



# Development Permit Application

Referral Form – RDCK File DP2209K

Date: February 3, 2023

You are requested to comment on the attached DEVELOPMENT PERMIT for potential effect on your agency's interests. We would appreciate your response WITHIN 30 DAYS (PRIOR TO March 6, 2023). If no response is received within that time, it will be assumed that your agency's interests are unaffected.

**LEGAL DESCRIPTION & GENERAL LOCATION:**

5785 Highway 23, Halcyon, Electoral Area 'K'  
 LOT 1 DISTRICT LOT 100 KOOTENAY DISTRICT PLAN NEP61860 (PID: 024-181-218)

**PRESENT USE AND PURPOSE OF PERMIT REQUESTED:**

The subject property is located approximately 30 km north of the Village of Nakusp on the west side of Highway 23. The property is bounded by private land to the north and south, Highway 23 to the east, and Arrow Lake to the west.

The 5.1 ha property is mostly undeveloped and is zoned Neighbourhood Commercial (C1) and Tourist Commercial (C3). The OCP Land use designation is General Commercial (C1) and Tourist Commercial (C2). The portion of the lot designated C2 is subject to the Resort Commercial Development Permit (RCDP) Area.

The purpose of this Development Permit Application is to establish a Tourist Commercial use in the form of two 4 storey buildings that will have 16 units in each building for a total of 32 rental units. The rental buildings will be serviced by an on-site wastewater system and a private water supply. Driveway/access improvements and landscaping works are also proposed through this application.

Pursuant to Electoral Area 'K' Official Community Plan Bylaw No. 2022, 2009, the RCDP Area is required to assess the form and character of commercial and multi-family uses. The overall objective of the RCDP Area is to ensure that new resort commercial development is compatible with its surrounding residential and rural character, that it be aesthetically pleasing and environmentally sensitive.

AREA OF PROPERTY AFFECTED	ALR STATUS	ZONING	OCP
5.1 hectares (12.5 acres)	N/A	Neighbourhood Commercial (C1) and Tourist Commercial (C3)	General Commercial (C1) and Tourist Commercial (C2)

**APPLICANT:**

Canadian Global Construction

**OTHER INFORMATION: ADVISORY PLANNING COMMISSION PLEASE NOTE:**

If your Advisory Planning Commission plans to hold a meeting to discuss this Development Permit application, please note that the applicants must be provided with an opportunity to attend such meeting, in accordance with Section 461, subsection (8) of the Local Government Act, which reads as follows:

*"If the commission is considering an amendment to a plan or bylaw, or the issue of a permit, the applicant for the amendment or permit is entitled to attend meetings of the commission and be heard."*

Please fill out the Response Summary on the back of this form. If your agency's interests are 'Unaffected' no further information is necessary. In all other cases, we would appreciate receiving additional information to substantiate your position and, if necessary, outline any conditions related to your position. Please note any legislation or official government policy which would affect our consideration of this permit.

ZACHARI GIACOMAZZO, PLANNER  
 REGIONAL DISTRICT OF CENTRAL KOOTENAY

- MINISTRY OF TRANSPORTATION AND INFRASTRUCTURE
- HABITAT BRANCH (Environment)
- FRONTCOUNTER BC (MFLNRORD)
- AGRICULTURAL LAND COMMISSION
- REGIONAL AGROLOGIST
- ENERGY & MINES
- MUNICIPAL AFFAIRS & HOUSING
- INTERIOR HEALTH, HBE TEAM
- KOOTENAY LAKES PARTNERSHIP (FORESHORE DEVELOPMENT PERMITS)
- SCHOOL DISTRICT NO.
- WATER SYSTEM OR IRRIGATION DISTRICT
- UTILITIES (FORTIS, BC HYDRO, NELSON HYDRO, COLUMBIA POWER)

REGIONAL DISTRICT OF CENTRAL KOOTENAY

DIRECTORS FOR:

- A  B  C  D  E  F  G  H  I  J  K

ALTERNATIVE DIRECTORS FOR:

- A  B  C  D  E  F  G  H  I  J  K

- APHC AREA
- RDCK FIRE SERVICES
- RDCK EMERGENCY SERVICES
- RDCK BUILDING SERVICES
- RDCK UTILITY SERVICES
- RDCK RESOURCE RECOVERY
- RDCK REGIONAL PARKS

INSERT COMMENTS ON REVERSE . . .

The personal information on this form is being collected pursuant to *Regional District of Central Kootenay Planning Procedures and Fees Bylaw No. 2457, 2015* for the purpose of determining whether the application will affect the interests of other agencies or adjacent property owners. The collection, use and disclosure of personal information are subject to the provisions of FIPPA. Any submissions made are considered a public record for the purposes of this application. Only personal contact information will be removed. If you have any questions about the collection of your personal information, contact the Regional District Privacy Officer at 250.352.6665 (toll free 1.800.268.7325), [info@rdck.bc.ca](mailto:info@rdck.bc.ca), or RDCK Privacy Officer, Box 590, 202 Lakeside Drive, Nelson, BC V1L 5R4.

**RESPONSE SUMMARY**

**FILE: DP2209K**

**APPLICANT: CANADIAN GLOBAL CONSTRUCTION**

**Name:**

**Date:**

**Agency:**

**Title:**

RETURN TO: ZACHARI GIACOMAZZO, PLANNER  
DEVELOPMENT AND COMMUNITY SUSTAINABILITY SERVICES  
REGIONAL DISTRICT OF CENTRAL KOOTENAY  
BOX 590, 202 LAKESIDE DRIVE  
NELSON, BC V1L 5R4  
Ph. 250-352-8190  
Email: [plandept@rdck.bc.ca](mailto:plandept@rdck.bc.ca)

# 5785 Highway 23 (DP2209K) - Aerial Photo Map



REGIONAL DISTRICT OF CENTRAL KOOTENAY  
Box 590, 202 Lakeside Drive,  
Nelson, BC V1L 5R4  
Phone: 1-800-268-7325 [www.rdck.bc.ca](http://www.rdck.bc.ca)  
[maps@rdck.bc.ca](mailto:maps@rdck.bc.ca)

## Legend

-  Streams and Shorelines
-  Electoral Areas
-  RDCK Roads
-  Cadastre
-  Civic Address

Map Scale:

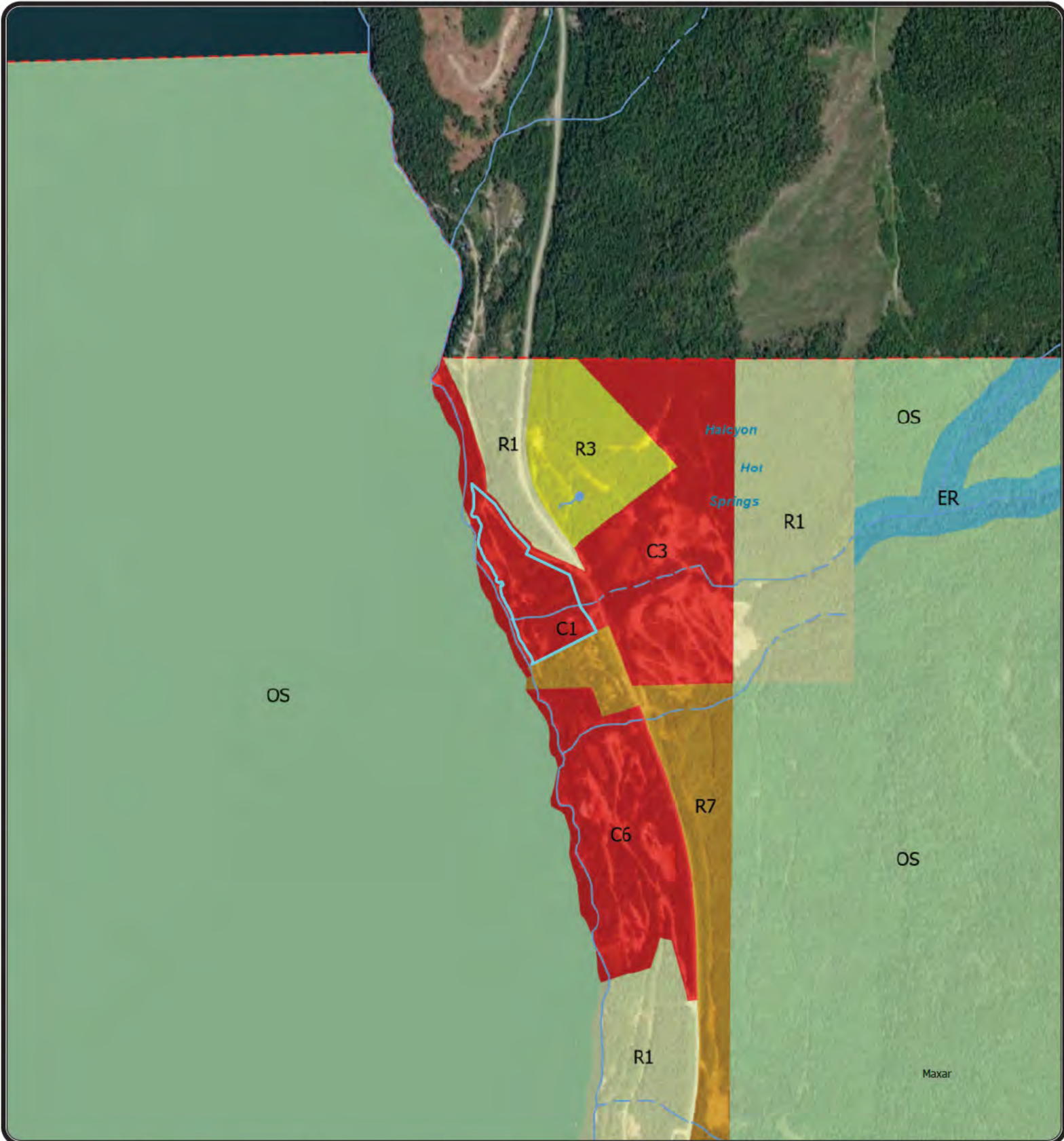
1:4,000

Date: February 2, 2023



The mapping information shown are approximate representations and should only be used for reference purposes. The Regional District of Central Kootenay is not responsible for any errors or omissions on this map.

5785 Highway 23 (DP2209K) - Zoning Map



REGIONAL DISTRICT OF CENTRAL KOOTENAY  
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 Nelson, BC V1L 5R4  
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 maps@rdck.bc.ca

Zoning Class

- Commercial
- Environmental Reserve
- Open Space

Legend

- Residential 1
- Residential 3
- Residential 7
- Streams and Shorelines
- Electoral Areas

Map Scale:

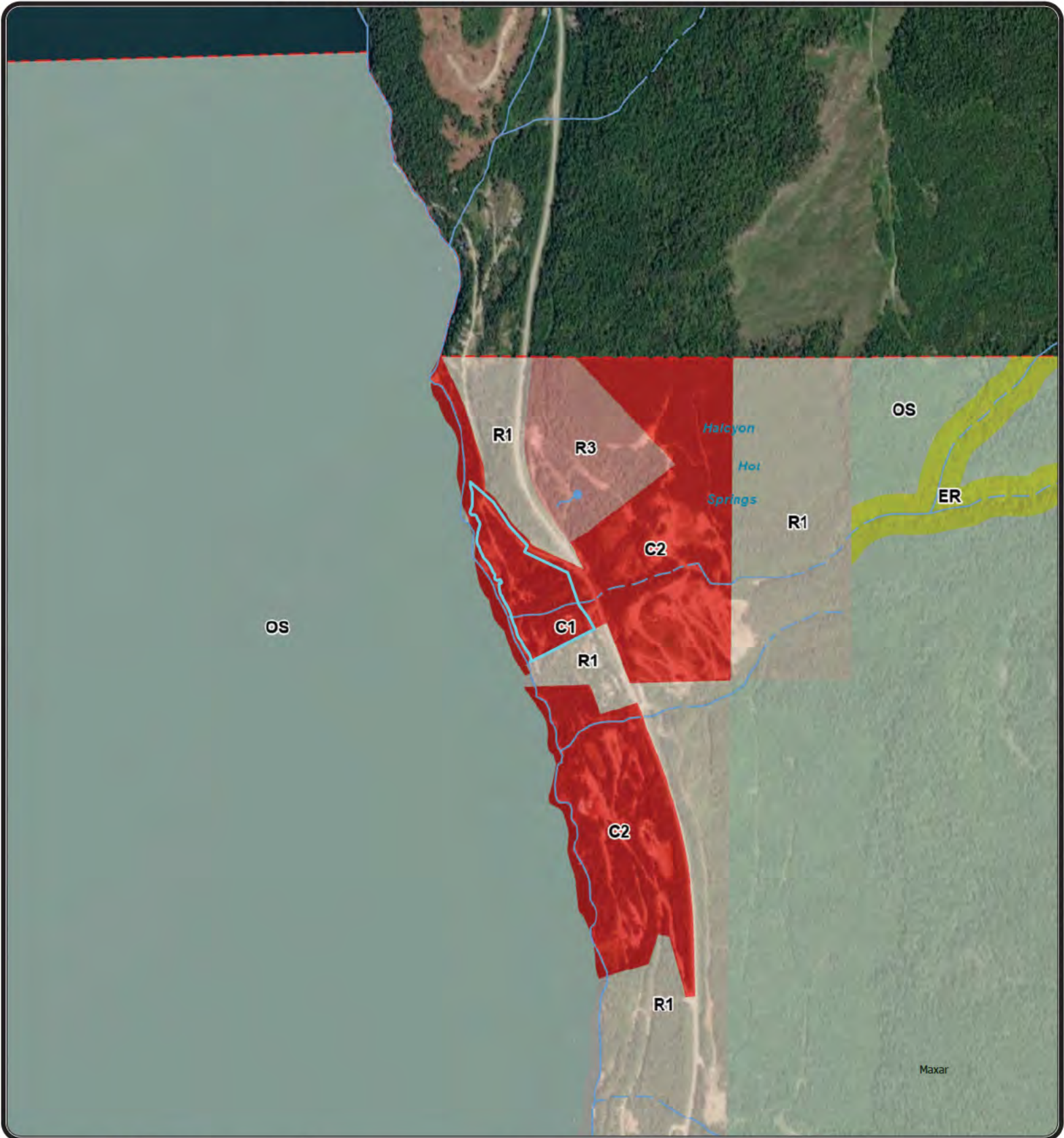
1:20,000

Date: February 2, 2023



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5785 Highway 23 (DP2209K) - OCP Land Use Map



