Section 34.0



Knoxville, Tennessee March 2022

TECHNICAL SPECIFICATIONS FOR CONSTRUCTION AREA TRAFFIC CONTROL

1. <u>Contractor Responsibility and General Provisions</u>

- (a) The Contractor shall provide, erect, and maintain all traffic control devices necessary to preserve the safe and orderly movement of traffic. All operations shall be scheduled and conducted in such a manner and sequence as to cause the least practicable interference with the traveling public, fire protection, and public utility service.
- (b) Payment for materials and labor associated with the required construction area traffic control shall normally be included in the pay item(s) provided by the Contract. In the event that no such pay item(s) are included, the Contractor shall include such costs in the prices bid for other appropriate Contract items.
- (c) All necessary protective devices and operations shall be in accordance with the *Manual on Uniform Traffic Control Devices* (MUTCD), published by the Federal Highway Administration. A Traffic Control Plan is included with many projects to define specific or typical traffic control needs. The Contractor may request a revision or addition to these plans of operation by making a written request, in advance, to the Director of the Department of Engineering or an authorized representative.
- (d) A project safety officer or other similarly responsible individual shall be made known to the Director of the Department of Engineering or an authorized representative prior to the commencement of construction. This notification shall include a telephone number or numbers where the individual may be reached on a 7 day, 24 hour basis.
- (e) Except as otherwise noted in the project "Special Conditions," total road closures are not permitted. However, if the Contractor determines that one is required, a written request shall be made in advance to the Director of the Department of Engineering or an authorized representative. This request shall state the reason for the closure, estimated duration of the closure, proposed traffic control devices, and the routing of detours. A minimum of two (2) working days are required for review and processing of permit; a minimum of four (4) working days are required for the CBID and UT/Fort Sanders Area.
- (f) Except as otherwise noted in the project "Special Conditions," the Contractor shall provide one adequate traffic lane, minimum of 10 feet in width, in each direction during the hours of 7:00 A.M. 9:00 A.M. and 3:00 P.M. 6:00 P.M.

During hours when work is not in progress, the Contractor shall also maintain one similarly adequate traffic lane in each direction. Exceptions to the above must be approved by the Director of the Department of Engineering or an authorized representative.

- (g) The Contractors attention is called to the *City of Knoxville Policy on Work Zone Traffic Control* (a copy of which is included at the end of this Specification following Section 6).
- 2. <u>Installation and Maintenance of Traffic Control Devices</u>
 - (a) The Contractor shall be fully responsible for the supplying, erection, and maintenance of all traffic control devices. These functions shall occur in a workmanlike manner such that all supports are vertical, all sign panels are generally perpendicular to the travel way, and all legends are horizontal so that they effectively convey the intended message. Signs shall be mounted on stationary or portable supports dependent on the type of work being performed. In general, work being performed at spot locations and for a short duration will necessitate the use of portable supports properly weighted for stability. Traffic control devices shall not obstruct any bicycle or pedestrian facilities adjacent to or within the work zone unless these facilities are approved to be closed and included in the Traffic Control Plan.
 - (b) All existing traffic signs within the limits of this project shall be the maintenance responsibility of the contractor for the duration of construction. This includes stop and street name signs on side streets which intersect within the project limits. This responsibility shall include temporary sign relocations caused by construction activities.

The Contractor shall provide continuous and expeditious maintenance of all required traffic control devices. This shall include, but not be limited to, replacement of sign panels, barricades, and other devices which, in the opinion of the Department of Engineering, are damaged or deteriorated beyond continued use; replacement of broken supports; plumbing of leaning signs; cleaning of dirty signs, barricades, and other devices; repair of defaced sheeting and legends; and replacement of stolen items. All items used for traffic control shall be generally maintained in their original placement condition and such maintenance will be considered a part of the original installation cost. Failure to maintain all traffic control devices in such a manner as to provide continuous safety to the public will be cause for suspension of construction operations until proper traffic control is re-established.

