



# Project Development Plan NSD Inland Port and Developments

Address: 4800 Keith Avenue, Terrace, BC

Legal Description: LOT A, DISTRICT LOT 362, RANGE 5, COAST DISTRICT, PLAN 12018 EXCEPT PART IN PLAN EPP42962



Prepared For: Progressive Ventures Ltd.

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0	2020-06-29	DW	KMY	Issued For Zoning and OCP Amendment Application			
1	2020-07-03	DW	KMY	Revised Figure 6 and added Figure 8			

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#### 1 INTRODUCTION

This Project Development Plan presents NSD Inland Port and Developments, a proposed project in the City of Terrace intended to attract, support and facilitate other business investment. The project proponents are local residents who want to contribute to a diversified and resilient economy that can withstand the boom and bust cycles that have historically affected the rural northwest of British Columbia. The NSD Inland Port and Developments recognizes Terrace's favourable geography and history as a regional transportation hub and service centre, and seeks to improve the region's ability to do business efficiently with trade partners around the world.

# 1.1 Objectives

The objectives of this document are as follows:

- To describe and present the proposed NSD Inland Port and Developments project, a commercial, industrial and institutional land development, as envisaged by the project proponents.
- To be consistent with the Community Vision, as well as other recent planning policy documents.
- To build on the Keith Estates Neighbourhood Concept Plan that was developed through a community engagement process by incorporating key elements in the proposed NSD Inland Port and Developments.
- To capitalize on the current economic boom.
- To build a transportation and service center that endures and continues to support a resilient regional economy.

## 1.2 Location and Population

The City of Terrace is located adjacent to the Skeena River in northwestern British Columbia. Across the Skeena River is the sizeable unincorporated rural community of Thornhill. The City of Terrace provides business and community services that serve the residents of Thornhill, local First Nations communities, and other smaller local neighbourhoods. The location of the site is shown on Figure 1: Project Location.

The population of Thornhill, Terrace and Greater Terrace (2016 Census) are as follows:

City of Terrace 11,643

• Thornhill 3,993 (Electoral Area E including Kulspai)

• Greater Terrace 19,073 (includes Terrace, Thornhill, Kitsumkalum, Gitaus, and Census Subdivision C – Part 1)

As a regional hub, Terrace also provides services that are used intermittently by residents from communities such as Kitimat, the Nass Valley (Nisga'a communities), Stewart, north along Highway 37, and to a lesser extent Prince Rupert and the Hazeltons. This regional area has a serviced population of about 50,000 people.

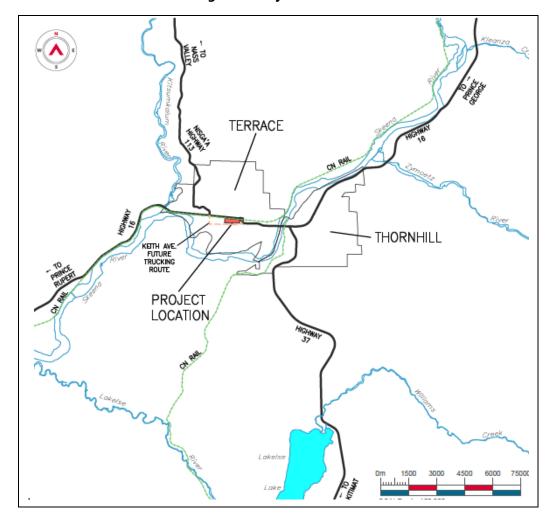


Figure 1: Project Location

# 1.3 Physical & Historical Context

The City of Terrace is located in the heart of the Coast Mountains, a rugged and formidable mountain range that extends from the southern end of British Columbia in the south to Yukon Territory and Alaska in the north. The jagged peaks, steep valleys and extensive ice fields make this mountain range a natural barrier to trade and travel. Few easily traversable routes exist. Fewer still have the breadth and shallow grades necessary to support a full range of infrastructure including rail lines. At the southern extent of the coast mountains, a number of rail lines converge at Vancouver. The only other rail route through the coast mountains is the CN line connecting the ports of Prince Rupert and Kitimat on the coast to the broader rail network at Prince George and Edmonton. This rail line passes through Terrace and borders the subject property.

The land around the port of Kitimat is generally fjord-like valley walls and estuary, and the secondary rail line that extends from Terrace to Kitimat has unfavourable grades and requires switching in Terrace. The area in and around the port of Prince Rupert is a mix of rolling rock and swamp; rugged, near-vertical mountains; and deep water inlets and channels that present challenges to land development. About 140km east and up the Skeena River from Prince Rupert, a geographical anomaly provides

extensive flat and developable land in the heart of the Coast Mountains. This is where a broad and overall flat trench valley cuts through the coast mountains in a south-north direction from the Douglas Channel and Kitimat in the south to the Nass River valley in the north. This broad, flat and developable trench valley is bisected by the broad Skeena River valley that cuts across the Coast Mountains from east to west. The City of Terrace sits at the junction of these two geographic breaks in the rugged coast mountains, a natural crossroads with extensive developable land.

These natural geographic corridors have a long history of serving as the primary trade and travel routes of northwestern British Columbia. First the local First Nations peoples travelled them by canoe and Grease Trails. Then, in the late 19<sup>th</sup> century and early 20<sup>th</sup> century, the Europeans settlers established steamboat routes and railways along these same corridors.

Terrace developed through the 20<sup>th</sup> century as a sawmill community, with large sawmill operations being established on the rail-serviced lands. As the region developed and grew from the 1950's to 1990's, transportation networks were improved and, today, provincial highways 16, 37 and 113 all pass through Terrace, which has become the regional service centre.

# 1.4 Project Site

The subject property is ideally situated to take advantage of the natural geographic crossroads of its host city. It is located on the unofficial Keith Avenue trucking route near the commercial core of the City's downtown, but is separated from it by Highway 16 and multiple CN rail tracks. To the north of the property, CN rail tracks border the property with 6 sets of tracks that serve as part of the rail yard around which Terrace was built. A rail spur enters the property from the northeast corner. North of, and parallel to, the CN rail is Highway 16 running in an east-west direction, and beyond that is a mix of land uses that marks the western extent of Terrace's downtown. To the east of the property is a privately owned and undeveloped parcel, the northern portion of which will be acquired and consolidated into the project site. About 175m beyond the project site, the Sande Overpass forms part of Highway 16 and serves as the primary highway and road crossing of the CN rail tracks in Terrace. Along the west side of the property is Kenney Street, a Collector road which is one of few level crossings of the CN tracks. Beyond Kenney Street to the west is bare industrial land which previously hosted industrial loggingrelated uses. To the south, the property is bordered by Keith Avenue, a Collector road which serves as a truck route. The south side of Keith Avenue is primarily developed with Light Industrial uses, with some undeveloped land, Service Commercial and Public and Institutional uses mixed in. This configuration is shown in Figure 2: Project Site Detailed Transportation Context.

1.8 ACRES OF 4760 KEITH AVE.

4800/4900 KEITH AVENUE

METH AVENUE FUTURE TROSAYS ROUTE

Om 75 150 225 300 375

**Figure 2: Project Site Detailed Transportation Context** 

The project site is comprised of two properties:

- 4800 Keith Avenue. This property's legal description is LOT A, DISTRICT LOT 362, RANGE 5, COAST DISTRICT, PLAN 12018 EXCEPT PART IN PLAN EP42962. It is shown as "REM. A PLAN 12018" in Figure 3: Plan EPP42962.
- The northern 1.8 acres (0.7ha) of 4760 Keith Avenue. This portion of land has yet to be subdivided and consolidated with 4800 Keith Avenue. The legal description of 4760 Keith Avenue is PART OF LOT A, DISTRICT LOT 361, RANGE 5, COAST DISTRICT, PLAN 6510. It is shown as "REM. A PLAN 6510" in Figure 4: Plan EPP53069.

The expectation and intent is to have the 1.8 acre (0.7ha) section of 4760 Keith Ave consolidated into the 4800 Keith Ave parcel to serve as the overall development property. Throughout this report, the development property is referred to as 4800 Keith Ave for the purpose of brevity.

The subject land is generally flat, with some long shallow benches and local depressions. The overall topography generally slopes from northeast to southwest, with a total elevation difference of about 5m within 4800 Keith Ave. A topographic survey of 4760 Keith Ave has not been completed to date, but the

	hown on Figure 5: Existing Site Topography	
northeast corner of the property is estim	nated to be a further 2m higher than the no	rtheast corner of

