



## 3521 DOLPHIN DRIVE

### Construction Traffic Management Plan

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## **1.0 GENERAL INFORMATION**

### **1.1 INTRODUCTION**

This Construction Traffic Management Plan provides plans and procedures to safely maintain traffic flow for the Phase 1 construction at 3521 Dolphin Drive. The plan is intended to minimize traffic disruptions, provide local access, protect the general public, and maintain mobility of construction workers and equipment. This Plan has been developed from the *2015 Interim MoTI Traffic Management Manual for Work on Roadways*.

### **1.2 PROJECT LOCATION AND DESCRIPTION**

Phase 1 of the project involves the renovation of the existing building's exterior and construction of a new 39 unit residential condominium building at 3521 Dolphin Drive in Nanoose Bay (RDN).

### **1.3 HOURS OF WORK**

Work will generally occur between 7am and 5pm Monday to Saturday on the site. The Contractor will follow the RDN Area E Noise Bylaw. No Work is permitted on Sundays or Statutory Holidays.

No work on the roadways, that causes traffic delays is permitted between 7am and 9am and 3pm and 5pm. This includes any minor random interruptions of traffic.

### **1.4 ROAD CHARACTERISTICS**

Dolphin Drive is classified as a rural collector road in the Regional District of Nanaimo. Since RDN does not have road jurisdiction, this road is under the jurisdiction of the Ministry of Transportation. Dolphin Drive is a two lane paved road with a 50km/h speed limit.

Outrigger Road is a local road with a speed limit of 50km/h. Ourtigger Road does not have any pavement markings to delineate lanes or paved shoulders.

### **1.5 LANE CLOSURES**

Lane closures on Dolphin Drive and Outrigger Road are not expected to occur as part of the project. Traffic Control Personnel (TCP) may be on site to provide access / egress to the site for truck traffic as well as maintain residential access to Outrigger Road at all times.

## 2.0 OPERATIONS & SIGNAGE

### 2.1 SITE FENCING

The site will be fenced as shown in Figure 1 to prevent pedestrians from accessing the site. C-018 signs will be installed in advance of the site (a minimum of 40m from other signs, Dolphin Road, or the work site depending on the approach).



Figure 1 Site Setup

### 2.2 TRUCK ACCESS POINTS

Construction vehicles and trucks will access the site directly from Dolphin Road or via the Phase 1 parking lot depending on the area of work.

### 2.3 SIGNAGE

- All signage and supports shall conform to the BC Ministry of Transportation and Infrastructure's *Traffic Management Manual for Work on Roadways* and all signage will be in accordance with the current Catalogue of Standard Traffic Signs.

- Signage will be located as shown in the **Figure 1**.
- All signs will be maintained regularly to allow for maximum visibility. All signs will remain clear of any materials that may reduce their visibility.
- All signage will be set up so as to command the respect of vehicles in order to ensure the safety of both the travelling public and the workers.
- All safety apparel and traffic control retro-reflectivity signs and devices will be as per Section 5.4 of MoTI's *Traffic Management Manual for Work on Roadways*.
- All signage will be reviewed / inspected a minimum of once daily (24 hour period). If traffic control devices are in place during active work the devices will be checked and reviewed immediately after installation and at least twice during the shift. If devices are maintained during non-active periods the devices will be checked at least once every 24 hours.

### **3.0 USERS AND ACCESS**

#### **3.1 PEDESTRIANS**

The access to the Marina will be maintained by providing a pedestrian walkway on the grassy plot to the north side of the building. This walkway will be 7 – 10 m away from the building edge and separate from the site by fencing. The walkway will be gravel and accessible for all users. Secured transitions between changes in elevation will be provided.

#### **3.2 COLLECTION SERVICES**

The Contractor will ensure that access for all collection services to local residents on Outrigger Road including garbage collection, recycling collection, yard waste collection, and mail delivery are maintained.

#### **3.3 CONSTRUCTION PARKING**

Construction parking will be in a designated location as identified below. No construction vehicle (or equipment) parking is permitted on public roads.

