# Manchester City Council Report for Information

**Report To:** Audit Committee - 31 August 2017

**Subject:** Highways Improvement – Update Report

**Report of:** City Treasurer and the Head of Internal Audit and Risk

Management

## Summary

This report provides an update on agreed actions following audits carried out by Internal Audit in respect of highways maintenance and repairs.

#### Recommendations

Members are requested to note the report.

#### Wards Affected:

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## Background documents (available for public inspection):

- Highways Improvement Reports to Audit Committee in October 2016 and 28 June 2017
- Report to Neighbourhoods and Environment Scrutiny Committee in November 2016.
- Internal Audit Annual Report to Audit Committee 23 June 2017

# 1 Purpose of Report

- 1.1 In August 2016 Internal Audit issued a no assurance opinion in respect of Highways Maintenance and Repairs. A follow up audit to evaluate progress made against the agreed management action plan was completed in May 2017.
- 1.2 In June 2017 a report of the Strategic Director, Highways, Transport and Engineering (Director) was provided to Audit Committee. This included an update on areas for improvement identified in the Internal Audit reports and the actions being taken by management to address these.
- 1.3 Audit Committee requested a further more detailed report from the Director be provided and an additional, separate report from Internal Audit on progress made in the implementation of agreed actions.
- 1.4 This is the Internal Audit update as requested.

## 2 Introduction and Background

- 2.1 The original audit report in August 2016 found a range of issues including a lack of established and clear processes for delivery of reactive maintenance work and limited management oversight and scrutiny over contractor performance and quality assurance. The issues arising including poor cost control and widespread growth of work orders with no formal change or approval processes for additional works.
- 2.2 The key areas where Internal Audit recommended further work or attention were made in the first audit report with 11 recommendations made.
  Management included a further 18 actions that they considered necessary to support service improvement.
- 2.3 As a result of the follow up audit in May 2017 Internal Audit reported that a number of additional areas needed to be addressed. These related to management of processes, delivery of reactive maintenance and improvements in quality control and performance. These areas were summarised in eight key actions and were highlighted in order to help ensure focus on areas for further improvement.
- 2.4 This report provides an update on all 37 of these areas of agreed action based on an overview of progress. There is some overlap in the updates provided as a number of the actions being taken are intended to address related issues.
- 2.5 Only limited testing was carried out in some areas with compliance testing of 11 orders undertaken as there have been no completed works orders issued to the Council for payment by the other three contractors at this stage. Progress on actions has been identified through discussions with senior officers tasked with progressing the action plan where testing could not be undertaken.

# 3 Findings

- 3.1 In summary, Internal Audit consider that there has been progress made across most of the agreed actions but there are some specific areas where further time is required in order to fully address key areas of risk, which include the development of an approach to assure the quality and performance management controls for the in-house team.
- 3.2 Some of the completed actions referred to in the Director's June 2017 report had already led to significant improvements in the service and in addition to this Internal Audit can report positively that:
  - Growth on work completed by sub-contractors has been eliminated.
  - weekly management / operational meetings have been established to drive through service delivery and service improvement actions;
  - an agreed definition of a quality repair has been established to enhance the services' knowledge and consistency of approach;
  - positive progress has made in reviewing current ICT and systems and future requirements; and
  - additional qualified and experienced staff have been assigned to a number of roles to help move the service forward.
- 3.3 Internal Audit's assessment of progress against the 37 agreed actions is summarised in the table below.

	Action Points	Complete	Part Complete	Incomplete
August 2016	18	5	8	5
Appendix A	11	2	9	0
May 2017	8	1	7	0
Appendix B				
Totals	37	8	24	5

- 3.4 In summary, there are seven actions from the original Internal Audit report in August 2016 that are complete while five more remain incomplete and 17 are part complete. The incomplete actions relate to:
  - Compliance for spraying defects by Highways Inspectors remains inconsistent. Evidence of spraying was being provided by the sub contractors' in 'before works' photos. The Highways Inspectors are not yet taking photographs of defects and repairs. There are ongoing discussions about the implementation of handheld devices.
  - Structural changes to embed Manchester Contracts repair teams into other new Asset Management Team are still on going with a final structure due to be confirmed shortly.
  - The process for the renewal of the existing TC036 contract has not yet been completed. Action is incorporated in part of six service improvement work streams.
  - Highways Inspectors are not consistently recording Traffic
    Management requirements: whether Basic, Enhanced or that none is
    required. This has been demonstrated in testing as only one of 11
    work orders contained any evidence of Traffic Management review.

