

CAP MEETING #3 – Transportation Dufferin Aggregates Paris Pit



Brant County
June 19, 2012

AGENDA

- A. Introductions
- B. Minutes from Last Meeting

- C. General Update

- D. Technical Information on Transportation
 - 1. Traffic Observations and Truck Routes
 - 2. Road Platform and Construction
 - 3. Truck Types
 - 4. Dufferin's Transportation and Trucker Policies

- E. Discussion

- F. Next Steps

DUFFERIN UPDATE

Andrea Bourrie (Dufferin/Holcim)

1. *We will operate to Today's Standard*

- The 1974 license simply grants us the right to extract the resource. Our operations must and will operate based on today's standards. **It is the law.**

2. *We will be a strong economic partner to the community*

- Materials extracted from the Paris Pit will meet the needs of construction jobs in the County of Brant, Brantford, Hamilton and Kitchener Waterloo areas. **Supplying these projects locally is both environmentally and economically responsible.**

3. *Aggregates and water can co-exist*

- Paris Pit extraction will be above the groundwater table, except the source water pond development and the final stages of operation anticipate below water extraction in 20-40 years.
- **Dufferin is committed to further evaluation and ongoing review. Below water table extraction will not occur if it cannot be done safely.**
- No chemicals or contaminants will be used in the operation.
- There is no known example of an aggregate operation resulting in groundwater contamination.

We continue to listen to community concerns and seek solutions. Two-way dialogue is encouraged. It is important that the discussion stays focused on facts and that the community is in a position to create an informed opinion.

- Meetings have been held with members of Brant County staff and several members of Council
 - ▶ Transportation
 - ▶ Watts Road reconstruction
 - ▶ Water (municipal, domestic well and ecology)
 - ▶ Various other matters
- ❖ Anticipate sending a response to County questions in July
- Briefing meeting held with GRCA staff and Source Protection staff
 - ▶ Anticipate comments on PTTW when submitted
 - ▶ Will explore additional opportunities for discussion when appropriate
- PTTW technical work continues in support of an application to MOE
 - ▶ Technical work has address several comments raised at last meeting as well as County and GRCA meetings
 - ▶ Pre-consultation meeting with MOE pending
 - ▶ Will advise prior to submission of application and all material will be available
- Website will launch shortly: www.dufferinparispit.com
- Public information meetings will be held shortly and again in fall

Questions and concerns related to transportation have summarized to date. We think we understand many of them and intend to address them through our discussion tonight. Additional questions are expected and welcome.

CURRENT QUESTIONS ...

