater drainage channel is proposed on Municipal Utility Parcel (MU1) and a wastewater lift station (Coopertown Lift Station) is proposed on Municipal Utility Parcel (MU2).

The stormwater drainage channel will connect to Wascana Creek. The drainage channel will be constructed without negatively impacting the aquifer and Wascana Creek, in accordance with the Coopertown Neighborhood Plan Part B.17, Policy 5.4.2 e) iii.

The Coopertown Lift Station, as outlined in the Coopertown Neighborhood Plan Part B.17, Policy 5.3.2 (a), will serve the developments in the Coopertown Neighborhood and is also expected to be sized and designed to accept wastewater flows from other areas in the City's northwest to allow for the eventual decommissioning of the Westhill and Mapleridge lift stations. It is the City's preference that operation efficiency be enhanced by eliminating redundant, inefficient or aging facilities. There is no set timing for the decommissioning of existing infrastructure; however, the direction to realize the efficiencies is outlined in the Coopertown Neighborhood Plan Part B.17, Policy 5.3.2 (b)(ii).

Parcel MU1 is approximately 12.07 ha and Parcel MU2 is approximately 1.00 ha. The subject properties are currently vacant agricultural land. City Administration is reviewing the related subdivision application and if approved, the properties will become dedicated land owned by the City. Although no construction dates are identified for the infrastructure, the rezoning will allow the applicant to proceed with their infrastructure upgrades based on future market conditions. There are no other applications for other sites within the Coopertown Neighbourhood being reviewed at this time.

Considerations

The stormwater channel is anticipated to have minimal impact on surrounding properties as it simply collects and distributes stormwater. The wastewater lift station will generate minimal noise or nuisance. The nearest residential property is approximately 350 metres from the proposed lift station and it is not anticipated the nuisance impacts residential properties.

Community Engagement

In accordance with the public notice requirements of *The Planning and Development Act, 2007*, neighbouring property owners within 75 metres of the proposed development received written notice of the application. The Prairie View Community Association was contacted but did not respond. Comments from neighbouring properties are captured in Appendix B.

DECISION HISTORY

April 14, 2017 City Council approved the Coopertown Neighborhood Plan (CR17-37)

August 30, 2018 City Council approved the Coopertown Concept Plan for Phase 1 (CR18-75).

June 24, 2019 City Council amended the Coopertown Neighbourhood Plan to its current form (CR19-60).

City Council's approval is required pursuant to Part V of *The Planning and Development Act, 2007*.

Respectfully Submitted,

Respectfully Submitted,



Autumn Lawson, Director, Planning & Development Services

7/28/2021



Diana Hawryluk, Executive Director, City Planning & Community Dev.

7/28/2021

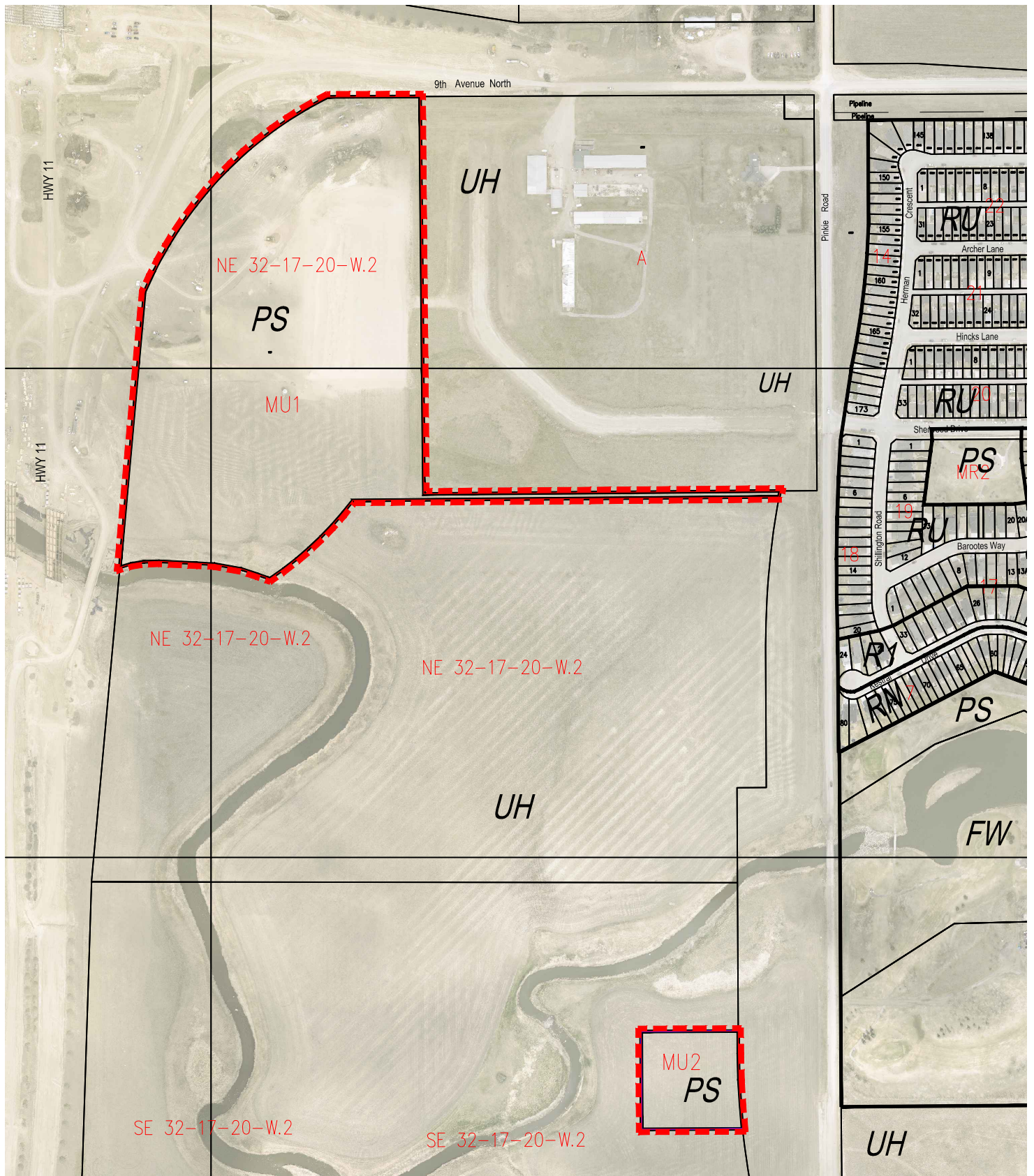
Prepared by: Michael Sliva, City Planner II

ATTACHMENTS

Appendix A-1

Appendix A-2

PL202100088 Appendix B



Date of Photography : 2018



Subject Property





Subject Property

Date of Photography: 2018



Public Notice Comments

| Response | Number of Responses | Issues Identified |
|-----------------------------------------------------|---------------------|-------------------|
| <i>Completely opposed</i> | | |
| <i>Accept if many features were different</i> | | |
| <i>Accept if one or two features were different</i> | 1 | - Traffic |
| <i>I support this proposal</i> | 1 | |

The following is a summary of issues identified through public consultation, listed in order of magnitude (starting with most numerous):

1. **Excess Traffic on a Grid Road**

Administration's Response:

Upon completion of construction, the City of Regina anticipates negligible traffic. Neither location requires a full time worker to be present.



Discretionary Use Application - 628 Victoria Avenue - PL202100084

| | |
|---------------------|---------------------------------------|
| Date | August 4, 2021 |
| To | Regina Planning Commission |
| From | City Planning & Community Development |
| Service Area | Planning & Development Services |
| Item No. | RPC21-50 |

RECOMMENDATION

Regina Planning Commission recommends that City Council:

1. Approve the discretionary use application for the proposed development of “Agriculture, Animal Support” located at 628 Victoria Avenue, being Lots 2-6, Block 216, Plan DV270 in the Arcola Subdivision, subject to compliance with the following development standards and conditions:
 - a. The development shall be generally consistent with the plans attached to this report as Appendix A-3.1 and A-3.2, prepared by JMA Architecture, dated April 30, 2021, except that said plans shall be revised to comply with the requirements of Table 4B.T.3.3 of the Zoning Bylaw, specifically:
 - i. the window glazing must be revised to meet the active wall standards prescribed in Table 4B.T.3.3 (1) b of the Zoning Bylaw; or
 - ii. the front yard setback must be increased to 3.0m in accordance with clause 4B.T.3.3 (2)(c) of the Zoning Bylaw.
 - b. Except as otherwise specified in this approval, the development shall comply with all applicable standards and regulations in *The Regina Zoning Bylaw, 2019-19*.
 - c. Prior to issuance of any building permit in relation to the development, the applicant shall submit revised plans, satisfactory to the City, confirming compliance with the Zoning Bylaw in accordance with clause a of this recommendation.

2. Authorize the Development Officer to issue a development permit with respect to the application, upon the Applicant making payment of any applicable fees or charges and entering into a development agreement if one is required.
3. Approve these recommendations at its meeting on August 11, 2021, following the required public notice.

ISSUE

The Applicant, 102101897 Saskatchewan Inc., on behalf of the property owner (Victoria Veterinary Clinic P.C. Inc.), proposes to expand the existing "Agriculture, Animal Support" land use (veterinary clinic) by 460.74 square metres from an existing floor area of 367 square meters. The subject property is zoned MH - Mixed High-Rise Zone, in which a veterinary clinic is a discretionary use when larger than 500 square metres. The development proposes 827.74 square metres of total gross floor area for the proposed land use.

All properties in the city of Regina are assigned a zoning designation under the *Regina Zoning Bylaw 2019-19* (Zoning Bylaw). Within each zoning designation, land-use can be permitted, prohibited or discretionary. Discretionary use applications require a public and technical review; consideration and recommendation by the Regina Planning Commission and consideration and approval by City Council to proceed. Furthermore, this application requires City Council's approval as Bylaw No. 2021-44, delegating authority of discretionary use to the Development Officer, takes effect on September 1, 2021.

This application is being considered pursuant to *The Planning and Development Act, 2007* (The Act); *Design Regina: The Official Community Plan Bylaw No. 2013-48* (OCP) and the Zoning Bylaw, including suitability based on the prescribed evaluation criteria for discretionary uses established in Part IE.3. The proposal has been assessed and is deemed to comply with all applicable policies, regulations and standards.

Pursuant to subsection 56(3) of The Act, City Council may establish conditions for discretionary uses based on the nature of the proposal (e.g. site, size, shape arrangement of buildings) and aspects of site design (e.g. landscaping, site access, parking, loading), but not including architectural details.

IMPACTS

Financial Impacts

The subject area currently receives a full range of municipal services, including water, sewer and storm drainage. The Applicant will be responsible for the cost of any new, or changes to existing, infrastructure that may be required to directly or indirectly support any proposed development that may follow, in accordance with City of Regina (City) standards and applicable legal requirements.

Accessibility Impacts

The development requires one accessible parking stall. The proposal provides one accessible stall, which meets the minimum requirement.

Environmental Impact

City Council set a community goal for the City of Regina of achieving net-zero emissions and sourcing of net-zero renewable energy by 2050. In support of this goal, City Council asked Administration to provide energy and greenhouse gas implications of recommendations so that Council can evaluate the climate impacts of its decisions. The recommendations in this report have limited direct impacts on energy consumption and greenhouse gas emissions. However, this is an addition to an existing building, which will have less impact than demolition and new site design.

Policy/Strategic Impact

The proposed development does not conflict with any OCP policies and is consistent with the following OCP goals/policies:

- Section C, Goal 3 – Intensification: Enhance the city's urban form through intensification and redevelopment of existing built-up areas.
- Section D11, Goal 1, Policy13.6: Encourage intensification as a means to revitalize and renew neighbourhoods and existing community resources.

