

NO: R223

COUNCIL DATE: November 6, 2017

REGULAR COUNCIL

TO: **Mayor & Council** DATE: **November 2, 2017**

FROM: **General Manager, Engineering** FILE: **5400-80 (10500)**
General Manager, Parks, Recreation & Culture

SUBJECT: **105 Avenue Corridor Project – Hawthorne Rotary Park Alternative Approval Process**

RECOMMENDATION

The Engineering Department and Parks, Recreation & Culture Department recommend that Council:

1. Receive this report as information;
2. Authorize staff to proceed with the implementation of the 105 Avenue Corridor project including land purchases to increase the park size and the Hawthorne Rotary Park improvements; and
3. Authorize the City Clerk to bring forward the Final Reading of the *Surrey Removal of Reservation of a Portion of Hawthorne Park Bylaw, 2017, No. 19337*, as a result of the conclusion of the Alternative Approval Process (“AAP”) resulting in approval of the electors being obtained, with less than 10% of all eligible electors submitting valid elector response forms.

INTENT

The purpose of this report is to obtain Council’s approval to proceed with the Final Reading of the *Surrey Removal of Reservation of a Portion of Hawthorne Park Bylaw, 2017, No. 19337* and to authorize proceeding with 105 Avenue Corridor project, Hawthorne Rotary Park Master Plan and Hawthorne Rotary Park improvements. This report will present to Council:

- The history and background of the 105 Avenue project;
- The traffic analysis and the justification for proceeding with the 105 Avenue corridor project;
- The mitigation and park improvement measures planned for Hawthorne Rotary Park; and
- A summary of the conclusion of the AAP results for Hawthorne Rotary Park.

BACKGROUND

The 105 Avenue Corridor project is a two-lane road between 138 Street and 150 Street, with the general project scope illustrated in the attached Appendix “I”. This will complete a long standing objective, first identified in the 1986 OCP, to connect City Centre to Guildford from 132 Street to 154 Street with a green, multi-modal collector road and will include:

- A two-lane road (one travel lane in each direction) for vehicles;
- Separated bicycle lanes within the raised boulevard providing a safer riding corridor;
- Sidewalks improving pedestrian connectivity within the neighbourhood;
- Improved intermodal (cycling, pedestrian and vehicle) access to Hawthorne Rotary Park;
- Improved pick-up and drop off area for Hjorth Road Elementary School;

The original alignment from the 1986 OCP, as illustrated in Appendix “II” ran roughly along the 106 Avenue and bisected Hawthorne Rotary Park. In 2006, the City revised this alignment to avoid sensitive environmental features, and have the alignment minimize impacts to the Park. The 105 Avenue corridor is in the City’s 10 Year Servicing Plan as a long term (7-10 years) project to reflect the need to deliver the road with the anticipated development and population growth along the 104 Avenue corridor. With minimal development occurring along the corridor, the project remained in subsequent 10 Year Servicing Plans and within the long term time frame.

Recently, the need to accelerate the project to a short term time frame was identified to maintain and improve neighbourhood access and connectivity during construction of the Surrey-Newton-Guildford (“SNG”) Light Rail Transit (“LRT”) on 104 Avenue, and operation of the system within five years. Construction of 105 Avenue in advance of LRT would also mitigate concurrent construction activities and lessen impacts on local residents and businesses.

The 105 Avenue corridor also provides the most feasible alignment for a major water main and storm sewer utility relocation that is required as part of the LRT Early Works program. The Early Works are funded through the Government of Canada’s Public Transit Infrastructure Fund (“PTIF”) and from Provincial and TransLink funding from Phase 1 of the 10 Year Investment Plan. As a condition of this funding agreement, the utility relocations must be completed by December 2018 in order to maintain eligibility for funding. Completion of the Early Works program by December 2018 will also maintain the SNG LRT delivery time for operation of the system within five years.

DISCUSSION

The 105 Avenue corridor is a complex project with impacts to Hawthorne Rotary Park, Hjorth Road Elementary School and private property. The project is critically important in balancing the needs for transportation infrastructure for the existing community during and after SNG LRT construction, while accommodating the significant population and employment growth along the 104 Avenue corridor, in City Centre and in Guildford Town Centre.

Staff are committed to delivering a very successful 105 Avenue corridor project and five key project guiding principles were developed to ensure effective and successful project delivery:

1. Deliver a critical collector road for the neighbourhood;
2. Improve access to and use of Hawthorne Rotary Park;
3. Provide high quality multi-modal facilities on the new 105 Avenue;

4. Mitigate impacts of the project; and
5. Provide an open and transparent public consultation process.

Hawthorne Rotary Park

As illustrated in Appendix “III”, the 105 Avenue alignment is within Hawthorne Rotary Park and is impacting approximately 4 acres of parkland and requiring the removal of approximately 200 trees from the Park. As part of the project, a mitigation plan to offset these impacts is being developed through a Hawthorne Rotary Park Master Plan process. The Master Plan is also intended to improve the park overall guiding investment in new and upgraded park amenities. Incorporating the feedback received at the June 7, 2017 public consultation meeting, initial deliverables of the Park Master plan and 105 Avenue Corridor project will include:

Parkland and Natural Areas

- Acquiring approximately 5 acres of adjacent properties resulting in a net increase in the park area of 1 acre;
- Protecting the natural areas adjacent to the Park through the newly acquired park lands;
- Incorporating approximately 450 trees into the Park through the acquired properties;
- Removing the 142 Street connection that was initially planned between 104 Avenue and the 105 Avenue corridor, and
- Introducing environmental and biodiversity enhancements with a new salmon rearing habitat for Bon Accord Creek.

