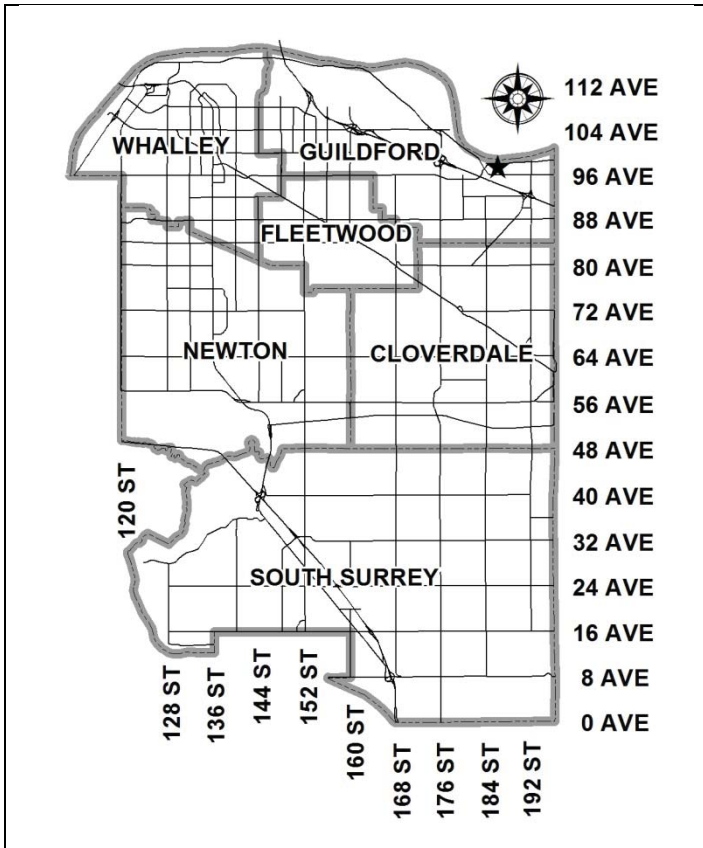


City of Surrey
PLANNING & DEVELOPMENT REPORT

File: 7916-0320-00

Planning Report Date: May 8, 2017



PROPOSAL:

- **Development Permit**

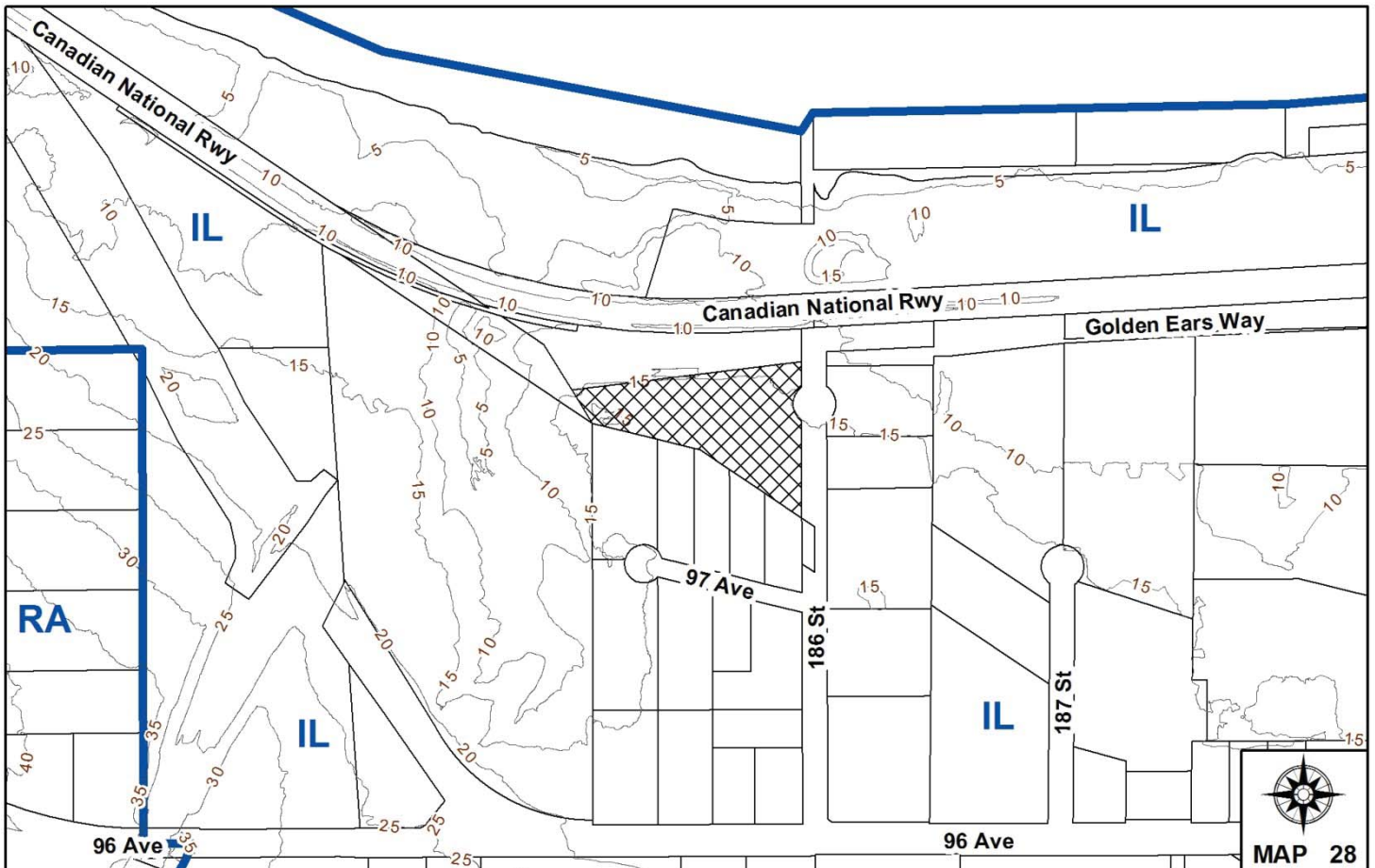
to permit the development of an industrial building in Port Kells.

LOCATION: 9781 - 186 Street

OWNER: 1042131 B.C. Ltd.

ZONING: IL

OCP DESIGNATION: Industrial



RECOMMENDATION SUMMARY

- Approval to draft Development Permit.

DEVIATION FROM PLANS, POLICIES OR REGULATIONS

- None.

RATIONALE OF RECOMMENDATION

- Complies with the Industrial designation in the OCP.
- The proposed building has been sited along the north property line to avoid a Kinder Morgan right-of-way that runs through the south portion of the lot.
- The proposed building incorporates high quality materials and design, which is appropriate as Golden Ears Way is considered a gateway location into the City.
- The applicant has created a high quality landscaped interface between the Golden Ears Greenway and the proposed building.
- The applicant, Hiway Refrigeration, installs and maintains refrigeration units in semi-trailer units as well as other types of cargo vans and trucks.
- It is the applicant's intent to relocate their business from Port Coquitlam to this site.

RECOMMENDATION

The Planning & Development Department recommends that:

1. Council authorize staff to draft Development Permit No. 7916-0320-00 generally in accordance with the attached drawings (Appendix II).
2. Council instruct staff to resolve the following issues prior to approval:
 - (a) ensure that all engineering requirements and issues including restrictive covenants, dedications, and rights-of-way where necessary, are addressed to the satisfaction of the General Manager, Engineering;
 - (b) submission of a finalized landscaping plan and landscaping cost estimate to the specifications and satisfaction of the Planning and Development Department; and
 - (c) resolution of all urban design issues to the satisfaction of the Planning and Development Department.

REFERRALS

- Engineering:** The Engineering Department has no objection to the project subject to the completion of Engineering servicing requirements as outlined in Appendix III.
- TransLink:** TransLink has no concerns with the project.
- Kinder Morgan:** Kinder Morgan does not permit any parking or storage within 3 metres (10 feet) of the pipeline. The proposed site plan has been configured to meet this requirement.

SITE CHARACTERISTICS

Existing Land Use: Vacant lot, which has already been preloaded and is encumbered by a Kinder Morgan right-of-way bisecting the southern portion.

Adjacent Area:

Direction	Existing Use	OCP Designation	Existing Zone
North (Across Golden Ears Way):	Sawmill and treed lot with watercourse.	Industrial	IL
East (Across 186 Street):	Vacant lot and industrial building.	Industrial	IL
South:	Mix of industrial buildings.	Industrial	IL
West:	Treed ravine with watercourses.	Industrial	IL

DEVELOPMENT CONSIDERATIONS

Background

- The subject site is located at 9781 - 186 Street in Port Kells. It is 1.14 hectares (2.83 acres) in area, is zoned "Light Impact Industrial Zone (IL)" and is designated Industrial in the OCP.
- The subject site is located to the west of the 186 Street cul-de-sac which serves as the site's access. The subject site is located immediately south of both Golden Ears Way and Golden Ears Greenway and is considered a gateway location into Surrey.
- The subject site is a triangular shaped property and is encumbered by an 18.3-metre (60 ft.) wide Kinder Morgan right-of-way along the southern portion of the property.

Current Proposal

- The applicant purchased the subject site at 9781 – 186 Street and plans to relocate their business operations from Port Coquitlam to this location, where they plan to construct a building and a parking/storage area.
- The applicant, Hiway Refrigeration, installs and maintains refrigeration units in semi-trailer units as well as other types of cargo vans and trucks.
- The proposed development complies with the Industrial designation of the OCP. The IL Zone, which regulates the site, permits transportation industry and warehouse uses.
- The proposed building will include a warehouse, service shop, and office and is proposed to be located in the northeastern portion of the property. The proposed building has a total floor area of 2,466 square metres (22,400 sq. ft.). The proposal represents a floor area ratio (FAR) of 0.20 and a lot coverage of 17% which is well within the maximum FAR of 1.0 and lot coverage of 60% permitted in the IL Zone.

DESIGN PROPOSAL AND REVIEW

- The proposed building is constructed from concrete tilt-up panels. The exterior finish of the building will be painted "steel wool" grey with Hiway Refrigeration's blue corporate colour used for accent and trim.
- The proposed building has three components. The southeast portion of the building contains an office and reception area on the ground floor with additional office space on the second floor. The northeastern portion contains a parts warehouse on the ground floor with additional parts warehouse mezzanine space. The remainder of the building contains a large single-storey shop warehouse.

- The eastern elevation fronts 186 Street and includes the office (southern portion) and warehouse (northern portion) components. The two-storey office component includes tall two-storey windows with blue trim and accents. The warehouse portion is primarily tilt-up concrete painted grey with blue trim and accents and includes three windows located along the upper portion. The primary parts loading door is located at the northern edge.
- The south elevation is primarily tilt-up concrete painted grey and includes the service shop's six blue loading doors along the western portion with the office component along the eastern portion. The office component has substantial elongated windows and blue trim.
- The western elevation is primarily comprised of a wash bay which is screened by a solid wall from Golden Ears Way. The wall is painted grey with blue trim. Behind the wash bay, there are four exit doors and one blue overhead door.
- The northern elevation faces Golden Ears Way and is primarily tilt-up painted grey concrete with minimal blue trim and accents. Two overhead doors are located on this side of the building which will be used occasionally for loading. Landscaping will screen the lower portion of the building from Golden Ears Way and Golden Ears Greenway.
- The proposed building is 9 metres (30 ft.) in height, which is lower than the maximum 18-metre (60 ft.) height permitted in the IL Zone.
- The rooftop mechanical units will be screened by powder coated anodized aluminum panels.

Trees, Landscaping and Retaining Walls

- The site was recently pre-loaded and the applicant installed a retaining wall along the eastern portion of the north property line without permits. The retaining wall is a high quality wall that mimics slatted timber planks. The existing wall is approximately 1.3 metres (4 ft.) in height.
- The retaining wall is highly visible as it runs alongside both Golden Ears Way and Golden Ears Greenway. The wall sits on a 1-metre (3 ft.) slope leading down to the Golden Ears Greenway, which will include screening at the base with shrubs (see Appendix II for details and a cross-section). At the top of the wall is an omega fence and cedar hedge which extends the entire length of the northern property line.
- There is a 1.5-metre (5 ft.) wide landscape buffer along the western portion of the north property line which widens to approximately 4 metres (13 ft.) along the eastern portion of the north property line where the building is located. A cedar hedge will be located within the buffer.
- As no bylaw trees are located on the subject site or proposed to be removed as part of this development application, an arborist report was not required but a tree survey was provided identifying off-site trees in close proximity to the site (see Appendix IV). All the off-site trees, including two willows and three cedars, are proposed to be retained. There are approximately 180 undersized coniferous trees along the northwest property line of the property and the applicant proposes to retain approximately 107 of the undersized trees and relocate approximately 25 within the site as part of the hedge along the northern property line.

- Along the eastern portion of the site, the application proposes 7 trees along 186 Street and a mix of shrubs. In addition to the proposed frontage landscaping, one of the five landscaped islands within the surface parking lot will be planted with trees. Kinder Morgan does not permit trees to be planted within the right-of-way. Structural soil cells will be required under each island.
- The two driveway entrances and walkway to the main entrance of the building are proposed to be constructed of dark grey stamped concrete.
- The applicant proposes a staff amenity area within the eastern setback which includes two benches and decorative paving stones. A transformer is located adjacent to the amenity area and will be screened by shrubs.
- The rear (west) yard will be used primarily for truck parking and maneuvering and is proposed to be paved with asphalt. At the far west corner of the site, where the site narrows, the applicant proposes to protect 3 off-site cedars.
- The southern portion of the site includes garbage facilities located along the south property line that will be enclosed by concrete tilt-up panels that will be finished the same as the proposed building with wooden planks for the access gate.
- For security, the applicant has proposed wall mounted site lighting and fencing around the perimeter of the site. An internal gate will separate the customer and employee parking from the loading and storage areas of the site.
- An approximate 300-square metre (3,230 sq. ft.) portion of the site, in the southeast corner, will remain leased to the southern neighbour at 18563 – 97 Avenue to remain as a driveway, to that property.

Parking, Access and Circulation

- Two driveway accesses are proposed to the site from 186 Street. The southern driveway is the entrance for all vehicles. The northern driveway is for egress only and also serves as the main loading area for delivery of refrigeration units. Trucks will access the loading area by circling the building and using the one-way drive aisle along the north side of the building. To discourage trucks from backing in from the 186 Street cul-de-sac, a gate with signage will be installed across the northern driveway.
- Trucks will access the service area of the building through the service bays along the southern side of the building. The applicant has provided turning movements, which show trucks being able to maneuver around the southern portion of the site to access the service bays.
- A wash bay is located at the eastern portion of the building which will be accessed from the south.
- The applicant proposes a total of 39 employee and customer parking spaces, and 13 truck parking spaces. Based on the floor area, a total of 22 employee and customer parking spaces are required under Surrey Zoning By-law No. 12000.

- The Kinder Morgan right-of-way prohibits parking and storage of goods within a 6-metre (20 ft.) corridor along the pipeline, which the applicant has complied with.
- The applicant proposes to construct a walkway connecting 186 Street cul-de-sac and Golden Ears Greenway.

