

# Metro78 Waste Removal Unaddressed Serious Safety Concerns

A Path Less Travelled Consulting Inc. prepared this document. We were engaged by nearby residents of the Metro78 proposal to review the Transportation Impact Assessment and related concerns.

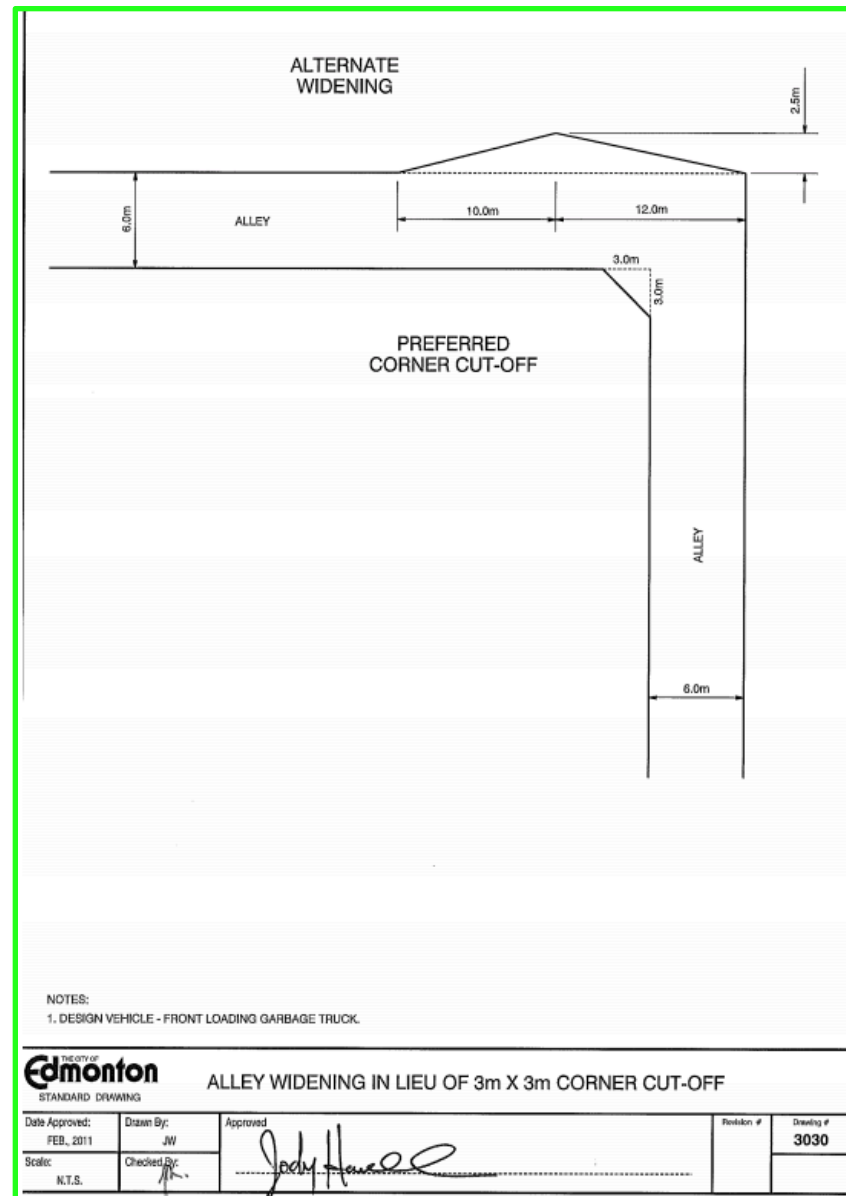
We prepared it to more clearly document our serious safety concerns with the Metro78 Waste Removal that the City administration accepted.

The drawing to the right is from the City of Edmonton's Servicing Standards Manual, Drawing number 3030. It illustrates the City's standard corner cut-offs in alleys, to accommodate turns of larger vehicles such as waste trucks.

The diagram shows two options for widenings. The first is labelled "Preferred Corner Cut-Off". It requires a 3m by 3m corner cut from the inside track of the turn, allowing the vehicle sweep through this area.

However, in some cases the owner of the parcel on the inside sweep is not the developer. Thus the standard contemplates an alternative corner cut-off, on the outside of the vehicle turn. This is labelled "Alternative Widening."

Both these kinds of widenings exist for the lane on either side of 78 Avenue. The following pictures illustrate these widenings.



The picture to the right shows the existing lane connection from 79 Avenue, that serves the properties north of 78 Avenue. The view is looking south.

In the foreground the line of asphalt is straight. As this line nears the intersecting east-west alley it then swings to the left. This is the outside of the turn and correlates to the “Alternative Widening” on Drawing number 3030.