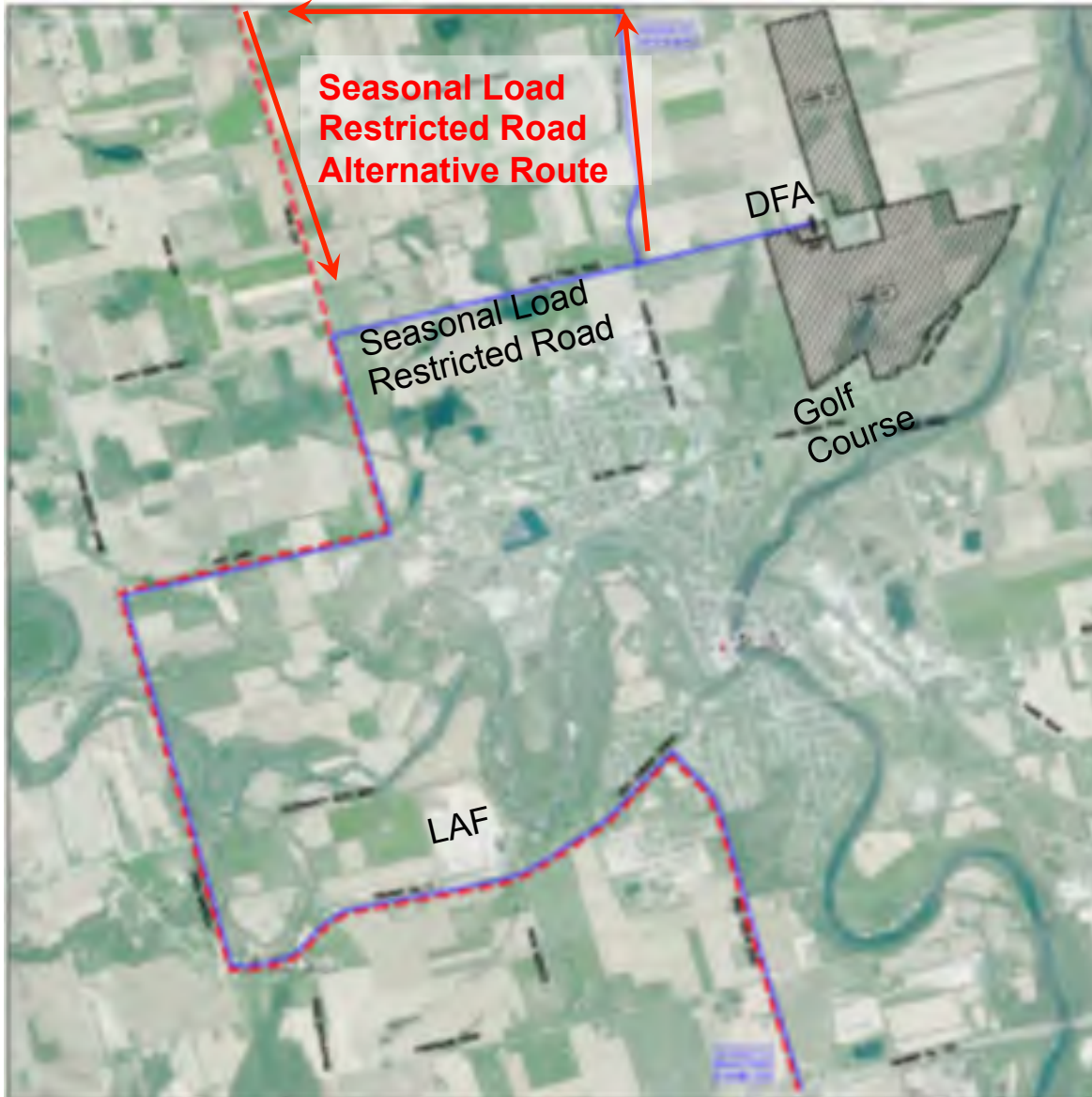
1. Why are you moving the truck entrance? Was there an option to move the entrance to elsewhere?
2. Why does the Ministry consider moving the entrance a 'major amendment' to the license?
3. Is Watts Pond Road appropriate for truck traffic? When will you do improvements to the road? Will you build berms on Watts Pond Road?
4. Will Dufferin contribute to improvements of the public road?
5. What is the truck route? What restrictions will the trucks have?
6. Do you expect the County to change the approved truck route?
7. How will you ensure the trucks stay on this approved route?
8. How do you ensure your drivers respect traffic rules, particularly speed limits?
9. Are you going to advocate for reduced speed limits?
10. Will trucks use engine breaks in front of the entrance?
11. Does the truck route use Keg lane? Pinehurst?
12. How do you ensure trucks do not enter downtown Paris?
13. What are the half load restrictions? What is the alternative route?
14. Does the license require paved roads?
15. What is the tonnage limit?
16. What will be the frequency of truck traffic?
17. Will Dufferin need a ramp to the 403?
18. Will you be using the rail corridor for shipping (by rail or truck)?

TECHNICAL DISCUSSION ON TRANSPORTATION

Rob Wanless, MMM Group and Kevin Mitchell/Steve Bottero, Dufferin

1. Traffic Observations and Truck Routes
2. Road Platform and Construction
3. Truck Types
4. Dufferin's Transportation and Trucker Policies

The County has an approved truck route and Dufferin will use that route. If the County chooses to modify the approved route, we'll use the modified route.