Signage

- The proposal incorporates two large fascia signs with one sign on each of the north and east elevations of the building. The proposed signs are individual channel letters that will be internally lit. Both of the proposed fascia signs comply with the Sign By-law.
- The applicant proposes three free-standing signs. Two signs are located at the northeast and northwest corners of the site, respectively, along Golden Ears Way. Each of these signs is 4.3 metres (14 ft.) tall and 2.4 metres (9 ft.) wide for a total area of 10.6 square metres (114 sq. ft.) which comply with the Sign Bylaw. Both signs are proposed to include internally illuminated box signage between metal columns painted blue to match the building.
- A third shorter free-standing sign is proposed along 186 Street. The proposed sign is 2.1 metres (7 ft.) tall and 3 metres (10 ft.) wide for a total area of 6.5 square metres (70 sq. ft.), which complies with the Sign Bylaw. The sign is constructed of concrete tilt-up to match the building.

PRE-NOTIFICATION

In accordance with Council policy, a development proposal sign was erected on the property on April 3, 2017. To date, staff have not received any comments with respect to the proposal.

SUSTAINABLE DEVELOPMENT CHECKLIST

The applicant prepared and submitted a sustainable development checklist for the subject site on June 30, 2016. The following table summarizes the applicable development features of the proposal based on the seven (7) criteria listed in the Surrey Sustainable Development Checklist.

Sustainability Criteria	Sustainable Development Features Summary
1. Site Context & Location (A1-A2)	<ul style="list-style-type: none"> • Complies with the OCP Industrial designation.
2. Density & Diversity (B1-B7)	<ul style="list-style-type: none"> • N/A
3. Ecology & Stewardship (C1-C4)	<ul style="list-style-type: none"> • Provides natural landscaping and infiltration trenches. • Applicant will not remove any by-law sized trees and will retain over 100 undersized trees including relocating some undersized trees.

Sustainability Criteria	Sustainable Development Features Summary
4. Sustainable Transport & Mobility (D1-D2)	<ul style="list-style-type: none"> • Located on Golden Ears Greenway. Applicant will construct a connection between the greenway and 186 Street cul-de-sac.
5. Accessibility & Safety (E1-E3)	<ul style="list-style-type: none"> • Applicant has incorporated security fencing, site lighting and landscape design into site security.
6. Green Certification (F1)	<ul style="list-style-type: none"> • N/A
7. Education & Awareness (G1-G4)	<ul style="list-style-type: none"> • N/A

INFORMATION ATTACHED TO THIS REPORT

The following information is attached to this Report:

- Appendix I. Lot Owners, Action Summary and Project Data Sheets
- Appendix II. Site Plan, Building Elevations, Landscape Plans and Perspective
- Appendix III. Engineering Summary
- Appendix IV. Tree Survey

original signed by Judith Robertson

Jean Lamontagne
General Manager
Planning and Development

JKS/da

DEVELOPMENT DATA SHEET

Existing Zoning: IL

Required Development Data	Minimum Required / Maximum Allowed	Proposed
LOT AREA (in square metres)		
Gross Total		
Road Widening area		
Undevelopable area		
Net Total		11,452 m ²
LOT COVERAGE (in % of net lot area)		
Buildings & Structures	60%	16.7%
Paved & Hard Surfaced Areas		
Total Site Coverage		
SETBACKS (in metres)		
Front	7.5 m	7.5 m
Rear	7.5 m	79 m
Side #1 (North)	7.5 m	8.2 m
Side #2 (South)	7.5 m	25 m
BUILDING HEIGHT (in metres/storeys)		
Principal	18 m	9 m
Accessory		
NUMBER OF RESIDENTIAL UNITS		
Bachelor		
One Bed		
Two Bedroom		
Three Bedroom +		
Total		
FLOOR AREA: Residential		
FLOOR AREA: Commercial		
Retail		
Office		320 m ²
Total		
FLOOR AREA: Industrial		1,989 m ²
FLOOR AREA: Institutional		
TOTAL BUILDING FLOOR AREA	11,452 m ²	2,309 m ²

Development Data Sheet cont'd

Required Development Data	Minimum Required / Maximum Allowed	Proposed
DENSITY		
# of units/ha /# units/acre (gross)		
# of units/ha /# units/acre (net)		
FAR (gross)	1.0	0.2
FAR (net)		
AMENITY SPACE (area in square metres)		
Indoor		
Outdoor		
PARKING (number of stalls)		
Commercial	14	33
Industrial	6	6
Residential Bachelor + 1 Bedroom		
2-Bed		
3-Bed		
Residential Visitors		
Institutional		
Total Number of Parking Spaces	20	39
Number of disabled stalls	1	1
Number of small cars		
Tandem Parking Spaces: Number / % of Total Number of Units		
Size of Tandem Parking Spaces width/length		

Heritage Site	NO	Tree Survey Provided	YES
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PROPOSED BUILDING - HIWAY REFRIGERATION

9781 186TH STREET, SURREY, B.C.

SHEET LIST

ARCHITECTURAL

- A0.0 COVER PAGE
- A0.1 PERSPECTIVES
- A1.0 CODE ANALYSIS
- A1.1 ASSEMBLY SCHEDULE
- A2.0 SITE PLAN
- A2.1 SITE DETAILS
- A2.2 SITE SECTIONS
- A2.3 TRUCK TURNING
- A3.0 MAIN FLOOR PLAN
- A3.1 SECOND FLOOR PLAN
- A3.2 ENLARGED OFFICE MAIN FLOOR PLAN
- A3.3 ENLARGED OFFICE SECOND FLOOR PLAN
- A3.4 MAIN FLOOR CEILING PLAN
- A3.5 SECOND FLOOR CEILING PLAN
- A3.6 ROOF PLAN
- A4.0 ELEVATIONS
- A5.0 BUILDING SECTION
- A5.1 BUILDING SECTION
- A5.2 WALL SECTIONS
- A5.3 WALL SECTIONS
- A5.4 WALL SECTIONS
- A5.5 WALL SECTIONS
- A6.0 STAIR PLANS AND SECTIONS
- A6.1 STAIR PLANS AND SECTIONS
- A7.0 PLAN DETAILS
- A7.1 BUILDING DETAILS
- A7.2 BUILDING DETAILS
- A7.3 BUILDING DETAILS
- A8.0 DOOR & WINDOW SCHEDULES
- A8.1 FINISH PLAN AND SCHEDULE

STRUCTURAL

- S1.0 GENERAL NOTES
- S2.0 FOUNDATION PLAN
- S2.1 SECOND FLOOR FRAMING PLAN
- S2.2 ROOF FRAMING PLAN
- S2.3 METAL DECK PLAN
- S3.0 TLT PANEL ELEVATIONS
- S3.1 TLT PANEL ELEVATIONS
- S3.2 TLT PANEL ELEVATIONS
- S3.3 STANDARD TLT PANEL AND EMBED DETAILS
- S4.0 CONCRETE SECTIONS AND DETAILS
- S5.0 STEEL SECTIONS AND DETAILS
- S5.1 STEEL SECTIONS AND DETAILS

MECHANICAL

- M1.1 SITE PLAN AND LEGEND
- M2.1 FOUNDATION PLAN
- M3.1 MAIN FLOOR PLAN - PLUMBING
- M3.2 SECOND FLOOR PLAN - PLUMBING
- M3.3 ENLARGED MAIN FLOOR PLAN - PLUMBING
- M3.4 ENLARGED SECOND FLOOR PLAN - PLUMBING
- M3.5 MAIN FLOOR PLAN - HVAC
- M3.6 SECOND FLOOR PLAN - HVAC
- M3.7 ENLARGED MAIN FLOOR PLAN - HVAC
- M3.8 ENLARGED SECOND FLOOR PLAN - HVAC
- M4.1 MECHANICAL DETAILS
- M5.1 MECHANICAL DETAILS
- M5.2 MECHANICAL DETAILS
- M5.3 MECHANICAL SCHEDULES
- M6.4 MECHANICAL SPECIFICATIONS

ELECTRICAL

- E1.1 SITE PLAN
- E2.0 MAIN FLOOR POWER & EMERGENCY LAYOUTS
- E3.1 MAIN FLOOR LIGHTING LAYOUTS
- E3.0 SECOND FLOOR POWER & EMERGENCY LAYOUT
- E3.1 SECOND FLOOR LIGHTING LAYOUTS
- E4.0 ROOF PLAN
- E5.0 SCHEDULES & SCHEMATICS
- E5.1 SCHEDULES & SCHEMATICS
- E6.0 ELECTRICAL & FIRE ALARM SPECIFICATIONS
- E6.1 FIRE ALARM SPECIFICATIONS (CONT'D)

LANDSCAPE

- L1.0 LANDSCAPE PLAN AND NOTES
- L2.0 DETAILS
- L3.0 SECTIONS

CIVIL

- C1.0 LOCATION PLAN AND GENERAL NOTES
- C2.0 SITE GRADING PLAN
- C3.0 SITE SERVICING PLAN
- C4.0 WATER METER DESIGN AND LOCATION PLAN

PROJECT TEAM

ARCHITECT OF RECORD

LARRY PODHORA ARCHITECT
1952 BRACKMAN WAY
SAANICH B.C. V8L 0C2

CONTACT: LARRY PODHORA

BUILDING DESIGN

KRAHN ENGINEERING LTD.
400 - 34077 GLADYS AVENUE
ABBOTSFORD B.C. V2S 3E8
P. 604.853.8831 F. 604.853.1580

CONTACT: DARREN CRUICKSHANKS

STRUCTURAL

KRAHN ENGINEERING LTD.
210 - 1311 KOOTENAY STREET
VANCOUVER B.C. V5K4Y3
P. 604.294.6662 F. 604.294.6666

CONTACT: PETER KIDDOE

CIVIL

KM CIVIL CONSULTANTS LTD.
400 - 34077 GLADYS AVENUE
ABBOTSFORD B.C. V2S 3E8
P. 604.853.8831 F. 604.853.1580

CONTACT: STUART MCGREGOR

MECHANICAL

KD MECHANICAL CONSULTANTS LTD.
400 - 34077 GLADYS AVENUE
ABBOTSFORD B.C. V2S 3E8
P. 604.853.8831 F. 604.853.1580

CONTACT: CHAD NIWRANSKI

LANDSCAPE

KM CIVIL CONSULTANTS LTD.
400 - 34077 GLADYS AVENUE
ABBOTSFORD B.C. V2S 3E8
P. 604.853.8831 F. 604.853.1580

CONTACT: SHAN TENNYSON

ELECTRICAL

KD ELECTRICAL CONSULTANTS LTD.
400 - 34077 GLADYS AVENUE
ABBOTSFORD B.C. V2S 3E8
P. 604.853.8831 F. 604.853.1580

CONTACT: MIKE MURPHY

MECHANICAL

KG INTERIOR DESIGN LTD.
400 - 34077 GLADYS AVENUE
ABBOTSFORD B.C. V2S 3E8
P. 604.853.8831 F. 604.853.1580

CONTACT: SUZANNE GRATHAM

larry podhora / architect

PROJ007

PROPOSED BUILDING - HIWAY REFRIGERATION

PROJ007
9781 186TH STREET, SURREY, B.C.

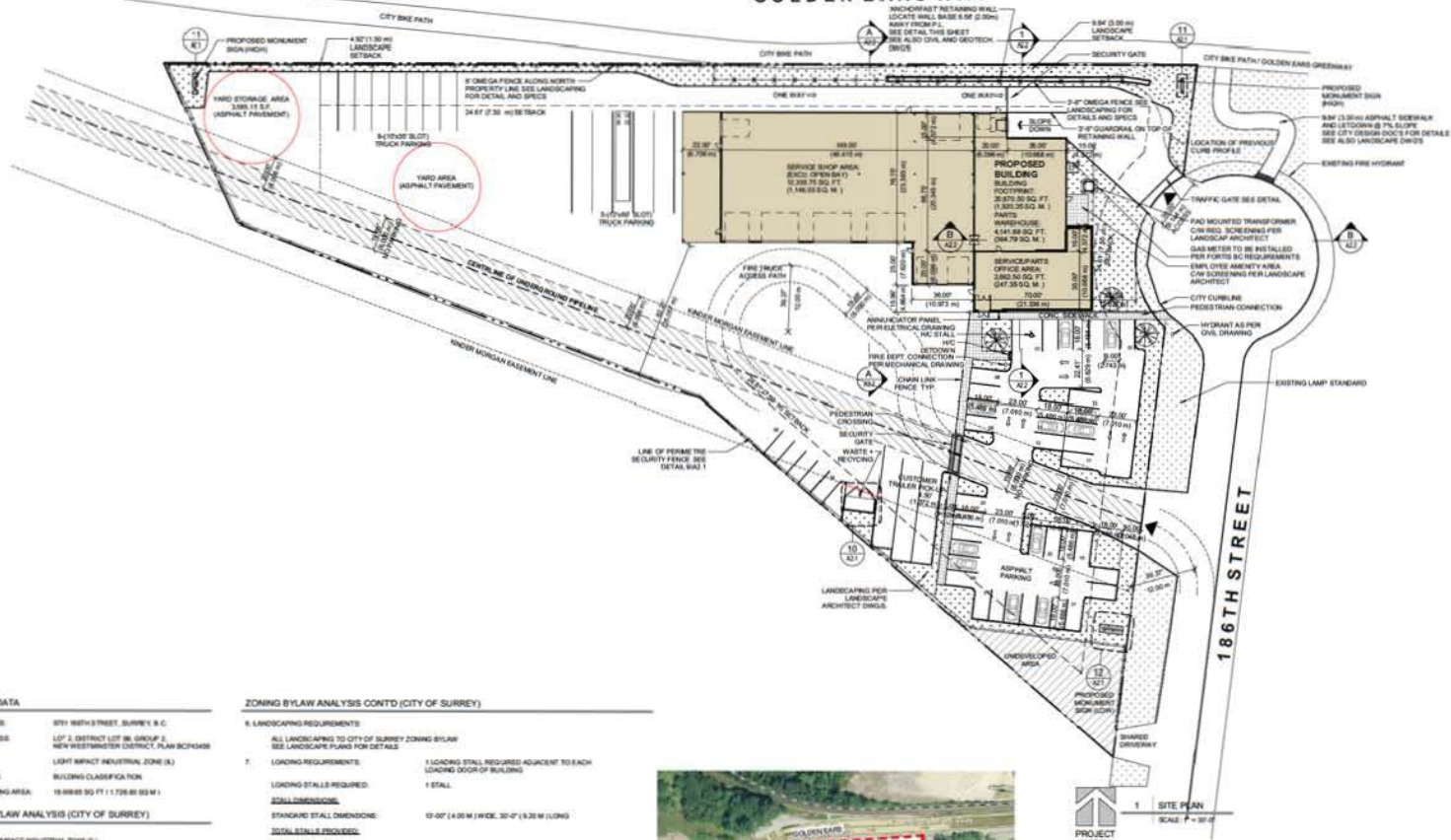
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COVER PAGE

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GOLDEN EARS WAY



Krahn
GROUP OF COMPANIES

ARCHITECTURE
1700 WEST 7TH AVENUE, SUITE 100
VANCOUVER, BC V6L 1A6
TEL: 604.273.8888 FAX: 604.273.8889

LANDSCAPE ARCHITECTURE
1700 WEST 7TH AVENUE, SUITE 100
VANCOUVER, BC V6L 1A6
TEL: 604.273.8888 FAX: 604.273.8889

Hiway Refrigeration

1.	2.	3.	4.
5.	6.	7.	8.

larry pochora | architect
100 BURNHAMTHORPE AVENUE SUITE 100
VANCOUVER, BC V6L 1A6

PROJECT
PROPOSED BUILDING - HIWAY REFRIGERATION

PROJECT
8781 186TH STREET, SURREY, B.C.