- Development of a detailed specification of works within works orders to clarify the depth of excavation / repair material / depth of surfacing for repairs required of contractors. This action is linked to the renewal of an existing contract revision which management are targeting for completion by December 2017.
- 3.5 Seven of the eight areas for further development from the May 2017 Internal Audit update report are considered to be partly complete and one is completed in full.
- 3.6 The 37 recommendations in the two Internal Audit reports are linked to an overarching service redesign of the previously separate Manchester Contracts and Highways Service and as a result the agreed actions from the Internal Audit reports are part of wider strategic developments being progressed within the newly consolidated service. This has impacted the timescales for delivery of some of the agreed actions. In addition, whilst a number of actions have not been completely resolved at this stage there have been other areas of focus for the Service beyond the remit of the audit report in areas such as health and safety, contracts and procurement; finance; and workforce development. Further details of this are to be provided in a separate Highways Services report to the Audit Committee.
- 3.7 We can confirm, however, that in the opinion of Internal Audit progress has been made in a number of areas over the last two months as a result of additional resources being appointed at a senior level in the service.
- 3.8 Internal Audit opinion on progress toward implementation of the recommendations and areas for improvement is included in the actions plans attached in Appendix A and Appendix B.

#### 4 Recommendation

4.1 Audit Committee is asked to note the Internal Audit Update report.

Appendix A: August 2016 Report: Implementation Status

<u> </u>	endix A: August 2016 Report: imple	inemation of	เสเนอ	
	Actions	Audit Opinion on Progress	Agreed Timescales where provide August 2016	Audit Comments
1	Consideration of the findings in relation to the operational practices of sub-contractors and the need for a commercial discussion with the Director.  This should include legal opinion and consideration of the level of evidence to support any contractual claim.	Complete		This was considered and actions agreed between the Strategic Director, Highways, Transport and Engineering, City Solicitor, City Treasurer and Head of Audit and Risk Management.
2	Review the existing framework arrangements and pricing structures to ensure they are 'fit for purpose'. Continue to progress the workstream looking at contracting arrangements, which should be informed by the results of the ongoing procurement exercise to appoint a contractor(s) to clear the current backlog of work.	Part Complete		The renewal of the existing framework is included as part of six work streams which are ongoing with a target date for completion of December 2017. The work streams are:

	Actions	Audit Opinion on Progress	Agreed Timescales where provide August 2016	Audit Comments
				These costs will be used to inform the retender of the TC36 contract which we have been advised will be completed by December 2017.
3	Introduction of contract monitoring and quality assurance checks. The current position around missed SLAs need to be given significant attention. There are also significant improvements to be made around the quality checking of works delivered by the in-house teams.	Part Complete		The Quantity Surveyor carries out quality assurance checks on sub-contractors work via a desktop review of photographs, a Clerk of Works goes out to physically inspect the works completed.  Currently there are still a number of service level agreements (SLA) being missed due to backlog of works to be completed. Additional sub-contractors have been brought in to address the backlog and to complete new works orders.  The work of the In House Teams is quality checked as part of the Quality Tracker which has been implemented however this remains an inconsistent process.  We identified from a review of the tracker from 17 August 2017 there had been no checks on the in-house since 28 July 2017.  We were advised that performance is discussed as part of the weekly management team meetings but this is not evidenced.