Figure 3: Plan EPP42962

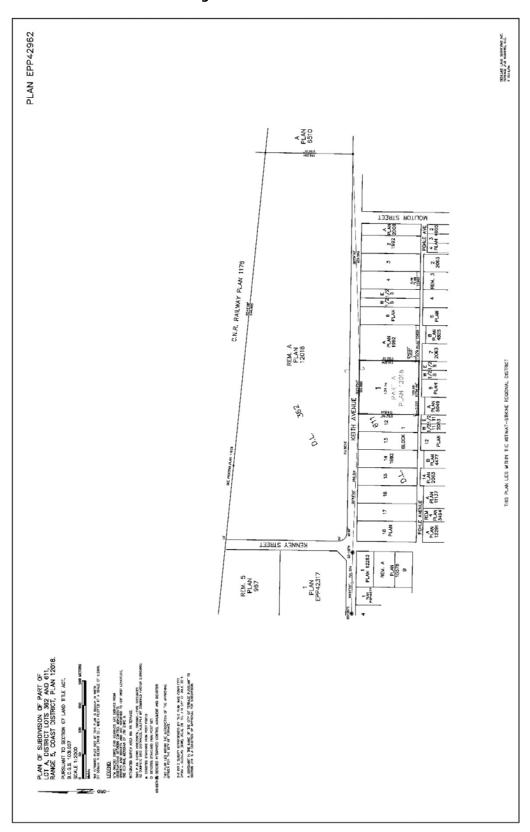
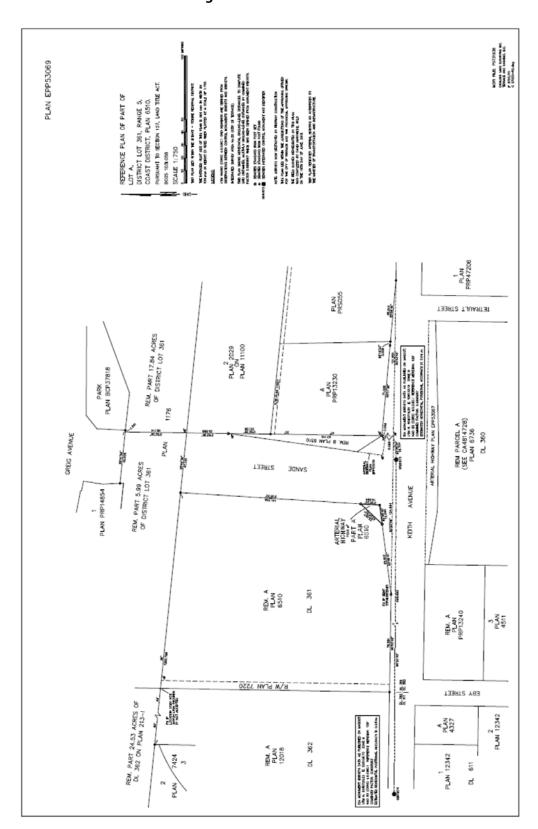
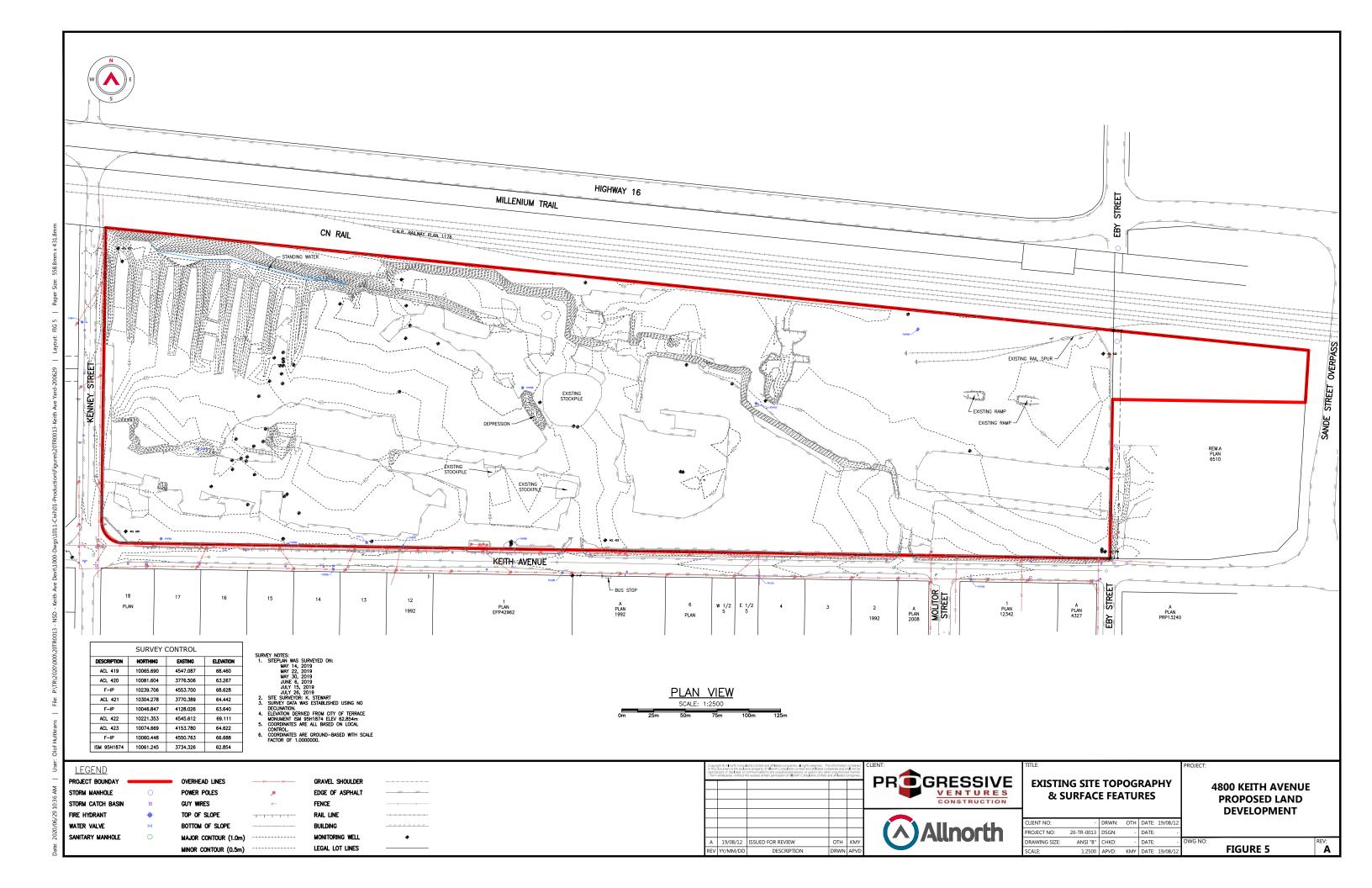


Figure 4: Plan EPP53069





#### 1.5 Historical and Present Uses

The subject property is the historical site of the Skeena Cellulose sawmill. This industrial operation was an economic driver of the Terrace area, directly employing hundreds of local residents with well-paying jobs. In the late 1990's, the sawmill experienced financial distress. After several years and many attempts by government, industry, and local business people to rescue and resurrect the sawmill, the property relinquished its role as the economic engine of Terrace as the mill equipment was auctioned off and removed from site.

The majority of the mill site is now vacant or underutilized, with a single significant exception in the northeast corner, where a large multinational tenant makes use of the existing rail spur and operates a bulk cement transload facility. This facility operates daily and employs staff and equipment at the CN yard, local truck drivers and administrative staff, property management staff for site maintenance, and supports indirect jobs at ancillary businesses such as truck repair shops, tire shops and hardware stores. On the south property line, a small area is used by a nearby automotive shop as temporary overflow parking during tire changeover season. The property that once hosted a significant driver of the Terrace economy now sits mostly vacant and contributes little in terms of employment or municipal tax base.

# 1.6 Planning Status

The subject parcel is identified in the Official Community Plan as a Site In Transition. Current zoning is M1 Light Industrial for 4800 Keith Ave and C3 Service Commercial for 4760 Keith Ave, but the Keith Estates Neighbourhood Concept Plan (NCP) presents a vision for the area to be comprised of mixed light industrial, commercial, institutional and residential land uses.

The Keith Estates NCP was developed in October of 2014 through a collaborative and community-driven process and sought to align community members' broader vision for the City with future development of the site. As a future-oriented planning document, the NCP was intended to provide Council with a decision making tool against which to assess development proposals on the site.

The Keith Estates NCP and other relevant planning documents are discussed further in Section 3.1 of this document.

The Keith Estates NCP did a good job of capturing and consolidating the aspirations that engaged community members hold for this parcel of land. It was informed by the best information available at the time. In the five years that have passed since development of the NCP, the land owner of the large 4800 Keith Avenue parcel has invested in studies, field reconnaissance and market survey work to better understand the functional limitations and market opportunities for this parcel.

This Project Development Plan presents an updated vision for development of this prominent land as a vibrant contributor to the community's character and regional economy. While developing this Project Development Plan, the community engagement work done for the Keith Estates NCP was thoroughly reviewed and efforts have been made to incorporate that community input into this plan.

#### 2 PROJECT DESCRIPTION

# 2.1 For The Community, By The Community

The NSD Inland Port & Developments is a made-in-Terrace solution. The region is experiencing growth driven by the continued growth of the Fairview Container Terminal in Prince Rupert, the start of construction of LNG Canada's plant in Kitimat, numerous smaller projects, development of mines to the north, and development of the Skeena Industrial Development Park. A need has emerged to provide an intermodal transload facility and additional lands to host the commercial and light industrial businesses that will support these major industrial projects. Progressive Ventures Ltd. is well positioned to recognize this opportunity.

Progressive Ventures is one of the largest construction companies based in Northwest British Columbia. Founded in 1973 and based in Terrace, Progressive Ventures has built a significant part of the community of Terrace, as well other communities and infrastructure in the region. They own a number of developed and undeveloped commercial properties in Terrace and are well-connected with local, regional and international businesses. Progressive Ventures has identified this project as a viable opportunity to leverage the current positive investment climate to build a transportation and service hub that leaves a legacy of supporting a diversified and resilient local and regional economy.

Progressive Ventures has full ownership of NSD Development Corporation, which in turn owns 4800 Keith Avenue. They intend to be the main proponent behind the development and will likely be a partner in the operation of the proposed transload facility, along with a suitably experienced transload facility developer and operator. The mixed use lots are intended to be developed to suit individual businesses. The vision is for the project to be locally owned and operated.

# 2.2 Planning Concept for Subject Area

With the recent increase in regional business activity and expectation of pending growth, there is an opportunity for significant change in the City of Terrace.

This NSD Inland Port and Developments plan envisions the 4800 Keith Avenue property becoming a hub of economic activity that supports and complements other developments and a vibrant downtown core. The northern portion of the property will become a transportation hub, hosting a transload facility and additional rail infrastructure adjacent to existing CN rail. The southern portion of the property will be mixed use and will host a variety of commercial and light industrial businesses, institutional uses and possibly residences. Together, the improved transportation and trade connectivity and service offerings will make the northwest, and specifically Terrace, a more attractive place to do business.

The project will improve cycling and pedestrian transportation along the Keith Avenue corridor. The proponent anticipates contributing land and funding to pedestrian and cycling sidewalk/pathway upgrades along Keith Avenue. The new pedestrian and cycling infrastructure will provide connectivity to the Sande Overpass and downtown for both the area residents and employees of new and existing businesses.

