Request for Decision

Downtown Parking Options

Presented To:	City Council
Presented:	Tuesday, Dec 12, 2017
Report Date	Tuesday, Nov 21, 2017
Type:	Managers' Reports

Resolution

THAT the City of Greater Sudbury directs staff to further investigate the development of the Dufferin Street Road allowance as a parking lot as well as public and private sector funding opportunities for the pedestrian overpass – Energy Court expansion in order to determine its viability;

AND THAT the City of Greater Sudbury directs staff to investigate and implement pay by plate technology for on street parking, as outlined in the report entitled "Downtown Parking Options", from the General Manager of Corporate Services, presented at the City Council meeting on December 12, 2017.

Relationship to the Strategic Plan / Health Impact Assessment

This report refers to operational matters.

Report Summary

This report provides further information on parking options requested at the October 17th, 2017 Council meeting. Staff have made recommendations concerning each option.

Signed By

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Financial Implications

If approved, financing for the Pay by Plate Initiative will be provided by reallocating previous years Capital Budgets in the amount of $200,000 as well as $100,000 from the 2018 Capital Budget.

Background

The purpose of this report is to provide Council with baseline information on the state of parking in the downtown and the potential effect of downtown parking and transportation initiatives in the short and long term. Armed with this information, staff is interested in engaging Council in a policy discussion about the preferred approach to downtown parking supply and demand issues.

There are a number of large initiatives being undertaken or considered for the downtown core of Sudbury in the near future. A number of these initiatives will have a direct impact on the supply of parking in the downtown core. The proposed Place des Arts and Phase 1 of the Elgin Greenway will cause reductions of 59 and 90 spaces respectively. As a result, downtown business owners have expressed concerns over the scarcity of parking in the downtown core and are inquiring as to how the City will manage the loss of additional spaces.

The potential loss of these lots, along with the urging of the downtown business community have lead staff to consider what actions if any, should be taken by the City of Greater Sudbury. The policy direction indicated by Council with respect to the loss of the 149 spaces would also be helpful in recommending potential transportation and parking solutions which would be required if new large projects were located in the downtown (e.g. a new Art Gallery / Library and / or the proposed Synergy Centre).

Policy

The City of Greater Sudbury recognizes the need to ensure that downtown land uses remain supported by an effective transportation infrastructure network. The Downtown Master Plan anticipates that the planned intensification of the downtown will be supported through incremental investments in active transportation infrastructure and parking. These investments can be made by the private and public sectors.

The City of Greater Sudbury has a long-standing policy to waive most parking requirements for new development in downtown Sudbury. According to the Official Plan and Zoning By-law, all development with the exception of a limited range of residential construction, are not required to provide parking. This policy was enacted to encourage downtown revitalization. It also recognizes that Downtown Sudbury is one of the most walkable neighbourhoods in Greater Sudbury that is also very well-served by public transit.

Current State of Parking

For the purposes of this report parking in the downtown core is defined by Paris Street on the east, St. Annes Road to the north, Elgin Street and Lorne Street to the south and west. This area can be seen in Appendix "A".

Parking in the downtown core consists of both public and private sector parking alternatives. The City of Greater Sudbury owns and maintains 14 off-street municipal lots and 438 on-street meters for a total of 2,170 parking spaces. Private operator parking is estimated to be 2,244 (excluding Beech St. S lot) for a total of 4,414. Appendix "A" also depicts the public and private sector parking in the downtown core.

Currently, the publicly owned parking contributes to approximately 49% of the available parking in the downtown core.

Other municipalities have various shares of public and private parking ownership models. Exhibit 1 below provides examples of 5 municipalities and the relative share of public/private parking ownership.

Exhibit 1 - Public/Private Parking Ownership				
	Public Parking Spaces	**Private Parking Spaces**	**Total**	**% of Parking Publicly Owned**
Peterborough	2155	1452	3607	60%
Thunder Bay	1930	2100	4030	48%
North Bay	1800	50	1850	97%
Kitchener	3500	5000	8500	41%
Sudbury	2170	2244	4414	49%

Municipal Parking Lots

All 14 municipal parking lots are paid parking Monday to Friday, 8:00 a.m. to 6 p.m. Parking is available for free on weekday evenings from 6:00 p.m. to midnight, and weekends except during special events at the Sudbury Arena. In addition, the Energy court lot offers free parking up to two hours. Of the 14 municipal parking lots, 1 is pay upon exit (TDS), 1 has an attendant (Centre for

life) and the remaining 12 use pay and display machines to administer parking fees.

Exhibit 2 below, shows the municipally owned parking lots, the respective monthly and daily fees, comparable private sector fees, the parking spaces available and the impact that some large downtown development initiatives will have on the supply at these lots. The lots are also depicted in Appendix "A