	Actions	Audit Opinion on Progress	Agreed Timescales where provide August 2016	Audit Comments
4	Ensuring all orders for repairs under 5m² clearly define the number of defects / metres required against pricing schedules in TC036 (contract). Further guidance is required on orders to ensure a better description is recorded on orders.	Part Complete		Highways Inspectors have been instructed to only mark out and raise a job for a defect which measures over $0.5m^2$ and if there are a number of actionable defects close together to mark as one patch and in their description note the number of potholes within the patch and clearly record any Traffic Management that may be required.  The action is linked to the renewal of TC36 work stream which will review pricing of square metres and is forecast for completion in December 2017.
5	Begin the process for removing ambiguity over the precise location of defects, which may include the use of spraying and/or photographs.	Part Complete		For walked inspections Highways Inspectors have been instructed to spray where safe to do so and the contractors have been advised to return the job if not sprayed.  There is an ongoing programme to move to recording defects on handheld devices which will also allow the Highways Inspectors to take photographs of the defect. This is currently being planned and workshops are proposed for later in the year.  We could only confirm in four of 11 cases that there was evidence the defect had been sprayed.
6	Initiate a formal change control and sign off process to control growth and additions which involves the	Part Complete		A change process has been implemented where the sub- contractor is to obtain authorisation for any changes, such as a difference in the reported size of the defect or if Traffic Management / Restrictive Working is required

	Actions	Audit Opinion on Progress	Agreed Timescales where provide August 2016	Audit Comments
	budget holder or Highways Inspectors. Before any further structural changes within the teams are proposed, it will be important to clearly define and consistently apply change control, including who agrees, tolerances, where information is held and what is updated on Symology, particularly if it impacts on price. The change control should be recorded on Symology.			prior to completing the job. However this is currently recorded outside of Symology through emails or is verbally confirmed which affect the ability to evidence the authorisation.
7	Implement a more robust process to effect and document a permanent repair where temporary repairs have been completed. A process for linked orders needs to be defined and implemented, including the backlog of any orders that have been returned.	Part Complete		Discussions with the Highways Manager, Operations Supervisor and Deputy Director of Operations (Interim) identified that there are issues with linking work orders on Symology. Management have confirmed the need to clarify whether it is a system design issue or a Highways Inspector issue in understanding Symology. An interim solution has been proposed to ensure that linked work orders can be identified but this is not operational yet.  The long term solution is linked to the review of Symology.
8	Implement weekly operational / management meetings to drive through improvement actions.	Part Complete		Management advised that there are weekly management meetings which take place each Friday covering a standard agenda which includes:

	Actions	Audit Opinion on Progress	Agreed Timescales where provide	Audit Comments
			August 2016	<ul> <li>Progress</li> <li>Resourcing</li> <li>Health and Safety</li> </ul> This involves supervisors and managers from Manchester Contracts. Action points were not recorded to demonstrate reviews and to help ensure actions are taken. The service have now agreed to document action points from these meetings.
9	Clarifying when both Traffic Management and restricted working can be applied and the appropriate rates that should be applied.  Further work is required to determine who should identify the requirement for Traffic Management (TM), who determines what TM is to be used, the cost of the TM and the recording of this cost on the orders. This needs to be tied into the permitting process via the GMRAP to ensure that TM does not become a reason for delays in completing work.	Part Complete		The TC36 contract includes some provision for Traffic Management or Restricted Working. It is planned that as part of the renewal of the contract traffic management this will be better defined including prices and rates to be charged.  At present Highway Inspectors have been instructed to make a judgement and record Traffic Management requirements in Symology as Basic, Enhanced or no Traffic Management.  Currently Traffic Management requests have to be approved by the Council. In our testing we have noted instances where Traffic Management charges have been queried when the sub-contractor has provided a request for payment which includes costs for Traffic Management. This indicates a greater level of challenge

	Actions	Audit Opinion on Progress	Agreed Timescales where provide August 2016	Audit Comments
				is being applied but there is more action required to address this risk as part of the re-letting of contracts.
10	Start to record on Symology details of work completed by the in-house teams to allow on-going assessments to be made over productivity and value for money. Sufficient information needs to be recorded on Symology to enable effective performance management of the in-house teams and comparison of productivity with subcontracted work.	Part Complete		It has been built into Symology to specify whether works are sub-contracted or undertaken by the in-house teams.  Performance is currently monitored outside of Symology by the Highways Manager as there is a lack of confidence in the data that Symology produces. This is being considered as part of the Symology work stream.  Performance is monitored by the number of orders which are completed by each gang (whether in-house or sub-contracted) however the order will contain a varied amount of works orders depending on how this has been packaged. Therefore the current performance data is not an accurate reflection of the number of work orders completed.  At Manchester Contracts there had been issues with monitoring performance at an individual level in the inhouse teams as the supervisor issued all orders to himself and then issued them to the various gangs for completion.  We were advised that progress is discussed at the weekly team meetings which needs documenting.

