2026 TECHNICAL SPECIFICATIONS UPDATES

Summary of Changes

Revisions and additions in bold italics and ~~DELETIONS~~

S-103 EQUIPMENT REQUIREMENTS

1. Revised first paragraph to the following. Unless otherwise noted, equipment shall conform to ***all applicable DOT requirements and*** the requirements specified in Division 150 of the "Standard Specifications", or as specified herein.

S-104 MATERIAL REQUIREMENTS AND SUBMITTALS

1. Revised section B. to the following. Certain material, such as ring and covers for manholes and storm sewer structures, street lighting, signal poles and equipment, sealants, concrete mixes, asphalt mixes, rolled erosion control products, etc. are pre-approved for use on public improvements. The list of pre-approved materials is available at the office of the City Engineer ***and on the City of Lenexa website***. To add additional material to the list, submit specifications and/or catalog cuts of the proposed addition to the City Engineer.

S-105 SAMPLING AND TESTING

1. Revisions to the sampling and testing frequency table.
    a. Deleted vibra-plate from BACKFILL
    b. Revised the frequency section for FLY ASH, CEMENT, LIME AND LIME KILN DUST FOR STABILIZATION to state MODIFIED SUBGRADE
    c. Revised the frequency section for BITUMINOUS MIXTURES to state per KCMMB Specification.

S-207 EXCAVATION FOR STRUCTURES

1. Revised section A.10. ***~~Seven copies of the~~ Electronic*** detailed drawings ***using Adobe X or newer*** (maximum size 24" x 36") of cofferdams and cribbing to be used on work adjacent to a railroad track shall be submitted by the Contractor for approval by the Railroad Company and the Engineer. These drawings shall be designed and sealed by a registered professional engineer.

S-305 MILLING

1. Revised the first paragraph to the following. This work will consist of the removal of the existing surface to the depth and limits shown on the Plans or established by the Engineer. It shall also include the loading***, hauling*** and stockpiling, if required, of the milled material, and temporary striping.

S-309 TACK COAT

1. Revised the first paragraph to the following. This work shall consist of applying emulsified asphalt tack coat as specified below. Emulsified Asphalt (CSS-1H) shall be required prior to placing ~~***Asphaltic Concrete Surface***~~ ***each lift of asphalt***. The rate of application shall be 0.05 to 0.12 gallons per square yard of CSS- 1H, or as otherwise directed by the Engineer. At locations where asphalt is being placed on top of existing concrete pavement uncut emulsified asphalt (SS-1H) shall be used. Tack shall be applied as far in advance of the paving train as necessary to allow evaporation time for the tack to "break" before asphalt paving will be allowed. Tack material that is removed by construction traffic shall be re-applied to the required rate as specified above. Tack Coat is required between each lift of asphaltic concrete.

S-401 CONCRETE CONSTRUCTION

1. Revised section A.19 Mixing and Delivery 12th bullet point to the following. When a truck mixer or truck agitator is used in transporting concrete that has been completely mixed in a stationary central mixer, agitating during transportation shall be at the speed designated by the manufacturer of the equipment as agitating speed. The total revolutions (additional remixing and agitating) shall not exceed 200 revolutions. ***When the truck mixer or agitator arrives on the jobsite an additional 20-30 revolutions shall be added prior to placement.***

S-403 CURBS AND GUTTERS

1. Revised section A.5. to the following. When existing curb is to be removed, the removal shall be accomplished in accordance with the Standard Detail for the Type of Removal specified in the plans. Repair of the asphalt shall be subsidiary to "Curb and Gutter". The curb shall be removed to the nearest joint, and the joint shall be cut to full depth (with a concrete saw meeting the requirements of the Standard Specifications) prior to removal. When "Complete Removal" is specified, the joint will still need to be saw cut, but no saw cut will be required in the pavement. No more than 1,000 feet of existing curb may be removed prior to placing the replacement curb and ***shall be replaced within 14 days,*** unless approved by the Engineer.

2. Revised section B. Method of Measurement to the following. "Curb and Gutter" shall be measured by the linear foot of completed and accepted work, of the type indicated on the Plans. When the Plans indicate removal of existing curb and gutter, the removal shall be subsidiary to the new curb and gutter. ***When the***

plans specify "Curb Inlet Top Removal and Replacement" the removal and replacement shall be subsidiary.