(c) In the event that the Contractor, in the opinion of the Director of the Department of Engineering or an authorized representative, has failed to provide or maintain adequate traffic control devices, the City of Knoxville shall have the right to provide the necessary items and deduct the expense the items from payments due the Contractor.

3. <u>Application and Use of Traffic Control Devices</u>

- (a) Cones are not permissible as channelizing devices during hours of darkness. Standard barricades, drums, and/or vertical panels are permissible, but where used to delineate vehicle paths during hours of darkness, they must be accompanied by steady-burn lights.
- (b) Except as otherwise directed by the Director of the Department of Engineering or an authorized representative, the Contractor shall maintain centerline striping throughout the duration of the project. Where a newly asphalted section of roadway

is to be maintained overnight, temporary centerline and lane line stripes shall be provided by the Contractor at the conclusion of each work day. These stripes shall be a temporary reflective tape or paint with four-inch-wide line segments. The segments shall be two-feet long with thirty-eight-foot gaps. Skip lines shall not be used for lane lines separating a turn lane from a through lane or for edge lines.

- (c) All conflicting and confusing pavement marking shall be removed or obliterated in a fashion consistent with MUTCD, Section 6D-1. Painting over existing striping is not considered to meet the requirements for removal or obliteration. The methods listed below are considered acceptable:
 - 1) Sand blasting using air or water
 - 2) High pressure water
 - 3) Steam or super-heated water
 - 4) Mechanical devices such as grinders, sanders, scrapers, scarifiers, and wire brushes
 - 5) Solvents and chemicals
 - 6) Burning

Any damage to the pavement or surfacing caused by the Contractor's pavement marking removal shall be repaired by the Contractor at the Contractor's expense and by methods and materials acceptable to the Department of Engineering.

- (d) Short-term operations which conflict with existing pavement markings may be permissible, but a proper vehicle path must be ensured through the appropriate use of warning signs, flagmen, and/or channelizing devices.
- (e) Mesh or other fabric-type signs are not considered acceptable for use during hours of darkness.
- (f) Except in operations of short duration, where good sight distance is available, "Flagger Ahead" signs shall be installed where flaggers are required. Flaggers shall utilize stop/slow paddles and proper attire, including a reflectorized orange vest. Flaggers must be trained and certified in flagging operations by one of the following training programs:
 - 1. American Traffic Safety Services Association (ATSSA)
 - 2. National Safety Council (NSC)
 - 3. Tennessee Transportation Assistance Program (TTAP)

The City will accept flagger training programs developed and conducted by construction industry associations, consultant organizations, and contractors if they have an established, written program that meets all MUTCD requirements.

- (g) During periods of non-use, warning signs and other devices shall be promptly covered, removed from the work area, or otherwise positioned so they do not convey their message to the traveling public. If covered, the covering material shall be maintained in a neat and workmanlike manner.
- (h) Unless otherwise notified, the official maximum speed limit is to be used for determining taper lengths, device spacing, sign placement, and other pertinent details.

4. <u>Materials</u>

Materials for all traffic control and marking devices shall be in accordance with the provisions of the current edition of the MUTCD. Exceptions are listed below with reference to the appropriate subsections of the January 1, 2021 edition of the Tennessee Department of Transportation Standard Specifications (TDOTSS) and all subsequent Supplemental Specifications thereto pertaining prior to the advertisement for this contract.

| Material | Subsection |
|--------------------------------------|------------------|
| Signs: | |
| Aluminum and Composite Material | 916.02 (a) |
| Reflective Sheeting | 916.06, Type III |
| Paint | 916.05 |
| Cold Rolled Carbon Steel-16 gal. | ASTM A366 |
| Drums and Barricades: | |
| Reflective Sheeting | 916.06, Type I |
| Temporary Pavement Marking Material: | |

The material for temporary traffic centerline and lane line marking shall be a pressure-sensitive, adhesive-backed, reflective pavement-marking tape or reflectorized paint.

Cones:

Cones shall be a minimum of 28 inches high and weighted at the base.

In addition to the materials certifications required above, the Contractor shall submit a signed, notarized statement that the materials to be used for temporary traffic control comply with the above provisions. This statement shall be submitted prior to the beginning of the work.