	Actions	Audit Opinion on Progress	Agreed Timescales where provide August 2016	Audit Comments
11	Each invoice from sub-contractors where there is a discrepancy between works ordered and works claimed will be scrutinised and agreed before payment is made.	Complete	In Place	The Quantity Surveyor carries out checks of all invoices received against works ordered to identify any discrepancies. In addition quality assurance checks are carried out on sub-contractors work via a desktop review of photographs. This was a 100% check which has now been reduced to 50% and will be kept under review. In addition a Clerk of Works goes out to physically inspect a sample of the works completed.
12	No work outside the scope of the works order is agreed unless Council officers agree a change (and this change is recorded). If it is unclear from the works order then clarification must be sought.	Part Complete	In Place	A change process has been implemented where the sub- contractor is to obtain authorisation for any changes such as a difference in the reported size of the defect, if Traffic Management or Restrictive Working was required prior to completing the job. However this is currently recorded outside of Symology through emails or verbal confirmation. These changes need to be recorded on Symology to provide the appropriate audit trail.  Our testing identified in three instances there was growth and in only one case we could confirm this had been approved and this was through an email thread and was not recorded on Symology.
13	One sub-contractor should be contacted and formally brought in to discuss – we are potentially looking	Complete	6 Weeks	See action one.

	Actions	Audit Opinion on Progress	Agreed Timescales where provide August 2016	Audit Comments
	at invoices where work has been claimed but not completed			
14		Part Complete	In Place	Highways Inspectors have been notified of the minimum contract requirements for 2 square metres.  Where a group of defects are present, the Highways Inspectors have been instructed by the Highways Inspector Manager to order 2 square metres minimum. However for isolated defects, Highways Inspectors have been instructed to order work in 0.5 square metre blocks in order to preserve the integrity of good condition adjacent carriageway / footway.  The bandings for orders will be reviewed as part of the renewal of TC36.
15	Managers will now accompany each Highways Inspector on-site over the coming weeks to ensure that marking out is being undertaken in accordance (and consistently) with the recent office briefing; that appropriate Personal Protective Equipment is being used; and that any typical issues faced by Highways Inspectors are being clarified and answered first hand.	Complete	2 Weeks	Managers were accompanying Highways Inspectors on site however the process has now been developed into a Quality Tracker which is completed weekly for a target sample of 30 completed works orders.  The quality tracker looks at the following:  • Defect Correctly Marked.  • Site Check Quantity (no.)  • Site Check Area (square metres)  • Works Order Measurement (Area, square metres)  • Acceptable Measurement Correlation

	Actions	Audit Opinion on Progress	Agreed Timescales where provide August 2016	Audit Comments
				The checks are completed jointly by an officer from the Highways Inspectors section and an officer from Manchester Contracts.
16	areas for repair. If the Highways Inspectors cannot spray the defect they should note on the ticket where / how they have marked the defect to avoid tickets being returned. An effective repair size should be agreed, ordered and sprayed consistently for small defects.	Incomplete	In Place	For walked inspections Highways Inspectors have been instructed to spray paint areas for repair where it is safe to do so and the contractors advised to return the job if it has not been sprayed.  There is an ongoing programme to move to the use of recording defects on handheld devices which will also allow the Highways Inspectors to take photos of the defect. This is currently being discussed and workshops are planned for later this year.  Our testing identified mixed evidence of compliance because in 11 cases:  4: evidence that the defect had been sprayed  2: unable to identify which were the before / after photos  2: could not see evidence the defect had been sprayed from the before photo  3: photos had not been provided by the subcontractor.
17	Manchester Contracts staff to undertake checking on subcontractors work (site visit) to review both quality and the amount	Complete	In Place	The Quantity Surveyor carries out quality assurance checks on sub-contractors work via a desktop review of photographs and a Clerk of Works goes out to physically inspect the works completed.