EXHIBIT 2- Municipally Owned Parking Lots							
Lot	**Monthly Pass Cost**	**Hourly Cost**	**Comp Private lot Monthly Cost**	**Comp Private lot Hourly Cost**	**Monthly Pass Holders as % of Spaces**	**Spaces**	**Potential Reduction in Spaces**
Sudbury Arena	$82	$1.30	$80	$2.00	80%	81	
Sudbury Arena Annex	$82	$1.30	$80	$2.00	80%	165	
Beech Street	$93	$1.30	$70-$140	$4.00	30%	79	
Shaughnessy East	$82	$1.30	$80	$2.00	80%	110	
Shaughnessy West	$82	$1.30	$80	$2.00	80%	56	
Shaughnessy "B"	$82	N/A	$80	N/A	100%	30	
Elgin- CP	$51	N/A	$50	N/A	100%	300	90
Larch Street	N/A	$1.30	N/A	$2.00	N/A	59	59
Lisgar Street	N/A	$1.30	N/A	$3.00	N/A	9	
Elgin and Larch	N/A	$1.30	N/A	$2.00	N/A	60	
Medina	N/A	$1.30	N/A	$2.00	N/A	20	
Energy Court	$41	$1.30	$33	N/A	50%	218	
Elgin/YMCA (leased to YMCA)	N/A	N/A	N/A	N/A	N/A	95	
Tom Davies	$143	$1.50	$180	$2.00	70%	295	
Centre For Life	N/A	$1.40	N/A	$2.00	N/A	155	
					Total Spaces	1732	149

As can be seen in exhibit 2, the monthly rates of municipal parking lots are variable based on geographic location. Monthly parking is more expensive in the lots where

demand for parking is greatest. Higher parking rates in the most convenient parking lots are used to encourage access to high demand parking for short stay patrons and encourage longer stay patrons to use peripheral parking.

Parking rates for private sector lots are comparable for monthly stays. However, private sector parking is approximately 50% higher than public lots on an hourly basis.

The elimination of 59 spaces at the Larch street lot is attributable to the development of the Place des arts. The Place des Arts will be built upon the Larch street lot and will result in the elimination of this parking lot. Similarly, if approved the first phase of the Elgin Greenway will encroach on the CP lot and will result in an elimination of 90 spaces at this lot. The loss of these spaces will represent approximately 9% of the total municipally owned parking supply.

On-Street

The City has 438 single space meters in the downtown core. The on-street meters are intended to service short stay hourly customers. The cost of hourly parking is $1.30 per hour, 2-hour maximum with the exception of Elm Street at $2.00 per hour with a 1-hour maximum. While it is difficult to monitor and obtain accurate data, there are concerns that the time allotted maximums are being exceeded and some on street parking is being used for all day parking. All day parking is more suited to a monthly pass in an off-street lot and on-street parking left available for short stay customers. Appendix "A" exhibits the streets where metered parking is available in the downtown core.

Financial Position

A five year financial history of the parking section can be seen in exhibit 3 below. Exhibit 3 details the history of revenues, contributions to reserve (net income derived from parking operations), as well as the reserve fund balances in each respective year. On a positive note parking revenues have increased by approximately 15% over the 5 year period as a result of increased rates and utilization.

As per By-law 2015-9, net proceeds from all parking operations in excess of the net operating budget are credited to the Parking Improvements Reserve Fund. As at December 31, 2016 the Parking Improvements Reserve Fund has a balance of $0. This is a result of the contribution to fund the TDS Courtyard waterproofing project. Additionally, $330,000 is to be funded annually from the Parking Improvements Reserve Fund for the courtyard project until 2023. This will limit funds available for capital improvements or expansion in the parking section. Further, the loss of spaces as a result

of downtown development will result in an annual reduction in parking revenues of approximately $100,000 at the Larch Street lot and approximately $50,000 at the CP lot.

Exhibit 3 - Parking Financial History						
	2012	**2013**	**2014**	**2015**	**2016**	**2017 ***
Revenues	1,726,400	1,788,001	1,810,899	1,861,564	1,982,950	1,990,000
Contribution to Reserve	476,025	608,586	582,809	738,041	673,936	630,000
Reserve Fund Balance	1,525,142	1,954,672	2,593,541	1,207,922	0	300,000

*2017 is the forecasted result

Utilization

The most recent parking utilization survey was completed in November 2014. This survey looked exclusively at utilization in municipally owned parking facilities. That survey indicated an average utilization of 70%. This average utilization represents a combination of both on-street and off-street parking.

Indications from both the general public and the downtown business sector, is that utilization of municipal lots has increased to approximately 90%. At current levels the City still has the supply to meet the current demand. However, there are areas in downtown where the demand exceeds the supply and customers are forced to park at further distances from their place of business.

Utilization in the near future will be higher due to the reduction in parking supply and increased parking demand as a result of the School of Architecture, the Place des Arts, and the Elgin Greenway development. Additionally, there is potential that a new art gallery, library and/or a synergy convention centre is located downtown which would spur further parking demand and potentially decrease supply further.

Solutions

Solutions to the impending issue of demand exceeding parking capacity can largely be broken down into supply or demand side solutions. These proposed solutions are largely related to publicly owned parking and would need to be further researched and detailed in order to be implemented. There are also solutions that could come from the private sector that would have similar positive impacts. Several of the supply side solutions could be fertile areas for public-private partnership wherein the City exchanged land for the rights to build and maintain private parking spaces.

Supply Side Solutions

Supply side solutions are predicated on increasing the amount of parking spaces available to patrons. They will help alleviate the constraints in parking and have an immediate impact once constructed. Conversely, some options do entail considerable capital funding and as can be seen in exhibit 3, parking have minimal capital funds available. The following options to increase the supply of publicly owned parking spaces are for consideration.