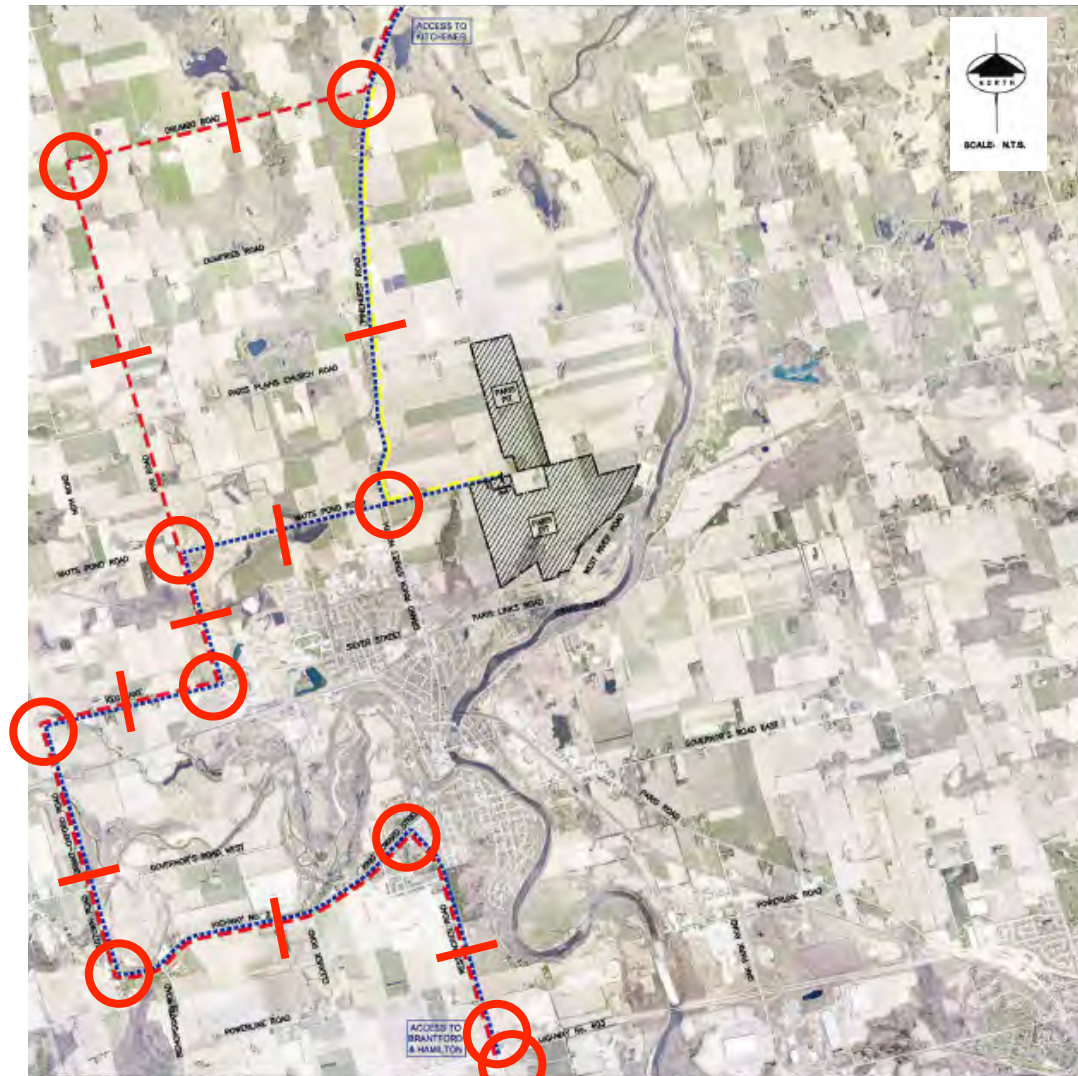
- **Accessing the Kitchener Market**
 - Westbound from the DFA Paris pit ingress/egress on Watts Pond Road to Pinehurst Road
 - Northbound on Pinehurst Road
- **Accessing the Brantford & Hamilton Market (without Load Restriction Roads)**
 - Westbound from the DFA Paris pit ingress/egress on Watts Pond Road to Ayr Road
 - Southbound on Ayr Road to Keg Lane Road
 - Westbound on Keg Lane Road to Brant-Oxford Road
 - Southbound on Brant-Oxford Road to Highway #2
 - Eastbound on Highway #2 to East Acres Road
 - Southbound on East Acres Road to Hwy #403
- **Accessing the Brantford & Hamilton Market (with Load Restriction on Watts Pond Road West of Grand River Street)**
 - Westbound from the DFA Paris pit ingress/egress on Watts Pond Road to Pinehurst Road
 - Northbound on Pinehurst Road to Drumbo Road
 - Westbound on Drumbo Road to Ayr Road
 - Southbound on Ayr Road to Keg Lane Road
 - Westbound on Keg Lane Road to Brant-Oxford Road
 - Southbound on Brant-Oxford Road to Highway #2
 - Eastbound on Highway #2 to East Acres Road
 - Southbound on East Acres Road to Hwy #403

MMM Group retained to complete several traffic observations in and around the Paris Pit. This information will help to inform DFA operational plans and also ensure that the County and community has access to current information.





