



**CALL NO. 342**

**CONTRACT ID. 225221**

**JEFFERSON COUNTY**

**FED/STATE PROJECT NUMBER FD04 056 1703 004-005**

**DESCRIPTION KY 1703**

**WORK TYPE ASPHALT RESURFACING**

**PRIMARY COMPLETION DATE 10/1/2022**

**LETTING DATE: February 24,2022**

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 am EASTERN STANDARD TIME February 24,2022. Bids will be publicly announced at 10:00 am EASTERN STANDARD TIME.

**NO PLANS ASSOCIATED WITH THIS PROJECT.**

**REQUIRED BID PROPOSAL GUARANTY: Not less than 5% of the total bid.**

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**PART I**  
**SCOPE OF WORK**

## ADMINISTRATIVE DISTRICT - 05

**CONTRACT ID - 225221**

**FD04 056 1703 004-005**

**COUNTY - JEFFERSON**

**PCN - BR05617032100**

**FD04 056 1703 004-005**

KY 1703 OVER TYLER PARK PEDESTRIAN BRIDGE, A DISTANCE OF 0564.51 MILES.ASPHALT RESURFACING  
SYP NO. 05-80109.00.

GEOGRAPHIC COORDINATES LATITUDE 38:13:51.00 LONGITUDE 85:43:00.00

**COMPLETION DATE(S):**

COMPLETED BY 10/01/2022

APPLIES TO ENTIRE CONTRACT

## **CONTRACT NOTES**

### **PROPOSAL ADDENDA**

All addenda to this proposal must be applied when calculating bid and certified in the bid packet submitted to the Kentucky Department of Highways. Failure to use the correct and most recent addenda may result in the bid being rejected.

### **BID SUBMITTAL**

Bidder must use the Department's electronic bidding software. The Bidder must download the bid file located on the Bid Express website ([www.bidx.com](http://www.bidx.com)) to prepare a bid packet for submission to the Department. The bidder must submit electronically using Bid Express.

### **JOINT VENTURE BIDDING**

Joint venture bidding is permissible. All companies in the joint venture must be prequalified in one of the work types in the Qualifications for Bidders for the project. The bidders must get a vendor ID for the joint venture from the Division of Construction Procurement and register the joint venture as a bidder on the project. Also, the joint venture must obtain a digital ID from Bid Express to submit a bid. A joint bid bond of 5% may be submitted for both companies or each company may submit a separate bond of 5%.

### **UNDERGROUND FACILITY DAMAGE PROTECTION**

The contractor shall make every effort to protect underground facilities from damage as prescribed in the Underground Facility Damage Protection Act of 1994, Kentucky Revised Statute KRS 367.4901 to 367.4917. It is the contractor's responsibility to determine and take steps necessary to be in compliance with federal and state damage prevention directives. When prescribed in said directives, the contractor shall submit Excavation Locate Requests to the Kentucky Contact Center (KY811) via web ticket entry. The submission of this request does not relieve the contractor from the responsibility of contacting non-member facility owners, whom shall be contacted through their individual Protection Notification Center. Non-compliance with these directives can result in the enforcement of penalties.

### **REGISTRATION WITH THE SECRETARY OF STATE BY A FOREIGN ENTITY**

Pursuant to KRS 176.085(1)(b), an agency, department, office, or political subdivision of the Commonwealth of Kentucky shall not award a state contract to a person that is a foreign entity required by [KRS 14A.9-010](#) to obtain a certificate of authority to transact business in the Commonwealth ("certificate") from the Secretary of State under [KRS 14A.9-030](#) unless the person produces the certificate within fourteen (14) days of the bid or proposal opening. If the foreign entity is not required to obtain a certificate as provided in [KRS 14A.9-010](#), the foreign entity should identify the applicable exception. Foreign entity is defined within [KRS 14A.1-070](#).

**For all foreign entities required to obtain a certificate of authority to transact business in the Commonwealth, if a copy of the certificate is not received by the contracting agency within the time frame identified above, the foreign entity's solicitation response shall be deemed non-responsive or the awarded contract shall be cancelled.**

Businesses can register with the Secretary of State at <https://secure.kentucky.gov/sos/ftbr/welcome.aspx>.

#### **SPECIAL NOTE FOR PROJECT QUESTIONS DURING ADVERTISEMENT**

Questions about projects during the advertisement should be submitted in writing to the Division of Construction Procurement. This may be done by fax (502) 564-7299 or email to [kytc.projectquestions@ky.gov](mailto:kytc.projectquestions@ky.gov). The Department will attempt to answer all submitted questions. The Department reserves the right not to answer if the question is not pertinent or does not aid in clarifying the project intent.

The deadline for posting answers will be 3:00 pm Eastern Daylight Time, the day preceding the Letting. Questions may be submitted until this deadline with the understanding that the later a question is submitted, the less likely an answer will be able to be provided.

The questions and answers will be posted for each Letting under the heading "Questions & Answers" on the Construction Procurement website ([www.transportation.ky.gov/contract](http://www.transportation.ky.gov/contract)). The answers provided shall be considered part of this Special Note and, in case of a discrepancy, will govern over all other bidding documents.

#### **HARDWOOD REMOVAL RESTRICTIONS**

The US Department of Agriculture has imposed a quarantine in Kentucky and several surrounding states, to prevent the spread of an invasive insect, the emerald ash borer. Hardwood cut in conjunction with the project may not be removed from the state. Chipping or burning on site is the preferred method of disposal.

#### **INSTRUCTIONS FOR EXCESS MATERIAL SITES AND BORROW SITES**

Identification of excess material sites and borrow sites shall be the responsibility of the Contractor. The Contractor shall be responsible for compliance with all applicable state and federal laws and may wish to consult with the US Fish and Wildlife Service to seek protection under Section 10 of the Endangered Species Act for these activities.

#### **ACCESS TO RECORDS**

The contractor, as defined in KRS 45A.030 (9) agrees that the contracting agency, the Finance and Administration Cabinet, the Auditor of Public Accounts, and the Legislative Research Commission, or their duly authorized representatives, shall have access to any books, documents, papers, records, or other evidence, which are directly pertinent to this contract for the purpose of financial audit or program review. Records and other prequalification information confidentially

disclosed as part of the bid process shall not be deemed as directly pertinent to the contract and shall be exempt from disclosure as provided in KRS 61.878(1)(c). The contractor also recognizes that any books, documents, papers, records, or other evidence, received during a financial audit or program review shall be subject to the Kentucky Open Records Act, KRS 61.870 to 61.884.

In the event of a dispute between the contractor and the contracting agency, Attorney General, or the Auditor of Public Accounts over documents that are eligible for production and review, the Finance and Administration Cabinet shall review the dispute and issue a determination, in accordance with Secretary's Order 11-004.

April 30, 2018

## **SPECIAL NOTE FOR RECIPROCAL PREFERENCE**

### **RECIPROCAL PREFERENCE TO BE GIVEN BY PUBLIC AGENCIES TO RESIDENT BIDDERS**

By reference, KRS 45A.490 to 45A.494 are incorporated herein and in compliance regarding the bidders residency. Bidders who want to claim resident bidder status should complete the Affidavit for Claiming Resident Bidder Status along with their bid in the electronic bidding software. Submittal of the Affidavit should be done along the bid in Bid Express.

April 30, 2018

### **ASPHALT MIXTURE**

Unless otherwise noted, the Department estimates the rate of application for all asphalt mixtures to be 110 lbs/sy per inch of depth.

### **DGA BASE**

Unless otherwise noted, the Department estimates the rate of application for DGA Base to be 115 lbs/sy per inch of depth.

