MEMO

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PROJECT: Anmore South Neighbourhood Plan
SUBJECT: Phase 1 Transportation Commentary

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1. INTRODUCTION

Icona Properties (Icona) is proposing to activate the designated Special Study Area lands through development of a 151-acre, mixed-use community at the lower, southwest corner of the Village of Anmore, BC. The Anmore South Neighbourhood Plan (NP) will guide the sustainable growth of the community, supporting the objectives of Anmore Council's Strategic Plan and the Metro 2050 Regional Growth Strategy. The Terms of Reference (ToR) for the NP were finalized in March 2024 with approval from the Village of Anmore, and include four phases of work that ultimately lead to delivery of the final NP:

1. Technical Due Diligence – Biophysical Studies, Planning + Engineering Inventories
2. Preliminary Land Use Planning + Community Input
3. Preferred Plan, Engineering Studies and Technical Assessments
4. Neighbourhood Plan Document

Icona has retained Bunt & Associates Engineering Ltd. (Bunt) to be the project's transportation planning engineers, providing input throughout the NP process. Bunt's largest contribution to the NP will be in Phase 3, when a Transportation Impact Assessment (TIA) and Transportation Demand Management (TDM) Plan will be prepared for the preferred plan. Icona and Bunt understand that transportation and traffic concerns are top of mind for many. This Phase 1 Transportation Commentary serves as a summary of transportation work to date on Anmore South, which will set the stage for the full Transportation Impact Assessment (TIA) in Phase 3.

2. DEVELOPMENT AS A CATALYST FOR TRANSPORTATION IMPROVEMENTS

Current vehicle access to Anmore South is either via 1st Avenue (connecting to Port Moody via Ioco Road) or Sunnyside Road (connecting to Port Moody via East Road). East Road, Sunnyside Road, 1st Avenue, and Ioco Road are all part of the Major Road Network (MRN). MRN corridors have shared jurisdiction between the municipal government and TransLink, although each municipality retains overall responsibility for its portion of the MRN. In addition, Ioco Road is a designated Truck Route.

The development site is currently served by limited and infrequent bus routes to Anmore, Belcarra, Port Moody, and Coquitlam. However, as part of this transit service, buses to Port Moody provide convenient access to the Millennium Line at Inlet Centre and Moody Centre stations and to the West Coast Express at Moody Centre Station; thus, a connection to the Frequent Transit Network (FTN) is available.

Traffic conditions on the area road system can indeed be stressed at times, largely on account of the growing popularity of the regional and provincial parks in the area. Projected population and employment growth within local centres, as well as the largely untapped potential of the nearby industrial lands fronting onto Burrard Inlet, will at some point add significant demand to the area transportation system. As such, the success of Anmore South will in large part depend on the planning for compelling travel options beyond reliance on private vehicle trips.

As it is in the best interest of municipalities and developers to support convenient and reliable transportation to the site (via private vehicle and otherwise), improvement to transportation options in the wider area are inevitable. The TIA in Phase 3 will investigate what these improvements would need to be for different transportation scenarios, such as a future with no additional road capacity, or a future with new road connections to Anmore.

A key strategy for Anmore South regardless of the future road network is to create an efficient and effective mobility connection to the regional transit system, namely the Inlet Centre and Moody Centre Stations on the Millennium Line, as well as the West Coast Express commuter rail station at Moody Centre. The short travel distance/time between these stations and Anmore South is highly compelling and key to the Anmore South strategy to encourage travel by sustainable modes rather than overreliance on private vehicle trips.

3. TRAFFIC DATA

Previous work for Anmore South referenced traffic data collected in 2017. That data is now out of date and does not account for post-pandemic travel patterns. In response, Bunt has collected two additional traffic data sets that will be relied on for the upcoming TIA. Data was collected in Summer 2023 (late July/early August – to understand peak recreational traffic flows) and Fall 2023 (mid September – in order to understand the overlap of school traffic with shoulder season recreation). Data was collected for weekdays and Saturdays.

Preliminary analysis of the 2023 traffic data shows overall reductions in vehicle volumes throughout Anmore, with the higher of the two 2023 count dates anywhere from 5% to 40% less than comparable May 2017 counts. Of the corridors within the study area, Sunnyside Road between Bedwell Bay Road and East Road saw the largest reduction in traffic (20-40%), while East Road and Ioco Road saw more modest reductions (5-20%). Similar reductions were noted for both the weekday peak hours and the Saturday peak hour. These reductions likely account for the increase in work-from-home post-pandemic and the implementation of parking pre-booking and lot closures at Buntzen Lake and Sasamat Lake. The new data will form the basis for all traffic analysis going forward.

Of the two 2023 datasets, weekday traffic flows (AM and PM peak) were found to generally be higher in the summer, while Saturday traffic flows (PM peak) were generally found to be higher in the early fall.