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Official  
 Community Plan

- Commercial
- Environmental Reserve

Legend

- Open Space
- Rural Residential
- Suburban Residential
- Streams and Shorelines
- Electoral Areas

Map Scale:

1:20,000

Date: February 2, 2023



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# Property Information Report

## Area of Interest (AOI) Information

Area : 13.23 acres

Feb 3 2023 14:51:56 Pacific Standard Time



<p><b>Map Scale:</b> 1:4,514</p>	<ul style="list-style-type: none"> <li> Streams and Shorelines</li> <li> Electoral Areas</li> <li> RDCK Roads</li> <li> Cadastre</li> <li> Civic Address</li> </ul>	<p>REGIONAL DISTRICT OF CENTRAL KOOTENAY Box 590, 202 Lakeside Drive, Nelson, BC V1L 5R4 Phone: 1-800-268-7325 <a href="http://www.rdck.bc.ca">www.rdck.bc.ca</a> <a href="mailto:maps@rdck.bc.ca">maps@rdck.bc.ca</a></p>
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## Cadastre - Legal Parcels

#	Folio	PID	Site Address	Actual Use	Plan Number	LTO Number	Lot	Block
1	710.01000.170	024-181-218	5785 HIGHWAY 23, HALCYON	2 Acres Or More (Single Family Dwelling, Duplex)	NEP61860	CA4371378	1	-

#	District Lot	Legal Description	Lot Size	Size Unit	Area(acres)
1	100	LOT 1 PLAN NEP61860 DISTRICT LOT 100 KOOTENAY LAND DISTRICT	12.48	ACRES	13.23

## Civic Address

#	Unit	Number	Street	Full Address	Count
1	-	5787	BURNHAM RD	5787 BURNHAM RD	1
2	-	5793	BURNHAM RD	5793 BURNHAM RD	1
3	-	5785	HWY 23	5785 HWY 23	1
4	-	5779	BURNHAM RD	5779 BURNHAM RD	1

## Electoral Area

#	Area	Director	Area(acres)
1	Electoral Area K - The Arrow Lakes	Teresa Weatherhead	13.23

## Zoning Designation

#	Electoral Area	Zoning Class	Class Description	Bylaw Number	Area(acres)
1	Area K	C3	Tourist Commercial	1675	10.55
2	Area K	C1	Neighbourhood Commercial	1675	2.67

## Official Community Plan

#	Bylaw	Class	Class Description	Area(acres)
1	2022	C2	Tourist Commercial	10.55
2	2022	C1	General Commercial	2.67

The mapping information shown are approximate representations and should be used for reference purposes only. For complete Land Parcel information, view record in Tempest Lands.



2022/11/04

**Regional District of Central Kootenay  
Development & Community Sustainability Services / Planning**

Attn: **Eileen Senyk** - Planner

Box 590

202 Lakeside Drive

Nelson, BC

V1L 5R4

RE: **Arrow Lake Villas**

Arrow Lake Villas consists of two four-storey, 16 unit buildings for a total of 32 units located on the beautiful sloping shoreline of Arrow Lake.

These luxury rental villas offer the opportunity for the public to enjoy a quiet nature destination located miles away from the hustle and bustle of the city. Their central location is ideally located for visitors to explore the Kootenay region and experience all it has to offer.

The Arrow Lake region is one of the most sought-after areas in British Columbia with a lovely climate, stunning views, and access to naturally occurring lithium water, making it a highly desirable destination for both local and international vacationers.

In addition to the Villas, we will be including upgraded paved roads providing access to the properties on both north and south sides as well as to the highway, increasing connectivity for all the neighbors. We are providing on-site water retention and scalable water and waste treatment facilities which we hope will someday be expanded to assist all adjacent properties, reducing the number of such facilities along the shoreline, and allow for the easy expansion and development of our neighbors.

The site will remain in its natural state throughout except where required for the buildings and services. Once work is complete all attempts will be made to return affected areas to their original condition. Only local flora will be used. All soils removed for the construction of the buildings will either be reused on-site for construction or removed to another location.

**Site Summary**

Site Classification – Zoned C1

Gross Area – 1.69 Ha

Building Areas – Building A = 555 sq.m.    Building B = 918 sq.m.

Building Site Coverage – 1473 sq.m. / 1.69 Ha (16,900 sq.m.) = 9%

Typical unit sizes – 1 Bed = 604 sq.ft.    2 Bed = 1058 sq.ft.



**LEGEND**

	PROPOSED APARTMENT BUILDING
	PROPOSED ROAD
	EXISTING PAVED ROAD
	EXISTING GRAVEL ROAD
	PROPOSED GRASS AND SHRUBBERY
	UNDEVELOPED AREA
	STORM PIPES
	SANITARY PIPES
	SANITARY PIPES
	PROPOSED TREE LINE
	EXISTING TREE LINE
	SEPTIC TREATMENT PLANT
	WATER TREATMENT PLANT
	WASTE COLLECTION POINT

- NOTES:
- EXISTING TREES TO REMAIN WITHIN THE UNDEVELOPED AREA.
  - ALL REWORKED LANDSCAPE AREAS AROUND BUILDINGS TO BE REPLANTED WITH NATIVE GRASSES AND SMALL SHRUBBERY

**BEFORE YOU DIG:**  
THE LOCATION OF EXISTING UTILITIES HAS BEEN SHOWN BASED ON THE AVAILABLE INFORMATION. THE ACCURACY & COMPLETENESS OF THE DRAWINGS IN THIS RESPECT IS NOT GUARANTEED. THE EXACT LOCATION OF UTILITIES & SERVICES SHALL BE DETERMINED ON SITE BY THE CONTRACTOR PRIOR TO CONSTRUCTION. ALL CONFLICTS TO BE IMMEDIATELY REPORTED TO GUIDE ENGINEERING & CITY PROJECT MANAGER.

**ISSUED FOR REVIEW**

**GUIDE ENGINEERING LTD.**  
UNIT 512, 45715 HOCKING AVE. CHILLIWACK, BC  
PH (778) 794-0214

PROJ. MGR.	MN	DATE	2022/12/21	BY	HS
DESIGN	HS	DATE		BY	MN
DRAWN	HS	DATE		BY	CH
REV.	0	ISSUED FOR REVIEW		DATE	2022/12/21
		REVISIONS		DATE	

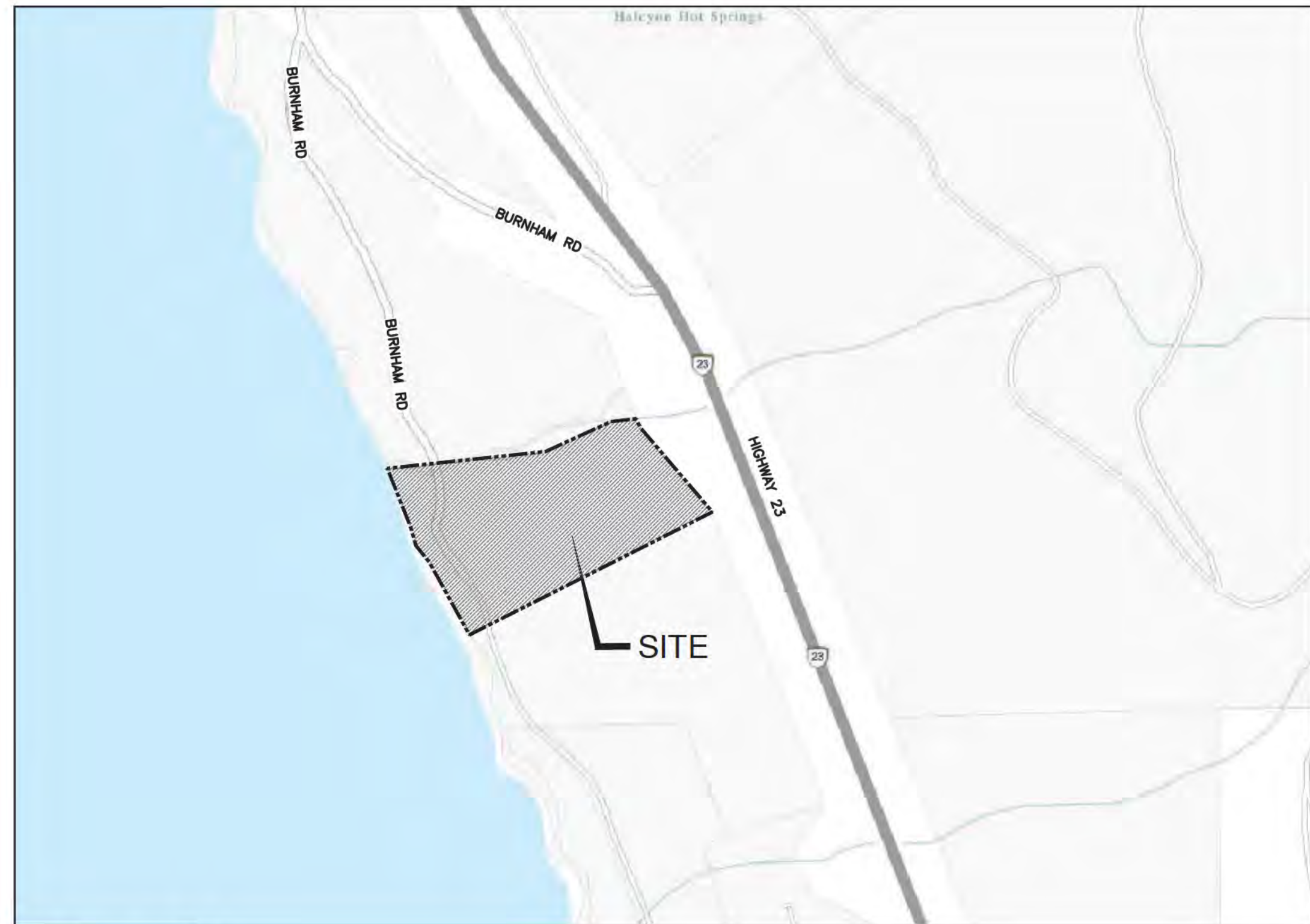
PERMIT TO PRACTICE  
**GUIDE ENGINEERING LTD.**  
SIGNATURE \_\_\_\_\_  
DATE \_\_\_\_\_  
PERMIT NUMBER: 1000770  
THE ASSOCIATION OF PROFESSIONAL ENGINEERS AND GEOSCIENTISTS OF THE PROVINCE OF BRITISH COLUMBIA

