

City of Surrey
PLANNING & DEVELOPMENT REPORT

Application No.: 7920-0285-00

Planning Report Date: June 27, 2022

PROPOSAL:

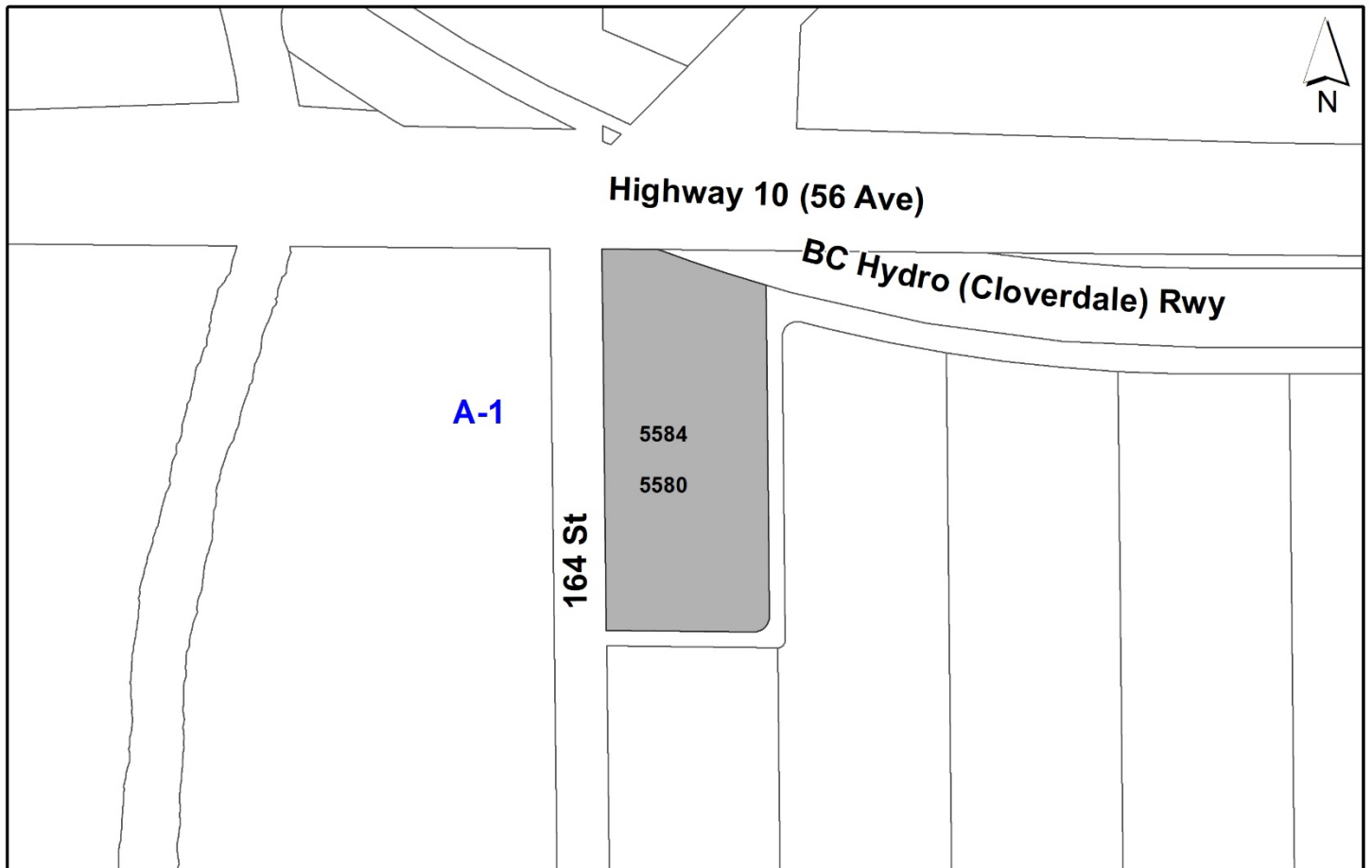
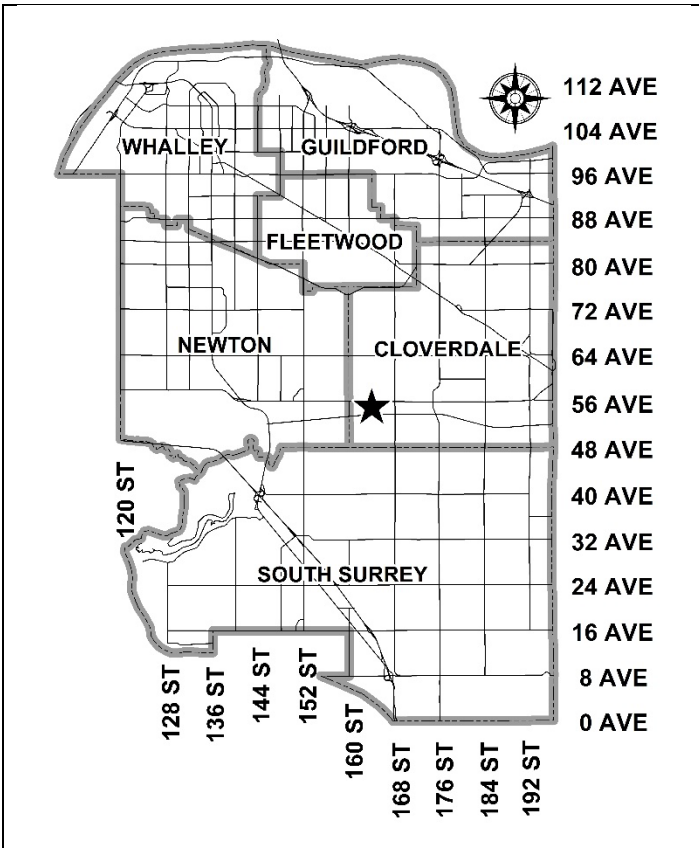
- **Development Variance Permit**

to permit the development of a ferrous chloride facility on the existing Cloverdale Pump Station.

LOCATION: 5580 - 164 Street
(5584 - 164 Street)

ZONING: A-1

OCP DESIGNATION: Agricultural



RECOMMENDATION SUMMARY

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

DEVIATION FROM PLANS, POLICIES OR REGULATIONS

- Proposing to reduce the rear (south) yard and street side (west) yard setback in the A-1 Zone.

RATIONALE OF RECOMMENDATION

- The proposed variance to setbacks is to support expansion and improvements to Metro Vancouver's infrastructure (pump station).
- The applicant has explored alternate locations and the proposed location was the only feasible location based on operational requirements.
- The proposed ferrous chloride facility complies with the previous ALC decision from June 23, 2003, for a non-farm use which allowed for the original pump station.

RECOMMENDATION

The Planning & Development Department recommends that:

1. Council approve Development Variance Permit No. 7920-0285-00 (Appendix II) varying the following, to proceed to Public Notification:
 - (a) to reduce the minimum rear (south) yard setback of the A-1 Zone from 15 metres to 1.2 metres to the ferrous chloride building face; and
 - (b) to reduce the minimum street side (west) yard setback of the A-1 Zone from 30 metres to 10 metres to the ferrous chloride building face.

