OVERALL COMMENTS

Speed Limits

Speed limits are mentioned many times as suggestions in the Newsletter survey. I definitely support dropping the speed limits from 50km/h to a lower number (i.e. 40km/h or even 30km/h). However, I would strongly urge that recognize that generally speaking vehicles travel at a speed at which they feel comfortable, not necessarily what the posted speed is. For example, even though the speed limit on the Whitemud freeway is 80km/h, arguably the speed at which most people travel is above that because they feel safe and comfortable doing so. If not all residential roads throughout the City are going to a lesser speed limit changing the limits in isolation will not curb speeding because it will be abnormal. Those that are not used to driving 30km/h in residential areas because theirs are still are 50km/h will not necessarily drive slower because of a speed limit change. In my opinion, the way to reduce speeds in a residential area is not just a speed limit change but also by implementing road features that make drivers feel less comfortable with driving fast. More on that belowé

Congestion ï the root of the issue

One of the main issues our subdivision deals with is shortcutting. This is primarily an issue in the p.m. peak period when traffic tries to avoid travelling along University Ave and 114th Street. Many of the suggestions listed in the survey to reduce shortcutting include: reducing speed limits, adding traffic calming measures, eliminating turning lanes, etc. However, in my opinion, these measures will not solve the problem. The issue at hand here is that as long as an alternative route (i.e. shortcut) is less time consuming for a driver (or perceived to be less time consuming) they will continue to choose that route.

Currently traffic travelling along University Ave heading east is stop and go traffic. Generally speaking vehicles will have to wait through several red/green traffic light cycles before they make it through the intersections ï particularly turning south from University Ave to 114th Street, and also heading straight on 114th Street at 76th ave. Currently people are motivated to circumvent this route because they perceive that travelling through Belgravia will be faster. Given the volumes of traffic travelling through Belgravia in the p.m. peak period, there is typically a line up as well on 76th ave and congestion at both 114th street and 115th Street. To be clear, the issue is not a speed issue, itôs a time issue ï the incentive to shortcut is not due to the speeds at which cars are able to drive, itôs the ability to make it through pinch points in less time. If a lower speed limit is implemented, motorists would still be motivated to short cut as long as they get through the pinch point more quickly even if they have to drive at a slower speed to do so. The only way to reduce the traffic is to eliminate the short cutting opportunity.

In a nutshell, the root of the issue is the traffic control at 76th ave and 114th street. As long as that intersection provides an opportunity for shortcutting (perceived or actual), it will happen. The most heavy handed way to deal with this would be to eliminate the short cut altogether. One way to accomplish this would be to eliminate the route completely ï i.e. 76th ave becomes a one way west bound road, west of 114th. However, this is probably not the solution because we must recognize two things: 1) this would impact the day-to-day lives of Belgravian residents making travel out of the subdivision to the East or the South more difficult. It would also force more traffic on to 115th northbound which is not designed for that level of traffic, and 2) this issue is not a 24/7 issue. Itôs only an issue during the p.m. peak period. As a result, this is not a good

solution. Further along in my letter I make some different recommendations to mitigate the short cutting.

Road widths / Traffic Calming

Firstly, I noticed in the survey there were quite a few suggestions to add speed bumps throughout our neighbourhood. I very strongly advocate that we not add speed bumps to our neighbourhood. The unintended consequences of adding speeding bumps far outweigh the perceived benefits. I can appreciate the premise of adding speed bumps to slow traffic, but this needs to be dealt with in other ways.

RECOMMENDATIONS

- Recommendation #1: No right turn from 76th ave on to 114th St during peak periods.

e.g. similar to no left turns during peak periods (as shown below ï 124th St. and 107th ave)

  - Goal: to eliminate the opportunity for short cutting
  - The benefit of this option would be a direct correlation between the traffic controls and the issue at hand ï i.e. right hand turns at 76th ave on to 114th St. south during the p.m. peak period.
  - The downsides of this option are:
    - May require police monitoring to increase acceptance ï perhaps this could be done as sporadically much like speed traps.
    - Restricts right hand turns for local traffic. However, local traffic could still exit the subdivision with a right turn at University Ave and 115th street. I would argue not being able to turn right in the p.m. peak period is a good trade off for eliminating the short cut traffic through our neighbourhood.

- Recommendation #2: Revise the timing of lights on the Arterials in the p.m. peak period
  - Goal: to move more traffic along the high volume route in the p.m. peak period. Moving more traffic volume along the major artery roads would discourage shortcutting.
  - More priority right turn from University Ave to 114th Street combined with more north/south green light time at 114th and 76th to move the high volume of traffic.