CLIENT: CANADIAN GLOBAL CONSTRUCTION  
PROJECT: ARROW LAKE VILLAS DEVELOPMENT  
5785 HIGHWAY 23

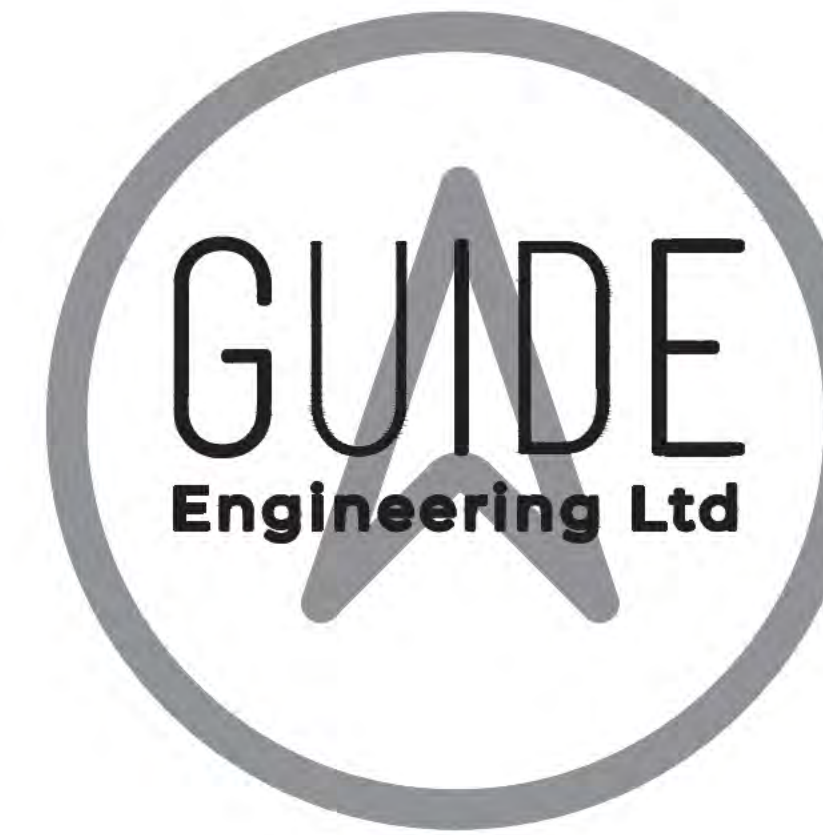


TITLE: LANDSCAPE PLAN

PROJECT #	2022.073.RVL	SHEET	7 OF 7
SUB/BP #	SUB _____		
DRAWING NO.	22.073.C.06		



**SITE PLAN**  
SCALE 1:3000



**GUIDE ENGINEERING LTD.**

UNIT 512, 45715 HOCKING AVENUE, CHILLIWACK, BC

PH: (778) 704- 0214

PERMIT TO PRACTICE #: 1000770

**LIST OF DRAWINGS:**

DWG. NO.	DRAWING DESCRIPTION
22.073.C.00	COVER SHEET
22.073.C.01	GENERAL NOTES & LEGEND
22.073.C.02	KEY PLAN
22.073.C.03	LOT GRADING PLAN
22.073.C.04	SITE SERVICING PLAN
22.073.C.05	TRUCK MANEUVER PLAN

**DEVELOPER:**

CANADIAN GLOBAL CONSTRUCTION,  
[REDACTED]

**CONTACT PERSON:**

TODD LUKE BERTSCH [REDACTED]

KEVIN BRAMWELL: [REDACTED]

**SURVEYOR:**

TRUE LAND SURVEYING LTD  
[REDACTED]

PHONE NUMBER: [REDACTED]

**LEGAL DESCRIPTION:**

PROPOSED LOT A, WITHIN, LOT 1, D.L. 100, KOOTENAY DISTRICT, PLAN NEP61860

**ARROW LAKE VILLAS DEVELOPMENT**

5785 HIGHWAY 23, NAKUSP, BC

PROJECT NO.: 2022.073.RVL



CITY FILE NO. \_\_\_\_\_

THIS PROJECT IS WITHIN THE REGIONAL AUTHORITY OF REGIONAL DISTRICT OF CENTRAL KOOTENAY, FOR THE PURPOSE OF THESE PLANS REGIONAL AUTHORITY REFERRED AS THE "MUNICIPALITY".

1. GENERAL

- 1.1. ALL CIVIL WORK WAS DESIGNED IN ACCORDANCE WITH THE FOLLOWING DOCUMENTS:
(c) THE MASTER MUNICIPAL CONSTRUCTION DOCUMENT AND STANDARD DETAIL DRAWINGS (MMCD) 2018
(b) B.C. BUILDING CODE (BCBC) 2018
(c) REGIONAL DISTRICT OF CENTRAL KOOTENAY SUBDIVISION BYLAW 2011, NO. 2159
1.2. ALL CONSTRUCTION PROCEDURES, ACTIVITIES & MATERIAL TESTING AND MATERIAL SPECS SHALL BE IN ACCORDANCE WITH FOLLOWING WHERE IT APPLICABLE:
(c) THE MASTER MUNICIPAL CONSTRUCTION DOCUMENT AND STANDARD DETAIL DRAWINGS (MMCD) LATEST EDITION (PLATINUM EDITION), AS ADOPTED;
(d) THE LATEST EDITION OF B.C. BUILDING CODE;
(e) FEDERAL REQUIREMENTS SUCH AS THE MINISTRY OF ENVIRONMENT AND/OR FEDERAL DEPARTMENT OF FISHERIES AND OCEANS OR THE MINISTRY OF WATER, LANDS AND AIR PROTECTION;
(f) THE WORKERS' COMPENSATION ACT - OCCUPATIONAL HEALTH AND SAFETY REGULATIONS - LATEST EDITION;
(g) THE LATEST EDITION OF REGIONAL DISTRICT OF CENTRAL KOOTENAY SUBDIVISION BYLAW;
(h) THE MINISTRY OF TRANSPORTATION & INFRASTRUCTURE (MOTI) GUIDELINES AND REQUIREMENTS INCLUDING BUT NOT LIMITED TO: "BC TRAFFIC CONTROL MANUAL FOR WORK ON ROADWAYS," LATEST EDITION;
1.2. ALL DIMENSIONS ARE SHOWN IN METRIC SYSTEM. ELEVATIONS ARE GEODETIC AS PER LEGAL SURVEY AND TOPOGRAPHIC SURVEYOR PROJECTION. THE PROJECTION OF ELEVATIONS ARE DESCRIBED ON SITE PLAN AND SURVEY PLANS FOR REFERENCE.
1.3. PIPE SIZES IN MILLIMETERS UNLESS OTHERWISE NOTED.
1.4. DRAWINGS ARE NOT TO BE SCALED.
1.5. FOR LOT AND SUBDIVISION LEGAL DIMENSION, REFER TO LEGAL SURVEY PLANS.
1.6. FOR BUILDING AND PARKING LOT DIMENSIONS REFER TO ARCHITECTURAL SITE PLANS.
1.7. THE CONTRACTOR SHALL ACQUIRE ALL REQUIRED PERMITS AND LICENSES AND INFORM GUIDE ENGINEERING IN REGARD TO STATUS OF SUCH DOCUMENTS.
1.8. THE CONTRACTOR SHALL ONLY ESTIMATE, WORK FROM THE "ISSUED FOR CONSTRUCTION" (IFC) CIVIL DRAWINGS AND SHALL CONFIRM WITH GUIDE ENGINEERING PRIOR TO STARTING CONSTRUCTION. THE DRAWING SHALL HAVE "ISSUED FOR CONSTRUCTION" MARK ON THE RIGHT MARGIN OF THE DRAWINGS BY GUIDE ENGINEERING.
1.9. ALL CONSTRUCTION WORKS INSTALLED PRIOR TO THE IFC DATE ARE DONE AT CONTRACTORS OWN RISK. ANY VERSIONS OF DRAWING OTHER THAN IFC ARE FOR INFORMATION AND DISCUSSION ONLY.
1.10. THE CONTRACTOR MUST CONTACT THE ENGINEER OF RECORD OR ANYONE WHO WAS ASSIGNED BY ENGINEER OF RECORD TO SCHEDULE A PRE-CONSTRUCTION MEETING. NO WORK SHALL COMMENCED UNTIL SUCH MEETING HAS BEEN TAKEN PLACE. THE CONTRACTOR SHALL TAKE PHOTOGRAPH OF THEIR WORK INCLUDING ANY EXISTING FEATURES TO BE AFFECTED INCLUDING INFRASTRUCTURE OF EXISTING ITEMS OUTSIDE OF THE CONSTRUCTION AREA THAT MAY BE AT RISK OF DAMAGES OR AFFECTED BY CONSTRUCTION.
1.12. CONTRACTOR SHALL GIVE A MINIMUM 24 HOURS NOTICE FOR ANY CONSTRUCTION INSPECTION TO GUIDE ENGINEERING. IT IS ALSO RECOMMENDED CONSTRUCTION SCHEDULE TO BE SUBMITTED TO GUIDE ENGINEERING DURING THE PRE-CONSTRUCTION MEETING.
1.13. NO CONSTRUCTION WILL BE ASSUMED ACCEPTED IF IT IS NOT INSPECTED BY THE ENGINEER OF RECORD. CONTRACTOR SHALL GIVE AN OPPORTUNITY TO ENGINEER OF RECORD TO DETERMINE THAT IF INSPECTION OF SUCH WORK IS NECESSARY, ANY WORK WHICH IS BURIED WITHOUT OUR CONSENT AND APPROVAL MAY NEED TO BE EXPOSED FOR INSPECTION.
1.14. ALL CONSTRUCTION TO BE COMPLETED TO THE SATISFACTION OF THE ENGINEER.
1.15. ANY CHANGE TO THE DESIGN MUST BE APPROVED IN WRITING BY THE ENGINEER OF RECORD. FAILURE TO NOTIFY THE ENGINEER OF RECORD IN ADVANCE OF CHANGES MAY RESULT IN REJECTION OF WORK, SCHEDULE DELAYS AND OR EXTRA COSTS.
1.16. FOLLOWING MINIMUM COVER OVER ALL SERVICES SHALL BE MAINTAINED:
(a) 1.0 m FOR WATERMAINS, STORM, AND SANITARY
(b) 900 mm FOR ELECTRICAL DUCTS
1.17. ALL DRAWING DISCREPANCIES ARE TO BE REPORTED TO THE ENGINEER OF RECORD PRIOR TO INSTALLATION.
1.18. THE CONTRACTOR MUST HAVE AN UP TO DATE HEALTH AND SAFETY PLAN ACCEPTABLE TO THE PROJECT ENGINEER BEFORE COMMENCING WORK. ALL WORKS ON SITE SHOULD CONFORM TO THE PROVISIONS IN THE PLAN CONSISTENT WITH THE REGULATIONS UNDER THE WORKERS' COMPENSATION ACT AND THE HAZARDOUS PRODUCTS ACT.
1.19. ALL MATERIALS USED ON THIS PROJECT SHALL BE LEAD AND ASBESTOS FREE. THE COPY OF MATERIAL TESTING MAY BE REQUESTED AT PROJECT ENGINEER DISCRETION.
2. EROSION AND SEDIMENT CONTROL MEASURES
2.1. APPROPRIATE EROSION/SEDIMENT CONTROL MEASURES AS DESCRIBED HEREIN, SHALL BE INSTALLED BY THE CONTRACTOR PRIOR TO THE COMMENCEMENT OF ALL CLEARING, DEMOLITION AND CONSTRUCTION ACTIVITY WITHIN THE APPROVED LIMITS OF DISTURBANCE. THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION, BUT IN NO CASE SHALL EXCEED 5 ACRES AT ANY ONE TIME BEFORE DISTURBED AREAS ARE STABILIZED.
2.2. CONTRACTOR SHALL INSTALL ALL SPECIFIED EROSION/SEDIMENT CONTROL MEASURES AND WILL BE REQUIRED TO MAINTAIN THEM IN THEIR INTENDED FUNCTIONING CONDITION AND BE IN STRICT CONFORMANCE WITH THE STANDARDS BELOW. THE CONTRACTOR SHALL SUPPLY AND MAINTAIN THESE STANDARDS AND HAVE THEM AVAILABLE ON-SITE FOR THE DURATION OF CONSTRUCTION. THE OWNER, AGENTS OF THE REGULATORY AGENCIES AND/OR QUALIFIED PROFESSIONAL SHALL HAVE THE AUTHORITY TO REQUIRE SUPPLEMENTAL MAINTENANCE OR ADDITIONAL MEASURES IF FIELD CONDITIONS ARE ENCOUNTERED BEYOND WHAT WOULD NORMALLY BE ANTICIPATED.
(c) REGIONAL DISTRICT OF CENTRAL KOOTENAY SUBDIVISION BYLAW
(d) MINISTRY OF ENVIRONMENT OR DEPARTMENT OF FISHERIES AND OCEAN EROSION AND SEDIMENT CONTROL BYLAW
2.3. THE EROSION AND SEDIMENTATION CONTROL MEASURES, CONSTRUCTION SEQUENCE AND PHASING IS THE MINIMUM RECOMMENDED. THE CONTRACTOR SHALL INSTALL AND MAINTAIN ADDITIONAL MEASURES AND SEQUENCING AS REQUIRED BASED ON ACTUAL FIELD OPERATIONS AND CONDITIONS AND BE CONSISTENT WITH THE NEW HAMPSHIRE STORMWATER MANUAL. SIGNIFICANT ADDITIONS AND/OR MODIFICATIONS FROM THE PLANS SHALL BE SUBMITTED, REVIEWED AND APPROVED BY THE OWNER, QUALIFIED PROFESSIONAL AND APPLICABLE REGULATORY AGENCIES.
2.4. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE CONTRACTOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO ELIMINATE THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION.
2.5. THE CONTRACTOR SHALL KEEP A SUPPLY OF EROSION CONTROL MATERIAL (STRAW BALES, SILT FENCE, JUTE MESH, RIP RAP ETC.) ON-SITE FOR MAINTENANCE AND EMERGENCY REPAIRS.
2.6. ALL REGULATORY AGENCY PERMITS REQUIRED FOR THE SITE SHALL BE OBTAINED BY CONTRACTOR PRIOR TO SITE WORK COMMENCES.
2.7. THE CONTRACTOR'S PRE-CONSTRUCTION SITE REVIEW FOR THEIR ESC PLAN IS TO IDENTIFY ITEMS SUCH AS, STORM WATER RUN-OFF LOCATIONS, CATCHMENT AREAS AND AFFECTED DOWNSTREAM AREAS, WITH DOCUMENTATION TO SATISFY ALL REQUIREMENTS OF THE APPLICABLE AUTHORITY.
2.8. ANY CHANGES TO THE EROSION AND SEDIMENT CONTROL METHODS ARE TO BE COMMUNICATED TO THE ENGINEER OF RECORD.
2.9. THE SEDIMENT AND EROSION CONTROL PLAN WAS DEVELOPED TO HELP PROTECT THE EXISTING ROADWAY AND STORM DRAINAGE SYSTEMS, ADJACENT PROPERTIES, AND ADJACENT WETLAND AREA FROM SEDIMENT LADEN SURFACE RUNOFF AND EROSION. THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT SEDIMENT LADEN WATER DOES NOT LEAVE THE SITE EITHER OVERLAND OR PIPED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DRAINAGE DURING CONSTRUCTION AND SHALL PREVENT SURFACE RUNOFF FROM FLOWING ONTO NEIGHBORING PROPERTIES.
2.10. CONSTRUCTION ACCESS TO THE SITE SHALL BE LIMITED TO THE APPROVED CONSTRUCTION ENTRANCES PER THE MUNICIPALITY. THE CONTRACTOR SHALL BE RESPONSIBLE TO KEEP THE MUNICIPALITY'S ROADS CLEAN TO THE SATISFACTION OF THE MUNICIPALITY AT ALL TIME. IN THE EVENT THAT THE ROAD IS CLEANED BY MUNICIPALITY FORCES, SUCH EXPENSES SHALL BE DONE AT THE COST OF CONTRACTOR.
2.11. THE CONTRACTOR SHALL ADHERE TO ESC PLAN WHICH IS PREPARED FOR THIS SITE AT ALL TIME.
2.12. THE COST OF ALL EROSION AND SEDIMENT CONTROL MEASURES INCLUDING UNFORESEEN MEASURES SHALL BE INCLUDED IN THE CONTRACTOR'S PRICE WITH NO ADDITIONAL COST TO THE CONTRACT.