### **DGA BASE FOR SHOULDERS**

Unless otherwise noted, the Department estimates the rate of application for DGA Base for Shoulders to be 115 lbs/sy per inch of depth. The Department will not measure necessary grading and/or shaping of existing shoulders prior to placing of DGA Base, but shall be incidental to the Contract unit price per ton for DGA Base.

Accept payment at the Contract unit price per ton as full compensation for all labor, materials, equipment, and incidentals for grading and/or shaping of existing shoulders and furnishing, placing, and compacting the DGA Base.

### **INCIDENTAL SURFACING**

The Department has included in the quantities of asphalt mixtures established in the proposal estimated quantities required for resurfacing or surfacing mailbox turnouts, farm field entrances, residential and commercial entrances, curve widening, ramp gores and tapers, and road and street approaches, as applicable. Pave these areas to the limits as shown on Standard Drawing RPM-110-06 or as directed by the Engineer. In the event signal detectors are present in the intersecting streets or roads, pave the crossroads to the right of way limit or back of the signal detector, whichever is the farthest back of the mainline. Surface or resurface these areas as directed by the Engineer. The Department will not measure placing and compacting for separate payment but shall be incidental to the Contract unit price for the asphalt mixtures.

### **OPTION B**

Be advised that the Department will control and accept compaction of asphalt mixtures furnished on this project under OPTION B in accordance with Sections 402 and 403.

**KENTUCKY TRANSPORTATION CABINET  
DEPARTMENT OF HIGHWAYS  
CURB & SIDEWALK REHABILITATION PLANS  
ASPHALT MILL AND OVERLAY**

**INDEX OF SHEETS**

SHEET NO.	DESCRIPTION
1	TITLE & LOCATION MAP
2-5	PLAN VIEWS
6	TYPICAL SECTIONS
7-10	STRIPING PLAN VIEWS
11	SIDEWALK AND RAILING REPAIRS

**SPECIAL NOTES**

are provided in Section 7 of this proposal

**STANDARD DRAWINGS**

are listed in Section 6 of this proposal

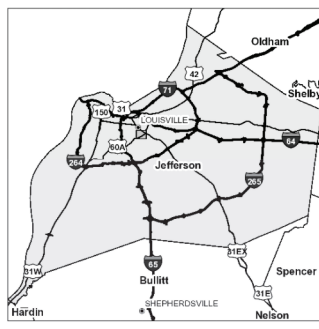
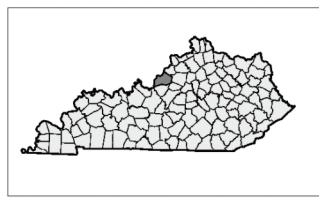
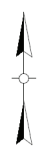
**ACTIVE SEPIAS**

None

**BEFORE YOU DIG**

The contractor is instructed to call 1-800-752-6007 to reach KY 811, the one-call system for information on the location of existing underground utilities. The call is to be placed a minimum of two (2) and no more than ten (10) business days prior to excavation. The contractor should be aware that owners of underground facilities are not required to be members of the KY 811 one-call Before-U-Dig (BUD) service. The contractor must coordinate excavation with the utility owners, including those whom do not subscribe to KY 811. It may be necessary for the contractor to contact the County Court Clerk to determine what utility companies have facilities in the area.

**SCALE: 1" = 1000'**



**LOCATION MAP**

DATE: 10 / 1 / 21  
SHEET NO.: 1 OF 11

PREPARED BY: Stantec

SHEET TITLE: TITLE & LOCATION MAP

COUNTY: JEFFERSON  
CROSSING: TYLER PARK PEDESTRIAN PATH

BRIDGE NUMBER: 056B00296N  
ROUTE: BAXTER AVENUE (KY 1703)

USERS: jomass  
DATE PLOTTED: 10/1/2021 9:18:03 AM  
FILE NAME: ...D031317\FD04-056-1703-004-005.dgn

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**SECTION 1 – PROJECT DRAWINGS**

**SECTION 2 – TYPICAL SECTIONS**

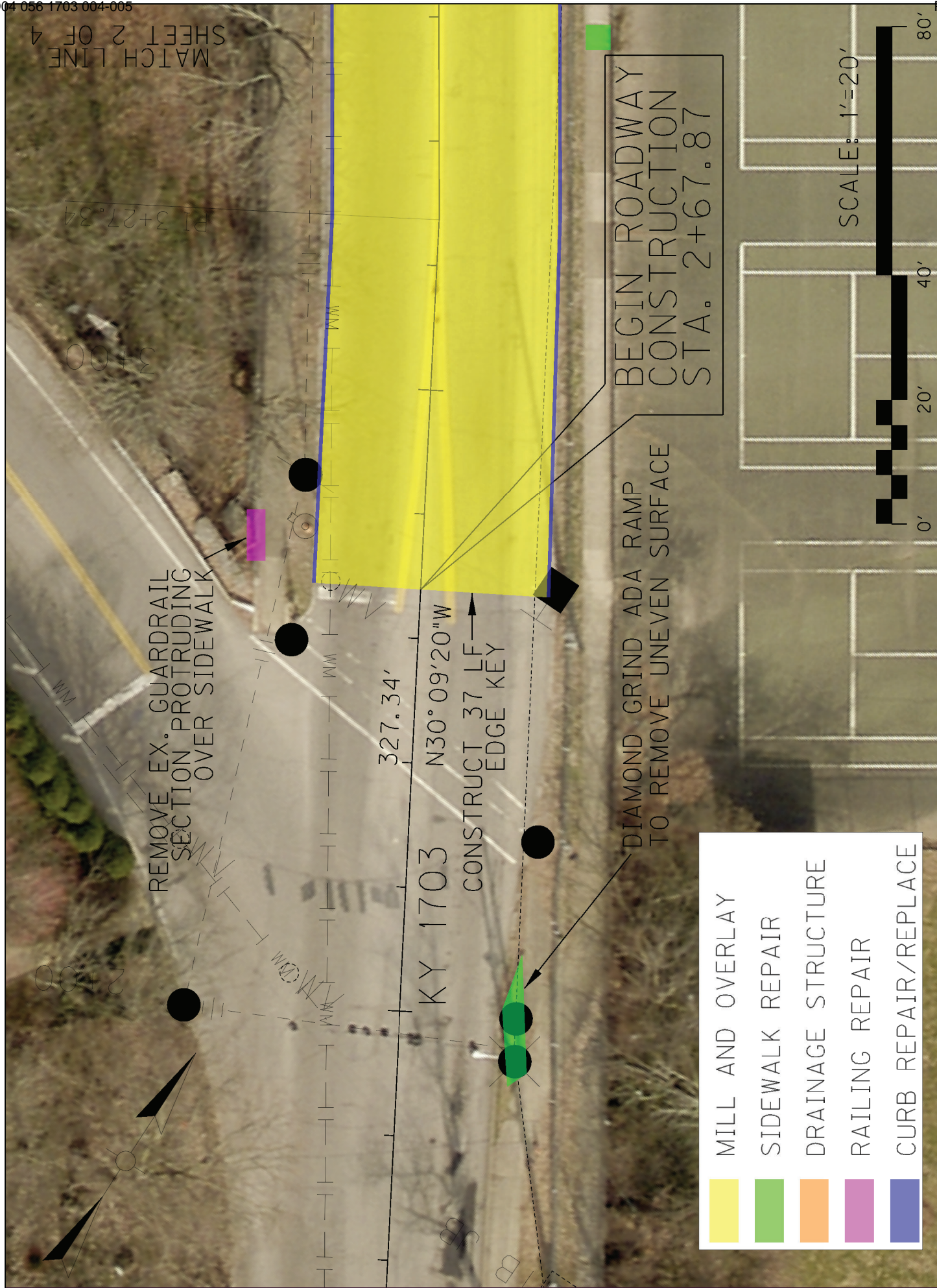
**SECTION 3 – GENERAL SUMMARY**






**SECTION 4 – PROJECT NOTES**

**SECTION 5 – TRAFFIC CONTROL PLAN**

**SECTION 6 – REFERENCES**

**SECTION 7 – SPECIAL NOTES**



	MILL AND OVERLAY
	SIDEWALK REPAIR
	DRAINAGE STRUCTURE
	RAILING REPAIR
	CURB REPAIR/REPLACE

SCALE: 1' = 20'