1) Energy Court: The City owns lands adjacent to the current Energy Court parking lot that could be used for expansion. Expansion into these areas could generate approximately 180 additional parking spaces. The cost to expand Energy Court would be in the range of $350,000 to $750,000 depending on the type of treatment (gravel or asphalt) used for the lot. If expansion of this lot was to proceed, the City would need to enter into an agreement with the adjacent landowner for pedestrian access to the property via Elm Street west of the railway tracks or find alternative access to the lands. Data gathered by the City indicates that utilization of this lot and any further expansion is greatly inhibited by the perception of the distance needed to walk around the lots to the existing street level crossing on Elm Street. There has been private sector interest expressed in partnering with the City on these lands to enhance the service with a pedestrian crossing or covered bridge leading directly to Elgin Street, thereby providing a more direct route to the downtown core and increasing the marketability of the lot. Canadian Pacific Railway has indicated that a level crossing is not feasible due to a variety of risk factors. In developing a solution such as a pedestrian bridge, staff could explore a partnership model with private sector interests and upper levels of government. Costs for such a structure would need to be developed in conjunction with design. Design elements such as a covered bridge, elevators, length, width and aesthetics can change the price dramatically. Exhibit 4 below provides details of recently constructed pedestrian bridges including size and cost.

Exhibit 4 - Recently Constructed Pedestrian Bridges

City	Bridge	Cost	Length (metres)	Width (metres)	Covered	Overhead Lights	Opened
Calgary	Bow Trail	$6M	50	3	No	No	2011
Calgary	Peace	$24.5M	126	6	Yes	Yes	2012
Calgary	St. Patrick's Island	$25M	182	7.3-10.7	No	No	2014
Cambridge	Galt	$2M	102	N/A	No	No	Construction
Milton	CPR	$3M	N/A	N/A	Yes	No	2013

It should be noted that the Downtown Master Plan's vision for these lands in the long-term, calls for them to be transformed into a new office park known as Inno-Tech Park.

2) Dufferin/Pine Street: The City owns a parcel of property at Dufferin and Pine Streets that could be opened up and used to create an additional 40 spaces. The cost to open this lot would be approximately $40,000 which would be required to grade, provide drainage, fencing and for a pay and display machine.

3) Parking Structure: The construction of a multi-level parking structure can be investigated. This is the most expensive option and one that takes the most time to complete. The Canadian Parking Association estimates that a stand-alone parking structure will cost approximately $35,000 per parking space. If a 250 space parking structure was built, it would cost approximately $9 million.

4) Lourdes Street: The vacant storage building on Lourdes Street could be demolished and replaced with parking. This would require a significant capital outlay, but could create approximately 60 parking spaces. A lower rate could be offered to encourage monthly pass holders to move farther from the core. Currently, there are approximately 15 parking spaces that exist on this lot.

5) On Street Parking: The City could provide parking on streets for an 8 hour limit on the fringe of the downtown core. This may encourage some monthly pass holders to relinquish their parking spots and park for free within a reasonable walking distance. This would have some impacts on the neighbourhoods along the outer crust of the downtown core.

Demand Side Solutions

Demand side solutions are directed at relocating demand to the most suitable areas within a suite of available options. The highest demand areas are in the middle of the downtown core. The following solutions would attempt to move some of the demand (particularly long term parking) to the fringe of the core so that short term stays have available spaces.

1) Technology: The replacement of on-street meters with pay by plate technology would provide a reliable and efficient means of enforcing the 2 hour parking maximum as there is a record for each vehicles start and end time. The current system requires manual intervention to determine a start time that is not very efficient or effective. Downtown business owners have

expressed concerns regarding the practice of patrons feeding the metres and staying in excess of the 2 hour parking maximum, particularly along Cedar, Larch, Durham and Lisgar streets. It would also provide an increased level of convenience for those that do not regularly carry coin. The cost to replace all 438 metres with pay by plate would be approximately $250,000. Costs for the removal of the current metres would be in addition to this. Conversely, the current meters provide a marker for the parking spots which are of value during winter months where street lines are not visible.

2) Advertise: Advertising the lots that are available for longer term stays and/or the benefits of these lots (ex. 2-hour free parking at Energy Court). Additionally, clearly marked way finding and improved signage at municipal parking lots, would assist patrons in understanding which areas are for public parking and may provide for a more simple and seamless experience.

3) Incent: Provide incentives for patrons to park at lots where demand is least, to take the transit system or to car pool. Programs such as discounted transit passes for large employers in the downtown core could encourage employees of these organizations to use the transit system. Similarly, park and ride programs that have express transit routes from a designated parking lot on the periphery of the City may free up spaces normally occupied by monthly pass holders. Further promotion of the City's current car pool initiative may also alleviate parking demand in the downtown core.

4) Adjust Parking Rates: Currently, municipal hourly rates are approximately 65% of the comparable private sector hourly rates. Hourly parking rates could be increased in the highest demand areas (such as on-street parking locations) in order to dampen demand in the area. This could create supply for short term stays and would encourage monthly parking on the peripheral. Pricing parity may also spread the demand across public and private sector lots.