Amenities

- Improving access to the Park from 144 Street;
- Relocating the main parking lot and 200 metre long drive aisle to 144 Street and replacing it with green space; and
- Constructing new walking trails and wildlife crossings.

105 Avenue Corridor

- Providing a custom road cross section to eliminate most of the on-street parking and minimize the road footprint;
- Including measures to reduce noise through the Park with the use of quiet pavement;
- Providing wider boulevards and enhanced soil volumes for large street tree growth; and
- Constructing a plaza and roundabout at 144 Street for traffic control and to act as an entry feature.

A rendering of some of these initial deliverables are illustrated in Appendix “IV”. The overall mitigation will result in both a net increase in the size of the park and an increase in the number of trees as well as improvements to the overall access to and use of the Park.

The Hawthorne Rotary Park Master Plan is also intended to deliver a range of improved amenities to the community. While these need to be confirmed with residents at an upcoming open house, the following items are proposed to improve the active areas of the park:

- New waterpark that also helps feed the wetland ensuring an appropriate reuse of runoff from the spray features;
- New destination scale playground with play features for all ages including parkour for youth;

- New washroom building; and
- New fenced dog off leash area

The estimated cost of these park improvements is \$3 Million with the final plan of amenities and timing of work informed by the input from residents at the open house.

It should also be noted that a recent independent consultant study indicated that, while the area was formerly a bog, it no longer contains many of the species and ecosystems that function as a bog. As a result, the new proposed salmon rearing habitat will enhance the biodiversity of the park by providing wetlands that do not currently occur there.

Hjorth Road Elementary School

As illustrated in Appendix “V”, the 105 Avenue Corridor alignment between 147 Street and 148 Street is proposed to go through the outdoor play field for Hjorth Road Elementary School. City staff have recognized the impacts that the alignment has on the school and have met with School District 36 staff over the past five years to discuss short and long term options. At the September 20, 2017 Regular Board Meeting, the School Board 36 Trustees requested a meeting with City staff to work collaboratively on developing the short term plans for the field relocation, and the long term plans to identify and secure an appropriate future Hjorth Road Elementary School within Surrey. The School Board 36 Trustees have requested that the outcomes be committed to in writing.

Staff can reaffirm the commitment to develop a mitigation strategy for the impacts of the 105 Avenue corridor project on the school site and the initial plans are outlined below.

Short Term Strategy

- Providing a new relocated play field that is better than the existing gravel field;
- Including traffic calming on 105 Avenue corridor consistent with City practice for Collector roads adjacent to elementary schools;
- Improving pick-up and drop-off from the additional street frontage;
- Accommodating new multi-modal access from all directions; and
- Considering new or enhanced playground structures.

Long Term Strategy

- Work with School District 36 staff to identify a new school site as part of the 104 Avenue Corridor an Guildford Town Centre Land Use Study; and
- Review and consider alternative funding solutions for the necessary acquisition of lands, construction of new school, and sale of the existing site.

The short term improvements are generally illustrated in Appendix “VI”. Ultimately, staff will work with School District 36 to create a Memorandum of Understanding to bring forward for Council’s consideration.

Should the City not find a resolution with the School Board in the short term, the City will wait to complete the 105 Avenue connector from 147 Street to 148 Street until a plan is in place to the satisfaction of the School Board and the City. Should a mutual agreement not occur, the City would complete 147 Street from 104 Avenue to 105 Avenue.

Traffic Analysis

As part of the SNG LRT project, there will be opening day capacity reductions on 104 Avenue from four lanes to two lanes in many locations. While the long term plan is to protect 104 Avenue for four travel lanes, this is not anticipated to occur until a significant amount of development occurs along the corridor. The existing volumes along 104 Avenue range from 28,000 vehicles per day to 32,000 vehicles per day, which make it one of the City's busiest corridors. In total there are approximately 74,000 vehicles per day ("vpd") that utilize the three continuous east-west corridors of 100 Avenue (17,000 vpd), 104 Avenue (32,000 vpd) and 108 Avenue (25,000 vpd) between Guildford Town Centre and Surrey City Centre. While many new and existing trips along these corridors are expected to be made by Transit using the SNG LRT, there is still a need to accommodate the remaining east-west vehicle movements.

Vehicle license plate survey and traffic modelling have been conducted to determine the SNG LRT opening day (2023), medium term (2030) and long term (2040) impacts on 104 Avenue, 105 Avenue connector, 100 Avenue and 108 Avenue. The vehicle license plate survey determined that over 50% of vehicle traffic (16,000+) use 104 Avenue between 152 Street and Whalley Boulevard for localized trips. The study also indicated that many of these trips were less than 800 metres on 104 Avenue. This implies that 104 Avenue is both functioning as an arterial road and as a collector road, distributing shorter trips along the network. This is not surprising as there are no east-west road corridors between 104 Avenue and 108 Avenue.

Associated capital improvements are already underway on the adjacent corridors of 100 Avenue and 108 Avenue to accommodate the redistribution of the longer distance east-west through traffic trips away from 104 Avenue. These adjacent corridor improvements and reductions in 104 Avenue capacity were included into traffic model simulations, and it was forecast that 40-50% of through traffic will utilize 108 Avenue and 100 Avenue as an alternative arterial corridor during and after construction of the SNG LRT project. Unfortunately, with the reduction of capacity along 104 Avenue, signalization priority for SNG LRT, and increase in overall pedestrian activity (to and from LRT stations), 104 Avenue will be unable to accommodate the remaining 16,000 vpd without significant delays and queues.

