



PHYSICAL SAFETY DESIGN ASSESSMENT

Windsor Public Library – Main Branch: 850 Ouellette Avenue – Windsor, Ontario

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The following is a summary of observations and suggestions regarding the physical safety and security features associated with the main branch of the Windsor Public Library property in downtown Windsor. The information provided here is based on the universally known principles of crime prevention through environmental design (CPTED), according to site visits made to the property on June 15th and July 6th, 2017.

KEY UNDERLYING CONDITIONS

The facility faces some existing challenges based on unique, underlying conditions. Most notably is the facility's easily accessible downtown location, including being immediately across Ouellette Avenue from the recently opened overnight lodging facility for the Downtown Mission. Combined, these two aspects create a criminological condition of "*elevated situational vulnerability*" – a locational phenomenon whereby there is increased public order challenges due to higher-than-average transiency for its customer base, typified by many individuals attending and staying to loiter. With its open, public accessibility and climate controlled environment, it becomes a reliable place of daily refuge for some individuals (particularly those who have no permanent residence) as somewhere to linger and get out of the weather, rather than attend for more purposeful reasons. This inherently creates conditions that can support an increased probability for undesirable behaviour to occur. The presence of individuals who have consumed varying amounts of alcohol or drugs in some instances further increases the risk for problems. This risk has been confirmed by individuals regularly observed by employees of the facility.

While it is acknowledged these conditions exist and an understanding is in place that any measures taken must recognize these special conditions, corrective action can nonetheless be achieved that will improve the overall level of public order and safety for the property.



Library's physical location is attractively close to larger transient populations, making for a unique challenge to maintain safety and public order

RELEVANT OCCUPATIONAL HEALTH & SAFETY ACT REFERENCES

A physical safety design assessment such as this carries direct correlation to workplace healthy and safety per the Ontario Occupational Health and Safety Act. It is therefore very important to recognize the key, relevant sections of this provincial legislation in how they correspond to the findings and recommendations of this audit. The sections of the Act that most aptly apply in this case are the following:

- Section **25[2]h** pertaining to employers ("...take every precaution reasonable in the circumstances for the protection of a worker").
- Section **25[2]i** pertaining to providing the health and safety committee or their representatives with the results/copies of a report respecting health and safety.

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- Section **25[2]j** pertaining to advising workers of the results/copies of a report respecting health and safety and providing copies if requested.
 - Section **26[1]k** (“...where so prescribed, provide a worker with written instructions as to the measures and procedures to be taken for the protection of a worker”).
 - Section **27[2]c** pertaining to supervisors (...take every precaution reasonable in the circumstances for the protection of a worker”).
 - Section **28(1)a** pertaining to workers working (...in compliance with the provisions of this Act and the regulations).
 - Section **28(2)a&b** pertaining to workers (...not removing or making ineffective any protective device provided by the employer or work in a manner that may endanger themselves.
 - Section **29(1)** pertains to owners ensuring that a workplace has proper facilities provided, that facilities are in good condition, and the workplace or any alterations to it are in compliance with the Act and its regulations.
 - Section **32** pertaining to workplace violence and harassment and the need for appropriate physical preparations and measures by the organization to address situations and circumstances such as:
 - The exercise of physical force by a person against a worker in a workplace that causes or could cause physical injury to the worker;
 - An attempt to exercise physical force against a worker, in a workplace, that could cause physical injury to the worker; or
 - A statement or behaviour that it is reasonable for a worker to interpret as a threat to exercise physical force against the worker, in a workplace, that could cause physical injury to the worker
 - Section **20 of Regulation 851** of the Occupational Health & Safety Act that “Barriers, warning signs or other safeguards for the protection of all workers in an area shall be used where vehicle or pedestrian traffic may endanger the safety of any worker”.

Adherence to these sections of the Occupational Health and Safety Act and related regulations should be continually pursued by the employer and affected employees to adequately ensure the health and safety of the workplace for workers. The minimization of identified threats and risks, *regardless of how minor they may be*, is a key to maintaining a safe and functional work environment for all.