Conclusion

Demand for parking in the downtown core has been increasing over the last decade. There are also a number of proposed large projects that will spur more demand and reduce the supply of parking in the near future. Downtown intensification such as that caused by large development projects need to be supported by transportation infrastructure including parking. These investments can be made by the public or private sector. There are various solutions that can affect the supply or demand for parking. City staff would be pleased to add additional information to any of the options raised in subsequent reports, or upon Council's direction as budget options for

the 2018 budget deliberations. Further, staff will consider Council's input and policy discussion surrounding this report to raise options for further exploration in the 2018 budget process or in subsequent budget deliberations.

Composite Rendering #1

Option #1: Standard Pedestrian Bridge with ramps

Energy Court Pedestrian Bridge

Downtown Sudbury | November 15, 2017 | JLR No.: 27777-000.0

J.L.Richards
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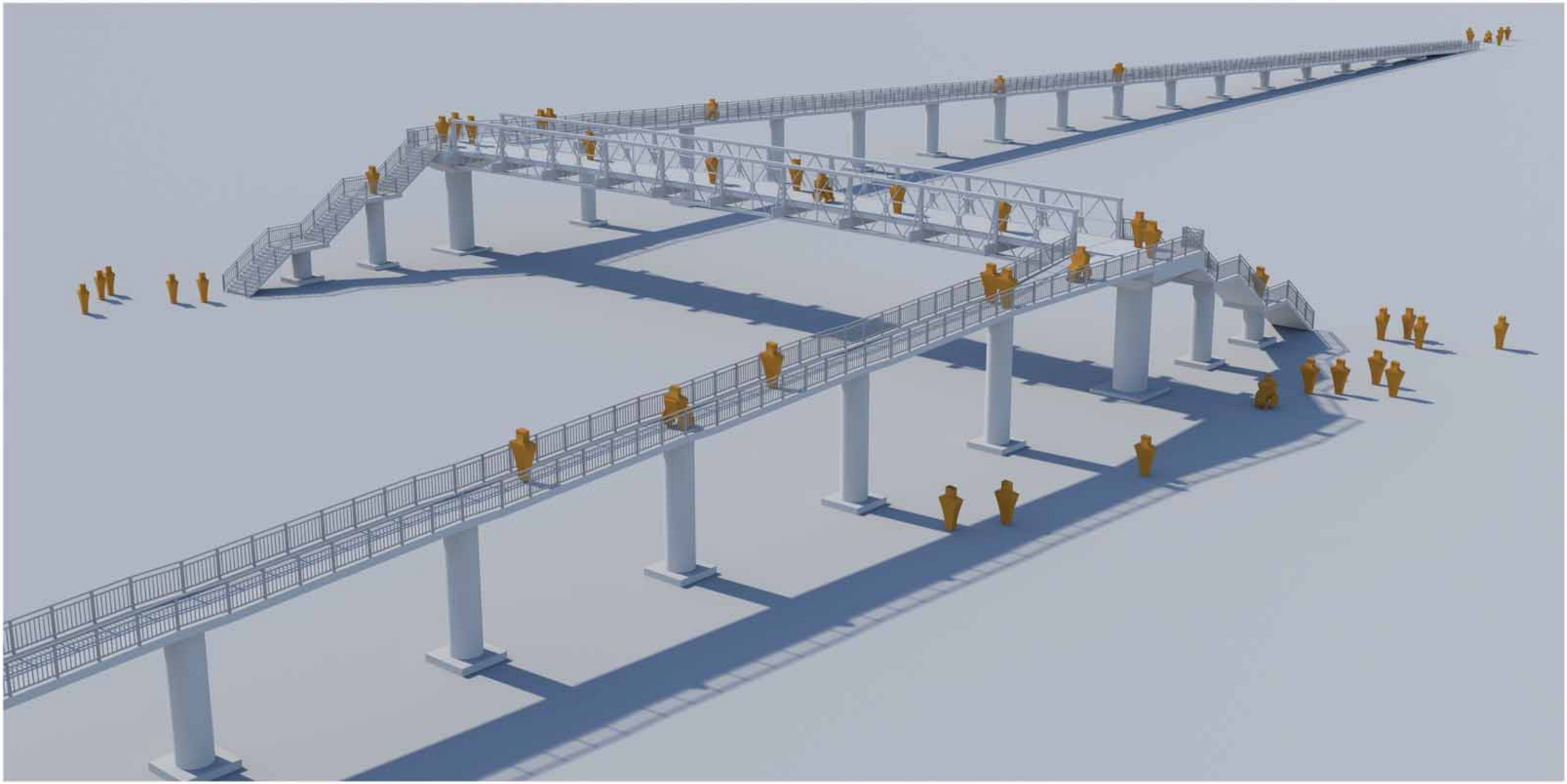