S-509 STORM INLETS AND MANHOLES

1. Revised section E. Method of Measurement to the following. Inlets, manholes, and junction boxes shall be measured per each structure completed and accepted. Installation, backfill***~~, curb transitions~~***, and connection of storm sewers to the structure shall be subsidiary to the structure.

S-511 UNDERDRAINS

1. Revised section A. to the following. The type of pipe shall be Type T (per the Standard Specifications), but with a nonwoven geotextile sock which shall be a 100% continuous filament polyester nonwoven needle punched engineering fabric or as specified on the Construction Drawings. Prefabricated edge drains shall be used for residential streets and shall conform to the requirements for Class B Geocomposite as defined in ASTM D7001-06. This geocomposite product shall be composed of a flat pipe design consisting of a full circumference polyethylene core wrapped with a nonwoven Class II geotextile ***per s-512 ~~Geotextile. Although selection of the appropriate geotextile specifications is site soil specific, a commonly used geotextile for filtration will have an Apparent Opening Size ranging between U.S. Sieve Sizes 70 to 100 and a minimum unit weight of 5.0 oz./square yard. The coefficient of permeability will typically range between 0.16 to 0.24 in./second.~~*** All underdrain shall be installed with flowlines a minimum of 1.25 foot below the existing gutter grade. The underdrain pipes shall have a nominal minimum inside diameter of four inches unless shown otherwise on the Plans. If the installation of the underdrain causes the relocation of any water or sewer lines, the relocation of the water or sewer line shall be subsidiary to the underdrains. Installation of geotextile fabric and backfill shall be in accordance with the plans and with these specifications.

S-512 GEOTEXTILE

1. Revised Table 1 Physical Requirements to the following.

Geotextile Class 2**			
Physical Property	**ASTM Test Procedure**	**Minimum Acceptance Criteria**	
Grab strength tensile	D 4632	***~~120 lbs~~ 100 lbs***	***~~530 N~~ 445 N***
Grab Elongation at Break	D 4632	***~~60%~~ 50%***	***~~60%~~ 50%***
Mullen Burst Strength	D 3786	***~~90 psi~~ 210 psi***	***~~620 Kpa~~ 1448 Kpa***
Apparent Opening Size (AOS)	D 4551	60***~~/70~~*** US Std Sieve	250***~~/212~~*** µm

S-800 TRAFFIC SIGNALS

1. Revised section B.22. to the following. Loop detector installation shall conform to the details and notes shown on the plans and the Standard ***Detail D-804 ~~sheets~~***. All loop conductors shall be wound in the same direction with the start and end clearly marked on the conductors at the junction or service box. Conductors of all loops shall run continuous to and from the nearest junction or service box. The loop conductors for each loop shall be spliced in the junction or service box to a detector lead-in cable running from the box to a sensor unit mounted in the controller cabinet.

S-804 STREET LIGHTING

1. Revised section A.11. to the following. ***~~For all new street light pole base installations, the conduit shall extend 2 inches above the top of the handhole opening – approximately 24 inches on poles without breakaway bases and 33 inches on all poles with breakaway bases.~~*** The 3 lug connectors should be made up and installed before the pole is installed on the base. The 3 lug connectors shall be placed above the top of the handhole with the No. 14 AWG pole and bracket cable installed and shall extend down the pole to be connected in the handhole opening. All street light poles requiring a breakaway base shall have the City of Lenexa approved anti-theft device installed between the pole and the breakaway base.