BRIDGE NUMBER <b>056B00296N</b>	COUNTY <b>JEFFERSON</b>	DATE <b>10/17/2021 9:19:41 AM</b>	DATE <b>10/1/21</b>
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SHEET TITLE: <b>PLAN VIEW SHEET 1 OF 4</b>		PREPARED BY: 	CONTRACT ID: <b>225221</b>

MATCH LINE  
SHEET 2 OF 4

PI 3+27.84

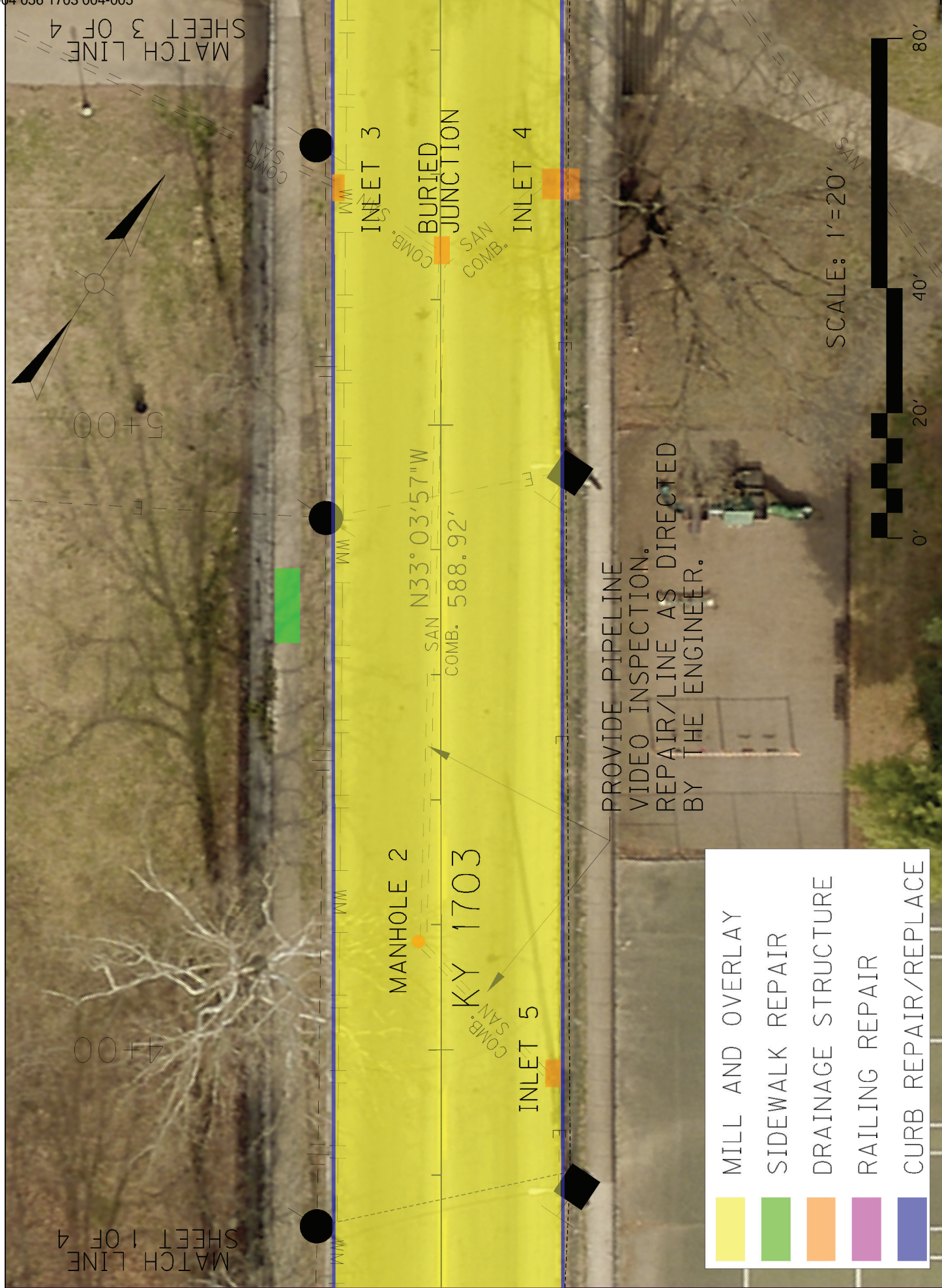
3100

327.34' N30°09'20"W  
CONSTRUCT 37 LF  
EDGE KEY

BEGIN ROADWAY  
CONSTRUCTION  
STA. 2+67.87

REMOVE EX. GUARDRAIL  
SECTION PROTRUDING  
OVER SIDEWALK

DIAMOND GRIND ADA RAMP  
TO REMOVE UNEVEN SURFACE



MATCH LINE  
SHEET 1 OF 4

4+00

5+00

MATCH LINE  
SHEET 3 OF 4

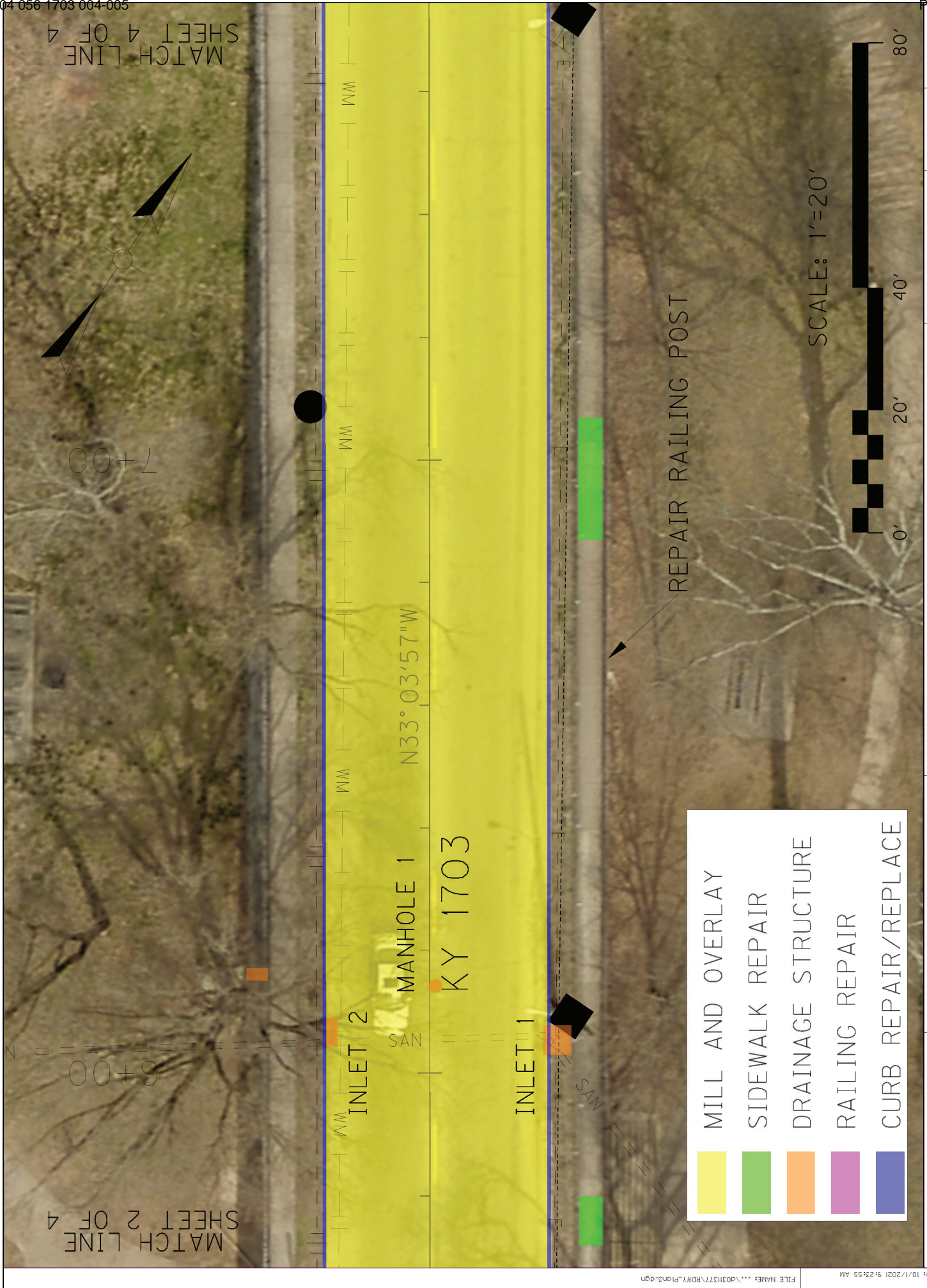
- MILL AND OVERLAY
- SIDEWALK REPAIR
- DRAINAGE STRUCTURE
- RAILING REPAIR
- CURB REPAIR/REPLACE

