The City Auditor had concerns about the reported status of recommendations #1 & #2. The City Council's Transportation, Infrastructure & Operations Committee agreed and asked for additional information in another ARTS report. 01/29/2020

AUDIT REPORT TRACKING SYSTEM (ARTS)

SECTION I: SUMMARY INFORMATION			
Audit Title:	GOkc Sidewalk Repair Program Could Be Improved	Audit Release Date:	04/22/2019
Department:	Public Works	Last Report Date:	First ARTS Report
Department Director:	Sherri McIntyre	This Report Date:	01/03/2020
Contact Person/Phone:	Mark Montgomery 8162566038	Expected Presentation Date:	01/29/2020
SECTION II: RECORD OF IMPLEMENTED RECOMMENDATIONS			
1. Implemented 07/01/19)	3. Implemented 04/31/19	
2. Implemented 05/02/19		4. Implemented 07/01/19	

SECTION III: SUMMARY OF IMPLEMENTATION EFFORTS

Recommendation 1: The director of public works should ensure staff enforce GOkc Sidewalk Repair contract requirements.

Status of Recommendation: Implemented

Implemented – Section 1740 and 1030 of the construction contract have been modified to reflect the field practices and staff is to the follow the contract requirements. The contractor is informed on the updated sections in the contract in the Preconstruction conference and the inspectors will receive training on the updated sections of the contract before spring construction. The outcome from this implementation improved services/processes.

Recommendation 2: The director of public works should ensure inspectors use a standardized inspection checklist for GOkc Sidewalk Repair projects consisting of all contract requirements and do inspections throughout the project.

Status of Recommendation: Implemented

Implemented – A new sidewalk blockface inspection GoBond check list has been created. The outcome from this implementation improved services/processes.

Recommendation 3: The director of public works should establish written procedures for GOkc Sidewalk Repair projects on how sidewalks should be installed to accommodate trees on private property.

Status of Recommendation: Implemented

Implemented – We have an updated our standard operating procedure regarding sidewalks around trees that impact the sidewalk construction. These procedures cover when the sidewalk needs to enter into private property, and when traversing sidewalk around private trees impacting the right-of-way. The outcome from this implementation improved services/processes.

Recommendation 4: The director of public works should add a requirement in GOkc Sidewalk Repair contracts that contractors must communicate to residents when grass will be restored to areas affected by sidewalk construction.

Status of Recommendation: Implemented

Implemented – Revision to the specifications for Section 01740 - Cleanup Operation Specifications, along with a draft example form letter has been added to the contract. The outcome from this implementation improved services/processes.

SECTION IV: ADDITIONAL OUTCOMES



CLEANUP OPERATIONS

Project Number:	
Project Title:	

- **A.** <u>General:</u> After a maximum period of fourteen (14) hours from the placement of concrete, the Contractor shall be responsible for cleanup operations related to completed concrete work as follows:
 - 1. Within a maximum period of three (3) working days after tear-out of drive approaches, walk-ins and walk-outs, sidewalks, and curbs, the new concrete shall be placed.
 - The contractor shall not work on or place materials on the newly placed concrete for a minimum of 24 hours. The contractor is responsible to repair or replace any locations showing visible marring of the concrete caused during the performance of the cleanup operations.
 - 3. The Contractor shall coordinate the construction with residents and/or businesses by door-to-door signage. This notification shall include the date of distribution, the date in which the sodding or hydro seeding will be placed, as indicated on the sample provided on page 01740-3 of this section. The Contractor shall be responsible for providing and distributing the notifications within 24 hours after all concrete is placed on one side of a block face.
 - 4. Removal of forms and debris removal from sidewalks and parkway areas shall be accomplished within two (2) working days after the concrete placement.
 - The backfilled areas within one foot of new concrete shall not be compacted until the concrete has cured a minimum of four (4) days. Backfill shall be in accordance with Sections 2100, 2200 and 2300, "Standard Specifications and Design Criteria", and Section 02920 of this Project Manual.
 - 6. Within a maximum period of ten (10) working days after all concrete is placed on one side of a block face, the Contractor shall be required to complete all joint caulking, pavement restoration and sodding or hydro seeding. If construction is being performed during periods other than designated sod seasons, all unsodded locations shall be completed within ten (10) working days after the beginning of the next sod season. Temporary landscaping will be placed outside of the designated sod seasons at the Contractors