The subject development is located within the OCP's Map 1c – Intensification Boundary and supports OCP's intensification goals.

OTHER OPTIONS

Alternative options would be:

1. Approve the application with specific amendments to the plan.
2. Refer the application back to Administration. If City Council has specific concerns with the proposal, it may refer the application back to Administration for further review and direct that the application be brought back to Regina Planning Commission or directly to City Council for reconsideration following such review. Referral of the report back to Administration will delay approval of the development until requested information has been gathered or changes to the proposal have been made.
3. Deny the application. Expansion of the veterinary clinic land use will not proceed on the subject property if City Council rejects the application. If Council defeats or does not move a recommendation to approve (with or without conditions), Council must consider an alternate

motion to reject the application. The motion must include the reasons for the denial based on the evaluation criteria.

COMMUNICATIONS

The Applicant and other interested parties will receive a copy of the report and notification of their right to appear as a delegation at the Regina Planning Commission and Council meetings when the application will be considered. Public notice of City Council's consideration of this application will also be given in accordance with *The Public Notice Policy Bylaw, 2020*. The Applicant will receive written notification of City Council's decision in accordance with The Act.

DISCUSSION

Proposal

The Applicant proposes to expand the existing veterinary clinic by 460.74 square metres (existing floor area of 367 square meters), located on the subject property.

The subject property is zoned MH - Mixed High-rise Zone, in which a veterinary clinic is a discretionary use, when larger than 500 square metres. The development proposes 827.74 square metres of total gross floor area for the proposed land use.

The land use and zoning details of this proposal are summarized in the following tables:

| Land Use Details | Existing | Proposed |
|------------------|-----------------------------|-----------------------------|
| Zoning | MH - Mixed High-Rise Zone | MH - Mixed High-Rise Zone |
| Land Use | Agriculture, Animal Support | Agriculture, Animal Support |
| Building Area | 367 m ² | 827.74 m ² |

| Zoning Analysis | Required | Proposed |
|------------------------------------------|----------|----------|
| Number of Parking Stalls | 5 | 23 |
| Min. Lot Area (m ²) | 250 | 1566.39 |
| Min. Lot Frontage (m) | 6 | 41.1 |
| Max. Building Height (m) | 15 | 7.65 |
| Max. Floor Area Ratio | 3.0 | 0.53 |
| Max. Coverage (%) | 65 | 36.8 |
| Landscaping (percentage of site area) | 10 | 18 |

The existing building was approved and constructed under previous zoning regulations (City of Regina Zoning Bylaw 9250) and was permitted to be built to the front property line. The current

Zoning Bylaw also allows for buildings to be built to the front property line (nil setback) if the fronting wall of the building meets the active wall requirements in the Zoning Bylaw, otherwise there must be a three-meter front yard setback. As noted in Appendix A-3.1, the Applicant is proposing to demolish the front portion of the existing building and reconstruct, and as a result, the entire front of the building must meet the active wall requirements. The Zoning Bylaw defines “active wall” as, “the exterior walls of a building, at street level, that animates the public realm through the incorporation of glazing, fenestration, and regular entrances.” Active walls help enhance the urban character of the street by providing an interactive and animated character between the public and the private realm.

The current drawings attached to this report do not provide the minimum percentage of fenestration or glazing for the front wall. However, the Applicant has agreed to revise the proposed plans to increase the glazing area to meet the active wall requirements of 60 per cent glazing. To not delay this application, the Applicant requested this application be forwarded for approval while the drawings are being revised by the designer. Options to proceed have been discussed with the applicant. These include:

1. Revising the proposed plans to increase the glazing area to meet the active wall requirements;
or
2. Increasing the front setback to 3.0m to meet the standard front yard setback requirements.

The Applicant seeks a decision on the discretionary use based on the size (greater than 500 square meters) of the building not the setback or glazing, which will be reviewed later by Administration at the time of building permit application. The conditions of approval, as reflected by the Administration’s recommendation, will require revised plans to ensure adherence to the active wall or setback requirements.

The surrounding land uses are residential development to the north, Victoria Avenue and commercial development to the south and other commercial development to the east and west. Based on Administration's evaluation of the proposal for land use, development standards, and criteria established in Part 1E.3 of the Zoning Bylaw, the development is suitable for the proposed location. No adverse impacts have been identified.

Community Engagement

In accordance with the public notice requirements of *The Public Notice Policy Bylaw, 2020*, neighbouring property owners within 75 metres of the proposed development received written notice of the application and a sign was posted on the subject site. The Heritage Community Association was contacted and has no issues or concerns with the proposed application. There was one comment from neighbouring property owners and is included as Appendix B of this report.

DECISION HISTORY

City Council's approval is required pursuant to Part V of *The Planning and Development Act, 2007*.

Respectfully Submitted,

Respectfully Submitted,



Autumn Lawson, Director, Planning & Development Services

7/27/2021



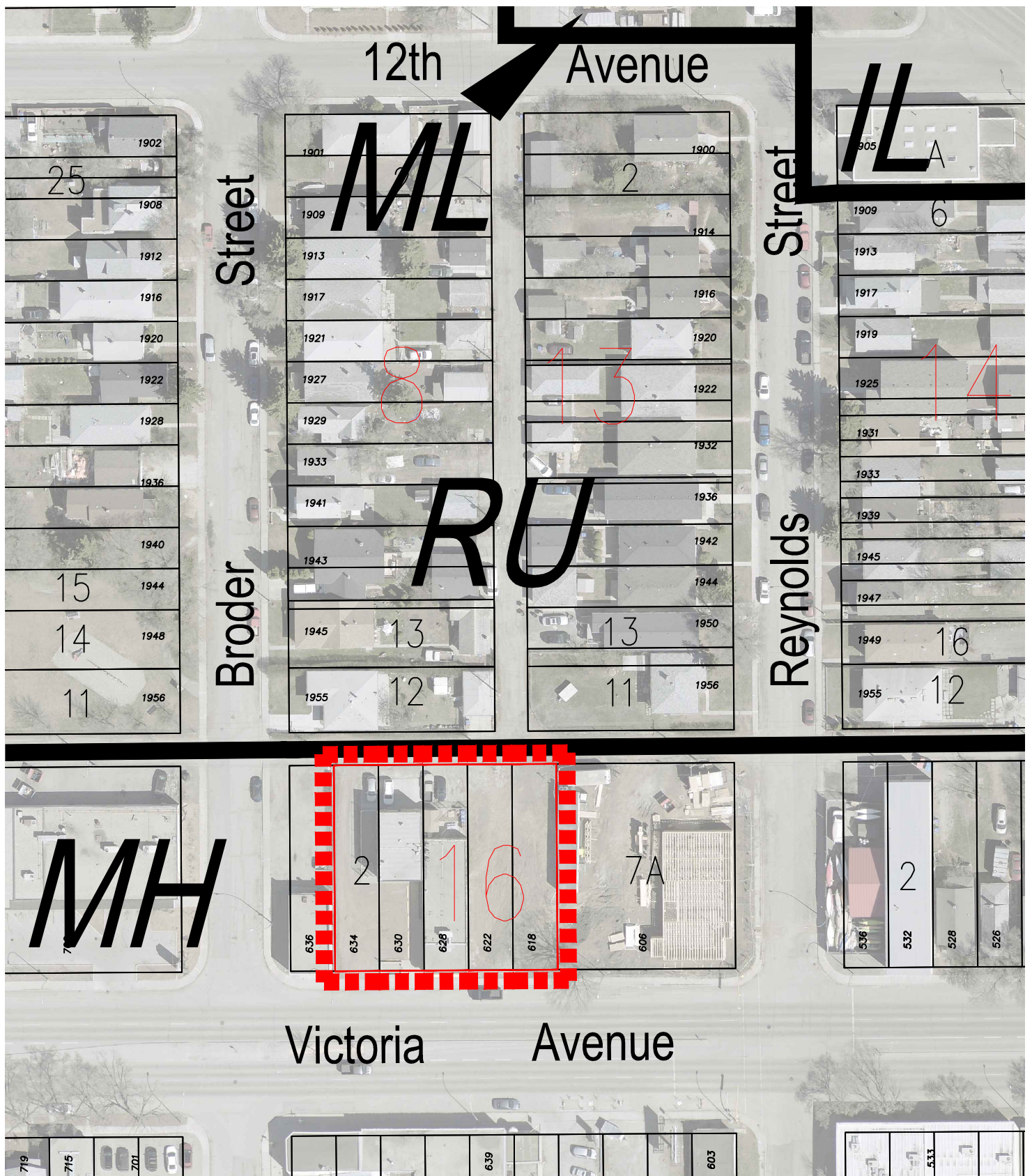
Diana Hawryluk, Executive Director, City Planning & Community Dev.


7/28/2021

Prepared by: Binod Poudyal, City Planner II

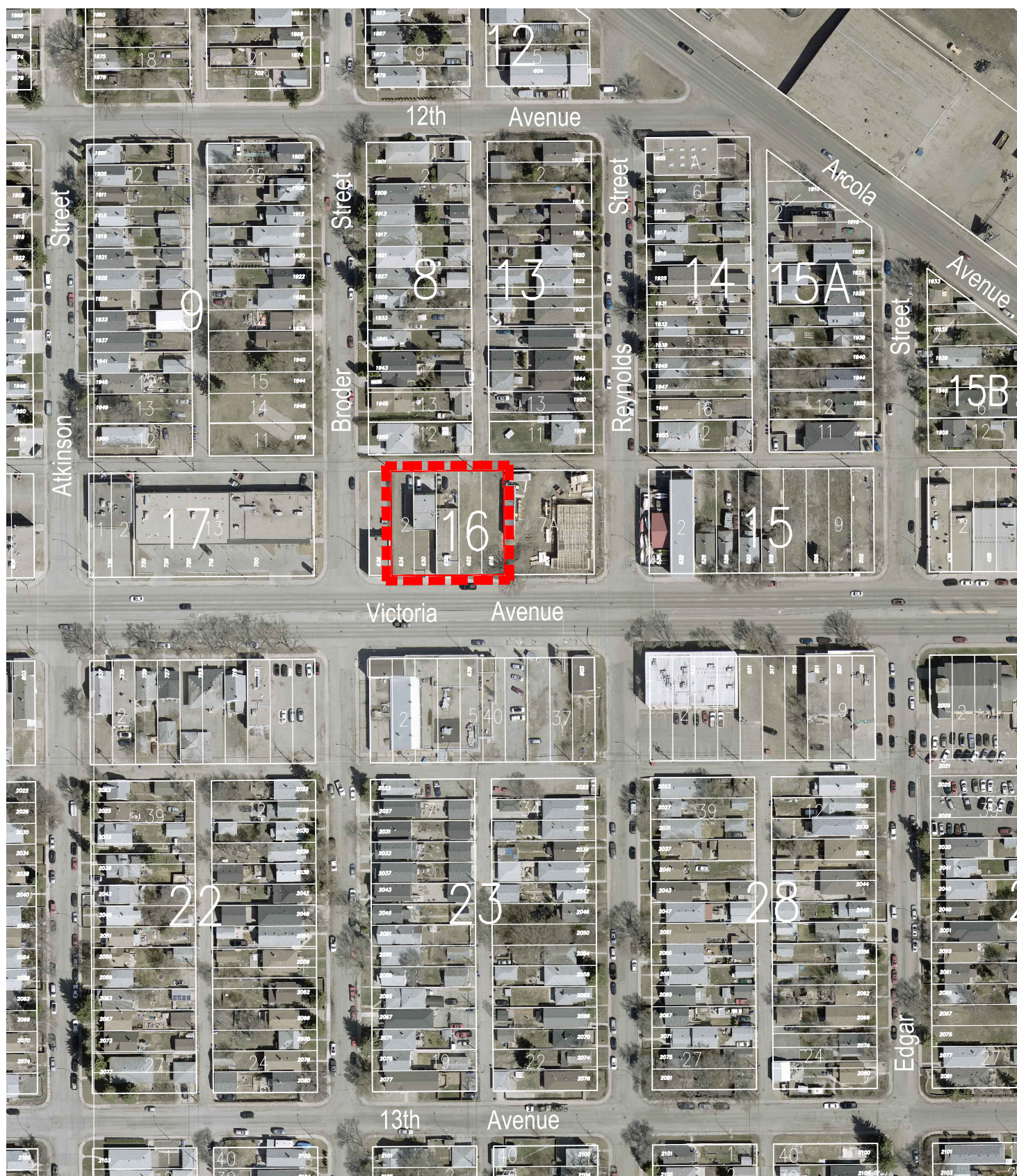
ATTACHMENTS

Appendix 1 (Subject Property Map)
Appendix 2 (Aerial Map)
Appendix A-3.1 (Proposed Site Plan)
Appendix A-3.2 (Proposed Main Floor Plan)
Appendix A-3.3 (Proposed Second Floor Plan)
Appendix A-3.4 (Proposed Elevations)
Appendix A-3.5 (Existing Building Views)
Appendix A-3.6 (Proposed Building Section)
Appendix B (Public Comment Summary)