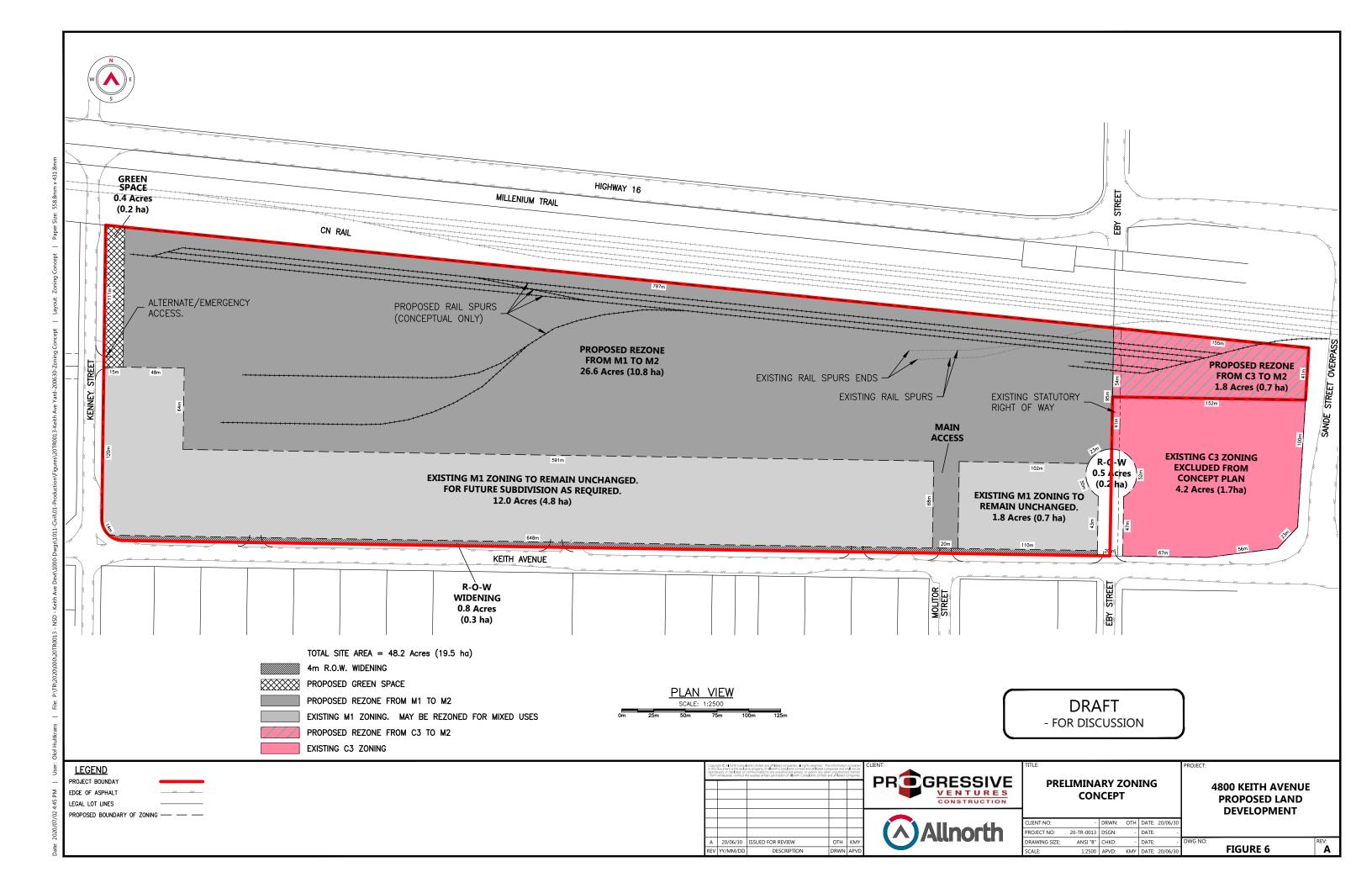
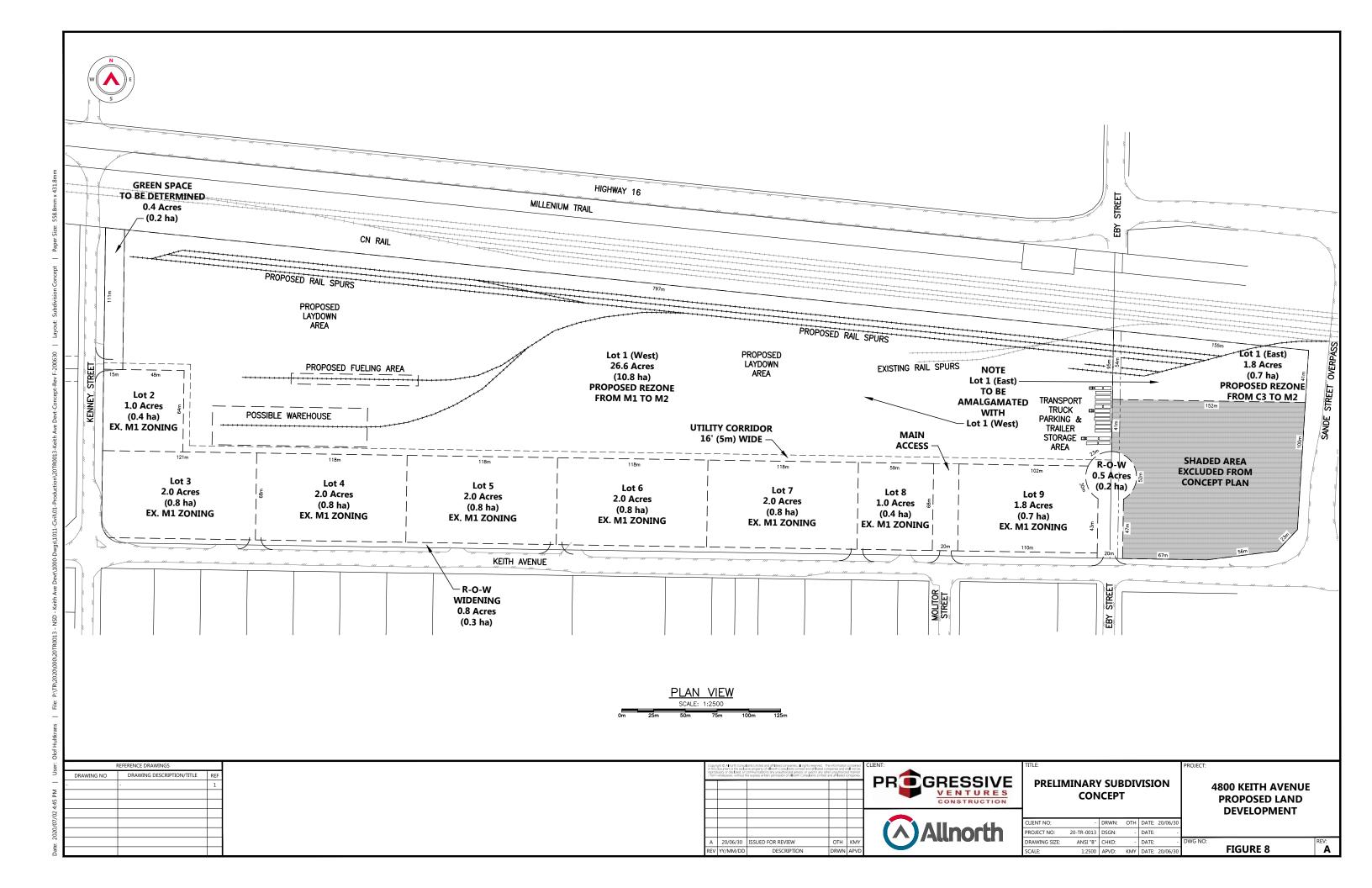


Figure 7: Concept Model





#### 2.2.1 Northern Sector – Heavy Industrial Zoning (M2)

A proposed transload facility on the north portion of the property will serve as a transportation hub providing rail access to a variety of local industries. Locally-manufactured and value-added goods will be able to use this access point to reach North American and world markets by established rail and marine shipping routes. Raw resources and product components can be shipped to Terrace and incorporated into manufactured goods produced at local factories, such as the ones proposed for construction at the Skeena Industrial Development Park (SIDP). Freight will be handled in either bulk or containerized form, with the goal of making trade more efficient and accessible for local and regional companies.

Table 2-1 – Examples of Possible Heavy Industrial (M2) Uses

#### **Examples of Possible Heavy Industrial (M2) Uses**

- Rail yard, including train building.
- Truck to train loading.
- Train to truck loading.
- Bulk material handling.
- Container handling and storage.
- Bulk construction materials unloading and distribution.
- Bulk fuel unloading and distribution.
- New automobile shipping and unloading.
- Small scale manufacturing.

Three comparable transload facility developments are presented in Figure 9: Comparable Site A - 1020  $\pm$  40<sup>th</sup> Ave NE Calgary, AB; Figure 10: Comparable Site B - 285160 Kleysen Way, Calgary, AB; and Figure 11: Comparable Site C - 855 River Road, Prince George, BC. They are summarized in the following table.

**Table 2-2 – Comparable Sites Land Use Statistics** 

Description	Land Area (acres/ha)	Building Footprint Area (ft²/m²)	Length of Rail (m)	Approx # of Jobs
Transload Logistics Corp 1020 40 <sup>th</sup> Ave NE Calgary, AB	33.5 acres / 13.6 ha	31,000 ft <sup>2</sup> / 2,900 m <sup>2</sup>	305 m	10+
Kleysen Group Ptd Distribution Centre 285160 Kleysen Way, Calgary, AB	33.5 acres / 13.6 ha	86,000 ft <sup>2</sup> / 7,900 m <sup>2</sup>	1,100 m	20+
CN Prince George Intermodal Terminal 855 River Road, Prince George, BC	51.6 acres / 20.9 ha	99,400 ft <sup>2</sup> / 9,200 m <sup>2</sup>	3,640 m	30+
Average:	39.5 acres / 48.1 ha	72,100 ft <sup>2</sup> / 6,700 m <sup>2</sup>	1,680 m	20+
Average, per Acre:		1,825 ft² / 170 m²	42 m	0.5+

<sup>\*</sup>Jobs numbers were provided by Progressive Ventures and have not been independently verified.

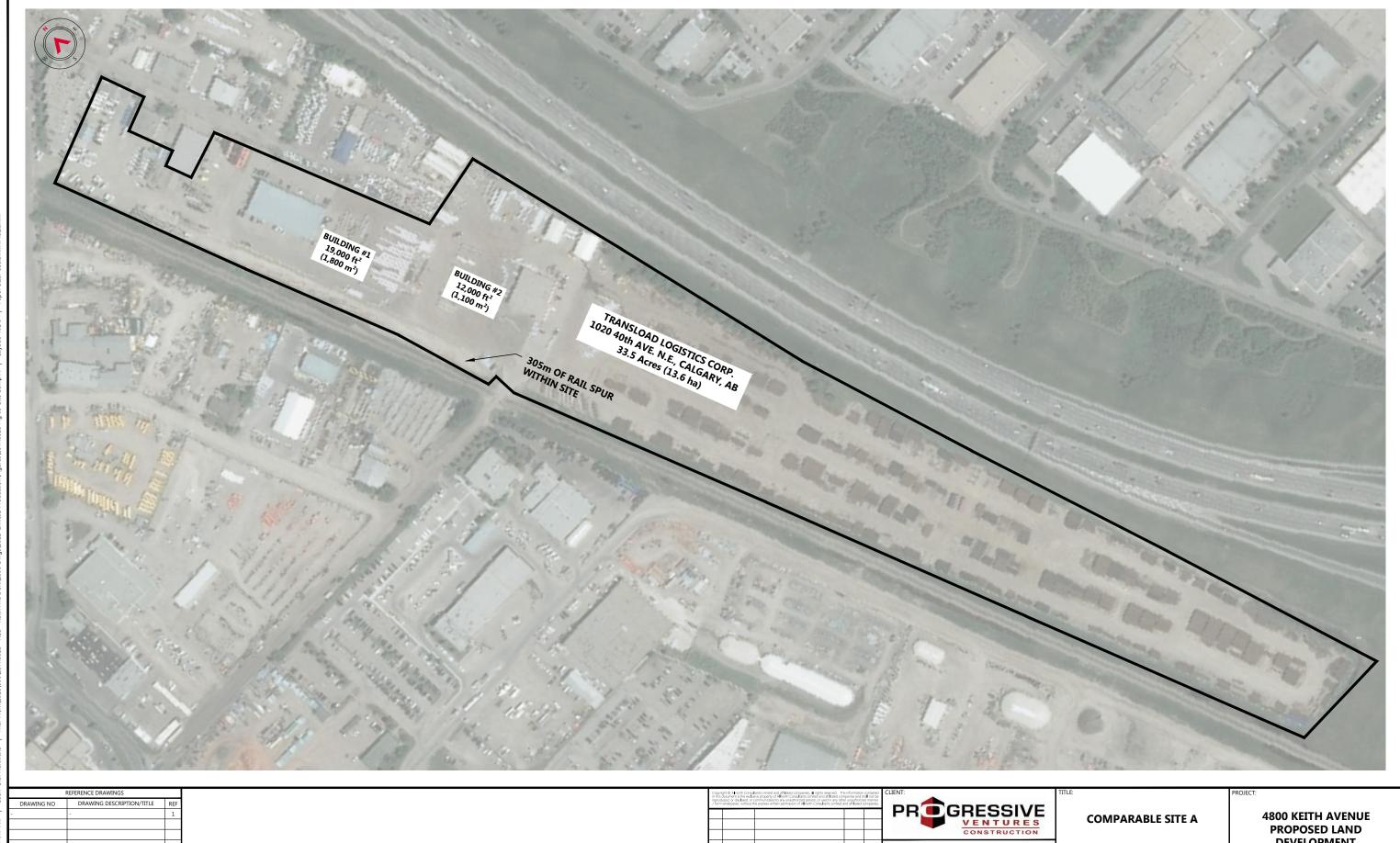
The following table summarizes the land use statistics for the proposed transload facility.

