



FINANCIAL SERVICES - Business Systems and Controls

Access and Privacy Review Completed May 18, 2006
M E M O R A N D U M

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DATE: 19 September 2005

SUBJECT: Inspection of Street Cuts

EXECUTIVE SUMMARY

During the 2003/2004 business planning session Business Systems & Controls met with HRM Business Unit Directors to review areas of risk. The inspection of street excavations was an issue that was discussed by some business unit directors. The review of the street excavation inspection process was placed on the 2004/2005 audit plan, however, the initiation of this review did not begin until 2005/2006.

The core issue raised was the lack of a coordinated, consistent and systematic approach to re-inspection of street excavations within the one year time frame from the reinstatement of a street excavation within HRM as defined in By-Law S-300. This concern is validated throughout this report. Systematic inspections of reinstatements throughout HRM are not conducted consistently among HRM business units nor is the process adequately coordinated and monitored. Consistency of obtaining permits and compliance with permit conditions was absent. The review observed different methods for external parties, HRM and the Halifax Regional Water Commission to obtain and comply with permits.

Coordinated processes are required to improve the monitoring of reinstatements and the review of the street cuts during the warranty period. HRM does not use, to its fullest potential, the Hansen software as an integrated system. If configured and used properly, Hansen can provide the integrated "cradle to

grave” processes to ensure street excavations within HRM are reinstated in accordance with HRM specifications. However, Hansen is only a tool to assist in the coordination and monitoring of construction activity in the right of way.

Staff from Planning and Development (“P&D”) and Transportation and Public Works (“TPW”) have initiated a Trench Reinstatement Working Group to resolve the issue identified. The findings and recommendations within this report should provide a framework to assist this working group to move forward to mitigate future risks surrounding street excavations and the reinspection process. The working group has identified a need to ensure staff are trained in the specifications of HRM street specifications. In addition to the internal operating procedures of P&D and TPW, changes will be required in Financial Services, Shared Services and the Halifax Regional Water Commission (“HRWC”) in order for the monitoring and inspection of street excavations to be truly effective.

One area HRM does lead, compared to other municipalities, is the non-refundable charge for future settlement. On the downside, HRM has not designed an appropriate system to ensure that the appropriate future settlement fees and security deposits are collected. On the positive side, HRM does use the funds collected to repair settled street cuts. However, the process to link locations of settled cuts cannot be related to the use of the funds.

SUMMARY FINDINGS

Segregated Monitoring Processes and Data Collection

- Street excavation activity is not captured in an integrated system.
- Inefficient and ineffective monitoring and inspection of street cut reinstatements.
- Inefficient communication and coordination of street excavation activity between HRM Business Units and between HRM and the HRWC.
- Inspection process gaps related to water service only connections and street reinstatements.

Inadequate Internal Controls

- No reconciliation of the activity captured in Hansen with SAP for required deposits and fees.
- Appropriate fees are not collected as required under the Streets By-Law Section 24(2).
- Ineffective systems to ensure that reinspection of street cuts has occurred during the warranty period.

- Lack of appropriate safeguards and segregation of duties related to warranty deposits collected in the form of letters of credit, bonds or certified cheques.
- Expenditures made from future settlement fees cannot be linked to a specific location or activity.
- Lack of appropriate exception reporting.
- Applications/permits and reinstatement inspections in Hansen are not closed or actioned on a timely basis.

Halifax Regional Water Commission (“HRWC”)

- HRWC has access to Hansen to review development and building applications for approval purposes, but does not have access to input permit information for street excavation activity.
- HRWC has expressed an interest to review length of time for the warranty of street excavations and discuss fees associated to transfer the risk to the HRM after one year.

