## RECOMMENDATION

That the Geo Enabled Digital Imaging Proprietary System (currently StreetScape) be approved as the City’s standard for street level images and be single sourced to the developer, iLOOKABOUT Corporation for a period of five years, with options to automatically renew for two additional five year periods if both parties are satisfied with the operation of the agreement.

## EXECUTIVE SUMMARY

The City Of Hamilton entered into a pilot project with iLOOKABOUT in 2008 to update an existing set of images that allowed City staff to access street level images at their desktop for the entire geographic limits of the City.

The recommendation is for a single source as opposed to a sole source since iLOOKABOUT provides these images as a stand alone web service. Other firms offer this service as a by product of other services such as a full road indexing project or pavement analysis.

The alternatives section expands on the rationale for continuing with this service provider instead of a free web based provider like Google Street View.

The pilot has been very successful and on an average month the iLOOKABOUT system delivers over 8,000 images to internal staff. The system has been integrated into the Corporate GIS, GISnet and CAD solution to provide the easiest possible access to the latest images of projects, residential and commercial areas and existing streets.
The system is a turnkey solution and the iLOOKABOUT Corporation hosts and delivers the images through a web service. This saved start up costs and accelerated the pilot significantly.

Our conservative cost saving estimates of the iLOOKABOUT system, coupled with estimate in staff time and vehicle usage costs place the average annual value of this project to exceed $400,000

In order to formalize the use of this product and allow for extensions in its development and service, the arrangement needs to go beyond a pilot basis and into a structured set of products and services.

Staff has developed an acceptable internal privacy policy to manage the use and distribution of these images.

Alternatives for Consideration - See Page 5

FINANCIAL / STAFFING / LEGAL IMPLICATIONS

Financial: The use of street level images provides a significant value to the City through a more effective deployment of staff. Site visits can be reduced drastically which further promotes green initiatives through less vehicle miles.

Conservative estimates note that this system eliminates over 400 site visits monthly and adds over $400,000 of additional value to the City by allowing staff to process more work by accessing these images through their desktop.

Staffing: There are no staffing implications.

Legal: Legal Services has assisted and directed negotiations with the vendor for the pilot project and will provide advice for the final agreement.

HISTORICAL BACKGROUND

This project was initiated in 2008 to replace and enhance the 2004 images taken by the Asset Management group during a road condition index project; the 2004 image delivery was an offshoot of the larger road study.

There was significant uptake on the 2004 images and staff used them extensively.

Previous analysis of staff usage of the 2004 product noted the following:

- There were 432 average monthly unique system hits;
- These web hits were estimated to resolve 50% or 216 site visits monthly;
- A site visit takes on average 90 minutes, and is estimated to be approximately 20 kilometres. Conservative annual saving of staff time including mileage was estimated to be over $200,000.

The 2004 images were over 4 years old at the time of our pilot agreement and were not being relied on by staff due to their lack of currency. There was no initial plan to upgrade the images and refresh the 2004 data. The City arranged with iLOOKABOUT
to deliver an updated product that was solely street level images and not a complete road index study, thus reducing our project costs.

The 2004 image delivery system was web based and did not easily facilitate rapid location of a specific address or point in the City. The iLOOKABOUT pilot recommended a system that was map based and relied on the position of the image when the user requested an image.

The iLOOKABOUT system is designed to be accessible through the majority of Corporate GIS and CAD tools which has broadened its appeal and usage and that is reflected in the usage numbers.

Current staff usage of the iLOOKABOUT system results in more than 5,500 standard resolution and over 2,500 high resolution images being viewed internally. This is a marked increase to the 2004 product due to the integration of this tool into our corporate applications.

Staff have created an acceptable privacy policy internally to allow for the use and modification of these images.

**The Proposed Arrangement:**

Staff proposes to continue aligning the City Of Hamilton with the iLOOKABOUT corporation services and products that have been jointly developed since the start of the pilot project.

The standard product is a geo referenced image with a directional vector to allow the user to select what location and direction they wish to view. The images may be captured from a vehicle or from a hand held solution. As the products evolve it may change names, it is currently known as StreetScape, but the City wishes to engage in a relationship with this vendor for this product and future iterations that include enhancements.

City staff recommends the term of the agreement to be five years, with options to automatically renew for two additional five year periods if both parties are satisfied with the operation of the agreement. This provides a reasonable opportunity for the City to revisit the terms and conditions of the agreement since standards in the industry continue to change.