**Table 2-3 – North Sector Land Use Statistics** 

Description	Land Area (acre/Ha)	Building Area (ft²/m²)	Improvement Costs*	Direct Permanent Jobs
Consulting & General Site Preparation			\$1,650,000	
Office Buildings	28.4 acres /	3,000 ft <sup>2</sup> / 280 m <sup>2</sup>	\$1,050,000	
Warehouses	11.5 ha	30,000 ft <sup>2</sup> / 2,800 m <sup>2</sup>	\$4,500,000	
Loading Ramp			\$100,000	
Rail	1		\$3,250,000	
Transload Subtotal	28.4 acres / 11.5 ha	33,000 ft <sup>2</sup> / 3,080 m <sup>2</sup>	\$10,550,000	20+
Transload Average, per acre		1,162 ft² / 108 m²		0.7

<sup>\*</sup>Building costs are based on an assumed cost of \$350/sqft for office buildings and \$150/sqft for warehouses.

<sup>\*\*</sup>Rail costs were estimated by the project proponent in consultation with rail contractors.



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REV YY/MM/DD DESCRIPTION

#### **COMPARABLE SITE A**

PROPOSED LAND
DEVELOPMENT

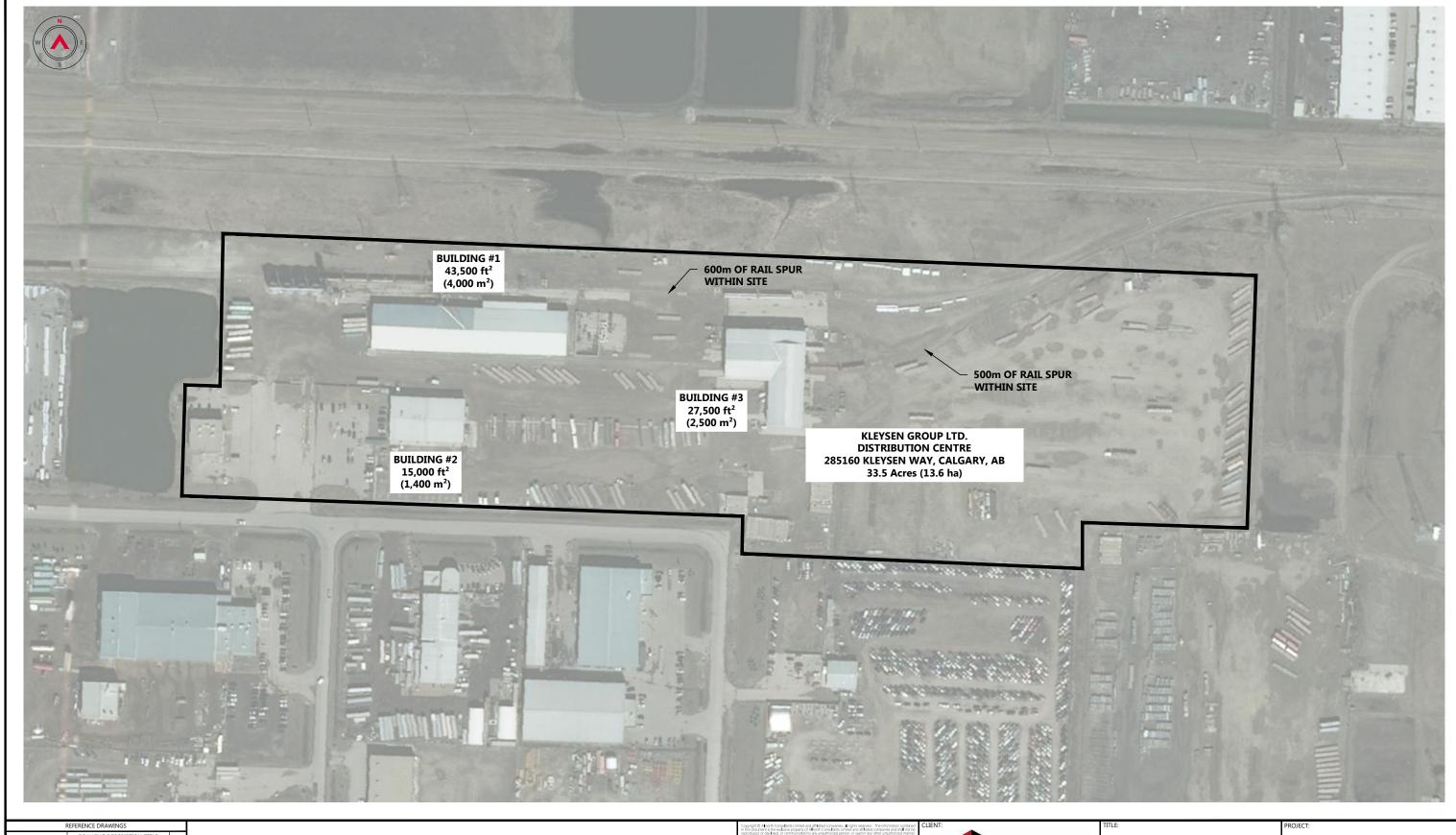
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 ANSI "8"
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 DATE:

 SCALE:
 1:3000
 APVD:
 KMY
 DATE:
 19/02

			DEVELOPMENT	
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ATE:	-	DWG NO:		REV:
ATE:	19/02/06		FIGURE 9	A



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#### **COMPARABLE SITE B**

4800 KEITH AVENUE PROPOSED LAND DEVELOPMENT

 
 CLIENT NO:
 DRWN:
 OTH
 DATE:
 19/02/

 PROJECT NO:
 20-TR-0013
 DSGN:
 DATE:

 DRAWING SIZE:
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 1:2500
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 KMY
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FIGURE 10



A 19/10/21 ISSUED FOR REVIEW

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 DATE:

 SCALE:
 1:3000
 APVD:
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FIGURE 11

## 2.2.2 Southern Sector – Mixed Uses Along Keith Avenue and Kenney Street

The south portion of the lot is envisaged as mixed use light industrial, commercial, institutional and possibly residential developments that complement the transload facility, either directly or by servicing common clients. It also serves as a visual and noise buffer between Keith Avenue and Kenney Street, and the industrial uses of the Northern Sector. These businesses will front onto the Keith Avenue trucking route and will back onto the proposed transload facility. The following table summarizes real businesses that have approached the project proponent in the past year with the intention of establishing a permanent presence in Terrace. All business details are generalized and approximate, but are representative of the proposed developments, with all information provided by the NSD Inland Port and Developments project proponent.

**Table 2-4 – Examples of Potential Mixed Uses** 

General Description	Company Activities	Parcel Size (acre/Ha)	Office Area (sqft)	Shop Area (sqft)	# of Jobs	Potential Job Descriptions
Remediation Contractor	Manages remediation projects, stores and dispatches construction equipment. Transports bulk materials to/from industrial sites.	2 / 0.8	2,000	6,000	15	Dispatch Coordinators Drivers Mechanic Safety
Equipment/tool Rental Company	Maintains tool rental inventory, dispatches equipment to and from the field, maintains equipment.	2 / 0.8	2,500	10,000	20	Sales Mechanics Drivers Logistics Safety
Light Manufacturing of Small Products	Receives bulk materials and ships finished products. Creates finished products in a fully contained manufacturing warehouse with light emissions.	2 / 0.8	500	10,000	20	Labourers Shipping/Receiving Manager
Electrical Supply Company	Receives bulk products, stocks and sells to contractors, ships bulk orders to large clients.	2 / 0.8	2,500	10,000	15	Sales Shipping/Receiving
Industrial Maintenance & Construction Company	Manages projects, pre- fabricates industrial components, stages construction materials and equipment.	2 / 0.8	2,000	5,000	20	Coordinators Project Mgmt Maintenance/Parts Shipping/Receiving Welders
Industrial Scaffold Rentals	Provides large scale scaffold and related construction services on a rental and complete setup / maintenance / removal basis. Stocks/dispatches/delivers supplies.	2 / 0.8	1,000	2,000	10	Drivers Logistics Maintenance
Construction Supply Company	Provides large scale, bulk supplies such as culverts, geofabrics, etc.	2 / 0.8	1,000	5,000	10	Sales Shipping/Receiving Drivers Logistics Dispatch
Food and Drink Distribution Warehouse	Shipping, receiving, distribution and warehousing of food products.	2 / 0.8	1,000	10,000	20	Labourers Dispatch Drivers

Light Industrial Complex	Mixed use professional or small contractor building. Six units at	1 / 0.4	3,000	6,000	30	Consultants Small Contractors
Complex	1500 sqft each. Comproised of					Misc Services
	small office and small					iviisc services
	shop/warehouse.	1.01	1 000	2.000	- 10	
Dewatering	Provides dewatering service,	1 / 0.4	1,000	3,000	10	Sales
Contractor	including setup, operation and					Dispatch
	maintenance, rents equipment,					Maintenance
	ships, receives, stores and					Delivery
	maintains inventory.					Cooordinators
Service Center	Small, central lot with cafes,	1 / 0.4	5,000	0	25	Service, sales, etc.
	coffee shops, convenience					
	stores, restaurant, fast food,					
	office supply					
	Average, per acre (excl service centre):				9	

<sup>\*</sup>All information in this table was provided by the project proponent.

Based on these development characteristics, the proposed 13.8 acres of mixed use land in the south sector will yield:

Table 2-5 – South Sector Land Use Statistics

Description	Land Area (acre/Ha)	Floor Area (sqft/m²)	Building Costs*	Jobs
Mixed Use, primarily light industrial	12.8 acre / 5.1 ha	59,000 ft <sup>2</sup> / 5,500 m <sup>2</sup>	\$17.7million	115
Service Centre, primarily commercial	1 acre / 0.4 ha	5,000 ft <sup>2</sup> / 500 m <sup>2</sup>	\$1.5million	25
Mixed Use Subtotal	13.8 acres 5.5 ha	64,000 ft <sup>2</sup> / 6,000 m <sup>2</sup>	\$19.2million	140

<sup>\*</sup>Building costs are based on an assumed construction cost of \$300/sqft for a combination of office and shop buildings.

# 2.2.3 Keith Avenue Corridor Upgrades

A key feature of the proposed NSD Inland Port and Developments is an expected lands and funding contribution to the City's planned upgrade of Keith Avenue to include pedestrian and cycling facilities. The City has identified these upgrades as needed improvements in the Transportation Master Plan, which is discussed in more detail in Section 3.1.5.

The project proponent anticipates contributing 0.8 acres (0.3ha) of land to facilitate a 4m widening of the City's Keith Avenue right of way. And they anticipate contributing a fair share of funding towards sidewalks and bicycle pathway infrastructure along Keith Avenue. Once the Keith Avenue corridor upgrades project is complete, the resulting widened and improved corridor will beautify the Keith Avenue streetscape, encourage safe pedestrian and cycling commuting, and create a circle route for recreational users of the existing and much-used Grand Trunk Pathway.