3. UTILITY LOCATION, GRADES AND MEASURES

- 3.1. THE INFORMATION OF EXISTING UTILITIES HAS BEEN COMPILED FROM AVAILABLE INFORMATION INCLUDING UTILITY COMPANY AND THE MUNICIPALITY'S RECORD DRAWINGS AND / OR A TOPOGRAPHICAL FIELD SURVEY AND IS NOT NECESSARILY TO BE CORRECT OR COMPLETE. UTILITIES AND STORM DRAINAGE SYSTEMS ARE SHOWN TO ALERT THE CONTRACTOR TO THEIR PRESENCE AND THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETERMINING THE ACTUAL LOCATIONS AND ELEVATIONS OF ALL UTILITIES AND STORM DRAINAGE SYSTEMS INCLUDING SERVICES. PRIOR TO CONSTRUCTION OR DEMOLITION, THE CONTRACTOR SHALL CONTACT "BC ONE CALL" PRIOR TO COMMENCEMENT OF WORK AND VERIFY ALL UTILITIES AND STORM DRAINAGE SYSTEM LOCATIONS.
3.2. THE CONTRACTOR SHALL VERIFY ALL EXISTING SITE CONDITIONS IN THE FIELD AND CONTRACT THE OWNER AND ENGINEER IF THERE ARE ANY QUESTIONS AND/OR CONFLICTS REGARDING THE SITE DEVELOPMENT PLANS AND/OR EXISTING FIELD CONDITIONS PRIOR TO CONSTRUCTION.
3.3. THE CONTRACTOR SHALL EXPOSE ALL EXISTING SERVICES AND PRESERVE AND PROTECT THEM FROM DAMAGE PRIOR TO AND DURING THE WORK.
3.4. ADHERE TO 72 HOURS NOTICE PRIOR TO CONSTRUCTION COMMENCEMENT FOR LOCATION OF MUNICIPAL WATER AND SEWER.
3.5. ALL CONSTRUCTION SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE IFC DRAWINGS USING MATERIALS DESIGNATED ON THE DRAWINGS AND OR IN THE MUNICIPALITY'S SPECIFICATIONS AND STANDARDS.
3.6. IF SITUATION HAS OCCURRED DURING CONSTRUCTION WHICH IT IS ABSOLUTELY NECESSARY TO CHANGE THE LOCATION OR SLOPES OF THE UTILITIES, THE CLIENT HAS THE RIGHT TO MAKE SUCH CHANGES UPON CONSULTATION AND APPROVAL OF THE ENGINEER OF RECORD. SUCH CHANGES WILL BE REFLECTED IN THE SITE INSTRUCTION AND WILL BE CONSIDERED AS PART OF CONSTRUCTION DOCUMENTS.
3.7. ALL SERVICES INSTALLED TO PROPERTY LINES ARE TO BE PERMANENTLY MARKED OR STAMPED IN THE SURFACE OR ON THE CURB AS PER DIRECTION BY THE MUNICIPALITY OR ENGINEER OF RECORD. STAMPING SHALL BE 75mm TALL "D, S OR W".
4. MATERIALS TESTING
4.1. TRENCHING AND PIPE/SEWER CONSTRUCTION
4.1.1. ALL TRENCH BEDDING AND BACKFILL MATERIAL SHALL CONFORM TO THE MMCD G4 SPECIFICATIONS.
4.1.2. ALL STORM AND SANITARY SEWERS ARE TO BE TESTED AND CLEANED BY POWER FLUSHING AS PER THE MUNICIPALITY'S STANDARD SPECIFICATIONS AND AS PER MMCD STANDARD PROCEDURES.
4.1.3. ALL STORM AND SANITARY SEWERS ARE TO BE VIDEO REVIEWED AS PER MMCD STANDARD. COPIES OF THE REPORT SHOWING POSITIVE COMPLIANCE OF THE SEWER LINES ARE TO BE SUPPLIED TO GUIDE ENGINEERING PRIOR TO REQUESTING SUBSTANTIAL COMPLETION.
4.2. ROADWORKS, DRIVEWAYS & CONCRETE WORKS
4.2.1. THE CONTRACTOR WILL BE RESPONSIBLE TO ARRANGE THE TESTING OF GRANULAR, ASPHALT AND CONCRETE MATERIALS AND COMPACTION TO DEMONSTRATE CONFORMITY TO THE GEOTECHNICAL CONSULTANT'S REQUIREMENTS.
4.2.2. WHEREVER PIPES ARE PASSING THROUGH UNCOMPACTED FILL AREAS, THE BEDDING TRENCH SHALL BE EXCAVATED TO THE UNDISTURBED GROUND LEVEL AND BACKFILLED WITH GRANULAR MATERIAL COMPACTED TO 95% STANDARD PROCTOR DENSITY.
4.2.3. STRUCTURAL FILL SHALL EXTEND BEYOND THE TOES OF NEW CURBS AND SIDEWALKS TO A MINIMUM 500mm, PLUS SLOPE AT 2%:1V FROM TOP OF SUBGRADE ELEVATION TO NON-ORGANIC SOIL, WHERE APPLICABLE.
4.2.4. MINIMUM GRAVEL DRIVEWAY RESTORATION TO BE 75mm OF SIMILAR ORIGINAL MATERIAL.
4.3. CONTRACTOR TO EMPLOY THE SERVICES OF:
a. CERTIFIED GEOTECHNICAL TESTING AGENCY TO CONDUCT TESTING DURING EXCAVATION AND PERFORM TEST AT REGULAR INTERVAL. ALL POSITIVE TEST RESULTS SHALL BE SUBMITTED TO GUIDE ENGINEERING ON AN ON-GOING BASIS.
b. GEOTECHNICAL ENGINEER TO SUPERVISE, APPROVE AND CERTIFY:
i. TRENCH BEDDING, RESTORATION MATERIALS AND COMPACTION
ii. SUBGRADE, BASE GRAVELS AND ASPHALT MATERIALS
iii. ENSURE EXCAVATION RESTORATION IS DONE TO REQUIRED STANDARDS
iv. AND OTHER TESTING AS DEMED REQUIRED BY THE GEOTECHNICAL ENGINEER
v. PREPARE AND SIGN REPORTS CERTIFYING THE ROAD'S INTEGRITY - WITH COPY PROVIDED TO GUIDE ENGINEERING FOR OUR RECORD.
4.4. MINIMUM TESTING SHALL BE CARRIED OUT AS FOLLOWS:
a. GRANULAR BACKFILL MATERIAL OVER SANITARY, STORM, WATER WORKS - ONE PROCTOR DENSITY TEST PER 100m.
b. ROAD SUB-GRADE - ONE PROCTOR DENSITY TEST PER 500m.
c. ROAD BASE AND SUB-BASE - ONE PROCTOR DENSITY TEST PER 300m.
d. ASPHALT TESTING - ONE MARSHALL STABILITY TEST PER 4000m<sup>2</sup> PER LAYER AND 5 CORE SAMPLES.
e. CONCRETE SIDEWALK - ONE SET OF CONCRETE CYLINDER TESTS PER 250m<sup>2</sup> OF SIDEWALK.
f. CURB AND GUTTER - ONE SET OF CONCRETE CYLINDER TESTS PER 400m OF CURB AND GUTTER.
g. BENTLEMAN BEAM TESTING SHOULD BE CARRIED OUT EVERY 10m FOR EACH LANE OF ROAD OR LANE.
h. COSTS FOR TESTING WOULD BE INCLUDED IN THE CONTRACTOR'S PRICE WITH NO ADDITIONAL COST TO THE CONTRACT.
4.5. PAVEMENT
a. REINSTATE PAVED MUNICIPALITY'S ROADWAY, DRIVEWAYS & PARKING AREAS AS PER THE MMCD G5 SPECIFICATIONS WITH A MINIMUM DEPTH OF:
i. 300mm OF 75 mm MINUS GRAVEL SUB-BASE COMPACTED TO 95% MODIFIED PROCTOR,
ii. 100mm OF 20mm CRUSHED GRAVEL BASE COMPACTED TO 95% MODIFIED PROCTOR,
iii. 40 mm ASPHALT - BASE COURSE,
iv. 35 mm ASPHALT - SURFACE COURSE.
b. ASPHALTIC CONCRETE, IMPORTED BASE AND SUBBASE MATERIAL SHALL CONFORM TO THE GRADATION, SPECIFICATIONS AND COMPACTION SET OUT IN THE MMCD OR MUNICIPALITY BYLAW SPECIFICATIONS.
c. THE FINAL LIFT OF ASPHALT WILL BE PLACED ONE YEAR SUBSEQUENT TO THE PLACEMENT OF THE FIRST LIFT OR AT TIME AS APPROVED BY THE PROJECT ENGINEER OR MUNICIPALITY.
4.6. WATERMAINS & WATER SYSTEMS
a. THE CONTRACTOR SHALL PROVIDE GUIDE ENGINEERING WITH PROOF OF:
i. LEAKAGE TESTING,
ii. CHLORINATION TESTING AND FLUSHING FOR THE NEW WATER MAINS AND SERVICES TO ALL STANDARDS OUTLINED IN THE MUNICIPALITY'S STANDARD SPECIFICATIONS, AND TO AWWA STANDARDS.
b. HEAVILY CHLORINATED WATER SHALL BE DISPOSED OF IN A MANNER APPROVED BY THE MUNICIPALITY OR AUTHORITY HAVING JURISDICTION OVER OPERATION.
5. STORM AND SANITARY SEWER
5.1. ALL TRENCHING TO BE IN ACCORDANCE WITH THE WORKERS COMPENSATION ACT - OCCUPATIONAL HEALTH AND SAFETY REGULATIONS.
5.2. PER THE MUNICIPALITY'S STANDARD DRAWINGS & UNLESS OTHERWISE NOTED,
a. ALL STORM AND SANITARY MAINS SHALL BE PVC SDR 35, CSA APPROVED
b. STORM AND SANITARY SERVICE CONNECTIONS SHALL BE PVC, SDR 28, CSA APPROVED
c. FOR SERVICE CONNECTION CONTRACTOR SHALL BE USING PREFABRICATED WYES.
d. STORM AND SANITARY SEWER AND SERVICE CONNECTIONS TO BE FITTED WITH RUBBER GASKET JOINTS ON-SITE & OFF SITE TO BUILDING CONNECTIONS.
e. STORM AND SANITARY SEWERS AND SERVICES TO HAVE 1.0 m MINIMUM COVER AND BE CONSTRUCTED IN ACCORDANCE WITH THE OCCUPATIONAL HEALTH AND SAFETY ACT.
f. EXACT LOCATION OF SANITARY AND STORM SERVICE CONNECTIONS TO BE RECORDED, AT TIME OF CONSTRUCTION, ON AS-BUILT RECORDS DRAWINGS MAINTAINED AND BE COMMUNICATED TO ENGINEER OF RECORD. A COPY OF MARKED UP DRAWINGS SHALL BE SUBMITTED TO GUIDE ENGINEERING AT THE TIME OF RECORD DRAWING PREPARATION.
5.3. ALL SEWERS CONSTRUCTED WITH LESS THAN 0.50% GRADE, LASER ALIGNMENT CONTROL SHALL BE UTILIZED.
5.4. UNLESS OTHERWISE NOTED ALL MANHOLES:
a. SHALL BE PRE-CAST REINFORCED CONCRETE WITH 100# IN-SIDE DIAMETER.
b. LADDER RUNGS TO BE ALUMINUM OR EPOXY COATED REBAR AND ACCORDING TO ASTM C478.
c. MANHOLE ADJUSTING RINGS MANUFACTURED TO ASTM C478M OR HDPE TO ASTM D1248 MAX..