SUMMARY RECOMMENDATIONS

1. Design processes to ensure a coordinated and consistent inspection of street cut reinstatements and warranty period reviews.
2. All HRM street excavation permits should be entered, tracked and reviewed in Hansen.
3. Design a process that reviews HRM and HRWC generated street excavations prior to the expiry of the warranty period as specified in By-law S-300.
4. HRM and the Water Commission review water service inspections and identify who should be inspecting street reinstatements and develop the workflow process to ensure the inspections are conducted.
5. Design and monitor workflow and reports for HRM and HRWC generated street excavations.
6. Hansen training and access should be provided to all inspectors on the permitting module.
7. Design of management and exception reports to ensure inspections are conducted and permits are closed on a timely basis.
8. Design exception reports to review deposits and fees waived by supervisors and managers.
9. Design of summary reports by activity for supervisor, manager and director review on a monthly, quarterly and annual basis.
10. Applicants’ after hours contact information be updated during the beginning of each construction season and readily available to HRM staff.
11. Development of a report to monitor and reconcile contractor’s security deposits/letters of credit or other financial instrument, including expiry dates.
12. Develop guidelines for the acceptance and form of letters of credit.
13. Deposits in the form of letters of credit, bonds or certified cheques be maintained by another business

unit other than the department approving and issuing permits.

14. Provide on-line permitting access to the HRWC to input current street excavation activity.
15. Review with the HRWC ownership of street cuts and the time frame from the current status to one similar to other applicants/contractors as specified in the Streets by-law.
16. Establishment of a road surface testing and reinstatement training facility at Turner Drive or other suitable HRM facility.
17. Update By-Law S-300 to ensure all sections in Section 24 are consistent with the one-year warranty time period.
18. Staff review Section 24(2) of the streets by-law and propose changes to reflect where HRM has in fact resurfaced a street within a specified period of time versus the current language in the by-law.

BACKGROUND

During the 2003/2004 business planning process, it was presented to the Business Systems & Control Group that HRM's reinstatement inspection process was an area of risk to the organization. The main of risk was the HRM's ability to provide uniform street reinstatement inspections to all parties who excavate in the right of way.

The governing legislation for street excavations is HRM By-Law S-300 ("By-Law Respecting Streets" or "Streets By-law"). The Streets By-law originally took effect under the HRM on 22 November 1997. Staff recognized that there was a need to revise Section 24 of the by-law pertaining to performance security. Effective 7 February 2004, Section 24(3) of the Streets By-law was revised to extend the warranty period and the holding of performance security from six months to twelve months. This change, as recognized by staff, was required to allow street cuts to experience a full freeze-thaw cycle before re-inspecting the street cut and before returning the performance security. When the changes were made in 2004 to Section 24(3) of the Streets By-law, the amendments did not simultaneously change Section 24(4) to be consistent with the extension of the warranty period from six months to one-year. Currently, the reference in Section 24(4) in the Streets By-law quotes a "six month period referred to in subsection (3)." Therefore, the related clauses are not consistent with each other.

Recommendation

- Staff recommend to Council to amend Section 24(4) of the by-law to reflect the one year warranty period.

FINDINGS & RECOMMENDATIONS

Segregated Monitoring Processes and Data Collection

Street cut reinstatement inspections are conducted by the Transportation and Public Works (“TPW”) and Planning and Development (“P&D”) business units. Within TPW, Design & Construction Services, Operations and Right of Way Services are involved in the review of street reinstatements. However, there is not a coordinated processes that reviews either business units monitoring of street cut activity within HRM.

Excavation in the HRM Right of Way is tracked through multiple systems such as: Hansen, spreadsheets and other databases. Each system captures data in different forms that does not allow for effective integration of street cut data. In some cases there is duplicate data gathered among the different systems. The result is data is gathered many times and randomly used.

Transportation & Public Works (“TPW”), within the last twelve to eighteen months began, to submit street excavation data to Right of Way services to obtain permits through Hansen as required under the Streets By-law. TPW Staff simultaneously track this information within spreadsheets. However, TPW inspectors do not have access to the information in Hansen and cannot track if and/or when the cuts were inspected for warranty purposes with HRM contractors.

Staff within Design and Construction services rely on data related to street excavation activity to maintain the street distress index. Currently, the index is maintained in a stand alone database and is not integrated with Hansen or other corporate systems. In addition, staff within Design and Construction services, including Construction Inspectors, do not have access to the Hansen permitting module. Therefore, they cannot track, monitor or update permits taken out by HRM for capital projects nor can they effectively update the street distress index with up to date activity.