DRAWING
SITE PLAN

SCALE	As Indicated
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PROJECT DATA

CMHC ADDRESS: 8781 186TH STREET, SURREY, B.C.
LEGAL ADDRESS: LOT 3, DISTRICT LOT 86 GROUP 2, NEW WESTMINSTER DISTRICT, PLAN B039486

ZONING: LIGHT IMPACT INDUSTRIAL ZONE (L)
BUILDING USE: BUILDING CLASSIFICATION
GROSS BUILDING AREA: 18,888 SQ. FT. (1,738 SQ. M.)

ZONING BYLAW ANALYSIS (CITY OF SURREY)

1. ZONING: LIGHT IMPACT INDUSTRIAL ZONE (L)
2. SITE AREA: 2.83 ACRES (11,144 SQ. FT. / 1,029,80 SQ. M.)

3. SITE COVERAGE

TOTAL SITE AREA:	123,274.80 SQ. FT. (11,482.81 SQ. M.)
ALLOWABLE SITE COVERAGE:	60% (73,964.88 SQ. FT. / 6,821.38 SQ. M.)
BUILDING FOOTPRINT AREA:	20,870.50 SQ. FT. (1,930.36 SQ. M.)
GROSS FLOOR AREA:	24,891.82 SQ. FT. (2,288.81 SQ. M.)
PROPOSED SITE COVERAGE:	16.7% (20,870.50 SQ. FT. / 123,274.80 SQ. FT.)
FLOOR SPACE RATIO:	0.30 FSR (24,891.82 SQ. FT. / 123,274.80 SQ. FT.)

4. BUILDING HEIGHT

MAXIMUM HEIGHT:	60'0" (18 M.)
PROPOSED HEIGHT:	30'0" (9 M.)

5. REQUIRED SETBACKS

FRONT YARD (DIRECTION):	248'7" (7.5 M.)
BACK YARD (DIRECTION):	248'7" (7.5 M.)
SIDE YARD (DIRECTION):	248'7" (7.5 M.)
REAR YARD (DIRECTION):	248'7" (7.5 M.)

ZONING BYLAW ANALYSIS CONTO (CITY OF SURREY)

6. LANDSCAPING REQUIREMENTS: ALL LANDSCAPING TO CITY OF SURREY ZONING BYLAW. SEE LANDSCAPE PLANS FOR DETAILS.

7. LOADING REQUIREMENTS: 1 LOADING STALL REQUIRED ADJACENT TO EACH LOADING DOOR OF BUILDING.

LOADING STALLS REQUIRED: 1 STALL

STALL DIMENSIONS: 10'0" (4.00 M.) X 30'0" (9.30 M.) (LONG)

TOTAL STALLS PROVIDED: 1 STANDARD STALL

8. PARKING REQUIREMENTS:

INDUSTRIAL SPACE:	1 STALL PER 1,075 SQ. FT. (100 SQ. M.)	
OFFICE/WORKSPACE:	1 STALL PER 1,075 SQ. FT. (100 SQ. M.)	
WAREHOUSE AND SERVICE SHOP:	8,638.21 SQ. FT. (799.81 SQ. M.)	+ 1.48
SERVICE AND PARTS OFFICE AREA:	2,862.50 SQ. FT. (265.50 SQ. M.)	+ 2.47
OFFICE MEZZANINE:	2,211.50 SQ. FT. (204.52 SQ. M.)	+ 2.15
PARTS MEZZANINE:	1,862.00 SQ. FT. (172.40 SQ. M.)	+ 1.53
TOTAL:		+ 32.01 (8)

ACCESSIBLE STALLS REQUIRED: 1 SPACE FOR EVERY 100 STALLS PROVIDED
1 ACCESSIBLE STALL REQUIRED

DRIVEWAY WIDTH: 22'0" (7.00 M.) AT 90°

STALL DIMENSIONS: 8'11" (2.52 M.) X 30'0" (9.30 M.) (LONG)

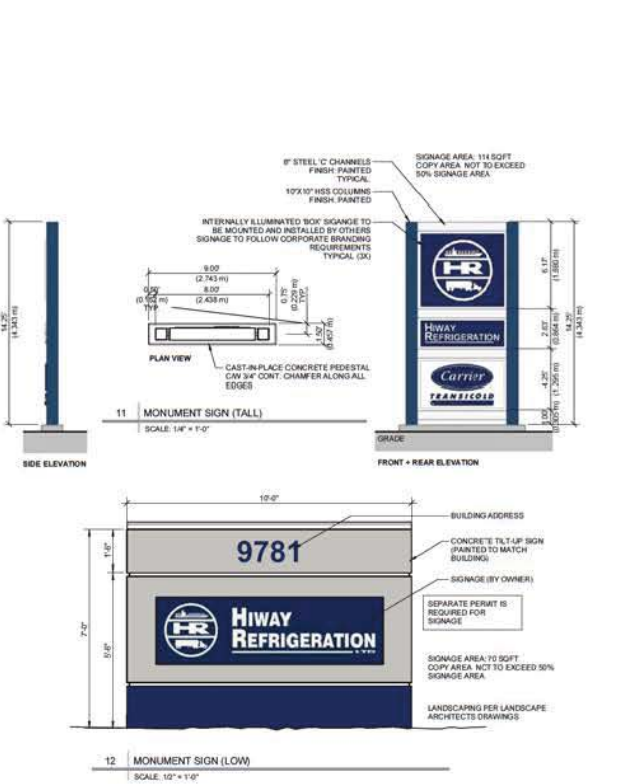
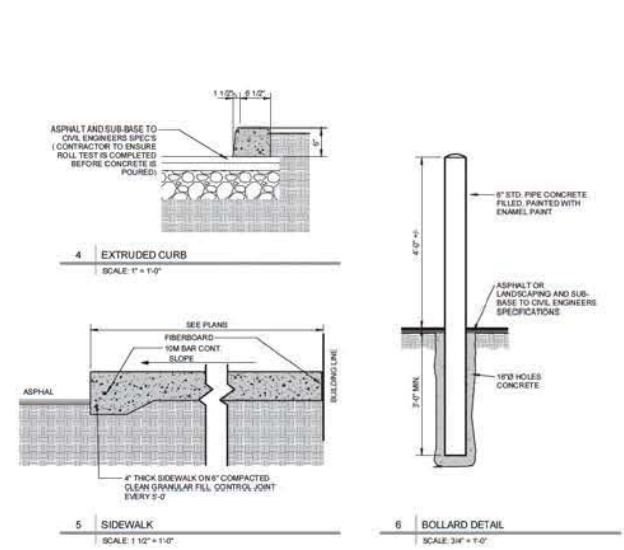
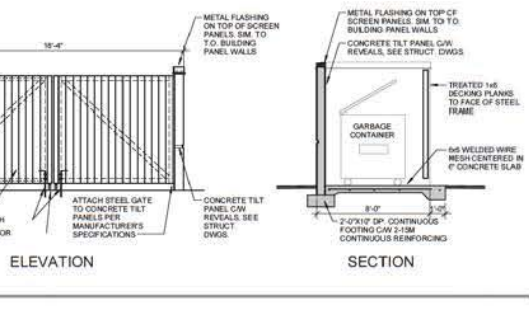
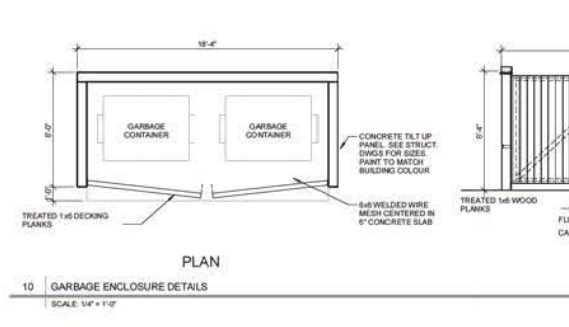
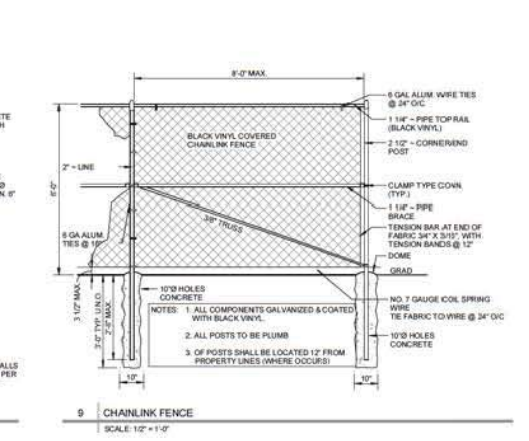
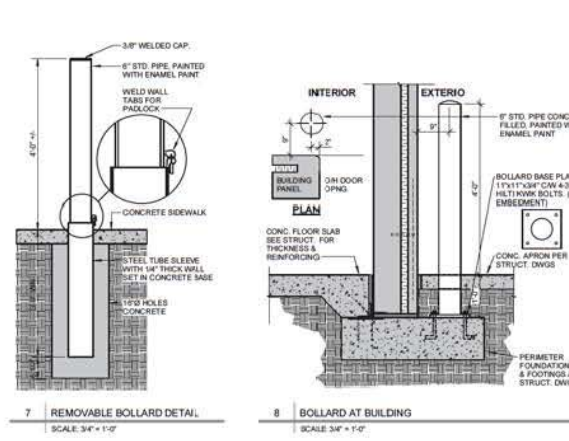
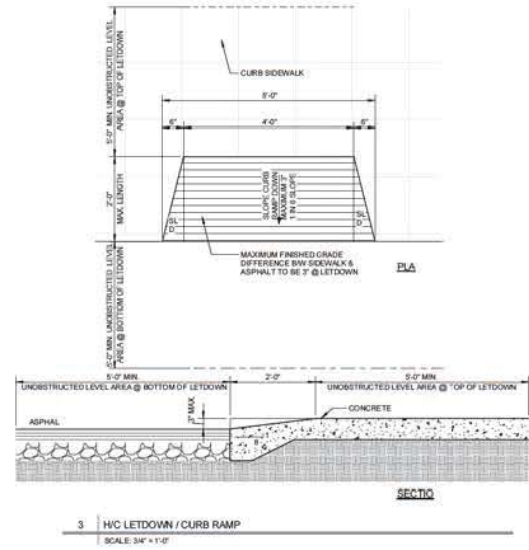
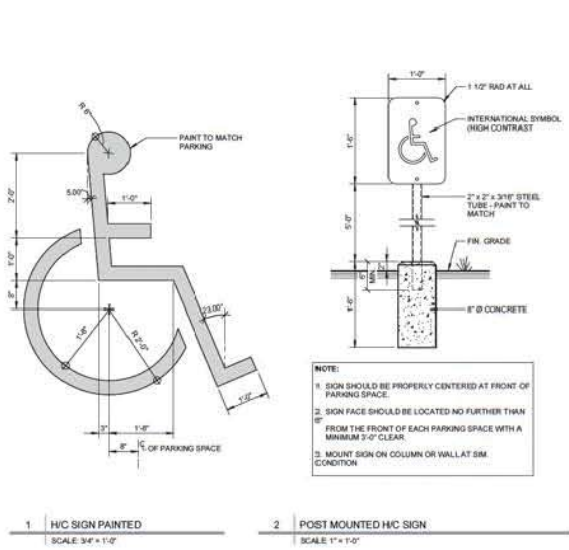
STANDARD STALL DIMENSIONS: 10'0" (4.1 M.) X 30'0" (9.30 M.) (LONG)

TOTAL STALLS PROVIDED: 38 STANDARD STALLS
1 ACCESSIBLE STALL

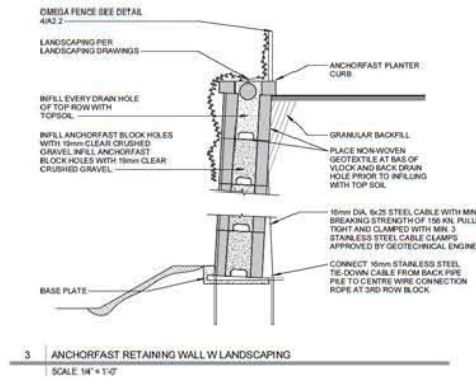
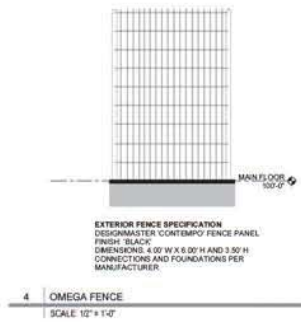
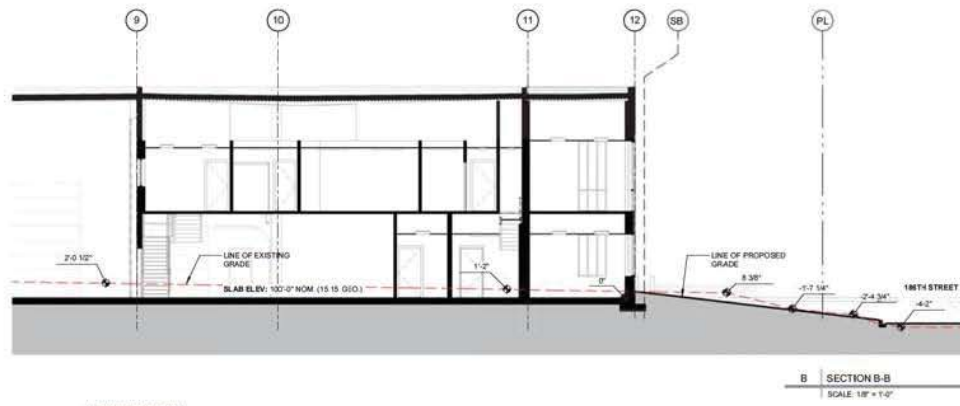
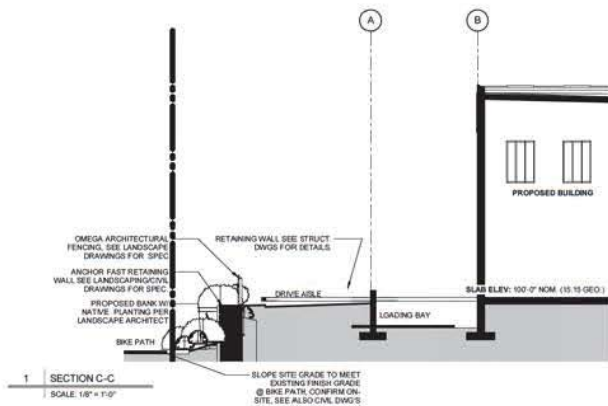
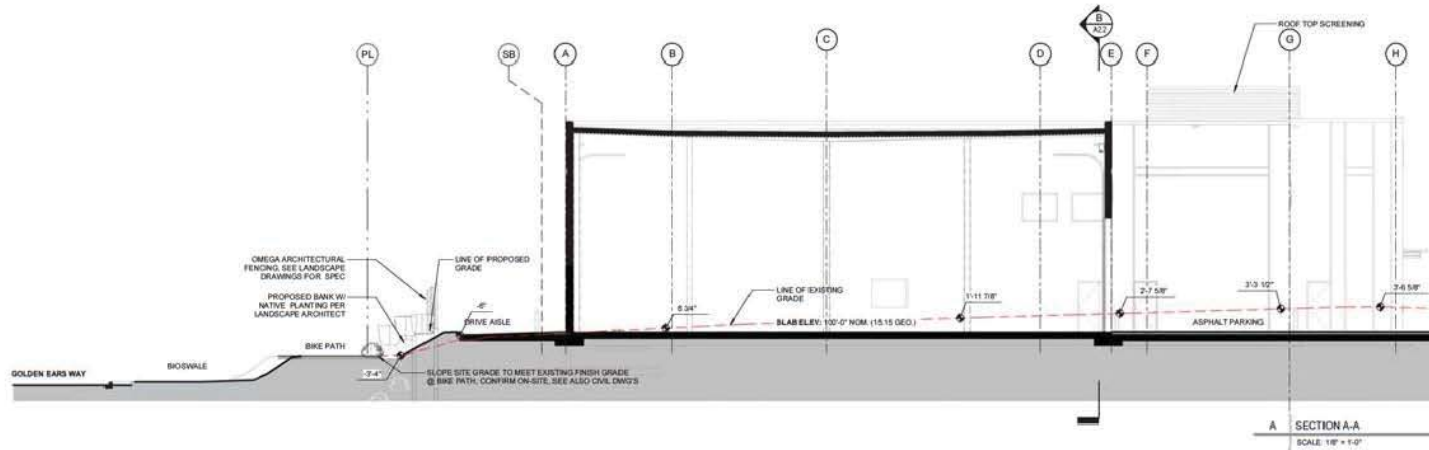