This widening allows waste trucks to swing wide and make the turn without backing. It was built presumably by the City during the time of the LRT construction.



The picture to the right is the alley connection from 78 Avenue to the east-west alley serving properties to the south of 78 Avenue. The picture uses a panoramic view. The left side of the picture is a view to the west and the right side of the picture views north.

On the far right of the picture the edge of asphalt for the lane closest to the LRT is straight. The opposite asphalt edge also starts straight, but then bends in a curve as it nears the east-west alley. This curve is in effect the 3m by 3m "Preferred Corner Cut-Off" from standard drawing 3030. The landscaped area between the lane and private property creates an offset for the inside corner cut.



For the Metro78 development, both buildings require the alternate widening. In a June meeting with the developer and residents, the developer claimed that they have modelled garbage truck turns and that they work. However, they never shared it with us, the City has never shared any such document with us despite our concerns, and it is not in the TIA, where it should be.

The following page is a diagram showing the south building as the related land requirements for the truck sweep.

The City accepted the developer's proposal to use the truck loading area for the truck sweep. The blue dotted line shows the loading area.

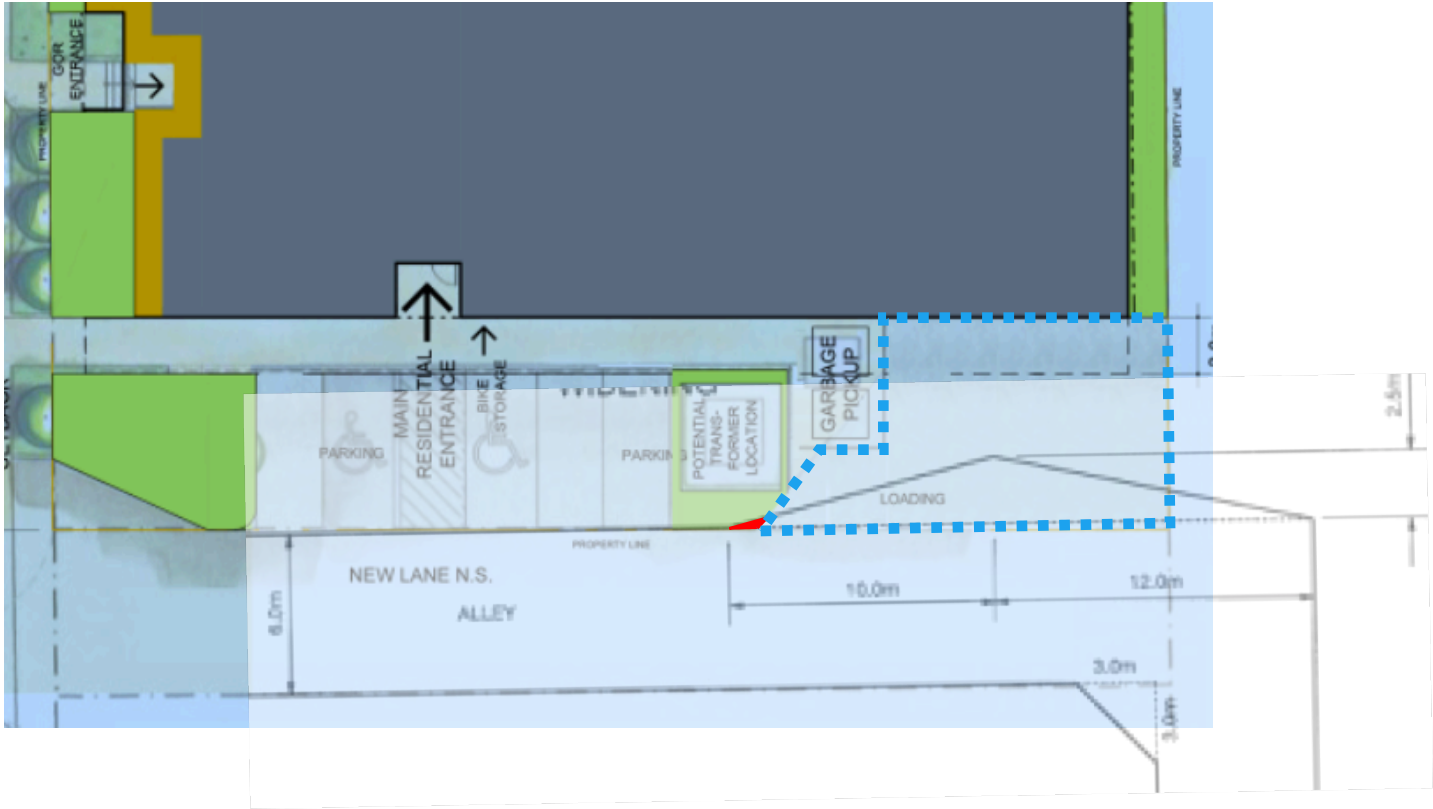
We overlapped the City's standard drawing #3030 onto the developer's plans. This allows us to understand the approximate area required for the trucks. However, because the existing east-west lane is 5m wide, but the City stand assumes a 6m wide alley, the area required for the turn will be

larger – possibly significantly so given the flat angles involved in these kinds of turns.