PROVIDE PIPELINE VIDEO INSPECTION. REPAIR/LINE AS DIRECTED BY THE ENGINEER.

SCALE: 1"=20'



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ROUTE <b>BAXTER AVENUE (KY 1703)</b>		CROSSING <b>TYLER PARK PEDESTRIAN PATH</b>	
PREPARED BY: 		DATE <b>10 / 1 / 21</b>	
SHEET NO. <b>3 OF 11</b>		Page 13 of 80	



MATCH LINE  
SHEET 4 OF 4

MATCH LINE  
SHEET 2 OF 4

7+00

6+00

INLET 2

SAN

N33°03'57"W

MANHOLE 1

KY 1703

INLET 1

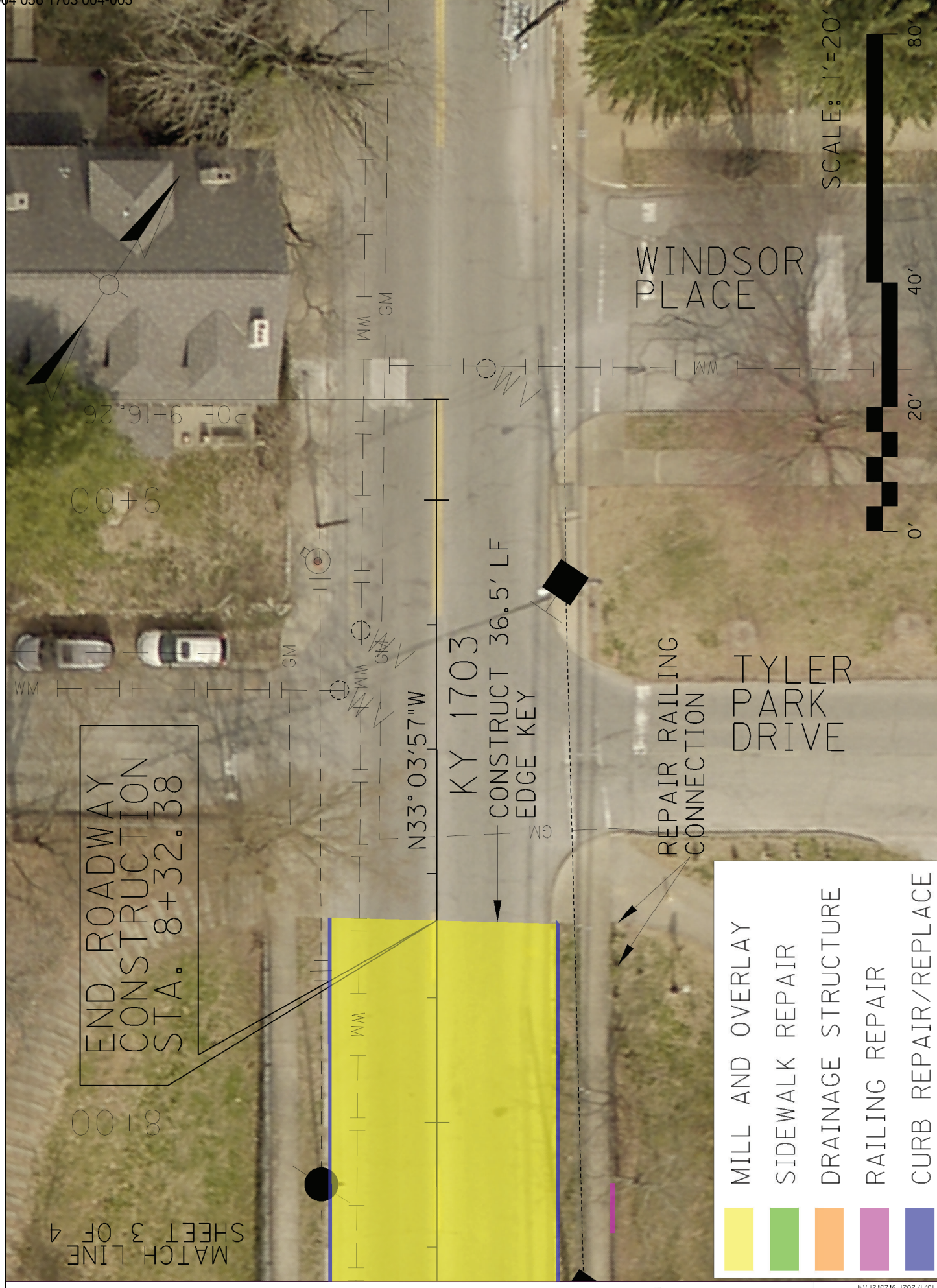
SAN

REPAIR RAILING POST

- MILL AND OVERLAY
- SIDEWALK REPAIR
- DRAINAGE STRUCTURE
- RAILING REPAIR
- CURB REPAIR/REPLACE

SCALE: 1"=20'