2 CONTEXT PLAN
SCALE: 1/8" = 1'0"





NO.	DATE	BY	DESCRIPTION
1	2018/01/15	ML	ISSUED FOR PERMITS
2	2018/01/15	ML	ISSUED FOR PERMITS
3	2018/01/15	ML	ISSUED FOR PERMITS
4	2018/01/15	ML	ISSUED FOR PERMITS
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49	2018/01/15	ML	ISSUED FOR PERMITS
50	2018/01/15	ML	ISSUED FOR PERMITS



FISHED 'ANCHORFAST' WALL IN 'DARK GREY'

2 ANCHORFAST RETAINING WALL
SCALE: 1/8" = 1'-0"

RETAINING WALL NOTES:
EXTERIOR WALL FINISH TO BE COLOUR 'ANCHORFAST - DARK GREY'
CONFIRM AND COORDINATE ALL ASPECTS OF WALL CONSTRUCTION WITH CIVIL AND GEOTECHNICAL DRAWINGS PRIOR TO CONSTRUCTION

NO.	DATE	YMD	DESCRIPTION
1	2023/08/15	2023/08/15	ISSUED FOR PERMIT
2	2023/08/15	2023/08/15	ISSUED FOR CONSTRUCTION
3	2023/08/15	2023/08/15	ISSUED FOR DEVELOPMENT PERMIT
4	2023/08/15	2023/08/15	ISSUED FOR DEVELOPMENT PERMIT
5	2023/08/15	2023/08/15	ISSUED FOR PERMIT
6	2023/08/15	2023/08/15	ISSUED FOR PERMIT
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16	2023/08/15	2023/08/15	ISSUED FOR PERMIT
17	2023/08/15	2023/08/15	ISSUED FOR PERMIT
18	2023/08/15	2023/08/15	ISSUED FOR PERMIT
19	2023/08/15	2023/08/15	ISSUED FOR PERMIT
20	2023/08/15	2023/08/15	ISSUED FOR PERMIT

larry podhora / architect

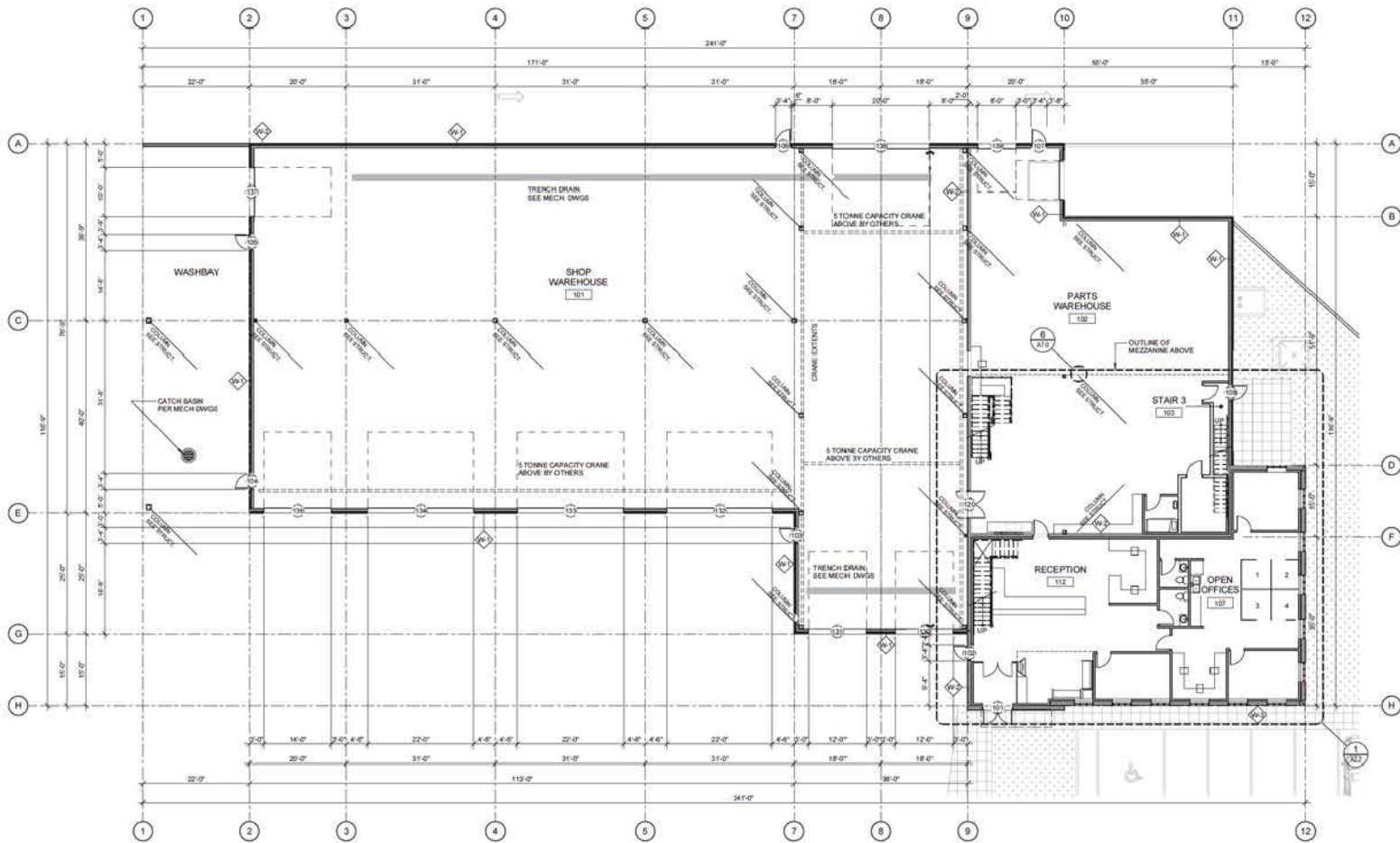
PROJECT
PROPOSED BUILDING - HIWAY REFRIGERATION
PROJECT
9781 166TH STREET, SURREY, B.C.

DRAWING
SITE SECTIONS

SCALE	AS ISSUED
DRAWN	BM
CHECKED	DC
PROJECT	166119
DRAWING	

A2.2

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NO.	DATE	YAML	DESCRIPTION
1			ISSUED FOR PERMIT
2			ISSUED FOR CONSTRUCTION
3			ISSUED FOR AS-BUILT

PROJECT NORTH

1 MAIN FLOOR PLAN
SCALE: 3/32" = 1'-0"

larry podhora / architect
180 BRADSHAW WAY, NORTH BAYVIEW, B.C. V8L 1C2

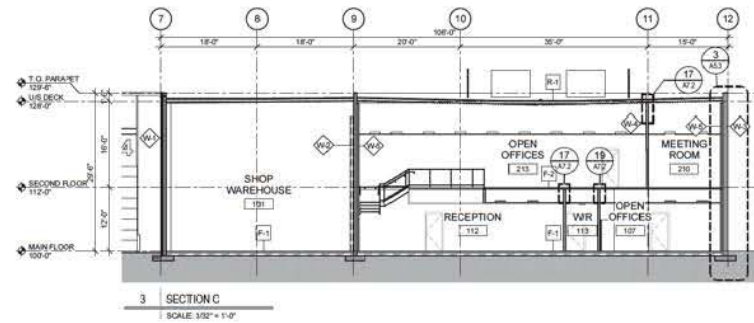
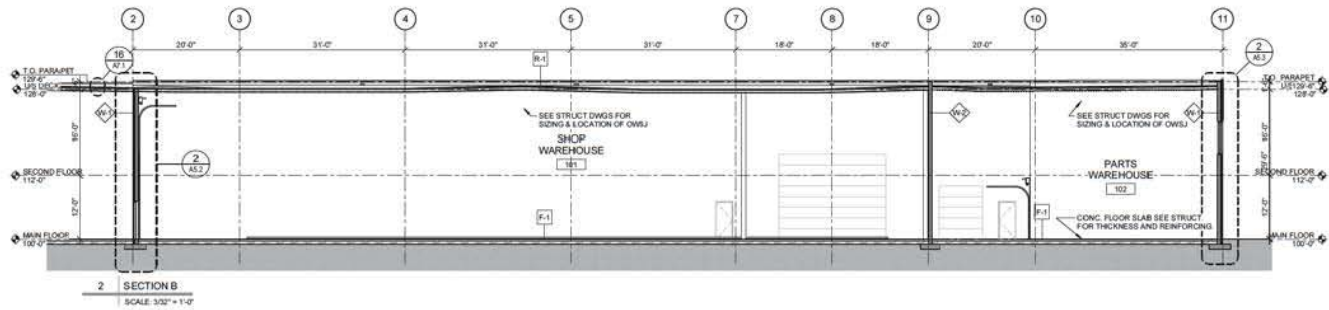
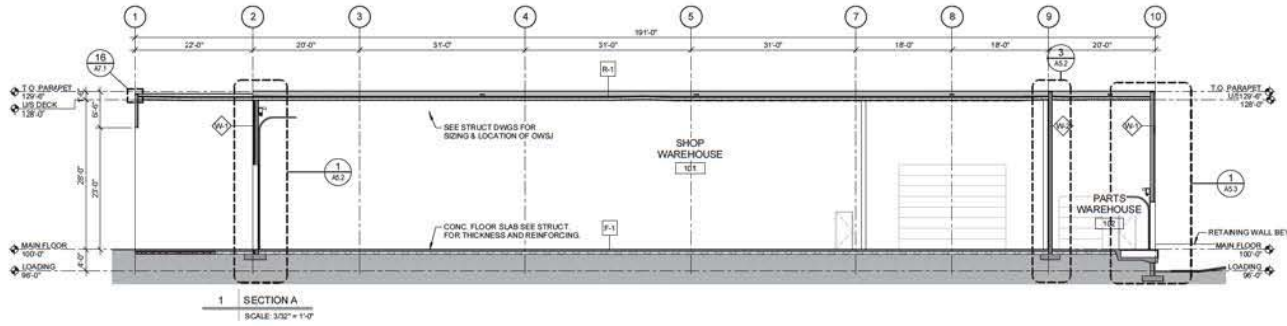
PROJECT
PROPOSED BUILDING - HIWAY REFRIGERATION
PROJECT
9781 166TH STREET, SURREY, B.C.

DRAWING
MAIN FLOOR PLAN

SCALE	3/32" = 1'-0"
DRAWN	MP
CHECKED	DC
PROJECT	16619
DRAWING	

A3.0

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NO.	DATE	YAML	DESCRIPTION
1			ISSUED FOR PERMITS
2			ISSUED FOR CONSTRUCTION
3			ISSUED FOR CONSTRUCTION

larry podhora / architect

1400 BRALMAN WAY, NORTH BAYVIEW, B.C. V8L 1C2

PROJECT

**PROPOSED BUILDING
- HIWAY
REFRIGERATION**

PROJECT

9781 166TH STREET, SURREY,
B.C.

PROJECT

DRAWING

BUILDING SECTION

DRAWING

SCALE: 3/32" = 1'-0"

DRAWN: MW

CHECKED: DC

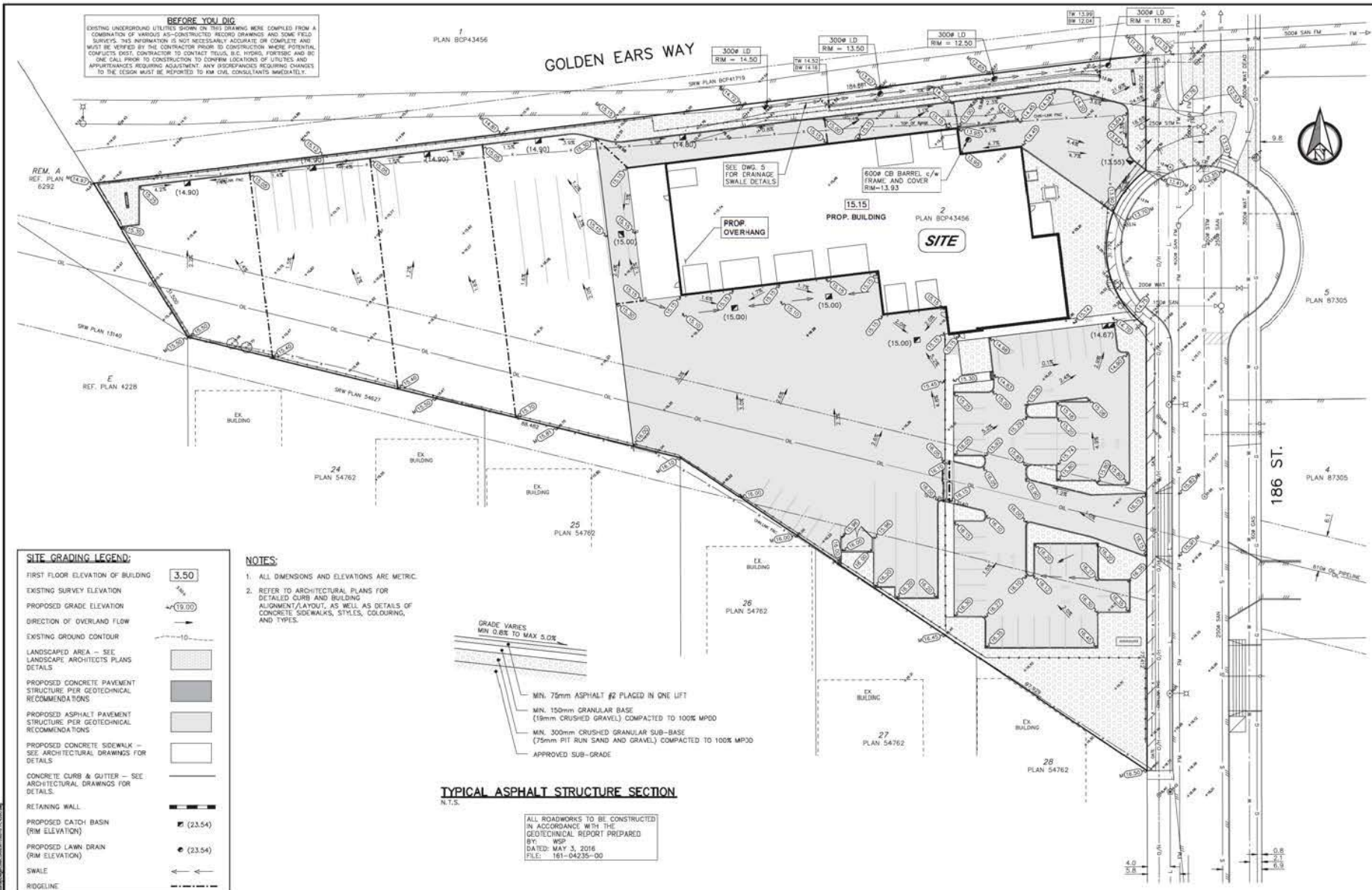
PROJECT: 166119

DRAWING:

A5.0

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BEFORE YOU DIG
 EXISTING UNDERGROUND UTILITIES SHOWN ON THIS DRAWING WERE COMPILED FROM A COMBINATION OF VARIOUS AS-CONSTRUCTED RECORD DRAWINGS AND SOME FIELD SURVEYS. THIS INFORMATION IS NOT NECESSARILY ACCURATE OR COMPLETE AND MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION WHERE POTENTIAL CONFLICTS EXIST. CONTRACTOR TO CONTACT TELUS, B.C. HYDRO, FORTISBC AND BY ONE CALL PRIOR TO CONSTRUCTION TO CONFIRM LOCATIONS OF UTILITIES AND APPEARANCES REQUIRING ADJUSTMENT. ANY DISCREPANCIES REQUIRING CHANGES TO THE DESIGN MUST BE REPORTED TO RM CIVIL CONSULTANTS IMMEDIATELY.



