

For Information Only

Sudbury Landfill - Operational Assessment

Presented To: Operations Committee

Presented: Monday, Aug 11, 2014

Report Date: Wednesday, Jul 30, 2014

Type: Managers' Reports

Recommendation

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Background

This report is intended to address the landfill odour issue notice of motion #CC2014-217 passed on June 24, 2014. The report addresses this request on an interim basis with follow-ups to come. In addition, staff is taking the opportunity to update the Committee on traffic congestion issues.

Nuisance Odours

All landfills have the potential to create odours. Certain odours are similar to the garbage smell that is noticed in your household garbage bin. These odours can be mitigated by reducing exposed garbage and applying progressive covering techniques. Some odours are generated during the decomposition or break down of the waste. When waste decays underground, certain landfill gases will produce odours and landfill gas collection systems will help reduce the migration of gas off site. When wastes break down above the ground and start to decompose anaerobically (without oxygen), then odourous gases, as one example, can be released during the turning process. In this case, understanding and finding the right mixture of various wastes and processing in a certain manner will control odours. Odours can also be produced from leachate (liquid that comes into contact with waste). Leachate can be very odourous and described as having an ammonia or sewage-type smell.

Many steps have been undertaken over the last few years to mitigate nuisance landfill odours. A summary is included in Appendix A.

In April 2014, Councillor Kett hosted a public meeting for the residents located south of the site. Attendance was good and residents were able to voice their concerns. It was also a good opportunity to review what waste or waste processes can cause nuisance odours and what actions have been taken to mitigate those odours. At that time, the City did indicate that a consultant would be hired to review site operations.

Residents were also encouraged to immediately contact the City when they have concerns and to consider

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participating in future solid waste advisory panels and/or landfill tours.

Recent Steps

For several months, additional staffing resources have been assigned by the City to ensure site compliance. Monitoring by various staff is daily and communication with the Contractor is frequent. While this has been effective in the short term, a more sustainable solution will be to identify a dedicated position to manage landfill operations.

In response to the concerns voiced, the landfill operating contractor has also assigned one additional senior operator /relief supervisor to periodically assist with key functions and the Contractor's management staff have also been visiting the site several times each week to assess any potential operational issues.

Managing the operation is on-going and the City continues to be involved in process management and quality assurance monitoring.

Additional Reviews

In addition to an internal review being undertaken, a qualified engineering/environmental firm was also retained to assess landfill operations and to conduct specific odour measurements and testing. The following tasks are recommended as a result of the work:

- Inspect the leachate collection system.

Action: This inspection will be completed by the City's new annual sampling and monitoring contractor. Repairs (if required) will then be initiated.

- Increase inspection and monitoring of site operations. This includes, but is not limited to landfill disposal methods, including daily cover, interim and final cover, composting processes, and leachate seep management. The firm has recommended that the City should consider having a full-time staff member on site to oversee all operations.

Action: Increased inspections are currently assigned to various staff. This function is currently under review, including the development of a dedicated Landfill Manager.

- Investigate and Quantify Current Odour Sources – Although the City has conducted an internal review of potential odour sources, an independent and scientific review will be initiated.

Action: The City requested and has received a draft proposal to conduct three main tasks:

- 1) Conduct a three (3) day site visit to obtain first-hand information regarding fugitive odours from the site.
- 2) Identify all odour samples and make screening level odour samples using a portable olfactometer. Develop an odour emission guide based on the site observations and from a library of historical odour measurements from other landfill sites.
- 3) Review the odour levels from the site in order to determine what the current potential impacts are at the off-site receptors through a dispersion modelling study.

Once these tasks are completed, staff will review options for potential improvements.

- Complete a thorough review of the operations contract and whether there's a requirement for more detailed operating plans with instructions.

Action: To be completed once the dedicated Landfill Manager position is designated.

Staff will report back to the Operations Committee once key processes and tasks have been completed.

Traffic Congestion

Visits to the landfill sites spike every Spring as residents clean-up and construction works commence. At the Sudbury Landfill Site, the long line ups have occasionally disrupted traffic on the Kingsway.

Staff are reviewing several options, which include, but are not limited to:

- 1) Additional in-bound laneways at the Sudbury Landfill Site (Refer to Appendix B)
- 2) Additional out-bound laneways at the Sudbury Landfill Site (Refer to Appendix C)
- 3) Traffic count studies at the Walden Transfer Station, the Azilda Landfill and the Hanmer Landfill.
- 4) Review in possible changes to operating hours and process changes.

All options will be reviewed, including the anticipated increase in cost or decrease in revenue. Once the details are available, staff will present options during the 2015 or 2016 budget deliberation process.