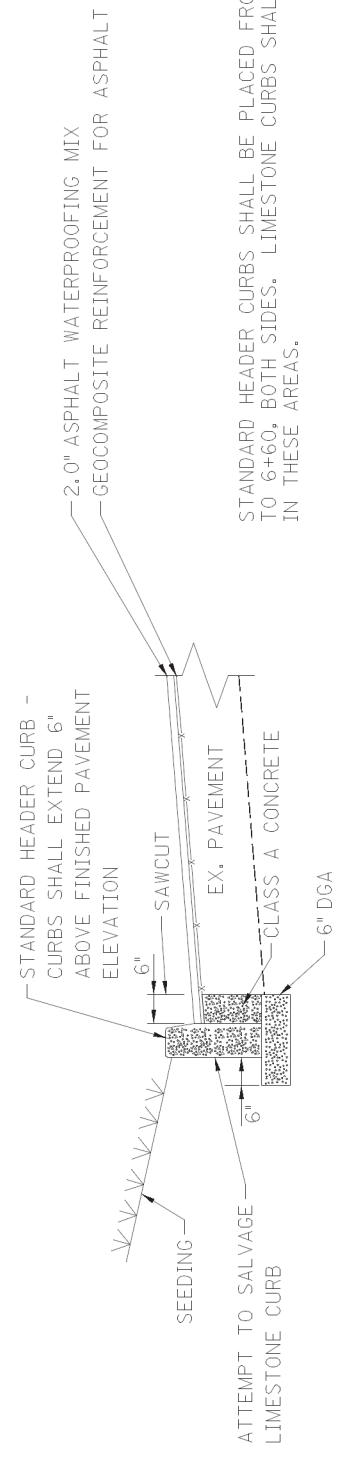
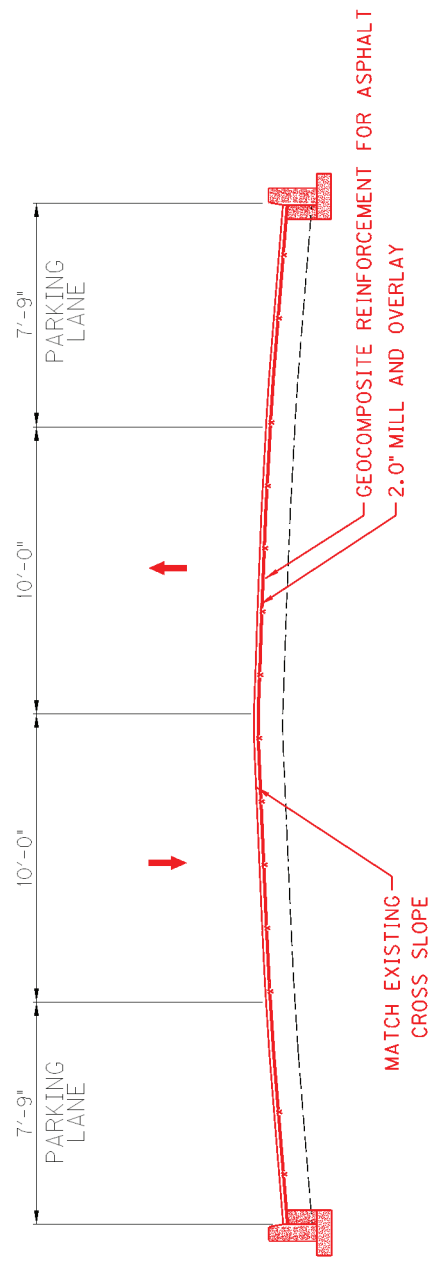


MATCH LINE  
SHEET 3 OF 4

- MILL AND OVERLAY
- SIDEWALK REPAIR
- DRAINAGE STRUCTURE
- RAILING REPAIR
- CURB REPAIR/REPLACE

SCALE: 1"=20'  
0' 20' 40' 80'

USER: joloss DATE PLOTTED: 10/17/2021 9:25:21 AM FILE NAME: ... \D03137\FD04\Print.dgn	BRIDGE NUMBER <b>056B00296N</b> ROUTE <b>BAXTER AVENUE (KY 1703)</b>	COUNTY <b>JEFFERSON</b> CROSSING <b>TYLER PARK PEDESTRIAN PATH</b>	SHEET TITLE: <b>PLAN VIEW SHEET 4 OF 4</b>	PREPARED BY: <b>Stantec</b>	DATE <b>10 / 1 / 21</b> SHEET NO. <b>5 OF 11</b>
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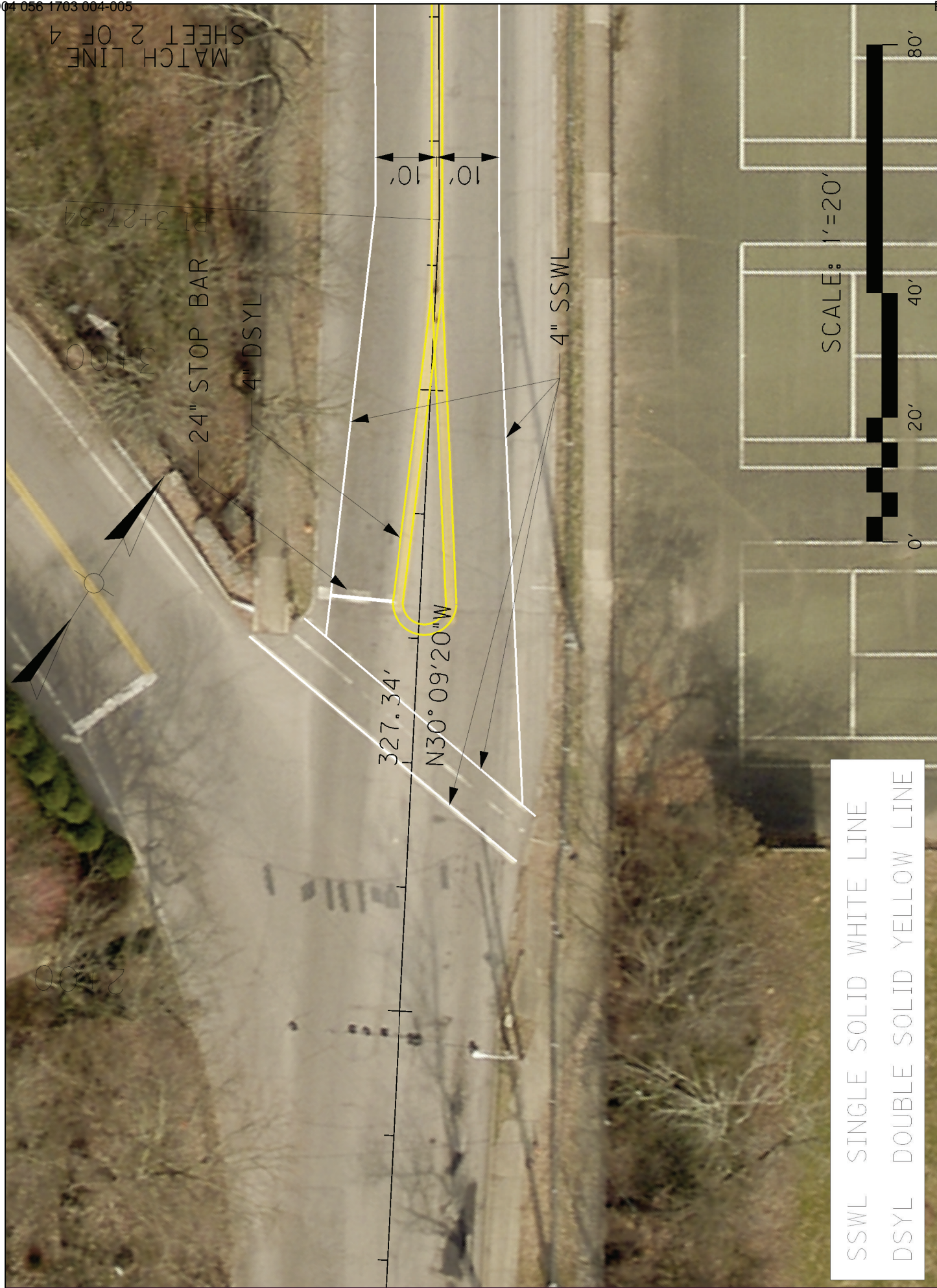
STANDARD HEADER CURBS SHALL BE PLACED FROM STATIONS 4+90 TO 6+60, BOTH SIDES. LIMESTONE CURBS SHALL NOT BE PLACED IN THESE AREAS.