Construction parking for Phase 1 will be provided on the space proposed for the new building. Phase 2 parking will be provided (if required) in the parcel of land south west of the Dolphin Drive - Outrigger Road intersection. Construction parking, including parking heavy (concrete, gravel, etc.) trucks will not be permitted to park on Outrigger Road and block / narrow the road.

The Traffic Control Supervisor will monitor construction vehicle parking and ensure that they are not blocking any roads, and / or driveways. Construction worker parking will not be permitted on Outrigger Road or along Dolphin Road. A site orientation will be undertaken with workers on how and where to park when entering and exiting the site. This will include routing to and from the site.

### **3.4 MARINA PARKING**

Parking for the vehicles intending to use the Marina will be maintained in the area closest to the Boat Launch until work occurs in this parking lot at which time it will be moved temporarily to the Phase 2 parking lot, as shown in Figure 1.

### **3.5 ACCESS TO THE BOAT LAUNCH**

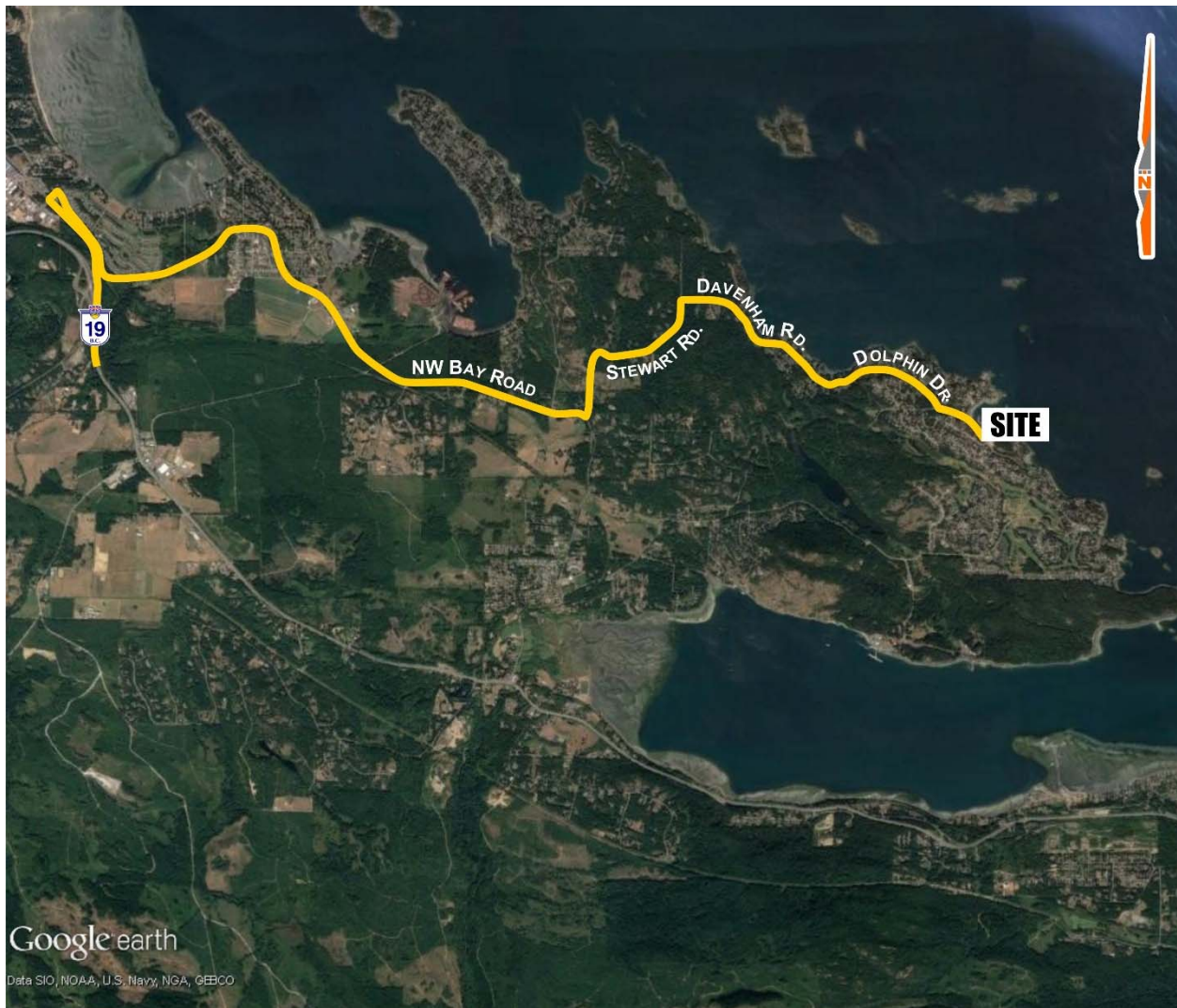
Access to the boat launch area will be maintained at all times during construction except during the re-surfacing work in the parking lot area. The closure of the boat launch will be minimized and advance notification provided to users. Notifications may be undertaken using the Fairwinds website, contacting Fairwinds members, and posted notifications at the property.