- d. THE DISTANCE FROM TOP OF FINISHED MANHOLE RIM ELEVATION TO TOP RUNG TO BE MAXIMUM 500mm WHERE NO HANDHOLD IS PROVIDED.
5.5. UNLESS OTHERWISE NOTED, ALL CATCH BASINS:
a. SHALL BE PRECAST REINFORCED CONCRETE WITH A MINIMUM INSIDE DIAMETER OF 600 mm.
b. FRAME AND GRATE:
i. IN TRAFFIC AREAS SHALL HAVE DOBNEY FOUNDRY NO. B28-B (H=20 LOADING) FRAME AND GRATE OR APPROVED EQUIVALENT.
ii. IN CURBSIDE AREAS HAVE DOBNEY FOUNDRY NO. B23 (H 20 LOADING) FRAME AND GRATE OR APPROVED EQUIVALENT.
iii. ALL SINGLE CATCH BASIN LEADS SHALL BE MINIMUM 150 mm PVC SDR 35.
iv. DOUBLE CATCH BASIN LEADS ARE TO BE 200mm PVC SDR-35.
v. HAVE LEADS AT A MINIMUM GRADE 2.0% UNLESS OTHERWISE SPECIFICALLY NOTED ON THE DRAWINGS.
c. UNLESS OTHERWISE NOTED ALL ROCK PITS AND OR SOAKAWAY SYSTEMS SHALL BE INDIVIDUALLY REVIEWED BY THE CONSULTING ENGINEER TO CONFIRM ITS LOCATION AND CONFIGURATION PRIOR TO INSTALLATION. PRIOR TO PLACEMENT OF MATERIAL, THE BOTTOM OF THE ROCKPIT SHALL BE INSPECTED BY GUIDE ENGINEERING.
6. WATERWORKS
6.1. UNLESS OTHERWISE NOTED, ALL MUNICIPALITY WATER MAINS ARE TO BE DUCTILE IRON PIPE TO AWWA C151 STANDARD.
6.2. SERVICE PIPES TO BE TO MUNICIPALITY'S STANDARDS
6.3. THE INVERT OF A WATER MAIN SHALL BE AT LEAST 500 MM ABOVE THE CROWN OF A STORM OR SANITARY SEWER.
6.4. THE MINIMUM HORIZONTAL CLEARANCE BETWEEN A WATER MAIN AND A STORM OR SANITARY SEWER SHALL BE 3.0m UNLESS THE SEWER MAIN IS INSTALLED IN A CARRIER PIPE.
6.5. WHERE THE ABOVE NOTED CLEARANCES, ARE NOT POSSIBLE, APPROVAL IS REQUIRED FROM THE FRASER HEALTH AUTHORITY AND THE MUNICIPALITY'S ENGINEERING DIRECTOR. THE FOLLOWING MEASURES ARE TO BE TAKEN IN ACCORDANCE TO MINISTRY OF HEALTH REQUIREMENTS.
a. WHEN THE WATER MAIN IS CLOSER THAN 500 MM TO A STORM OR SANITARY SEWER BUT ABOVE THE STORM OR SANITARY SEWER, THE WATER MAIN MUST BE LAID IN SUCH A MANNER THAT CROSSING IS MADE MIDWAY BETWEEN JOINTS ON A FULL LENGTH OF WATER MAIN. THE WATER MAIN JOINTS ARE TO BE WRAPPED WITH HEAT SHRINK PLASTIC OR PACKED WITH COMPOUND AND WRAPPED WITH TAPE OVER A LENGTH EXTENDING 3.0 M ON EITHER SIDE OF THE SEWER MAIN.
b. WHEN THE WATER MAIN IS BENEATH THE SEWER, THERE SHALL BE A MINIMUM 300 MM VERTICAL SEPARATION. THE CROSSING SHALL BE MADE MIDWAY ON A FULL LENGTH OF WATER MAIN PIPE.
c. THE WATER MAIN JOINTS ARE TO BE WRAPPED WITH HEAT SHRINK PLASTIC OR PACKED WITH COMPOUND AND WRAPPED WITH TAPE OVER A LENGTH EXTENDING 3.0 M ON EITHER SIDE OF THE SEWER MAIN.
d. WHEN 3.0 M HORIZONTAL SEPARATION IS UNATTAINABLE, ALL WATER MAIN JOINTS ARE TO BE WRAPPED WITH HEAT SHRINK PLASTIC OR PACKED WITH COMPOUND AND WRAPPED WITH TAPE.
6.6. TIE IN TO ALL EXISTING WATER MAIN SHALL BE BY MUNICIPALITY'S FORCES AT DEVELOPERS COST UNLESS OTHERWISE NOTED.
6.7. DEVELOPER TO SUPPLY ALL MATERIALS AND SUPPLIES AND BACKFILL AS PER MMCD G4 & G5.
7. ROADWORKS AND PARKING
7.1. PRIOR TO ANY ROAD AND CONCRETE WORK AND AFTER ALL SERVICES HAVE BEEN INSTALLED, THE CONTRACTOR SHALL RE-COMPACT THE SUBGRADE IN PAVED AND CONCRETE AREAS TO THE SATISFACTION OF THE GEOTECHNICAL ENGINEER.
7.2. ANY SOFT SPOTS IN THE SUBGRADE ARE TO BE EXCAVATED OUT AND REPLACED WITH SUITABLE MATERIAL COMPACTED TO THE SATISFACTION OF THE GEOTECHNICAL ENGINEER.
7.3. THE CONTRACTOR SHALL SUPPLY, PLACE AND COMPACT THE SUBGRADE, SUBBASE, BASE MATERIAL AND ASPHALT CONCRETE AS PER THE PAVEMENT DESIGN STRUCTURE. ALSO SEE TESTING NOTES.
7.4. GUIDE ENGINEERING IS TO BE GIVEN A MINIMUM 24 HOURS NOTICE TO INSPECT THE PAVEMENT BASE PREPARATION PRIOR TO PAVING AND THE FORMS OR STRING LINE FOR THE CONCRETE CURB AND SIDEWALK PRIOR TO POURING CONCRETE.
7.5. ALL RIM ELEVATIONS SHOWN ON DETAIL DRAWINGS ARE TO FINAL LIFT ELEVATION. ALL CATCH BASINS, CBHMS AND VALVE BOXES ARE REQUIRED TO BE SET TO 25mm MINIMUM BELOW FINISHED ASPHALT GRADE ELEVATION AND SET TO MATCH GRADE AND CROSS-FALL OF THE ROAD.
7.6. THE FINAL LIFT OF MUNICIPAL ROADS ASPHALT WILL BE PLACED ONE YEAR SUBSEQUENT TO THE PLACEMENT OF THE FIRST LIFT OR AT TIME AS APPROVED BY THE PROJECT ENGINEER.
7.7. CONTRACTOR IS TO ADJUST ALL CATCH BASINS, CBHMS AND VALVE BOXES ETC. TO FINAL FINISHED ELEVATIONS PRIOR TO 2ND ASPHALT LIFT INSTALLATION UNLESS APPROVED BY ENGINEER PRIOR TO 1ST LIFT'S INSTALLATION.
7.8. THE ASPHALT CONCRETE SHALL CONFORM TO THE GRADATION, SPECIFICATIONS AND COMPACTION SET OUT IN THE MASTER MUNICIPAL SPECIFICATIONS (MMCD).
9. CLEARING AND RESTORATION NOTES
9.1. CONTRACTOR SHALL RESTORE AREAS WHICH WAS AFFECTED BY CONSTRUCTION TO THE ORIGINAL CONDITION OR BETTER UPON APPROVAL OF MUNICIPALITY AND ENGINEER OF RECORD.
9.2. CONTRACTOR IS RESPONSIBLE FOR REINSTATEMENT OF PUBLIC ROAD - SEE MATERIALS TESTING NOTES.
9.3. ALL GRASSED AREAS AFFECTED DURING CONSTRUCTION SHALL BE RESTORED WITH 50mm TOPSOIL AND SOD OR HYDROSEED, MAINTAIN UNTIL ESTABLISHED AND ACCEPTED BY MUNICIPALITY AND ENGINEER OF RECORD.
9.4. ANY TREES WHICH NEEDS TO BE REMOVED SHALL BE IDENTIFIED BY CONTRACTOR AND OBTAIN ENGINEERING APPROVAL AND ANY REQUIRED PERMIT PRIOR TO CUTTING.
9.5. ALL TREES TO BE REMOVED SHALL BE HAND DUG UNLESS THE USE OF MECHANICAL EQUIPMENT IS APPROVED BY MUNICIPALITY.
9.6. IF CONSTRUCTION WORK REQUIRES PARTIAL REMOVAL OF EXISTING FEATURES SUCH AS FENCE SIDEWALKS ETC., ALL REMOVAL SHALL BE PERFORMED BY HAND AND RESTORED TO ORIGINAL OR BETTER CONDITION UPON APPROVAL OF STAKEHOLDER AND MUNICIPALITY.
10. PAVEMENT MARKINGS & LINE PAINTING
10.1. ALL LINE PAINTING AND PAVEMENT MARKING FOR TRAFFIC LANE DELINEATION SHALL BE COMPLETED IN WAY TO NOT COMPROMISE PUBLIC SAFETY AND TIMING OF SUCH WORK SHALL BE APPROVED BY MUNICIPALITY.
10.2. CONTRACTOR SHALL OBTAIN A TRAFFIC MANAGEMENT PLAN FOR ALL LINE PAINTING WHICH TAKES PLACE IN TRAFFIC LANE AND PUBLIC ROADS OR WHERE HAS BEEN IDENTIFIED TO BE NECESSARY BY MUNICIPALITY.
10.3. THE PAVEMENT MARKING FOR ALL PARKING LOT LINES, HANDICAP STALL SYMBOLS, NO PARKING, AND CROSS HATCHING ETC. SHALL BE IN ACCORDANCE TO THE ARCHITECTURAL SITE PLANS AND/OR CIVIL DRAWINGS.
10.4. ALL PAVEMENT MARKINGS SHALL BE PLACED IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR CANADA. THE DEVELOPER IS RESPONSIBLE FOR SUPPLYING AND INSTALLING ALL THE PERMANENT AND TEMPORARY PAVEMENT MARKINGS OF THE MATERIAL TYPE AS SPECIFIED BY THE ENGINEERING DIRECTOR. THE CITY REQUIRES ALL PAVEMENT MARKINGS TO BE THERMOPLASTIC.
11. TRAFFIC CONTROL, SIGNAGE, WARNINGS AND BARRIERS
11.1. THE TRAFFIC MANAGEMENT PLAN SHALL BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER OF THE PROVINCE OF B.C.
11.2. ALL TRAFFIC CONTROL AND SIGNAGE SHALL BE PREPARED IN ACCORDANCE WITH MINISTRY OF TRANSPORTATION REQUIREMENTS.
11.3. CONTRACTOR SHALL MAINTAIN A MINIMUM OF ONE LANE OF TRAFFIC FLOW THROUGHOUT DURATION OF PROJECT. CONTRACTOR SHALL OBTAIN LAINE CLOSURE PERMITS FROM AUTHORITY HAVING JURISDICTION.
11.4. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE PROTECTION OF ITS WORK AND SAFETY OF ITS WORK SITE. THE