SITE CONTEXT & BACKGROUND

Direction	Existing Use	OCP Designation	Existing Zone
Subject Site	Metro Vancouver's Cloverdale pump station.	Agricultural	A-1
North (Across Highway No. 10):	Agricultural lots.	Agricultural	A-1
East (Across unopened lane):	Vacant agricultural lot.	Agricultural	A-1
South (Across unopened lane):	Agricultural lot with single family dwelling.	Agricultural	A-1
West (Across 164 Street):	Agricultural lot with single family dwelling.	Agricultural	A-1

DEVELOPMENT PROPOSAL

Planning Considerations

- The applicant is proposing a Development Variance Permit to permit the addition of a ferrous chloride facility to the southwest of the existing Metro Vancouver Sanitary overflow tank. Ferrous chloride is used to prevent odors. The applicant has explored alternate locations on site for the proposed facility and the proposed location is the only area that is feasible from an operational standpoint.

Referrals

Engineering: The Engineering Department has no objection to the project.

Agriculture, Environment, and Investment Advisory Committee (AEIAC):

The Committee expressed concerns about the chemical facility's proximity to an existing waterway and implementation of a proper containment plan.

The applicant has provided staff a summary of their containment plans that includes a double containment system.

Context & Background

Background

- The existing Metro Vancouver pump station on the subject site received approval from the Agricultural Land Commission (ALC) on June 23, 2003 as a non-farm use.
- In 1995, Metro Vancouver applied for a Development Variance Permit (DVP), subsequently approved by Council, to construct the existing pump station (Development Application No. 7995-0112-00) and in 2003 (Development Application No. 7903-0173-00) a second DVP was approved to expand the facility to include an overflow facility.

Site Description

- The subject site is addressed as 5580 and 5584 - 164 Street and is approximately 8,984 square metres in area.
- The property is within the Agricultural Land Reserve (ALR) and is designated Agricultural in the Official Community Plan (OCP) and zoned "General Agricultural Zone (A-1)".
- The site is located in the 200-year floodplain and the applicant has proposed a Flood Construction Level (FCL) of 3.22 metres which is above the 2.4 metre FCL required.
- There is an existing Metro Vancouver Cloverdale Pump Station currently on the subject property.
- Surrounding lands to the north, west, east, and south are also designated Agricultural in the OCP and lands to the west, east and south are located within the ALR.

Watercourses

- The applicant has engaged a Qualified Environmental Professional (QEP) to assess the watercourses on the site. The proposed ferrous chloride chemical facility will be located 10 metres away from the red-coded ditch along the east side of 164 Street. The proposed development is exempt from a Sensitive Ecosystem Development Permit as the proposed addition is considered public utility works. The applicant is proposing planting improvements along the eastern side of the watercourse.
- The applicant's QEP watercourse assessment (see Appendix III for summary) determined the following:

- Watercourse 1A along the east side of 164 Street was determined to be a red-coded Class A ditch;
 - The watercourse along the west side of 164 Street was determined to not be a stream;
 - A drainage feature in the northeastern portion of the site was determined to not be a stream; and
 - Watercourse 2, an east-west swale along the southern portion of the site, was determined to not be a stream.
- The applicant has already received both Provincial and Federal environmental approvals for the project.

Transportation Considerations

- To facilitate truck maneuvering to access the site the applicant will be required to widen the pavement width of 164 Street. The site will be accessed by a large tanker truck approximately once a week.
- Due to the length of trucks accessing the site, the applicant will need to widen 164 Street pavement width by approximately 5 metres.
- The unopened lane to the south of the site may be constructed in the future as neighbouring properties develop.

Sustainability Considerations

- The applicant has met all of the typical sustainable development criteria, as indicated in the Sustainable Development Checklist.

POLICY & BY-LAW CONSIDERATIONS

Agricultural Land Commission (ALC)

- The proposed ferrous chloride chemical facility complies with the previous ALC decision from June 23, 2003, for a non-farm use which allowed for the original pump station.

Regional Growth Strategy

- The proposal is considered infrastructure related to Metro Vancouver service delivery which is allowed within any Metro Vancouver Regional Growth Strategy (RGS) designation. The site is designated Agricultural in the Metro Vancouver Regional Growth Strategy (RGS). This designation is intended for agricultural uses, facilities and supporting services with an emphasis on food production.

Official Community Plan

Land Use Designation

- The proposal is considered infrastructure which is allowed within any designation of the OCP. The proposal complies with the Agricultural designation in the Official Community Plan (OCP).

Setback Variances

- The applicant is requesting the following variances:
 - (a) to reduce the minimum rear (south) yard setback of the A-1 Zone from 15 metres to 1.2 metres to the ferrous chloride building face; and
 - (b) to reduce the minimum side (west) yard setback of the A-1 Zone from 30 metres to 10 metres to the ferrous chloride building face.
- The applicant has worked with staff in both Transportation and Planning to explore alternate siting locations and were unable to find alternate locations for the proposed ferrous chloride chemical facility.
- Due the location of the existing tank, which is comprised of a large underground tank, siting of the proposed ferrous chloride chemical facility is limited to the southwest corner.
- To facilitate truck maneuvering to access the site the applicant will be required to widen the pavement width of 164 Street. The site will be accessed by a large tanker truck approximately once a week.
- Staff support the requested variances to proceed for consideration.

DEVELOPMENT PERMITS

- As the proposed ferrous chloride chemical facility is considered infrastructure, no Development Permits are required.

TREES

- No trees are proposed to be removed.

INFORMATION ATTACHED TO THIS REPORT

The following information is attached to this Report:

Appendix I.	Survey Plan, Proposed Subdivision Layout, Site Plan and Building Elevations,
Appendix II	Development Variance Permit No. 7920-0285-00
Appendix III	Summary of Watercourses
Appendix IV	Excerpt from AEIAC Draft Minutes - June 8, 2022

approved by Ron Gill

Jeff Arason
General Manager
Planning and Development

JKS/cm



metro vancouver

4730 Kingsway, Burnaby, BC, Canada V5H 0C6 604-432-6200

Appendix I

Greater Vancouver Regional District • Greater Vancouver Water District

Greater Vancouver Sewerage and Drainage District • Greater Vancouver Housing Corporation