During the review, it was identified by staff that there is a gap in the street reinstatement process when there is a water service only connection. This results from a lack of workflow process between HRM and the Halifax Regional Water Commission. A brief synopsis of the process occurs as follows: the property owner/contractor applies for the permit from HRM, the Water commission inspects the connection, and the process ends. Currently there is not a process that identifies who is responsible for the street reinstatement inspections after the water commission has inspected the water service connection. Timing is one of the problems between the service connection inspection and the street reinstatement.

Recommendation

- Design processes to ensure a coordinated and consistent inspection of street cut reinstatements and warranty period reviews.

- All HRM street excavation permits should be entered, tracked and reviewed in Hansen.
- Appropriate staff within Design and Construction services should have access and training to the permitting module in Hansen.
- Design of an internal process that reviews HRM generated street excavations prior to the expiry of the warranty period as specified in By-law S-300.
- HRM and the Water Commission review water service inspections and identify who should be inspecting street reinstatements and develop the workflow process to ensure the inspections are conducted.

The Right of Way (“ROW”) unit of TPW does not have an effective ability to identify the street cut activity occurring in HRM streets. The current means of capturing street cut data does not allow the ROW unit to know, in a timely fashion, whether or not to issue or deny permits due to the level of activity on any given HRM street. ROW also cannot summarize by type of permits issued.

Where data is captured outside of Hansen, the period required under the Streets by-law and HRM construction contracts are not being tracked and, therefore, one cannot determine that the reinspection of street excavations has been conducted. The result is HRM is not ensuring that its warranty period is secured and, where required exercised. For Fiscal Year End 2004/2005, street opening deposits have not been used to repair settled street cuts, as allowed under the Streets By-law.

As specified in the Streets By-law, the HRWC applies for an annual Street and Services Permit. Under the annual permit, the HRM is to be informed of the location of the work prior to its commencement. Incidental and emergency operations data obtained from the HRWC occurs on a monthly basis via e-mail to the TPW Streets’ Inspectors. During snow and ice operations, faxes are sent to the Snow and Ice Control Operations centre to inform HRM of the locations of active street cuts carried out by the HRWC. The incidental and emergency operations data is not entered into Hansen for review by ROW services. The HRWC does apply for street and services permits for its capital projects from ROW and is recorded in Hansen.

The HRWC has access to Hansen to review and approve/decline development and building applications to allow connections to existing water services. However, the HRWC does not have access to the permit and inspection module that would enable the live input of street excavation activity.

Municipal Inspectors assigned to the TPW business unit (Operations and Design and Construction) do not have access to the permit and inspection module of Hansen. Therefore, TPW cannot get timely information on excavations requiring warranty inspections. The TPW Inspectors track street excavation work in spreadsheets. Currently, TPW Inspectors do not use these spreadsheets to review reinstatements within the one-year time frame or other suitable time period on a consistent or formal basis. The result is tracking of information outside of Hansen which does not provide an effective monitor and inspection system for street cuts generated by the HRM, HRWC or external parties with streets and services permits.

Inspection of Street Cuts

With data captured in multiple fashions, communication and coordination among HRM business units and the HRWC is not effective. TPW inspectors do not know the universe of the permits issued by ROW and which permits require inspections. ROW currently faxes copies of permits issued, but does not know if and when an inspection of the work has occurred. Permits issued by PD are not accessible to the TPW inspectors to identify who is responsible for the street cut.

Two Crystal Reports have been created to extract data from Hansen to identify street cuts. The reports were designed for used by HRM Dispatchers/Commissionaires to identify the contractors who may be responsible for street excavations when a complaint is received. However, the process is cumbersome, at best, where staff are attempting to identify who is responsible for a street cut. Staff have initiated a review of the Crystal Reports to streamline the reports with one report. In addition, staff have identified that the contact information that is available on the reports is not current for operating purposes. The report currently provides a contractor's main phone number and not the after-hours number which is required in most cases.

Recommendation

- Applicants' after hours contact information be updated during the beginning of each construction season.
- All HRM inspectors should be trained and use the Hansen permit module.