### **3.6 ACCESS TO OUTRIGGER ROAD**

Two way access to Outrigger Road will be maintained at all times during construction. A minimum width of 6m or existing width is to be provided at all times.

### **3.7 TRUCK ROUTING**

The trucks will utilize Highway 1 to North West Bay Road to Stewart Road to Dolphin Drive to access the site and vice versa as shown in Figure 2. A site orientation will be undertaken with all workers, including sub-contractors, on the required truck routing to and from the site.



**Figure 2 Truck Access Route**

To minimize traffic disruptions when accessing or leaving the work zone, the following procedures will be abided by:

- Workers will use good judgment when entering and exiting the Work Site;
- Construction vehicles will enter and exit the work zone in the same direction as traffic.

## **4.0 INCIDENT MANAGEMENT PLAN**

### **4.1 INTRODUCTION**

The purpose of the Incident Management Plan is to have an action plan prepared in the event of an incident, which affects traffic adjacent to the site.

An Incident is defined as a motor vehicle accident with or without injuries, vehicle breakdown, stall, hazardous spills, damage from falling objects, construction accident, or any other event, which impedes the flow of traffic. The incident may result in a full or partial roadway blockage.

The duties of the Traffic Control Supervisor with respect to incident management is to prudently respond and communicate incidents as they occur with the Site Superintendent, and / or the relevant emergency service provider (911). The Site Superintendent will contact the MoT Area Operations Manager immediately to inform them of an incident adjacent to the site on Dolphin Road. The TCS will ensure the safe movement of traffic through or around the incident and to provide access for all emergency vehicles. During an incident the Traffic Control Supervisor will provide traffic control around an incident as quickly as possible. The TCS will work with emergency responders to determine appropriate traffic control.

### **4.2 NOTIFICATION**

Emergency Services will be contacted (by phone by the TCS) if the severity of the incident warrants them attending. The Contractor's Site Superintendent will inform all crews (by radio or directly talking to them) working within the incident area of the incident and the possibility of emergency crews arriving. For all incidents on Dolphin Road, at the site, the MoT Area Operations Manager will be notified immediately of the incident, the planned clearance time of the incident, the estimated time of the incident and the planned clearance measure planned to remove the incident and updated every half hour.

Traffic control personnel may be used to inform the travelling public of all delays due to incidents by talking to drivers stopped due to the incident.

### **4.3 INCIDENT REVIEW**

An Incident Response Team will review incidents which occur within the work area where traffic management is considered a contributing cause. The team members will include the Site Superintendent and Traffic Control Supervisor and will know the importance of an effective and efficient Incident Management Plan. After every incident within the work zone, the Incident Management Team will meet and discuss what happened, why did it happen, how could it have been prevented and what measures will be taken on site to help reduce similar types of incidents from occurring in the future.