# 2.2.4 Eby Street Cul-de-Sac

NSD anticipates dedicating 0.3 acres (0.1ha) of land to facilitate a future ~80m cul-de-sac extension of Eby Street. This cul-de-sac will provide orderly vehicle access to the neighbouring 4760 Keith Avenue for future development purposes.

#### 2.2.5 Park Dedication

NSD proposes dedicating approximately 0.4 acres (0.2ha) of park land along the east side of Kenney Street to be landscaped to serve as a visual and noise buffer.

#### 2.2.6 Summary of Land Use Statistics

The Table 2-6 – Development Summary below provides a summary of land area, building floor area, estimated building value and estimated jobs that will be created. All values are estimates based on comparable developments and example developments provided by the project proponent.

**NSD Inland Port and Developments – Development Summary Estimated Estimated Improvements Direct Jobs Land Area Building Area** Value Created Sector North - transload facility 28.4 acres / 33,000 ft<sup>2</sup> \$10.6million 20 11.5 ha 3,080 m<sup>2</sup> South - mixed use 13.8 acres / 64,000 ft<sup>2</sup> \$19.2million 140 5.5 ha 6,000 m<sup>2</sup> **Road Dedications** 1.1 acres (Eby St and Keith Ave) 0.4 ha Park Dedication 0.4 acres 0.2 ha **Development Total** 43.6 acres 109,000 ft<sup>2</sup> \$32million 160 17.6 ha 10,200 m<sup>2</sup>

**Table 2-6 – Development Summary** 

# 2.3 Purpose / Need

The northwest of British Columbia is experiencing a period of economic renewal. The regional economy languished after the downturn in the forestry processing, fishing and mining industries in the 1990's. Over the last 15 years, the region's economy has transformed with the development of the container port and various bulk port facilities in Prince Rupert, the Rio Tinto Alcan modernization, LNG developments in Kitimat, and renewed exploration and construction of mining interests to the north, along the Highway 37 corridor. The proposed Skeena Industrial Development Park in Terrace, the acceleration of LNG plant construction in Kitimat, and a general transition towards a diversified trade-based regional economy will create a demand for intermodal shipping.

A transload study is being conducted by the City of Terrace. The study has not been made available to the public at the time of this writing. The project proponent expects it to indicate support for the development of this project site as a transload facility based on the proponent's own review of alternate sites, which is summarized in Section 2.5.

The need for commercial and light industrial land for development is exemplified by the number of interested companies listed in Section 2.2.3.

The proponent has received a number of letters from local and regional businesses voicing their support for this project. These are included in Appendix A Letters of Support.

<sup>\*</sup>See development descriptions in previous sections for assumptions used in developing this table.

# 2.4 Benefits to the Community

This project will provide numerous benefits to the community, some of which are discussed below. In general, by improving transportation connectivity, Terrace will become more efficiently connected to broader international trade routes. Products extracted, processed and manufactured in the region will be more competitive on the world market due to quicker shipping times and cheaper shipping costs. Similarly, world products are expected to enjoy cheaper shipping costs, lowering prices for local consumers and making proposed development projects more cost-competitive and attractive.

#### **QETDZ Industrial Park**

The proposed transload facility is envisioned as a project that complements the QETDZ Industrial Park, a portion of the SIDP and a project that the City has strongly supported. The QETDZ Industrial Park is a proposed land development that will host a number of heavy industry manufacturing plants in the City of Terrace. While it enjoys good highway connectivity, proximity to electrical and natural gas infrastructure, favourable soil conditions and is being developed to provide potable water, sanitary sewer, storm water, and fibre optic internet servicing, as well as an internal road network, the QETDZ Industrial Park does not have a rail link. The construction of a transload facility in Terrace would allow for the manufacturing plants proposed at the QETDZ Industrial Park to efficiently import components and inputs for their manufacturing processes, and export manufactured goods. In this way, the proposed transload facility supports the City's strategy of developing a diversified manufacturing base at the QETDZ Industrial Park.

The QETDZ Industrial Park is expected to produce hundreds and possibly thousands of good, stable, high-paying jobs. Since a number of manufacturing plants are expected to be developed, the industrial park will result in a diversified local economy that is more resilient to the boom and bust cycles that traditionally plague northern communities in British Columbia. The vision of the proposed transload facility to build a diversified local economy and the opportunity for good jobs and business opportunities is in alignment with the vision of the City and proponent of the QETDZ Industrial Park.

#### **Increased Tax Revenue**

The following review of tax implications is based only on municipal general taxes. It does not look at taxes collected by the municipality for specific uses such as schools, hospitals, public transportation, etc.

The development of this primarily vacant parcel of property will increase the property value and generate a significant increase in tax revenues. The property in its current undeveloped state generates little in municipal taxes. The 2019 taxes for this property are estimated in Table 2-7 – Estimated 2019 Taxes for 4800 Keith Avenue.

Table 2-7 - Estimated 2019 Taxes for 4800 Keith Avenue

Estimated 2019 Taxes for 4800 Keith Avenue	
BC Assessment 2019 – Assessed Value for 4900 Keith Ave (Taxable Value)	
*Due to the size of the property, the BC Assessment address does not	
align with the municipal address	\$1,501,800
Property Classification	6 – Business
City of Terrace Municipal: General mill rate, in dollars of tax per \$1,000	
taxable value)	21.4550
Estimated 2019 General Municipal Taxes	\$32,221

The annual municipal taxes estimated in Table 2-8 – Estimated Tax Revenue below are based on the City of Terrace's Tax Rate Bylaw No. 2163-2019, and publicly-available property information from City of Terrace mapping sources and BC Assessment records. The construction costs estimated in Section 2.2 of this study were used to represent an estimate of future assessment values of buildings. The market value (taxable value) of rail infrastructure was estimated as 3km of track at the prescribed rates defined in BC Reg 203/86. It is currently unclear which track classification will apply, so we have assumed a Track Class 5, which results in the lowest market value. Actual classification may vary, and actual taxable value and taxes may be greater as a result.

**Table 2-8 – Estimated Tax Revenue** 

ESTIMATED TAX REVENUE AT BUILDOUT						
Land Use	Land Area	Land Value	Estimated Future Assessment Value of Improvements	Tax Class	CoT 2019 Tax Rate	Projected CoT Tax Revenues at 2019 Rates
Transload Facility – Rail Tracks	4.2 acres / 1.7 ha	\$146,200	\$41,100	2. Utility	53.6375	\$9,720
Transload Facility – Yard and Buildings	24.1 acres / 9.7 ha	\$828,600	\$5,650,000	6. Business	21.455	\$138,256
Commercial / Industrial	13.8 acres / 5.6 ha	\$475,300	\$19,200,000	6. Business	21.455	\$422,134
Park and Road Dedication	1.5 acres 0.6 ha	\$51,700				\$0
Total:	43.6 acres 17.6 ha	\$1,501,800	\$24,900,000			\$571,180

<sup>\*</sup>Transload facility assumed to be 15% rail tracks and associated infrastructure, and 85% yard and buildings for the purpose of tax classification.

The projected direct increase in annual municipal taxes is provided in the table below. This does not account for spin off developments such as complementary businesses at the SIDP.

Table 2-9 – Increase in Tax Revenue

Projected Tax Increases	
Undeveloped 2019 General Municipal Taxes Paid	\$32,221
Projected Tax Revenue at Buildout (at 2019 rates)	\$571,180
Projected Increase in Annual Municipal Taxes	\$538,959

#### **Capital Investment**

The proposed NSD Inland Port and Developments is expected to attract significant capital investments. This includes over \$10million for the proposed transload facility, and about \$20million of complementary light industrial, commercial and institutional construction.

#### **Improved Business Climate**

The proposed NSD Inland Port and Developments combines a transload facility that connects Terrace to world markets with Mixed Use lands that will host increased service offerings to support regional growth. Opportunities for improved efficiencies will extend to existing local businesses and prospective investors alike, whether they are in the resource extraction, manufacturing, or service industries.

#### Supporting a Vibrant Downtown

The project site is strategically located in the light industrial core of the City of Terrace, near the downtown core. As a vacant former industrial site, it currently disconnects the southwest portion of the City from the downtown area. The proposed development will create a vibrant transportation and service centre along Keith Avenue, with many new businesses and jobs within walking distance to the downtown. The former mill site which once served as the community's economic driver located in the middle of town can once again contribute to a vibrant downtown area.

#### **Contributing to Sustainable Transportation**

The project proponent anticipates contributing lands and funds to the City's planned Keith Avenue. These corridor upgrades will provide improved transportation connectivity between the downtown area and southwest Terrace. Benefits will include:

- Beautification of the highly visible Keith Avenue and Kenney Street corridors.
- Creation of a circle route featuring panoramic views on the Sande Overpass for recreational pedestrians and cyclists.
- Safe walking and cycling route to downtown for residents in southwest Terrace.
- Safe pedestrian and cyclist connectivity for employees and patrons of businesses along Keith Avenue.

#### **Jobs / Employment**

The NSD Inland Port and Developments project is expected to generate approximately 160 direct jobs. The Terrace Population Survey and Projections 2015 study by Big River Analytics assumes that 1.6 indirect jobs will be created for each direct job created. If we assume that this jobs multiplier applies to this development, we can estimate total new jobs:

**Table 2-10 – Projected Permanent New Jobs** 

Projected Permanent New Jobs			
Estimated Direct Permanent Jobs	160		
Indirect Jobs, based on 1.6 jobs multiplier	256		
Total Projected Permanent Jobs	416		

<sup>\*</sup>See development descriptions in previous sections for assumptions used in developing this table.

Additional research may be required to confirm the suitability and applicability of the jobs multiplier noted above to this development.

#### **Complementary Land Uses Adjacent to Rail**

The NSD Inland Port and Developments project proposes a gradual transition of land uses, with compatible uses situated adjacent to one another. The northern property boundary is bordered by an existing rail mainline and yard. The development lands immediately adjacent to this will be additional rail tracks for train building and staging. Just south of that will be the rail loading and unloading area and a materials handling yards. Between these materials handling yards and the Keith Avenue trucking route will be a mixed use area of light industrial, commercial and institutional land uses, some of which will take advantage of the proximity of both the transload facility and the Keith Avenue trucking route. The City's planned improved pedestrian and cycling-friendly Keith Avenue corridor will border the south side of the development.

The overall configuration is intended to provide a gradual transition of land uses to minimize undesired impacts of neighbouring land uses on each other. In particular, the proposed configuration provides favourable buffering to reduce noise and visual disturbances on residential areas, and increases the distance between residential areas and materials that are shipped on the rail line.

#### **Kenney Street Park**

Park dedication along the west side of the site will separate the new transload facility from Kenney Street. Landscaping and vegetation are envisioned to provide an aesthetically pleasing sound and visual buffer.

# 2.5 Alternate Development Sites Considered

The project proponent has reviewed and considered alternate sites in the Terrace area for a transload development. For the following reasons, the proposed site at 4800 Keith Avenue was determined to be favourable to alternate sites:

- The project site is located on the main rail line between Prince Rupert and Edmonton, which enjoys
  the most favourable grades crossing the continental divide in Yellowhead Pass. It is not
  encumbered by the rail limitations due to grade, bridge restrictions and smaller train building
  capacity that affect sites on the Terrace-Kitimat rail line.
- The project site is near the downtown of Terrace and building new businesses in this area will help maintain a vibrant downtown rather than pushing business out of the downtown core.
- The connection to the CN main line is in a low speed zone due to the proximity to the Terrace rail yard, thus providing improved service from CN.