With the 105 Avenue project included, forecast traffic volumes are approximately 10-12,000 vpd, and 104 Avenue operates within acceptable levels of congestion. This projected volume for 105 Avenue is well within typical collector road volumes. Even with growth in ridership on the SNG LRT line and the 105 Avenue in place, by 2030, both 100 Avenue and 108 Avenue will be approaching capacity, and by 2040, 104 Avenue will require four travel lanes due to the population and employment growth in the City Centre, the 104 Avenue corridor and the Guildford Town Centre areas.

Access and circulation within the local neighbourhood will be disrupted, with many of the full movement intersections and accesses along 104 Avenue restricted to right-in and right-out only as part of the SNG LRT construction. The 105 Avenue project will reduce the amount of circulation required for local neighbourhood and business access, both during and after the SNG LRT project on 104 Avenue.

Conclusion of Alternative Approval Process

On January 15, 1979, a Bylaw was adopted by Council to reserve portions of lands in Hawthorne Rotary Park for park purposes. The old Park Reservation Bylaw applies to six specific properties within Hawthorne Rotary Park as identified in Appendix “VII” of this report. Due to the importance of the 105 Avenue project, staff recommended that Council undertake the AAP as authorized under s.84 and s. 86 of the *Community Charter* to facilitate the legislative requirements for removing the reservation Bylaw.

The AAP allows an opportunity for eligible electors to indicate to Council that they are opposed to the removal of the Park reservation through the submission of an Elector Response Form. As the removal of reserved parkland is considered a matter of interest to all Surrey residents, the AAP was applied to the entire City. The *Surrey Removal of Reservation of Parkland of a Portion of Hawthorne Park Bylaw 2017, No. 19337* (“Removal of Park Reservation Bylaw”) is considered approved if less than 10% of the registered electors submit their Elector Response Forms. The total number of electors (303,372 total electors) provided for the City was from the 2017 Provincial Government Election data which was used to determine the required 10%, which is 30,372.

To maintain project deadlines for completion of SNG LRT Early Works utility relocations by the end of 2018 and the opening of the road before major SNG LRT construction, the AAP began in Early August 2017 and was completed on September 22, 2017. At the October 23, 2017 Regular Council Meeting Corporate Report R204; 2017 *Conclusion of Alternate Approval Process for Hawthorne Rotary Park* was presented indicating that 11,161 valid response forms were received. This represented 3.7% of the valid electors, and in accordance with Section 86 of the *Community Charter*, the approval of the electors was obtained.

Recommendation - Proceeding with 105 Avenue Corridor Project

As a result of the approval of the electors being received from the AAP, the Engineering Department recommends that Council both authorize the City Clerk to bring forward the final reading of the Removal of Park Reservation Bylaw, and to proceed with the implementation of the entire 105 Avenue corridor project, including the initial Hawthorne Rotary Park improvements.

The 105 Avenue corridor project is considered critical to the success of the 104 Avenue Corridor and Guildford Town Centre Land Use plan and for the delivery of the SNG LRT project and park improvements, as it:

- Improves access and circulation for existing residents;
- Accommodates access and circulation for the growth planned in the City Centre, 104 Avenue corridor and Guildford Town Centre land use plans;
- Reduces the block spacing from 800 metres to approximately 400 metres;
- Benefits the approximately 74,000 drivers that currently travel the east-west corridors of 100 Avenue, 104 Avenue and 108 Avenue;
- Reduces the reliance on 104 Avenue for local access and circulation during and after SNG LRT construction;
- Provides a consistent east-west multi-modal connection;
- Provides the preferred alignment for the SNG LRT Early Work water main relocation and will meet the PTIF funding deadline and budget allowance;
- Allows the SNG LRT to construct a preferred cross section on 104 Avenue;

- Improves access and visibility to Hawthorne Rotary Park; and
- Allows Engineering to fund and advance components of the Hawthorne Rotary Park Master Plan, including removal of the existing parking lot and drive aisle and addition of a new salmon rearing habitat.

Implications of Not Proceeding

If the recommended approach is not adopted, there will be critical impacts to the SNG LRT project and to the planned growth in the City Centre, 104 Avenue corridor and Guildford Town Centre, which includes:

- An alternative corridor for the SNG LRT Early Work water main relocation will be required. The delays in designing a new alignment may create challenges in meeting the December 2018 PTIF funding deadline;
- Significant delays and queues will be experienced along 104 Avenue for the 2023 opening day of SNG LRT project; and
- An inadequate transportation network for the long term population and employment growth planned for the City Centre, 104 Avenue corridor and Guildford Town Centre plans.

Next Steps

It is understood that moving forward with the project as recommended may be perceived negatively by some residents who opposed the Bylaw amendments. In order to effectively communicate the rationale of the Bylaw amendment, the benefits of the property acquisition mitigation strategy and the planned investments in Hawthorne Rotary Park, staff will continue to highlight and communicate the mitigation strategy which includes:

- Increasing the size of the Park by acquiring approximately 5 acres of compensation lands for the Park, bringing the total of replacement land in excess of the removal for road purposes resulting in a net increase in the size of the Park;
- Details of the nature of these acquisitions in terms of net increase of natural area and protection of trees; and
- Undertaking the Hawthorne Rotary Park Master Plan and significant investment of \$3 million being made for additional amenities and enhancements to Hawthorne Rotary Park.