SITE GRADING LEGEND:

FIRST FLOOR ELEVATION OF BUILDING	3.50
EXISTING SURVEY ELEVATION	19.00
PROPOSED GRADE ELEVATION	19.00
DIRECTION OF OVERLAND FLOW	→
EXISTING GROUND CONTOUR	-10
LANDSCAPED AREA - SEE LANDSCAPE ARCHITECT'S PLANS FOR DETAILS	[Pattern]
PROPOSED CONCRETE PAVEMENT STRUCTURE PER GEOTECHNICAL RECOMMENDATIONS	[Pattern]
PROPOSED ASPHALT PAVEMENT STRUCTURE PER GEOTECHNICAL RECOMMENDATIONS	[Pattern]
PROPOSED CONCRETE SIDEWALK - SEE ARCHITECTURAL DRAWINGS FOR DETAILS	[Pattern]
CONCRETE CURB & GUTTER - SEE ARCHITECTURAL DRAWINGS FOR DETAILS	[Pattern]
RETAINING WALL	[Pattern]
PROPOSED CATCH BASIN (RIM ELEVATION)	(23.54)
PROPOSED LAWN DRAIN (RIM ELEVATION)	(23.54)
SWALE	[Symbol]
RIDGELINE	[Symbol]

NOTES:
 1. ALL DIMENSIONS AND ELEVATIONS ARE METRIC.
 2. REFER TO ARCHITECTURAL PLANS FOR DETAILED CURB AND BUILDING ALIGNMENT/LAYOUT, AS WELL AS DETAILS OF CONCRETE SIDEWALKS, STYLES, COLOURING, AND TYPES.



ALL ROADWORKS TO BE CONSTRUCTED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT PREPARED BY: WSP DATED: MAY 3, 2016 FILE: 161-04235-00

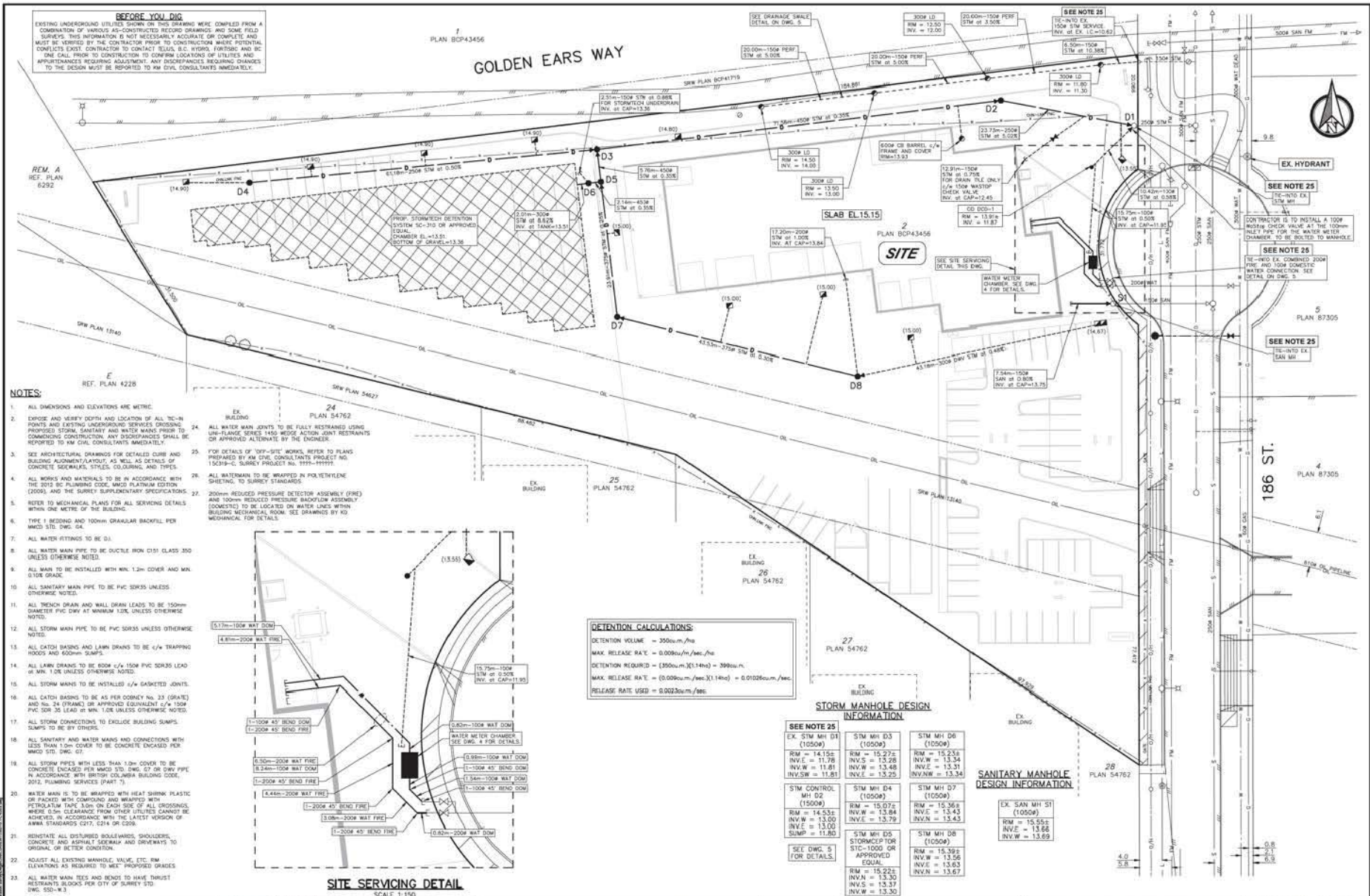
No.	DATE	REVISION	DRN	TECH/ENG
4	2017.04.19	ISSUED FOR DEVELOPMENT PERMIT	NWP	SJB
5	2017.04.19	ISSUED FOR TENDER	NWP	SJB
4	2017.04.12	ISSUED FOR CO-ORDINATION	NWP	SJB
3	2017.02.27	REVISED GRADING AND SERVING	NWP	SJB
2	2016.11.09	RE-ISSUED FOR DEVELOPMENT PERMIT	NWP	SJB
1	2016.10.07	ISSUED FOR DEVELOPMENT PERMIT	NWP	SJB

KM Civil CONSULTANTS LTD.
 ABBOTSFORD OFFICE
 #400 - 34077 Gladys Avenue
 Abbotsford, BC V3C 2E8
 Tel: 604-853-8831 Fax: 604-853-5880
 VANCOUVER OFFICE
 #110 - 2000 Venard Way
 Vancouver, BC V6M 0C4
 Tel: 604-294-6652 Fax: 604-294-6605

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 1462 MUSTANG PLACE, PORT COQUITLAM, B.C. V3C 6L2
 TEL: (604)-944-0119 FAX: (604)-944-7521

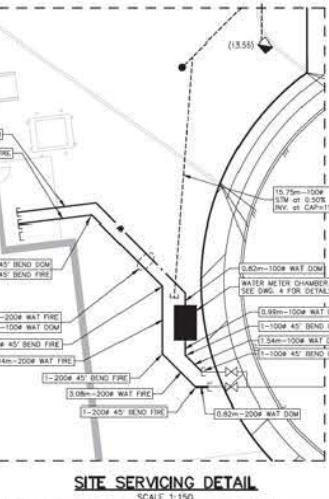
SITE GRADING PLAN						SUPPORT PROJECT NUMBER		DRAWING NO.	
9781 186 STREET						150319.1-C		2	
DESIGNED	DRAWN	REVIEWED	APPROVED	SCALE	DATE	PROJECT NO.		REVISION NO.	
SJB	NWP	SM	SM	AS SHOWN	MAY 2016	150319.1-C		5	

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BEFORE YOU DIG
 EXISTING UNDERGROUND UTILITIES SHOWN ON THIS DRAWING WERE COMPILED FROM A COMBINATION OF VARIOUS AS-CONSTRUCTED RECORD DRAWINGS AND SOME FIELD SURVEYS. THIS INFORMATION IS NOT NECESSARILY ACCURATE OR COMPLETE AND MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION WHERE POTENTIAL CONFLICTS EXIST. CONTRACTOR TO CONTACT UTILITY B.C. HYDRO, FORTISBC AND BC ONE CALL PRIOR TO CONSTRUCTION TO CONFIRM LOCATIONS OF UTILITIES AND APPURTENANCES REQUIRING ADJUSTMENT. ANY DISCREPANCIES REQUIRING CHANGES TO THE DESIGN MUST BE REPORTED TO KM CIVIL CONSULTANTS IMMEDIATELY.

- NOTES:**
1. ALL DIMENSIONS AND ELEVATIONS ARE METRIC.
 2. EXPOSE AND VERIFY DEPTH AND LOCATION OF ALL TIE-IN POINTS AND EXISTING UNDERGROUND SERVICES CROSSING PROPOSED STORM, SANITARY AND WATER MAINS PRIOR TO COMMENCING CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED TO KM CIVIL CONSULTANTS IMMEDIATELY.
 3. SEE ARCHITECTURAL DRAWINGS FOR DETAILED CURB AND BUILDING ALIGNMENT/LAYOUT, AS WELL AS DETAILS OF CONCRETE SIDEWALKS, STAIRS, SLOPING, AND TYPED.
 4. ALL WORKS AND MATERIALS TO BE IN ACCORDANCE WITH THE 2015 BC PLUMBING CODE, MAND PLATINUM EDITION (2008), AND THE SURVEY SUPPLEMENTARY SPECIFICATIONS.
 5. REFER TO MECHANICAL PLANS FOR ALL SERVICES DETAIL WITHIN ONE METRE OF THE BUILDING.
 6. TYPE 1 BEDDING AND 100mm CRANKULAR BACKFILL PER MAND STD DWG 02.
 7. ALL WATER FITTINGS TO BE DUCTILE IRON Duct CLASS 300 UNLESS OTHERWISE NOTED.
 8. ALL MAIN TO BE INSTALLED WITH MIN. 1.2m COVER AND MIN. 0.10% GRADE.
 9. ALL SANITARY MAIN PIPE TO BE PVC 503SS UNLESS OTHERWISE NOTED.
 10. ALL TRENCH DRAIN AND WALL DRAIN LEADS TO BE 150mm DIAMETER PVC DWY AT MINIMUM 1.0% UNLESS OTHERWISE NOTED.
 11. ALL STORM MAIN PIPE TO BE PVC 503SS UNLESS OTHERWISE NOTED.
 12. ALL CATCH BASINS AND LAIRN DRAINS TO BE 4/4 TRAPPING HOODS AND 600mm SUMP.
 13. ALL LAIRN DRAINS TO BE 800M 4/4 150M PVC 503SS LEAD AT MIN. 1.0% UNLESS OTHERWISE NOTED.
 14. ALL STORM MAINS TO BE INSTALLED 4/4 GASKETED JOINTS.
 15. ALL CATCH BASINS TO BE AS PER COONEY NO. 23 (GRADE) AND NO. 24 (DRAIN) OR APPROVED EQUIVALENT 4/4 150M PVC 503 SS LEAD AT MIN. 1.0% UNLESS OTHERWISE NOTED.
 16. ALL STORM CONNECTIONS TO EXCLUDE BUILDING SUMPS. SUMPS TO BE BY OTHERS.
 17. ALL SANITARY AND WATER MAINS AND CONNECTIONS WITH LESS THAN 1.0m COVER TO BE CONCRETE ENCASED PER MAND STD DWG 02.
 18. ALL STORM PIPES WITH LESS THAN 1.0m COVER TO BE CONCRETE ENCASED PER MAND STD DWG 02 OR DWY PIPE IN ACCORDANCE WITH BRITISH COLUMBIA BUILDING CODE, 2012, PLUMBING SERVICES (PART 7).
 19. WATER MAIN IS TO BE WRAPPED WITH HEAT SHRINK PLASTIC OR PACKED WITH COMPRESSIBLE AND WRAPPED WITH PETROLATUM TAPE 1.0m ON EACH SIDE OF ALL CROSSINGS WHERE CLEARANCE FROM OTHER UTILITIES CANNOT BE ACHIEVED. IN ACCORDANCE WITH THE LATEST VERSION OF AWWA STANDARDS C127, C214 OR C209.
 20. REINSTATE ALL DISTURBED BOUNDARIES, SHOULDER, CONCRETE AND ORIGINAL SIDEWALK AND DRIVEWAYS TO ORIGINAL OR BETTER CONDITION.
 21. ADJUST ALL EXISTING MANHOLE, VALVE, ETC. RM ELEVATIONS AS REQUIRED TO MEET PROPOSED GRADES.
 22. ALL WATER MAIN REES AND BENDS TO HAVE DRUST RESTRAINTS BLOCKS PER CITY OF SURREY STD DWG 550-W-3.