www.metrovancouver.org

GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT

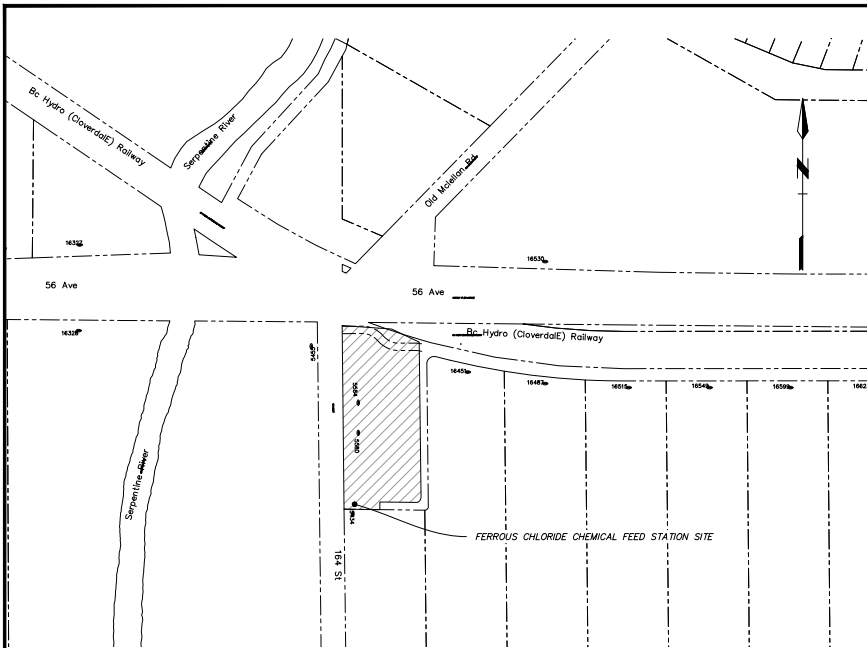
PRELIMINARY DESIGN REVIEW

Tender No. -----

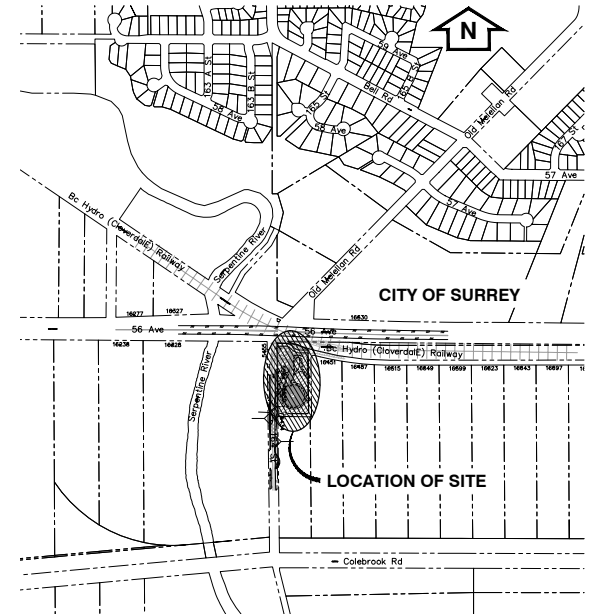
**Cloverdale Pump Station
Ferrous Chloride
Chemical Feed Station**

July 2021

wsp North Vancouver Office
604-990-4300
210-889 Harbourside Drive
North Vancouver BC
V7P 3S1, Canada



KEY PLAN
HORIZ. N.T.S.



LOCATION PLAN
N.T.S.

DRAWING INDEX

SHEET NO	DRAWING NO	DRAWING TITLE
1	G-001	COVER SHEET
2	G-001	DRAWING INDEX, AREA PLAN AND LOCATION PLAN
3	C-002	GENERAL SITE PLAN
4	C-003	SECTIONS
5	C-004	CHEMICAL FEED PIPE PROFILE
6	C-100	ROAD WIDENING - SITE PLAN
7	C-101	ROAD WIDENING - TYP. SECTIONS AND DETAILS
8	P-10-001	PIPING & INSTRUMENTATION DIAGRAM
9	P-10-002	PIPING & INSTRUMENTATION DIAGRAM
10	P-10-003	PIPING & INSTRUMENTATION DIAGRAM
11	P-10-004	PIPING & INSTRUMENTATION DIAGRAM
12	A-001	LOWER & UPPER FLOOR PLANS
13	A-002	BUILDING SECTIONS
14	A-003	BUILDING ELEVATIONS
15	A-004	BUILDING - 3D VIEWS
16	S-001	STRUCTURAL - GENERAL NOTES
17	S-002	STRUCTURAL - GENERAL NOTES 2
18	S-003	STRUCTURAL - GENERAL NOTES 3
19	S-004	STRUCTURAL - GENERAL NOTES 4
20	S-005	FOUNDATION PLAN
21	S-006	UPPER FLOOR AND ROOF FRAMING PLAN
22	S-007	TYPICAL DETAILS
23	S-008	SECTIONS AND DETAILS 1
24	S-009	SECTIONS AND DETAILS 2
25	S-010	SECTIONS AND DETAILS 3
26	E-001-02	SINGLE LINE DIAGRAM - POWER DISTRIBUTION - SCPP
27	E-PDP-XXXX-01	SINGLE LINE DIAGRAM - POWER DISTRIBUTION - SCPP
28	E-008-02	LAYOUT - POWER AND CONTROL PLAN - CONTROL BUILDING
29	E-ACP-812-10	SCHEMATIC AND WIRING DIAGRAM - PLC INTERCONNECTION DIAGRAM - SCPP-ACP-812



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Issue	Date	Des'n	Dr'n	Chkd	App'd	Description
P2	JUL 2021	OP	AJS	MW	TM	ISSUED FOR PRELIMINARY DESIGN REVIEW
P1	NOV 2020	BC	BWW	SL	BC	ISSUED FOR PRELIMINARY DESIGN REVIEW

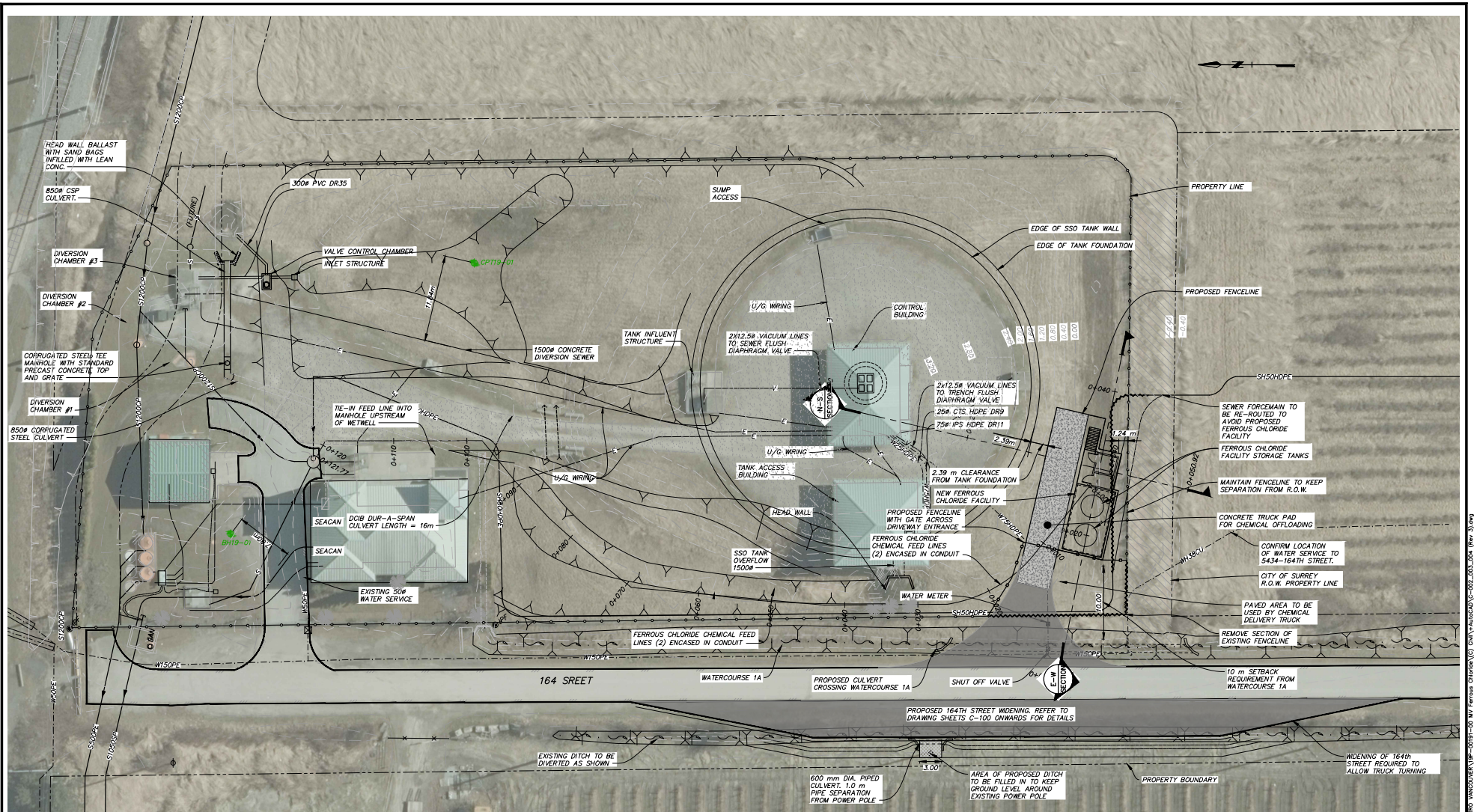
GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT

Design: BC	Drawn: RD	Checked: SL	Approved: TM	Manager: TM
CLOVERDALE PUMP STATION FERROUS CHLORIDE CHEMICAL FEED STATION				SCALE: N.T.S. DISTRICT FILE S-3149
DRAWING INDEX AREA PLAN & LOCATION PLAN				DRAWING NUMBER G-001

Professional Seal

Bar is 20mm On Original Drawing. If Not On This Sheet, Adjust Scales Accordingly.

SUPERSEDES PRINTS OF THIS DRAWING NUMBER WITH LETTERS PREVIOUS TO P2



PLAN
1:250

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P1	NOV 2020	OP	AIS	OP	CB	ISSUED FOR PRELIMINARY DESIGN REVIEW

Professional Seal

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GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT

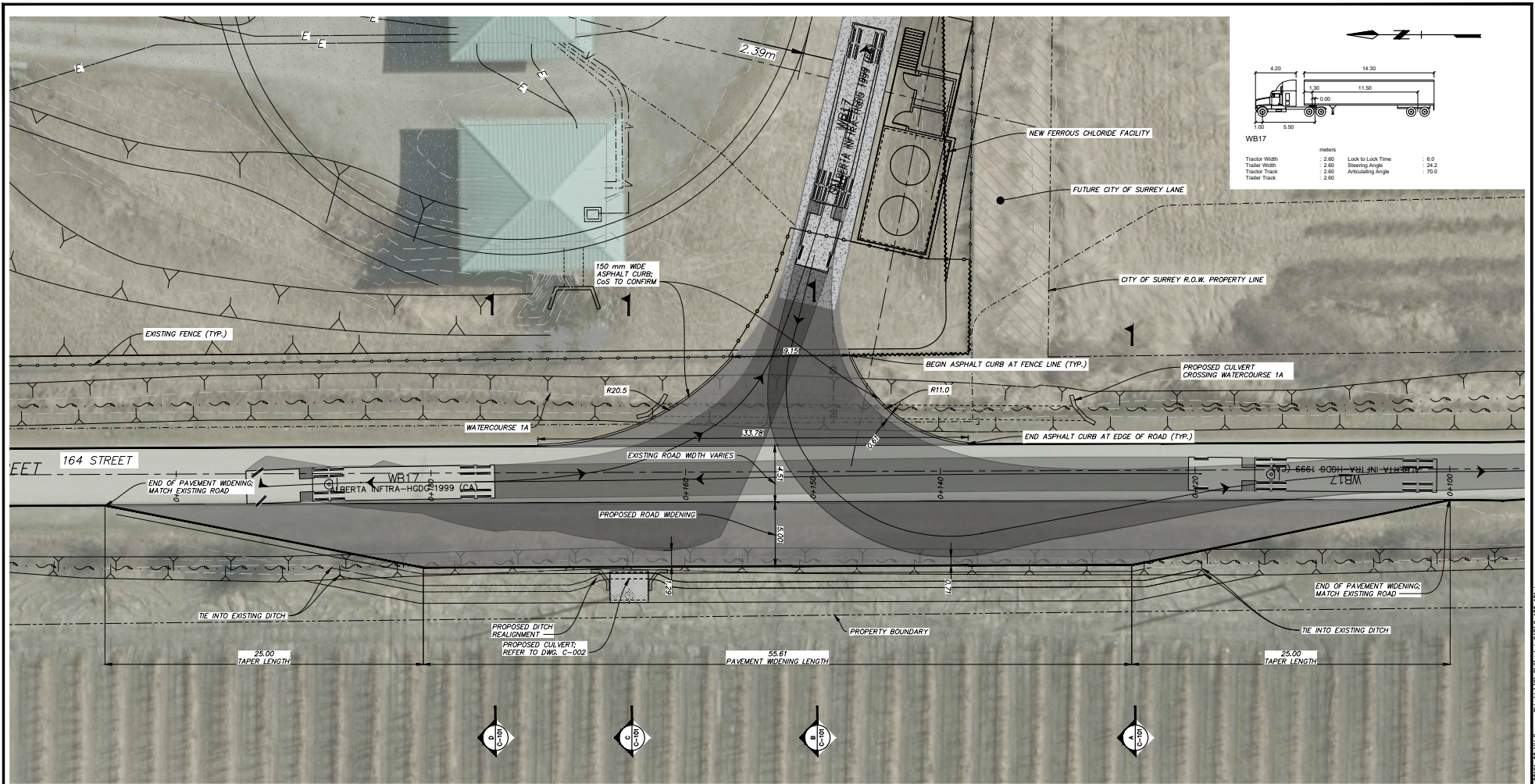
CLOVERDALE PUMP STATION
FERROUS CHLORIDE
CHEMICAL FEED STATION

GENERAL SITE PLAN

SCALE: 1:250
DISTRICT FILE S-3149

DRAWING NUMBER C-002

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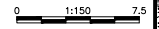


Tractor Width	: 2.60	Lock to Lock Time	: 6.0
Trailer Width	: 2.60	Shearing Angle	: 28.2
Tractor Track	: 2.60	Articulating Angle	: 70.0
Trailer Track	: 2.60		

LEGEND	
	ASPHALT PAVEMENT
	INBOUND TRUCK ROUTE (NB)
	OUTBOUND TRUCK ROUTE (SB)

**NOT FOR
CONSTRUCTION**

PLAN
1:250



- NOTES:
- ALL EXISTING UTILITIES SHALL BE PROTECTED UNLESS NOTED OTHERWISE.
 - TOPOGRAPHIC SURVEY AT 164 STREET PROVIDED BY METRO VANCOUVER DATED MARCH 24, 2021.
 - OFFSITE WORKS SHALL CONFORM TO LATEST EDITION OF CITY OF SURREY DESIGN CRITERIA MANUAL AND SUPPLEMENTARY MASTER MUNICIPAL CONSTRUCTION DOCUMENTS UNLESS NOTED OTHERWISE.
 - SEE TYPICAL SECTIONS AND DETAILS ON DWG. C-101.
 - REFER TO DWG. C-002 FOR DITCH AND CULVERT DETAILS.