Timing for the 105 Avenue Corridor Project

In order to maintain project deadlines for completion of the SNG LRT Early Works utility relocations by the end of 2018 and the opening of the road before major SNG LRT construction on 104 Avenue, it is critical to proceed with the implementation of the 105 Avenue corridor.

Staff will investigate construction sequencing opportunities and delivery methods which will allow the majority of the Phase 1 roadwork and improvements in Hawthorne Rotary Park, including the redevelopment of the waterpark, playground washroom and parking lot, to be completed as early in 2018 as possible.

DEPARTMENTAL REVIEW

Parks, Recreation & Culture staff have been consulted on the removal of the amendment to the Bylaw and understand its necessity to achieve broader City objectives. There is support for the Engineering Department's commitment to acquiring additional properties to achieve a net increase in the area of Hawthorne Rotary Park and the opportunities to enhance the Park through the Master Plan process and project delivery.

CONCLUSION

Due to the critical importance of the 105 Avenue corridor project, the Engineering Department and Parks, Recreation & Culture Department are recommending that Council proceed bring forward the final readings of the Removal of Park Reservation Bylaw, as the approval of the electors has been obtained. The removal of the Park Reservation Bylaw will allow the City to proceed with SNG LRT Early Works utility relocations and with the majority of the 105 Avenue corridor project as presently planned and include initial improvements to Hawthorne Rotary Park as part of the City's mitigation plans.

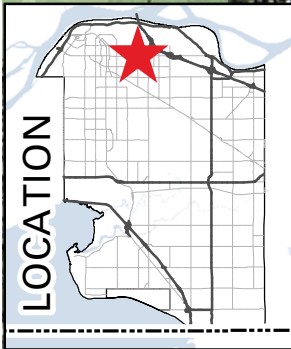
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Laurie Cavan
General Manager,
Parks, Recreation & Culture

FS/DM/cc

Appendix "I" – 105 Avenue General Alignment
Appendix "II" – 1986 OCP 105 Avenue Alignment
Appendix "III" - 105 Avenue Corridor Alignment through Hawthorne Rotary Park
Appendix "IV" – Hawthorne Rotary Park Initial Improvements Renderings
Appendix "V" – 105 Avenue Corridor Alignment through Hjorth Road Elementary School
Appendix "VI" - Hjorth Road Elementary School Playfield Relocation Rendering
Appendix "VII" – Properties Included in the Portion of Hawthorne Park, Park Reserve By-law,
1979, No. 5812

AERIAL PHOTOGRAPH OF SITE



LEGEND

- 105 Avenue Corridor Project
- Parks

Produced by GIS Section: 02-Nov-2017, P205934

Date of Aerial Photograph: March 30, 2016

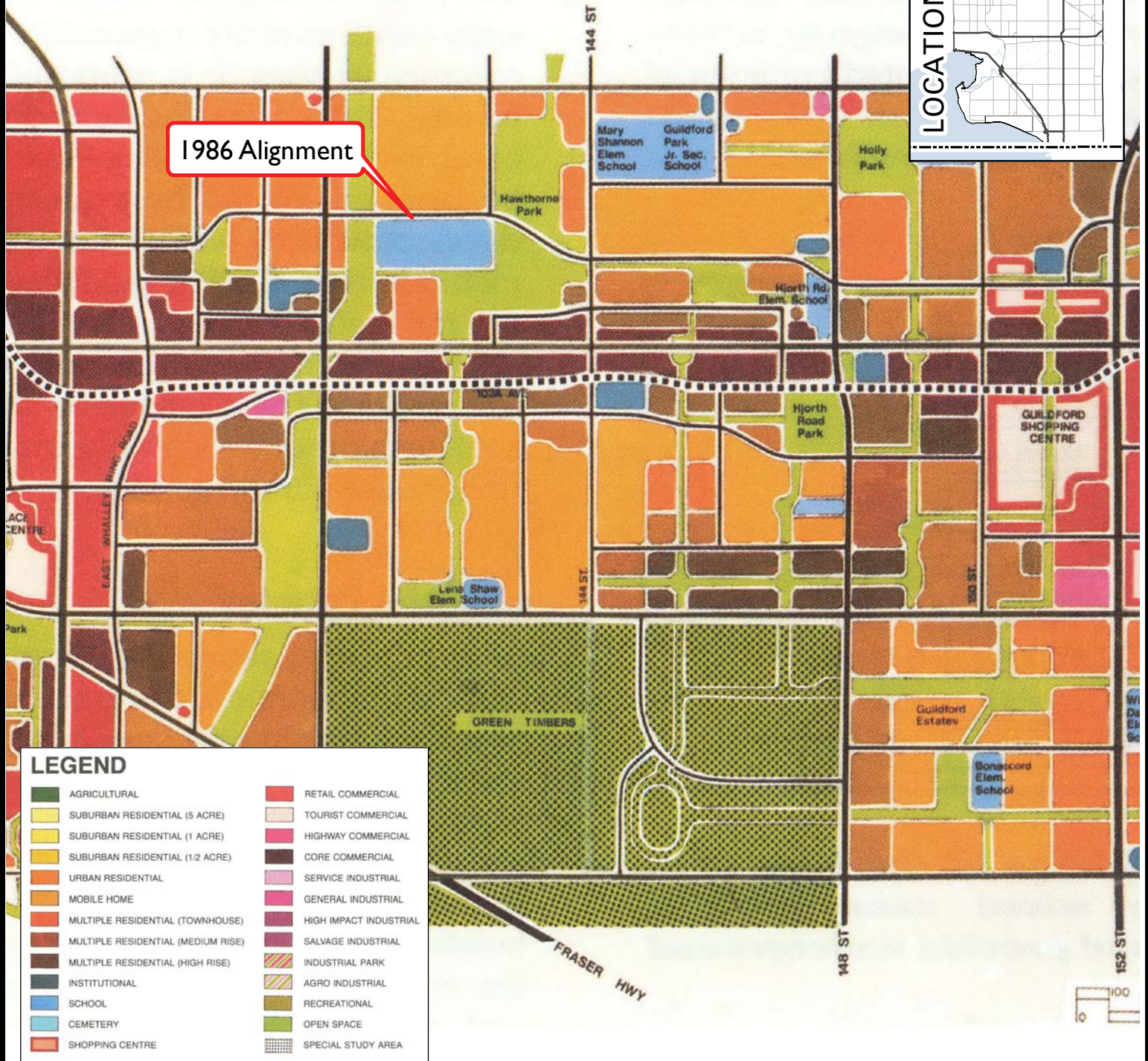
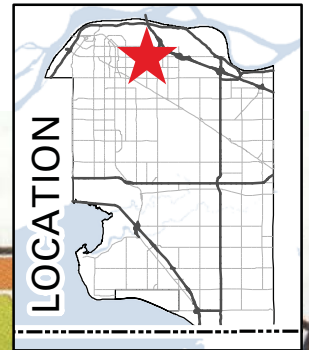
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105 Avenue Corridor Project