 Subject Property

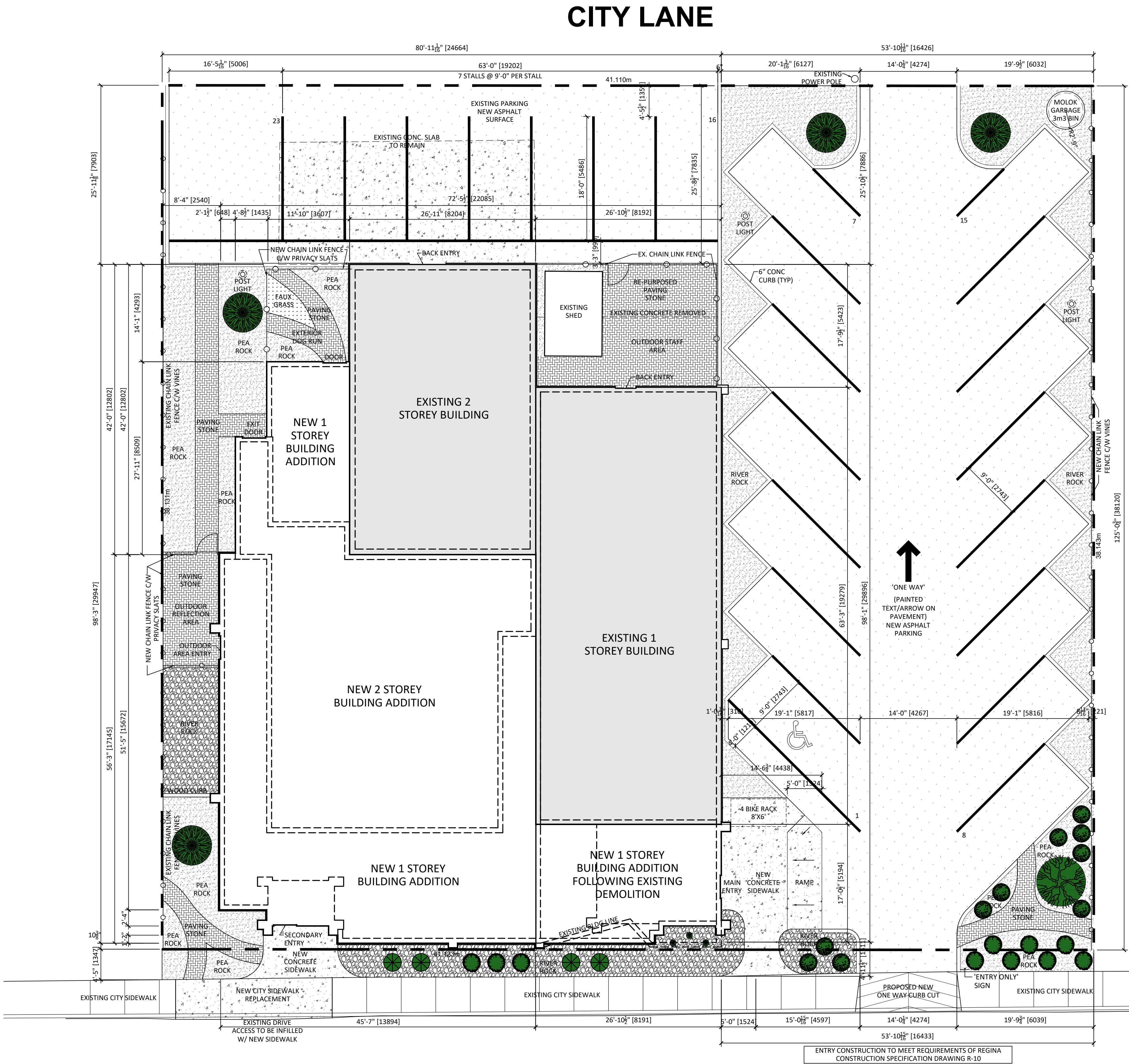




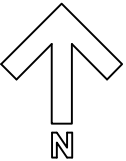
Subject Property

Date of Photography: 2018





VICTORIA AVE.



1 PRELIMINARY SITE PLAN
A1.1 A1.1 SCALE: 1/8" = 1'-0"

BUILDING AREA LEGEND

| | |
|---------------------------------------------|------------------------|
| EXISTING MAIN LEVEL AREA | 2,830 SF. (262.90 SM.) |
| EXISTING MAIN LEVEL AREA - TO BE DEMOLISHED | 453 SF. (42.08 SM.) |
| TOTAL EXISTING MAIN FLOOR AREA | 3,283 SF. (305.0 SM.) |
| EXISTING BUILDING LESS DEMOLISHED AREA | 2,830 SF. (262.90 SM.) |
| MAIN LEVEL FLOOR AREA - ADDITION | 3,369 SF. (312.98 SM.) |
| TOTAL MAIN LEVEL FLOOR AREA | 6,199 SF. (575.89 SM.) |
| EXISTING 2ND LEVEL AREA | 1,130 SF. (104.98 SM.) |
| 2ND LEVEL FLOOR AREA - ADDITION | 1,581 SF. (146.87 SM.) |
| TOTAL 2ND LEVEL FLOOR AREA | 2,711 SF. (251.85 SM.) |
| TOTAL MAIN/2ND FLOOR ADDITION AREA | 4,950 SF. (459.86 SM.) |
| TOTAL FACILITY FLOOR AREA | 8,910 SF. (827.73 SM.) |

ZONING REVIEW

| | |
|----------------------------------------------------|-----------------------------|
| TOTAL SITE AREA | 16,861 S.F. (1,566.39 S.M.) |
| ZONING: | 'MIXED HIGH-RISE' |
| | REQ'D PROVIDED |
| MINIMUM LOT AREA | 250 s.m. 1,566.39 s.m. |
| MINIMUM FRONTAGE | 6 m 41.1 m |
| MINIMUM FRONT YARD SETBACK (ACTIVE WALL BELOW 13m) | nil 0.27m |
| MIN. REAR YARD (IF UNDER 8.5m OF WALL HT.) | 1.2m 7.9 m |
| MIN. SINGLE SIDE YARD (IF UNDER 8.5m OF WALL HT.) | 1.2 2.54m |
| MAX. SITE COVERAGE | 90% 36.8% |
| MAX. BUILDING HT | 15m 3.86m |
| MAX. FLR AREA RATIO | 3.0 0.53 |

PARKING REQUIREMENTS

| | |
|------------------------------------------|--------------|
| VETERINARY HOSPITALS | |
| 1ST 150 S.M. - NO STALLS REQUIRED | |
| 827.7 - 150 = 1 PER 150 S.M./677.7 SQ M. | = 4.5 STALLS |
| TOTAL STALLS REQUIRED | = 5 STALLS |
| TOTAL STALLS PROVIDED | = 23 STALLS |

SITE LANDSCAPE CALC. LEGEND

| | |
|------------------------|-----------------------------|
| SITE AREA | 16,861 S.F. (1,566.39 S.M.) |
| 10% INTERIOR LANDSCAPE | 156m2 (285.6m2 PROVIDED) |

TREE & SHRUB ALLOCATION

TREE REQUIREMENT - DECIDUOUS

| | | |
|-------------------------------|------------------------|-----------|
| REQUIRED: | 1 TREE FOR EVERY 40m2 | |
| CALCULATION: | 156 m² / 40m² | 3.9 TREES |
| NEW TREES REQUIRED BY CITY | | 4 |
| NEW TREES PROVIDED: | | 4 (OK) |
| SHRUB REQUIREMENT - DECIDUOUS | | |
| REQUIRED: | 1 SHRUB FOR EVERY 20m2 | |
| CALCULATION OF REQUIRED: | 156 m² / 20m² | 8 SHRUBS |
| NEW SHRUBS PROVIDED: | | 26 (OK) |

TREE & SHRUB LEGEND

| SYMBOL | DESCRIPTION | SPECIFICATION | TOTALS |
|--------|----------------------------------|-------------------------------------------------------------|--------|
| | GREEN ASH (PATMORE OR BERGESON) | 60mm CAL 1.8m STD B&B: 4m HT. | 1 |
| | SESTER DWARF BLUE SPRUCE | 38mm CAL 1.8m STD B&B: 3.05m HT. | 3 |
| | SILVER LEAF DOG WOOD | 2 GAL., 5 MAJOR BASAL BRANCHES, 1m SPREAD 500mm HIGH | 17 |
| | GOLDFINGER POTENTILLA | 2 GAL., 5 MAJOR BASAL BRANCHES, 1m SPREAD 600-800mm HIGH | 9 |
| | PENCIL CEDARS | 2 GAL., 5 MAJOR BASAL BRANCHES, 1m SPREAD 500mm HIGH | 4 |
| | DECORATIVE TALL GRASS PERENNIALS | | 3 |

SITE MATERIALS FINISH LEGEND

| MATERIAL | SPECIFICATIONS | HATCH PATTERN |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------|---------------|
| LIGHT DUTY ASPHALT | 50mm ASPHALT ON 150mm GRANULAR BASE (TYPE 33) 150mm GRANULAR SUB-BASE (TYPE 8) COMPACTED TO 98% STANDARD PROCTOR DENSITY | |
| CONCRETE | SEE DETAILS & STRUCTURAL | |
| DECORATIVE ROCK | 75-100mm ROUNDED RIVER ROCK | |
| FAUX GRASS | FAUX GRASS/TURF | |
| DECORATIVE ROCK | 20mm RAINBOW PEA ROCK | |
| PAVING STONE | RE-PURPOSED PAVING STONE | |

DRAWING LIST

ARCHITECTURAL

- A-1.1 PRELIMINARY SITE PLAN
- A-2.0 EXISTING/DEMOLITION MAIN LEVEL PLAN
- A-2.1 RENOVATED MAIN LEVEL PLAN
- A-2.2 EXISTING/DEMOLITION 2ND LEVEL PLAN
- A-2.3 RENOVATED 2ND LEVEL PLAN
- A-3.1 PRELIMINARY EXTERIOR ELEVATIONS
- A-3.2 PRELIMINARY EXTERIOR ELEVATIONS & EXISTING PICTURES
- A-4.1 BUILDING SECTION