- Recommendation #3: Revise the order of the lights at 76th ave and 114th St.
  - Goal: to limit the traffic flow from Belgravia on to 114th Street in the p.m. peak period. Less traffic flow along this route would over time discourage shortcutting.
  - Currently the order of the lights is as follows (green lights):
    - East on 76th
    - West on 76th
    - Priority turns from 114th to 76th Ave
    - North / South on 114th
    - When an LRT train comes, the cycle starts from the beginning.
      - Each time an LRT train comes the cycle restarts. As such the traffic heading east on 76th is always the first to go. This order, combined with the highest volume of LRT trains in the p.m. peak period provides greater opportunity for vehicles to exit Belgravia on to 114th. As a result, the eastbound traffic is effectively given preferential priority because it always gets to go first after a train.
  - Change the light timing to the following:
    - Priority turns from 114th to 76th Ave
    - West on 76th
    - East on 76th (moved from 1st to 3rd)
    - North / South on 114th
  - This recommendation has the following advantages:
    - The infrastructure exists as of today ï no further investment required
    - Can be tailored to deal with the abnormal traffic volumes during only a portion of the day.

- Recommendation #4: Change the duration of the lights at 76th ave and 114th Street. for the p.m. peak period.
  - During the p.m. peak period reduce the green light time allowed for east bound traffic on 76th ave.

- Recommendation #5A: Please do not recommend the use of speed bumps. Speed bumps will not address shortcutting and the unintended consequences of adding them far outweigh the benefits.
    - Speed bumps will not address one of the major issues ï shortcutting. Speed bumps will slow down traffic but they will not dissuade shortcutting as long as the wait times on the short cut are shorter than the main thoroughfares. The factor leading to shortcutting is the traffic bottle necks, not the speed at which vehicles can travel. Given the long wait times on University Ave, even with speed bumps shortcutting would still occur.
    - Speed bumps have the following unintended consequences:
        - By adding speed bumps to the busier roads (e.g. Saskatchewan Dr. and 76th ave) shortcutting traffic will be motivated to travel on roads nearby without speed bumps (e.g. 119th street and 78th ave). These other roads would then see higher volumes of traffic that they were not designed to accommodate.
        - Decrease in the response times for emergency vehicles that have challenges navigating speed bumps.
        - Some research has shown speed bumps actually lead to higher speeds, because some people feel they need to accelerate faster to make up for the lost time of slowing down for the speed bump.
        - Increase in noise pollution. Instead of vehicles travelling at a constant velocity, when hindered by a speed bump they will be forced to brake and then accelerate. Imagine a loud vehicle (e.g. a Harley Davidson motorcycle) travelling along that route. After each bump there would be a loud burst of acceleration as the bike brings itself up to the speed limit repeatedly.
        - Speed bumps are marginally less environmentally friendly. The requirement to slow down and accelerate repetitively consumes more gasoline.
        - Speed bumps are less aesthetically pleasing to the eye.
        - Increase in nuisance for residents. While commuter traffic travel in the subdivision at most 5 times a week (i.e. during p.m. peak period Monday to Friday) local traffic would travel the same roads multiple times per day. This would result in residents (who are less likely to speed in their own neighbourhood) to be the ones most impacted by the speed bumps.
    - Speed is likely of primary concern on the larger collector roads within the neighbourhood ï Saskatchewan Drive and 76th ave. Because these roads are wider, they are much more prone to high speeds. Whereas the remaining roads, which have a local road classification, typically have enough space for two parking lanes (one on each side) and 1.5 lanes of driving lanes. When cars are parked on both sides of the road, because you are effectively sharing the driving lane with oncoming traffic you are more prone to drive slower. We can use other design features on the collector roads to make use of this same concept without needing speed bumps.

- Recommendation #5B: Use alternative forms of traffic calming
    - Reducing the speed limit to 30 or 40km/h is a good suggestion. However this should not be done in isolation. It needs to be accompanied by other traffic calming measures:
    - Goal: To make drivers more subconsciously aware of their speed and to make it less appealing to drive faster. The could be done using a combination of the following:
        - Narrowing the carriage width of collector roads (not local roads)
            - Narrowing lanes or reducing the number of lanes can give the impression of a more confined road and results in reduced speeds.
            - In recent history, industry standards have generally defaulted to making busier collector roads within neighbourhoods wider. The theory was that these roads accommodated more traffic and need more room. However, some industry experts feel that the unintended consequence of wider roads is that motorists feel more comfortable driving fast on them. This is not ideal within neighbourhoods.
            - For example ï Saskatchewan Drive is wide enough to accommodate parallel parking on both side, plus almost two full travel lanes (one in each direction). Furthermore, given that no parking is permitted on one side of Saskatchewan Drive (some areas 24/7, some areas between the hours of 7am and 7pm) in peak times the parking lane is used a travel lane. This results in effectively two very wide travel lanes on the road and, as such, vehicles are more likely to drive faster.
            - Narrowing the carriage width can be done in several ways
                - Eliminate the parking lane closer to the river altogether
                - Convert the parking lane into a bikeway. Delineate the pavement with green paint to clearly indicate where drivers should drive and where they shouldnôt. This could be applied to both 76th ave Saskatchewan Drive (will talk about this more later).