POSITIVE SAFETY DESIGN FEATURES

- The facility has an extensive CCTV recording infrastructure, featuring high resolution colour imaging and a retention period of approximately 14 days.
- The facility's employees are vigilant in recognizing problematic behaviour and individuals to allow for early intervention of incidents to optimize safety and security. This is an instrumental benefit going forward.
- The property is situated on a lot having considerable frontage to busy Ouellette Avenue, facilitating good ongoing natural surveillance capability that elevates witnessing potential and reporting of incidents to police.
- The facility receives regular monitoring throughout using both employees and a private security service, which is in place during all hours the library is open. The private security guard patrols the property 55 minutes out of every hour.
- The general design and orientation of the main floor reception desk facilitates monitoring capability by the employees who work there for the most part.

KEY UNDERLYING "TRIGGERS" of RISK & VULNERABILITY

The assessment revealed one very distinct "trigger" of risk and vulnerability that serves to act as a catalyst for behaviour that increases the likelihood for problems; namely, loitering. It is important to recognize this if any course of action is to be successful at improving safety.

LOITERING: A Key Incubator of Problematic Behaviour

Without a doubt, loitering represents a fundamental root cause for safety concerns raised at the main public library branch. The ongoing presence of loitering acts as an "incubator" to potentially more dangerous situations that impair safety. The problem is particularly pronounced in circumstances where individuals or groups attend for lengthier periods, taking advantage of more discreet locations within the overall facility that are more difficult to observe by any other employee or user.

What Causes Loitering to Establish and Continue?

The conditions for loitering to first establish itself, then be sustained over time depend heavily on four distinct risk factors which, when combined, greatly increase the vulnerability of the

space and various users of that space as well. Sometimes only one risk factor is at play but if it is strong, it can still lead to a sustainment of loitering. Any combination of the 4 factors will typically increase risk and vulnerability on an ascending scale. These factors are as follows:

1. **Convenience** – The easier it is to do without having to take special measures to guard against detection, the more likely loitering will occur and remain in place.
2. **Comfort** – If loiterers are not challenged or there are no others around to call the activity into question, the problem will continue with little or no resistance.
3. **Concealment** – If those who loiter cannot be readily observed or, if observed, no action is ever taken, the problem cannot be addressed and will persist.
4. **Canopy/Cover** – In any situation where physical protection from weather elements is present, loitering is more prone to occur and persist.

Loitering risk tends to be highest in public spaces where there is no one particular person or organization directly responsible for the ongoing monitoring and safeguarding of a particular space. The fewer “opportunistic points of observation capability” a particular space has, the greater its vulnerability to sustained loitering and the negative consequences associated with it. While it is typically impossible to prevent loitering from occurring outright, its impact can be minimized, with less drastic consequences, when more of the 4 risk factors can be effectively addressed and therefore mitigated.

SUGGESTIONS TO FURTHER IMPROVE SAFETY & SECURITY

The following suggestions, in no particular order, are respectfully offered for consideration from a physical crime prevention through environmental design (CPTED) perspective, a workplace health and safety perspective, and also a general operational safety and nuisance prevention perspective as well. These ideas are not binding in any way but are instead presented as complementary to the positive physical conditions and operating practices already in place at this facility.

1. The current practice of using a private security service should be maintained in its current format. Having this presence on site during the building’s hours of operation helps in identifying problematic situations such that the proper intervention can be made proactively before escalation occurs. While there is certainly a cost to this, the expense is warranted in this situation.
RECOMMENDATION: Maintain current private security service but the route taken for the hourly patrols that are done 55 minutes of each hour need to be changed each time so that they are not predictable and will therefore be more effective.