DETENTION CALCULATIONS:

DETENTION VOLUME	= 350m ³ /ha
MAX. RELEASE RATE	= 0.008m ³ /m ² /sec/ha
DETENTION REQUIRED	= (350m ³)/(1.14m) = 309m ³ /m
MAX. RELEASE RATE	= (0.008m ³ /m ² /sec)(1.14m) = 0.01026m ³ /m/sec
RELEASE RATE USED	= 0.0030m ³ /m/sec

STORM MANHOLE DESIGN INFORMATION

SEE NOTE 25	SEE NOTE 25	SEE NOTE 25
EX. STM MH D1 (1050)	STM MH D3 (1050)	STM MH D6 (1050)
RM = 14.15 INV. S = 13.28 INV. W = 13.48 INV. N = 13.25	STM MH D4 (1050)	STM MH D7 (1050)
STM CONTROL MH D2 (1500)	STM MH D5 (1050)	STM MH D8 (1050)
RM = 14.53 INV. W = 13.00 INV. N = 13.80	STM MH D5 (1050) STORMCEPTOR	STM MH D8 (1050)
SEE DWG. 5 FOR DETAILS.	RM = 15.22 INV. N = 13.30	RM = 15.39 INV. W = 13.56 INV. N = 13.63 INV. N = 13.67

SANITARY MANHOLE DESIGN INFORMATION

EX. SAN MH S1 (1050)
RM = 15.55 INV. W = 13.66 INV. N = 13.69

No.	DATE	REVISION	DRN	TECH/ENG
4	2017.04.19	ISSUED FOR DEVELOPMENT PERMIT	NWP	SJM
5	2017.04.19	ISSUED FOR TENDER	NWP	SJM
4	2017.04.12	ISSUED FOR CO-ORDINATION	NWP	SJM
3	2017.02.27	REVISED GRADING AND SERVICING	NWP	SJM
2	2016.11.09	RE-ISSUED FOR DEVELOPMENT PERMIT	NWP	SJM
1	2016.10.07	ISSUED FOR DEVELOPMENT PERMIT	NWP	SJM

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 TEL: (604)-944-0119 FAX: (604)-944-7521

SITE SERVICING PLAN

7871 186 STREET

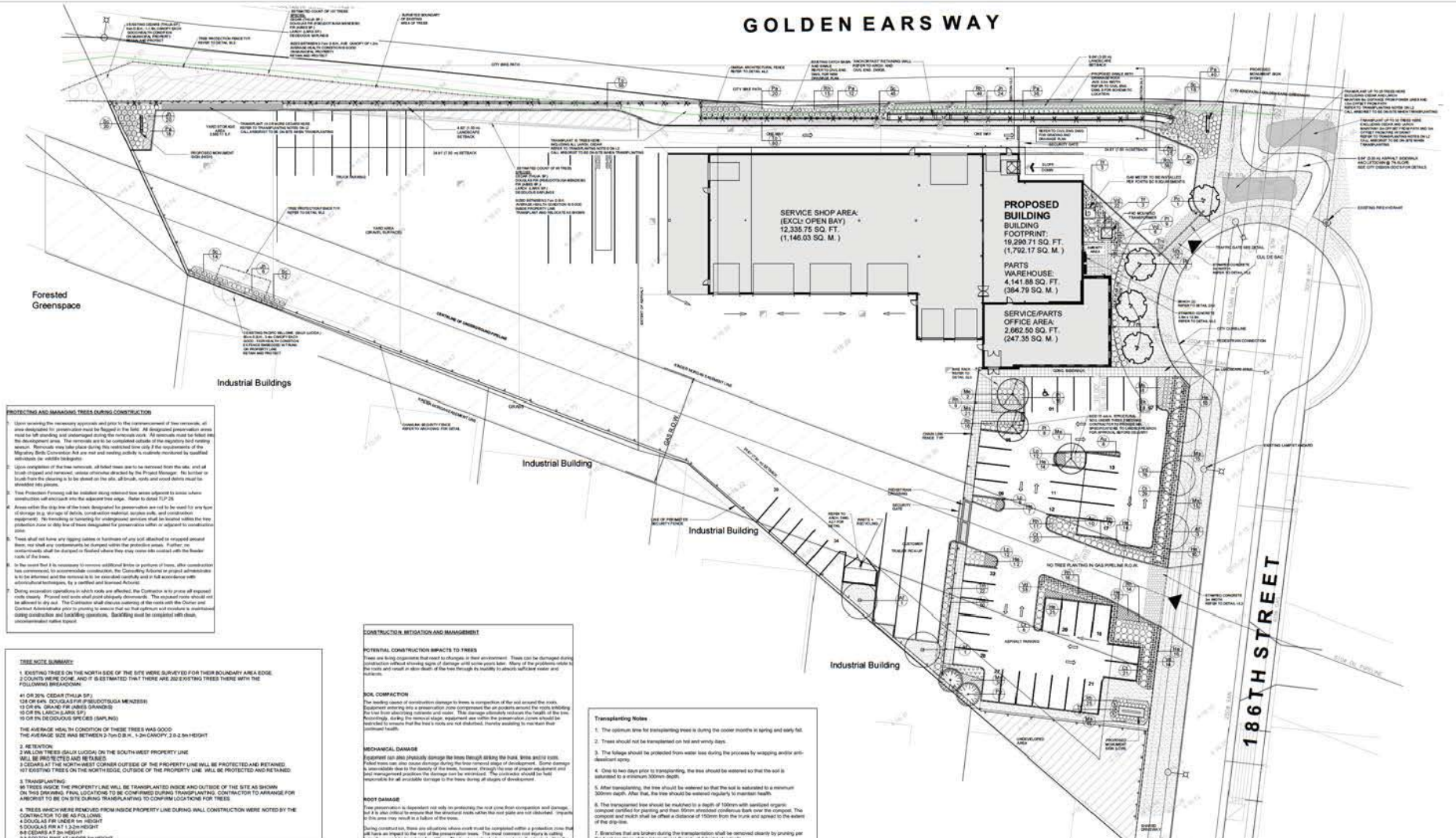
150319.1-C

DATE: MAY 2016

DRAWING NO. **3**

REVISION NO. **5**

GOLDEN EARS WAY



Krahn
GROUP OF COMPANIES

1000 UNIVERSITY AVENUE
SUITE 1000
VANCOUVER, BC V6C 1R8
TEL: 604.681.1111
WWW.KRAHN.COM

KD Planning
a DESIGN LTD

1000 UNIVERSITY AVENUE
SUITE 1000
VANCOUVER, BC V6C 1R8
TEL: 604.681.1111
WWW.KRAHN.COM

LEGEND

- TURF GRASS
- CONCRETE BED/GRAVEL/PAVING
- EXISTING CONCRETE
- ROAD
- SITE BACK
- TREE PROTECTION FENCE
- OMEGA FENCE
- CHAINLINK SECURITY FENCE
- PLANT KEY
- EXISTING REVEGETATION TREE
- EXISTING ELEVATION

- 1 2503-17 REVISED PER CITY COMMENTS
- 2 1904-07 ISSUED FOR TENDER
- 3 2143-07 REVISED FOR DP
- 4 2762-07 REVISED FOR DP
- 5 2301-17 REVISED FOR DP
- 6 09-11-18 REVISED FOR DP
- 7 2109-18 ISSUED FOR COORDINATION
- 8 3006-18 ISSUED FOR DP

DATE: 08/20/2018
PROJECT: 186TH STREET
B.C.S.L.A. # 965



HIWAY REFRIGERATION

CITY OF SURREY PROJECT NO. 7916-022-00
PROJECT NUMBER:
9781 196th Street
SURREY, BC

ISSUING TITLE:
LANDSCAPE PLAN
AND NOTES

SCALE:	1:300
DATE:	07-27-18
DESIGNER:	KT
PROJECT NO.:	1861916

L1

TRANSPLANTING NOTES

- The optimum time for transplanting trees is during the cooler months in spring and early fall.
- Trees should not be transplanted on hot and windy days.
- The foliage should be protected from water loss during the process by wrapping and/or anti-desiccant spray.
- Once in new place prior to transplanting, the tree should be watered so that the soil is saturated to a minimum 300mm depth. After that, the tree should be watered regularly to maintain health.
- After transplanting, the tree should be watered so that the soil is saturated to a minimum 300mm depth. After that, the tree should be watered regularly to maintain health.
- Excavated trees should be watered to a depth of 100mm with sanitized organic compost certified for planting and free from broad-spectrum antibiotics. Bark over the canopy. This compost and mulch shall be at least a distance of 150mm from the trunk and tapered to the surface of the ground.
- Excavated trees should be watered to a depth of 100mm with sanitized organic compost certified for planting and free from broad-spectrum antibiotics. Bark over the canopy. This compost and mulch shall be at least a distance of 150mm from the trunk and tapered to the surface of the ground.
- The transplanted tree should be watered so that the soil is saturated to a minimum 300mm depth. After that, the tree should be watered regularly to maintain health.
- Excavated trees should be watered to a depth of 100mm with sanitized organic compost certified for planting and free from broad-spectrum antibiotics. Bark over the canopy. This compost and mulch shall be at least a distance of 150mm from the trunk and tapered to the surface of the ground.
- Excavated trees should be watered to a depth of 100mm with sanitized organic compost certified for planting and free from broad-spectrum antibiotics. Bark over the canopy. This compost and mulch shall be at least a distance of 150mm from the trunk and tapered to the surface of the ground.

PLANT LIST

KEY	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONDITION
DECIDUOUS TREES					
01	5	Acer x Fraxinus	Freemantle Maple	60mm cal. W.B.	
02	1	Magnolia Elaeagni	Eastern Magnolia	60mm cal. W.B.	
03	4	Platanus orientalis 'Quercifolia'	Charleston Pear	60mm cal. W.B.	
CONIFEROUS TREES					
04	2	Pinus strobus	Scots Pine	2.5m H. W.B.	
CONIFEROUS SHRUBS					
05	100	Brachyglottis laetevirens	Sheila Berry	300mm H.	#2 Pin
06	240	Rosa 'Hansa'	Hansa Rose	300mm H.	#2 Pin
CONIFEROUS AND BRACLEYF EVERGREEN SHRUBS					
07	25	Chamaecyparis	Mountain Mack Orange	600mm H.	#3 Pin
08	84	Juniperus horizontalis 'Hughes'	Hughes Juniper	300mm H.	#2 Pin
09	33	Lonicera alba	Scotch honeysuckle	300mm H.	#2 Pin
10	33	Phytolacca americana 'Trio Lutea'	Obs Lusterberry	300mm H.	#2 Pin
11	84	Taxus canadensis 'Discolorata'	David's Yew	600mm H.	#3 Pin
12	1	Thuja occidentalis 'Fastigiata'	Pyramidal Cedar	1.5m H.	#4 Pin
13	126	Thuja occidentalis 'Emerald Green'	Emerald Green Cedar	1.5m H.	#4 Pin
14	151	Yucca filifera	Daunt Yucca	300mm H.	#2 Pin
PERENNIALS, GRASSES AND GROUND COVERING					
15	100	Andropogon virginicus	Stemless	300mm H.	#1 Pin
16	120	Timothy	Blue Grass	300mm H.	#1 Pin
17	120	Macarthur intense 'Jugoslav'	Alpen Meadow Grass	300mm H.	#1 Pin
18	151	Perovskia atrorubra 'Little Blue'	Little Blue Russian Sage	300mm H.	#1 Pin

GENERAL NOTES

- EXAMINE SITE AND CONFIRM EXISTING SITE CONDITIONS BEFORE BEGING.
- CONFIRM ALL MEASUREMENTS ON SITE, DO NOT SCALE DRAWINGS.
- CONFIRM EXISTING AND PROPOSED GRADES PRIOR TO BEGINNING CONSTRUCTION WORKS.
- CONFIRM ALL NECESSARY PERMITS FOR BUILDING PERMITS, SITEWORKS, BUILDING CODE WORKS AND OTHER BY-LAW REQUIREMENTS, OBTAIN REQUIRED PERMITS PRIOR TO BEGINNING CONSTRUCTION WORKS.
- OBTAIN UTILITY AND SERVICES LOCATIONS PRIOR TO BEGINNING CONSTRUCTION WORKS.
- PROTECT FROM DAMAGE ALL EXISTING STRUCTURES, TREES, SURFACES, SITE FURNISHINGS, UNDERGROUND SERVICES AND OTHER EXISTING FEATURES THAT REMAIN DESIRABLE, ARE PART OF THE SITE ACCESS OR ARE SUBJECT TO THE SITE'S PERFORMANCE STANDARDS AND MAKE GOOD WORKS FOR ANY DAMAGE THAT IS CAUSED BY THE CONTRACTOR'S OVERSIGHTS.
- UNLESS OTHERWISE SPECIFIED, CONTRACTOR SHALL QUANTIFY ALL WORKS AND MATERIALS FOR A PERIOD OF NOT LESS THAN ONE YEAR. CONTRACTOR SHALL INSPECT THE LANDSCAPE ON A REGULAR BASIS AND REPLACE MATERIALS THAT ARE IN POOR CONDITION WITHIN TWO WEEKS OF INSPECTION OR NOTIFICATION.
- THE CONTRACTOR SHALL MAINTAIN THE SITE IN GOOD WORKING ORDER WITH A CLEAN AND ORDERLY APPEARANCE DURING THE PERIOD OF WORK. PERENNIALS, PUBLIC AND ROAD RIGHTS ARE TO BE DAMP AT THE END OF EACH DAY AND KEEP FREE OF OBSTACLES. LANDSCAPE PUBLICS TO BE CUSHIONED OFF BY AT LEAST TWO PROTECTED LOCATIONS.

CONSTRUCTION, MITIGATION AND MANAGEMENT

POTENTIAL CONSTRUCTION IMPACTS TO TREES
There are many potential impacts that could occur during construction. These include: soil compaction, root damage, mechanical damage, and root damage. The contractor should take steps to minimize these impacts and ensure the health and survival of the trees.

SOIL COMPACTION
The heaviest source of construction damage to trees is compaction of the soil around the roots. Compaction reduces the oxygen and water available to the roots, which can lead to root death. The contractor should avoid heavy machinery on the soil around the trees and use mats to distribute the weight of the equipment.

MECHANICAL DAMAGE
Equipment can also cause damage to trees through striking the trunk, limbs and/or roots. Pallet trucks can also cause damage to the root system if they are used on the soil around the trees. The contractor should avoid equipment near the trees and use mats to distribute the weight of the equipment.

ROOT DAMAGE
The heaviest source of construction damage to trees is compaction of the soil around the roots. Root damage can also occur if the roots are cut or severed during construction. The contractor should avoid heavy machinery on the soil around the trees and use mats to distribute the weight of the equipment.

SOODING NOTES

- SOODED AREAS AS SHOWN ON THE PLANTING PLAN ARE TO BE CERTIFIED CANADA NO. 1 CULTIVATED TURF SOO. WITH STROKES BEHOLD ROOT SYSTEM, TRACK AND/OR GROOVE CONFORMING TO REQUIREMENTS OF THE BRITISH COLUMBIA LANDSCAPE AND NURSERY ASSOCIATION, AND OF THE FOLLOWING MINIMUM APPROVED EQUAL:
- 20% - Peatmoss (Fibre)
- 20% - Vermiculite (Fibre)
- 20% - Perlite (Fibre)
- 20% - Sand (Fibre)
- AREAS TO BE SOODED SHALL HAVE A MINIMUM 150MM TOPSOIL BASE
- LOOSEM SOIL SURFACE PRIOR TO SOODING, ELIMINATE BUMPS AND HOLLOWING, ROLL LIGHTLY WHEREVER TOPSOIL IS EXCESSIVELY LOOSE.
- AVOID TO SOODING, GROUND APPROVALS, THAT PASSES GRADE AND DEPTH OF TOPSOIL ARE SATISFACTORY.
- DELIVER SOO TO SITE WITHIN 24 HOURS OF BEING LIFTED AND LAY WITHIN 2 HOURS OF BEING LIFTED. DURING DELIVERY, WEAR A PROTECTIVE COVERING AND WATER SOO AS NECESSARY TO ENSURE IT IS VIBRANT AND PREVENT THE LOSS OF SOO IN PACKAGING. SOO SHOULD BE REJECTED.
- LAY SOODING BEHIND BENCHES, LAY SOO IN ROWS, INTERLOCKING TO SLOPE AND WITH JOINTS STAGGERED, BUT SECTION JOINTS ONLY, OVERLAPPING ON LAUNDRY GAPS BETWEEN SECTIONS. CUT OUT IRREGULAR OR THE SECTIONS WITH SHARP HANDS.
- WATER SOO IMMEDIATELY AFTER LAYING TO OBTAIN MOISTURE PENETRATION INTO TOPSOIL 150MM OF TOPSOIL. MAINTAIN SOODED AREAS FROM START OF INSTALLATION UNTIL FINAL ACCEPTANCE.