- Add intermittent obstacles to reduce the stretches of straightaway where vehicles can accelerate.
  - Bump outs used in conjunction with marked pedestrian crossings
    - The combination of the visual cues of a road narrowing as well as the implied obstacle that pedestrians maybe be present nearby causes drivers to psychologically raise their awareness of their speed and are more likely to feel pressure to slow down (even if pedestrians are not present).
    - Pedestrian crossings could easily be added at a relatively low cost to key locations in the neighbourhood.
    - Adding marked pedestrian crossings could hopefully also encourage pedestrians to cross in those locations (instead of mid-block) and improve overall pedestrian safety.

OR

- Roundabout.
  One suggestion in the survey sent out in the newsletter to the residents was to add a roundabout at the intersection of 76th ave and Saskatchewan Drive. Although roundabouts come with their disadvantages such as: issues with accommodating large vehicles and making snow removal more difficult a small roundabout in this location is a great idea for the following reasons:
    - Currently traffic at this intersection is free flow along Saskatchewan Drive. Adding a roundabout would effectively add a yield to all directions, so traffic would slow down, but not be forced to stop (good for safety and also for less noise pollution than a stop sign.)
    - Traffic calming at a busy intersection
    - Traffic calming near a high pedestrian activity node (entrance to trailhead into river valley)
    - Unlike intersections that are fully built out at each corner, this area has room to accommodate a roundabout which takes up more room than a standard intersection. The intersection can steal some area from where the multi use trail currently sits.
    - Roundabouts are visually attractive given they can be landscaped. They turn an asphalt intersection into vegetated focal point.

- Recommendation #6: Where possible, add two-way bikeways on collector roadways instead of a bike lane or a sharrow going in each direction. (76th avenue / Saskatchewan Drive)
  - Configuration: two way bike lane, two way vehicle lane, one parking lane
  - By consolidating the two bikes lanes on one side of the road you achieve the following:
    - Less conflict between vehicles and bikes
    - Provides a dedicated areas for bikes to reduce the potential for pedestrian / cyclist conflict
    - Provides a safer venue for more bike traffic. Some studies show there are several kinds of cyclists. Daily commuters are generally stronger cyclists and more likely to cycle in and amongst vehicle traffic. However there is a large segment of the population that bikes on sidewalks beside busy roads (more like a pedestrian) due to their perception of safety. They do this even though sidewalks are supposed to be for pedestrians. Providing a safer, dedicated area for cyclists would encourage more of the cycling population to use the bike lanes.
    - A dedicated bike lane is more visible if it is wider. Would result in vehicle traffic staying out of it. Recommend painting the asphalt

green to further delineate the difference between bike traffic and car traffic
    - In practice the configuration of one bike lane on each side of the road (as is currently the case on 76th ave) does not get maintained properly in the winter. The bike lane remains largely unplowed renders them useless as bikes end up cycling in the driving lanes instead because they have been cleared. A combined two way bikeway is much easier for a normal grader to clear in the winter.

- Recommendation #6A: Consideration of winter climate for bikeway delineation.
    - Some bikeways have used physical barriers to further delineate the vehicle lanes from the bikeway.