- An increase in rail traffic will not negatively affect the road interruptions of the Queensway area, which can be isolated from road connectivity by a single train.
- The proposed project site is a former industrial site and is currently underdeveloped and underused with plenty of space available.
- The site does not require switching to get from the Terrace-Kitimat rail line onto the Prince Rupert Prince George line.
- The proposed project site is not located in a flood plain.
- The property is located in a high visibility location within the community and prominently showcases progressive use of this property.

Alternate sites considered are summarized in the following table:

**Table 2-11 – Alternate Site Comparison** 

	LOCATION			
CONSIDERATION	4800 Keith Ave	Thunderbird	Poirier	Queensway
No rail limitations due to grade,	,		,	
bridge restrictions, smaller train	$\checkmark$		$\checkmark$	$\checkmark$
building capacity, etc				
Site is on low speed rail line		$\checkmark$		$\checkmark$
Site is in town and will attract complementary businesses that will contribute to a vibrant downtown	<b>✓</b>		<b>\</b>	
Will not affect road connectivity of Queensway neighbourhood.	✓		<b>\</b>	
Sufficient land is available	✓	✓	$\checkmark$	
Does not require switching at the CN Terrace yard, which has limited space available.	<b>√</b>		<b>✓</b>	
Municipal water/sewer/storm sewer are available.	<b>✓</b>		>	<b>✓</b>
Site is well-connected to established major road networks.	<b>✓</b>		<b>✓</b>	
BC Hydro services are available on site or in close proximity without major substation construction.	<b>√</b>	<b>√</b>	<b>√</b>	<b>✓</b>
Site is not located in a floodplain.	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
Site is prominent and can serve as a showcase development.	<b>√</b>		<b>√</b>	

#### 3 DEVELOPMENT CONSTRAINTS AND IMPLEMENTATION

# 3.1 Planning & Development Regulations

This section summarizes pertinent City of Terrace documents as they apply to the proposed development.

#### 3.1.1 Terrace Zoning Bylaw

The City of Terrace Zoning Bylaw No. 2069-2014 defines how a property can be used, including permitted and prohibited uses, what can be built on a property, where a building can be built on a property, parking requirements and other details.

The subject property is currently zoned M1 – Light Industrial (4800 Keith Ave) and C3 – Service Commercial (1.8 acres of 4760 Keith Ave). Details on this zoning can be found in Section 13.0 of the Zoning Bylaw. For convenience, the permitted uses table has been copied and provided below in Figure 12: M1 – Light Industrial Zoning Permitted Uses.

Figure 12: M1 – Light Industrial Zoning Permitted Uses

#### **Primary Uses**

- · Agricultural Supply and Service
- Boat and Marine Sales, Leasing and Service
- Building Supply Store
- Bulk Fueling Station, Minor
- Commercial Equipment Sales, Leasing and Service
- Dry Cleaning
- Freight Transport and Storage
- Gas Bar
- Industrial Equipment Sales, Leasing and Service
- · Industrial Laundromat
- Laboratory and Research Facilities
- · Manufacturing, Light

- Media Studio
- Mini Storage Facility
- · Printing Services
- · Recycling Depot
- · Service Station
- · Technical Consulting Firm
- · Trade Contractor
- · Vehicle Sales, Leasing and Service
- · Vehicle Washing Facilities
- Veterinary Clinic
- Warehouse
- Welding, Machine or Metal Fabrication
- Wholesale Establishment

#### **Secondary Uses**

• Outdoor Storage, when screened as per Section 5.0

Proposed Southern Sector land uses are generally consistent with M1 zoning. On a case-by-case basis, re-zoning of individual lots to a commercial or institutional designation may be required to accommodate specific future developments.

Some of the uses envisioned for the Northern Sector are not consistent with the current M1 zoning designation. The proposed Northern Sector should be re-zoned to M2 – Heavy Industrial zoning to accommodate these uses. Permitted uses for M2 zoning are presented in Figure 13: M2 – Heavy Industrial Zoning Permitted Uses.

Figure 13: M2 – Heavy Industrial Zoning Permitted Uses

#### **Primary Uses**

- Agricultural Supply and Service
- Bottling and Distribution Plant
- Building Supply Store
- · Bulk Fueling Station, Minor
- · Bulk Fueling Station, Major
- Freight Transport and Storage
- Industrial Equipment Sales, Leasing and Service
- Manufacturing, General
- Manufacturing, Light

- Outdoor Storage
- Railway Lines and Yards for Storage and Repair of Railway Equipment and Vehicles
- Vehicle Salvage Operation
- Warehouse
- Welding, Machining or Metal Fabrication
- Wholesale Fuel Product Sales

#### Secondary Uses

Currently there are no specified Secondary Uses

#### 3.1.2 Official Community Plan

The City of Terrace Official Community Plan Bylaw No. 2142-2018 ("OCP") designates the subject land as a Development Permit Area (Type 6 – Industrial). The development permit criteria are primarily related to development aesthetics and public safety. It also identifies the future land use for the subject land as "Area In Transition" from its historical heavy industrial use to a proposed mixed light industrial, commercial, residential and institutional use. The OCP includes by reference (pg 27) the Keith Estates Neighbourhood Concept Plan and states that this "future-oriented planning document provides City Council with a decision making tool against which to assess future development proposals." (pg 30). The Keith Estates Neighbourhood Concept Plan is discussed in more detail in the next section.

The prescriptive policies and guidelines referenced above are meant to support the broader policies and objectives presented in the OCP. In the event that a proposed development is not fully consistent with the specific prescriptions that are pre-approved in the OCP and other planning documents, the form, function and other characteristics of the proposed development should be weighed against the OCP's stated objectives.

"The purpose of an Official Community Plan is to provide a statement of objectives and policies to guide community planning and land use management decisions within the area covered by the plan."

– City of Terrace Official Community Plan Bylaw No 2142-2018.

Some key objectives from the OCP are listed below, along with an explanation of how they are met by the NSD Inland Port and Development:

Table 3-1 – OCP Objectives As Achieved by NSD Inland Port and Developments

OCP Objective	NSD Inland Port and Developments Corresponding Features
Compact and Complete Neighbourhoods Objective #7: Strive for neighbourhoods across the City to be linked for safe walking, cycling and efficient public transit opportunities.	✓ Lands and funds contribution towards pedestrian and cycling improvements along Keith Avenue corridor.
Diversified and Coordinated Economy Objective #1: Support for local economic viability.	<ul> <li>✓ Project is locally-driven.</li> <li>✓ Improved access to international trade opens new opportunities for new business ventures, including future manufacturing facilities at the SIDP.</li> <li>✓ Promotes Terrace as a strategic location to do business in the Northwest.</li> </ul>
Diversified and Coordinated Economy Objective #2: Develop a highly coordinated and diversified regional economy.	<ul> <li>✓ Transload facility will be complementary to proposed manufacturing facilities at the SIDP.</li> <li>✓ Transload facility will be supportive of construction materials handling for major regional construction projects such as LNG facilities and mines.</li> <li>✓ Improved options for shipping exports, whether natural resources or manufactured goods.</li> </ul>
Diversified and Coordinated Economy Objective #4: Maintain and enhance transportation infrastructure that connects industry and businesses to diverse markets and customers.	Recognizes and supports the key role that rail plays in our local and regional economy, while ensuring rail safety continues to be a priority.
Diversified and Coordinated Economy Objective #6: Attract new business and investment.	<ul> <li>✓ A transload facility will be complementary to large economic drivers like major construction projects, the establishment of a manufacturing economy at the SIDP, and exporting of raw or value-added resources.</li> <li>✓ South sector mixed use lands will host a mix of new businesses.</li> </ul>
Diversified and Coordinated Economy Objective #7: Maintain a blend of commercial and industrial lands along the Highway 16 and Keith Avenue corridor.	✓ The proposed uses are fully consistent with this objective.

# 3.1.3 Keith Estates Neighbourhood Concept Plan

The stated purpose of the Keith Estates Neighbourhood Concept Plan ("NCP") was "to consider, among other aspects, how to accommodate potential residential growth while protecting industry – the

backbone of the region's prosperity." When the NCP was developed in the summer and fall of 2014, the City of Terrace was projecting a population growth of between 30% and 50% by 2025, the result of a sudden intense interest in developing numerous mega-projects in the region including mines, LNG export facilities, port expansions and the Skeena Industrial and Development Park. The City identified 29.4ha of land bordered by the existing CN rail tracks to the north, Keith Avenue to the south, the Sande Street Overpass to the east, and a vacant property fronting on Blakeburn Avenue to the west to be suitable to accommodate some of the forecasted mixed residential, commercial and light industrial growth.

The NCP sought to engage stakeholders and the community at large and incorporate their input into the concept plan. In-person community engagement activities were attended by a total of approximately 75 people and included:

- Keith Estates Area Property Owners and Stakeholders Meetings;
- Community Visioning Session (Public Open House);
- Guided Walking Tour;
- Public Workshop; and
- Summary Open House

Additional public engagement included an online survey, which attracted 130 surveys. Two newspaper articles appeared in the Terrace Standard during the NCP engagement process. Through this community engagement, a number of overarching interests emerged. The following Table 3-2 – NCP Key Themes & Elements As Reflected by NSD Inland Port and Developments summarizes the qualities that participants felt the NCP area should have, and notes how the NSD Inland Port and Developments reflects these qualities.

Table 3-2 – NCP Key Themes & Elements As Reflected by NSD Inland Port and Developments

NCP Key Themes & Elements	NSD Inland Port and Developments Corresponding Features
Aesthetically Pleasing	<ul> <li>✓ Lands and funds to be contributed to the Keith Avenue corridor improvements project.</li> <li>✓ Park dedication and landscaping along Keith Ave to serve as buffer between transload facility and public road.</li> </ul>
Connected and Integrated	✓ Lands and funds to be contributed to the Keith Avenue corridor improvements project, which will provide pedestrian and cycling connectivity, as well as a loop route for recreational users.
A mixture of uses	<ul> <li>✓ A transload rail shipping facility is proposed for the north sector of the property.</li> <li>✓ Mixed use light industrial, commercial, and institutional, is proposed for the South Sector of the property.</li> </ul>
Flexible	✓ The NSD Inland Port and Developments overall layout is somewhat different than the NCP prescribed. The NCP key theme of

	flexibility recognizes that developments could be proposed that do not fit the prescriptive layout envisaged by the NCP, but that the NCP should be flexible enough to accommodate them should they meet the broader goals of the NCP.
Green and natural	<ul> <li>✓ Lands and funds to be contributed to the         Keith Avenue corridor / streetscape         improvements, which are expected to include         landscaping improvements.</li> <li>✓ The park dedication along Kenney Street will         serve as a visual buffer between the transload         facility and public street.</li> </ul>
Maintenance of view corridors	<ul> <li>✓ A widened Keith Avenue right of way will maintain east-west view corridor along Keith Avenue.</li> <li>✓ Kenney Street will maintain north-south view corridor along Kenney Street.</li> <li>✓ Rail tracks and transload yard with low-height development will maintain east-west view corridor along Highway 16, the widened Keith Ave corridor and looking west from the Sande Overpass.</li> </ul>

The NCP built on these interests to develop five key themes as a foundation for the concept plan. These were further developed into a proposed layout with estimated land use statistics. It is summarized in Figure 14: Keith Estates Neighbourhood Concept Plan.