- CONTRACTOR SHALL AT ITS OWN COST, SUPPLY AND MAINTAIN ALL REQUISITE BARRIERS, FENCES, WARNING SIGNS OR OTHER PRECAUTIONS TO PROTECT THE WORKERS AND GENERAL PUBLIC FROM ACCIDENT OR INJURY.
11.5. ALL EXCAVATIONS SHOULD BE FILLED BY THE END OF THE WORKDAY. ANY EXCAVATIONS LEFT OPEN SHALL BE SECURELY FENCED OFF.
11.6. SHOULD ANY OF THE CONTRACTOR'S WORK CAUSE INTERFERENCE WITH ANY EXISTING PUBLIC ROAD OR PEDESTRIAN ACCESS, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN SUCH SIGNS, LIGHTS, BARRIERS, FLAG PEOPLE ETC. AS MAY BE REQUIRED FOR PUBLIC CONVENIENCE AND SAFETY IN ACCORDANCE WITH MUNICIPALITY'S REQUIREMENTS.
11.7. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING A SAFE ROUTE FOR PEDESTRIANS WHILE CONSTRUCTION IS IN PROGRESS DURING DAYLIGHT HOURS AND THE SITE TO BE MADE SAFE AS PER STANDARDS FOR NON WORK HOURS.
11.8. THE ON-SITE CONTRACTOR SHALL HAVE APPROPRIATE PERMITS FROM MUNICIPALITY TO WORK ON ADJACENT MUNICIPALITY'S STREETS. THIS PERMIT SHALL BE AVAILABLE AT THE CONSTRUCTION SITE.
12. SURVEYING & AS-BUILTS - CONTRACTOR'S OBLIGATIONS
12.1. THE CONTRACTOR IS RESPONSIBLE FOR ALL SURVEYING FOR CONSTRUCTION OF THE WORKS. PROPERTY CORNER PINS MUST BE PRESERVED BY THE CONTRACTOR. IF THEY ARE REMOVED, THE CONTRACTOR WILL HAVE TO REPLACE THEM AT THEIR COST BY A QUALIFIED LEGAL SURVEYOR.
12.2. FINAL MEASUREMENTS FOR AS BUILTS AND QUANTITIES FOR PAYMENT WILL BE CARRIED OUT BY THE CONTRACT ADMINISTRATOR / CLIENT AT THE END OF THE CONTRACT PERIOD. GUIDE ENGINEERING WILL PREPARE THE RECORD DRAWING BASED ON THE SUBMITTED AS-BUILT SURVEY PROVIDED BY CONTRACTOR OR CLIENT.
12.3. CONTRACTOR IS TO MAINTAIN AN ON-SITE WRITTEN RECORD OF INSTALLED PIPE MATERIALS, LOCATIONS AND ELEVATIONS OF INTERSECTION POINTS AND SERVICE CONNECTIONS. CROSSING LOCATIONS AND ELEVATION OF EXISTING UTILITIES IS ALSO TO BE RECORDED.
12.4. CONTRACTOR IS TO REVISE ALL GENERAL NOTES AND DETAILED DRAWINGS PAGES AS FOLLOWS:
a. THOSE ITEMS THAT WERE COMPLIED WITH: CHANGE THE NOTE TO PAST TENSE.
b. IF THE NOTE WAS NOT COMPLIED WITH: PROVIDE A NOTE DETAILING THE "REASON" FOR AND WHO AUTHORIZED THE CHANGES.
c. MAKE NOTE IF THE ITEM IS "NOT APPLICABLE" OR "IRRELEVANT".
12.5. CONTRACTOR TO CONFIRM THAT ALL NUMERICAL INFORMATION ON THE DRAWINGS HAS BEEN COMPLIED WITH PRIOR TO THE CHECK BEING CARRIED OUT BY THE SURVEYOR. KNOWN CHANGES TO THE NUMERICAL INFORMATION IS TO BE REFLECTED ON THE CONTRACTORS RECORD DRAWINGS.
12.6. A CONTRACTOR CERTIFIED COPY OF THE ON-SITE RECORD DOCUMENTS IS TO BE PROVIDED TO GUIDE ENGINEERING FOR FINAL RECORD DRAWING CREATION.

LEGEND CITY OF CHILLIWACK

Table with 2 columns: EXISTING and PROPOSED. Lists various symbols for infrastructure elements like Edge of Pavement, Curbs, Sewers, and Trees.

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Project information footer including logos for Guide Engineering Ltd., Regional District of Central Kootenay, and project details like 'ARROW LAKE VILLAS DEVELOPMENT' and '2022.073.RVL'.



**LEGEND**

- PROPOSED APARTMENT BUILDING
- PROPOSED ROAD
- EXISTING PAVED ROAD
- EXISTING GRAVEL ROAD
- EXISTING CONTOURS (5.0m VERT'L SEPARATION)



- NOTES:**
- FOR PURPOSE OF THIS LAYOUT THE RIPARIAN SETBACK FROM THE EXISTING HALCY CREEK WAS SET AT 15m. THIS MIGHT BE SUBJECT TO CHANGE ON GETTING MORE INFORMATION ABOUT THE CLASS OF THE EXISTING HALCY CREEK.
  - BASED ON THE SURVEY FILE RECEIVED FROM THE SURVEYORS, RETAINING WALLS WILL BE NEEDED DUE TO THE STEEP SLOPE ACROSS THE SITE.
  - PROPOSED PARKING PROVIDED FOR EACH BUILDING IS
    1. 30 STANDARD PARKING STALLS (2.6mX5.8m)
    2. 2 HANDICAP PARKING STALLS (3.7mX5.8m)
    3. 2 TRAILER VEHICLE PARKING STALLS (3.0mX12.0m, FOR THE LOWER BUILDING)
  - ACCESS ROAD FOR BOTH BUILDINGS ARE 6m WIDE WITH MAXIMUM 15% SLOPE. THE EXISTING GRAVEL ROAD WAS WIDENED TO TIE INTO THE HIGHWAY AND EXISTING BRIDGE.
  - EXISTING TREES TO REMAIN WITHIN THE UNDEVELOPED AREA. THE TREE LOCATIONS TO BE DETERMINED IN DETAILED DESIGN STAGE BY THE SURVEYOR.

BEFORE YOU DIG:  
THE LOCATION OF EXISTING UTILITIES HAS BEEN SHOWN BASED ON THE AVAILABLE INFORMATION. THE ACCURACY & COMPLETENESS OF THE DRAWINGS IN THIS RESPECT IS NOT GUARANTEED. THE EXACT LOCATION OF UTILITIES & SERVICES SHALL BE DETERMINED ON SITE BY THE CONTRACTOR PRIOR TO CONSTRUCTION. ALL CONFLICTS TO BE IMMEDIATELY REPORTED TO GUIDE ENGINEERING & CITY PROJECT MANAGER.

**PLAN VIEW**  
SCALE: 1:400

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**GUIDE ENGINEERING LTD.**  
UNIT 512, 45715 HOCKING AVE. CHILLIWACK, BC  
PH (778) 794-0214

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DATE: \_\_\_\_\_  
PERMIT NUMBER: 1000770  
THE ASSOCIATION OF PROFESSIONAL ENGINEERS AND GEOSCIENTISTS OF THE PROVINCE OF BRITISH COLUMBIA

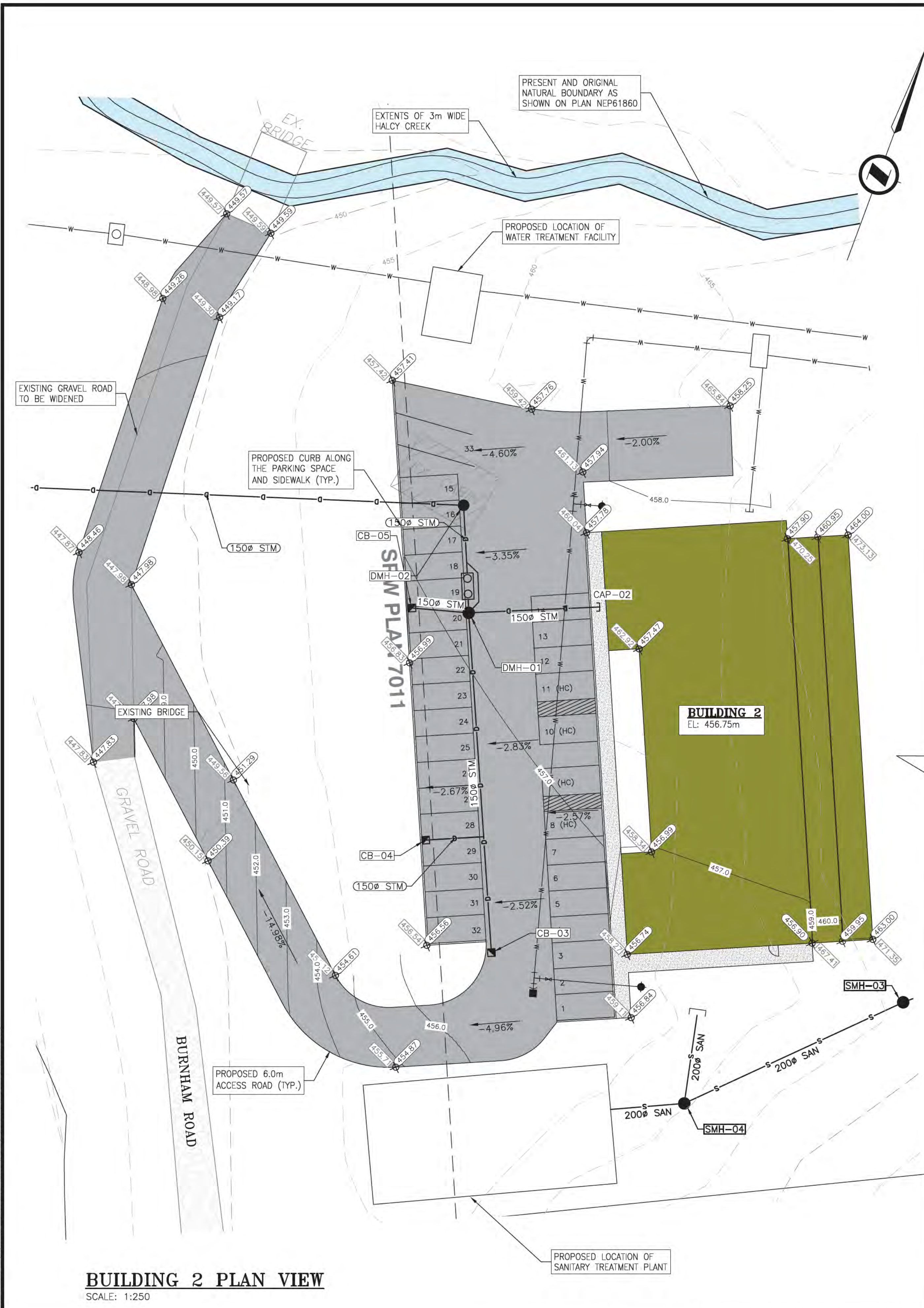


CLIENT	CANADIAN GLOBAL CONSTRUCTION
PROJECT	ARROW LAKE VILLAS DEVELOPMENT 5785 HIGHWAY 23

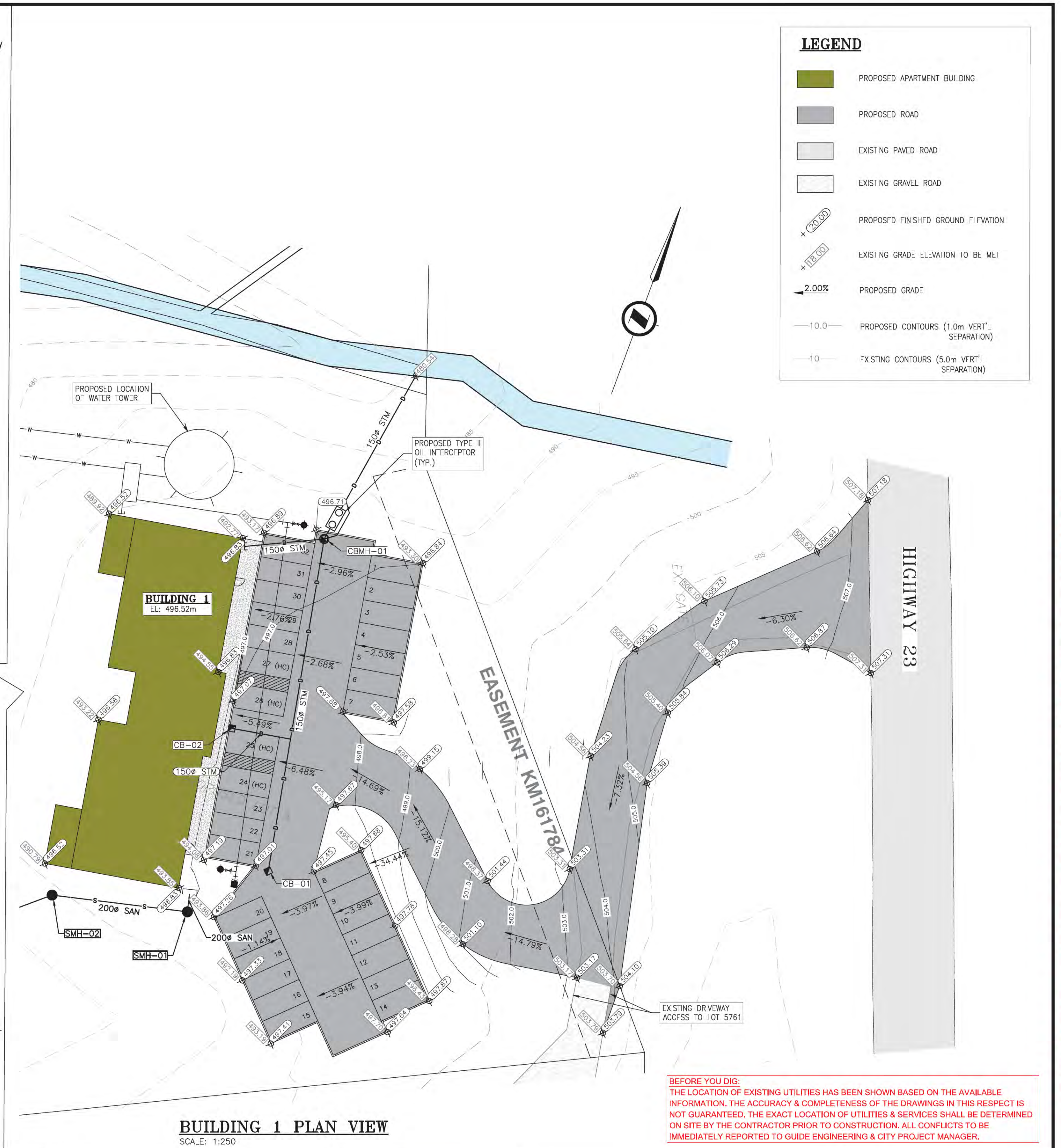


TITLE	KEY PLAN
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PROJECT #	2022.073.RVL.	SHEET	3 OF 6
SUB/PP #	SUB _____		
DRAWING NO.	22.073.C.02		