APPENDIX A

Item M-1 Landfill Odours

The following motion was presented by Councillor Kett:

CC2014-217 Kett/Landry-Altmann: WHEREAS despite continued efforts by the City of Greater Sudbury staff to mitigate odour issues at the Sudbury Landfill, with such measures as:

- Increased process requirements
- Increased monitoring and inspections including:
- Regular weekly inspections
- Seasonal monitoring-a staff person assigned to be on site for one week per season
- Additional weekly monitoring: two during regular operating hours, one during non operating hours and includes patrolling the neighbourhood
- Installed new camera system
- Installed wind socks
- Dealing with odours in, in coming waste
- Smaller disposal area/tipping face
- Regular meetings with the landfill operator
- Daily inspection reports revised
- New performance tracking
- Development of a more detailed nuisance prevention and management plan
- Development of a more detailed odour testing & prevention checklist;

AND WHEREAS numerous occurrences of rancid odours continue and continue to occur, destroying the right of families in the Moonlight Avenue/Levesque Streets area to enjoy the outdoors;

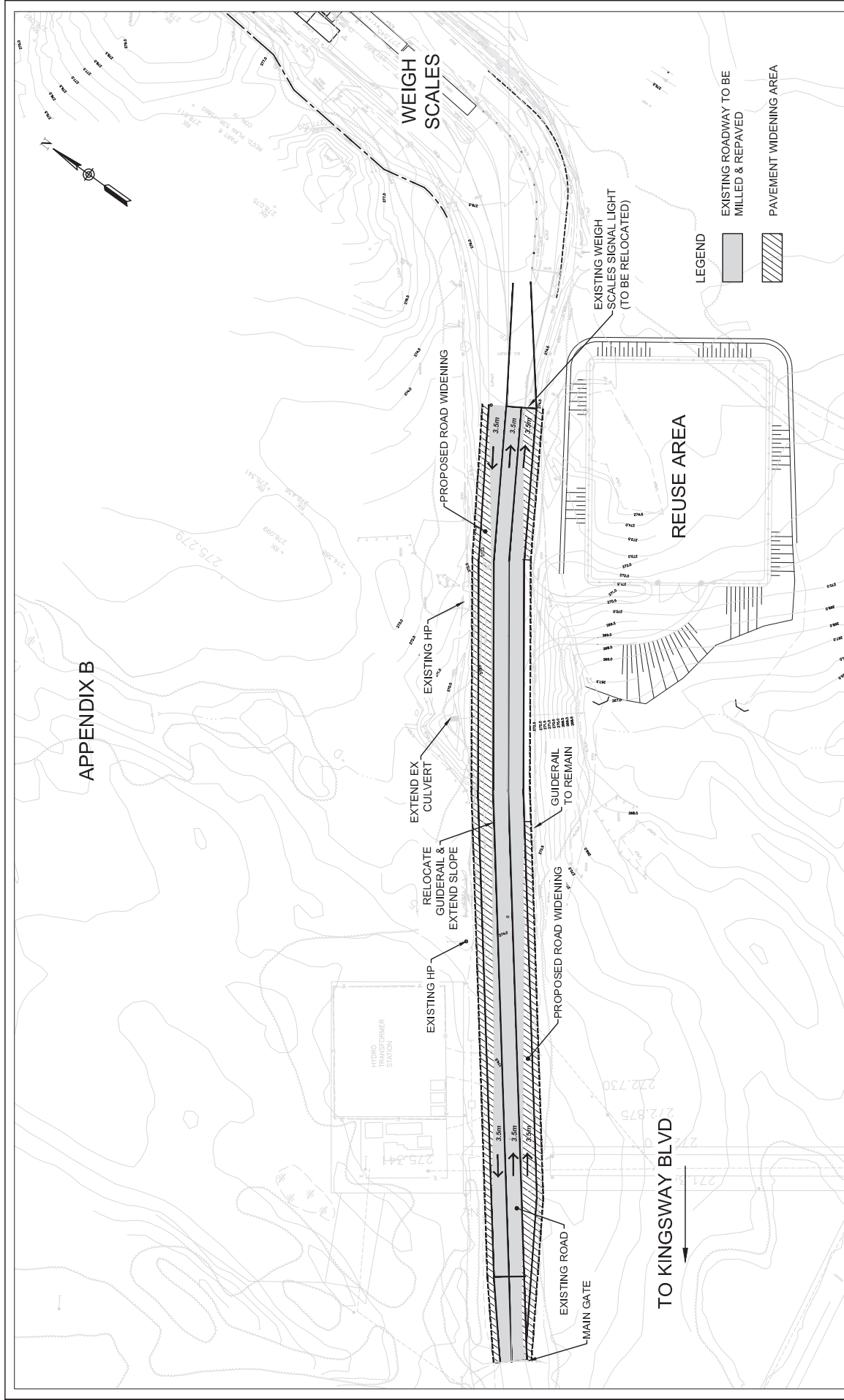
NOW THEREFORE BE IT RESOLVED THAT the City of Greater Sudbury clearly identify the source of these odours by assigning additional staff during all hours of landfill operation;