It should be noted that this NSD Inland Port and Developments Project Development Plan is not entirely consistent with the Keith Estates NCP. The following are key differences between the two plans:

- The proposed NSD project does not include residential development as a primary use. Due to the proximity to rail tracks, proximity to the Keith Avenue unofficial trucking route, and brownfield nature of the site, the land may be better suited to industrial and commercial uses. Nevertheless, a developer could create a development on part of the site that included ground level commercial and upstairs residential uses, subject to applicable re-zoning requirements.
- The Munroe Street Greenway is not included in the NSD project. This is discussed further in Section 3.2.3.
- The linear proposed park along the rail tracks in the Keith Estates NCP is not included in the proposed NSD development. Instead, the NSD development includes proposed lands and funds contributions to the City's planned Keith Avenue corridor upgrades.
- An internal public road network is not proposed or deemed beneficial to the development.

Keith Estates Neighbourhood Concept Plan

Figure 14: Keith Estates Neighbourhood Concept Plan

### 3.1.4 Subdivision and Development Bylaw

The City of Terrace Subdivision and Development Bylaw No. 1591-1997 sets a standard for municipal infrastructure servicing of new developments in the City of Terrace. This includes standards for new roads, sidewalks/pathways, drainage, water, sewer, street lighting and other municipal infrastructure. The existing infrastructure in the Keith Avenue and Kenney Street right-of-ways appears to be generally, but not completely, consistent with the standards for new construction based on light and heavy industrial land uses. The typical section for the specified street cross section is included below in Figure 15: City of Terrace Standard 9.0m Paved Road with Concrete Curbs.

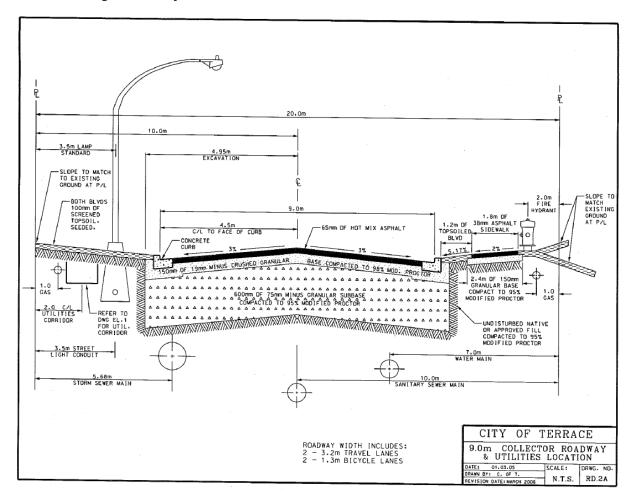


Figure 15: City of Terrace Standard 9.0m Paved Road with Concrete Curbs

The property is designated as Industrial in OCP Schedule B. But it is also labelled in that document as "Future development to conform with Keith Estates Neighborhood Concept Plan Appendix G". The Keith Estates NCP includes suggested upgrades to Keith Avenue to suit the nature and demands of that proposed development concept.

Onsite servicing is subject to both the Subdivision and Development Bylaw and the BC Building Code.

## 3.1.5 Transportation Master Plan

The May 2017 City of Terrace Transportation Master Plan ("TMP") provided a comprehensive review of the City's existing vehicle, pedestrian and cycling networks. It is a forward-looking document intended to inform City staff and serve as a basis for future policy decisions. It is not adopted as a bylaw.

The scope of the assessment included a comprehensive review of relevant background documentation, public and stakeholder consultation, transportation demand forecasting, classification of the road network, traffic safety analysis based on collision history, review of local issues and plans concerning active transportation, identification/analysis/selection of options to address the identified issues, and development of an implementation plan.

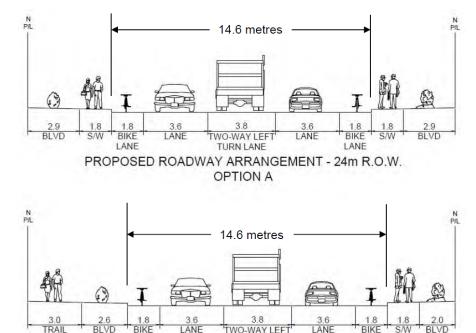
The system analysis was based on both a present day condition and a projected 2025 condition. The 2025 population projection was derived, with input from City representatives, from the Medium Growth Scenario developed in the 2015 *Terrace Population Survey and Projections* report by Big River Analytics, which is described in further detail in Section 3.2.1. The City also provided an estimate of where in the City the growth was expected to occur. Of note is that Zone 8 is the entirety of the Keith Estates neighbourhood and is expected to have 197 of a potential 660 parcels or units developed by 2025.

The report included the following key recommendations that relate to the proposed development of 4800 Keith Avenue.

Table 3-3 – Transportation Master Plan Key Recommendations for Keith Avenue

Recommendation	Comments
Convert the Keith Avenue @ Kenney Street	This recommendation has been implemented.
intersection to a 4-way stop in the short term	
Upgrade the Keith Avenue @ Sande Street intersection	This recommendation has been implemented.
to a signalized intersection	
Upgrade Keith Avenue from Sande Street to Kalum	The cross sections are included in Figure 16:
Lake Drive, including two-way left turn lane, bike lanes	Proposed Keith Ave Cross Section Options from City's
and sidewalks/pathways on each side of the road.	Transportation Master Plan below.
Designate Keith Avenue as a trucking route once a	
second vehicle overpass is built across the rail tracks at	
Kalum Lake Drive. Regulate and enforce the trucking	
route at that time.	
Construct a vehicle overpass at Kalum Lake Drive and a	The TMP does not recommend a pedestrian overpass
pedestrian overpass at the east end of the rail yard	at Munroe Street, which was a key feature of the
(east of Apsley Street).	Keith Estates NCP

Figure 16: Proposed Keith Ave Cross Section Options from City's Transportation Master Plan



PROPOSED ROADWAY ARRANGEMENT - 24m R.O.W. OPTION B

TWO-WAY LEFT

# 3.2 Contextual Changes

### 3.2.1 Population Projections

When the Keith Estates NCP was developed, an unprecedented economic and population boom seemed to be imminent in Terrace. The City developed possible growth scenarios and started planning to accommodate that growth. It is worth noting that the *Housing Terrace: Trends, Needs and Directions* study was completed in March of 2014, the *Keith Estates NCP* was completed in November of 2014, and the *Terrace Population Survey and Projections* study appears to have been completed in late 2015 or early 2016. At the time, the City was working hard to plan for the massive economic and population growth that seemed imminent.

The *Housing Terrace: Trends, Needs and Directions* study was developed in March of 2014 for the City of Terrace. Table 3 of that study presented three 10-year projected population growth scenarios, and is replicated below:

**Table 3-4 – Population Growth Scenarios** 

	2011	2021	<b>Growth Rate</b>
Scenario A: Status Quo Growth	18,790	19,766	2.6%
Scenario B: Moderate Projected Growth	18,790	24,500	30.4%
Scenario C: High Projected Growth	18,790	28,500	51.7%

Similar growth scenarios and projections are echoed by Big River Analytics in a 2015 study titled *Terrace Population Survey and Projections*. That study describes the three development scenarios in the Executive Summary as follows:

- Low a single manufacturing facility is built at the Skeena Industrial Development Park, and regional economic activity persists at its current level.
- Medium a total of ten manufacturing facilities are built at the Skeena Industrial Development
  Park, three regional mines proceed, and two LNG facilities with associated pipelines proceed, one in
  Kitimat and one in Prince Rupert.
- High a total of thirty manufacturing facilities are built at the Skeena Industrial Development Park, three regional mines proceed, and five LNG facilities with associated pipelines proceed.

In the years that have followed these studies, a clearer picture of the development scenarios has emerged. Most of the approximately 28 LNG developments that were proposed in 2014 have been cancelled or stagnated; only 1 very large scale LNG development has been approved while another is still advancing towards Final Investment Decision (FID), and 2-4 much smaller scale LNG projects are advancing towards FID. The Skeena Industrial Lands development continues to progress, albeit at a slower pace than originally envisioned. One large mine has been constructed, and others continue to be developed towards full construction. Based on these considerations, the region's growth trajectory will likely result in population growth that is somewhere between the Low growth scenario and the Medium growth scenario, with a timeline of perhaps 2030. This reflects a population growth for the City of Terrace of less than 6,000 additional people in the next 10 years.

The expected population growth discussed above is limited to the City of Terrace. The Big River Analytics 2015 *Terrace Population Survey and Projects* study assumes that 30% of all local and regional jobs and in-migrants will end up in the Regional District of Kitimat-Stikine, rather than Terrace (Appendix – Detailed Assumptions - #5). This would imply population growth for Terrace and the surrounding area of less than 8,600 additional people in the next 10 years.

### 3.2.2 Housing Capacity

While the population studies discussed above looked at potential housing demands, it wasn't until the *Transportation Master Plan* completed in May of 2017 that the City's published studies summarized the land available for development. This summary split the land into 12 zones and the capacity of that land to accommodate growth was estimated. Excerpts from Table 5 of that study are summarized in the following table.

Table 3-5 – Excerpts from Transportation Master Plan – CoT Population Estimates by Zone

Zone	Potential New Parcels or Units	Potential New Residents
All Zones	3,476	8,757
Zone 6 (Keith Estates)	660	1,663
Zones 1-12, excluding Zone 6 (rest of Terrace)	2,816	7,094

<sup>\*</sup>Assuming 2.52 persons per household.

The unincorporated community of Thornhill is located just across the Skeena River and has a population of about one third to one quarter the size of the City of Terrace. Undeveloped and readily developable land in Thornhill is plentiful. An informal review of available residential infill and new

developments not requiring major infrastructure upgrades is summarized in the Table 3-6 – Infill and Developable Land in Thornhill below.

Table 3-6 - Infill and Developable Land in Thornhill

Zone & Type	Potential New Parcels or Units	Potential New Residents
Queensway / Churchill Phase 2	270	655
Lower Thornhill – Lots	523	1318
Lower Thornhill – Mobile Homes	20	50
Upper Thornhill – Lots	279	703
Upper Thornhill – Mobile Homes	11	28
Thornhill Total	1,103	2,780

<sup>\*</sup>Assuming 2.52 persons per household.

Based on the available developable land, a population growth of up to 9,900 persons can be accommodated in the Terrace-Thornhill communities without major infrastructure upgrades. This does not include infill and new developments in other rural areas surrounding Terrace. This exceeds the population growth projected in Section 3.2.1.

# 3.2.3 Munroe Street Pedestrian Overpass

The Keith Estates NCP identified the Munroe Street Greenway as a key north-south pedestrian/cycling route, with connectivity across the rail tracks by a proposed Munroe Street pedestrian overpass. The Transportation Master Plan developed a few years later did not include mention of a pedestrian overpass at this location. A City road reconstruction project on Munroe Street in 2017-2018 did not include any obvious provisions such as crosswalks or street lights for north-south pedestrian connectivity at this location. It appears that this key element of the Keith Estates NCP is no longer expected to proceed.