2. Revised section A.17 to the following. Tracing wire shall be installed on the inside of all empty conduits or conduits with only fiber optic cable to facilitate the locating of buried cable. The wire shall be either a No. 10 AWG stranded copper Type USE or THWN cable or a No. 12 AWG Copperhead cable. The trace wire shall be installed without splices. ***~~At each service or junction box, the trace wire shall be connected to a light duty Snake Pit device with an orange cap. Connection between the Snake Pit and the box shall be made with a 1-1/2" or 2" conduit sweep.~~***

S-805 TRAFFIC CONTROL

1. Revised section A.4 to the following. The Contractor shall furnish all necessary posts, skids, easels ***sandbags*** and supports as may be required for proper installation of traffic control devices. The size, shape, color, and placement of all signs, barricades, mountings and devices shall comply with the details shown on the plans, and/or the Traffic Control Plan, or the current edition of the Manual on Uniform Traffic Control Devices (MUTCD). The size and layout of the message on the signs shall comply with the latest edition of Standard Highway Signs and Standard Alphabets for Highway Signs as approved by the AASHTO and the FHWA, US DOT.

2. Revised section A.8. to the following. All signs, barricades, drums and markers shall be retroreflectorized with high intensity sheeting ***and in good condition as determined by the Engineer***. The message and border shall be opaque color

as required for daytime use unless shown otherwise on the plans or Traffic Control Plan.

3. Revised section A.14. to the following. All Type III barricades placed across a street shall be suitably distributed across the roadway ***with sandbags or other approved weighted device*** and protected at night by approved yellow flashing lights unless noted otherwise on the plans or the Traffic Control Plan. The posts for the Type III barricades shall be Telespar posts and the remaining parts of the barricade shall be made of plastic (not wood). The lights shall be kept burning from sunset to sunrise. Other barricades and signs shall be protected by approved yellow steady-burn or flashing lights and drums, used singly, shall be protected by flashing lights all in accordance with the details shown on the plans or as directed by the Engineer. In cases where no details are shown, the MUTCD shall govern.

S-806 CONDUIT

1. Revised section A. to the following. MATERIAL SPECIFICATIONS: All conduits for traffic signal and street lighting installations shall be either Schedule 40 polyvinyl chloride (PVC) conduit or Schedule 40 high density polyethylene (HDPE) conduit ***and shall be gray***. PVC conduit shall bear an Underwriters' Laboratories (UL) label.

S-1001 SANITARY SEWER

1. Revised the first paragraph to the following. This work shall consist of the construction of sanitary sewer in accordance with these Specifications and as shown on the Plans or established by the Engineer. ***All work shall be inspected and approved by a JCWW certified inspector or a representative unless otherwise noted.***

S-1002 SANITARY SEWER ENCASEMENT

1. Revised the first paragraph to the following. This work shall consist of installing storm sewer encasement in accordance with these Specifications, the Plans, the Standard Details, ***Johnson County Wastewater Standard Details and Specifications*** and the Contract Documents. ~~***Sanitary sewers at locations shown on the Plans shall be encased with a minimum of 6" Class KCMMB 5K concrete. This encasement shall extend a minimum of 5' past each side of any storm sewer, and shall terminate within 6" of a joint in the sanitary sewer line, as approved by the Engineer. All other dimensions for the encasement shall conform to Type A bedding in the Standard Details.***~~

S-1108 GUARD FENCE

1. Replaced entire section with S-1108 EDGE TREATMENT.

S-1108 EDGE TREATMENT: On projects that carry traffic through construction, the following criteria shall be considered a minimum for edge treatment as shown in the plans. This work shall include the furnishing of all labor, materials and equipment for the installation of edge treatment as designated on the plans or directed by the Engineer. All materials, labor, etc. required to install, maintain, and remove edge treatment shall be considered incidental to the Traffic Control bid item.

A. The edge treatment shall be installed and remain in-place at all times when the height differential, or vertical distance, between the top of the surface being constructed and the top of the adjacent existing pavement is greater than two inches. Edge treatment may be temporarily removed only to actively construct the surface adjacent to the existing pavement. Edge treatment material shall be AB-3 or other compactible material approved by the Engineer, constructed at a 3:1 or flatter slope against the pavement edge

S-1116 CORE DRILLING AND REINSTATEMENT PROCEDURES

1. Added sections D and E.

D. METHOD OF MEASUREMENT: "Core Drilling and Reinstatement" shall be measured per each, complete and accepted.

E. BASIS OF PAYMENT: "Core Drilling and Reinstatement" shall be paid for at the contract unit price per each fixture, measured as stated above. The contract unit price shall include the cost of all labor, materials and equipment required to complete the work in accordance with these specifications.