Inadequate Internal Controls

What activity that is captured in Hansen is not reconciled with SAP for required deposits and fees. Currently, there are no summary reports designed within Hansen or Crystal Reports to identify the fee charges within Hansen by permit type or fee charged. A fee transaction type for letters of credit and certified cheques was not observed in Hansen. This may result in Hansen showing greater fees/deposits compared to SAP. Therefore, a reconciliation at the end of every month or year does not occur from Hansen to SAP or vice versa. This has been verified during the Revenue Tool Project analysis as well.

A review of the balance sheet account for "Street Opening Deposits" is summarized below. As of March 31, 2005 approximately \$296,000 is for deposits received before Fiscal year end 2003/2004.

Fiscal Year End	Deposits Collected	Deposits Returned		Outstanding Balance
		2004	2005	
2004	\$ 173,657.95	\$ (61,600.00)	\$(26,000.00)	\$ 86,057.95
2005	\$ 144,749.00	-	\$(39,000.00)	\$ 105,749.00

Inspection of Street Cuts

Fiscal Year End	Deposits Collected	Deposits Returned		Outstanding Balance
		2004	2005	
Balance outstanding for fiscal years 2004 and 2005				\$ 191,806.95
SAP balance at March 31, 2005				\$ 487,765.65
Street opening deposits prior to 2003/2004				\$ 295,958.70
<p>The amounts returned represent the deposits collected within fiscal years 2004 and 2005. Total returns in 2004/2005 were \$79,300 of which \$65,000 were for deposits collected in fiscal years ended 2004 and 2005 and the remaining \$14,300 were for deposits collected prior to fiscal year end 2004.</p> <p>Source: SAP Account - 2304 Street Opening Deposits.</p>				

Financial Services Staff maintain a spreadsheet of the above information and attempt to reconcile the account with Hansen and Richter. This process is unnecessarily time consuming and inefficient. The process requires four steps versus two steps to accomplish a similar reconciliation. The current process involves reviewing the balance sheet account in SAP to locate the batch number. With the batch number identified, staff then review Richter to ensure the payments were received. Then staff review the accounts receivable archive to identify the Hansen permit number and then verify the data in Hansen. As highlighted in the report, Hansen does not currently report on fee transactions through Crystal Reports.

Appropriate fees are not collected as required under the Streets By-Law Section 24(2). This by-law section requires the future settlement charges to double. In order to collect the doubled fees, the HRM would have had to notify the property owner that the street would be resurfaced within the next 24 months. Since data is not integrated within Hansen, and staff only receive an annual capital projects spreadsheet indicating which streets are designated for resurfacing, the ability to charge this fee is ineffective.

Recommendation

- Staff review Section 24(2) of the streets by-law and propose changes to reflect where HRM has in fact resurfaced a street within a specified period of time versus the current language in the by-law.

Reinstatement Inspections - Building Permits

A review of 115 reinstatement inspection types in Hansen indicate ineffective systems to ensure that reinspection of street cuts occur during the warranty period. P&D inspectors and their supervisors have the

use of Hansen. The review of the 115 reinstatement inspections found various deficiencies. Nineteen (19) of the reinstatement inspections relate to current activity, which is still under warranty, and no further analysis was conducted. The remaining 96 reinstatement inspections had the following noted issues:

- Seven (7) out of Nine (9) reinstatement inspections were waived without descriptions in Hansen why the inspections were waived.
- Forty-two (42) reinstatement inspections with a schedule date before 30 June 2005 still had “no action” indicated in Hansen
- Sixteen (16) inspections scheduled before 30 June 2005 were passed.
- Only two (2) reinstatement inspections completed since the change in By-Law S-300 have occurred. In both instances, the required time period had not elapsed when the reinstatement inspection occurred.
- Since there is no reconciliation between Hansen and SAP or fee reporting in Hansen, it is inconclusive whether the appropriate fees and deposits were collected for the 96 permits issued.

The listing of the 115 reinstatement inspections is attached as Appendix 1. This list was compiled by the review team by selecting “Reinstatement” inspection types in the Hansen Inspection Module. The list of reinstatement inspections was provided to the Acting Manager of Inspections for follow up within Planning & Development.