- Conducted site visit to observe traffic operations on the Holcim haul route.
- Collected traffic counts during the week of May 7, 2012 at 10 intersections and 9 road segment locations.
 - Intersection counts were collected on one weekday between the hours of 7 a.m. – 9 a.m. and 4 p.m. – 6 p.m.
 - Road segment counts were collected for seven consecutive days for 24 hours a day.
- Classified the counts by the type of vehicle (car, truck, bus).
- Measured gaps between vehicles to confirm there is sufficient time for trucks to turn.





Traffic counts were completed to determine existing traffic volumes along the truck route. This map shows the location of the traffic counts.



Legend

-  Dufferin Haul Route
-  County of Brant Paris Truck Bypass Route
-  Dufferin Haul Route During Half Load Period
-  Dufferin Paris Pit Boundary

-  Intersection Turning Movement Count
 - 1 weekday
 - 7 a.m. – 9 a.m.
 - 4 p.m. – 6 p.m.

-  Automated Traffic Count
 - 7 consecutive days
 - 24 hours a day

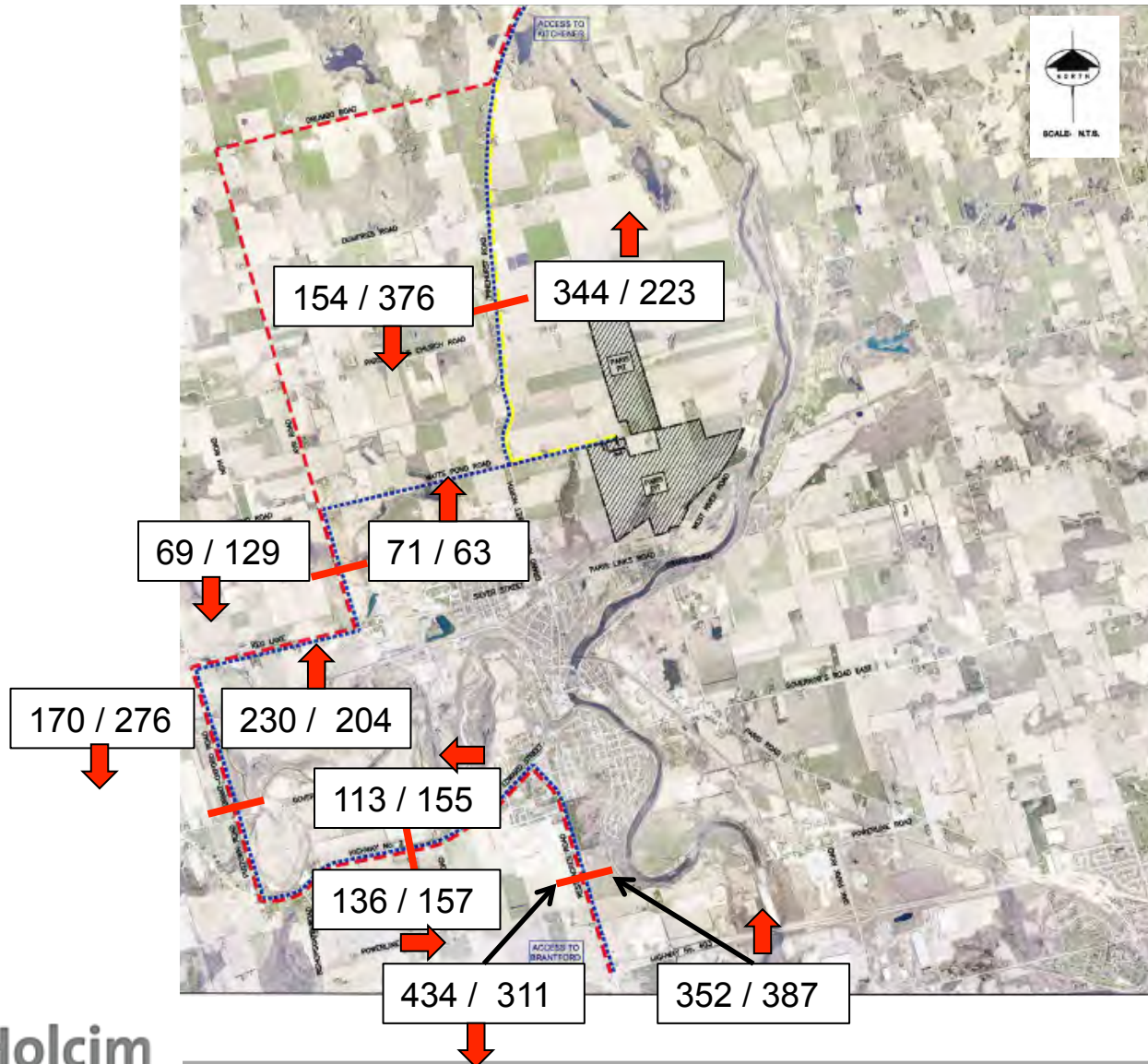
Note: Local deliveries may use other routes