2021.04.30 ISSUED FOR DISCRETIONARY USE R-0
DATE: ISSUANCE: REVISION:
DRAWN BY: JOHN MCGINN

STAMP:

JMA ARCHITECTURE LTD.
10138 Wascana Estates Regina, SK S4V2X4
W jmaarchitecture.ca C 306.530.5482 E john@jmaarchitecture.ca

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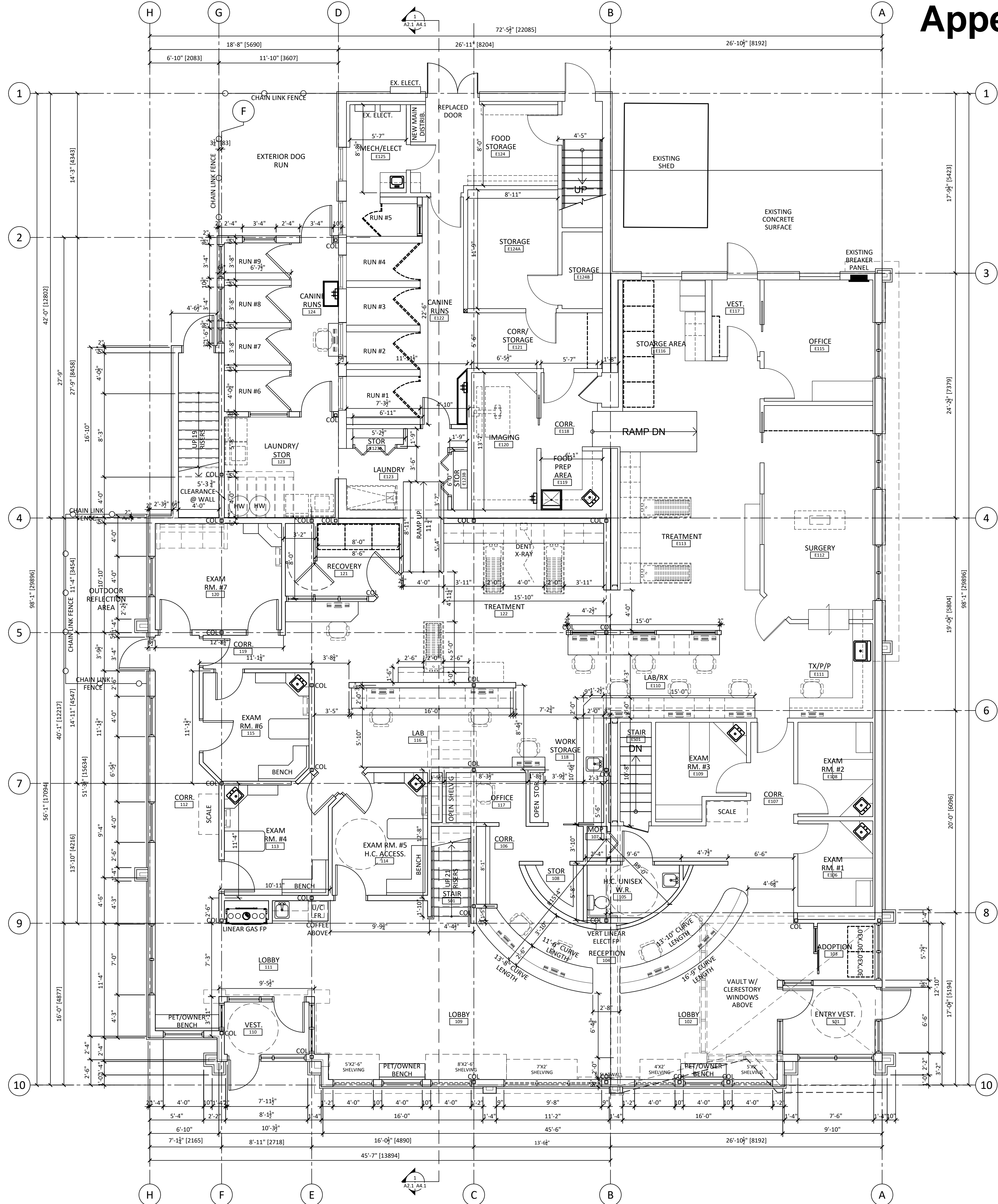
PROJECT TITLE:
ADDITIONS & RENOVATIONS TO VICTORIA VETERINARY CLINIC
628 VICTORIA AVE.

REGINA, SASK.

SHEET TITLE:
PRELIMINARY SITE PLAN

PROJECT NUMBER:
18023
PROJECT DATE:
30 APR 21
SHEET NUMBER:
A-1.1
REV. NUMBER:
R-0

Appendix A-3.2



| BUILDING AREA LEGEND | |
|---------------------------------------------|------------------------|
| EXISTING MAIN LEVEL AREA | 2,830 SF. (262.90 SM.) |
| EXISTING MAIN LEVEL AREA - TO BE DEMOLISHED | 453 SF. (42.08 SM.) |
| TOTAL EXISTING MAIN FLOOR AREA | 3,283 SF. (305.0 SM.) |
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| TOTAL MAIN/2ND FLOOR ADDITION AREA | 4,950 SF. (459.86 SM.) |
| TOTAL FACILITY FLOOR AREA | 8,910 SF. (827.73 SM.) |

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PROJECT TITLE:
**ADDITIONS &
RENOVATIONS TO
VICTORIA VETERINARY
CLINIC
628 VICTORIA AVE.**

REGINA, SASK.
SHEET TITLE:
**RENOVATED MAIN LEVEL
PLAN**

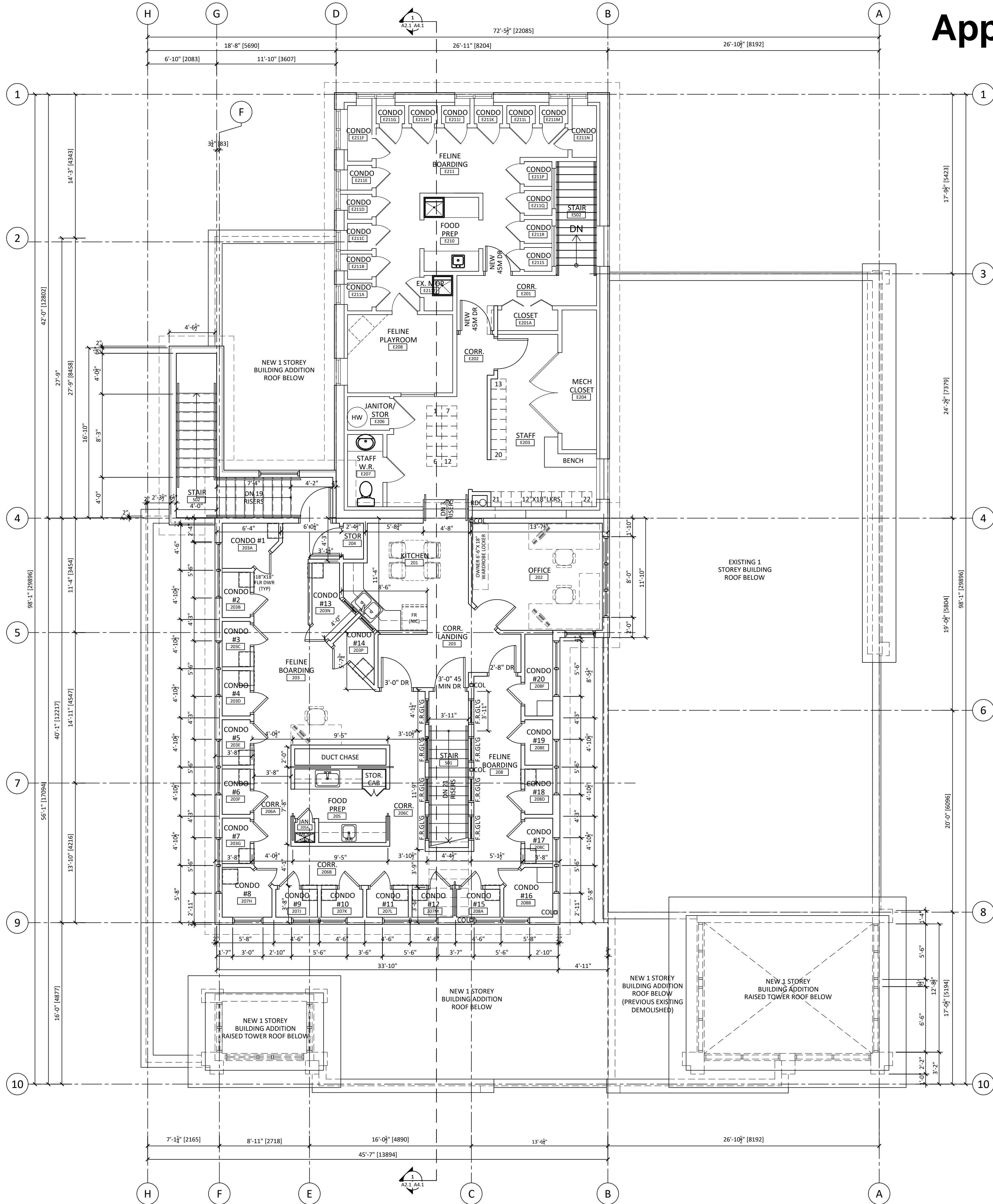
PROJECT NUMBER:
18023
PROJECT DATE:
30 APR 21