5. <u>Method of Measurement:</u>

When the Bid Schedule stipulates that payment will be made for Construction Area Traffic Control on a Lump Sum basis, the pay item "Construction Area Traffic Control" will include all signs, barricades, lights, flag persons, temporary pavement markings, and all incidentals required by this specification, any Traffic Control Plan included in the Contract Drawings, and the MUTCD. Where the Bid Schedule stipulates that payment will be made for Specific Items on a unit basis, measurement will be made by the unit stipulated. Where the Special Conditions and/or notes on the construction drawings stipulate that the cost of Construction Area Traffic Control will be included in other Items Bid, no measurement will be made.

6. <u>Basis of Payment</u>

The accepted quantity of Construction Area Traffic Control will be paid for at the lump sum price bid, which price shall be full compensation for providing Construction Area Traffic Control for the duration of the project in accordance with these specifications and the Traffic Control Plan provided with the construction drawings and/or submitted by the Contractor. This compensation shall include all labor, materials, equipment, and incidentals necessary to complete the work. The compensation shall be paid in accordance with the following schedule.

| Percent of Total | Total Percent Allowed for |
|---------------------|---------------------------|
| Contract on Partial | Compensation for Lump Sum |
| Pay Estimate | Item |
| 5% | 30% |
| 50% | 50% |
| 75% | 75% |
| 100%100% | |

POLICY ON WORK ZONE TRAFFIC CONTROL CITY OF KNOXVILLE, TENNESSEE May 2018

I. Introduction

- A. The proper use of warning devices in roadway construction and maintenance work areas must be planned in advance to meet the individual requirements of the job site. The objective of this policy is to provide maximum protection to employees, plants, equipment, and the public while causing minimum interference to vehicular, bicycle, and pedestrian traffic.
- B. When guarding work areas, always provide more protection than may appear necessary rather than under-protecting. Inadequate protection may promote accidents by presenting the driver, bicyclist, or pedestrian with a false impression of the extent of the work area and the deviations that the traveler must take from the original route in order to safely pass the work area.
- C. Early project planning for traffic control in construction and maintenance areas, as well as implementation and surveillance of the controls during construction are very important.

II. Need for Standards

- A. Problems of traffic control occur when traffic must be moved through, around, or adjacent to road or street construction, maintenance operations, and utility work. No one standard sequence of signs or other control devices can be set up as an inflexible arrangement for all situations due to the variety of conditions encountered.
- B. The *Manual on Uniform Traffic Control Devices* (MUTCD) has been adopted as Federal and Tennessee Law. The MUTCD established principles to be observed in the design, installation, and maintenance of traffic control devices.
- C. These principles and standards are directed to the safe and expeditious movement of traffic through work areas and to the safety of the work force performing those operations.

III. Responsibility

- A. Adequate public protection shall be provided by contractors, public utility companies, railroads, and state and city agencies performing any work on roadways or any work so closely adjacent to roadways as to create hazards or to restrict pedestrian, bicycle, or vehicular flow.
- B. It is important that the authorities having jurisdiction are able to require proper protection, that responsibility be clearly assigned, adequate training of personnel be provided, and that there be adherence to the provisions of the MUTCD.
- C. A temporary traffic control plan (TTCP) should include, but not be limited to, items such as signing; application and removal of pavement and markings; construction; scheduling; methods and devices for delineation and channelization; placement and

maintenance of devices; roadway lighting; traffic regulations; and surveillance and inspection.