ENGINEERING DEPARTMENT



LEGEND

	AGRICULTURAL		RETAIL COMMERCIAL
	SUBURBAN RESIDENTIAL (5 ACRE)		TOURIST COMMERCIAL
	SUBURBAN RESIDENTIAL (1 ACRE)		HIGHWAY COMMERCIAL
	SUBURBAN RESIDENTIAL (1/2 ACRE)		CORE COMMERCIAL
	URBAN RESIDENTIAL		SERVICE INDUSTRIAL
	MOBILE HOME		GENERAL INDUSTRIAL
	MULTIPLE RESIDENTIAL (TOWNHOUSE)		HIGH IMPACT INDUSTRIAL
	MULTIPLE RESIDENTIAL (MEDIUM RISE)		SALVAGE INDUSTRIAL
	MULTIPLE RESIDENTIAL (HIGH RISE)		INDUSTRIAL PARK
	INSTITUTIONAL		AGRO INDUSTRIAL
	SCHOOL		RECREATIONAL
	CEMETERY		OPEN SPACE
	SHOPPING CENTRE		SPECIAL STUDY AREA

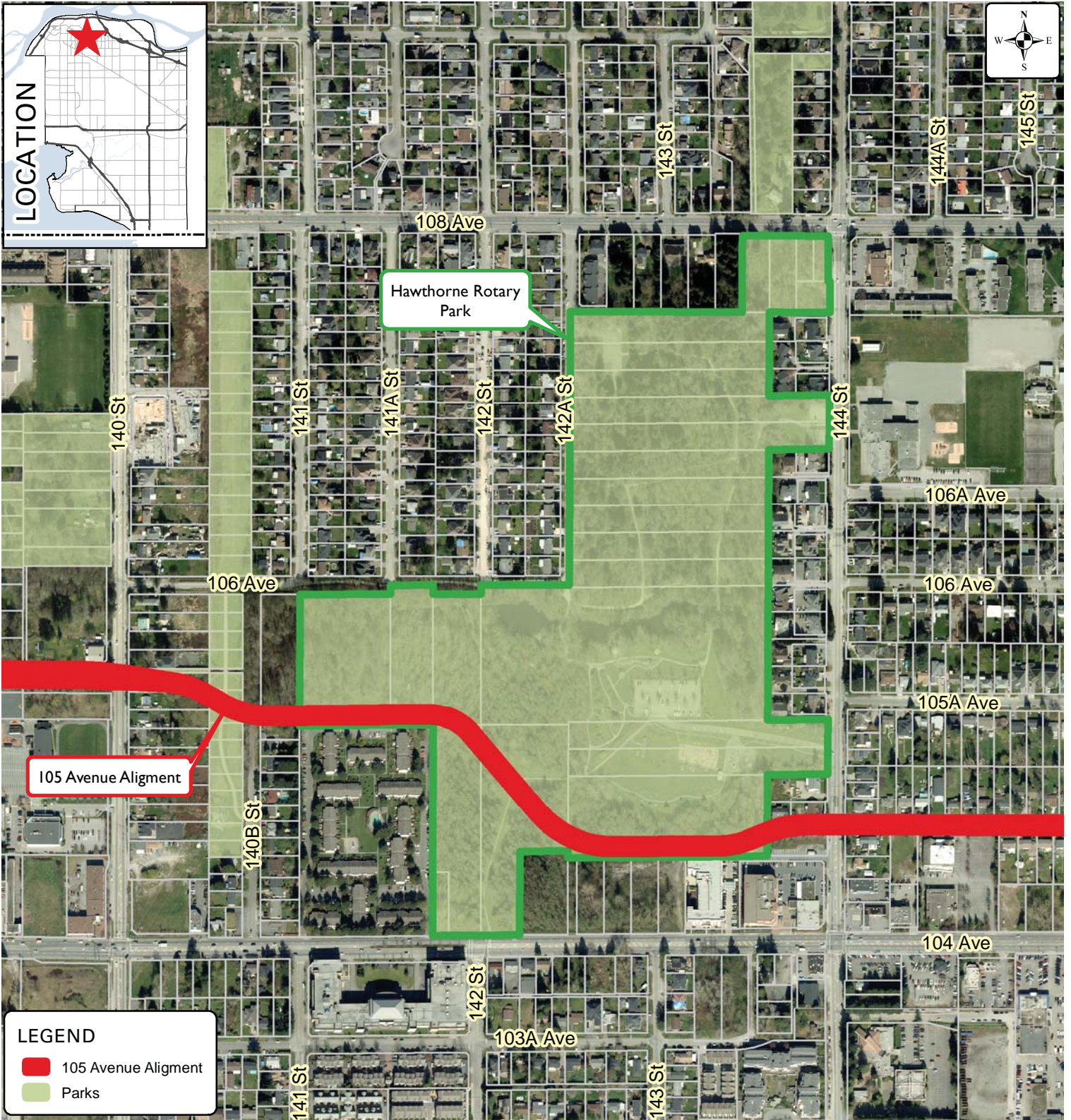
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1986 OCP Whalley - Guildford
Town Centre Land Use Plan