Counts at Highway 403 eastbound and westbound off-ramps.





MMM's site visit and preliminary review of traffic data confirmed that many trucks currently use the approved truck route. In addition, intersections have capacity to handle volume and trucks were able to make left turns safely.

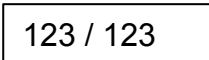
- Other than Watts Pond Road, the truck will follow currently designated County of Brant truck routes. The County of Brant Paris Truck Bypass Route is adequately designed for truck movements.
- Many trucks are presently using the truck route.
- Moderate traffic volumes with minimal congestion were evident at the intersections in the study area.
- All intersections appeared to have adequate capacity to handle existing traffic volumes and operate well.
 - 2 intersections along the truck route are controlled by traffic signals:
 - Highway 403 westbound off-ramp and Rest Acres Road; and
 - King Edward Street and Rest Acres Road.
 - All other intersections along the truck route are stop-controlled.
- Trucks were able to make left turns from a full stop with little delay due to oncoming or crossing traffic.

The County of Brant's Transportation Master Plan indicates that urban and rural arterial roads have a capacity of 800 vehicles per hour, per lane. The May 2012 average weekday vehicle volumes show that roads on the haul route are operating well within capacity.




Legend

-  Dufferin Haul Route
-  County of Brant Paris Truck Bypass Route
-  Dufferin Haul Route During Half Load Period
-  Dufferin Paris Pit Boundary

 Average weekday morning peak hour traffic volume / Average weekday evening peak hour traffic volume

 Automated Traffic Count Location

 Direction of traffic

MMM has completed the preliminary review of the recent traffic data and additional analysis will be completed and determine if improvements are necessary for safe operation of both truck and community traffic.