- expense within the maximum period of ten (10) working days after all concrete is placed on one side of a block face.
- 7. The contractor shall not operate any mechanical equipment, such as a bobcat, on or within two (2) feet of newly placed concrete to perform the cleanup operations.
- 8. If cleanup, backfilling, sodding, joint caulking or pavement restoration is not accomplished within the above limits, all tear-out operations shall cease until these items are finished or as directed by the Engineer.
- 9. No debris shall be placed in the street during the construction process. The contractor shall remove all debris as it is created. Debris stockpiling of any kind shall be prohibited.
- 10. Construction will be permitted along one side of alternating blocks, one side of the street at a time, or any other combination, provided that both sides in any one block are not under construction at the same time.
- 11. The Contractor shall be limited to working no more than two (2) consecutive blocks on a street at any one time.
- 12. Measurement for payment of completed items will be subject to the completion of these cleanup operations.
- **B.** <u>Seasonal- Construction Periods:</u> The following conditions will apply to construction performed in the period beginning November 1st and ending March 15th.
 - Tear-out operations shall be limited to an amount that will be replaced the next day. Tearout shall not begin if unfavorable conditions for concrete placement are forecast for the next day.
 - 2. All cleanup operations, as stated above, shall be completed within three (3) calendar days of concrete placement.
- C. <u>Payment:</u> No separate payment will be made for "Cleanup Operations". All costs pertaining thereto shall be included in the contract prices for other items as listed in section 00412 Unit Prices.

SAMPLE NOTIFICATION TO PROPERTY OWNERS
DATE:
SORRY to inconvenience you, but "DATE" we will be installing new grass seed at your property if you wish to remove your car from the driveway, you must do so before 8:00 a.m. "DATE".
PROTECTION of the new grass seed until established. We will water the grass seed until the grass seed is established.
WEATHER permitting, the inconvenience of our work should last no longer than 1 DAY. Please caution children to keep clear of the work.
THANK YOU FOR YOUR COOPERATION
CONSTRUCTION BY:
Public Works Department of Kansas City, Missouri Construction Office (816) 513-6979

HART OF FOUNTAINS HEART OF THE NATION

ADEQUATE MANPOWER AND JOB ABANDONMENT

Project Number:		
Project Title:	 	

Adequate manpower in the form of equipment operators, laborers, concrete finishers, form setters, and foreman shall be on the job at all times during progress of work. The minimum crew shall consist of two (2) laborers, one (1) equipment operator, one (1) concrete finisher, one (1) form setter, and one (1) foreman. If at any time the CONTRACTOR fails to provide adequate equipment or manpower, the Engineer or his representative, may at his sole discretion, cease all operations until the situation is corrected.

Job abandonment shall be considered if adequate manpower has not been on the jobsite for one (1) week. If at any time the CONTRACTOR fails to provide adequate manpower for one (1) week, the Engineer or his representative, may at his sole discretion, contact the CONTRACTOR surety.