ENGINEERING
DEPARTMENT

AERIAL PHOTOGRAPH OF SITE



Produced by GIS Section: 30-Oct-2017, P205934

Date of Aerial Photograph: March 30, 2016

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105 Avenue Corridor Alignment through Hawthorne Rotary Park

ENGINEERING
DEPARTMENT

CONCEPTUAL
DRAFT



NEW OPEN LAWN AREA REPLACING
EXISTING DRIVEWAY AND PARKING LOT.

NEW WALKWAY

NEW OPEN LAWN AREA

PROPOSED TRAIL
REALIGNMENT

NEW PARK ENTRY &
GATEWAY FEATURE

NEW SEDIMENT POND

NEW BRIDGE

PERIMETER FENCE TO PROTECT
ENVIRONMENTALLY SENSITIVE AREAS

DECK OVERLOOKING POND

NEW TRAIL PLAZA

BRIDGE WITH WEIR STRUCTURE

VIEW 1

NEW WETLAND

EXISTING
SPLASH PAD

BIOSWALE FROM
SPLASH PAD AREA

DROP OFF AREA

PARKING LOT
BIOSWALE

144 St

DROP OFF AREA

NEW PARK ENTRY &
GATEWAY PLAZA

104a Ave

VIEW 2

PEDESTRIAN
CROSSING

FISH SUPPORTING OFF CHANNEL POND

ROADWAY BIOSWALE

NEW PARK ENTRY &
GATEWAY FEATURE

PEDESTRIAN
CROSSING

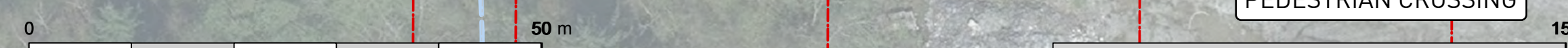
FOREBAY SEDIMENT POND

ROADWAY BIOSWALE INLET TO FOREBAY

ROADWAY BIOSWALE

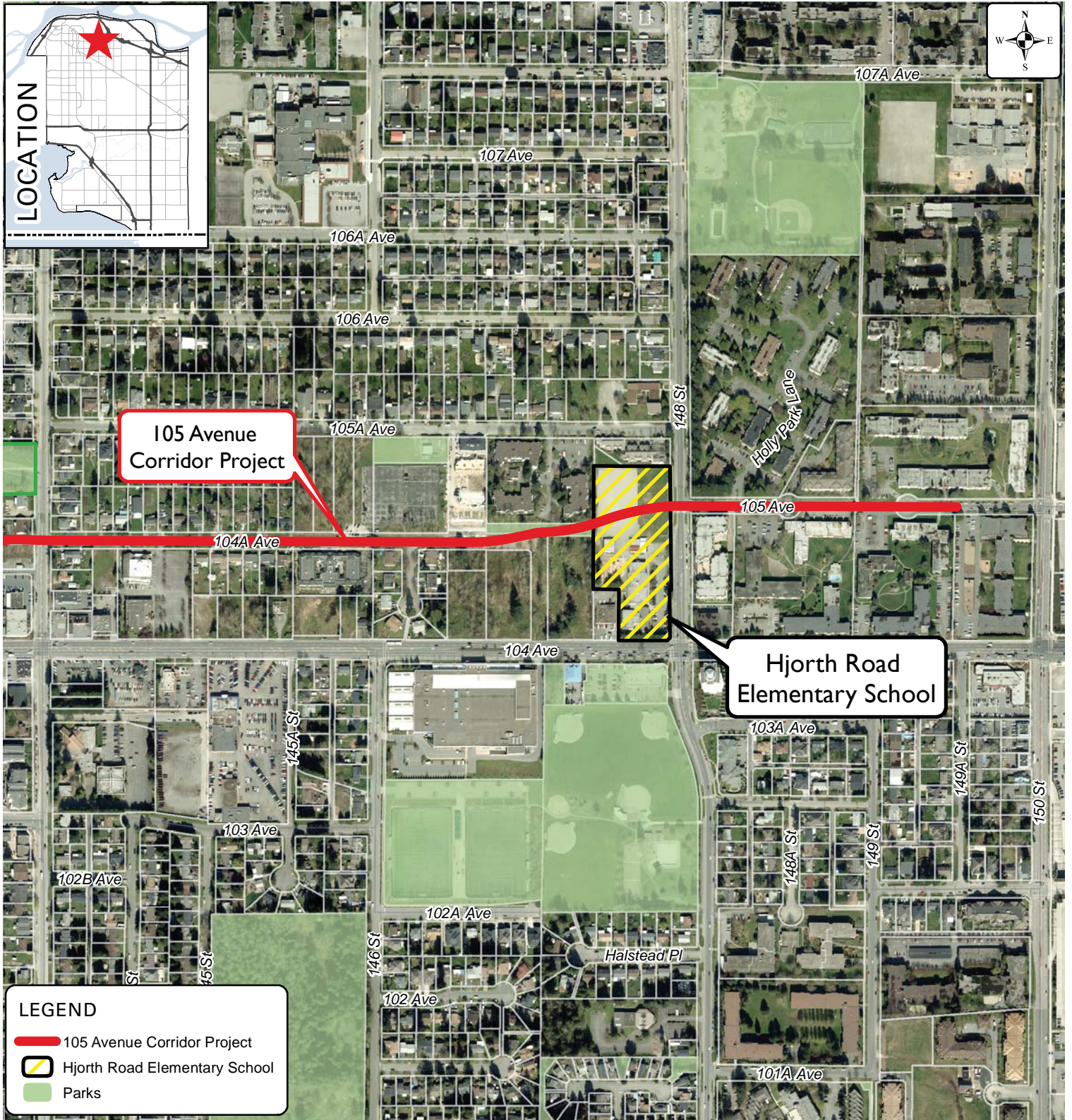
NEW TREES

NEW TRAIL THROUGH
RIPARIAN FOREST



11+100

AERIAL PHOTOGRAPH OF SITE



Produced by GIS Section: 30-Oct-2017, P205934

Date of Aerial Photograph: March 30, 2016

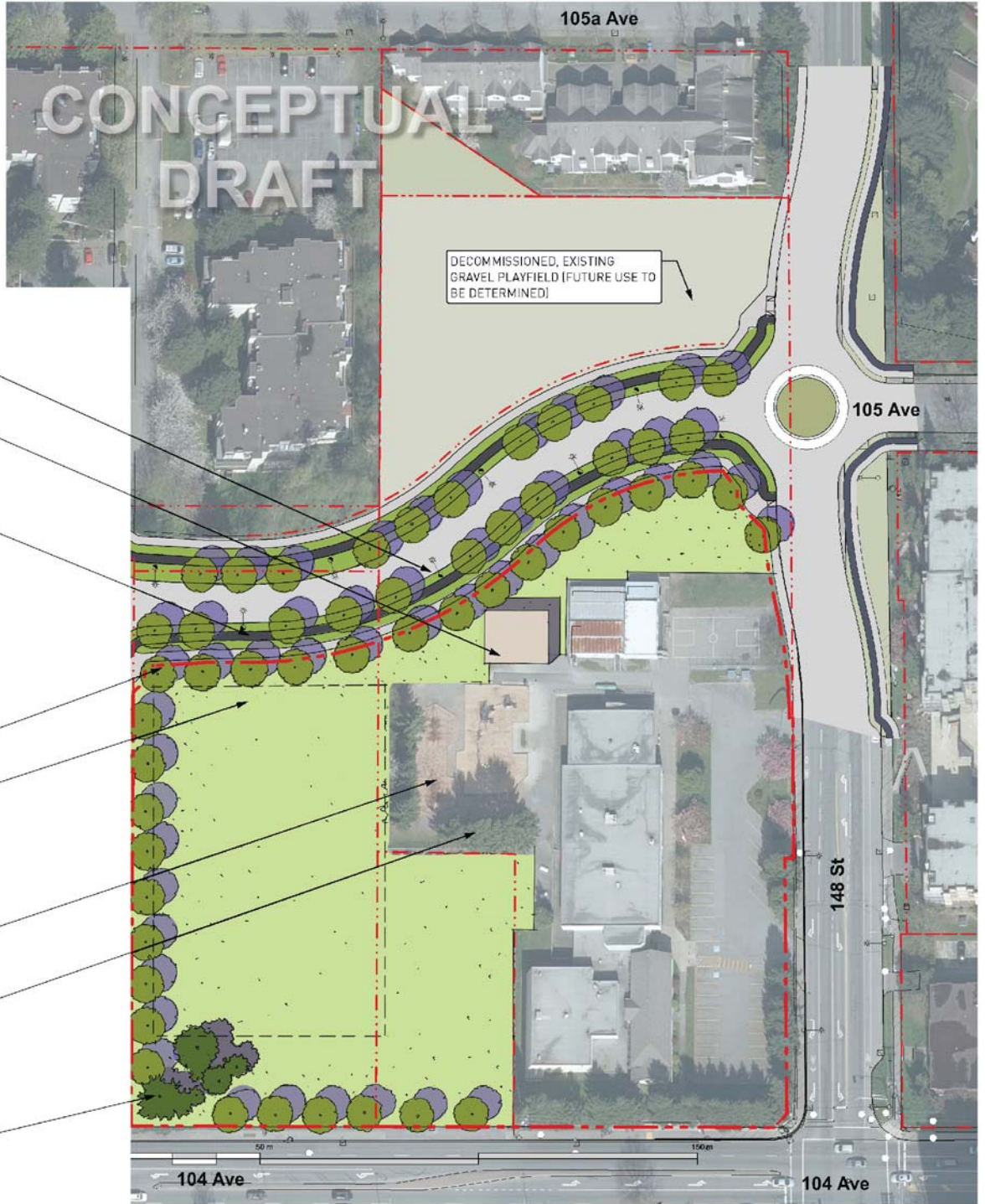
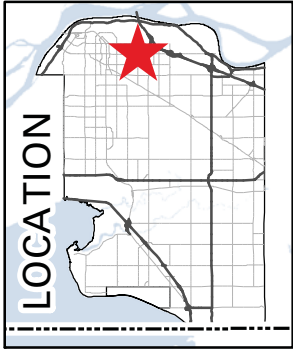
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105 Avenue Corridor Alignment
through Hjorth Road
Elementary School