**BUILDING 2 PLAN VIEW**  
SCALE: 1:250



**BUILDING 1 PLAN VIEW**  
SCALE: 1:250

**LEGEND**

	PROPOSED APARTMENT BUILDING
	PROPOSED ROAD
	EXISTING PAVED ROAD
	EXISTING GRAVEL ROAD
	PROPOSED FINISHED GROUND ELEVATION
	EXISTING GRADE ELEVATION TO BE MET
	PROPOSED GRADE
	PROPOSED CONTOURS (1.0m VERT'L SEPARATION)
	EXISTING CONTOURS (5.0m VERT'L SEPARATION)

**BEFORE YOU DIG:**  
THE LOCATION OF EXISTING UTILITIES HAS BEEN SHOWN BASED ON THE AVAILABLE INFORMATION. THE ACCURACY & COMPLETENESS OF THE DRAWINGS IN THIS RESPECT IS NOT GUARANTEED. THE EXACT LOCATION OF UTILITIES & SERVICES SHALL BE DETERMINED ON SITE BY THE CONTRACTOR PRIOR TO CONSTRUCTION. ALL CONFLICTS TO BE IMMEDIATELY REPORTED TO GUIDE ENGINEERING & CITY PROJECT MANAGER.

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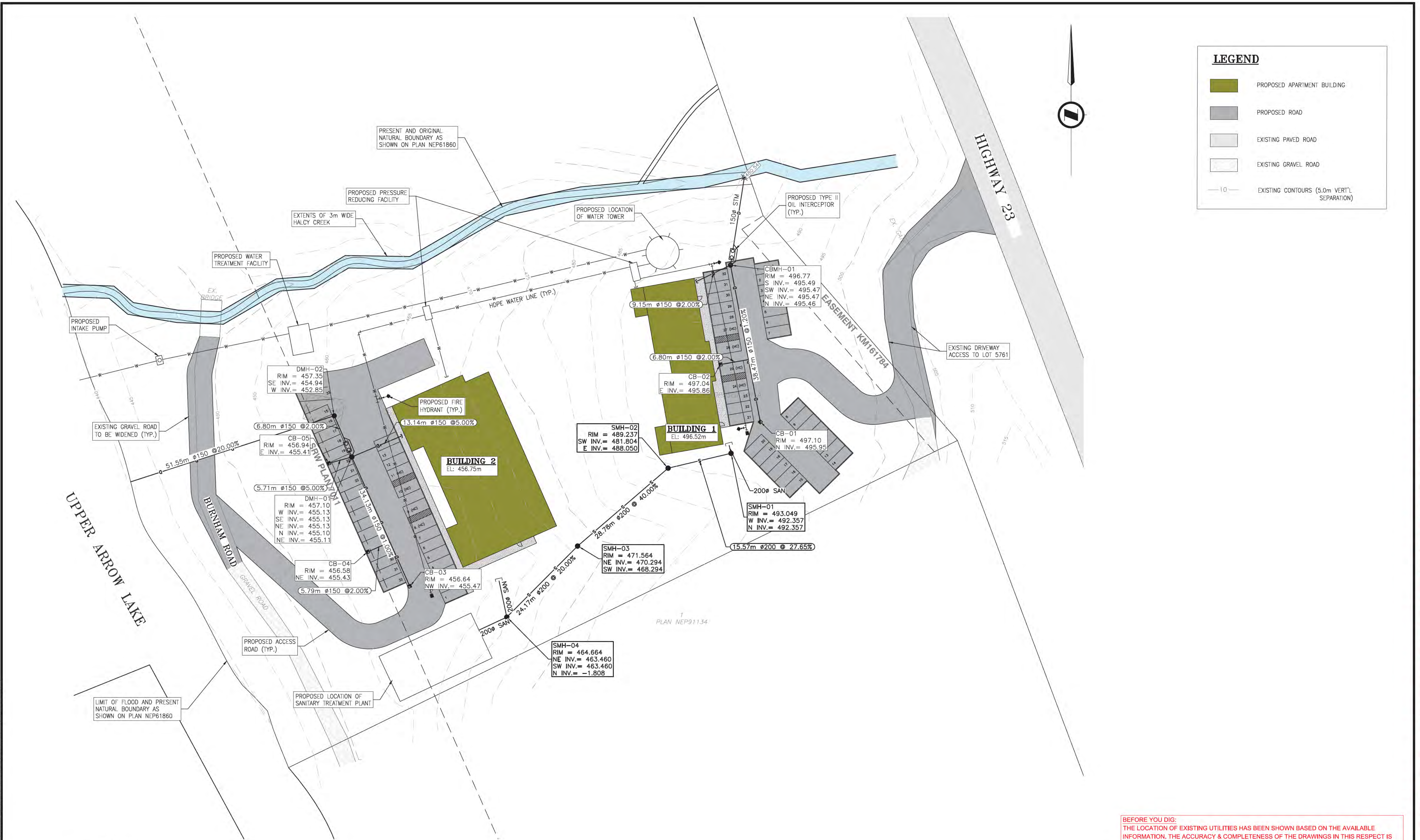


CLIENT: CANADIAN GLOBAL CONSTRUCTION  
PROJECT: ARROW LAKE VILLAS DEVELOPMENT  
5785 HIGHWAY 23



TITLE: LOT GRADING PLAN

PROJECT #	2022.073.RVL	SHEET	4 OF 6
SUB/SP #	SUB		
DRAWING NO.	22.073.C.03		



**LEGEND**

- PROPOSED APARTMENT BUILDING
- PROPOSED ROAD
- EXISTING PAVED ROAD
- EXISTING GRAVEL ROAD
- EXISTING CONTOURS (5.0m VERT'L SEPARATION)



**PLAN VIEW**  
SCALE: 1:400

**BEFORE YOU DIG:**  
THE LOCATION OF EXISTING UTILITIES HAS BEEN SHOWN BASED ON THE AVAILABLE INFORMATION. THE ACCURACY & COMPLETENESS OF THE DRAWINGS IN THIS RESPECT IS NOT GUARANTEED. THE EXACT LOCATION OF UTILITIES & SERVICES SHALL BE DETERMINED ON SITE BY THE CONTRACTOR PRIOR TO CONSTRUCTION. ALL CONFLICTS TO BE IMMEDIATELY REPORTED TO GUIDE ENGINEERING & CITY PROJECT MANAGER.

**ISSUED FOR DEVELOPMENT PERMIT**

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0	ISSUED FOR DEVELOPMENT PERMIT	2022/11/01	MY	MN

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PERMIT TO PRACTICE  
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DATE: \_\_\_\_\_  
PERMIT NUMBER: 1000770  
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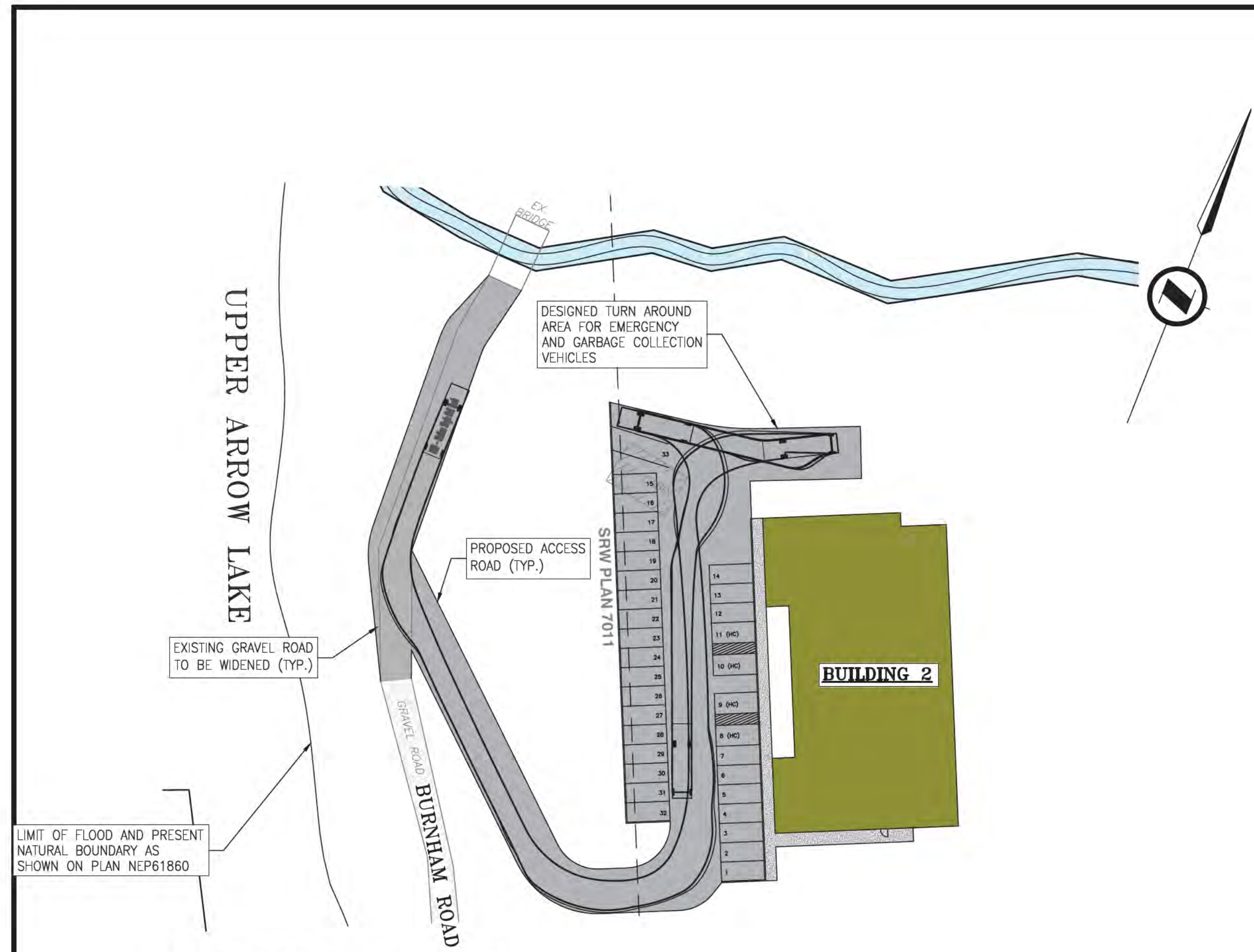