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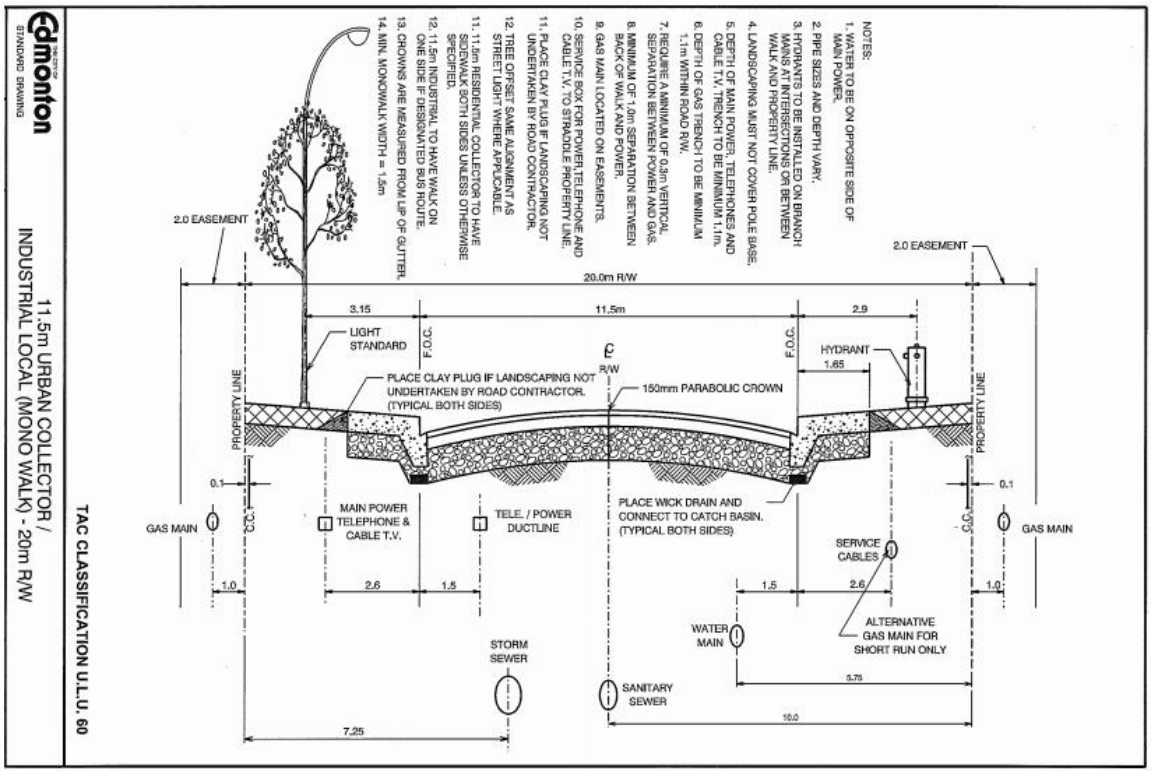
    - Physical barriers on bikeways are ideal because they create a hard delineation between the cyclists ñspaceò and the vehicles ñspaceò However, by adding these in a City like Edmonton it makes maintenance more difficult ï in particular with respect to snow removal. This should be considered when creating bikeways.
        - If the balance of priorities at any costs tips towards safety, the bikeways can be cleaned with smaller equipment (e.g. skid steers or sweepers).
        - If ease of maintenance is paramount, no barriers would be better.
        - One compromise may be to have removable barriers ï they could be installed in the spring and removed in the winter. This, of course, would add maintenance which may not be desirable from the Cityôs perspective.
    - If barriers to the bikeway do exist, this would necessitate special (i.e. smaller) equipment to clear them - there is a chance that the road gets cleared first and the bikeway does not. This would eliminate the benefit of having the bikeway.

- Recommendation 6B: If needed in favour of a bikeway, eliminate on street parking from all (or portions) of one side of 76th ave.
    - The most logical location for the bikeway is on the north side given the LRT station and underground pedway is on that side.
    - As mentioned above, having a dedicated bikeway should in theory make the roadway feel narrower and help slow down traffic. However, given Iôm not 100% certain of the width required, Iôm not sure if there enough room. If not, Iôd suggest eliminating one side of the on street parking in favour of the bikeway.
    - Based on my experience on usage to date, it would appear that on street parking is most used between 114th Street and 115th Street. However west of 115th Street on street parking is less congested ï likely because most homeowners park in the rear. In some stretches parking is already restricted to one side of the road.
    - Given this, Iôd suggest that in order to provide more room for a two way bikeway, one of the parking lanes be eliminated.
    - Having said this, 76th avenue has been identified by the City as a priority growth area for higher density uses. As a result, the burden for parking along 76th will in theory increase of over time. Careful consideration of the off-street parking requirement mandated for newer higher density development should be taken to avoid overburdening the on street parking available.

- Recommendation #7: No grandfathering of Front Driveway access along 76th ave.
    - All of the homes today fronting on 76th ave have rear lane access.
    - Most of these homes use this access, but there remains a small percentage that have front drive access. I could be mistaken, but I believe the City grandfathers this. I.E. If you buy a home that has a front driveway, you can build a new home on that lot that also has a front driveway. If that is correct, Iôd suggest that along 76th avenue rear driveway access should be mandated at the building permit stage.
    - By eliminating any front driveway access you will reduce the safety conflict of traffic backing up into 76th ave.