4. EXISTING CONDITIONS ANALYSIS

4.1 Theoretical Roadway Capacity

A roadway's theoretical capacity is defined as the maximum theoretical hourly rate at which vehicles can reasonably traverse a point or uniform section of roadway during a given period of time under prevailing roadway, traffic flow, and control conditions. As a general rule of thumb, a roadway theoretical capacity along an urban/suburban corridor with intersecting streets controlled by traffic signal is 750 vehicles per hour per lane (vphpl), which may be restrained (i.e. reduced) by elements such as weather, traffic conditions, road design, and terrain.

As a general indicator of traffic performance, this measure of traffic utilization of theoretical road capacity is a useful indication of potentially how much additional traffic volume a road can accommodate. It is important to note that road capacity is not equivalent to intersection capacity, which may be able to accommodate more or fewer vehicles than road segments. As the design process progresses in Phase 3, intersection capacity analysis will be conducted. For the purpose of this Phase 1 commentary, only available road capacity will be reviewed.

Table 4.1 shows the peak hour directional volumes for roadways in the study area, and **Table 4.2** shows their existing theoretical spare capacity.

Table 4.1: Roadway Peak Hour Directional Volumes

ROAD	PEAK HOUR DIRECTIONAL VOLUME (VEHICLES PER HOUR)		
	WEEKDAY AM [1]	WEEKDAY PM [1]	SATURDAY PM [1]
1st Avenue (between Ioco Road & Sunnyside Road)	150 vph north & southbound	250 vph north & southbound	250 vph north & southbound
Sunnyside Road (between 1st Avenue & East Road)	100 vph westbound	100 vph east & westbound	100 vph east & westbound
East Road (east of Sunnyside Road)	150 vph westbound	150 vph east & westbound	250 vph westbound
Ioco Road (east of April Road)	250 vph eastbound	300 vph east & westbound	300 vph east & westbound

[1] The weekday AM and PM volumes were taken from summer 2023 counts, which the Saturday PM volumes were taken from early fall 2023 counts. This reflects that the weekday counts were found to be higher in the summer, while the Saturday volumes were found to be higher in the early fall.

Table 4.2: Roadway Directional Peak Hour Spare Capacity

ROAD	DIRECTIONAL CAPACITY	PEAK HOUR DIRECTIONAL SPARE CAPACITY		
		WEEKDAY AM	WEEKDAY PM	SATURDAY PM
1st Avenue (between Ioco Road & Sunnyside Road)	750 vph	600	500	500
Sunnyside Road (between 1st Avenue & East Road)	500 vph [1]	400	400	400
East Road (east of Sunnyside Road)	500 vph [1]	350	350	250
Ioco Road (east of April Road)	500 vph [1]	250	200	200

[1] Due to rolling terrain, the theoretical capacity was reduced by one third.

The roadway peak hour directional volumes show that there are often no clearly defined peak traffic directions on Anmore's major roads. Peak commuting directions (i.e. leaving Anmore in the morning and returning in the afternoon) are opposite from peak travel patterns for visits to the area parks (arriving in Anmore in the morning and leaving in the afternoon).

The spare capacity analysis shows that all major roads in/leading to Anmore currently have some spare capacity.

- East Road currently carries its highest traffic volumes on Saturdays, with additional capacity on weekdays when park patronage is lower. This is beneficial for Anmore South, whose primarily residential land use will generate its peak vehicle demand during weekday morning and afternoon commuting times.

- Ioco Road at April Road carries similar vehicle volumes during both the weekday PM peak and Saturday PM peak. While not part of the 2023 count program, it is likely that traffic volumes on the eastern portion of Ioco Road (approaching Port Moody City Hall) are higher during the weekday PM peak given the increased access to residential land uses and civic amenities (recreation centre, library, city hall) that build up the further east one travels along the corridor. As such, Ioco Road likely has less available capacity to accommodate Anmore South traffic in its current condition.
- Internal Anmore roads (1st Avenue and Sunnyside Road) have ample capacity and are not anticipated to be constraining factors for Anmore South traffic.

This available road capacity does not necessarily translate to a fixed number of units that can be built at Anmore South before road capacity is reached. A measure of the future development potential at Anmore South will instead depend on:

- The vehicle trip generation of Anmore South, which in turn will be a reflection of the anticipated travel mode split for the project. Various measures can be implemented to reduce vehicle usage (and even eliminating the need to make certain trips) by lowering the amount of parking provided, implementing a frequent bus connection to the SkyTrain (every 15 minutes, 7 days per week), encouraging a wide range of commercial services within the development, safer active transportation connections, and other transportation demand management measures.
- Intersection capacity analysis will need to be conducted, as capacity pinch points and the largest proportion of delay is typically found at intersections rather than along road segments.
- The theoretical road capacity numbers are rules of thumb, and roadway volumes beyond these values are possible. In that scenario, traffic would move away from free-flow characteristics to bunched or platooned flow (all the way up to stop-and-go traffic at the most extreme), and roads or driveways intersecting that at-capacity corridor would experience longer delays due to the reduction in gaps in traffic.