(until	rk claimed and completed Quantity Surveyor and Clerk orks are appointed).	Audit Opinion on Progress	Agreed Timescales where provide August 2016	Audit Comments
18 A morestable sample under outcome correct Mancle involved independent of the correct of the c	nitoring template has been dished to undertake a weekly de of orders against works at taken with a pass / fail of and commentary on active actions back to chester Contracts. This will be managers undertaking dendent quality inspections on The template is currently being and between the managers and dill have circa 30 sites covered week.	Part Complete	2 Weeks	There is a quality tracker which is completed weekly for a sample of completed works orders (target of 30 per week).  This checks the following for Highway Inspectors:  • Defect Correctly Marked  • Site Check Quantity (no.)  • Site Check Area (square metres)  • Works Order Measurement (Area, square metres)  • Acceptable Measurement Correlation  The checks for the contractors includes:  • Edges being Squared and Sawn cut  • Compacted  • Levelled  • Use of like-for-like materials  • Edges being sealed  Whilst we identified checks are being completed in line with the agreed action this is not done for the 30 sites each week as originally specified. A review of the tracker identified the number of checks carried out varied from 11 to 34 checks and these were completed on a two weekly basis rather than weekly. The target of 30 and

	Actions	Audit Opinion on Progress	Agreed Timescales where provide August 2016	Audit Comments  timescales for checks is now being reviewed so that
				checks can be effectively targeted.
19	Inspectors photographing each defect where an order is being raised and the contractor taking before and after photographs to support the checking process. This ties in with the device refresh project. Consideration should be given to ensuring both the Highways Inspectors and the Inhouse teams are also taking photographs as this will greatly improve the process.	Part Complete	2-3 Months	The Highways Inspectors do not take photographs. The use of handheld devices is proposed and implementation is under discussion.  Sub-contractors are required to take photographs before, during and after jobs and this is checked as part of the Quantity Surveyor check on completed works.  Currently the in-house team do not take photographs of works with the exception of the city centre team. This is under development and part of a wider programme of activity to align the current workforce to more modern methods of working.
20	The current contract does not really support the volume of work being passed through it. Alternative charging models are available and an immediate review has suggested that moving to a day works model with a gang with labour and plant may provide better value for money. Consideration to a new contract should also include the methods of	Part Complete	1 Month	The TC36 contract is to be replaced and action to do this is included within the six work streams underway and will involve confirmation of specification and procurement processes. Management are to confirm the timeline for completion of the specification and tender action.

	Actions	Audit Opinion on Progress	Agreed Timescales where provide August 2016	Audit Comments
	fixing defects. The current procurement process to select a contractor to clear the backlog of orders may inform future contracting models.			
21	Recruit a Clerk of Works and a Quantity Surveyor to support Manchester Contracts in the checking of repairs. Workload and roles and responsibilities need to be considered in the new ways of working.	Complete	1 Month	The structure is still being developed and recruited to. However, roles and responsibilities of the Clerk of Works and a Quantity Surveyor have been established and are in place in line with the action.
22	Structural changes to embed Manchester Contracts repair teams into other new Asset Management Team. All of the action points need to be considered under any structural changes to ensure the positive steps taken are continued.	Incomplete	9 Months	The Highways Inspectors and Manchester Contracts are now located in one office. The Citywide Highways Manager confirmed that the current approach has been to stabilise the existing structure by recruiting permanent managers in key senior positions. Once the structure is stabilised management may consider further enhancements to the structure to support operational efficiency.
23	A new contract for sub-contractors is required which will look at partnering with contractors to provide a better, more aligned approach.	Incomplete	9 Months	The renewal of the existing TC36 contract is included in part of the six service development work streams and management need to confirm the detailed timeline for completion of the specification and procurement phases.