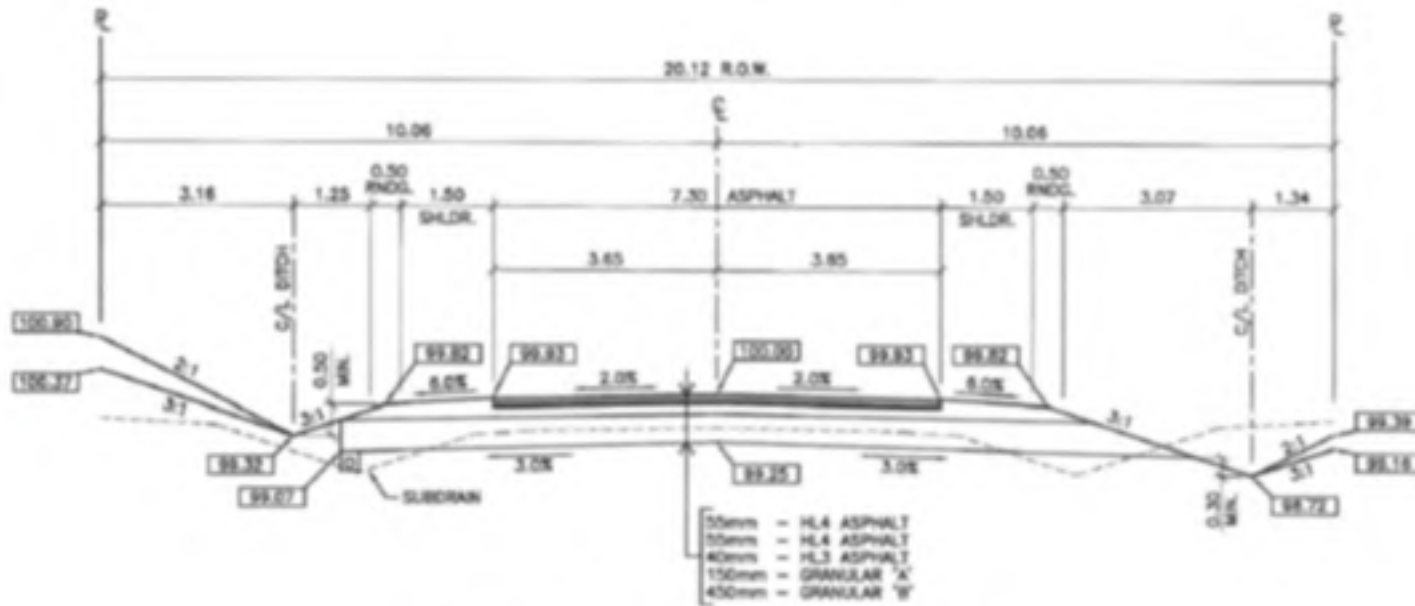
- Analyze existing operations at major intersections along the haul route.
 - Reassess these same intersections considering the addition of Holcim traffic.
- Identify any deficiencies along the truck route.
- Recommend improvements, if necessary.



Community safety and traffic flow is a priority. Dufferin Aggregates is committed to ensuring that the approved truck route is suitable for the anticipated volume of truck traffic.

- Dufferin Aggregates is committed to improving Watt's Pond Road from the pit entrance to Hwy 24A to be appropriate for truck and car traffic as specified in the ARA license.
- The required improvements will be part of the County's Road improvement program and can be completed at anytime.
- The remainder of Watts Pond Road may benefit, in several years, from upgrades such as asphalt resurfacing.
- The County may prefer that the entire stretch of Watts Pond Road have the same road platform. This is a County "preference" as opposed to a technical requirement and Dufferin is working with the County on this matter.

Dufferin and the County of Brant are discussing the road platform design. Geotechnical work was completed to identify current conditions on Watts Pond Road. Watts Pond Road improvements include additional road base, grading & 150 mm layer of asphalt.



TYPICAL ROAD X-SECTION
SCALE: 1:100

The lane width will be similar to other County of Brant truck routes, 3.65 m. The shoulder & ditch design will fit within the current road allowance.



Dufferin Aggregates Paris Pit license allows for a maximum shipment of 997,000 tonnes per year.

- Dufferin Aggregates will slowly ramp-up production at the Paris Pit over time, allowing for traffic flow to increase gradually.
- Based on an analysis of traffic patterns at Dufferin's comparable Blair site (near Cambridge) we expect:
 - Dec to Apr - 70 to 100 truck movements per day
 - May to Nov - 100 to 150 truck movements per day
- Early morning shipping volumes are typically busier than late afternoon.
- Peak hours are expected during the fall between 7am and 9am

Typical Truck Types: Triaxle



Max GVW	Tare Weight	Net Weight
35,000	12,500	22,500

- Used where jobsite conditions cannot accommodate larger trucks or for short distance, local deliveries

Typical Truck Types: Triaxle Pony Pup



Max GVW	Tare Weight	Net Weight
61,800	20,000	41,800

- Used for maximum payload to efficiently move product long distances
- Most efficient way to move aggregate product

Typical Truck Types: Hopper



Max GVW	Tare Weight	Net Weight
55,000	20,000	35,000

- Specialized discharge method (from the bottom) make it ideal for road construction

Typical Truck Types: End Dump/Live Bottom



Max GVW	Tare Weight	Net Weight
55,500	18,000	37,500

- End Dump: Discharge via box tipping.
- Live Bottom: material discharge via moving belt.
- Similar appearance from road

Dufferin Aggregates: Transportation and Trucker Policies

1. SAFETY
2. ENFORCEMENT
3. NUISANCE REDUCTION
4. SPILL PREVENTION AND REMEDIATION
5. COMPLAINT PROTOCOL

Safety is always our top priority.