4.2 Small-Scale Improvements

Previous studies looked at the impact of the David Avenue extension, which would have introduced a new arterial corridor to Anmore, Belcarra, and future expansion of the industrial lands. A previous City of Port Moody council voted to remove the road right-of-way for this extension in 2020, which means that the existing road connections of Ioco Road and East Avenue will continue to experience pressured traffic conditions into the foreseeable future.

The ongoing transportation planning work for Anmore South does not assume a future David Avenue extension. However, without its capacity, a combination of transportation demand management (TDM) to reduce auto dependency and small-scale infrastructure improvements to Ioco

Road and East Road will be necessary in order to enable these two existing arterials to continue to adequately serve the area.

Possible small-scale improvements would be focused on removing frictional elements that are disproportionally reducing the road's capacity; mitigating these issues would then incrementally allow for smoother traffic flow and thus increased throughput. It is noted that many existing elements on Ioco Road and East Road are actually intended to increase friction in order to calm traffic (raised medians, speed bumps, all-way stop intersections). If the intent is to increase capacity, public consultation should inform which measures are deemed generally appropriate. Options for new small-scale improvements include:

- Short left turn lanes at high-volume locations, to allow left turning vehicles to wait for a gap in ongoing traffic without causing a queue of through vehicles behind them
- Bus layby stops at high ridership locations, to allow buses to pull out of the traffic stream when stopped. This should be implemented with caution, especially in the context of providing additional high-quality transit service to Anmore South, as introducing bus laybys decreases the transit experience and reliability by forcing buses to wait for a gap in traffic or a yielding vehicle in order to pull back into the stream of traffic.
- Remove on-street parking where possible, as parallel parking manoeuvres cause delays.

5. INTERAGENCY COORDINATION

Outside of Anmore and neighbouring Belcarra, all municipalities within the Metro Vancouver Region have been experiencing tremendous growth over the past several years, including the neighbouring Tri-City municipalities of Port Moody, Coquitlam and Port Coquitlam. While post-covid travel patterns have temporarily halted or reversed traffic growth, this continued densification is expected to continue to increase the operational pressures on existing transportation systems. Development in these municipalities has contributed to increased visitations to Belcarra Regional Park and Buntzen Lake Recreation Area, resulting in implementation of entry and parking restrictions had to be implemented. By the same token, future development in Anmore and in the Port Moody IOCO Industrial Lands will result in increased traffic on the road networks in Port Moody, Coquitlam, and beyond.

In response to these anticipated changes, a Tri-City "North Shore" Planning Task Force has been convened. This multidisciplinary team will focus on how the Anmore South Special Study Area and the Port Moody IOCO Lands can help alleviate the region's industrial land and housing shortage. In part, this will involve reviewing innovative and sustainable transportation solutions for the area in alignment with TransLink's 2050 Goals, which emphasize convenience, reliability, affordability, safety, comfort, and a carbon-free transit system.

While currently only including the North Shore landowners, the Task Force is intended to comprise a wide range of key stakeholders, including representatives from Belcarra, Anmore, Port Moody,

Coquitlam, TransLink, Metro Vancouver, the Province of BC, the Port of Vancouver, the Tsleil-Waututh First Nation, the Tri-Cities Chamber of Commerce, Imperial Oil, Gilic Development, and Icona Properties.

The initial goal of the working group is to release a prospectus document outlining the broader opportunities and challenges of developing the north shore area in order to create a unified vision. By taking a proactive approach to regional planning, the North Shore Planning Task Force aims to recommend a sustainable development future for the area with both residential and industrial land that aligns with the community's needs and interests.

6. PHASE 3 TIA AND TDM PLAN

As per the Neighbourhood Plan ToR, a comprehensive Transportation Impact Assessment (TIA) will be completed as part of Phase 3 of work once the preferred plan of development is selected. The TIA will determine the impacts of the full buildout of the preferred plan on the existing road network and surrounding neighbourhoods. A Transportation Demand Management (TDM) Plan will outline the measures the project will take to reduce the reliance on single-occupancy vehicle trips and in so doing, lessen the vehicular impact of the project. In addition to the public consultation occurring as part of Phase 1, there will be opportunities for feedback in Phases 2 and 3. Specifically, part of the public consultation goals for Phase 3 is presenting and obtaining feedback on the technical studies, including the forthcoming TIA and TDM Plan.