SHEET NUMBER:
A-2.1
REV NUMBER:
R-0

1 RENOVATED MAIN LEVEL PLAN
A2.1 A2.1 SCALE: 3/16" = 1'-0"

Appendix A-3.3

| BUILDING AREA LEGEND | |
|---------------------------------------------|------------------------|
| EXISTING MAIN LEVEL AREA | 2,830 SF. (262.90 SM.) |
| EXISTING MAIN LEVEL AREA - TO BE DEMOLISHED | 453 SF. (42.08 SM.) |
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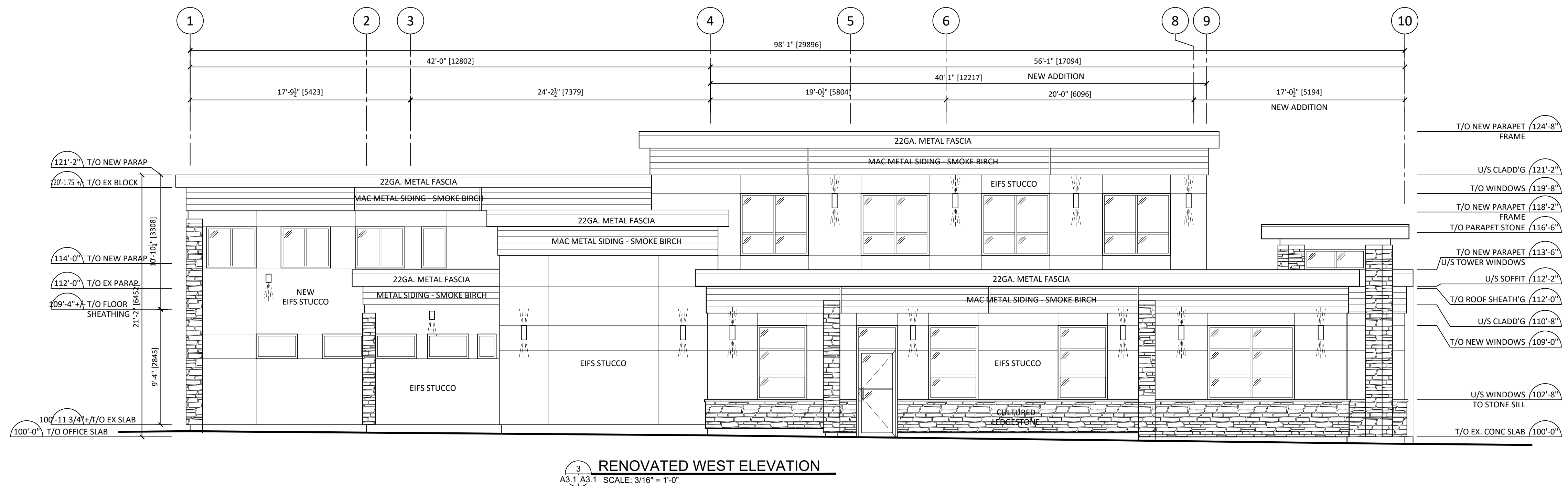
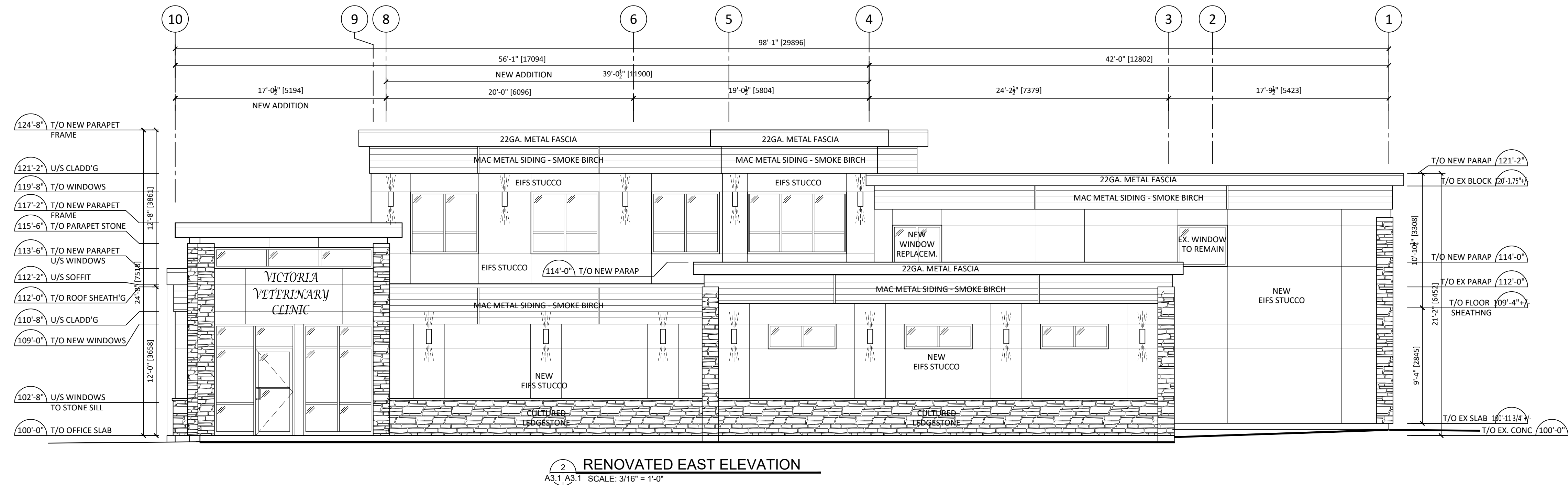
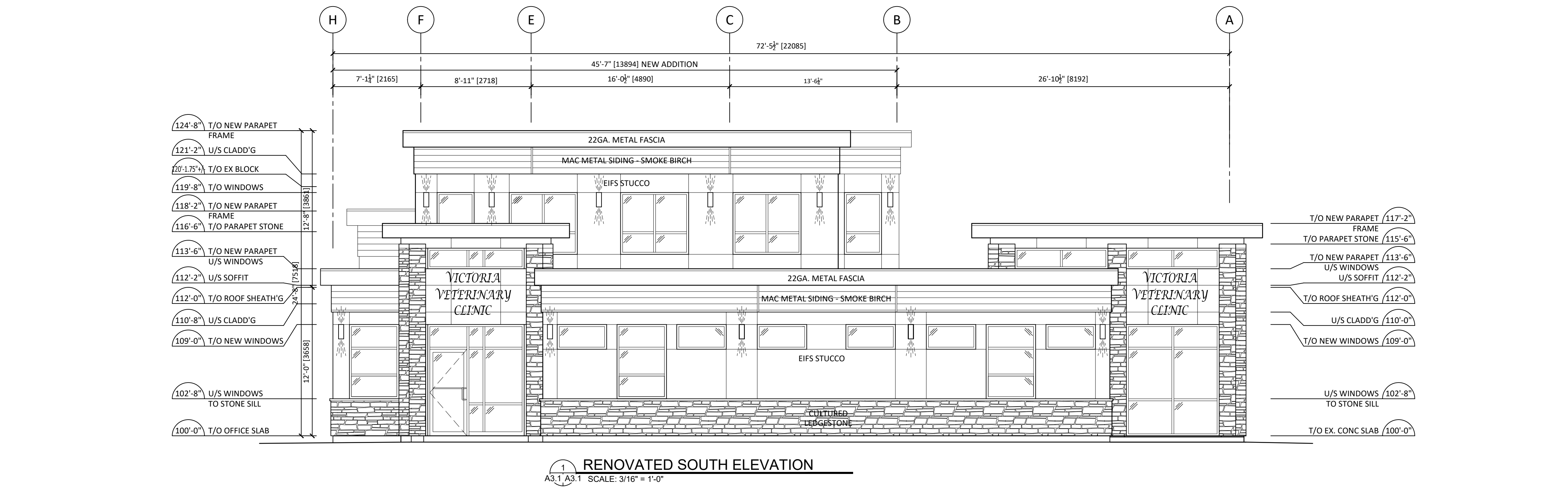
PROJECT TITLE:
ADDITIONS &
RENOVATIONS TO
VICTORIA VETERINARY
CLINIC
628 VICTORIA AVE.

REGINA, SASK.
SHEET TITLE:
RENOVATED 2ND LEVEL
PLAN

PROJECT NUMBER:
18023
PROJECT DATE:
30 APR 21
SHEET NUMBER:
A-2.3
REV NUMBER:
R-0

1 RENOVATED 2ND LEVEL PLAN
A2.3 A2.3 SCALE: 3/16" = 1'-0"

Appendix A-3.4



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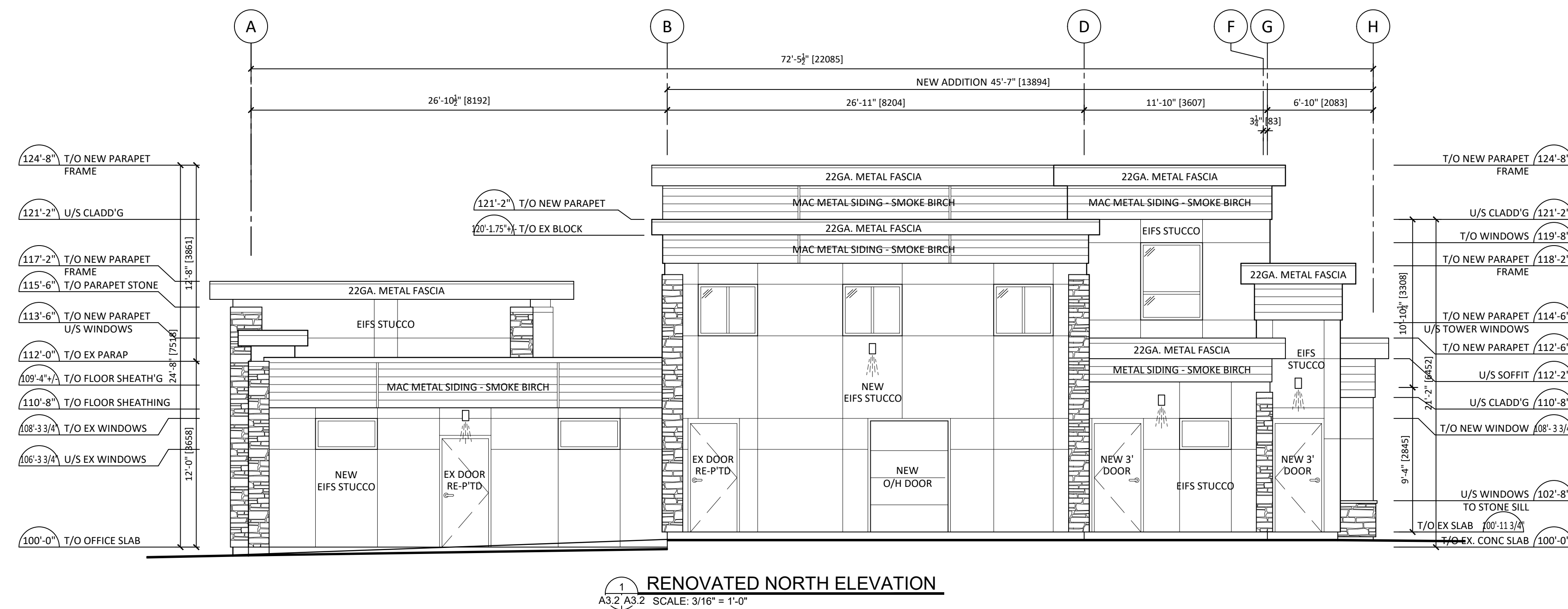
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PROJECT TITLE:
ADDITIONS &
RENOVATIONS TO
VICTORIA VETERINARY
CLINIC
628 VICTORIA AVE.

REGINA, SASK.
SHEET TITLE:
PRELIMINARY EXTERIOR
RENOVATED ELEVATIONS

PROJECT NUMBER:
18023
PROJECT DATE:
30 APR 21
SHEET NUMBER:
A-3.1
REV. NUMBER:
R-0

Appendix A-3.5



EXISTING PICTURE - SOUTHEAST VIEW



EXISTING PICTURE - SOUTHWEST VIEW



EXISTING PICTURE - NORTHWEST VIEW



EXISTING PICTURE - NORTHEAST VIEW

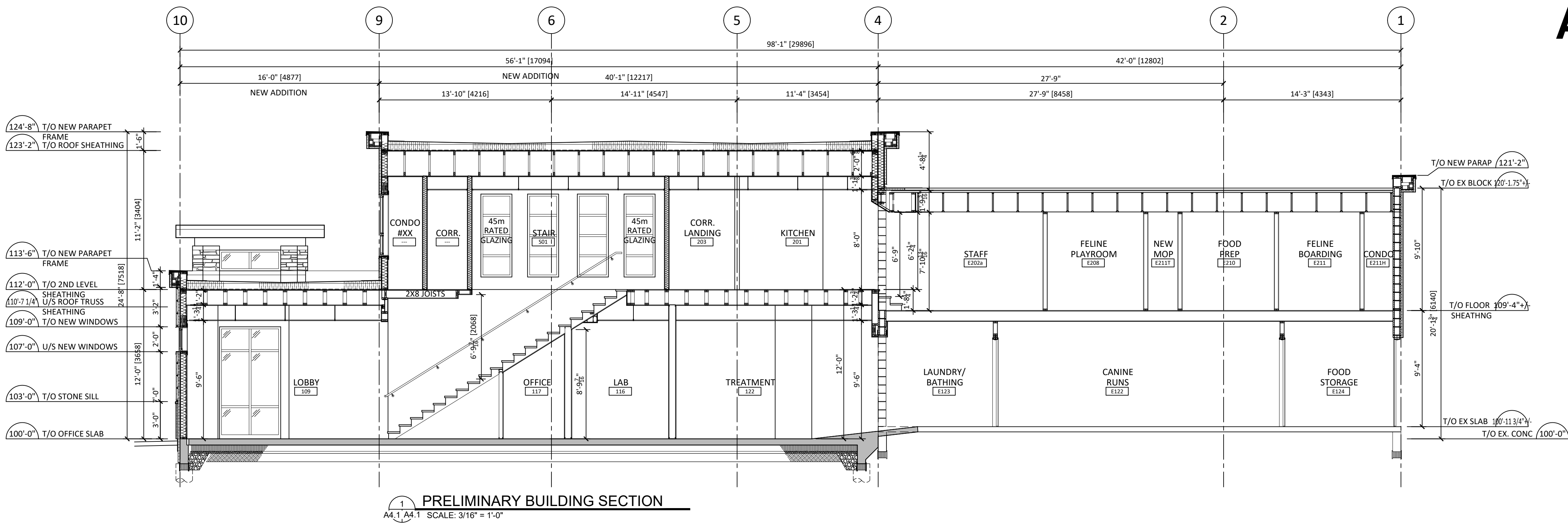
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| 2021.04.30 | ISSUED FOR DISCRETIONARY USE | R-0 |
| DATE: | ISSUANCE: | REVISION: |
| DRAWN BY: | JOHN MCGINN | |
| STAMP: | | |

PROJECT TITLE:
**ADDITIONS &
RENOVATIONS TO
VICTORIA VETERINARY
CLINIC
628 VICTORIA AVE.**

REGINA, SASK.