This will need to be checked using vehicle turning templates and software, which the developer's engineer did in the TIA for a fire truck situation. We do not know why the City did not require a similar truck turning template for the waste trucks in the TIA.

The diagram shows the area required for the Alternative Widening from the Metro78 property – it is both the red as well as orange portions. The orange portion is also part of the loading zone. However, the red is not part of the loading zone. In addition, because of the narrower east-west lane, the truck will need to start its turn earlier than shown and swing wider. This will encroach further into the Metro78 property and may encroach into the transformer.

This means the City standard was not enforced by City staff. It also means waste trucks cannot turn without backing.



The following page is a diagram showing the north building as the related land requirements for the truck sweep.

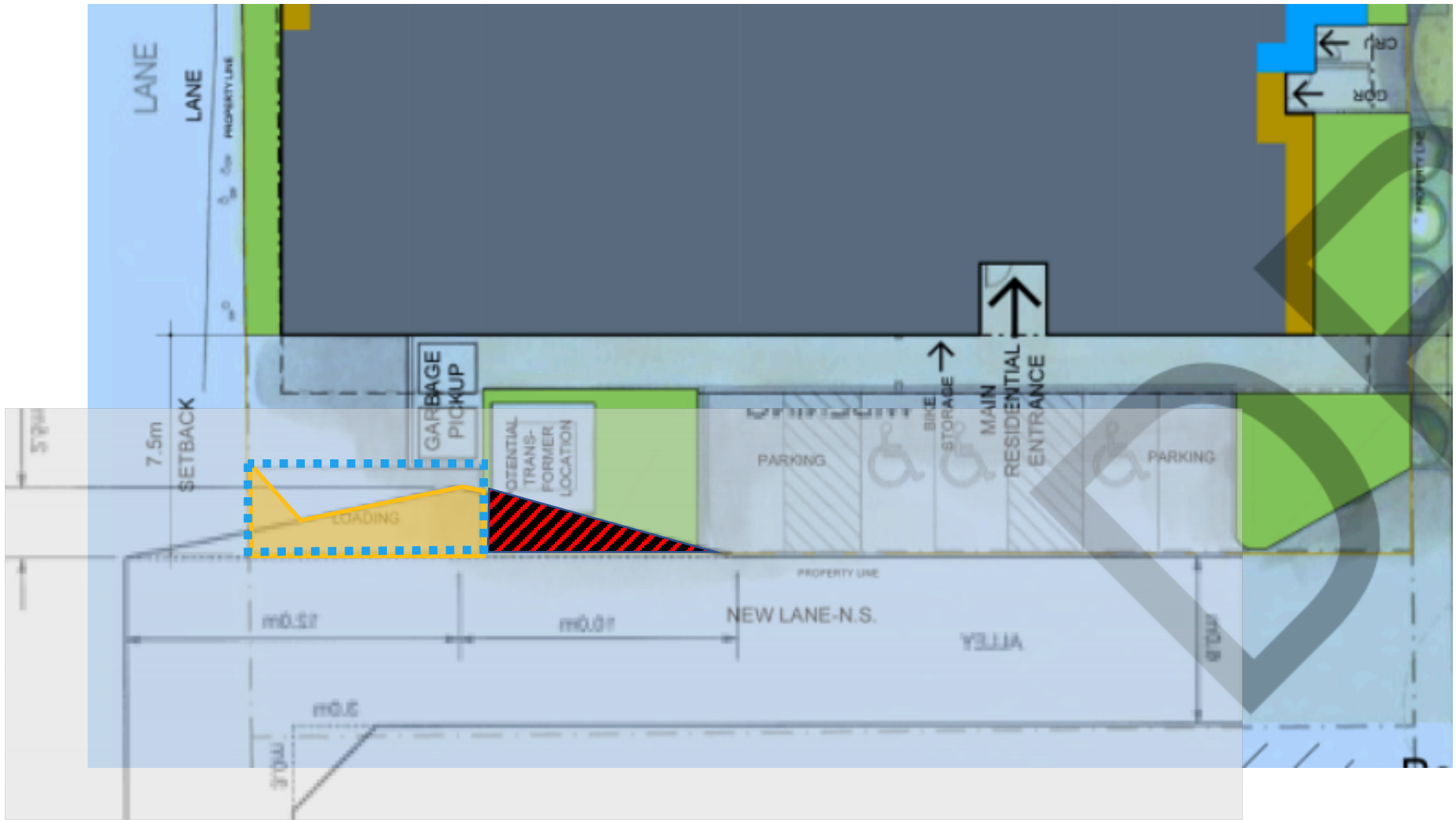
The City accepted the developer's proposal to use the truck loading area for the truck sweep. The blue dotted line shows the loading area.