- D. A TTCP and permit form shall be prepared by the contractor, public utility company, or state or city agency proposing to do work on or adjacent to the roadway. The TTCP and permit form should be completed in detail, to the complexity of the work project, and note the date of planned beginning and the duration of construction.
- E. The TTCP shall be reviewed and approved by the Director of the Department of Engineering or an authorized representative. A minimum of 48 hours should be allowed for review of the TTCP. Contact the City of Knoxville Department of Engineering, 3131 Morris Avenue, Telephone 215-6100, for additional information and assistance
- F. When the TTCP and permit are approved, the City of Knoxville Department of Engineering will coordinate with the media and other agencies, as needed.
- H. Construction on or adjacent to local streets (traffic volumes of less than 1,000 vehicles-per-day) requiring one lane closures will only require implementation of adequate work zone traffic control procedures as outlined in the MUTCD.
- I. The blockage of a sidewalk, bicycle lane, or other public-use path shall be regarded with the same importance as the closure of a motor vehicle lane by applying temporary traffic control practices. The City may require accommodations for pedestrians and bicyclists that provide a safe, accessible and convenient route through, past, or around a work zone that provides sufficient capacity and is also likely to be followed by the pedestrians and cyclists.

IV. Road Closures

- A. Total road closures for construction and maintenance activities are typically not permitted on principal collector or arterial roadways. Total road closures on secondary collectors and local streets will be considered on a case-by-case basis. Traffic control plans for total road closures must be sealed by a Professional Engineer registered in the State of Tennessee.
- B. In the event of an emergency, and there is no alternative but to close the roadway, adequate work zone traffic control procedures as outlined in the MUTCD shall be implemented. Notification of proper authorities must be made as soon as possible by contacting the E-911 Dispatcher at 215-4010.

V. Sidewalk Closures

- A. The method for providing safe accommodation should be prioritized as follows:
 - 1. Protect the existing pedestrian route from the worksite.
 - 2. Provide a temporary pedestrian route in a parking lane and protect it from adjacent traffic.
 - 3. Provide a multi-use path in a bike lane, and protect it from traffic. The path width must be a minimum of eight feet wide.

- 4. Provide a pedestrian route in an existing bike lane, protect it from traffic, and merge bicycles with traffic.
- 5. Provide a pedestrian route in an existing traffic lane and protect it from traffic.
- 6. Provide a pedestrian detour route.
- B. Closing a sidewalk on one side of the street and directing pedestrians to the sidewalk on the other side of the street is considered a pedestrian detour.
- C. In high pedestrian areas such as the Central Business Improvement District (CBID), Cumberland Ave, Fort Sanders, and other areas designated by the Director of the Department of Engineering or an authorized representative, a temporary pedestrian route should be given priority over vehicular traffic facilities, except when resulting in excessive delay to transit or creates excessive congestion.
- D. Both sidewalks on a block should not be closed simultaneously.
- E. A pedestrian route designated as an established detour route should not be closed.
- F. Signage intended only for pedestrians shall display the word "pedestrian" or the pedestrian symbol. A temporary route shall be clearly marked and include advanced notification of sidewalk closures, detours or diversions. Advanced notification to pedestrians of any detour or diversion shall be provided at the nearest crosswalk or intersection that meets minimum safety requirements on either side of the detour or diversion.
- G. If the work zone affects an accessible pedestrian route, the accessible features along the temporary route shall have accessibility features equivalent to or better than the features on the disturbed route. Where existing physical constraints make it impractical to have equivalent accessibility features, compliance is required to the maximum extent practicable. All physical constraints shall be documented and retained in the project's file. Existing physical constraints include, but are not limited to, underlying terrain, limited right-of-way availability, underground structures, adjacent facilities, intersection geometry, maintaining positive drainage, or the presence of notable natural or historic features.
- H. The pedestrian route shall be free of obstructions and surface hazards, e.g. debris, holes, loose gravel, and mud.
- I. If accommodation for pedestrians must be closed intermittently due to conflicts with construction activities, flaggers must be posted on each end of the route during peak hours when closures are in place. Reasonable flow of pedestrian traffic must be maintained in preference to construction activities and the flow of construction vehicles.

VI. Bike Lane Closure

- A. The method for providing safe accommodation for bicyclists should be prioritized as follows:
 - 1. Provide a bicycle lane on the same roadway past the work zone by shifting and narrowing the adjacent travel lanes.
 - 2. Provide a bicycle lane in an existing travel lane.