**POLICY IMPLICATIONS**

Purchasing Policy 14 - Policy for Standardization states that standardization is a management decision-making process that examines a specific common need or requirement and then selects a Good and/or Service that best fills that need to become the standard.

The iLOOKABOUT StreetScape is a proprietary system that can only be procured through the developer, and will therefore result in a single source purchase.

The policy requires that any standard established and any single source purchases resulting from that standard requires Council approval.
The policy further provides that house accounts can be negotiated with the original equipment manufacturer to ensure that the City obtains the best value for these procurements.

This agreement aligns with the Public Works Strategic Plan through innovation and many of the services were jointly developed as a partnership during the pilot phase.

The agreement aligns with the financial goals of the Public Works Strategic Plan as well by maximizing staff resources by eliminating the need to do significant field visits. From a risk management perspective, the City has captured images that can support or refute any claims made on City roads.

**RELEVANT CONSULTATION**

Consultation Collaboration with the Managers throughout both the Environment and Sustainable Infrastructure Division of Public Works, including Asset Management, Environmental Planning Strategic Planning and Rapid Transit, Design, Construction, Traffic Engineering and other Public Works divisions and has led to the recommendation agreement of this arrangement.

The Real Estate and Development Engineering Sections of Planning and Economic Development together with Hamilton Police Services use and endorse the ongoing development of this product.

Staff in the Purchasing Section and Legal Services Section were consulted to ensure compliance with corporate policies.

**ANALYSIS / RATIONALE FOR RECOMMENDATION**

The current use of the iLOOKABOUT tools is captured in the corporate web tracking software. Reports on usage are as follows:

Our reports depict that there are 8,000 database hits a month average since going live in July 2009.

5,500 standard images are returned but these are ignored in the value analysis. If a user requests a full size, or panoramic image we consider that to be a request that is determining a specific issue at that site. The system issues 2,500 full size images a month on average.

To further filter the results we estimate that 20% of these full size images results in a site visit not taking place. That results in 500 monthly site visits being avoided due to the use of these systems. This is based on using only 6% of the total number of images delivered monthly.

The results in saved site visits double the 2004 results due to the higher level of corporate system integration. Our conservative estimates in the image usage above, coupled with estimate in staff time and vehicle usage costs place the average annual value of this project to exceed $400,000.
To continue to allow staff to utilize and expand on a system with such sound returns on investment aligns with Corporate Strategic plans. The vast area of this City makes street level imaging a very attractive option; it allows staff at any City computer access to a bank of over 4 million images.

Staff in partnership with iLOOKABOUT have created a layer of data that includes the 2004 images through the same web based tool. Staff can now review a specific site over time, and we plan on enhancing and expanding on these toolls in the future to add more value.

**ALTERNATIVES FOR CONSIDERATION**

Options exist to utilize web based free image services such as Google Street View, and a variety of other providers. We encourage the use of these free products to assist in work related queries however the constraints in using these products are as follows:

**Time and Date Stamping** - For risk management and other legal purposes the time and date of particular images are critical. In Google StreetView and other web based free products there are no time and date stamps available and determining the time an image was captured in other products is problematic.

**Coverage** - Currently the Google product is available for the majority of residential and major roads in Hamilton. The lot and concession in the rural areas are not captured and we are unaware of plans to ever obtain this data in StreetView. The iLOOKABOUT data capture includes all City roads.

**Currency** - Beyond the current capture of the Google project we are unaware of plans to refresh the City by Google. Our 2004 project became outdated and required a refresh to ensure staff placed reliance on the product. The currency of over the internet products is a variable that we cannot control and coupled with the fact that we don’t know the actual capture date makes detailed use of these products problematic.

For all the above reasons the City Of Hamilton hopes to maintain its relationship with the iLOOKABOUT Corporation to ensure staff can place reliance on the products for their project needs.

**CORPORATE STRATEGIC PLAN**


**Skilled, Innovative & Respectful Organization**

More innovation, greater teamwork, better client focus - through the use of this technology staff are able to integrate street and hand held images directly into a series of corporate workflows. They are enabled to deal with clients immediately and ascertain site conditions.
Financial Sustainability

Conservative estimates note that the use and integration of this product adds over $250,000 in value to the City through avoiding site visits and unnecessary trips. This value does not include the mitigation of risk and legal claims, contractor claims and enhanced customer response rates.

Environmental Stewardship

Through the use of the iLOOKABOUT tools staff eliminate the need to travel over 100,000 km annually. Coupled with the reduction in emissions this product is a good example of a technology that assists in meeting City environmental goals.

APPENDICES / SCHEDULES

None