### 3.2.4 Environmental Considerations

As summarized in Section 3.7, environmental site assessment work has taken place and is ongoing. It is expected that additional environmental investigation, analysis, and remediation of the project site will result in the site being deemed suitable for industrial and commercial development. However, the due diligence and associated costs required to achieve residential standards are much more demanding and may not be economically feasible for such a large site.

Industrial sites are commonly redeveloped to residential uses in British Columbia. However, these sites typically have the soil dug out to considerable depth and concrete barriers are constructed. Removing all soils provides a high level of confidence that no contamination issues remain. A typical Vancouver-style construction which is dug out to 3-4 storeys below grade is a good example of what works in a major city but which isn't feasible on a broad scale in a smaller community.

#### 3.2.5 Keith Estates NCP Sales

During the fall-winter of 2018 and following the announcement of the LNG Canada Final Investment Decision, the City of Terrace issued a Request For Proposal for sale and development of another portion of the Keith Estates land. This included one group of 3 parcels located in the Keith Estates NCP area

(3111 Kenney St, 5020 Keith Ave, and 5014 Keith Ave). The RFP required that proposed developments be consistent with the Keith Estates NCP.

NSD understands that no sale deal was finalized and that the City remains the owner of this land.

#### 3.2.6 Discussions with CN Rail

The proponent is in high level negotiations with CN and has received a preliminary commitment for service at this site. A conceptual design for rail layout has been agreed between the parties and CN has communicated a level of comfort with the efficiency of servicing. After the site is rezoned and the project is approved in concept, CN will negotiate further on the specific details of layout and servicing.

# 3.3 Transportation

The development will be accessed from the existing Keith Avenue and Kenney Street roads. Private internal circulation roads may be developed, but some areas may have restricted access due to security requirements. The existing Keith Avenue roadway is in fair condition and has discontinuous sidewalk along the south side only. Land and financial contributions to the City's planned pedestrian sidewalk and cycling path upgrade along Keith Avenue will provide active transportation connectivity to the southwest portion of the City. The exact configuration is to be determined by the City, but is expected to be generally consistent with the proposed typical sections shown in Figure 16: Proposed Keith Ave Cross Section Options from City's Transportation Master Plan.

The pedestrian overpass at Munroe Street presented in the Keith Avenue Neighbourhood Concept Plan but not included in the Transportation Master Plan is not included in this NSD Inland Port and Developments Development Plan.

Additional traffic impact studies may be required as the project is further developed.

# 3.4 Infrastructure Servicing

Additional servicing studies may be required prior to development.

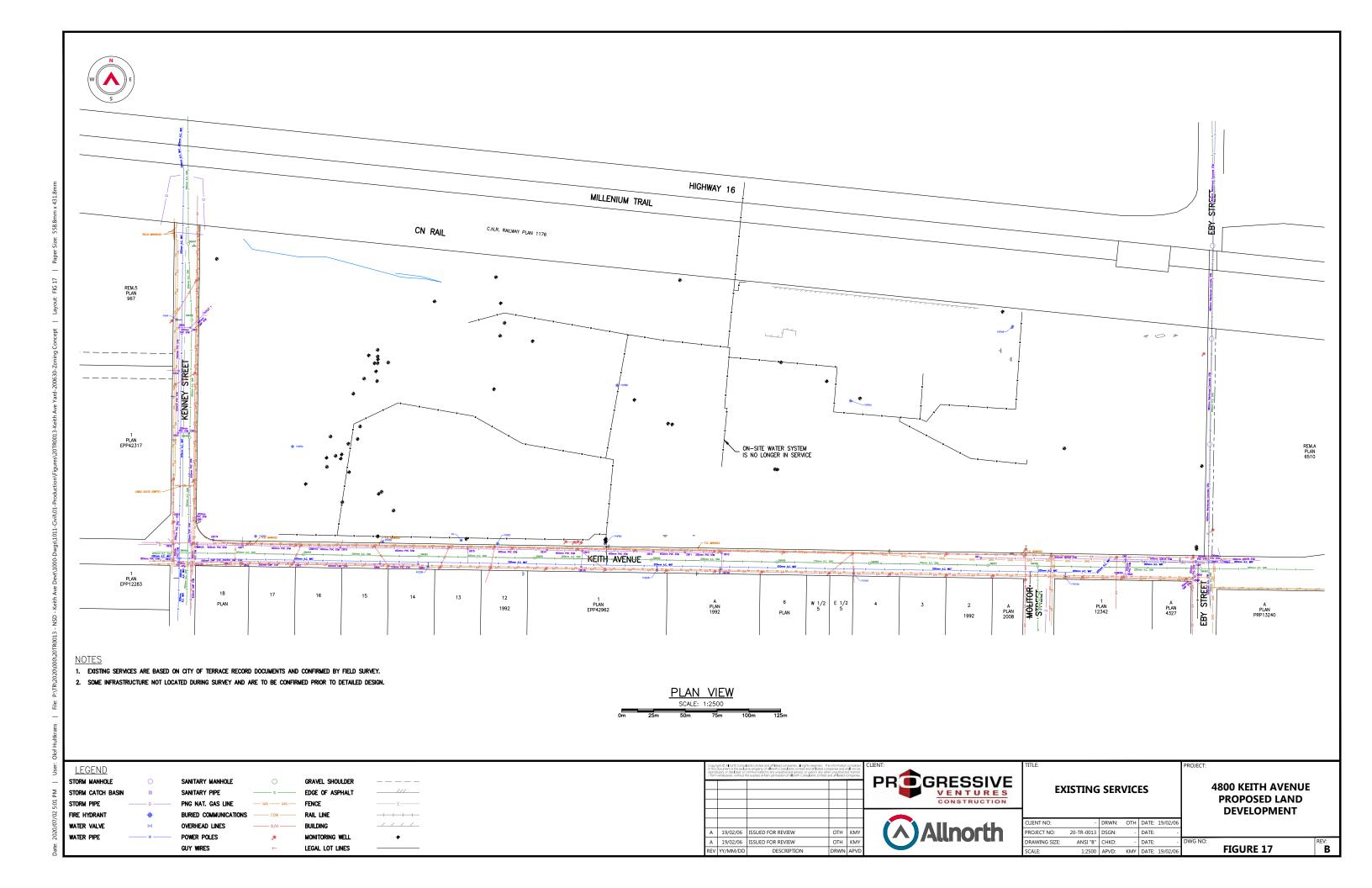
The subject property is in the middle of the City of Terrace and is a fully serviced former mill site. As such, infrastructure servicing is readily available. Municipal water, sanitary sewer, and storm sewer servicing are present in the adjacent Keith Avenue and Kenney Street right-of-ways. Preliminary discussions have been held with the City's Planning and Engineering staff, with the following summary notes on capacity of municipal services:

- Water A looped water main through the site is likely required to achieve industrial fire flows. The looped main should remain a City asset within an easement or right of way to maintain the integrity and the City's control of their water system.
- Drainage Downstream storm sewer likely does not have the capacity to receive a significant increase in runoff. The development will be required to manage storm water on site to reduce discharge from site, in accordance with the City's Subdivision and Development bylaw and established best practices.
- Sewer Downstream sanitary sewer capacity has not been reviewed in detail but is expected to be
  adequate to receive additional demands from the proposed development. Additional easements
  may be required for private internal collection sewers.

Additional review and analysis should be conducted as the project plan is further developed and refined.

Existing overhead wiring provides BC Hydro, Telus, and Citywest servicing along Keith Avenue. The capacity of overhead servicing has not been reviewed in detail at this time. Sufficient electrical capacity is considered to be readily available to provide the development with either 25kV distribution or 60kV transmission servicing. All capacities should be confirmed with the appropriate utilities.

Existing services are shown in Figure 17: Existing Services below.



### 3.5 Parks and Recreation

This proposed light and heavy industrial development includes a 0.4 acre (0.2 ha) park dedication along Kenney Street that is expected to serve as a landscaped visual and sound buffer. Additionally, the widening of the Keith Avenue right of way and financial contribution to the construction of sidewalk and pathways along Keith Avenue will support active transportation infrastructure that encourages residents and commuters to be active outdoors.

### 3.6 Rail

Rail connectivity is a major opportunity for this site due to its location adjacent to the low speed rail and rail yard. Connectivity to the existing rail system is envisioned using the existing rail spur at the northeast corner of the property and possibly at a second location at the northwest corner of the property.

### 3.7 Environmental

An environmental investigation was performed by Active Earth Engineering on the property in 2019. The analysis and assessment is ongoing. However, initial indications are that a number of low severity environmental issues exist. With some remediation, the site can likely be made suitable for development. However, significant additional investigation and assessment would be required to perform higher levels of due diligence to demonstrate the site is suitable for residential use, as residential standards are higher.

### 3.8 Geotechnical

A geotechnical test pitting investigation was performed by Golder on the property in 2019. The geotechnical engineer was also provided with drill log records from environmental investigations. Soil types varied across the property and with depth, and included the presence of some deposits of old organic waste. Generally, the site is considered suitable for development, but additional project-specific geotechnical investigations and recommendations will likely be required for most developments.

### 4 DEVELOPMENT STRATEGY

- Consult with City of Terrace to determine best approach to zoning and OCP considerations. (Ongoing since November 2019)
- Consult and negotiate with City of Terrace staff to determine adjustments to the Development Plan required to gain support of the City's Development Services department. (Ongoing since November 2019)
- Continue to engage with CN to confirm setback requirements, optimal rail spur line configurations, etc. (Ongoing)
- Continue ongoing environmental assessment. (Ongoing)
- Obtain OCP and zoning approvals from CoT. (In Progress)
- Legal survey to re-establish site boundary and identify blocks of development and road rights-ofway.
- Preliminary Engineering.

- o Collaborate with CoT engineering staff to assess capacity of offsite infrastructure.
- o Prepare site grading, drainage and servicing plans.
- o Traffic Impact Study development level.
- Continue to advance conceptual plans for the transload facility and commercial developments, including site planning and engineering, then proceed with development.

### 5 CONCLUSION

This NSD Inland Port and Developments – Project Development Plan presents a vision for development of a key parcel of land in a strategic location near downtown Terrace. The former Skeena Cellulose Sawmill property was once a major driver of the local economy and an integral part of the community that grew around it. Transforming this now largely vacant and unused parcel of land into a vibrant transportation and service hub would support the community's objective of creating a diversified and coordinated economy.

The project is complementary to a number of key regional projects and generally improves the competitiveness of local and regional businesses. It will contribute significantly to the local economy through direct capital investment, the creation of hundreds of jobs, and by significantly growing the non-residential tax base in Terrace.

To contribute to the quality of life in the community, this Project Development also proposes to contribute land and funds to the City's planned pedestrian and cycling upgrades to the Keith Avenue corridor. These upgrades will provide pedestrian and cycle connectivity between the southwest portion of the City to Downtown, and will create a loop route featuring panoramic views on the Sande Overpass for recreational users.

The proponents of the NSD Inland Port and Developments project are long-time residents of Terrace and have helped build this community. They envision this project creating the legacy of a vibrant, diversified and resilient local economy that can withstand the boom and bust cycles typical of rural, resource-based economies.

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