- 3. Merge bicyclists and adjacent traffic into a shared travel lane; this method may not be appropriate for higher speed/volume roadways.
- 4. Provide a bicycle detour route.
- B. Signage intended only for bicyclists shall display the word "bicycle" or the bicycle symbol. A temporary route shall be clearly marked and include advanced notification of lane closures, detours or diversions. Signage shall adequately warn bicyclists of any lane shift or shared lane condition.
- C. The bicycle route shall be free of obstructions and surface hazards, e.g. drainage grates, debris, holes, loose gravel, and mud.
- D. All traffic control plans that require bicyclists to merge with traffic shall post construction work zone speed limits of 35mph or less.
- E. If accommodation for bicyclists must be closed intermittently due to conflicts with construction activities, flaggers must be posted on each end of the route during peak hours when closures are in place. Reasonable flow of bicycle traffic must be maintained in preference to construction activities and the flow of construction vehicles.

VII. Hours of Work

- A. When construction that will block one or more lanes of a principal collector or arterial roadway is required, the hours of work shall be limited on weekdays to avoid conflict with peak hour traffic movement. Work on weekdays is permitted before 6:00 A.M., from 9:00 A.M. to 3:00 P.M., and after 6:30 P.M. Work is permitted during off-peak conditions and on weekends except for unusual circumstances, i.e. parades, U.T. football games, etc. More liberal hours are typically allowed on local streets. Other arrangements may be approved on a case-by-case basis.
- B. When an emergency occurs that requires total road closure on a principal collector or arterial roadway, every effort should be made to make the repairs as soon as possible. Notification of proper authorities must be made as soon as possible by contacting the E-911 Dispatcher at 215-4010.

VIII. Street Cut Permits

A. When the work requires that city streets be cut, a permit shall be required from the City of Knoxville Department of Engineering, 3131 Morris Avenue. On an emergency basis, these permits may be obtained by notifying the City of Knoxville Department of Engineering at 215-6100 and then following up with a written request as soon thereafter as practical. In routine situations, a written request outlining the need for cutting the street, the proposed location, the proposed date of work, and the contractor involved shall be supplied in writing to the City of Knoxville Department of Engineering at 3131 Morris Avenue. A minimum of two (2) working days are required for review and processing of permit; a minimum of four (4) working days are required for the CBID and UT/Fort Sanders Area.

B. Construction standards are available at the City of Knoxville Department of Engineering offices at 3131 Morris Avenue and on the Department of Engineering's website: <u>http://www.knoxvilletn.gov/engineering</u>.

IX. Principal Collector and Arterial Roadways

For the purposes of this policy, the following shall be defined as principal collector or arterial roadways.

- A. All streets in the Central Business Improvement District (CBID). See map on page TS-34.0-14.
- B. Principal collectors, arterials and selected minor collectors:

Adair Drive, Bruhin Road to Sanders Drive Ailor Avenue, Western Avenue to 21st Street Alcoa Highway Amherst Road, Middlebrook Pike to McKamey Road Anita Drive, Sevier Avenue to Hillwood Drive Asheville Highway Atlantic Avenue, Central Street to Broadway Ault Road, Buffat Mill Road to Hillview Avenue

Ball Camp Pike, Western Avenue to John May Road Baxter Avenue, Beaumont Avenue to Central Street Beaumont Avenue, Baxter Avenue to Keith Avenue Bennington Drive, Corteland Drive to Vanosdale Road Bernard Avenue, Elm Street to Central Avenue Beverly Road, Tazewell Pike to Greenway Drive Blount Avenue, Gay Street to Maryville Pike Boyds Bridge Pike, Brooks Avenue to Holston River Bridge Bradshaw Garden Drive, Pleasant Ridge Road to Clinton Highway Bradshaw Road, Ball Camp Pike to Pleasant Ridge Road Bridgewater Road, Cross Park Drive to Kingston Pike Broadway

Broome Road, N. Gallaher View Road to Middlebrook Pike Bruhin Road, Inskip Drive to Heiskell Avenue Buckingham Road, Kingston Pike to Vanosdale Road Buffat Mill Road, Whittle Springs Road to Loves Creek Road