Rendering #1

Option #1: Standard Pedestrian Bridge with ramps

Energy Court Pedestrian Bridge

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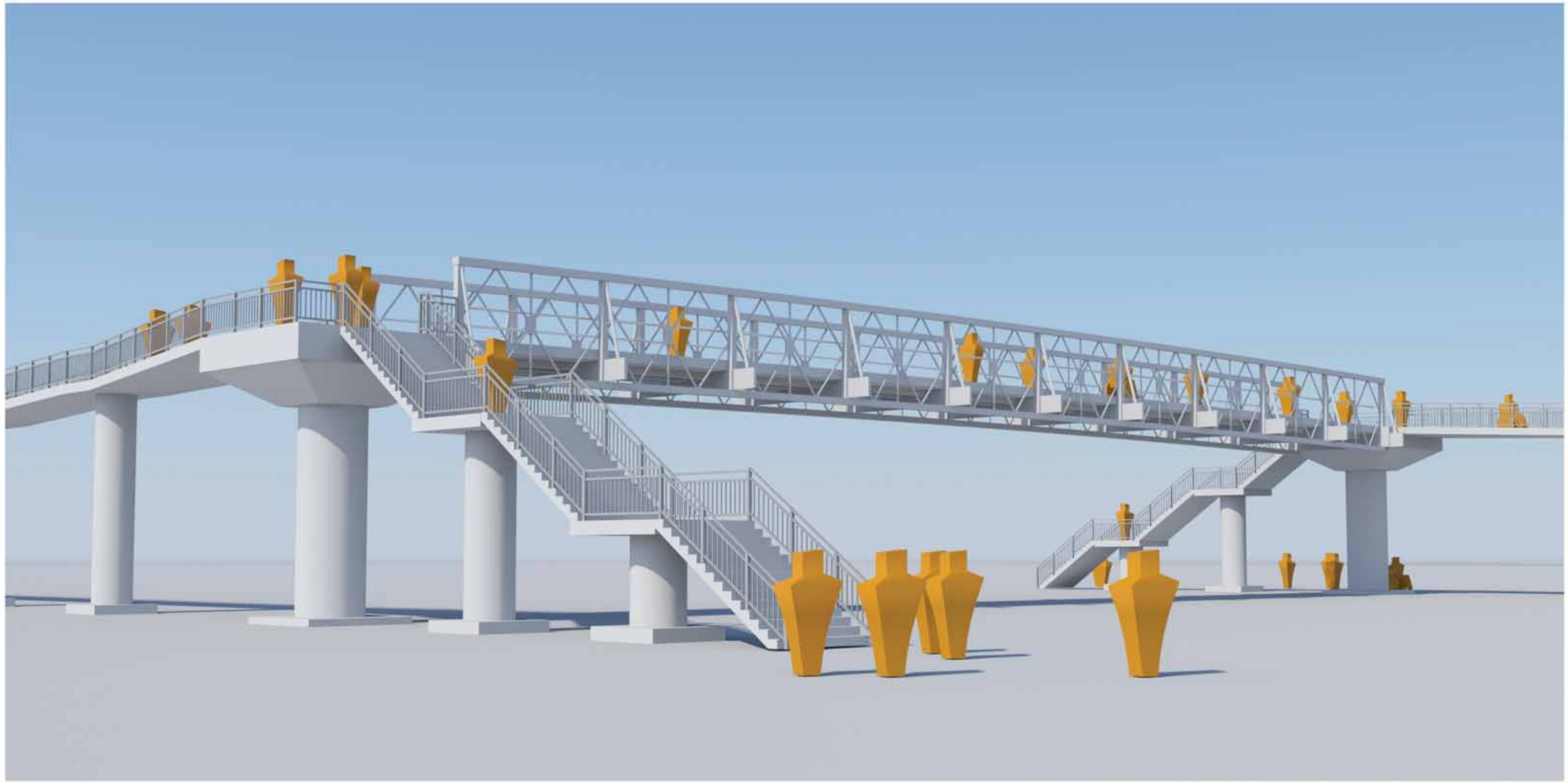