The ability to filter within Hansen and identify all permits issued with the excavation in the Right of Way is not currently possible. With approximately 4,400 building applications processed by PD in Fiscal Year End 2004/2005, it is not conclusive if permits issued had all the appropriate reinstatement inspections generated within Hansen.

Planning & Development Management’s Response

P&D Mgt has made changes in Hansen and processes to reflect not only the audit of road conditions at the time of reinstatement, but have added a warranty inspection as described in the by-law. A new process requires review of re-in statements immediately after road cuts are closed. This required a new inspection for staff but afforded an earlier audit of road condition and new trigger point for a later consideration of the warranty. The former Reinstatement inspection condition was changed to require a "warranty inspection" 11 months after the reinstatement inspection. This process and software adjustment ensures both aspects of the bylaws requirements are monitored.

After a complete review of the outstanding “reinstatement” codes in Hansen, as detailed in Appendix 1, P&D staff were assigned to review both the right of way condition

in the field and the office file status. Staff were able to reconcile 95% of files where action was required and have referred the remaining 5% (9 files) back to management for further direction.

Street and Services Only Permits - Right of Way

A review of permits processed within Hansen for Fiscal Year End 2004/2005 identified 1,289 permits that were streets and services only. Of the 1,289 permits only 727 related to excavations in the right of way. Hansen or Crystal, at the present time, does not provide any summary reports related to these permits. A detailed report has been designed in Crystal that provides the permit number, contractor name and main phone number and location of the work. Attached as Appendix 2 is a summary of the permits. The summary listing of permit types was compiled by the review team by selecting and analysing the individual "SANS Only" permit types processed in Fiscal Year End 2004/2005.

There is not a report that provides where fees/deposits have been waived or the amount of fees/deposits collected for permits issued as streets and services only. In addition, there is not a report that identifies the number of open and closed permits. As indicated throughout the report, TPW inspectors do not have access to the permit module of Hansen. Therefore, the workflow tracking of when inspections were conducted, passed or failed and comments is not possible at the present time.

Recommendation

- A Report should be designed and monitored for all permits issued with the condition Excavation in the Right of Way. Flexibility should be provided to allow business unit users to filter only permits issued by their respective groups for review and follow up.
- Design of an exception report that is monitored for appropriate waiving of fees.
- Design of fee transactions code within Hansen that identifies street opening deposits received in the form of a letter of credit or certified cheque in addition to the current payment transaction.

Safeguarding of Financial Instruments

The safeguarding of deposits collected in the form of letters of credit, bonds or certified cheques is maintained by the business units accepting them. These instruments are not recorded in SAP while some are recorded in Hansen. When certified cheques are received, the amounts are shown as paid in Hansen but do not get recorded in Richter/SAP as they are not deposited. There is no accounting within HRM for the total amount of instruments maintained by all business units. It was also observed or identified through interviews that staff maintain the instruments in locked desk drawers. The result is a lack of proper accounting and safeguarding

of the instruments held for warranty purposes.

In addition to the safeguarding of these instruments, there is not a formal means to ensure that the amounts on deposit provide enough financial coverage for the work carried out by contractors performing the work. Therefore, it is inconclusive at this time to determine the level of risk exposure to the HRM. Of the fourteen (14) letters of credit reviewed, original documentation was not identified for five (5) contractors. There are not any guidelines developed to identify what items are required to accept letters of credit from contractors. For example, letters of credit reviewed were either auto extending or annual.

Recommendation

- Redesign of the deposit/fee collection process and accounting should be reviewed between Transportation and Public Works, Planning and Development, Shared Services and Financial Services. This review of processes should have a focus of ensuring appropriate segregation of duties and safeguards are included regarding the fee and deposit collection and record keeping.
- Develop guidelines for the acceptance and form of letters of credits or other financial instruments collected for warranty of street reinstatements.

Future Settlement Fees

Section 24(2) of the Streets by-law requires the non-refundable maintenance fees to double where HRM provides “notice” to the property owner of its intention to pave or re-pave the street within two years of application. However, there is not an integrated system or multi-year capital project process that allows for this section to be applied at the current time. Also, even when the Municipality provides such notice, there is no ability to ensure that the street has been re-paved in the specified time period.