Cecil Avenue, Broadway to Cherry Street Cedar Bluff Road, Kingston Pike to Cross Park Drive Cedar Lane, Central Avenue Pike to Broadway Central Avenue Pike, Murray Drive to Bruhin Road Central Street, Bruhin Road to Neyland Drive Chapman Highway Cherokee Boulevard, Scenic Drive to Kingston Pike Cherokee Trail, Alcoa Highway to Scottish Pike Cherry Street, Cecil Avenue to Magnolia Avenue Chilhowee Drive, Rutledge Pike to Holston Hills Drive Clancy Avenue, Blount Avenue to Scottish Pike Clinch Avenue, 22nd Street to 11th Street Clinton Highway Coleman Road, Lonas Drive to Papermill Drive Concord Street, Kingston Pike to Sutherland Avenue Copper Kettle Street, Western Avenue to Ed Shouse Drive Cross Park Drive, Cedar Bluff Road to Bridgewater Road Cumberland Avenue

Dale Avenue, 21st Street to Western Avenue Dandridge Avenue, Hill Avenue to Brooks Avenue Dandridge Avenue, Brooks Avenue to Riverside Drive Davenport Road, Sevier Avenue to Moody Avenue Deane Hill Drive, Morrell Road to Kingston Pike Delrose Avenue, Dandridge Avenue to Boyds Bridge Pike Downtown West Boulevard, Kingston Pike to Gleason Road Dry Gap Pike, Central Avenue Pike to Rifle Range Road Dutch Valley Drive, Bruhin Road to Old Broadway

Ed Shouse Drive, Western Avenue to Middlebrook Pike 11th Street, Western Avenue to Cumberland Avenue Elm Street, Oldham Avenue to Bernard Avenue Emory Road

Essary Drive, Broadway to Briarcliff Road

Fairmont Boulevard, Broadway to Whittle Springs Road 5th Avenue, University Avenue to Winona Street Forest Glen Drive, Tobler Lane to Kingston Pike Forest Park Boulevard, Sutherland Avenue to Kingston Pike Fairway Road, Valley View Road to Washington Pike Francis Road, Middlebrook Pike to Amherst Road

Gallaher View Road, Middlebrook Pike to Gleason Drive Gap Road, I-640 to Wilson Road Gleason Drive, Morrell Road to Gallaher View Road Gov. John Sevier Highway Greenway Drive, Broadway to Washington Pike

Hall of Fame Drive, E. Hill Avenue to Broadway Haynes Sterchi Road, Dry Gap Pike to Cedar Lane Heiskell Avenue, Texas Avenue to Central Street Henley Street Highland Avenue, 22nd Street to 16th Street Highland Drive, Inskip Road to Broadway Hillview Avenue, Ault Road to Rutledge Pike Hinton Road, Third Creek Road to Western Avenue Hollywood Drive, Lonas Drive to Sutherland Avenue Hotel Road, Broadway to Holbrook Drive

Inskip Drive, Clinton Highway to Bruhin Road Inskip Road, Cedar Lane to Adair Drive Island Home Avenue, Sevier Avenue to Island Home Pike Island Home Pike, Island Home Avenue to Sevierville Pike

Jacksboro Pike, Tazewell Pike to Broadway Jackson Road, Amherst Road to Cecil Johnson Road James White Parkway Johnston Street, Heiskell Avenue to Tennessee Avenue

Keith Avenue, Beaumont Avenue to Sanderson Road Kingston Pike

Knott Road, Middlebrook Pike to Tenwood Drive

Lake Loudoun Boulevard, Volunteer Boulevard to Neyland Drive Liberty Street, Keith Avenue to Sutherland Avenue Lonas Drive, Weisgarber Road to Middlebrook Pike Loves Creek Road, Millertown Pike to Rutledge Pike Lyons Bend Road, Northshore Drive to Glen Cove Drive Lyons View Pike, Northshore Drive to Kingston Pike