	Actions	Audit Opinion on Progress	Agreed Timescales where provide August 2016	Audit Comments
24	Any Traffic Management required that is more extensive than that which can be carried out by the mobile repair team needs to be approved by Manchester Contracts.	Part Complete	In Place	It has been confirmed to sub-contractors that Traffic Management requests have to be approved by the Council before charges can be applied.  Our testing identified some cases where Traffic Management had been approved however this was either through email treads or verbal and not recorded on Symology as expected. Work needed to improve consistency is recognised and planned. In our test sample we did find some evidence that the Quantity Surveyor carried out reviews of Traffic Management charges raised by sub-contractors and these had been queried where the charge appeared unsupported.
25	Highways Inspectors will highlight on works orders where extensive Traffic Management is required.	Incomplete	1 Month	Highway Inspectors have been instructed to make a judgement and record Traffic Management requirements in Symology as Basic, Enhanced or no Traffic Management. From 11 work orders examined we identified only one instance where Traffic Management was specified but not at what level this was required. This requirement remains inconsistently applied.
26	Detailed specification of works required will be captured within the works order to clarify – depth of excavation / repair material / depth	Incomplete	1 Month	This is not done within current operational processes. Action to address this is linked to the renewal of the existing TC36 contract and therefore included in part of the six service improvement work streams now

	of surfacing etc. A standard repair detail will also be passed to subcontractors and Manchester	Audit Opinion on Progress	Agreed Timescales where provide August 2016	Audit Comments  underway. Management have advised this is expected to be complete by December 2017.
27	Contracts.  Manchester Contractors have a supervisor in place undertaking checking and training of the In House operational teams.  Additional information needs to be recorded.  Additional quality checks and inspections of the in-house teams need to be put into place.	Part Complete	In Place	A quality checking process has been developed where sub-contractor works are inspected on a sample basis by the Quantity Surveyor and the Clerk of Works. In addition a quality template has been developed to check completed work orders on a sample basis.  The work of the in-house teams is quality checked as part of the Quality Tracker which has been implemented however this remains an inconsistent process. We identified from a review of the tracker from 17 August 2017 there had been no checks on the in-house team since 28 July 2017.
28	Clear change control process implemented using Symology to manage any 'growth' deemed necessary. This needs to be considered by the Symology work stream.	Part Complete	3 Months	A change process has been implemented where the sub- contractor needs to obtain authorisation for any changes such as a difference in the reported size of the defect or if Traffic Management / Restrictive Working is required prior to completing the job. This is currently recorded through emails or is verbally confirmed rather than recorded on Symology.

	Actions	Audit Opinion on Progress	Agreed Timescales where provide August 2016	Audit Comments
				This action will be addressed through the Symology replacement work stream which management advised is expected to be completed by December 2017.
29	Define and agree the definition of a quality repair.	Complete		Currently there are five criteria for reviewing the quality of repairs:  • Edges being Squared and Sawn cut • Compacted • Levelled • Use of like-for-like materials • Edges being sealed  As part of the TC036 renewal a more detailed criteria for defining a quality repair will be introduced.

Appendix B: May 2017 Follow-up Report: Implementation Status

No	Actions	Highways Reported Status	Audit	Agreed	Audit Comments
			opinion	Timescales	
			on	where provided	
			Progress	in May 2017	
30	A backlog of uncompleted work, issued to the sub-contractor since September 2016 has developed. As a result, the sub-contractor is currently failing to meet the majority of target SLA's.	Several key items are relevant and work is ongoing as follows:  1) Manchester Contracts have procured additional resource capacity – now with multiple external providers to reduce backlog of work, including re-focus on clearing those within SLA.  2) An operational management team has been established and meets weekly to track productivity and performance which has improved significantly since monitoring began.  The Pothole & Drainage Improvement Programme work is reviewing the Inspection Code of Practice from a risk perspective and this will reduce the future SLA burden on the Council with more prioritised and realistic repair timeframes.	Part Complete	Jan 2018	<ol> <li>We confirmed that there have been an additional four contractors procured to help address the backlog.</li> <li>Management advised that there are weekly management meetings which take place each Friday covering a standard agenda which includes:         <ul> <li>Progress</li> <li>Resourcing</li> <li>Health and Safety</li> </ul> </li> <li>These meetings involve supervisors and Managers from Manchester Contracts. However action points are not recorded to ensure that actions are taken.</li> <li>The new Inspection Code of Practice is being considered as part of the development of the service to meet the implementation deadline of October 2018.</li> </ol>