PRECONSTRUCTION MEETING AGENDA

- 1. Sign-in
- 2. Introduction
 - A. Project Name and Location
 - 8. City Personnel
 - i. Project Inspector
 - ii. Construction Project Manager
 - iii. Construction Project Engineer
 - iv. Design Project Engineer
 - v. Consultant Project Engineer
 - vi. Project Surveyor
 - C. Contractor Personal
 - i. Project Manager
 - ii. Superintendent
 - iii. Traffic Control-24 hour contact
- 3. Distribute plans and project manuals
- 4. Establish Start Date
- 5. Utility Conflicts or Concerns:
 - A. Water Department
 - 8. Spire
 - C. Evergy
 - D. Spectrum
 - E. SWB
 - F. Google
- 6. Contractors responsibility to call for utility locates
- 7. Parks Department Concerns or Comments
- 8. Contract Changes Sections of the contract have been updated. Please review the contract for changes (i.e. section 01740 CLEANUP OPERATION)
- 9. Streets and Traffic Concerns or Comments-Traffic Control Permit
- 10. Collect the following from the contractor:
 - A. Businesslicense
 - 8. List of subcontractors
 - C. Schedule of work
 - D. Video tapes
 - E. Other necessary permits
- · 11.Calendar Days/Liquidated Damages
- 12. Addendums & Change Orders
- 13. Working Hours or Work Restrictions
- 14. Erosion Control
- 15. Location of approved Dump Site
- 16. Payroll Requirements and Daily Labor Force Reports
- 17. Pay Estimate Schedule/Change Orders
- 18. Project Manuel Summary of Work Review
- 19. Project Open Discussion

SIDEWALK INSPECTION BLOCKFACE CHECKLIST (GOBOND)

	Mark the boundaries of the demolition limits.
	Video all areas of the project that will be affected by construction.
	Check the tree list for conflicts. If there are any tree conflicts, contact Parks and Recreation/Tree Service at 513-8900. See Tree removal (SOP)
	Make sure that the contractor gives property owners sufficient notice of the start of the project. Door hangers within 24 hours of start of removals.
	Inspectors are responsible to notify property owners that any decorative work (landscaping) that is in the City right-of-way needs to be removed and relocated by the property owner before construction begins.
	Make sure that "NO PARKING" signs are installed, and the Traffic Operations Section and Police are given a 24-hour notice for enforcement of lane closures.
	Make sure that "Sidewalk Closed" signs are installed at appropriate locations and detour is setup if needed.
	If a water services curb stop cannot locate in the video notify Water Services Department of the address and that the curb stop needs to be located.
	Keep a daily record of all activities on the project in the project diary.
	Make sure that wage rates are posted and visible. For example, tool box on truck, project sign port-a-potty, etc.
	Make sure that a port-a-potty is on the job site. Make sure that the contractor has established an appropriate area for storage of equipment and materials. If this is to be done on private property, a third-party agreement should be signed by the property owners and the contractor. The inspector is not to negotiate the agreement.
	Make sure that the proper traffic/safety signage is in place. This includes cones, barricades, caution tape, etc.
]	Once an ADA ramp has been poured the inspector should complete the ADA compliance form to confirm compliance within 24 hours after the pour.

Joint Patterns: Sidewalks: Sidewalk surfaces shall be marked with a transverse joint spaced at a distance equal to the width of the sidewalk. Sidewalk greater than 6 feet in width shall be divided by longitudinal joints spaced not less than 30 inches no more than 60 inches with transverse joints spaced to form a square pattern. Edger tool marks shall remain showing unless the sidewalk is slip-formed and subsequently sawed. Curb joints should align with sidewalk joints where they abut.
Joint Patterns: Driveways and bicycle/pedestrian paths: In general, no driveway slab dimension shall exceed 10 feet, although widths no more than 24 times the slab thickness will be permitted to match existing joint patterns.
Isolation Joints: Shall be placed where directed by the plans or Engineer. The preformed isolation joint material shall be left $\frac{1}{2}$ inch below the surface, or a suitable tear strip will be provided to allow for the application of the joint sealer. The newly poured edges of these joints shall be rounded with an edging tool of $\frac{1}{4}$ inch radius.
Contraction Joints: Contraction joints shall be 1 inch deep by $1/8$ inch wide with $\frac{1}{4}$ inch radius. Joint sealer is not required for contraction joints.
On the day of demolition, make sure that the contractor has notified the property owners a second time that construction is getting ready to start. This is accomplished by the contractor walking to the door. This helps to ensure that a property owner who is at home can get any vehicle out before being blocked by construction. Within a maximum period of three (3) working days after tear-out of drive approaches, walk-ins and walk-outs, sidewalks, and curbs, the new concrete shall be placed.
Make sure the contractor has appropriate equipment and trucks available to haul off debris. Demotion debris should be hauled off at the same time demolition is completed.
In case of damage to a utility, the inspector shall make sure the contractor has notified the proper utility. If contractor has not, the inspector shall notify the appropriate utility. Contact numbers for the utilities are located on page 1180-1 of the project manual. Inspector shall document utility damage in the project diary.
Once the contractor has set the forms, the inspector shall check alignment, elevation, subgrade, and the quality control of the materials placed. Refer to Section 02775-1 of the project manual for specific requirements.
The inspectors shall contact the materials testing lab at 513-8755 and let them know when the soil, concrete, or asphalt can be tested.
Inspector shall obtain all concrete and asphalt tickets and make sure the right concrete or asphalt mix design is being used for the project. Material tickets are to be kept in the project file.
Inspectors should request testing of materials at least once in the AM and once in the PM. Inspectors shall document in the diary the construction location of where the testing materials were obtained. Inspectors should take the temperature of concrete when the ambient temperatures rise above 90°. When the concrete temperature is above 90°, the contractor