2. The design of the book shelves plays a critical role in maintaining an adequate degree of observation capability on an ongoing basis. This is particularly important in a large library facility such as this where there are numerous pockets of discreet space that make it easy to loiter. The majority of shelving units are tall (7' high) and while there are some spaces to permit a degree of visibility, the proportion of the shelf occupied by books takes up most of the space, thus limiting sight lines. A prototype shorter shelving unit has been developed and while these are much shorter (4'-5') to allow better visibility over the top, there are no spaces on the shelves due to a solid backing. This creates sight line loss.

RECOMMENDATION: Consider modification of the prototype shelf unit that has the lower height but with adequate space in each shelf to avoid an opaque backing in order to allow sight lines to be maintained.



Open Shelf permits some visibility

Opaque = no view corridor



Book shelf spacing is critical in order to be able to maintain some element of monitoring of spaces in between

3. The staff desk on the second floor is poorly oriented for being able to effectively monitor activity within the immediate area. All employees are essentially facing the same direction, leaving many blind spots where problems can arise without detection.
- RECOMMENDATION:** The furniture in this work area should be adjusted to enable staff to be oriented in different directions to optimize surveillance capability.



Current staff desks are only able to see a limited amount of the surrounding space

4. The main floor reception desk is nicely oriented to face the building entrance but its physical configuration creates vulnerability for employees due to its low counter height (just 38”) and depth of just 24” in some locations, elevating risk to confrontations. It also has openings on both ends where anyone can easily gain access. There is a need to strengthen this work area to make it more secure.

RECOMMENDATION: This desk needs to be closed in on both ends using lockable gates to help prevent unauthorized access. It would also be advisable to make architectural modifications to the counter to raise its overall height and/or increase its depth as either change will improve the “non-confrontational” strength of it, providing added safety for employees when dealing with individuals exhibiting harsh behaviour.



Large openings at sides of main reception desk need to be closed in with gates



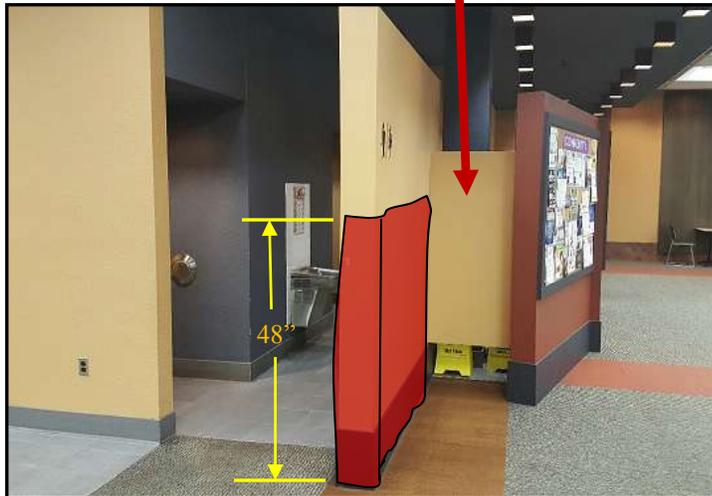
Consideration should be made to modify the main reception desk by adding additional millwork to it that will increase height and depth

5. The public washrooms on the main floor, second floor, and basement levels, for different reasons, all carry some degree of elevated vulnerability. In the case of the first floor washrooms, the architectural screening wall creates added discretion which can trigger inappropriate behaviour. In this regard, the wall provides an area of concealment, blocking sight lines so that staff, security officers, and other patrons cannot naturally monitor activity in and out of the washrooms. The washrooms on the second floor represent a design that is completely opposite to known safe design standards. They are discretely positioned in an alcove-type corridor, away from general traffic areas. This creates an environment that is attractive for unlawful and undesirable behaviour to establish and sustain itself. The washrooms in the basement level are vulnerable simply because they are situated within a low traffic area of the building, elevating vulnerability to problematic behaviour.