No	Actions	Highways Reported Status	Audit opinion on Progress	Agreed Timescales where provided in May 2017	Audit Comments
31	Returned Incomplete Orders  Orders that the sub-contractor has not been able to complete are returned to Manchester Contracts. However, there is no robust process for how these orders are resolved and tracked.	Better specification and definition at source of inspection is helping to reduce the volume of Works Orders returned incomplete. This is being further bolstered by the development of more robust processes around the identification and prior agreement of appropriate working arrangements and requirements between Manchester Contracts Supervisors / Works coordinators and their Contractor counterparts. More work is still to be done around the formal recording of any agreements made to ensure clear accountability and appropriate audit trail and this is being picked-up as part of the P&DI Symology project workstream.	Part Complete	Oct 2018	The Quantity Survey advised that the number of returned incomplete orders had significantly reduced since the Audit Report in August 2016. However, a robust process has not been developed which will allow effective data tracking of this issue. The process will be picked up as part of the Symology work stream.
32	Open Orders	The Manchester Contracts Commercial Team now have a robust mechanism in-place to	Complete	Process concluded and	The Quantity Surveyor carries out quality assurance checks on sub-contractors work via a desktop review of

No	Actions	Highways Reported Status	Audit opinion	Agreed Timescales	Audit Comments
			on Progress	where provided in May 2017	
	The sub- contractors have unpaid orders for which the works have been completed.	validate all incoming applications for payment and this is informed by photographic review of all repairs undertaken with follow-up site checks by a Clerk of Works across a sample of items before final payment is approved. Any items where quality is identified as substandard and/or where remediation remains necessary are returned to the sub-contractor without payment until evidence is provided of satisfactory completion	Tiogress	procedure now adopted	photographs, a Clerk of Works will go out physical inspect the works completed.  The open order issue arose with one of the sub- contractors where circa £0.5m of unpaid orders were identified. These were incomplete work orders which were reallocated to new sub-contractors in April 2017.
33	Control and Management of the work completed by the in-house team  Sufficient information is not being produced to	As evidenced herein, improved operational management and weekly tracking is now being used to more effectively direct and monitor performance of inhouse workflow, quality and productivity between and relative to sub-contractors. Some early work has been undertaken by the Manchester Contracts management team	Part Complete	Jan 2018	Currently there is performance management for all the external subcontractors in terms of daily performance tracking.  Currently the number of works orders completed by the in-house team is monitored, however it has been identified that a works order may contain any number of individual jobs and therefore performance figures are not reflective of

No	Actions	Highways Reported Status	Audit opinion	Agreed Timescales	Audit Comments
			on	where provided	
			Progress	in May 2017	
	enable effective performance management of the in-house team and comparison of productivity with the sub-contractor.	around the establishment of a set of appropriate Standard Minute Values (SMV's, employed by other local authorities elsewhere) to benchmark and provide an effective productivity and performance management tool for team outputs – to be monitored daily, reviewed weekly and acted upon monthly. A sample of typical outputs has been measured recently and the next stage will			the jobs completed. There is no monitoring of quality of the in house teams.  The Highways Manager advised us that once an upgraded Symology system is in place it will be utilised to assist with the performance reporting for Highways.
		require senior management to agree the principles, justification and benefits for employing such an SMV system.			
34	Highways Inspectors	A number of key changes have been introduced since August 2016 to enhance the			For walked inspections Highways Inspectors have been instructed to spray where safe to do so and the contractors
	Potential improvements could be made in ensuring consistent and quality orders	robustness of inspections. These include a return to marking-out of defects; better specification of repair area against TC036 payment schedules; and early definition	Part Complete	Jan 2018	have been advised to return the job if this was not sprayed. There is an ongoing program to move to the use of recording defects on handheld devices which will also allow the Highways Inspectors to take photos of the defect this is currently