Rendering #2

Option #1: Standard Pedestrian Bridge with ramps

Energy Court Pedestrian Bridge

Downtown Sudbury | November 15, 2017 | JLR No.: 27777-000.0

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Rendering #4

Option #1: Standard Pedestrian Bridge with ramps

Energy Court Pedestrian Bridge

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Composite Rendering #1

Option #1A: Standard Pedestrian Bridge with elevators

Energy Court Pedestrian Bridge

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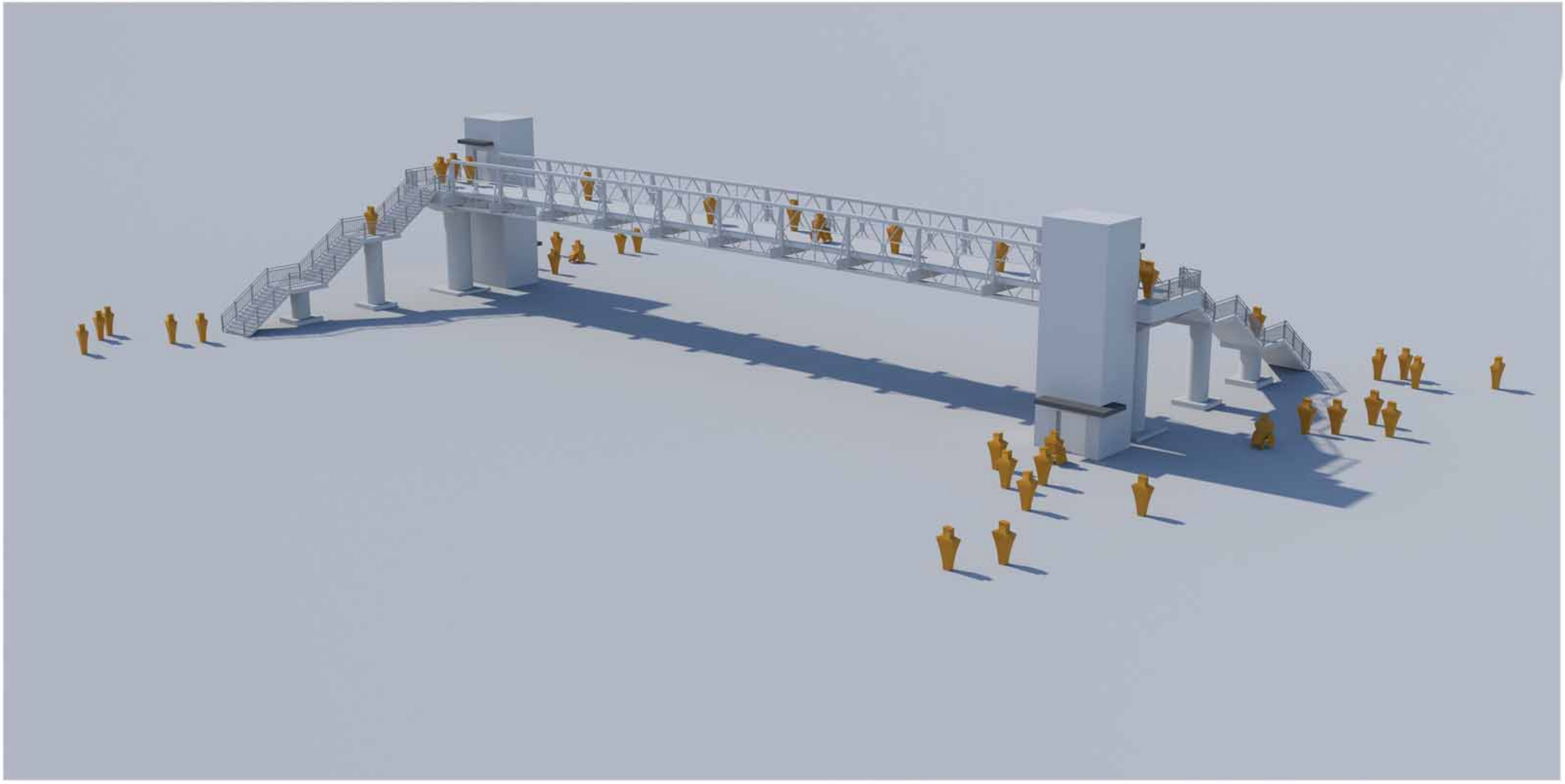

Rendering #1

Option #1A: Standard Pedestrian Bridge with elevators

Energy Court Pedestrian Bridge

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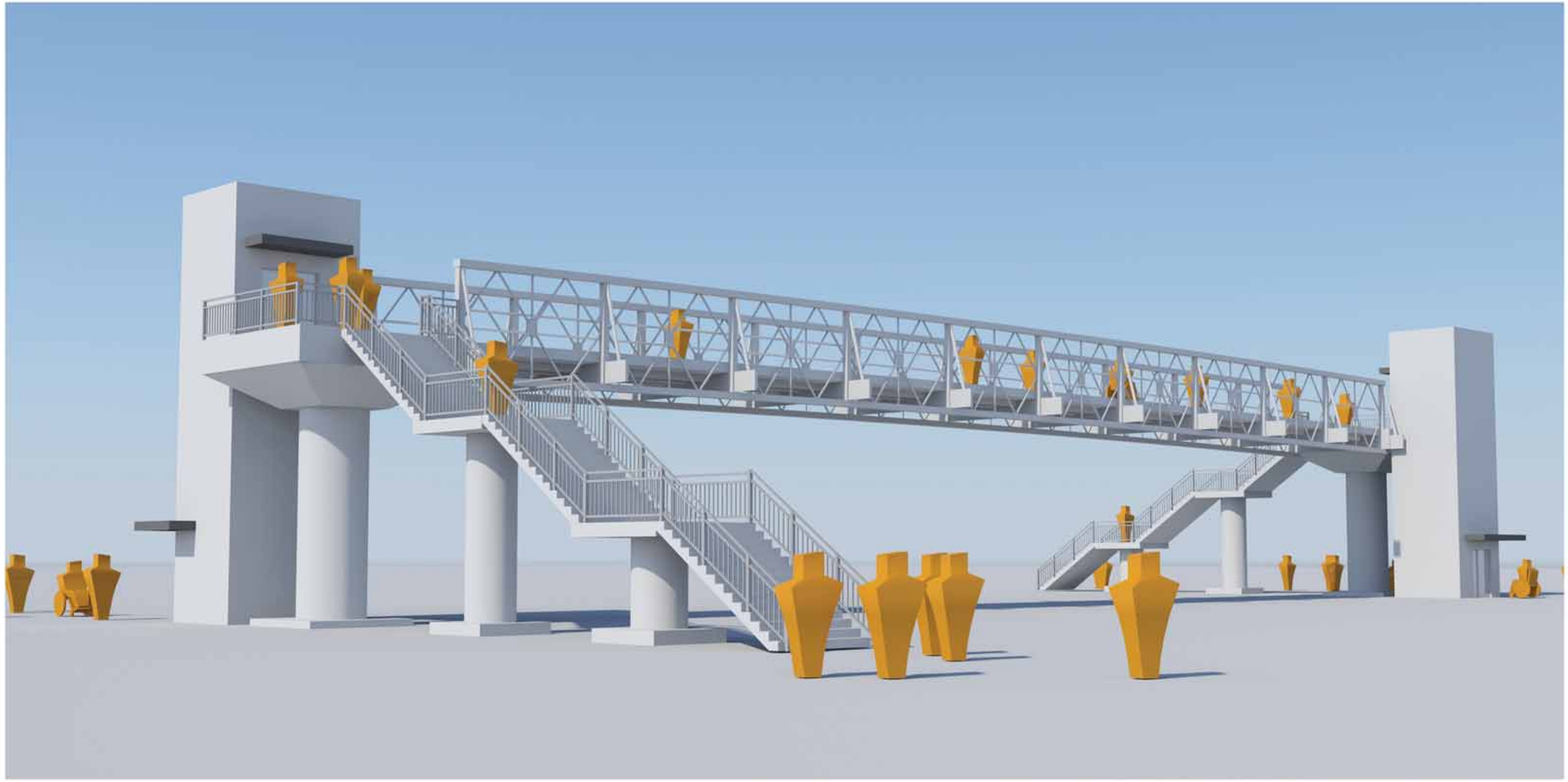