- Recommendation #8: Ask the City to provide us with information to help focus the discussion
    - For example, does the City's traffic engineering experts use any studies done from other winter Cities? Northern Europe? Northern US?
    - Have any traffic impact assessments (formal studies done by traffic engineers based on an actual traffic counts) been done in other similar cases to ours within Edmonton? If yes, what are the results of these assessments? Are there any recommendations from recent studies they can share with us?
    - Do they have any preferences with respect to the type of traffic controls and measures they like to use?
    - What kind of background work was done for other bikeways in the City? For example the newly approved 83rd ave bikeway near Whyte Ave.
    - Typically municipalities have a standard cross section that is used for each classification of road (For example, the City of Edmonton's standard cross section for a collector road with monolithic sidewalk on both sides is 20m – this includes the boulevard, sidewalks and an 11m road.

    I.E.



    - Having said this, road specifications change all the time. Given our neighbourhood was built in the 1950's I would be curious to know what right of way widths are available to work with in Belgravia? 76th ave? Saskatchewan Drive? Is this information they provide us?

Other recommendations in the Newsletter that I AGREE with:

- Provide more marked crosswalks
- Add a lay-by (not "layby") for drop-off / bus traffic in front of Belgravia school
- Extend multi use Trail all the way to the pedestrian bridge over Belgravia Road
- Make the service road on the south side of University Ave between 115th and 119th Street one way westbound.
    - This has the benefit of reducing the opportunity to shortcut in the p.m. peak period while still providing access for residents with only a slight increase in inconvenience.
- Ensure there are curb ramps on all curbs in the community for wheel chairs, walkers and strollers.
    - I agree with the principal, but think a better recommendation would be:
        - Add wheels chair ramps at all pedestrian crossings. On local roads use rolled face curb. Due to higher traffic and speeds, on collector roads use straight face curb to direct pedestrian and wheelchair traffic to safer crossing locations located at intersections.

Other recommendations in the Newsletter that I DISAGREE with:

- **Provide a sidewalk on the east side of 115 street.** In an ideal world I'd agree. However space in the right of way is limited. 115th is one of the most heavily used cyclist corridors. Along with the rest of the path from the Belgravia Road foot bridge all the way to University Ave. This is discussion regarding the 76th ave corridor, but based on my experience, the cyclist traffic is far greater on this corridor. Providing a road cross section that gives some dedicated space to each of: cyclist, pedestrian and vehicles would be ideal here. The sharrows that currently exist today are a sacrifice for both cyclists and vehicles that can be avoided I think.
    - Instead of the current setup of sharrows for cyclists give cyclists their own dedicated space (preferably a two lane bikeway)
        - Along 115th from University to 73rd
        - Along 73rd from 115th to 116th
        - Along 116th from 73rd to 71st
    - Pedestrians will still have access to a viable option with a sidewalk on one side of the road.
    - Cyclists will have a wider, safer dedicated space thus encouraging all bike traffic (including less experienced riders) to use it.
    - Cyclists will have less vehicle / pedestrian conflicts with their own space.
    - A two lane bikeway with no barriers on its own side of the road will be far more likely to be clear of snow in the winter.
    - If space becomes constrained to accomplish the above, consider using a monolithic sidewalk instead of the currently used separate sidewalk along 115th. It requires less room, but still provides a safe option for pedestrians.

- **Provide sidewalks on the east side of Saskatchewan Drive.** (Caveat: If budget is not a constraint than sidewalks on both sides is the ideal solution.) However, if we added a two-way bikeway here (as above), we'd have separate spaces for pedestrian, cycling and vehicle traffic. Sidewalks on both sides of this road may be redundant and eliminating the one on the house side of the road would save on initial cost and long term maintenance cost. That money could be used instead for other improvements we propose.
    - If budget is a big constraint, I would advocate that any sidewalks that do exist along Saskatchewan Drive be eliminated in favour of a wider multi use trail / bikeway on the other side of the road.
        - This will save the City cost on the rehab and that money can be spent on other features suggested in my letter.
- **Eliminate turning lane off of University Ave for traffic entering Belgravia.** This extended turning lane is a benefit to Belgravia residents – it allows us to get out of the p.m. peak period more quickly. Please do not recommend this to the City. As per summary, the issue at hand is the exit point at 114th and 76th being a viable shortcut to circumvent traffic. Eliminating this turning lane does not change that.