shall be notified and must provide a method to lower concrete temperature prior to placement. If temperature cannot be lowered, the placement shall stop.
Make sure utilities are adjusted. For example, manholes, sprinklers, water meters, hydrant valves, water valves, handrails, fencing, roof drains, etc.
Make sure that the forms are removed. Ensure that the curbs, sidewalk, and driveways are backfilled, and all excess rock, concrete, asphalt, and debris is removed from the parkway before backfilling areas shall be accomplished within three (3) working days after the concrete placement.
When concrete forms are removed from the curb and "honey comb" is present, the contractor shall grout open areas at the back of curb prior to backfilling.
Make sure that the contractor removes their trash daily.
Prior to asphalt placement, asphalt should be saw cut in a straight line, cleaned of lose debris, and tack coated with asphalt emulsion. Make sure that the contractor compacts the asphalt with a vibratory compactor or asphalt roller at the appropriate temperature for proper compaction.
The asphalt used shall be Type III. Virgin or recycled asphalt shall be used.
Do preliminary walk through for the concrete punch list. This should be completed with the project manager in attendance. Look for cracks, chips, and concrete placed out of specification.
Contractor should rough backfill the curbs, sidewalk, and driveways after 48 hours.
Contractor is required to inform the citizens with a door hanger within 24 hours after sidewalk backfill when sod or hydro seed will be installed on both sides of adjacent block faces.
The contractor is responsible to place suitable soil of up to 6". It shall be top soil that is free from rocks, roots, and trash.
 Prior to sod or hydro seeding placement, make sure the contractor has cut-in the sodding where it ties into existing lawns and fertilizer has been spread. Make sure the sod is watered and rolled. Make sure the hydro seed is watered. Refer to Section 02920-1 of the project manual for specific requirements and Section 2400 of the Standards and Specifications Manual.
Within a maximum period of ten (10) working days after all concrete is placed <u>on one side of a block face</u> , the Contractor shall be required to complete all joint caulking, pavement restoration and sodding or hydro seeding.
The inspector shall complete all field measurements as the job work progresses.

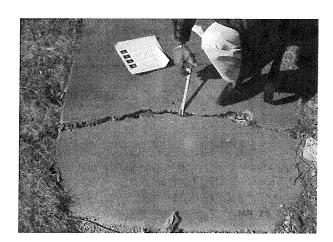
	Complete final walk through for final acceptance after sod is down or hydro seed is established, and the contractor has completed all caulking.
	Inspectors shall check all areas on the project where materials were stored to ensure that the areas have been properly restored.
Signate	ure: Date:

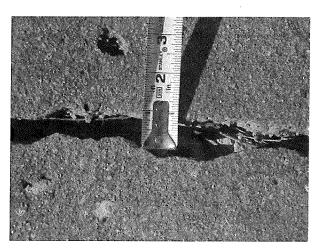
CRITERIA USED FOR IDENTIFYING PORTIONS OF SIDEWALKS, DRIVEWAYS, OR CURBS TO BE SUBSTANDARD (Revised 4/8/09)

This criteria defines the criteria that would cause a portion of sidewalk, driveway, or curb to be considered out of repair.