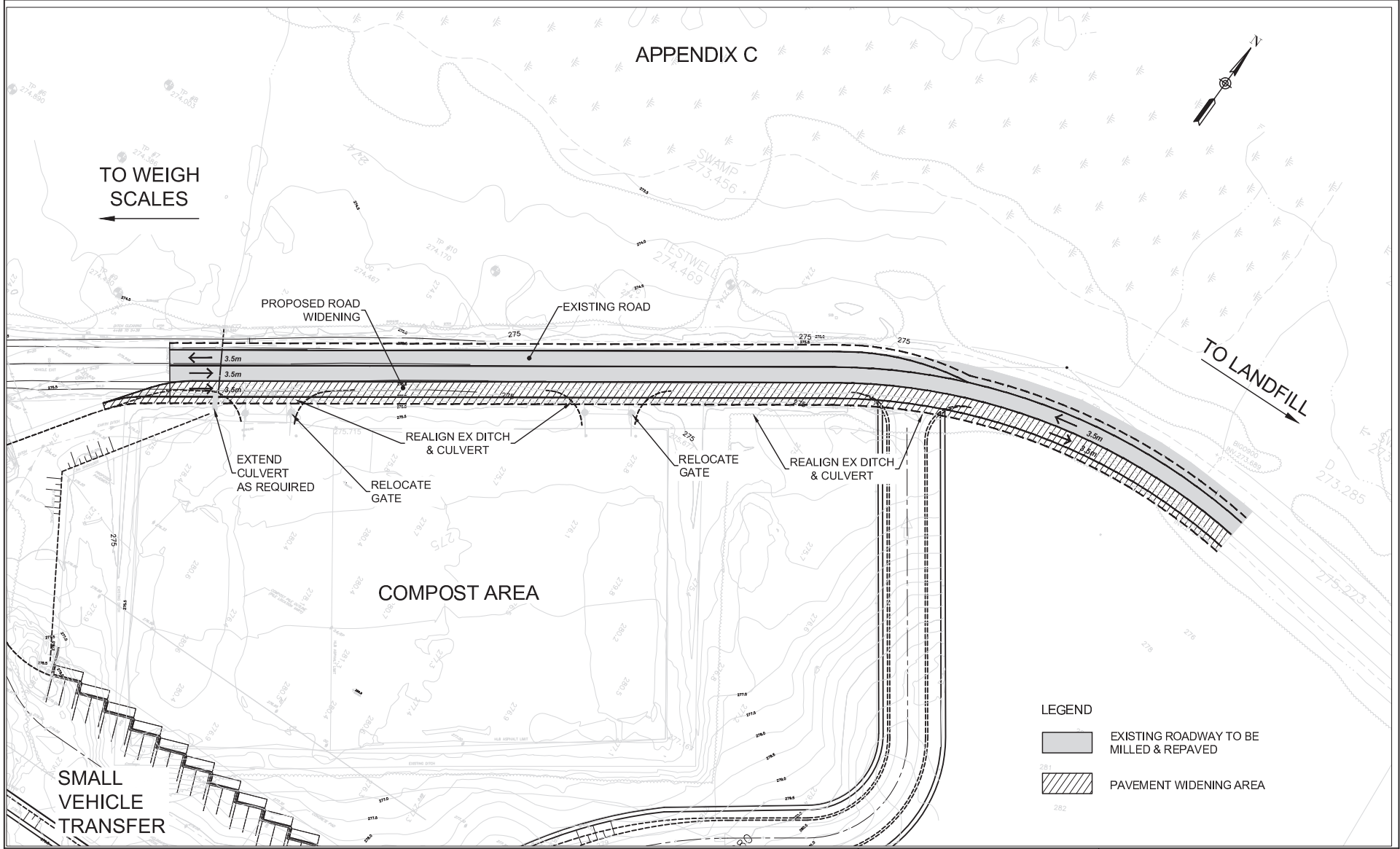
AND THAT the City of Greater Sudbury investigate ways to end this unacceptable situation;

AND THAT a report showing the alternatives be presented at the August Operations Committee Meeting.

CARRIED

City Council 2014-06-24





UEM

Sudbury

SUDBURY LANDFILL

FIGURE No. 4
OUTBOUND TRAFFIC LANE WIDENING