**LIMESTONE CURBS:**

IT IS THE INTENT OF KYTC TO REUSE THE EXISTING HISTORIC LIMESTONE CURBS LOCATED ON THIS PROJECT SITE FOR THE BENEFIT OF THE PROJECT. WHERE POSSIBLE, THE CONTRACTOR SHALL TRY TO REUSE THE CURB BY FLIPPING THE CURB END-FOR-END. IF FLIPPING THE CURB DOES NOT PRODUCE A USABLE, SOUND CURB PROFILE (PER THE DIRECTION OF THE ENGINEER) OR THE CURB DISINTEGRATES, THE CURB REMAINS SHALL BE DEALT WITH IN A MANNER ACCORDING TO THE HISTORICAL MATERIALS NOTE. THE CURB QUANTITY (BID ITEMS-STANDARD HEADER CURB AND SPECIAL HEADER CURB) IN THE GENERAL SUMMARY REFLECTS FINAL IN-PLACE CURB, IRRESPECTIVE OF BEING REPLACED OR FLIPPED. CURB FLIPPING AND CHECKING THE CURB ARE INCIDENTAL TO THE PLACEMENT OF THE CURB. POWER WASHING OF THE LIMESTONE CURB SHALL BE INCIDENTAL TO ITS PLACEMENT.

SHOULD THE ENGINEER REQUIRE THE USE OF NEW STONE IN LIEU OF EXISTING LIMESTONE CURB, THE NEW STONE SHALL MATCH DIMENSIONS AND COLOR OF THE EXISTING LIMESTONE CURB.

BRIDGE NUMBER <b>056B00296N</b>	COUNTY <b>JEFFERSON</b>	SHEET TITLE: <b>TYPICAL SECTIONS</b>	PREPARED BY: <b>Stantec</b>	DATE <b>10 / 1 / 21</b>
ROUTE <b>BAXTER AVENUE (KY 1703)</b>	CROSSING <b>TYLER PARK PEDESTRIAN PATH</b>			SHEET NO. <b>6</b> OF <b>11</b>



MATCH LINE  
SHEET 2 OF 4

PI 3+27.84

3100

24" STOP BAR

4" DSYL

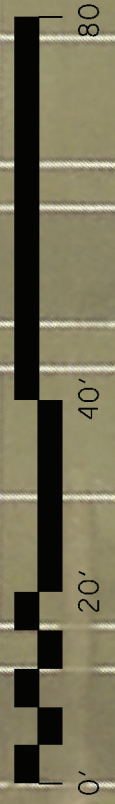
4" SSWL

327.34'

N30° 09' 20"W

10' 10'

SCALE: 1"=20'



SSWL SINGLE SOLID WHITE LINE  
DSYL DOUBLE SOLID YELLOW LINE

DATE 10 / 1 / 21	SHEET NO. 7 OF 11
PREPARED BY: <b>Stantec</b>	
SHEET TITLE: <b>STRIPING PLAN VIEW SHEET 1 OF 4</b>	
BRIDGE NUMBER <b>056B00296N</b>	COUNTY <b>JEFFERSON</b>
ROUTE <b>BAXTER AVENUE (KY 1703)</b>	CROSSING <b>TYLER PARK PEDESTRIAN PATH</b>



MATCH LINE  
SHEET 3 OF 4

MATCH LINE  
SHEET 1 OF 4

5+00

4+00

4" DSYL

4" SSWL

22'

22'

10'  
10'  
10'

N33°03'57"W  
588.92'

SCALE: 1"=20'



SSWL SINGLE SOLID WHITE LINE  
 DSYL DOUBLE SOLID YELLOW LINE

DATE PLOTTED: 10/17/2021 9:52:20 AM	BRIDGE NUMBER <b>056B00296N</b>	COUNTY <b>JEFFERSON</b>	SHEET TITLE: <b>STRIPING PLAN VIEW SHEET 2 OF 4</b>	PREPARED BY: <b>Stantec</b>	DATE <b>10 / 1 / 21</b>
USER: jomess	ROUTE <b>BAXTER AVENUE (KY 1703)</b>	CROSSING <b>TYLER PARK PEDESTRIAN PATH</b>			SHEET NO. <b>8 OF 11</b>



MATCH LINE  
SHEET 4 OF 4

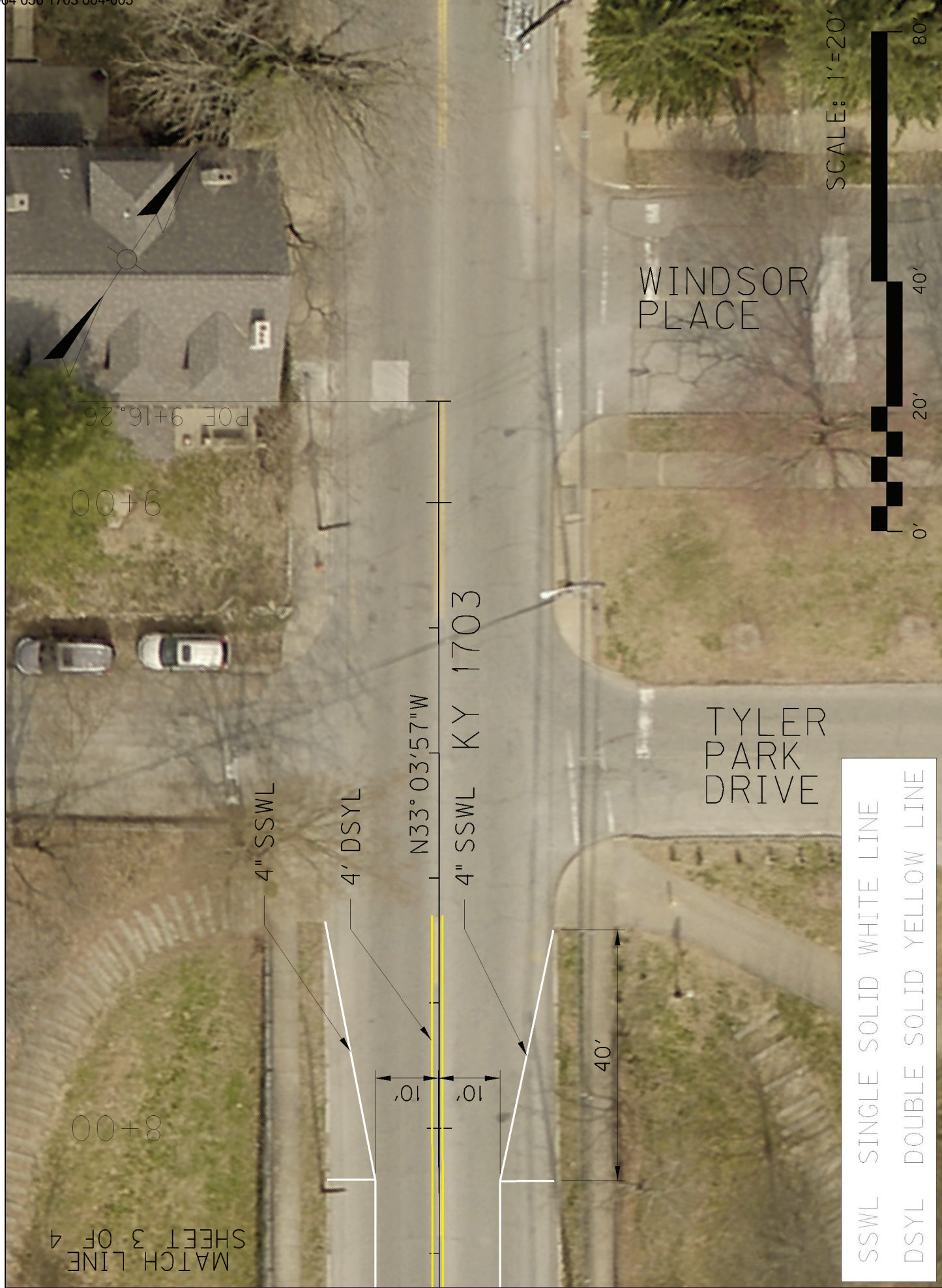
MATCH LINE  
SHEET 2 OF 4

SCALE: 1"=20'