PROTECTING AND MANAGING TREES DURING CONSTRUCTION

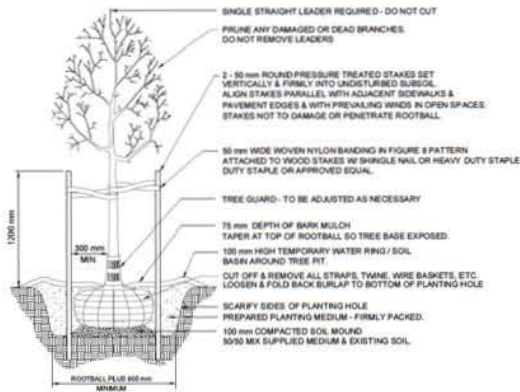
- Upon receiving the necessary approvals and prior to the commencement of tree removal, all areas designated for preservation must be flagged in the field. All designated preservation areas must be set out and protected during the construction work. All materials must be stored in the designated areas. The contractor must ensure that the preservation areas are clearly marked and protected throughout the construction period. Removal may take place during the construction work only if the representative of the Municipal Parks Department has been notified and a written permit is obtained.
- Upon completion of the tree removal, all holes must be filled with topsoil and all soil must be compacted and covered with a layer of topsoil. The contractor must ensure that the preservation areas are clearly marked and protected throughout the construction period.
- The preservation of trees will be essential along construction lines adjacent to trees which are to be preserved. All equipment and materials must be stored in the designated areas. The contractor must ensure that the preservation areas are clearly marked and protected throughout the construction period.
- There shall not be any digging, cutting or felling of any soil attached or adjacent preservation areas. The contractor must ensure that the preservation areas are clearly marked and protected throughout the construction period.
- In the event that it is necessary to remove additional trees or portions of trees, other construction methods shall be used to ensure that the preservation areas are clearly marked and protected throughout the construction period.
- During excavation operations in which roots are affected, the Contractor to provide all required equipment. The contractor must ensure that the preservation areas are clearly marked and protected throughout the construction period.
- During construction and finishing operations, the Contractor shall ensure that the preservation areas are clearly marked and protected throughout the construction period.

TREE NOTE SUMMARY

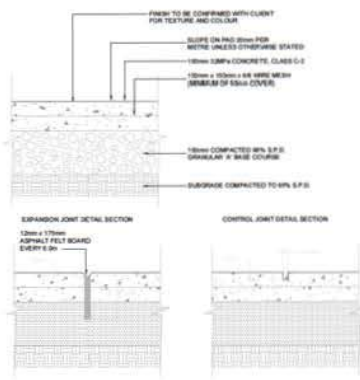
- EXISTING TREES ON THE NORTH SIDE OF THE SITE WERE SURVEYED FOR THEIR BOUNDARY AREA EDGE LOCATIONS HERE COORDINATE AND IF ESTIMATED THAT THESE ARE SIZE EXISTING TREES WITH THE FOLLOWING BREAKDOWN:
- 40 OR 50 CM DBH, CLEAR TRUNK (S)
- 10 OR 15 CM DBH, CLEAR TRUNK (S)
- 10 OR 15 CM DBH, CLEAR TRUNK (S)
- 10 OR 15 CM DBH, CLEAR TRUNK (S)
- THE AVERAGE HEALTH CONDITION OF THESE TREES WAS GOOD
- THE AVERAGE SIZE RANGE BETWEEN 2.0m H. - 4.0m CANOPY, 2.0-2.5m HEIGHT
- 2 MEDIUM TREES (SMALL LOGS) ON THE SOUTHWEST PROPERTY LINE WILL BE PROTECTED AND RETAINED
- 2 TREES AT THE NORTHWEST CORNER OUTSIDE OF THE PROPERTY LINE WILL BE PROTECTED AND RETAINED
- 40 EXISTING TREES AT THE NORTH SIDE, OUTSIDE OF THE PROPERTY LINE WILL BE PROTECTED AND RETAINED
- TRANSPLANTING:
- 3 TREES INSIDE THE PROPERTY LINE WILL BE TRANSPLANTED INSIDE AND OUTSIDE OF THE SITE AS SHOWN ON THE DRAWING. FINAL LOCATIONS TO BE CONFIRMED DURING TRANSPLANTING. CONTRACTOR TO MANAGE FOR ADEQUATE TO BE ON SITE DURING TRANSPLANTING TO CONFIRM LOCATIONS FOR TREES
- 3 TREES WHICH WERE REMOVED FROM INSIDE PROPERTY LINE DURING WALL CONSTRUCTION WERE NOTED BY THE CONTRACTOR TO BE AS FOLLOWS:
- 1 DOUGLAS FIR AT 1.2m HEIGHT
- 1 DOUGLAS FIR AT 1.2m HEIGHT
- 30 SDOOTER PINE AT UNDER 2m HEIGHT

PLANTING NOTES

- PLANTS SHALL BE INSTALLED AS DIRECTED BY THE DRAWING, NOTES AND DETAILS.
- PLANT MATERIAL SUBSTITUTIONS WILL NOT BE ACCEPTED WITHOUT PRIOR WRITTEN APPROVAL.
- ALL PLANT MATERIAL SHALL BE THOROUGHLY WATERED AND SOAKED AT THE TIME OF PLANTING.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MUNICIPAL DETAIL IF REQUIRED.
- ALL LANDSCAPE MATERIAL IS TO COMPLY WITH THE CANADIAN LANDSCAPE STANDARD.
- SOIL ANALYSIS FOR PROPOSED GROUNDING MEASURES IS TO BE PROVIDED TO LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
- LANDSCAPE STANDARD FOR SIZE, VARIETY AND LOCATION AS INDICATED ON THE PLANT LIST SHOWN ON THIS DRAWING ANY PLANT MATERIAL FOR WHICH THERE IS A SUBSTITUTION SHALL BE REJECTED. ANY PLANT THAT IS REJECTED WILL BE REMOVED FROM THE SITE AND REPLACED WITH A PLANT OF ACCEPTABLE QUALITY AND NO ADDITIONAL COST TO THE OWNER.
- REMOVE DEAD OR DAMAGED BRANCHES. ALL PRUNING SHALL BE PERFORMED IN ACCORDANCE WITH STANDARD HORTICULTURAL, TREE AND HEDGING SOCIETY PRACTICES & ALL SPECIFICATIONS WITH APPROPRIATE TRIMMING FOR EACH SPECIES.
- PROVIDE ONE YEAR WARRANTY FOR THE PLANT MATERIAL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MAINTENANCE REQUIRED TO KEEP THE PLANTS IN A HEALTHY CONDITION DURING THE WARRANTY PERIOD UNLESS OTHERWISE AGREED UPON, AND FOR THE CARE AND PROTECTION OF ANY MATERIALS THAT ARE DEAD OR IN POOR CONDITION DURING THE WARRANTY PERIOD AT THE CONTRACTOR'S OWN EXPENSE. MAINTENANCE INCLUDES BUT IS NOT LIMITED TO:
1. Regular watering of plants during the warranty period as directed by the Project Manager during construction and the warranty period. Plants shall be watered every 4 hours of active irrigation by the Owner or Owner representative. Failure to do so after the project shall result in the work being undertaken by others. The time of work shall be determined by the Project Manager in advance and otherwise recovered from the Contractor.
2. Maintenance and/or installation of mulch
3. Weed removal
4. Disease control

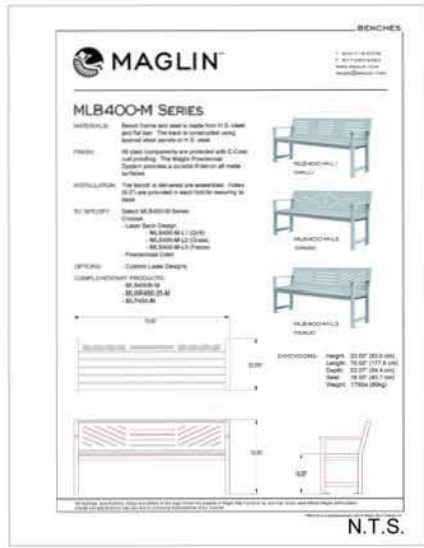


DECIDUOUS TREE
N.T.S.

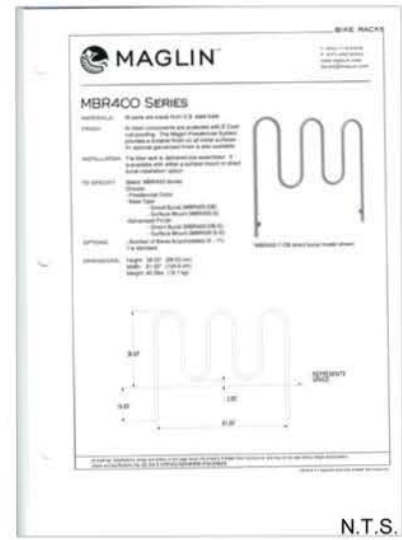


1. CONCRETE TO BE 150MM CLASS 0-2 AT 28 DAYS WITH 1.5% AIR ENTRAINED
2. CONCRETE TO HAVE BROOM FINISH PERPENDICULAR TO THE LENGTH OF THE SIDEWALK
3. EXPANSION JOINTS TO BE LOCATED AT EVERY 3.0M AND WHERE CONCRETE PAVING ADJUTS OTHER STRUCTURES OR BUILDINGS
4. CONTROL JOINTS TO BE LOCATED AT INTERVALS OF 2.0M AND AT CENTRELINE OF 4.0M WIDE TOLERANCE
5. CONCRETE TO BE FINISHED WITH WHITE POLYMER CURING COMPOUND
6. ALL DIMENSIONS ARE IN MILLIMETERS

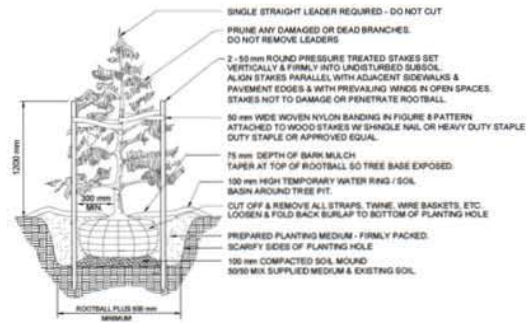
DETAIL 1. STAMPED CONCRETE PAVING



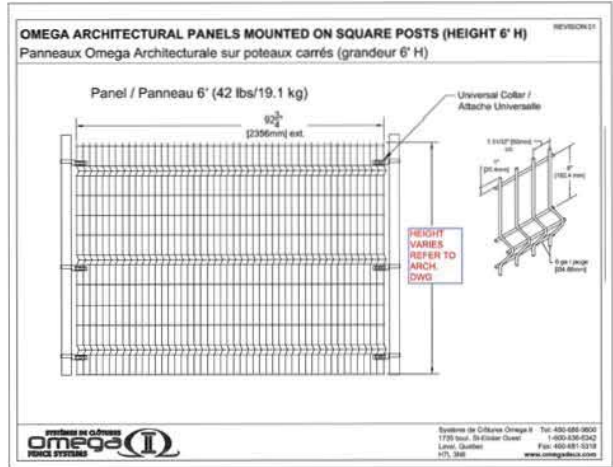
DETAIL 2. BENCH



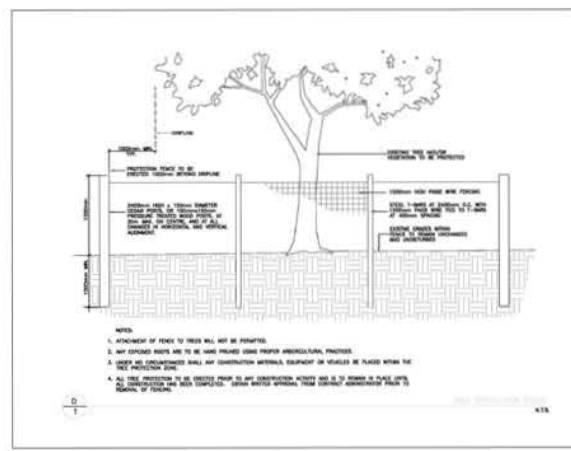
DETAIL 3. BIKE RACK



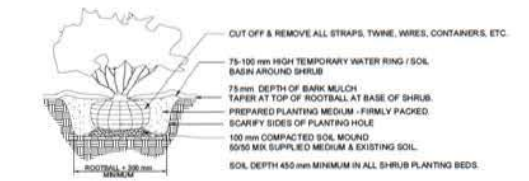
CONIFEROUS TREE
N.T.S.



DETAIL 4. OMEGA FENCE



DETAIL 5. TREE PROTECTION FENCE

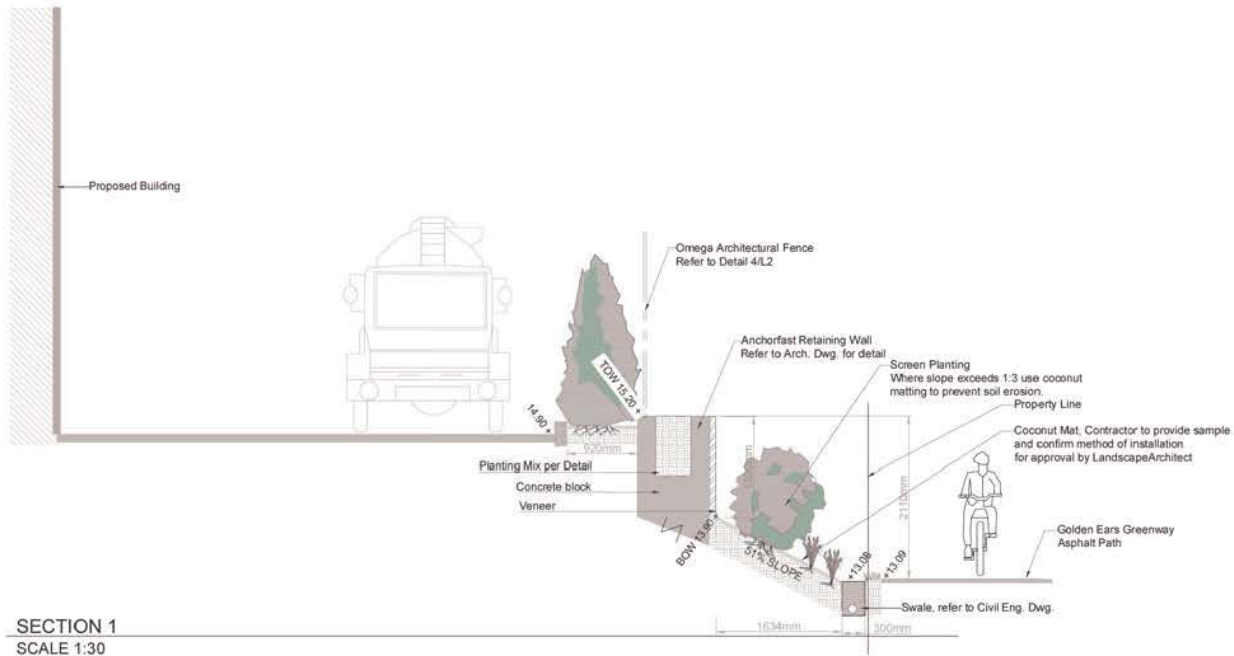


SHRUB AND PERENNIAL PLANTING DETAIL
N.T.S.