CLIENT	CANADIAN GLOBAL CONSTRUCTION
PROJECT	ARROW LAKE VILLAS DEVELOPMENT 5785 HIGHWAY 23



TITLE	SITE SERVICING PLAN
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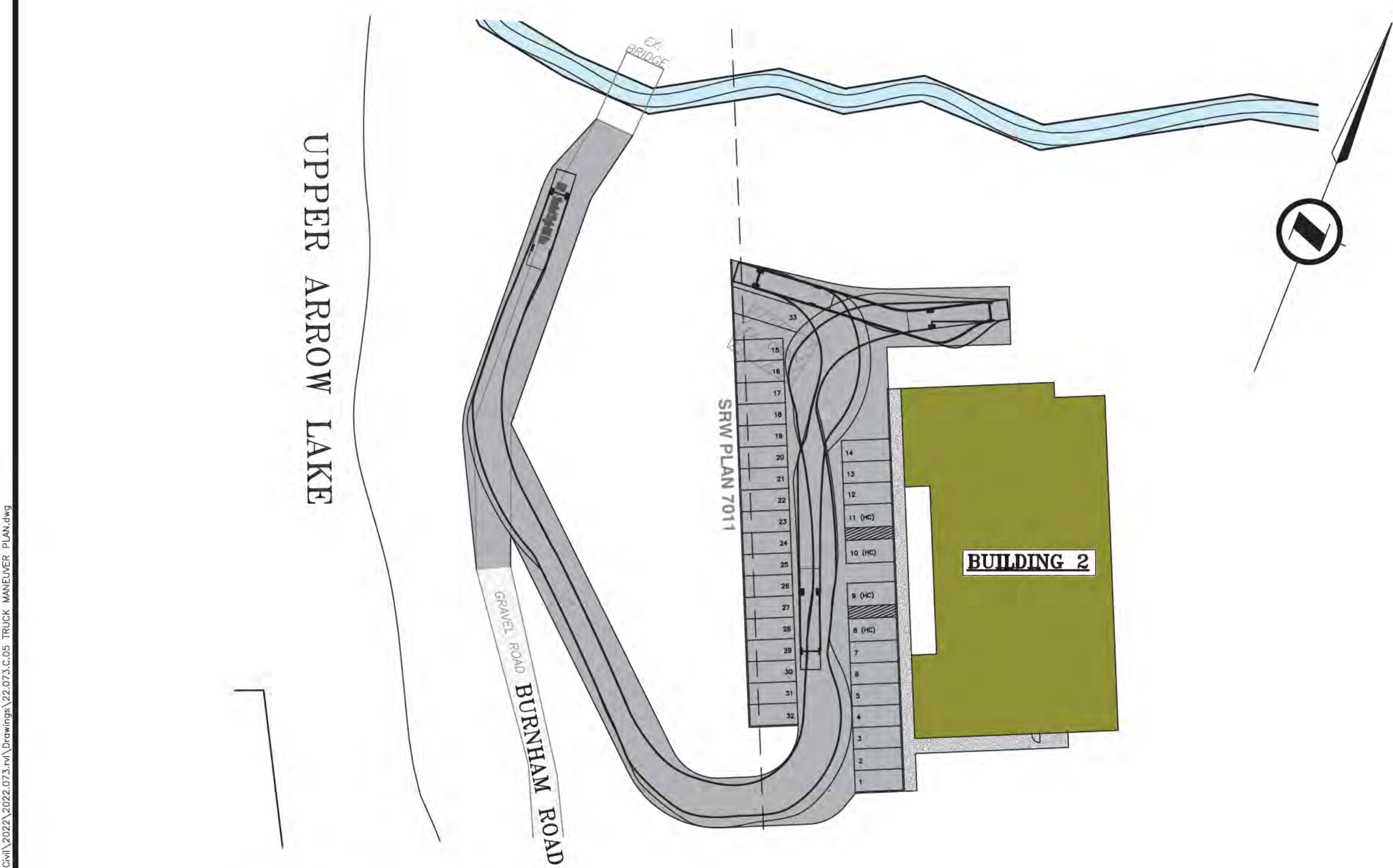
PROJECT #	2022.073.RVL	SHEET	5 OF 6
SUB/BP #	SUB _____		
DRAWING NO.	22.073.C.04		



**GARBAGE TRUCK PATH**  
SCALE: 1:500



**GARBAGE TRUCK PATH**  
SCALE: 1:500



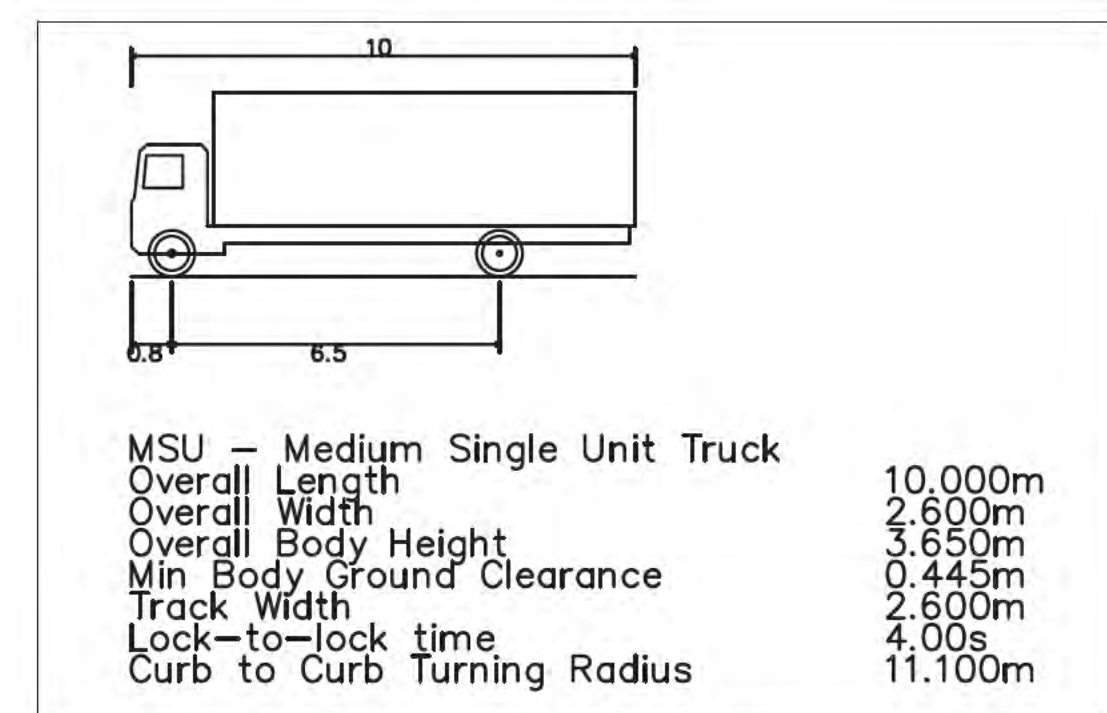
**FIRE TRUCK PATH**  
SCALE: 1:500



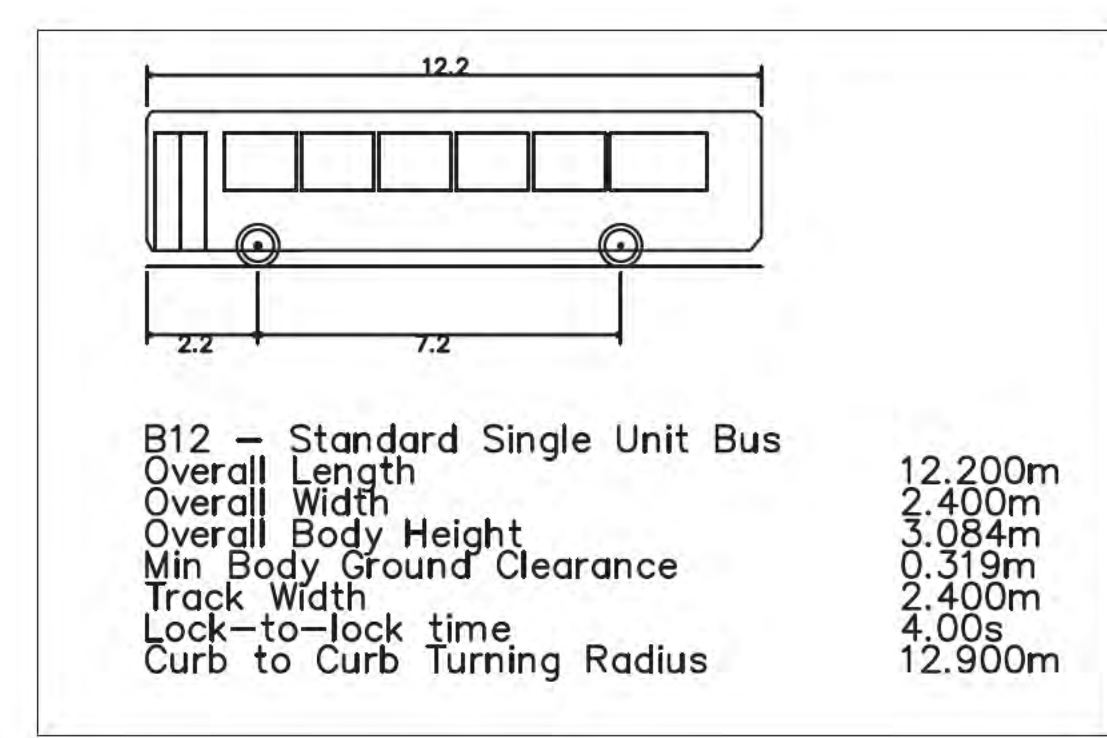
**FIRE TRUCK PATH**  
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**LEGEND**

	PROPOSED APARTMENT BUILDING
	PROPOSED ROAD
	EXISTING PAVED ROAD
	EXISTING GRAVEL ROAD



**GARBAGE TRUCK MODEL**



**FIRE TRUCK MODEL**

**GUIDE ENGINEERING LTD.**  
UNIT 512, 45715 HOCKING AVE., CHILLIWACK, BC  
PH (778) 794-0214

PROJ. MGR.	MN	DATE	2022/11/01	BY	MY	CH	MN
DESIGN	MY	DATE		BY	MY	CH	
DRAWN	MY	DATE		BY	MY	CH	
SCALE:	1:500						

PERMIT TO PRACTICE  
**GUIDE ENGINEERING LTD.**  
SIGNATURE:   
DATE: 2022/11/01  
PERMIT NUMBER: 1000770  
THE ASSOCIATION OF PROFESSIONAL ENGINEERS AND  
SCIENTISTS OF THE PROVINCE OF BRITISH COLUMBIA



CLIENT: CANADIAN GLOBAL CONSTRUCTION  
PROJECT: ARROW LAKE VILLAS DEVELOPMENT  
5785 HIGHWAY 23



TITLE: TRUCK MANEUVER PLAN

PROJECT #	2022.073.RVL.	SHEET	6 OF 6
SUB/BP #	SUB _____		
DRAWING NO.	22.073.C.05		

**ISSUED FOR DEVELOPMENT PERMIT**



6. the Province is requested to ensure industrial activities involving emission of toxic or irritant material meet the highest standards regarding the protection of groundwater catchment areas, surface water and riparian areas and air-borne industrial pollutants;
7. wherever possible, new industrial activity shall be located in close proximity and with direct access to major roads;
8. prior to commencement of industrial activity, a landscape buffer shall be required on industrial properties adjacent to non-industrial designated properties; and
9. all industrial activity; including parking and storage must be screened and wide buffers shall be left along roads and property lines.

### **Exemptions**

The IDP area does not apply to the following:

1. existing construction, alteration, addition, repair, demolition and maintenance of industrial buildings

### **Development Permit Area #3 –Resort Commercial Development Permit (RCDP) Area**

#### **Category**

All lands designated Tourist Commercial (C2) as shown in Schedule B, are designated as a Development Permit Areas pursuant to Section 488(1)(f) of the *Local Government Act*, for the purpose of providing guidelines for the form and character of commercial and multi-family uses.

#### **Justification**

Electoral Area K includes the Halcyon Hot Springs, the Arrow Lakes, Whatshan Lake, and St. Leon's Hot Springs. The OCP recognizes the increase in non-resident owners in the area, the development of the Halcyon Hot Springs area and the potential for further resort type development provided that such development is compatible with existing uses. The overall objective of this designation then is to ensure that new resort commercial development is compatible with its surrounding residential and rural character, that it be aesthetically pleasing and environmentally sensitive.

#### **Guidelines**

Development permits issued in this area shall be in accordance with the following general guidelines and with the requirements of the applicable Zoning Bylaw.

1. Development proposals shall be articulated in a detailed development plan.

#### Form and Character of Building

2. Buildings and structures should be sited and shaped in such a manner as to be visually unobtrusive and aesthetically pleasing.
3. The shape, siting, roof line and exterior finish of buildings should be sufficiently varied to avoid a monotonous appearance
4. A residential component located above commercial development is encouraged
5. Parking should be in smaller clusters, screened from view from internal and adjacent residential uses and from adjacent streets.

#### Landscaping and Screening

6. Particular emphasis should be given to landscaping and the retention of natural vegetation. Landscaping and screening shall comply with the requirements of any applicable zoning bylaw.
7. Landscaping along the street should be established so that it is sympathetic to the neighbourhood.
8. The Development of new structures may require a geotechnical report prepared by a Professional Engineer. The report shall address potential impacts to existing services and the natural environment with particular emphasis on potential impacts to water resources.
9. Community water and sewer are required for larger developments.
10. Signage should be low, visually unobtrusive and grouped whenever possible. Particular emphasis should be given to signage which is aesthetically pleasing and requires a minimal amount of lighting and boldness to be effective. Lighting should be unobtrusive and in scale with the surroundings.

#### **Exemptions**

The RCDP area does not apply to the following:

1. construction, alteration, addition, repair, demolition and maintenance of existing resort commercial buildings
2. subdivisions.