SSWL SINGLE SOLID WHITE LINE  
 DSYL DOUBLE SOLID YELLOW LINE

DATE 10 / 1 / 21	PREPARED BY: <b>Stantec</b>	SHEET TITLE: <b>STRIPING PLAN VIEW SHEET 3 OF 4</b>	SHEET NO. 9 OF 11
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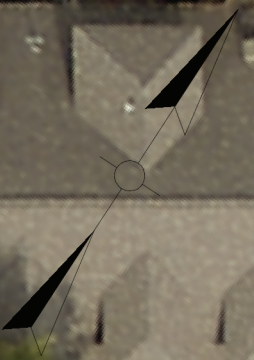


MATCH LINE  
SHEET 3 OF 4

8+00

9+00

POE 9+16.26



SCALE: 1"=20'



SSWL	SINGLE SOLID WHITE LINE
DSYL	DOUBLE SOLID YELLOW LINE

USER: joloss DATE PLOTTED: 10/1/2021 9:56:39 AM FILE NAME: ...FD04-056-1703-004-005-Striping-Plan4.dgn	COUNTY: JEFFERSON CROSSING: TYLER PARK PEDESTRIAN PATH ROUTE: BAXTER AVENUE (KY 1703)	SHEET TITLE: STRIPING PLAN VIEW SHEET 4 OF 4	PREPARED BY: Stantec	DATE: 10 / 1 / 21 SHEET NO.: 10 OF 11
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**BAXTER AVENUE (KY 1703) OVER TYLER PARK  
JEFFERSON COUNTY  
ITEM 5-80910  
GENERAL SUMMARY**

ITEM NO.	ITEM	NOTES	QUANTITY	UNIT
00001	DGA BASE		65	TON
01875	STANDARD HEADER CURB	1	340	LF
01877	SPECIAL HEADER CURB	1,2	788	LF
02381	REMOVE GUARDRAIL		1	LF
02562	TEMPORARY SIGNS		100	SQFT
02569	DEMOBILIZATION		1	LS
02585	EDGE KEY		73	LF
02650	MAINTAIN & CONTROL TRAFFIC		1	LS
02671	PORTABLE CHANGEABLE MESSAGE SIGN		2	EACH
02676	MOBILIZATION FOR MILLING & TEXTURING		1	LS
02677	ASPHALT MILLING & TEXTURING		245	TON
02726	STAKING		1	LS
02775	ARROW PANEL		2	EACH
04820	TRENCHING AND BACKFILLING	3	4	LF
04830	LOOP WIRE	3	284	LF
04895	LOOP SAW SLOT AND FILL	3	108	LF
04960	REMOVE AND REPLACE SIDEWALK		20	SQYD
06510	PAVEMENT STRIPING-TEMP PAINT-4 IN		4512	LF
06514	PAVE STRIPING-PERM PAINT-4 IN W		1173	LF
06514	PAVE STRIPING-PERM PAINT-4 IN Y		1493	LF
06565	PAVE MARKING-THERMO X-WALK-6 IN		105	LF
06568	PAVE MARKING-THERMO STOP BAR-24IN		10	LF
08100	CONCRETE - CLASS A		21	CUYD
21138ED	ASPHALT WATERPROOFING MIX		245	TON
21415ND	EROSION CONTROL		1	LS
23484EC	PIPE LINER ACCEPTANCE TESTING		1	LS
23744EC	EPOXY INJECTION CRACK REPAIR	4	100	LF
23956EC	PIPE REPAIR		10	EACH
24542EC	RAILING REPAIR		11	LF
24814EC	PIPELINE INSPECTION		137	LF
24861EC	PVC FOLD AND FORM PIPE LINER – 15 IN		17	LF
24862EC	PVC FOLD AND FORM PIPE LINER – 18 IN		48	LF
24863EC	PVC FOLD AND FORM PIPE LINER – 24 IN		166	LF
24969ED	LONGITUDINAL SAW CUT	5	1128	LF
25010EC	GEOCOMPOSITE REINFORCEMENT FOR ASPHALT		2225	SQYD

NOTES:

1. Excavation is incidental to the curb construction
2. Re-used existing limestone curb
3. To be used if existing loops are damaged during milling
4. Locations to be specified by the Engineer
5. Existing pavement to be saw cut 6" from existing curb

## DESCRIPTION OF WORK BAXTER AVENUE (KY 1703) OVER TYLER PARK

### I. PROJECT ROUTE LIST

**Baxter Avenue (KY 1703)** from Milepost 4.829 to Milepost 4.997

### II. DESCRIPTION

Perform all work in accordance with the Kentucky Transportation Cabinet's (KYTC) 2019 Standard Specifications, Supplemental Specifications, any applicable Special Provisions, and applicable Standard and Sepia Drawings, except as hereafter specified. Article references are to the Standard Specifications. Furnish all materials, labor, equipment, and incidentals for the following work:

(1) Maintain and Control Traffic; (2) Asphalt Pavement Milling and Texturing; (3) Asphalt Surface at locations listed and/or as directed by the Engineer; and (4) Sidewalk Repair at locations listed and/or directed by the Engineer; (5) Railing Repair at locations listed and/or directed by the Engineer; (6) Drainage system repairs and improvements; (7) All other work specified as part of this contract.

### III. MATERIALS

Except as specified in these notes or on the drawings, all materials will be per the KYTC Standard Specifications and applicable Special Provisions and Special Notes. The KYTC will sample and test all materials per KYTC's Sampling Manual and the Contractor will have the materials available for sampling a sufficient time in advance of the use of the materials to allow for the necessary time for testing, unless otherwise specified in these notes.

- A. **Maintain and Control Traffic.** See Traffic Control Plan.
- B. **Dense Graded Aggregate.** Crushed Stone Base may not be furnished in lieu of DGA.
- C. **Pavement Markings – 4-inch Paint.** Use 4-inch Permanent Paint for permanent striping.

### IV. CONSTRUCTION METHODS

- A. **Maintain and Control Traffic.** See Traffic Control Plan.
- B. **Site Preparation.** Be responsible for all site preparation. Do not disturb existing signs. This item will include, but is not limited to, incidental excavation and backfilling; removal of all obstructions or any other items; disposal of materials; sweeping and removal of debris; temporary and permanent erosion and pollution control; and all incidentals. Site preparation will be only as approved or directed by the Engineer. Other than the bid items listed, no direct payment will be made for site preparation, but will be incidental to the other items of work.
- C. **Embankment.** After the Engineer's approval of the layout, construct backfill. Construct embankments conforming to the attached sheets or as directed by the Engineer. Provide positive drainage of slopes and ditches at all times during and upon completion of construction.
- D. **Disposal of Waste.** Dispose of all cuttings, debris, and other waste off the right-of-way