The current use of SAP does not provide the ability to track the use of future settlement fees to a specific location or activity. This results in an inability to determine if the fees are being used for the repair of street cuts for which the fees were collected. A review of the account does identify \$213,000 was for used settled street cut repairs during 2004/2005.

Recommendation

- Review Section 24(2) of the Streets By-law and propose changes to incorporate where a street has been re-paved within a specified period of time prior to the application date the fees shall be as specified in the by-law. This review should include the designation of what constitutes an appropriate period of time.

Lack of Appropriate Exception Reporting

The current configuration in Hansen through Crystal Reports does not provide management with adequate exception reporting capability. There are no reports that provide management with:

- Permits issued where fees and/or deposits have been waived.
- Inspections that are past the required inspection date as required under By-Law S300.
- Permits that have remained open (See next section).

Applications/Permits in Hansen are not closed on a timely basis.

In addition to the exception reporting identified above, is the number of permits that remained opened in Hansen. There is not a formal report or procedure in place to ensure that permits in the system are reviewed and closed on a timely basis. This was evident through the Standard Applications and SANS only permits issued through Hansen.

Halifax Regional Water Commission (“HRWC”)

Under Section 25(5) of the Streets by-law, the Water Commission is responsible for all future maintenance of street cuts until the street is re-paved by HRM. While the HRWC retains responsibility for their street cuts until resurfacing, it is not required to remit future settlement fees to the HRM. The risk that currently lies with the HRWC is the cost to patch their cuts over longer periods of time compared to a property owner who is responsible for a one year period plus a \$250 non-refundable fee. Similar to HRM, the HRWC does not maintain a one-year reinspection process on its street cuts for emergency and incidental work. The one year warranty period required of other street and services permit holders is offset where the HRWC has an indefinite period of time and responsibility for the street cut.

The current risk to the HRM is the inability to track the HRWC’s street cuts on a real time basis and ensure that the cuts are reinstated to the Red Book Standard. The current form of communication of where the street cuts occur is between the HRWC and the TPW (Operations) Municipal Inspectors. The ROW unit does not have real time access to this data thru Hansen as the data is tracked in a spreadsheet. Additionally, the Design and Construction unit does not have an real-time ability to update the street distress index to plan for capital expenditures of future road resurfacing projects.

Recommendation

- Provide on-line permitting access to the HRWC to input current street excavation activity.

The HRWC has proposed to review with HRM the length of time it retains ownership of street cuts and fees that would be required. This review would provide a means for the HRWC to remove itself from the street patching business and focus on the delivery of water services. Both parties to this review need to ensure that the appropriate risks are transferred and maintained relative to the tradeoff of the street cut maintenance.

Recommendation

- Review with the HRWC ownership of street cuts time frame from current status to one similar to other applicants/contractors.

Trench Reinstatement Working Group

Staff from P&D and TPW have held meetings to discuss solutions regarding the street excavations in the HRM. Staff have identified that processes and technical standards and processes require review and updating. In order for staff to improve or review the current standards, processes should be improved or in place to assess the current technical standards. However, HRM does not have any means at present to test technical standards. Staff inspection street construction activities will require training and an understanding of HRM street specifications to ensure compliance with permits as well as ensuring streets are returned to an acceptable condition.

Recommendation

- HRM inspection staff should be trained in HRM street specifications to improve the review of street reinstatements.
- Transportation & Public Works should be trained and utilizing the Hansen permit module.
- Establishment of a road surface testing and reinstatement training facility at Turner Drive or other suitable HRM facility.