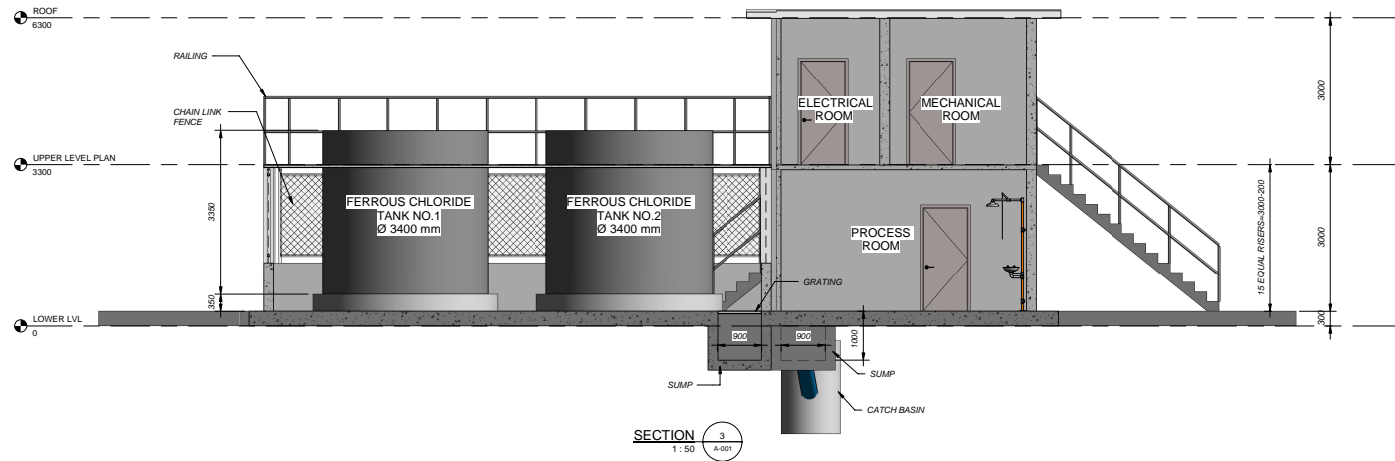
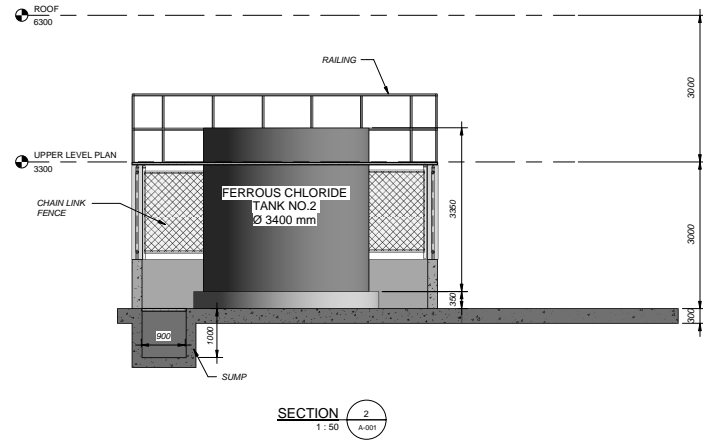
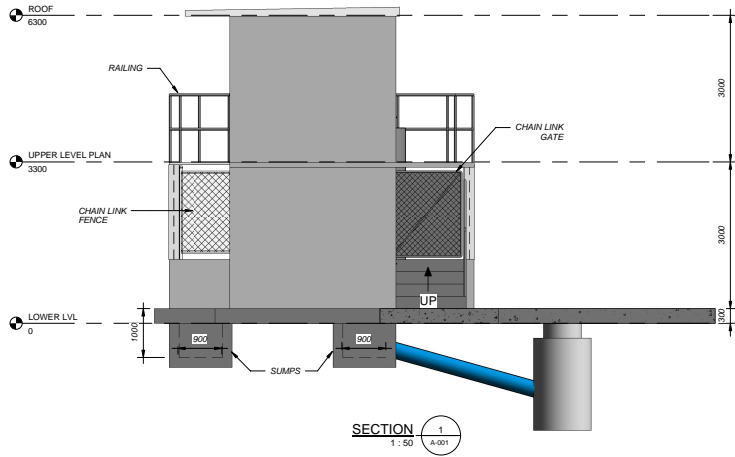
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Professional Seal						

Design: KR Drawn: KY Checked: MA		APPROVED Approved: TM Manager:		SCALE: 1:150 DISTRICT FILE S-3149 DRAWING NUMBER C-100
GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT CLOVERDALE PUMP STATION FERROUS CHLORIDE CHEMICAL FEED STATION ROAD WIDENING - SITE PLAN				SUPERSEDES PRINTS OF THIS DRAWING NUMBER WITH LETTERS PREVIOUS TO P1



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Issue	Date	Desn	Chkd	Appd	Description
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P1	NOV 2020	CB	RH	OP	ISSUED FOR PRELIMINARY DESIGN REVIEW

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GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT

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Drawn: RH
Checked: CB

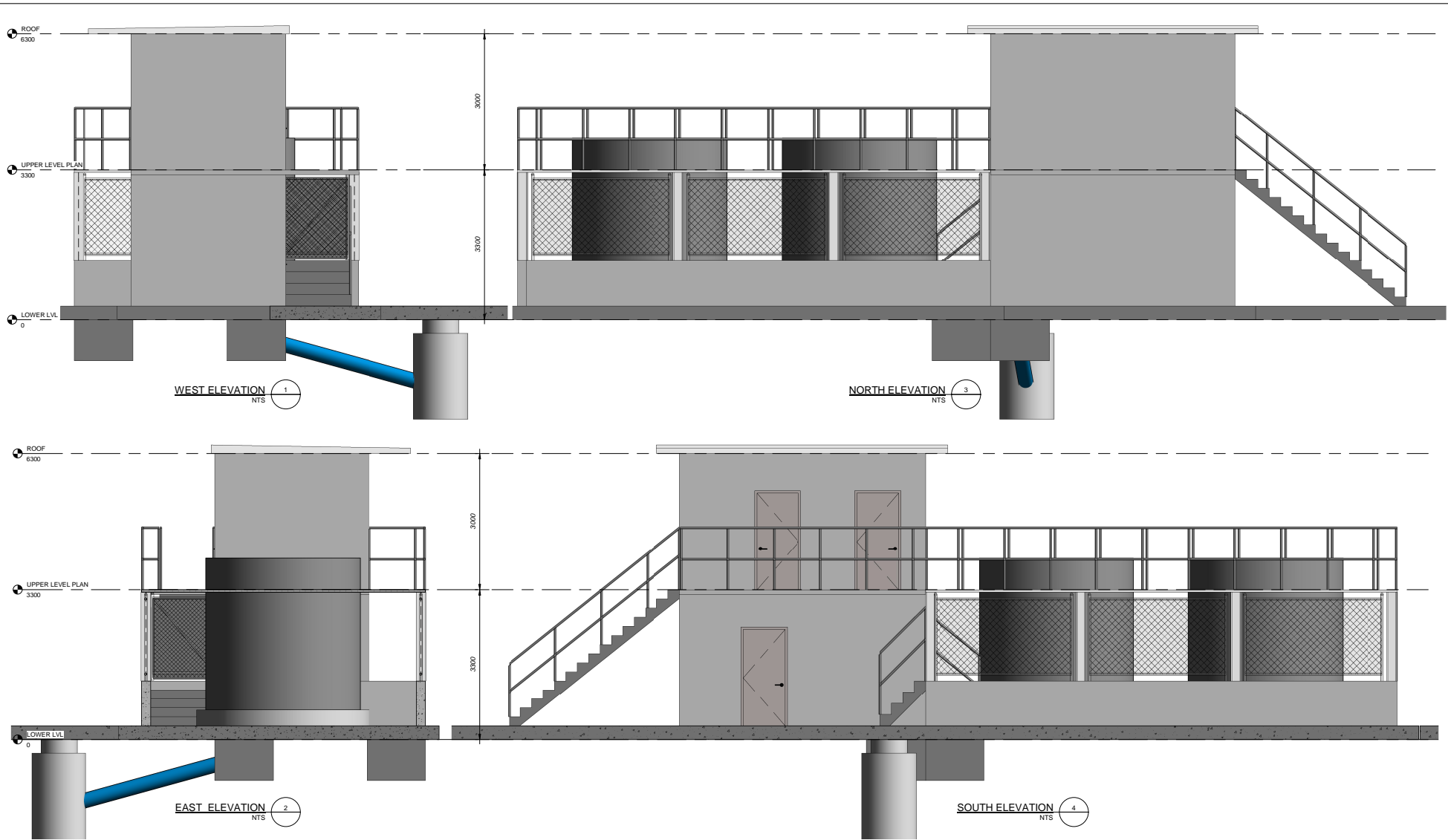
Approved:
Manager:

**CLOVERDALE PUMP STATION
FERROUS CHLORIDE
CHEMICAL FEED STATION**

BUILDING - SECTIONS

SCALE:
1:50
DISTRICT FILE
S-3149
DRAWING NUMBER
A-002

SURCEDES PRINTS OF THIS DOCUMENT CODE WITH LETTERS PREVIOUS TO P2



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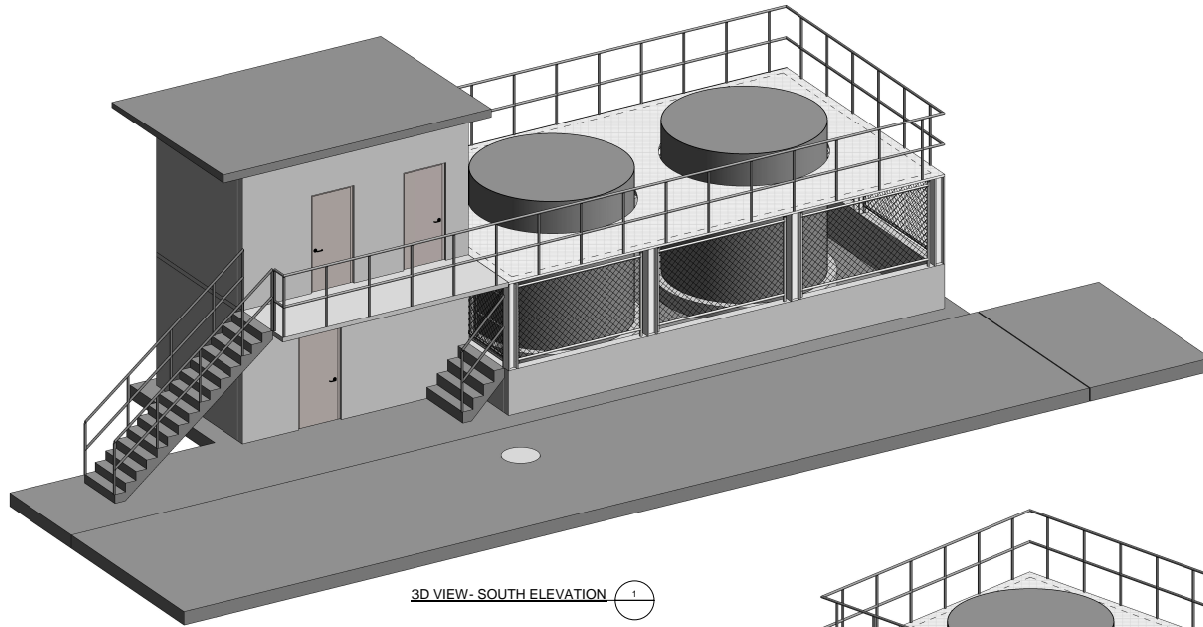
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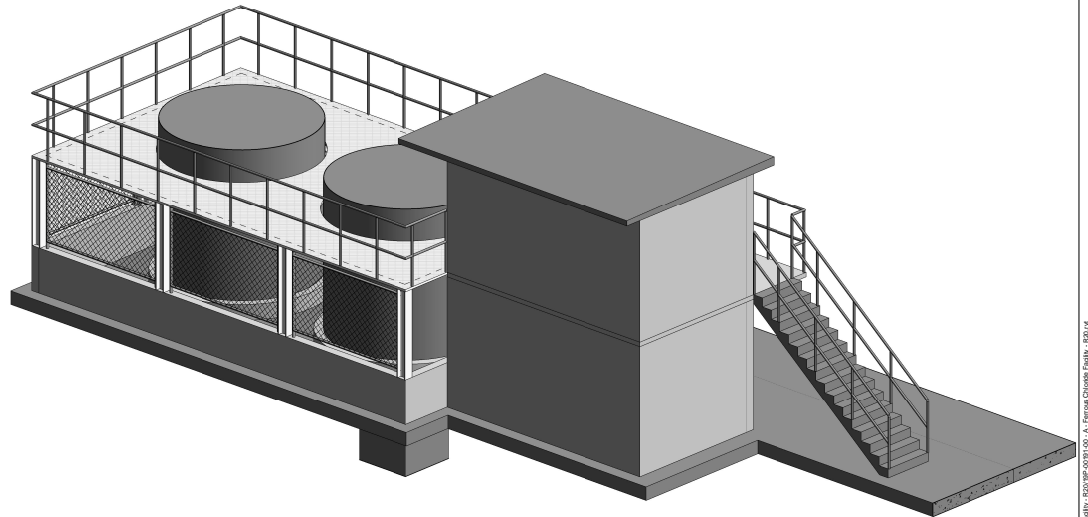
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P1	NOV 2020	CB	RH	OP	CB	ISSUED FOR PRELIMINARY DESIGN REVIEW