SHEET TITLE:
PRELIMINARY EXTERIOR
RENOVATED ELEVATION
& EXISTING PICTURES

| | |
|-----------------------------------|-------------------------------|
| PROJECT NUMBER: 18023 | SHEET NUMBER: A-3.2 |
| PROJECT DATE: 30 APR 21 | REV. NUMBER: R-0 |



| | | |
|------------|------------------------------|-----------|
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ADDITIONS &
RENOVATIONS TO
VICTORIA VETERINARY
CLINIC
628 VICTORIA AVE.

REGINA, SASK.
SHEET TITLE:
PRELIMINARY BUILDING
SECTION

| | |
|----------------------------|------------------------|
| PROJECT NUMBER: 18023 | SHEET NUMBER: A-4.1 |
| PROJECT DATE: 30 APR 21 | REV. NUMBER: R-0 |

Public Consultation Summary

| Response | Number of Responses | Issues Identified |
|------------------------------------------------------|---------------------|--------------------------------------------------------------------------------------------------------------------------------|
| <i>Completely opposed</i> | | |
| <i>Accept if many features were different</i> | | |
| <i>Accept if one or more features were different</i> | | |
| <i>I support this proposal</i> | 1 | The expansion and development of the parking space will only enhance development in the area and spur others to do so as well. |
| <i>Other</i> | | |



Ring Road Grade Crossing Relocation – Preliminary Design Procurement

| | |
|---------------------|---------------------------------------|
| Date | August 4, 2021 |
| To | Regina Planning Commission |
| From | City Planning & Community Development |
| Service Area | Sustainable Infrastructure |
| Item No. | RPC21-51 |

RECOMMENDATION

Regina Planning Commission recommends that City Council:

1. Authorize the Executive Director of City Planning & Community Development, or their designate, to initiate a public procurement to engage consulting and professional engineering services for the design and construction for the delivery of a preliminary design scope of project deliverables for the Ring Road Grade Crossing Relocation Initiative.
2. Authorize the Executive Director of City Planning & Community Development, or their designate, to negotiate, award and approve an agreement between the City of Regina and the highest ranked proponent of a public procurement process.
3. Authorize the City Clerk to execute the necessary agreements with the highest ranked proponent after review and approval by the City Solicitor.
4. Approve these recommendations at its meeting on August 11, 2021.

ISSUE

In accordance with the approvals of report CR19-76 by Council, Administration is planning to issue a solicitation document, award and enter into a contract to procure consulting and professional services to support the scope of a preliminary design project for the Ring Road Grade Crossing Relocation Initiative. Council's authority is required under *The Regina Administration Bylaw No.*

2003-69, Schedule D, Section 7 to issue a solicitation document, award and enter into a contract for consulting and professional services where the anticipated fees are expected to exceed \$750,000 when acquired in accordance with the provisions of Part V of the Purchasing Policy.

In accordance with *The Committee Bylaw No. 2009-40*, the Regina Planning Commission is authorized to:

- a) Consider and make recommendations to Council regarding rail relocation matters.
- b) Consider and make recommendations to Council on all consulting contracts over \$500,000 related to the Commission mandate.

IMPACTS

Financial Impacts

A total of \$2M to undertake a preliminary design was approved in the 2020 and 2021 budgets and preapproved in the forthcoming 2022 General Capital Budget so Administration could issue a solicitation document and award a contract to undertake the work. The funding source for this work is current contributions. Any unspent funds at the completion of this work would either be carried forward to subsequent stages of the project or returned to reserve depending on the outcome and future decisions of Council.

This work will examine the opportunities and challenges of the recommended relocation solution, provide a refined and updated cost estimate in order for Council to make a decision on whether to proceed to detailed design and construction.

A grant may partially offset funding of preliminary design through the National Trade Corridors Fund, which the City of Regina (City) was invited to submit a Comprehensive Project Proposal to Transport Canada; however, the submission of the proposal does not guarantee award and Administration is awaiting the decision on its submission. Transport Canada has advised the assessment of submitted projects is currently underway and they will communicate a funding decision as soon as it is available.

The cost of the overall initiative was identified in the initial City Feasibility Study to be approximately \$107M. This was an overall anticipated cost, which included pre-construction activities, such as permitting, engineering, land acquisition, etc., as well as construction activities such as track, earthwork, retaining walls, roadways, bridges and utilities protections or moves. Given the limited investigation completed to develop the concept, this cost estimate has a level of accuracy of -30 per cent to +50 per cent. The cost estimate is in 2018 dollars and is subject to inflation. The preliminary design would further refine the cost estimate and increase the accuracy associated with the relocation solution.

Completing a preliminary design does not commit the City or railway companies to proceed with a detailed design and construction of the relocation solution. The outcomes are subject to the review

and acceptance of the railways, permitting approvals and the approval of the necessary funds to realize the initiative.

Environmental Impacts

Council set a community goal for the City of achieving net-zero emissions and sourcing of net-zero renewable energy by 2050. In support of this goal, Council requested Administration to provide energy and greenhouse gas implications of recommendations so that Council can evaluate the climate impacts of its decisions. The recommendations in this report have limited direct impacts on energy consumption and greenhouse gas emissions.

The relocation initiative, if delivered, would reduce idling emissions due to a reduction in the number of vehicle delays at grade crossings. A benefit cost analysis determined that the removal would see a reduction in over 48,000 tonnes of CO₂ plus other related emissions, 15.7M litres of gasoline and 4.5M litres of diesel between 2027-2050. This is in addition to the 18.8M hours of travel time avoided. As a result of the overall initiative, changes in GHG emissions would be offset in part by construction emissions and there is potential for changes in rail emissions due to operational changes.

The preliminary design would also include a climate change risk assessment to address potential federal grant funding requirements and consider the resiliency of any new infrastructure constructed with respect to climate change.

Policy/Strategic Impacts

Undertaking a preliminary design would not have any Policy or Strategic impacts. Depending upon the recommended outcomes of a preliminary design and should the overall initiative proceed, removing the existing Canadian Pacific (CP) and Canadian National (CN) grade crossings at Ring Road would address the potential grade separation identified in *Design Regina: The Official Community Plan Bylaw No. 2013-48* (OCP) and the *Transportation Master Plan* (TMP), although it may also trigger other road network improvements not currently identified.

The impacted CP Lanigan subdivision tracks are adjacent to the development areas of Kensington Greens and SomerSet. Depending upon the recommended outcomes of the preliminary design, there may be impacts on the concept plans for these neighbourhoods that Council previously approved.

The preliminary design would advance and support OCP Section D9: Health and Safety, specifically policy 11.7, which provides direction to Administration and Council to employ appropriate setback standards to ensure compatible development adjacent to railway and other features, where required. Similarly, preliminary design advances and supports the Statements of Provincial Interest pertaining to the compatibility of development and rail infrastructure and considers noise and vibration when contemplating development in proximity to existing or proposed railway operations. The relocation of portions of the CP Lanigan Subdivision tracks and the CN Qu'Appelle Subdivision tracks would shift some railways away from new and existing residential neighbourhoods to the relocated rail corridors.

Risk/Legal Impacts

Undertaking preliminary design is not anticipated to incur any additional risk or have any legal impacts.

Preliminary design is intended to identify and mitigate or reduce potential risks to the delivery of the initiative. Initiating and completing a preliminary design does not guarantee the initiative can be delivered as it is subject to review and discussion of the operational and safety impacts by CP, CN and Transport Canada.

The identification and mitigation of risk through preliminary design includes, but is not limited to, field investigation, surveying, identification of railway operational needs and solutions to address them, identification of land acquisition needs and challenges in terms of costs and ability to acquire the necessary new rail corridors, identification and protection of existing infrastructure or structures. In addition, refinement of the previous cost estimate to deliver the initiative to understand the financial impact and risk further.

Other Implications

The proposed relocation will seek to engage and consult affected stakeholders through a preliminary design to identify and address other implications associated with the City's preferred solution to remove the grade crossings at Ring Road. Stakeholders include, but are not limited to, landowners in the adjacent and surrounding area, users of the impacted rail and road network corridors, regulatory authorities governing the work and other connected interests.

Engagement to date has only been with key stakeholders, CN and CP. CN and CP will continue to be the key stakeholders during the preliminary design in order to advance the recommended solution from a conceptual level. Engagement with broader impacted stakeholders may uncover additional aspects during the preliminary design that may need to be addressed to develop a viable relocation solution.

Council approved entering into an option to purchase agreement in Report CM21-6 for land owned by the City for an economic opportunity development north of the Federated Co-op Refinery. The option to purchase agreement lands overlap the Council approved rail relocation solution. Administration was directed to pursue. As a result, the rail relocation solution requires alterations to the conceptual alignment previously identified shown in Appendix C.

The economic opportunity is synergistic with a relocation solution in general as it is a rail-oriented industrial development.

OTHER OPTIONS

1. Council could deny the approval of this reports recommendations and not proceed with pursuing a solution to remove the grade crossings from Ring Road resulting in status quo and ending the preliminary design project and relocation initiative.

This would free up the capital dollars allocated to this project. These funds could be redirected to other capital initiatives or the funds could be returned to the source and directed to the appropriate reserve.

If no initiative moves forward and a no-build option is chosen, delays along Ring Road are expected to increase as both train and vehicle traffic are anticipated to grow. Over time this will increase the number of delays and lengths of vehicle queues. Additionally emissions would increase with the increased number of idling vehicles waiting at the grade crossings for trains to pass and the potential for train/vehicle accident events will increase with rail and traffic increases.

2. Council could defer proceeding with continuing to pursuing the approved relocation solution.

Similarly, this could free up the capital dollars allocated to this project. These funds could be redirected to other capital initiatives or the funds could be returned to the source and directed to the appropriate reserve.

Administration could ask for the equivalent capital dollars required in a future budget year.

Future budget requirements would be subject to inflation. Depending upon the length of time of a deferral, this may result in a lost opportunity to pursue a relocation solution due to changes in land ownership and willingness to further explore a relocation by CP and CN.

3. Council could request the Administration bring back a report to revisit the other solutions to remove the grade crossings from Ring Road and make a recommendation that does not include pursuing the approved relocation solution.

Other options examined in the Feasibility Study included grade separations and other relocation solutions. Only one option is anticipated to have a lower capital cost and the remaining options examined had a higher capital cost. Only the other similar relocation solution had a Benefit Cost Ratio greater than one of the factors considered. Additional discussion can be found in report CR19-76.