Rendering #2

Option #1A: Standard Pedestrian Bridge with elevators

Energy Court Pedestrian Bridge

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Conceptual Renderings

Option #2: Covered Pedestrian Bridge

Energy Court Pedestrian Bridge

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Conceptual Renderings

Option #3: Covered Pedestrian Bridge with Architectural Details and Green Spaces on Ramps

Energy Court Pedestrian Bridge

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Background

A report on downtown parking was presented at the October 17th, 2017 Council meeting. It is attached as appendix "A". In response to this report, members of the committee requested additional information on several initiatives that could be undertaken to improve the availability of parking in the downtown core of the City. This report will provide additional information on those initiatives that were identified by members of Council.

Of the initiatives that were presented to Council at the October 17th meeting, three (3) were identified as being of interest. They were the Dufferin Street road allowance lot development, the pedestrian overpass linking Energy Court to Elgin Street and implementing pay by plate technology. Additionally, information was requested on the viability of a developing a parking lot on Louise Street.

Initiatives

Louise Street

Located on Louise Street/Vincent Street (unopened road allowance) at the bridge that traverses Junction Creek, this area is currently being illegally utilized as a parking area. This area is outside of the downtown core and is being utilized by longer stay parkers who prefer not to pay. This area is designated parkland and is part of the linear park known as the Junction Creek Waterway Park. It is recommended that the area remain parkland and enforcement be increased in this area. Dufferin Street Road Allowance

The City owns a parcel of property described as the Dufferin Street road allowance, at the east end of Pine Street that could be opened up, and used to create an additional 40 spaces. It is currently a gravel lot and the intention would be to keep it in this condition. The location of the lot is slightly outside of the downtown core; however it is certainly within walking distance, would not present any traffic issues and would increase parking capacity for long term stays.

The cost to open this lot would be approximately $40,000 which would be required to grade, provide drainage, fencing and for a pay and display machine.

Financing for this option could be provided from a reallocation of unspent capital funds (approximately $200,000) from previous years.

Pedestrian Overpass – Energy Court Expansion

Parking supply will be negatively affected as a result of a number of large initiatives being considered and/or undertaken in the downtown core in the near future. The proposed Place des Arts and Phase 1 of the Elgin Greenway will cause reductions of 59 and 90 spaces respectively. Additionally, proposed large projects such as the Art Gallery/Library and/or the Synergy Centre could also reduce the supply of

parking. As a result, this alternative was put forth as it was an opportunity to add supply to the downtown parking utilizing existing City-owned lands. Figure 1 shows the existing energy court lot outlined in red and the potential expansion area outlined in blue. The existing Energy Court parking lot is comprised of 218 spaces that are approximately 70% utilized. Expansion into the adjacent City owned lands could add approximately 180 spaces. As indicated in Appendix "A", utilization of this lot is particularly hampered by the perception of the distance needed to walk to the Elm Street railway crossing in order to traverse the railway tracks. Additionally, the current parking lot has an easement agreement with the abutting land owner that would not extend to additional parking lot development.

Figure 1

There has been private sector interest in partnering with the City in order to build a pedestrian bridge that would link the Energy Court parking lot directly to Elgin Street. This would provide a more direct route to the downtown core, thus increasing the marketability of the lot. In exploring the option of a pedestrian bridge, the downtown B.I.A. had a local engineering firm develop a draft concept of a pedestrian bridge in order to provide Council with a point of reference in terms of scope and cost. Appendix "B" attached has renderings of four (4) options for a pedestrian bridge. Options 1 and 1A are differentiated only by their mode of meeting Accessibility for Ontarians with Disabilities Act (A.O.D.A). Option 1 incorporates a ramp, while option 1A uses an elevator. Options 2 and 3 are included to provide

Council with an understanding of the additional finishes that could be included such as a covering across the full length of the bridge and some architectural features and green spaces.

The construction and engineering costs of a bridge such as that in 1A (elevator and uncovered) could be expected to be approximately $5 million. Moderate cost impacts could be expected based on whether a steel ($4.8M) or aluminum bridge ($5.0M) is constructed. Though slightly more costly, an aluminum bridge offers improved durability, reduced maintenance costs, reduced foundation requirements and improved aesthetics. This opinion of probable costs considers the use of passenger elevators as the preliminary review indicates that it would be marginally more cost effective than the construction of concrete ramps due to the overall length of the ramp required. This costing does not include any architectural features including a covering. A more detailed design with defined attributes would be required to ascertain a reliable cost estimate and an understanding of the effects on the Elgin Greenway design as well as attrition of existing parking along the west side of Elgin Street.