Design: CB Drawn: RH Checked: CB		SCALE: NTS DISTRICT FILE S-3149	
APPROVED: _____ Manager: _____		BUILDING - ELEVATIONS DRAWING NUMBER A-003	
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3D VIEW - SOUTH ELEVATION ①



3D VIEW - SECTION (NORTH ELEVATION) ②



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Professional Seal

Issue	Date	Desn	D'n	Chkd	Appd	Description
P2	JUL 2021	OP	VV	MW	TM	ISSUED FOR PRELIMINARY DESIGN REVIEW
P1	NOV 2020	CB	RH	OP	CB	ISSUED FOR PRELIMINARY DESIGN REVIEW

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GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT

**CLOVERDALE PUMP STATION
FERROUS CHLORIDE
CHEMICAL FEED STATION**

BUILDING - 3D VIEWS

SCALE:	DISTRICT FILE
	S-3149
DRAWING NUMBER	A-004

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CITY OF SURREY

(the "City")

DEVELOPMENT VARIANCE PERMIT

NO.: 7920-0285-00

Issued To:

(the "Owner")

Address of Owner:

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

Parcel Identifier: 027-913-643
Lot 1 Section 1 Township 2 New Westminster District Plan BCP40888

5580 - 164 Street

(the "Land")

3. Surrey Zoning By-law, 1993, No. 12000, as amended is varied as follows:
 - (a) In Section F.1 of Part 10 "General Agriculture Zone (A-1)", the minimum rear (south) yard setback is reduced from 15 metres to 1.2 metres to the building face of the ferrous chloride building; and
 - (b) In Section F.1 of Part 10 "General Agriculture Zone (A-1)", the minimum side (west) yard setback is reduced from 30 metres to 10 metres to the building face of the ferrous chloride building.
4. The siting of buildings and structures shall be in accordance with the drawings numbered 7920-0285-00(A) which are attached hereto and form part of this development variance permit.

5. This development variance permit applies to only that portion of the buildings and structures on the Land shown on Schedule A which is attached hereto and forms part of this development variance permit. This development variance permit does not apply to additions to, or replacement of, any of the existing buildings shown on attached Schedule A, which is attached hereto and forms part of this development variance permit.

6. The Land shall be developed strictly in accordance with the terms and conditions and provisions of this development variance permit.

7. This development variance permit shall lapse if the Owner does not substantially start any construction with respect to which this development variance permit is issued, within two (2) years after the date this development variance permit is issued.

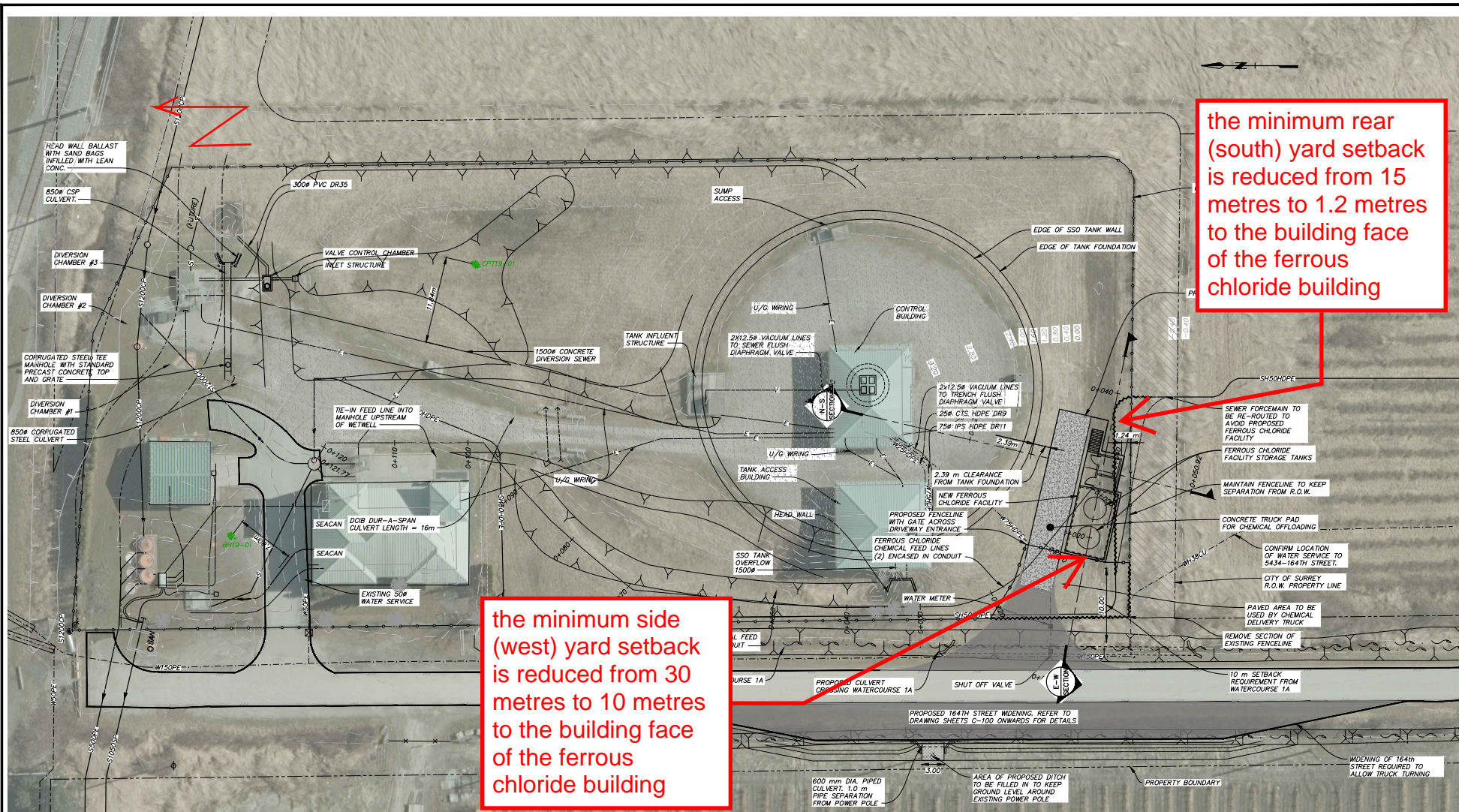
8. The terms of this development variance permit or any amendment to it, are binding on all persons who acquire an interest in the Land.