ENGINEERING
DEPARTMENT

AERIAL PHOTOGRAPH OF SITE APPENDIX "VI"



NEW, ENHANCED STUDENT PICK-UP AND DROP-OFF AREAS, INCREASING ROAD SAFETY

RELOCATED PORTABLE, IF REQUIRED

NEW, SEPARATED WALKING/CYCLING ROUTE, PROVIDING SAFER RIDING & IMPROVED PEDESTRIAN CONNECTIVITY

BOULEVARD TREES SURROUNDING SCHOOL PERIMETER

PREFERRED LOCATION FOR NEW, RELOCATED PLAYFIELD WITH DIRECT ACCESS AND IMPROVED CONDITIONS

EXISTING PLAYGROUND UNTOUCHED

EXISTING TREES TO BE RETAINED

EXISTING TREES TO BE RETAINED WITH OPEN LAWN UNDERSTORY

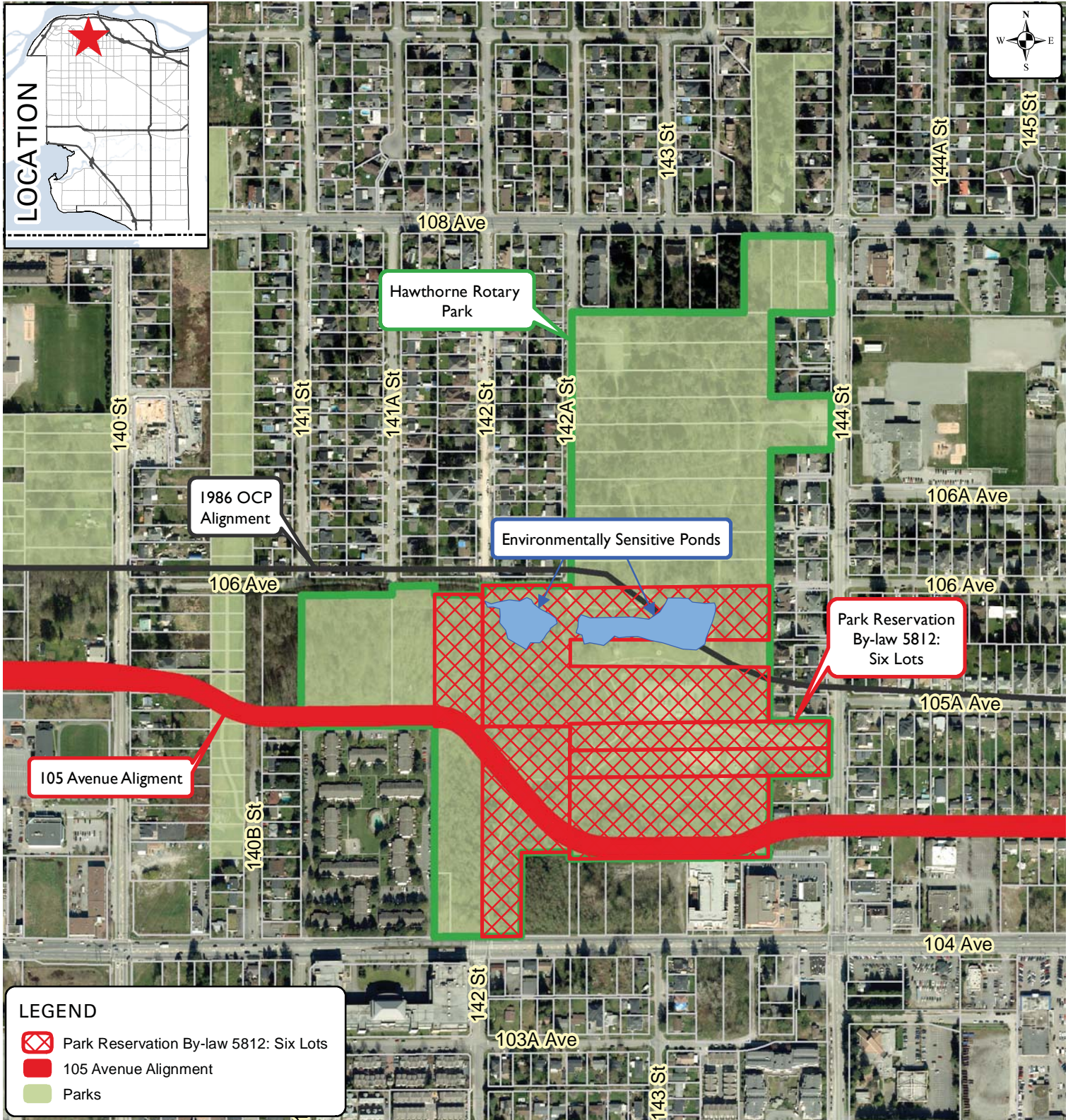
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Hjorth Road Elementary School Playfield Relocation Rendering

ENGINEERING DEPARTMENT

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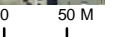


LEGEND

-  Park Reservation By-law 5812: Six Lots
-  105 Avenue Alignment
-  Parks

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Date of Aerial Photograph: March 30, 2016

Scale: 1:6,000 



Properties Included in the Portion of Hawthorne Park, Park Reserve By-law, 1979, No. 5812

ENGINEERING DEPARTMENT