Sidewalk and Sidewalk Areas Across Driveway

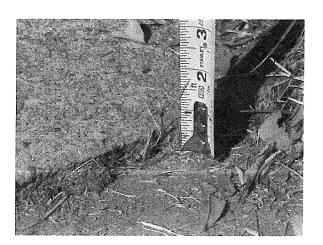
1. Any square having a crack ¾ inch or more wide shall be replaced. (1/2 inch or more wide within the downtown loop.)*



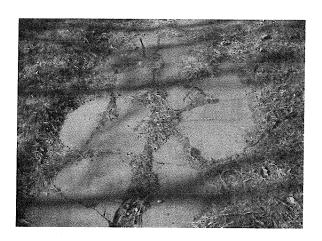


2. An adjoining square whose edge differs vertically by more than ¾ inch shall be replaced. (1/2 inch within the downtown loop.)*





3. Any square that has multiple cracks or structurally unsound shall be replaced.

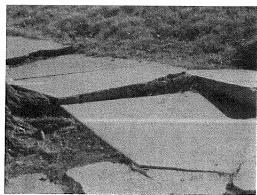


4. Any square that has a loose or missing piece(s) greater than 4 square inches shall be replaced.

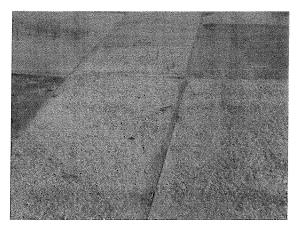


5. Any square that is upheaved or depressed, thereby causing an abrupt change in grade beyond specification shall be replaced.

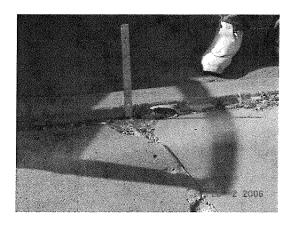




- 6. Any loose material used as a sidewalk shall be replaced.
- 7. Any square with intersecting cracks, loose aggregate, or a deteriorating surface shall be replaced.

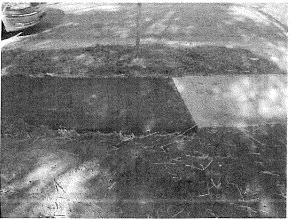


8. Any curb abutting sidewalk is considered subject to the same criteria as for sidewalk condemnation.



 Any material used as a sidewalk that fails to meet the strength and endurance standards established by Standard Plan shall be replaced.





10. Sidewalk that is 25 feet or less in length that is between two squares of sidewalk meeting criteria 1 through 9 above shall be replaced when necessary to provide positive drainage or to provide proper vertical alignment.

DRIVEWAY

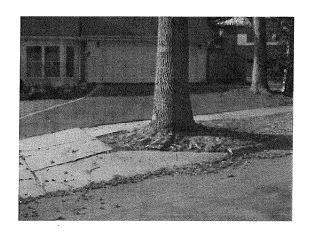
1. Any driveway having a crack in it 1 inch or more wide shall be replaced.

(1/2 inch or more wide within the downtown loop area.)*

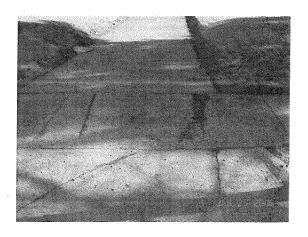




2. Any driveway that differs vertically by more than 1 inch either above or below the sidewalk shall be replaced. (by more than ½ inch within the downtown loop area.)*