9. This development variance permit is not a building permit.

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

Mayor – Doug McCallum

City Clerk – Jennifer Ficocelli



the minimum rear (south) yard setback is reduced from 15 metres to 1.2 metres to the building face of the ferrous chloride building

the minimum side (west) yard setback is reduced from 30 metres to 10 metres to the building face of the ferrous chloride building

PLAN
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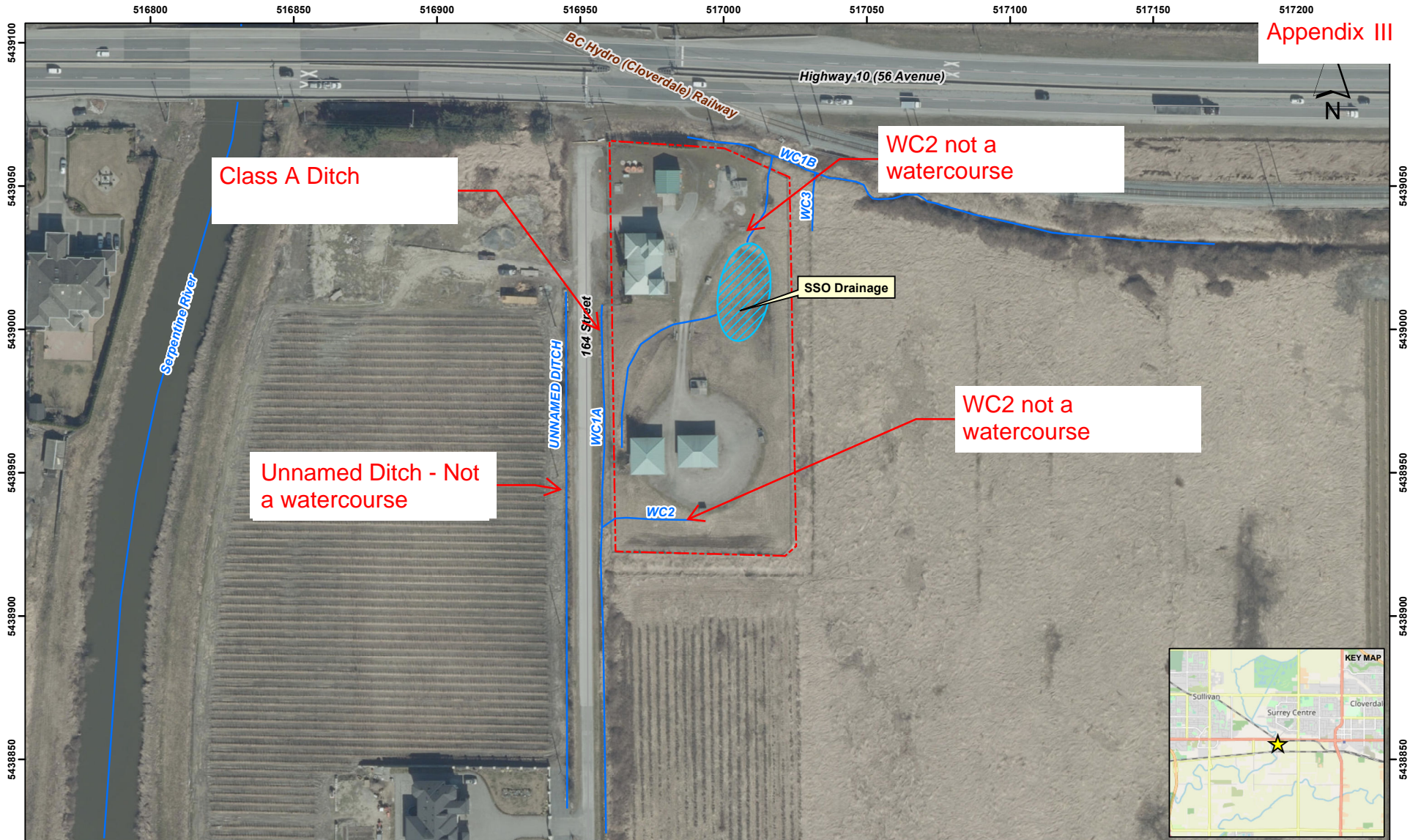
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Issue	Date	Drawn	Checked	App'd	Description	
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P1	NOV 2020	OP	AIS	OP	CB	ISSUED FOR PRELIMINARY DESIGN REVIEW

Design: OP Drawn: AIS Checked: MW		SCALE: 1:250
Approved: TM TM Manager		DISTRICT FILE S-3149
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GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT
CLOVERDALE PUMP STATION
FERROUS CHLORIDE
CHEMICAL FEED STATION

GENERAL SITE PLAN

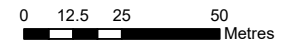
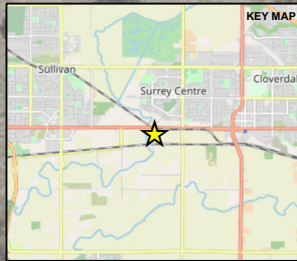


PROJECT NAME: Environmental Assessment
 CLIENT NAME: WSP
 PROJECT LOCATION: 5584 164 Street, Surrey, BC
 FIGURE NAME: Site Plan

PROJECT NO. 236502.001
 DATE: June 2021
 SCALE: 1:1,250
 FIGURE NO. 1

LEGEND
 - - - Approximate Site Boundary
 [Hatched Box] Pacific Water Shrew Critical Habitat
 [Blue Line] Watercourses

Service Layer Credits: Critical habitat data obtained from IMAP BC, 10/2/2019; Watercourse data adapted from COSMOS, 2021. © OpenStreetMap (and) contributors, CC-BY-SA



Coordinate System: WGS 1984 UTM Zone 10N
 Projection: Transverse Mercator
 Datum: WGS 1984

Agriculture, Environment and Investment Advisory Committee

C. NEW BUSINESS**1. Development Application 7920-0285-00**

Planner: John Koch-Schulte

Address: 5580 – 164 Street

John Koch-Schulte, Planner, summarized the report dated May 31, 2022, regarding Development Variance Permit 7920-0285-00 to reduce the rear (south) yard setback from 15 metres to 1.2 metres and the side (west) flanking yard setback from 30 metres to 10 metres to allow for the addition of a Ferrous Chloride (FCL) chemical facility to an existing Metro Vancouver Sanitary overflow tank. The following information was highlighted:

- The subject site is owned by Metro Vancouver. It is approximately 8,984 square metres, designated Agricultural in the Official Community Plan (OCP), zoned General Agricultural Zone (A-1), and located in the 200-year floodplain.
- There is currently an existing Metro Vancouver Cloverdale Pump Station on the subject property which was built in 1995. The site was later expanded to include non-farm use which allowed for an overflow facility in 2003.
- The proposed FCL facility is 3.22 metres and is above the 2.4 metre FCL required. The West 164 Street pavement width will be widened by approximately 5 metres to allow truck access and manoeuvres.
- There were no issues determined in the assessment of the watercourses on the site.

The chair recognized Ammar Mahdi, Senior Project Engineer, Metro Vancouver, present in the meeting. In response to questions from the Committee, Mr. Koch-Schulte and Mr. Mahdi provided the following information:

- The proposed development application is in response to the City of Surrey's request to move the FCL facility from the Surrey Works Yard to this location.
- Ferrous Chloride is a type of chemical injected into the sewer line systems in order to reduce odorous and poisonous gases.
- There is a double containment in place including the tanks, loading bay, and a pump to act as buffer between the sewer lines in consideration of the FCL facility being relocated to the Cloverdale site. The facility will be a 2-storey building that will house all sensitive equipment, including electricals, on the second level of the structure.

Staff noted the following comments:

- The Committee expressed concerns regarding the chemical facility's proximity to an existing waterway.
- The Committee commented on the implementation of a proper containment plan.