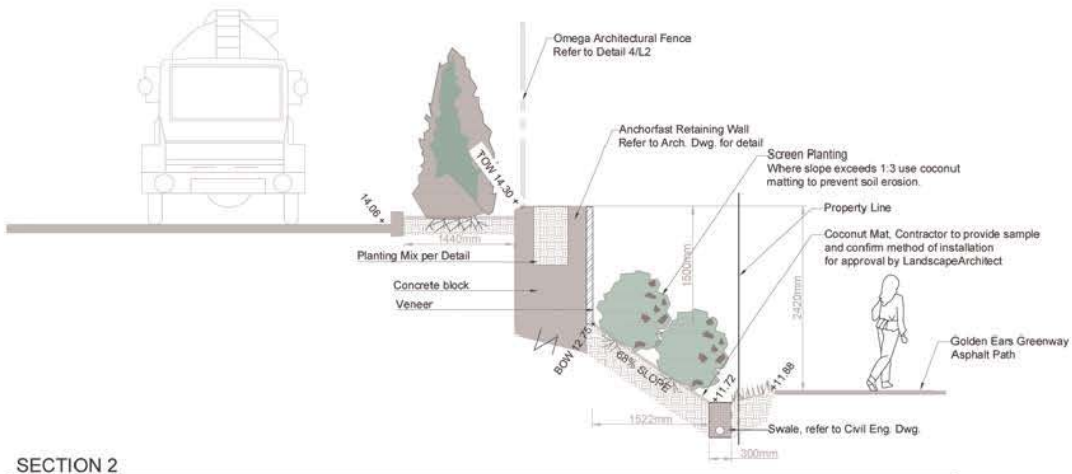


3	09-05-17	REVISED PER CITY COMMENTS
2	19-04-17	ISSUED FOR TENDER
1	21-03-17	RE ISSUED FOR DP
1	27-03-17	RE ISSUED FOR DP
1	09-01-17	RE ISSUED FOR DP
1	30-11-16	RE ISSUED FOR DP
1	21-09-16	ISSUED FOR COORDINATION
1	30-06-16	ISSUED FOR DP

HIGHWAY REFRIGERATION	
CITY OF SURREY PROJECT NO. TRN1600-02	
PROJECT ADDRESS:	
9781 150th Street	
SURREY, BC	
DRAWING TITLE:	
DETAILS	
DATE:	AS SHOWN
DESIGNER:	JT-ST
CHECKER:	ST
APPROVED:	1001-GL



SECTION 1
SCALE 1:30



SECTION 2
SCALE 1:30

1	03-05-17	REVISED PER CITY COMMENTS
2	10-04-17	ISSUED FOR TENDER
3	21-09-17	RE ISSUED FOR DP
4	27-02-17	RE ISSUED FOR DP
5	05-01-17	RE ISSUED FOR DP
6	09-11-16	RE ISSUED FOR DP
7	21-09-16	ISSUED FOR COOPERATION
8	30-09-16	ISSUED FOR DP

NO SCALE (MAY) REVISIONS
ISSUES & REVISIONS

SCALE
B.C.S.L.A. # 565

PROJECT NAME

HIWAY REFRIGERATION

CITY OF SURVEY PROJECTING 7916-620340

PROJECT ADDRESS

6781 196th Street
SURREY, BC

DRAWING TITLE

SECTIONS

SCALE 1:30

ISSUED 27-07

CHECKED BY

PROJECT NO. 19016-L

DRAWN BY

L3

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INTER-OFFICE MEMO

**TO: Manager, Area Planning & Development
- North Surrey Division
Planning and Development Department**

FROM: Development Services Manager, Engineering Department

DATE: March 27, 2017 PROJECT FILE: **7816-0320-00**

**RE: Engineering Requirements (Commercial/Industrial)
Location: 9781 186 Street**

DEVELOPMENT PERMIT

The following Works and Services must be completed as a condition of the Development Permit and subsequent Building Permit issuance:

Works and Services

- Construct the west half of 186 Street to the Industrial Limited Local Road Standard.
- Construct a 11.0 meter concrete driveway letdown at the southern access and a 9.0 meter concrete letdown at the cul-de-sac.
- Construct a 3.0 meter wide asphalt Multi-use Pathway (MUP) and letdown to connect the cul-de-sac and the Golden Ears Way MUP.
- Provide water, sanitary, and storm service connections to service the proposed development.
- Provide a new fire hydrant on 186 Street in order to meet fire protection requirements.
- Provide stormwater management features (quality and quantity measures) and register corresponding Restrictive Covenants.

A Servicing Agreement is required prior to issuance of Building Permit.



Rémi Dubé, P.Eng.
Development Services Manager
A3H

TOPOGRAPHIC SURVEY OF HIWAY REFRIGERATION SITE



The intended plot size of this plan is 560mm in width by 432mm in height (C size) when plotted at a scale of 1:500.

All distances are in metres and decimals thereof.

- LEGEND**
- denotes standard iron post found
 - denotes lead plug found
 - ⊙ denotes settlement gauge
 - ⊕ denotes catchbasin
 - ⊕ denotes hydro pole with transformer
 - ⊕ denotes anchor pole
 - ⊕ denotes pole anchor
 - ⊕ denotes lamp pole
 - denotes fence
 - denotes top of bank
 - denotes bottom of bank
 - denotes edge of pavement
 - denotes swale
 - ▨ denotes treed area
 - x 5.21 denotes spot elevation
 - ⊕ 0.75 denotes tree and diameter
 - denotes tree line
 - denotes property line
 - ⊕ → denotes photo location and direction

Date of Field Survey: 10th February, 2017

GOLDEN EARS WAY

168TH STREET

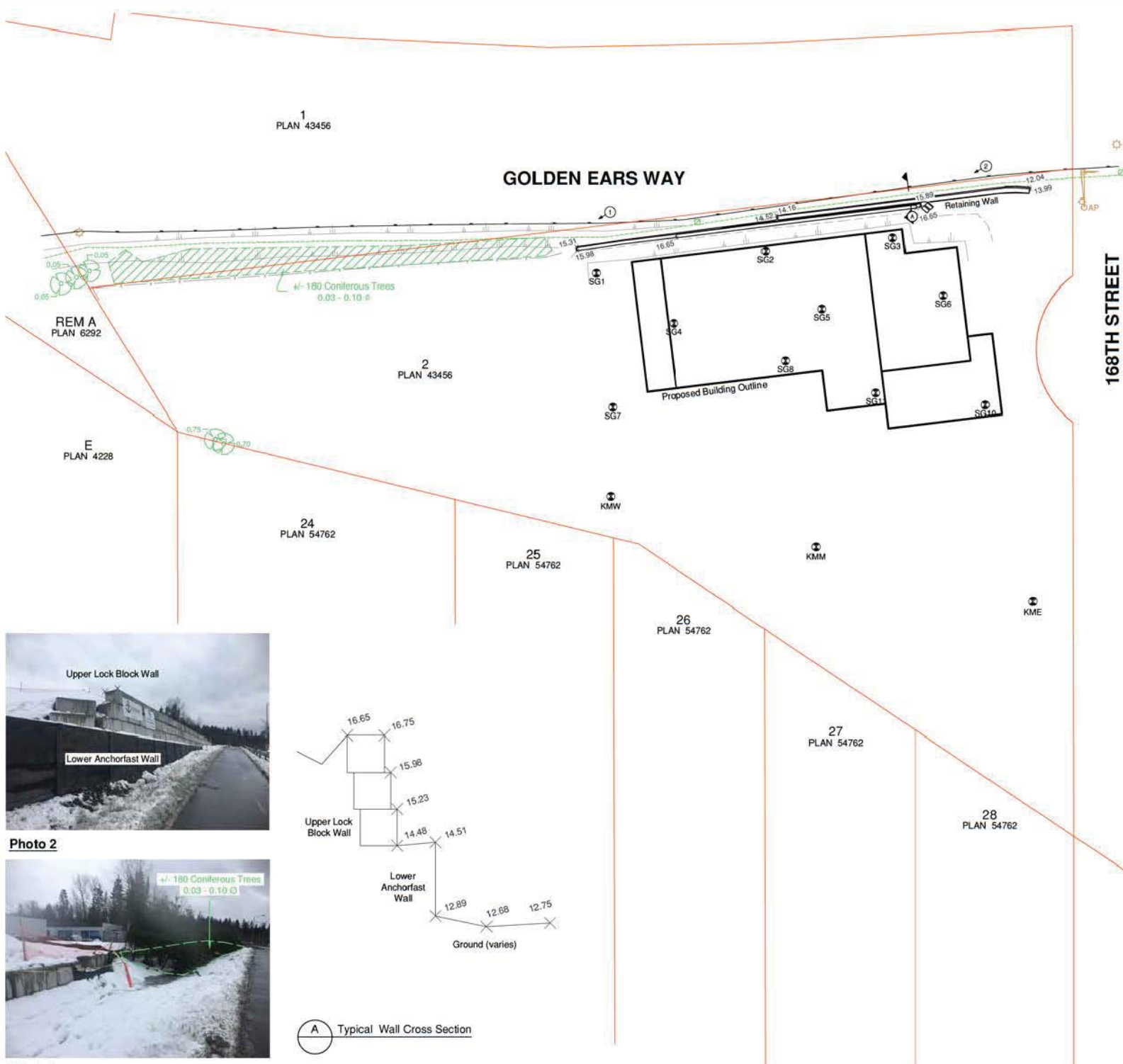
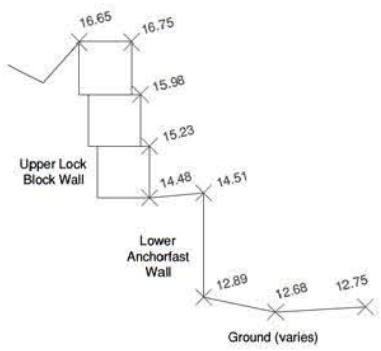


Photo 2



Photo 1



(A) Typical Wall Cross Section



WSP Surveys (BC) Limited Partnership
300-65 Richmond Street, New Westminster, BC
t: 604-625-4651 www.wspgroup.com

PROJECT
186 STREET & 96 AVENUE,
SURREY, BC

PROJECT REF. 010057363

SHEET TITLE
HIWAY REFRIGERATION
WALL AND TREE DETAILS

DRAWN CL	DATE 2001-02-15	CHECKED RO	SCALE 1:500
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SHEET NO. 010057363-CNSI01-R00

2017/02/15 - 11:37 S:\survey\bc_451\010057363\001\wsp\010057363-0001-001.dwg

TOPOGRAPHIC SURVEY OF HIWAY REFRIGERATION SITE



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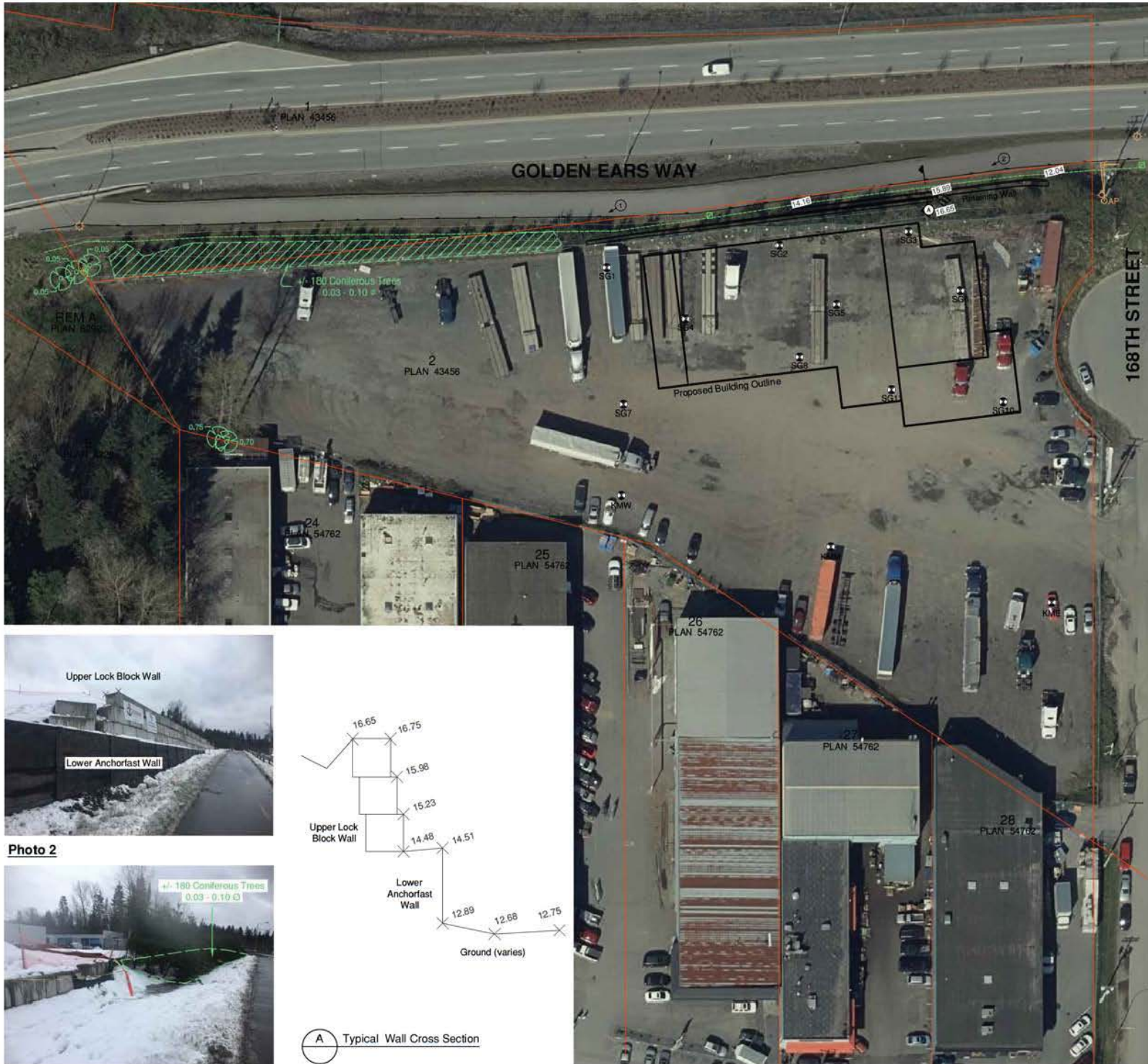
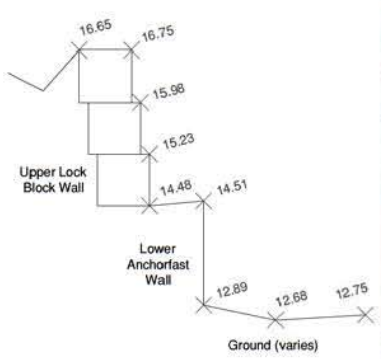


Photo 2



Photo 1



(A) Typical Wall Cross Section



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PROJECT			
186 STREET & 96 AVENUE, SURREY, BC			
PROJECT REF. 010057363			
SHEET TITLE			
HIWAY REFRIGERATION WALL AND TREE DETAILS			
DRAWN	DATE	CHECKED	SCALE
CL	2001-02-15	RO	1:500
SHEET NO. 010057363-CNSI01-R00			