- Dufferin Aggregates will take all steps necessary to ensure traffic flow and **safety is always our top priority**. We have undertaken the following precautions for the Paris Pit:
 - Fencing around the Paris Pit to avoid trespassing and safety risks to the community
 - Closed the laneway that used to go through the site
- **Trucker Safety & Compliance Policy**
 - Outlines responsible behaviour, including ensuring all local laws and traffic rules are strictly followed
 - It applies to all truckers that DFA works with

Trucker Safety & Compliance Policy is enforced internally. Any truckers caught not following the rules will be suspended for a day from ALL Dufferin facilities. This penalty is a significant deterrent because truckers get paid by the load.

- The enforcement process includes situations where truckers do not adhere to the County-approved truck route.
- Bylaw Enforcement and Police Cooperation:
 - Dufferin Aggregates will work with local and provincial authorities to ensure the approved truck routes are strictly enforced
 - We will work with the County on signage to educate the community and truckers of the approved route.
- Truck driver education is part of our standard operating protocol and we regularly conduct training and tailgates with drivers



We strive to operate **above compliance** with all relevant regulations, laws and by-laws that govern concerns such as noise and dust resulting from transportation.

- As a socially responsible company, we will put into place a **number of measures to reduce nuisances for our neighbours**:
 - Berms and tree screens along the site plan perimeter.
 - Require truckers to avoid using compression release engine breaks
 - Paved internal truck roads
 - Regular sweeping and washing of the road at site entrance
- A proposed amendment to the approved ARA site plan is underway to move the site entrance to **minimize the number of neighbours** our trucks will pass.



Strict procedures are in place to prevent spills from trucks and other equipment as much as possible. In the unlikely event of a spill, management kits are onsite to immediately contain and clean up the spill. All spills are reported.

- Dufferin Aggregates has strict procedures in place to prevent them as much as possible.
- We have a robust Environmental Management System (EMS) in place which defines detailed and strictly enforced preventative, reactive, monitoring and reporting procedures. Our sites are regularly monitored to ensure that these procedures are being followed.
 - Daily inspection and maintenance of mobile and fixed machinery and continuous training of operators
 - Fuel storage will be contained and the Technical Standards and Safety Authority (TSSA) spill plan will be in place.
 - Concrete pads and double walled tanks located outside well head protection area
 - Fuel storage for on-site equipment, not haul trucks
 - There is no use of chemicals in the extraction process. Potential spill is from fuel and oil leaks from trucks and mobile equipment can be managed with the onsite spills kit and clean up protocol.
- In the case of a spill, we follow the information protocol defined by the Ministry of Environment.

Complaint Protocol: Dufferin Aggregates is *always* interested in feedback from the community

- We do not anticipate any problems with our truckers, traffic and transportation due to the preventative measures we will put into place.
- However, if you notice any issues we encourage you to get in touch with us so that we can evaluate, in real-time, whether additional measures are required.
 - Try and obtain the license plate and the name of the trucking company. If this is not possible, describe the truck (colour, style)
 - Record the time of day and what the issue is
 - Call the site and provide the information
 - DFA staff will work with our dispatcher to identify the specific truck (whenever possible) via our load ticketing system
 - Follow up with the trucker company will include:
 - Summary of the complaint
 - Punishment
 - Follow up with the person who complains

We've tried to answer the questions and concerns as we understood them. Additional questions are welcome.

ADDITIONAL QUESTIONS ...?

Next Steps

- Complete discussions with the County on Watts Pond Road
- Complete additional traffic analysis
- Continued dialogue with the County, Conservation Authority, Source Protection, MOE, MNR and community to ensure accurate information and fulsome understanding
- Finished technical work and applies for Permit to Take Water
- Dufferin will continue to liaise with Public - next CAP meeting: September 25, 2012. Will focus on:
 - Operation Timeline
 - Other?
- Dufferin continues to work to address concerns and issues with County and Community