Other options would have similar preliminary design costs and proceeded with, have greater capital and operating costs than the recommended solution.

COMMUNICATIONS

CP and CN have been advised of this report. Upon award of a contract to a successful bidder, a Communications and Engagement Plan would be developed with Administration to engage both key and other stakeholders on this initiative.

DISCUSSION

Background

The subject of rail relocation in Regina has been discussed prior to the 2018 Motion of Council. A brief synopsis of events prior to 2018 is provided in Appendix A.

Ring Road is a four-lane 100km/hr expressway that connects Highway 1A and Highway 11A as part of the Urban Highway Connector System. Highways 1 and 11 are also part of the Core National Highway System. Ring Road and the transition to Highway 1A in city limits also provides connections to Highways 6, 46 and 33. Ring Road not only serves as an urban highspeed connector within the city road network, but it is also a key corridor for transporting goods from various industrial areas within the city and region. The corridor from Pasqua Street clockwise to the Regina Bypass provides a heavy vehicle and dangerous goods route through the city, providing an accessible road network linkage to industrial land uses in the northeast.

Ring Road is one of the busiest roadways within the city. The segment between Winnipeg Street and McDonald Street experiences approximately 60,000 vehicles per day. As growth within the city and region continues, the number of vehicles Ring Road experiences will grow accordingly. The City's TMP identifies the need for capacity improvements along Ring Road in support of the current growth planning horizon (300,000 population).

Currently, there are two grade crossings on Ring Road between Winnipeg Street and McDonald Street. These grade crossings impact the flow of traffic on Ring Road due to the frequent train movements on the CP Lanigan Subdivision tracks and the CN Qu'Appelle Subdivision tracks. On average, the crossings are occupied 22 times per day from a combination of through train traffic or rail car switching movements supporting numerous rail spurs to various industries both north and south of Ring Road. Each time the grade crossings are occupied due to train traffic, it generates delay to motorists by interrupting the flow of traffic, which can cause long queues compounding the traffic delays. Examples of typical traffic and delays due to train traffic can be found in Appendix B.

In addition, sections of the CP Lanigan Subdivision tracks and the CN Qu'Appelle Subdivision tracks cross other roads within the city and are adjacent or near existing and future residential land uses. The other crossings also result in traffic delays and generate resident concerns about noise and safety.

Transport of goods by rail is and will continue to be an important service to support economic growth within the region and areas beyond. Based on forecasted train volumes travelling over Ring Road, it is estimated that in 2022, almost \$9B worth of commodity will be transported through the region, with the value estimated to increase to \$16.7B by 2051 expressed in 2020 dollars.

Initiative History

In February of 2018, a Notice of Motion MN18-3 was submitted to Council regarding the CN and CP grade crossings at Ring Road between Winnipeg Street and McDonald Street. Subsequently, Administration provided report CM18-7 to Council in April of 2018 on the costs and implications of undertaking a Feasibility Study. This report was discussed, to which Council approved direction and funding. A procurement to hire a qualified engineering consultant was initiated and awarded in the summer of 2018. The scope of the Feasibility Study was the identification of options to remove the existing grade crossings at Ring Road, including but not limited to grade separation and rail relocation options informed by benefit cost analysis of the options and engagement of CN and CP.

Prior to undertaking the Feasibility Study, Administration had a high-level understanding of the initial capital costs and constraints associated with a grade separation solution to remove the CN and CP grade crossings on Ring Road. Administration also had a conceptual idea of where a rail relocation might be possible recognizing the City owned some of the lands necessary. Designing rail infrastructure is not a service Administration delivers on and it requires funding to work with a qualified engineering firm to undertake this work. The Feasibility Study provided a thorough examination of options from both an organization and community perspective. It also examined solution concepts from a technical and capital cost perspective and from an economic perspective through a benefit cost analysis. The scope and scale of the recommended solution, though perhaps smaller in scope of those being explored by other communities Administration is aware of, is still complex and, if the initiative continues through to construction, will involve multiple stakeholders, including the rail companies, local industry, regional, public and higher levels of government.

In August of 2019, report CR19-76 was brought forward to Council with recommendations based on the benefit cost analysis results. The benefit cost analysis examined costs, impacts and opportunities of potential solutions to remove the grade crossings at Ring Road. The analysis included capital construction costs, accident cost savings, travel time savings, construction delay costs, vehicle operating costs, emission cost savings and operation and maintenance costs. The report's outcome was to pursue the recommended potential solution, shown in Appendix C, which involved rail relocation of both portions of the CP Lanigan subdivision rail line and the CN Qu'Appelle subdivision rail line to an upgraded joint operating corridor. A conceptual understanding of the relocation moves is described visually in Appendix D.

Prior to undertaking further study, Administration was to:

- a. Bring a financing plan to fund a preliminary design through the 2020 budget process.
- b. To first secure the cooperation of CN Rail and CP Rail by way of a Memorandum of Understanding (MOU) or Letter of Intent.

In the 2020 general capital budget, \$2M was identified for funding over two years, approved for 2020 and 2021. Subsequently, in the 2021 general capital budget, funding was adjusted to extend into

2022 due to delays in initiating the work as the MOU took longer to negotiate than originally anticipated.

Administration worked with CN and CP on securing cooperation on the City's next steps. This work began in September of 2019 and an MOU was ultimately fully executed in October 2020. The MOU establishes a framework between the City, CN Rail and CP Rail on the cooperation to undertake the preliminary design and the limits and obligations of all parties and subsequent negotiation required should the overall initiative progress beyond preliminary design.

The next step of the preliminary design will seek to refine the concept developed in the Feasibility Study to realign portions of the CP and CN rail lines to eliminate vehicle congestion on Ring Road generated by train movements. The realignment will also look closely at additional at-grade crossings on both the CP and CN mainlines and eliminate the diamond crossing between the two rail lines. Overall, the preliminary design looks to reduce the total number of grade crossings within the region, thus eliminating various points of vehicle congestion and the potential for vehicle/train accidents, as shown in Appendix E.

DECISION HISTORY

On February 26, 2018, City Council considered a Motion regarding the CN and CP grade crossings at Ring Road between Winnipeg Street and McDonald Street (MN18-3).

On April 30, 2018, City Council approved funding to undertake a Feasibility Study (CM18-7).

On August 26, 2019, City Council approved pursuing a rail relocation solution subject to a financing plan for a preliminary design through the 2020 budget process and securing the cooperation of CN Rail and CP Rail (CR19-76).

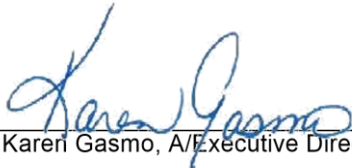
On December 9, 2019, City Council approved \$2M over two years to undertake the preliminary design of the approved relocation solution (CM19-15).

On April 12, 2021, Council approved an agreement with an independent commercial party for granting an option to purchase City lands identified for the routing of the preferred rail relocation solution (CM21-6).

On May 12, 2021, City Council considered a Motion regarding train issues in Eastview and McNab and tabled it for future consideration in conjunction with a report respecting Ring Road at grade crossing (MN21-4).

Respectfully Submitted,

Respectfully Submitted,



Karen Gasmo, A/E Executive Director

7/28/2021



Diana Hawryluk, Executive Director, City Planning & Community Dev.

7/28/2021

Prepared by: Geoff Brown, Manager, Asset Management

ATTACHMENTS

- Appendix A - Relocation History
- Appendix B - Crossing Images
- Appendix C - Preferred Solution
- Appendix D - Relocation Moves
- Appendix E - Impacted Grade Crossings

Brief Synopsis of Rail Relocation History in Regina

Canadian National Railway (CN) and Canadian Pacific Railway (CP) both have a long history in the city with rails within the city existing as early as 1886. From west to east, the most direct CP route main line runs right through the centre of Regina from Vancouver to points as far east as Montreal and Quebec City along the St. Lawrence Seaway. CN similarly does the same, but with a more northerly route through Saskatoon.

As Regina has developed, interest and execution in relocating some or all of the railways has occurred. This has been the result of various interests including such as concerns about noise, safety, incompatible adjacent land uses, urban redevelopment and delays in the city road network.

Rail relocation in Regina started with work in the 1960's, continued through the 1980's with an ending of the program in the early 1990's. In the 1980's, as part of the Rail Relocation Initiative, the City applied to the Canadian Transport Commission for a decision to relocate the CN Marshalling Yard, CN Central Butte, CN Craik, CN Qu'Appelle and CP Lanigan Subdivisions to a corridor around the north side of the city. An affirmative decision was handed down in 1987; however, a combination of lack of funding and other factors resulted in the City withdrawing the pursuit of further relocations.