We overlapped the City' standard drawing #3030 onto the developer's plans. The diagram shows the area required for the Alternative Widening – it is both the red and black striping as well as orange portions. The orange portion is also part of the loading zone and includes both types of corner cuts from standard drawing 3030 because both turns must be accommodated. However, the red and black striping is not part

of the loading zone. The north building has an additional problem - the area required for the waste truck turn infringes on the building transformer.

And as with the south building, the east-west lane is 5m wide, not the assumed 6m wide in the City standard. Thus the sweep for the truck will need to start sooner and swing wider into the Metro78 property.

This means the City standard was not enforced by City staff. It also means the transformer must be relocated, which we found challenging in past negotiations with the developer, and waste trucks cannot turn without backing.





Why do we want waste trucks to avoid backing?

In the 1990's Edmonton has two toddlers killed in separate incidents by backing waste trucks. The Metro78 building will have children as will nearby homes. By eliminating any induced backing due to the Metro78 we can eliminate this kind of fatality. It aligns with the City's commitment to Vision Zero.

The current Metro78 proposal, as accepted by the City's administration, has several possible ways waste trucks will need to back:

1. If a vehicle is parked on the loading zone, the trucks must back the entire length of the lane. This is unacceptable.
  - a. The City and developer claim they will prevent people using the loading space on waste days – three days per week.
  - b. Residents have consistently pointed out problems with illegal parking throughout the area that the City refuses to effectively enforce.
  - c. People moving in and out of Metro78 often have very limited windows of time to complete their move and are likely to violate the zone, as is common in other multi-family building throughout Edmonton.
2. Between the existing residential waste removal as well as for the Metro78 buildings there will be three garbage/recycle/compost days per week.
  - a. The new waste trucks must traverse the lane twice – once for each direction – because it only picks up from one side. There will be two traverses for the existing residents, plus two more traverses for the Metro 78 Buildings.
    - b. The recycle trucks for existing residents will traverse once per week, as will the Metro78 buildings.
    - c. The compost truck will traverse the lane once per week for existing residents. Metro78 residents will not have compost pick up.
    - d. The total number of waste truck traverses in the lane will increase from two per week to seven per week.
    - e. The above assumes that the commercial unit has its waste picked-up by the same provider as the apartment building. If not then there is another truck to add, and more bins to add, which need to be specified and currently are not.
3. The City and developer claim that waste between the two buildings will be collected by trucks that will not use the new north south lane connection between the buildings.
  - a. They will instead use 79 Avenue for the north building and circle around for 2-1/2 blocks to use the lane south of 78 Avenue.
  - b. Our experience with waste drivers is that they will “back and forth it” to turn the corner in the lane and use the north-south lanes. They will likely damage private property doing so.
  - c. Our experience with drivers is to give them a reasonable chance to make the manoeuvre they want – which is exactly what the City standard allows.
4. The loading zone does not meet the City's standard for waste truck turns in lanes. Therefore, if the loading zone is free, waste trucks will still need to back, at least several metres and possibly more than once, to make the turn.
5. The Metro78 will create a short dead-end alley that serves three lots. City staff asked us how it is possible to prevent

backing waste trucks in this case. We responded with several options:

- a. The three lot owners could negotiate to use the Metro78 containers.
  - b. The three lot owners could negotiate with other single family lots along the lane to use their garbage.
  - c. The three lot owners could take their bins to the front street for waste service, as is required for many neighbourhoods in Edmonton.
  - d. The City never replied as to the adequacy of these alternatives.
6. Metro78 will use bins that require fork trucks to lift and unload. These trucks must back in order to release the bin. Our comments in January advised of alternative pick

methods that do not require backing up. These were ignored by the developer and the City.

7. The City has been silent on how their new waste trucks will turn around to serve the opposite side of the lane. We are concerned that these trucks will use several backing manoeuvres to turn around at the end of the lane instead of forward-only movements.

In short, backing even short distances can kill children and there are City standard solutions that easily prevent backing. Although the probability of a child fatality is low, the risk – a combination of probability AND consequences – is not tolerable in a Vision Zero city.