Recommendation: *FIRST FLOOR:* To improve monitoring capability without compromising privacy, it is recommended to cut down the height of the architectural screening wall down to a height of 48". This will be a reasonable compromise to make the space less vulnerable but still respecting the privacy required for the washroom use. *SECOND FLOOR:* Realistically, there is very little that can be done here without significant cost. One less costly improvement however is to install an 18" x 24" grate in the base of each door. This will permit a cry for help to be more easily heard by nearby witnesses in the event of a problem. Also, this area should be

regularly patrolled by the security service. **BASEMENT LEVEL:** The most effective measure to implement here would be to keep these washrooms locked and require users to attend a staffed area to obtain the key. It is recommended the individual leave a piece of identification as collateral to ensure the key is returned.

Remove partition to prevent loitering



Install vent grills in doors



6. The back parking lot area designated for employees carries the potential for susceptibility from situations of panhandling, loitering, and confrontations by questionable individuals. Risk increases for later shifts, particularly those that extend into evening hours, most notably during winter when it gets dark earlier.
Recommendation: The current practice employed by the Library of having employees leaving in groups, plus allowing vehicles to be moved to closer parking spaces as availability permits during later hours, should be continued as these are both solid practices for ensuring employee safety.
7. The “book alarm” system at the exits of both the front and rear access points is largely effective but has one major shortfall. The design is such that a person attempting to exit the library without having properly checked out a book can easily do so without triggering the alarm simply by raising the book over the height of the detection threshold or walking around and through existing gaps. This creates a situation where there can be undocumented losses of inventory on a regular basis.
Recommendation: It may be that lost products have not been an issue but the risk exists nonetheless. The simplest solution for corrective action



Book alarm design does not properly “seal” off ability for a person to discreetly exit without properly checking out items. Need to install millwork extension to close off opening and acrylic top to prevent lifting items up over the detection panels.

8. The main entrance area and general front façade of the building is dark and shrouded, facilitating loitering and other behaviour that is difficult to observe and report on an ongoing basis. The bicycle rack in this area places bicycles at elevated risk of theft because visibility is marginalized. Ongoing visibility of this area needs to increase.
Recommendation: LED lights should be added in this area to increase overall visibility. The recommended minimum illumination level is 4.5 foot-candles.



Covered front of building creates a darkened zone that minimizes visibility

9. The building’s perimeter lighting is very outdated and therefore inefficient. The end result is less than functional illumination output that reduces visibility at night.
Recommendation: Replace perimeter lights with LED fixtures that will yield a minimum illumination level of 2.0 foot-candles.

10. The large refuse dumpster at the rear of the building is placed in such a way that it creates an opportunity for loitering and other undesirable behaviour to take place. Furthermore, it does not have an enclosure around it which is the City standard. **Recommendation:** A proper enclosure should be provided with the dumpster placed within it. This enclosure should be placed against the back wall to remove any discreet spaces to hide/loiter.



Construct proper refuse enclosure (per City standard) and place against wall here

POLICE INCIDENT RESPONSE HISTORY

A review of the police incident history at the property has been made for the past five full years plus the current year to date and is summarized below. The property does generate a significant number of calls requiring police response and intervention on an annual basis. The data reveals a noticeably sharp increase over the past couple of years in particular. The Library staff maintains a similar database of incidents and has also experienced a very significant increase in incidents over the recent few years, most notably the current year. The upward trend of police incidents places high importance on the correction of the safety and security deficiencies identified in the inspection report. Police calls are predominantly for such incidents as theft, disorderly conduct, suspicious persons, property damage, and trespassing. Incidents are more social disorder in nature but nonetheless a threat to safety.

YEAR	1400 Ouellette Avenue
2012	41
2013	41
2014	29
2015	46
2016	80
2017 (as of Aug 8 th)	72 (extrapolates to 119 annually)
Average	59.33 incidents per year

SUMMARY

The results of the physical safety design assessment would seem to point to opportunities where tangible improvements to safety and security can and should be made based on demonstrated need and conditions that currently exist. The implementation of the recommendations from this assessment will improve both workplace safety for all employees and also public safety for all users of the facility.