Mabry Hood Road, Pellissippi Parkway to Kingston Pike Magnolia Avenue

Mall Road N, Millertown Pike to Washington Pike Mall Road S, Washington Pike to Millertown Pike Martin Luther King, Jr. Avenue, Dandridge Avenue to Holston Drive Martin Mill Pike, Chapman Highway to Ogle Avenue Maryville Pike, Ogle Avenue to Caleb Avenue McCalla Avenue, Jessamine Street to Martin Luther King, Jr. Avenue McDonald Road, Boyds Bridge Pike to Sunset Road McKamey Road, Amherst Road to Western Avenue Merchant Drive, Pleasant Ridge Road to Central Avenue Pike Middlebrook Pike Millertown Pike, Washington Pike to Mill Road Mineral Springs Road, Broadway to Whittle Springs Road Montvue Road, Kingston Pike to Gleason Road Moody Avenue, Chapman Highway to South Knoxville Boulevard Morrell Road, Kingston Pike to Northshore Drive Murray Drive, Pleasant Ridge Road to Central Avenue Pike

Neubert Springs Road, Martin Mill Pike to W. Ford Valley Road Neyland Drive Northshore Drive

Ogle Avenue, Maryville Pike to Martin Mill Pike Oglewood Avenue, Harvey Street to Broadway Old Broadway, Broadway to Mineral Springs Road

Palmetto Road, Western Avenue to Sullivan Road Papermill Drive, Kingston Pike to Liberty Street Parkdale Road, Rifle Range Road to Cedar Lane Parkside Drive, City Limit to beginning of N. Peters Road Pellissippi Parkway N. Peters Road, Kingston Pike to beginning of Parkside Drive Pleasant Ridge Road, Western Avenue to City Limit (N. of Murray Drive) Proctor Street, Middlebrook Pike to Western Avenue Prosser Road, Buffat Mill Road to Magnolia Avenue

Ray Mears Boulevard, Downtown West Boulevard to Montvue Road Riverside Drive, South Knoxville Boulevard to Delrose Drive Riverside Drive, Delrose Drive to Holston Hills Road Rutledge Pike

Sanders Drive, Adair Drive to Jacksboro Pike Sanderson Road, Pleasant Ridge Road to Keith Avenue Scenic Drive, Kingston Pike to Southgate 17th Street, Western Avenue to Cumberland Avenue Sevier Avenue, Gay Street to Island Home Avenue Sevier Avenue, Island Home Pike to Sevierville Pike Sevierville Pike, Sevier Avenue to City Limit (E. of E. Ford Valley Road) Shea Street, Western Avenue to College Street Sisk Road, Hazelwood Road to Pleasant Ridge Road South Knoxville Boulevard Strawberry Plains Pike, Bell Lane to Huckleberry Springs Road Stone Road, Chapman Highway to Magazine Road Sullivan Road, Western Avenue to Pleasant Ridge Road Sutherland Avenue, University Avenue to Westwood Drive

Tazewell Pike

Tennessee Avenue, Western Avenue to Johnston Street Texas Avenue, Western Avenue to Heiskell Avenue Third Creek Road, Hinton Road to Middlebrook Pike Tillery Road, Wilson Road to Central Avenue Pike Tobler Lane, Sutherland Avenue to Forest Glen Drive 21st Street, Dale Avenue to Leslie Avenue

University Avenue, Western Avenue to Bernard Avenue

Valley View Drive, Whittle Springs Road to Washington Pike Vanosdale Road, Buckingham Road to Middlebrook Pike Volunteer Boulevard, Cumberland Avenue to Cumberland Avenue

Walker Springs Road, Walbrook Drive to Kingston Pike Walnoaks Road, Sullivan Road to Pleasant Ridge Road Washington Pike, Broadway to Murphy Road Weisgarber Road, Middlebrook Pike to Papermill Drive Western Avenue Westland Drive, Northshore Drive to Morrell Road Westwood Drive, Sutherland Avenue to Papermill Drive Whittle Springs Road, Mineral Springs Avenue to Cecil Avenue Wilson Road, Pleasant Ridge Road to Clinton Highway Winston Road, Kingston Pike to Corteland Drive Woodland Avenue, I-75 to Broadway Woodlawn Pike, Chapman Highway to Chapman Highway

Young High Pike, Martin Mill Pike to Woodlawn Pike