No	Actions	Highways Reported Status	Audit opinion	Agreed Timescales	Audit Comments
			on	where provided	
			Progress	in May 2017	
	from Highways	of potential Traffic			under discussion and workshops are
	Inspectors.	Management requirements to			planned for later this year.
		assist works allocation and			
		programming. The Service is			Highway Inspectors have been instructed
		also working currently towards			to make a judgement and record Traffic
		the formalised use of mobile			Management requirements in Symology
		hand-held devices to record			as Basic, Enhanced or no Traffic
		live the outcome of safety			Management.
		inspections – this will enhance			O martin Traffic Management and a second
		accuracy of repair specification			Currently Traffic Management requests
		at source and will also provide			have to be approved by the Council and
		photographic evidence of the			we have noted instances where Traffic
		marked defect to improve workflow and provide			Management has been queried when the sub-contractor has made a request for
		transparency in the end-to-end			payment and traffic management has
		inspection, repair and payment			been included.
		process.			been included.
35	Traffic	Since Autumn 2016, the			The current TC36 contract does not
	Management	Inspectors have been formally			contain any provision for Traffic
	and Restricted	providing an early judgement			Management or Restricted Working. As
	Working	identification on potential traffic			part of the renewal of TC36 Traffic
	- Working	management requirements to	_		Management and Restrictive Working will
	Clarity is	assist the Contractor's	Part	Jan 2018	be included within the price.
	required over	coordination of work activity –	Complete		
	responsibility for	and to promote more efficient			At present Highway Inspectors have
	identification	and effective working. In			been instructed to make a judgement and
	and type of	addition, future operational			record Traffic Management requirements
	Traffic	arrangements are being			in Symology as Basic, Enhanced or no

No	Actions	Highways Reported Status	Audit opinion on Progress	Agreed Timescales where provided in May 2017	Audit Comments
	Management and how both this and Restricted Working are captured on work orders.	considered and developed further under the Pothole & Drainage Improvement Programme ongoing, particularly the Symology and TC036 Renewal project workstreams.			Traffic Management. We did not see many examples of this recorded on works orders in our sample.
36	Capacity of Individuals  Further work is required in determining officer priorities and implementation of effective and efficient processes. This will outline the requirement for further resourcing.	Work ongoing over a number of recent months has sought to enhance how the service delivers its inspection and repair function. This has included recent co-location of in-house inspection and repair staff to reduce some barriers and historic inefficiency around ensuring and delivering a quality repair successfully within SLA. This has been supported with the identification and progression of recruitment to key operational management and business support roles to provide appropriate capacity, greater accountability and resilience that will bolster service continuity and reduce	Part Complete	Jan 2018	Co-location of in house inspection and repair staff has concluded.  Management have confirmed that there are range of actions underway to address the underlying reasons for service capacity and resilience issues. These actions include:  • Structure /roles review.  • Work load assessment.  • Recruitment and appointment.  • Skills audit.  • Health and Safety co-ordination.

No	Actions	Highways Reported Status	Audit opinion on Progress	Agreed Timescales where provided in May 2017	Audit Comments
		any potential single points of failure.			
37	Working outside of Symology  There is a project considering how Symology is used and potential changes to methods of working. This should help address the additional areas identified (i.e. Returned incomplete orders, open orders and monitoring Missed SLAs)	The Service is continuing significant work with the Symology service provider and internally with system users to better configure and more accurately manage work progress and report outcomes. This work is being driven forward through the Pothole & Drainage Improvement Programme 'Symology Workstream' and once concluded will provide a more robust platform for the accurate management of operational, commercial and quality aspects of highway repairs. Bolstered by much improved process / procedures with more clearly defined ownership and accountability, the service continues in the meantime to manage some of its delivery outside of Symology (for example, recording the sample checking	Part Complete	Jan 2018	ICT are currently in the process of documenting the end to end process flow. This will help to inform the scope of work for the redevelopment of the IT system architecture for Symology.  Currently 11 specific workshops have been organised to talk through various elements of the end to end process. These workshops will be attended by a range of Highways staff including senior management to improve engagement but also develop a standardised approach.  This should lead to new approaches to workflow being implemented and embedded.

No	Actions	Highways Reported Status	Audit opinion on Progress	Agreed Timescales where provided in May 2017	Audit Comments
		around the quality of inspections and repairs) but this is only as an interim measure pending the refinement and embedding of an upgraded Symology system.			