APPENDIX 2

Halifax Regional Municipality
SANS Only Applications
1 April 2004 to 31 March 2005

Work Type	Number of Applications	Percent of Total Number of Applications	ROW	SANS Application Fee	SANS Deposit	Future Settlement Fee	Total
Annual Permit	2	0.2%		2,000.00	40,000.00	0.00	42,000.00
Buried Electrical - Lateral	3	0.2% Y		0.00	0.00	0.00	0.00
Buried Telecom - Lateral	18	1.4% Y		1,300.00	7,000.00	3,000.00	11,300.00
Buried Telecom - Main	2	0.2% Y		100.00	1,000.00	250.00	1,350.00
Sidewalk Café	36	2.8%		2,300.00	0.00	0.00	2,300.00
Capital Project	85	6.6%		100.00	0.00	250.00	350.00
Temporary Closure - Crane	6	0.5%		400.00	2,000.00	0.00	2,400.00
Partial Closure - Crane	9	0.7%		800.00	3,000.00	0.00	3,800.00
Culvert	28	2.2%		2,600.00	13,000.00	0.00	15,600.00
Curb/Sidewalk Cut	57	4.4% Y		5,400.00	26,000.00	750.00	32,150.00
Encroachment	5	0.4%		0.00	0.00	0.00	0.00
Extension to Sewer Main	7	0.5% Y		600.00	0.00	1,250.00	1,850.00
Lateral Connection - Main	46	3.6% Y		3,700.00	19,000.00	12,784.93	35,484.93
Lateral Connection - Prop Line	122	9.5% Y		11,700.00	1,000.00	250.00	12,950.00
Partial Closure - Movie	17	1.3%		1,100.00	0.00	0.00	1,100.00
Temporary Closure - Movie	8	0.6%		700.00	0.00	0.00	700.00
Oversize Move	121	9.4%		10,200.00	5,000.00	0.00	15,200.00
Monitor Wells and Bore Holes	21	1.6% Y		1,800.00	5,000.00	500.00	7,300.00
Newspaper Boxes	3	0.2%		200.00	0.00	0.00	200.00
Natural gas Lateral	160	12.4% Y		0.00	150,000.00	10,664.17	160,664.17
Natural gas Main	28	2.2% Y		100.00	17,000.00	22,096.87	39,196.87
Overhead Telecom Lines	6	0.5%		800.00	8,000.00	0.00	8,800.00
Partial Closure - General	4	0.3%		300.00	0.00	0.00	300.00
Refuse Container	6	0.5%		300.00	2,000.00	0.00	2,300.00
Repairs to street surface	3	0.2% Y		100.00	0.00	0.00	100.00
Repairs to sidewalk	1	0.1%		100.00	0.00	0.00	100.00
Rickshaws	5	0.4%		0.00	0.00	0.00	0.00
Renew Lateral Connection - Main	203	15.7% Y		1,100.00	4,000.00	2,250.00	7,350.00
Renew Lateral Connection - Prop	67	5.2%		6,100.00	0.00	0.00	6,100.00
Sewer Cap off	1	0.1% Y		100.00	0.00	250.00	350.00
Temporary Closure - General	8	0.6%		300.00	0.00	0.00	300.00
Utility Pole Support Anchors	36	2.8%		0.00	0.00	0.00	0.00
Buried Electrical - Main	3	0.2% Y		100.00	0.00	250.00	350.00
Natural Gas Main	4	0.3% Y		0.00	0.00	0.00	0.00
Utility Pole Installation	42	3.3%		0.00	0.00	0.00	0.00
Replace Utility Pole	62	4.8%		0.00	0.00	0.00	0.00
New Water Main	7	0.5% Y		400.00	0.00	11,379.00	11,779.00
Water Lateral - Main to Prop	2	0.2% Y		200.00	0.00	500.00	700.00
Water Lateral - Renewal	7	0.5% Y		700.00	1,000.00	1,500.00	3,200.00
New Water Main	2	0.2% Y		0.00	0.00	0.00	0.00
Watermain Relining	1	0.1% Y		100.00	1,000.00	250.00	1,350.00
Watermain Renewal	10	0.8% Y		200.00	3,000.00	16,127.00	19,327.00
Temp Workplace Adjacent to ROW	4	0.3%		200.00	1,000.00	250.00	1,450.00
Temporary Workplace on ROW	20	1.6% Y		1,200.00	5,000.00	1,750.00	7,950.00
ROW	727		22	28,900.00	240,000.00	85,801.97	
Total SANS Only	1,289		44	57,400.00	314,000.00	86,301.97	