### **4.4 INCIDENT PROCEDURES**

In the event of unforeseen traffic obstructions such as a stalled vehicle, equipment failures, vehicle accidents, etc. that blocks one travel lane, the following measures will be taken:



1. The TCS will verify that an incident has occurred and inform the Site Superintendent;
2. The Site Superintendent will contact MoT Area Operations Manager to inform them of the incident, response measures, estimated delay, and when the incident has been cleared;
3. The Site Superintendent will ascertain what, if any, work activities need to be stopped until the incident is cleared. Site Superintendent will contact Spill Reporting and / or WorkSafe BC as necessary;
4. The TCS will identify the number of Traffic Control Personnel (if required) and call them to the site to inform the public of the incident, if TCP are not on site;
5. The TCS will assess the nature of the incident call towing, RCMP, fire, and / or ambulance as needed;
6. The TCS will assess traffic impacts and ascertain if traffic can safely be maintained around the incident, or if the roadway needs to be closed;
7. If the TCS ascertains traffic can be safely maintained around the incident:
  - a. Measures will be implemented to reroute traffic around the obstruction safely and efficiently;
  - b. TCPs will be utilized to provide safe access for all emergency vehicles;
  - c. MoT Area Operations Manager to be updated as new information is available, or at minimum every 30 minutes;
  - d. If queues occur, TCP will walk the queue in each direction and make travelers aware of the events, their options, the estimated time of opening, and level of confidence of that estimate;
  - e. Traffic re-route will remain in place until the incident is cleared;
8. If the TCS ascertains the roadway needs to be closed:
  - a. The TCS will advise over the radio of the road closure and coordinate with TCPs;
  - b. TCPs will assist in guiding motorists;
  - c. TCPs to provide safe access for all emergency vehicles;
  - d. MoT Area Operations Manager to be updated as new information is available, or at minimum every 30 minutes;
  - e. If queues occur, TCP will walk the queue in each direction and make travelers aware of the events, their options, the estimated time of opening, and level of confidence of that estimate;
9. The TCS will complete an Incident Report. A copy of the report will be sent to the MoT Area Operations Manager within 12 hours of the end of the incident.

#### 4.5 GENERAL SAFETY

- Any incident will be promptly investigated and correction of potential hazards will be rectified;
- All hazards to both workers and the travelling public will be identified and minimized;
- Accidents, near misses, and dangerous situations or acts, will be reported to the Traffic Control Supervisor and the causes will be corrected.

## 5.0 TRAFFIC CONTROL SUPERVISOR

The Contractor shall appoint a traffic control supervisor (TCS) to be responsible for the traffic control for this project. The TCS may be the site supervisor or hold another position on the project (i.e. first aid attendant, safety officer, etc.). The TCS may designate an alternate. The alternate must be familiar with the roles and responsibilities of the TCS position. The TCS will:

- Be responsible for monitoring the effectiveness of traffic control during the Works, and keeping daily traffic control logs and incident management reports.
- Have full authority over any traffic control personnel on site.
- Ensure daily traffic reports, logs, inspection forms and an up to date traffic control plan are available to the RDN, MoTI, a WorkSafe BC Officer or any other party interested in traffic control on the site upon request.
- Respond to any traffic concerns of the RDN, MoTI, RCMP, and / or WorkSafe BC.
- Ensure that all traffic control procedures are in accordance with the BC Ministry of Transportation and Highways' *Traffic Management Manual for Work on Roadways* and the Worker's Compensation Board of British Columbia's Occupational Health & Safety Regulation Part 18.
- Ensure that traffic control arrangements and procedures for the work are made known to all the people involved in the work.
- Ensure that all traffic control devices are properly maintained and checked during working and non-working hours.
- Ensure that any person assigned to be a traffic control person is adequately trained in a manner acceptable to WorkSafe BC and effectively performs their role in the traffic control arrangements and procedures for the work.
- Ensure that traffic control personnel are positioned in a safe location clear of potential environmental hazards.
- Ensure that each member of the traffic control operation wears the required personal protective clothing and equipment as per WorkSafe BC regulations.
- Ensure that all TCP are performing their duties competently and safely.
- Ensure that TCP work together as a team when working in groups of two or more.

## 6.0 COMMUNICATION PLAN

The Contractor will provide notification (by fax or email) at least one (1) week prior to the start of work to the following stakeholders:

- All emergency services
  - RCMP Nanaimo Detachment
  - Nanoose Bay Fire Department
  - BC Ambulance
- Regional District of Nanaimo
- Ministry of Transportation

The Contractor will coordinate traffic control with any other works in the area, as applicable.