The overall cost of a pedestrian bridge and expansion of Energy Court would entail a number of costs. The project would include land acquisition, expansion costs, engineering costs, and construction costs.

- Land Acquisition: As can be seen in Figure 1 above, land would be required along the west side of the railway tracks in order to construct a pedestrian overpass.

- Lot Expansion Costs: As indicated in Appendix "A", costs to expand Energy Court would range from $350,000 -$750,000 depending on the type of treatment (gravel or asphalt) used for the lot.

- Engineering and Construction Costs: Engineering and construction costs for a base level bridge such as that in 1A would be approximately $5 million. Additional features such as a covering and or any architectural designs would be in addition to this. Operational impacts of maintaining a safe pedestrian bridge in the winter and shoulder seasons would likely lead to a requirement for a covered walkway.

In considering the above estimates, the total cost for such a project would likely be in the $6 -$8 million dollar range depending on land costs, lot expansion costs and bridge attributes. This scale of project would represent a cost of approximately $30,000-$40,000 per space based on a 200 space lot expansion. On a per space basis this is comparable to the cost of a parking structure.

Financing for the Energy Court expansion and pedestrian overpass would need to be explored further. There has been support from Canadian Pacific Railway (C.P.) as an overpass would improve the safety of their rail yard. C.P. has indicated that they would be interested in contributing financially towards the pedestrian overpass.

As the City continues to discuss and undertake some large projects in the downtown core such as the site selection that is underway for the Art Gallery/Library or Synergy Centre, it is recommended that staff continue to explore private and public sector financing partnerships for a pedestrian overpass linking Energy Court to Elgin Street.

Pay by Plate Technology

The highest demand area for parking is in the downtown core and the most desirable parking spaces are on street. Pay by plate would replace the individual street parking meters that are used for on street parking throughout the downtown core with strategically located multi space meters similar to a pay and display machine. Pay by plate offers some distinct advantages over single meters or pay by space that include affecting demand for long term stays, flexibility of payment, efficiency of enforcement and efficiency of operation.

On-street parking is intended for short term stays. A pay by plate system offers the ability to affect demand for these spaces by limiting parking to a maximum time frame based on a license plate. Once a license plate exceeds the allotted time frame, there is no further ability to extend the parking privilege in that particular area. Downtown business owners have expressed concerns regarding the practice of patrons feeding the meters and staying in excess of the 2 hour parking maximum, particularly along Cedar, Larch, Durham and Lisgar streets. However, enforcement of this 2 hour parking maximum is quite onerous and difficult to apply consistently. A pay by plate system will have the affect of transferring demand from on-street parking to off-street lots, thereby providing more supply for short term stays in the downtown core.

One of the most obvious advantages of pay by plate is the flexibility of payment methods that is offered. Through online payment capability and fixed machines throughout downtown, pay by plate would provide a user with more flexibility when parking downtown including payment by coin, credit card or online using a smart phone. The current meters only accept coin and in an increasingly electronic age, this method of payment is diminishing rapidly. Additionally, if more time is required patrons are able to buy additional time online via a smart phone or at the nearest pay station. This level of convenience eliminates the need to walk back to the vehicle to buy additional time providing customers with increased level of satisfaction.

Pay by plate also offers efficiencies to enforcement of parking regulations. Pay-by-plate systems manage enforcement by comparing which license plates are parked with the ones that have activated parking sessions. As there is no requirement for enforcement officer on foot to check each meter, pay-by-plate systems can achieve higher compliance rates with less enforcement personnel.

Lastly, operational efficiencies can also be achieved using pay by plate technology. Pay stations do not need to be placed in such close proximity to parking spaces to accommodate customers walking back to their vehicles. As a result, fewer pay stations than meters need to be deployed, as they can be conveniently spaced along key pedestrian routes. For parking operations, this results in reduced coin collection and maintenance costs. Additionally, the availability of real time data regarding parking trends such as utilization can be used to more specifically tailor parking services to meet the needs of the public.

The estimated cost to replace all 438 meters with multi space meters that would incorporate pay by plate technology would be approximately $250,000. Other costs would include signage and costs for the removal of the current meters. In addition to the equipment costs, operational costs for the system would be approximately $25,000 annually for real time wireless connectivity, data hosting and battery replacement. As well, licensing for pay by phone applications would cost approximately $9,000 annually, which could be recouped via a small convenience charge per use as in many other municipalities.

Financing for this could be provided by reallocating previously approved capital budgets (approximately $200,000) in addition to the 2018 capital budget of $100,000.

Conclusion

Increasing demand for parking in the downtown core, along with future supply reductions will create a strain on downtown parking availability. Regarding the initiatives raised in this report, it is recommended that Louise Street remain parkland and enforcement of this area be increased; the Dufferin Street road allowance expansion be maintained as a viable option that could be developed in a short time frame; funding opportunities for the pedestrian overpass- Energy Court expansion be further investigated in order to determine its viability; and that staff further the Pay by Plate project.