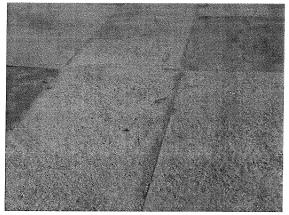


3. Any driveway that has a loose or missing piece(s) greater than 4 square inches shall be replaced.

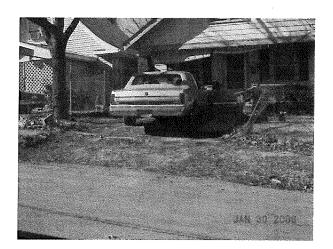


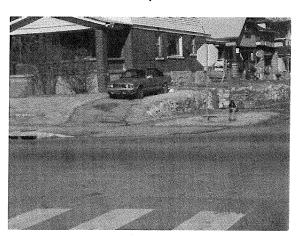
4. Any driveway that is raveled or has surface spalling affecting more than 40% of

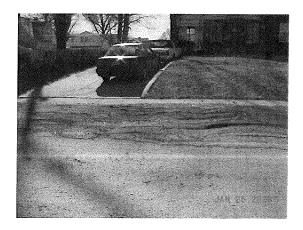
the surface area shall be replaced.



5. Any driveway that cannot serve its intended purpose shall be removed and the area restored with curb, landscaping, and sidewalk as necessary.





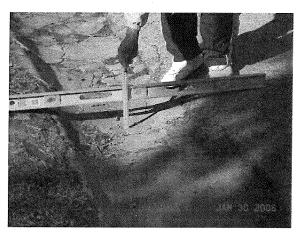


1. Any curb having a measured height of 2 ½ inches or less above the street surface measured at the edge of pavement shall be replaced to the nearest joints.





2. Any curb having a gutter section of 4 inches or more below the street surface measured at the edge of pavement shall be replaced to the nearest joints.



3. Any curb that is raveled or has surface spalling affecting more than 40% of the surface area shall be replaced to the nearest joints.

4. The vertical transition from the new curb to the existing curb shall not exceed a

slope of ½" per foot.



(Example of acceptable slope)

5. Any section of curb that is 25 feet or less in length that is between two sections of curb meeting criteria 1 through 4 above shall be replaced to the nearest joints

if the curb height is 5 $\frac{1}{2}$ inches or less above the street surface measured at the edge of pavement.

*Downtown loop area defined as being bounded by Interstate 70 on the north and east, Interstate 35 on the south and Interstate 29 on the west.

- 11. Below is the current SOP on Street trees with Parks Department as of 9/27/2018
 - 1. PW will submit list of trees to be inspected that conflict with proposed work.
 - 2. Forestry will inspect the trees and give approval for specific trees that are permitted to be removed.
 - 3. Notifications will be posted on trees viewed as healthy with a 14 day notification, to be posted by PW. PW will notify Forestry the date the trees are posted.
 - Notices will be mailed or door hangers to residents along the street where trees will be removed, not just the adjacent homeowner (PW will mail or delivered) And/or
 - 2. Forestry will work with PW to hold a neighborhood meeting if that group can be brought together from comments.
 - 4. With the new energov system, once the tree list for removals is approved by Forestry, a permit should be issued for those trees so it is clear citywide what should be removed.
 - 5. PW will schedule tree to be removed by the PW contractor.
 - 6. Forestry will provide a summary invoice on \$ for the total trees to be replaced following the completion of the project.
 - 7. PW will make payment to Forestry for tree plantings
 - 8. Forestry will oversee and direct tree replacements.

12. Sidewalk width requirements

- 1. If required the sidewalk maybe blocked in or out to obtain the 48".
- 2. If required the sidewalk may have its running slope raised to 8.33%. (This step requires supervisor approval.)
- 3. If sidewalk is blocked out right of way will need to be checked. (This step requires supervisor approval.)
- 4. If required sidewalk maybe blocked in for objects on private property (i.e. trees) (This step requires supervisor approval.)
- 4. Check right of way with Parcel Viewer.
- 5. Check with Public Works Survey group on right of way if not clear.
- 7. If sidewalk is placed outside right of way a sidewalk easement needs to obtain from the property owner. (This step requires supervisor approval.)

DRIVEWAY

1. Any driveway having a crack in it 1 inch or more wide shall be replaced.

(1/2 inch or more wide within the downtown loop area.)*