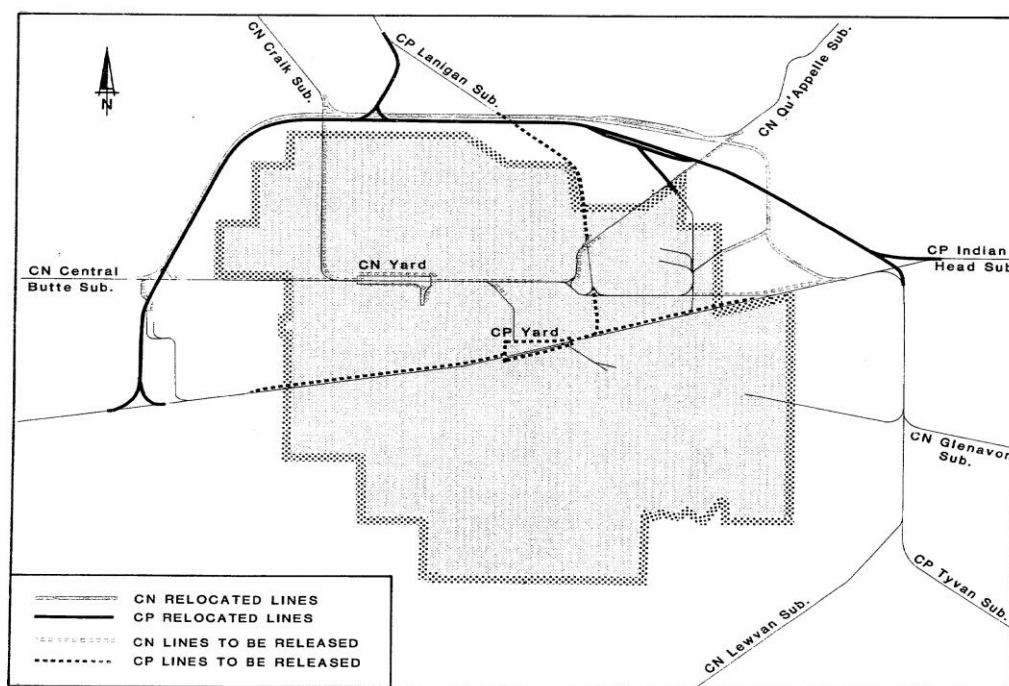


Figure: Regina's Global Railway Relocation Program, 1984

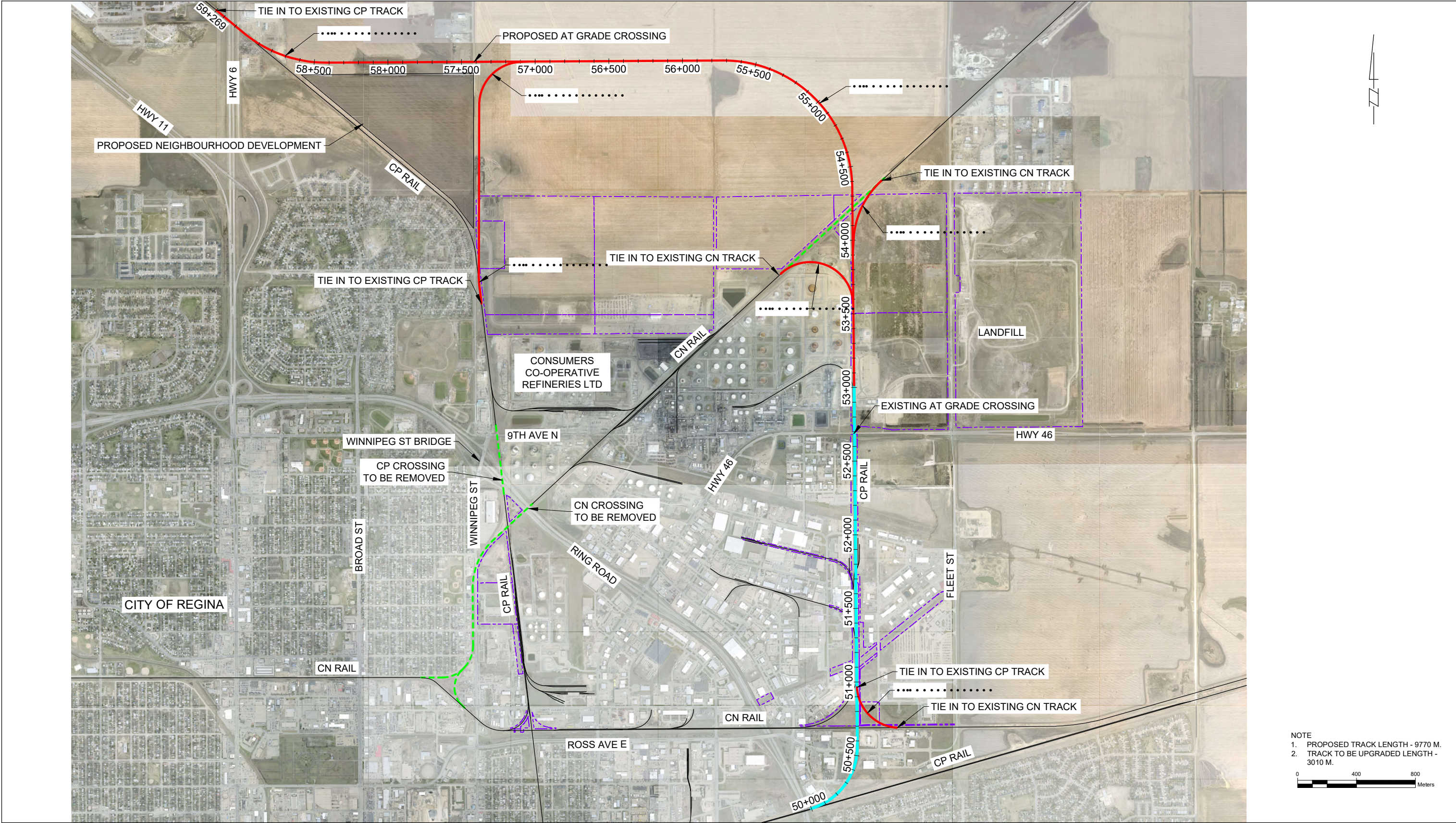
Subsequent discussions in the late 1980's and early 1990's to facilitate a compromise with both CN and CP to relocate both subdivisions within the city limits to a joint operating corridor were also unsuccessful at that time.

Figure 1: Typical Traffic on Ring Road – Winnipeg Street to McDonald Street



Figure 2: Typical Queuing on Ring Road During Crossing Event – Export Potash Train





NOTE
1. PROPOSED TRACK LENGTH - 9770 M.
2. TRACK TO BE UPGRADED LENGTH - 3010 M.

0 400 800
Meters

LEGEND
PROPOSED TRACK
EXISTING TRACK
TRACK TO BE REMOVED
TRACK TO BE UPGRADED
CITY PROPERTY BOUNDARY



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ISSUED FOR REVIEW

City of Regina

REGINA
Innovative Solutions

CITY OF REGINA

RING ROAD RAIL CROSSINGS FEASIBILITY STUDY

RAIL RELOCATION OPTION 4

PLAN

FILENAME
SCALE 1:12,000
DRAWING

Rail Relocation Conceptual Moves

In the figure below:

Canadian Pacific Railway Lanigan Subdivision tracks shown in boxes 1 and 2 would shift from the existing solid red line to the relocated dashed red line maintaining the west and east connectivity as shown respectively.

Canadian National Railway Qu'Appelle Subdivision tracks shown in boxes 3 and 4 would shift from the existing solid blue line to the relocated dashed blue line maintaining the west and east connectivity as shown respectively.

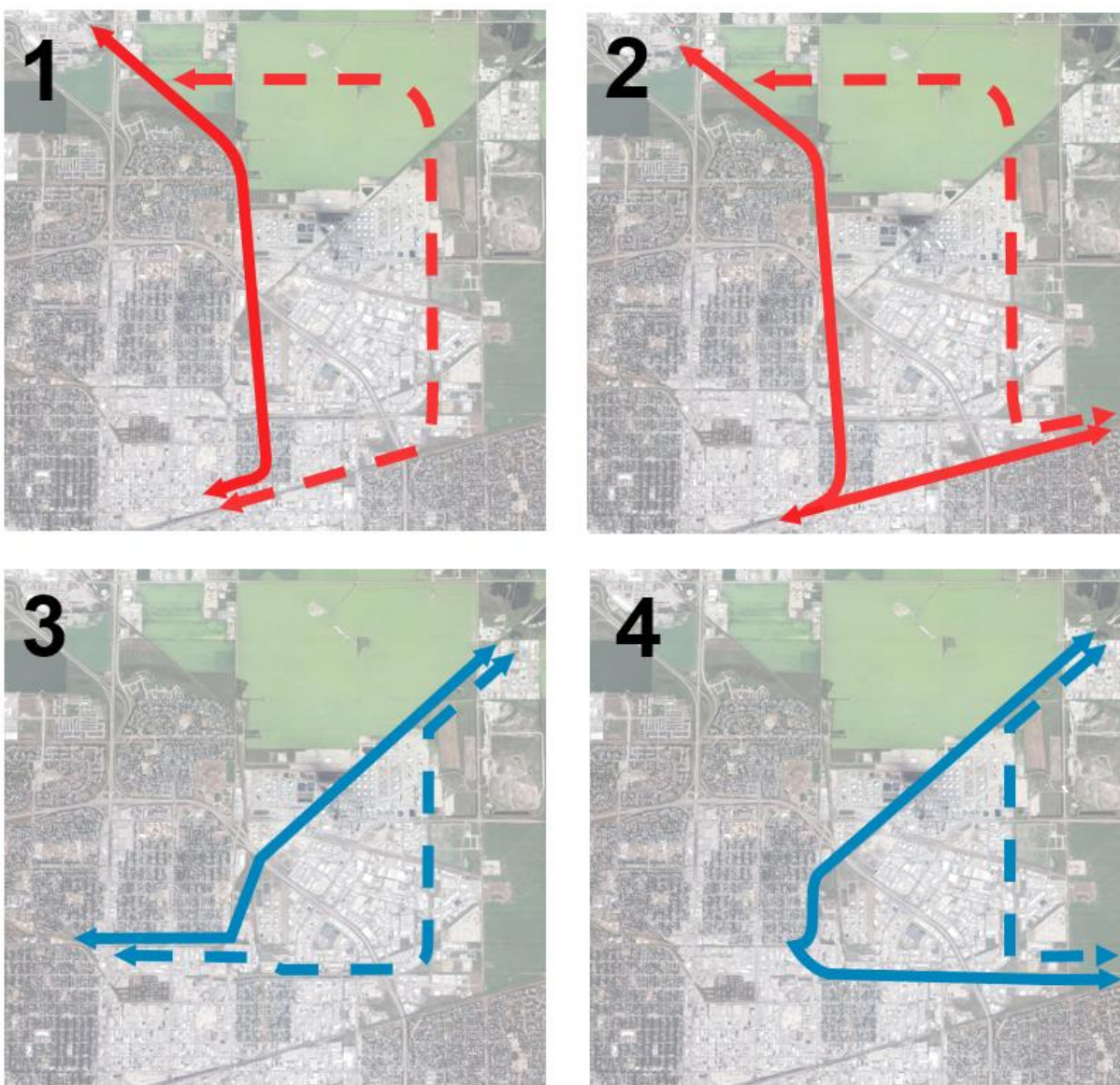


Figure: High-Level Schematic of changes to existing rail corridors

Affected Grade Crossings

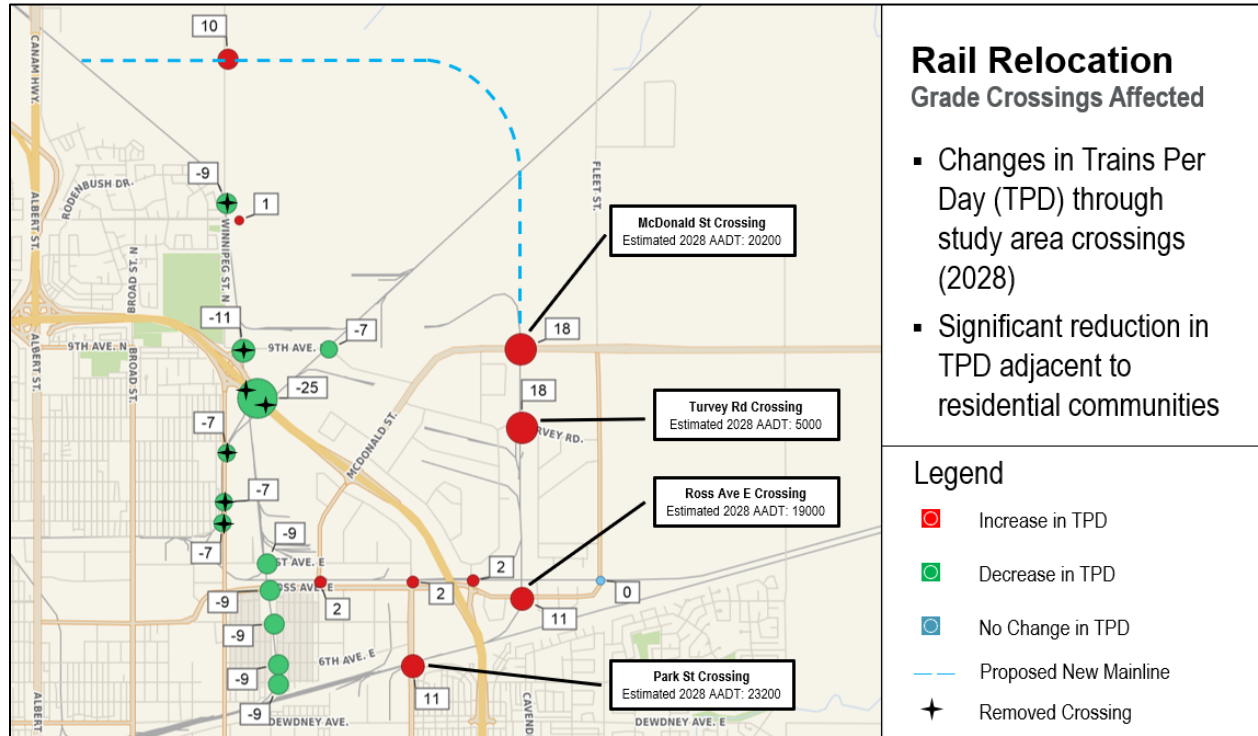


Figure: Affected Grade Crossings as part of the recommended solution