The Contractor will keep the RDN and MoT Area Operations Manager up to date construction works. The Contractor will notify the RDN and MoT Area Operations Manager immediately before conditions change unless the change is to rectify an immediate safety issue. The Traffic Control Manager will keep the Contract Administrator informed and updated when approved changes to the Traffic Management Plan are required.

The TCS will contact emergency services of any unscheduled delays.

Contacts are located in *Section 7.0*.

## 7.0 CONTACT LIST

### EMERGENCY SERVICES

<b>Emergency – RCMP, Fire, Ambulance</b>	<b>911</b>
Oceanside RCMP (non-emergency)	250-248-6111
Nanaimo RCMP (non-emergency)	250-754-2345
Nanose Bay Fire Department (non-emergency)	250-468-7141
BC Ambulance (non-emergency)	1-800-461-9911
Air Ambulance	604-872-5456
Earthquake, Flood, Dangerous Goods Spills (24 hrs)	1-800-663-3456
WorkSafe BC	1-888-621-7233
WorkSafe BC (After hours)	1-866-922-4357
Workers Compensation Board	1-604-276-3100
Workers Compensation Board (After hours)	1-604-273-7711

### MEDICAL SERVICES

Location	Address	Phone
Nanaimo Regional General Hospital	1200 Dufferin Cres, Nanaimo, BC	250-755-7691

### CONTRACTOR – TBD\*

Contact	Email	Cell
Site Superintendent - TBD		TBD
Traffic Control Manager / Supervisor		TBD

\*Note this information will be provided at a later date

### WATT CONSULTING GROUP LTD

Contact	Email	Phone
Nadine King – Traffic Engineer	<a href="mailto:NKing@wattconsultinggroup.com">NKing@wattconsultinggroup.com</a>	250-388-9877

### MEDIA

Company	Type	Phone	Email
The Wave/The Wolf	Radio	250-758-1131	
Parksville Qualicum Beach News	Newspaper	250-248-4341	

## **APPENDIX A: ACCIDENT REPORTING PROCEDURES**

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# ACCIDENT REPORTING PROCEDURES

## ACCIDENT REPORTS

The Traffic Control Supervisor (TCS) will notify the Contract Administrator after any accident involving personal injury, fatalities, damage or complaints from residents or the travelling public. The notification can be made in person or by telephone.

The TCS will prepare a detailed written report of all accidents involving personal injury, fatalities or damage. The report is to be reviewed and initialed by the Site Superintendent and the Contractor Manager and sent to the Contract Administrator by the next workday.

The report submitted to the Contract Administrator will contain the following information:

- What happened?
- Who was injured?
- Who was involved, but not injured?
- What changes are being made in the operation?
- A copy of the hazard analysis for the operation.
- Any revisions made in the hazard analysis.
- Copies of the crew's four previous toolbox-meeting reports.
- What disciplinary action, if any, was taken?

## INVESTIGATION

### A. Investigate

- Take photographs. Get close ups and different angles of:
  - Anything a person slipped on, fell from or collided with.
  - All damaged property (equipment, the job itself, tools, buildings, etc.).
- Collect hard facts.
- Collect names and addresses of all parties involved in the incident.
- Ask for names and addresses of witnesses.
- Identify persons or companies that could have indirectly contributed to the accident.
- Identify the item(s) that contributed such as a drill or loose step. List all damaged items with their ID numbers.

## **B. Report Accidents Involving Workers**

### **Near Miss**

- Fill out near miss incident report and file all forms on site alphabetically under the injured employee's name.
- First aid only (timecard is marked "injured" but there is no medical attention sought).
- Fill out Foreman's Accident Report.
- Photocopy both sides of the timecard.
- Photocopy any diary notes (witness statements or other relevant information).
- File all forms on site alphabetically under the injured employee's name.

### **Medical attention is required.**

- Fill out Foreman's Accident Report.
- Fill out Accident Investigation Report (identify any witnesses).
- Fill out WorkSafe BC Employee Claim Form.
- Photocopy any diary notes, timecard or other relevant documents.
- File all forms on site alphabetically under the injured employee's name.