- at approved sites obtained by the Contractor at no additional cost to the KYTC. The contractor will be responsible for obtaining any necessary permits for this work. No separate payment will be made for the disposal of waste and debris from the project or obtaining the necessary permits but will be incidental to the other items of the work.
- E. Final Dressing, Clean Up, and Seeding and Protection.** After all work is completed, completely remove all debris from the job site. Perform Class A Final Dressing on all disturbed areas. In accordance with Section 212.03.03A of the Standard Specifications Sow disturbed earthen areas with a seed mixture of 90% Fescue and 10% Ryegrass. These items are incidental to other items in the contract.
- F. Pavement Striping and Pavement Markers.** Permanent striping will be in accordance with Section 112, except that:
- (1). Striping will be 4" in width
  - (2). Permanent striping will be in place before a lane is opened to traffic
  - (3). Permanent striping will be 4" Permanent Paint Striping.
- G. On-Site Inspection.** Each Contractor submitting a bid for this work will make a thorough inspection of the site prior to submitting a bid and will thoroughly familiarize himself with existing conditions so that the work can be expeditiously performed after a contract is awarded. Submission of a bid will be considered evidence of this inspection having been made. Any claims resulting from site conditions will not be honored by the KYTC.
- H. Caution:** Information shown on the drawings and in this proposal and the types and quantities of work listed are not to be taken as an accurate or complete evaluation of the material and conditions to be encountered during construction. The bidder must draw his own conclusions as to the conditions encountered. The KYTC does not give any guarantee as to the accuracy of the data and no claim will be considered for additional compensation if the conditions encountered are not in accordance with the information above.
- I. Utility Clearance.** It is not anticipated that utility facilities will need to be relocated; however, in the event that it is discovered that the work does require that utilities be relocated, the utility companies will work concurrently with the Contractor while relocating their facilities.
- J. Utility Valve Covers, Curb Inlets, and Manholes.** Adjustment of utility valves/covers and drainage structures, including manholes shall be incidental to the project. It shall be the responsibility of the Contractor to determine the locations of these items prior to bidding.
- K. Right of Way Limits.** Limit work activities to back of sidewalk, permanent or temporary Easements, and work areas secured by the KYTC through consent and release of the adjacent property owners. Be responsible for all encroachments onto private and public lands.
- L. Restoration.** Be responsible for all damage to public and/or private property resulting from the work. Restore all damaged features in like kind materials and design.

## V. METHOD OF MEASUREMENT

- A. Maintain and Control Traffic. See Traffic Control Plan.
- B. Permanent Striping. 4" Permanent Paint Striping is measured per linear foot. See Traffic Control Plan.
- C. Erosion Control. Erosion control items not listed as bid items will not be measured for payment, but will be considered incidental to the "lump sum" price for the bid item "Erosion Control".

## VI. BASIS OF PAYMENT

No direct payment will be made other than for the bid items listed in the contract. All other items required to complete the construction will be incidental to the bid items listed. Existing signs damaged by the Contractor will be replaced by the Contractor at his expense.

- A. Maintain and Control Traffic. See Traffic Control Plan.
- B. Site Preparation. Other than the bid items listed, no direct payment will be allowed for site preparation but will be incidental to the other items of work.
- C. Permanent Striping. See Traffic Control Plan.

## VII. PROJECT COORDINATES

The project is based upon the KY Single Zone coordinate system. The project base line has the following stationing and coordinates:

Station	Description	Northing	Easting
0+00	POB	3971369.37	4931031.33
3+27.34	PI	3971652.41	4930866.89
9+16.26	POE	3972145.95	4930545.58

**NOTES APPLICABLE TO PROJECT  
PAVEMENT REHABILITATION  
BAXTER AVENUE (KY 1703) OVER TYLER PARK**

1. The dimensions shown on the typical section for pavement and shoulder widths and thickness are nominal or typical dimensions. The actual dimensions to be constructed may be varied to fit existing conditions as directed or approved by the Engineer. It is not intended that existing pavement be widened.
2. The Contractor is advised low wires exist throughout the project.  
  
**CAUTION:** These and all other utilities should be avoided on this project. If any utility is impacted, it will be the Contractor's responsibility to contact the affected utility and cover any costs associated with the impact.
3. Any roadway signs or lighting that are damaged during construction are to be replaced at the Contractor's expense.
4. The Contractor should take extreme care during milling and paving operations to prevent damage to existing manholes and curb box inlets on the project. Any manhole or curb box inlet damaged during construction are to be replaced at the Contractor's expense.
5. Overlay pavement shall be tapered to create a smooth transition to the existing pavement at the tie in and approaches/entrances.
6. Option B compaction shall be utilized with this project. Rideability requirements will be based on the 10' straightedge method.
7. Any utilities shown on these plans were developed from facilities maps provided by the respective utility company and their locations should be considered approximate and are provided for informational purposes only. It shall be the responsibility of the Contractor to field verify the locations of all utilities, shown or not shown in this proposal, prior to any construction activities. The Department does not warrant the locations and assumes no responsibility for the accuracy or completeness. The Contractor must make his own determination. Except as shown on the Plans, work around and do not disturb existing utilities.
8. **CAUTION:** Underground utilities are present in areas where reconstruction will occur with this project. The Contractor must call BUD (1-800-752-6007 to reach KY 811) before any construction activity begins. See Special note for BUD for more details.
9. The Contractor shall field verify the dimensions of all drainage structures prior to their repair, adjustment, or reconstruction.
10. This project may include replacing traffic signal loops. Quantities for Bid Item No. 04820 – Trenching and Backfilling, Bid Item No. 04830 – Loop Wire (LF), and Bid Item No. 04895 Loop Saw Slot and Fill (LF) are included in the General Summary. Payment for these items will include all materials and labor necessary for complete installation, including routing of the new loop wire into the base of the existing pedestrian pedestal.
11. The Contractor is not to order any materials, produce any shop drawings, or begin any construction activities until after verifying dimensions and conditions in the field. Dimensions and details shown on these Plans in relation to the existing structure shall be considered

approximate. Existing plans, if available, shall not be considered accurate. It shall be the Contractor's responsibility to verify such dimensions and details in the field and to notify the Project Engineer and the Designer of any differences. Failure to notify either may delay drawing and other approvals. Thereafter make the necessary approved adjustments prior to construction or ordering materials. All Specification requirements shall remain in effect. Any variations shall not be cause for additional compensation for a change in the scope of work; however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work. In addition, the overrun and underrun formulas may be applied to appropriate repairs provided that the requirement of Article 104.02.02 of the Standard Specifications is satisfied. The cost of all labor, equipment, surveying, and materials necessary to verify field dimensions shall be included in the lump sum price for Bid Item No. 02726 --Staking.

12. The Contractor shall not use any part of Tyler Park as a staging area, laydown/storage area, or equipment parking, nor for any other construction-related activities. The Contractor shall bear full responsibility and expense for repair of any and all damage to the park and its facilities, should such damage result from the Contractor's actions.
13. The Contractor shall protect the existing bridge and retaining walls and shall bear full responsibility and expense for repair of any and all damage to the structures, should such damage result from the Contractor's actions. The Contractor is completely responsible for the stability of the structures from the time of mobilization until after the bridge has been reopened to normal traffic following completion of all work required in the Contract. After completion of all operations, the structures and site shall be left in a condition that is in accordance with Section 105.12 of the Specifications.
14. All welding shall be in accordance with the American Welding Society Structural Welding Code (Steel) ANSI/AWS D1.1 (current edition). Weld metal shall be E60XX or E70XX. Nondestructive testing of welds is not required.
15. One sidewalk shall remain open at all times for conveyance of pedestrians.

**TRAFFIC CONTROL PLAN  
BAXTER AVENUE (KY 1703) OVER TYLER PARK**

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**THE CONTROL OF ACCESS ON THIS PROJECT IS BY  
PERMIT**

**TRAFFIC CONTROL GENERAL**

Except as provided herein, "Maintain and Control Traffic" shall be in accordance with the KYTC Standard Specifications and the Standard Drawings, current editions. All lane closures used on the Project will be in compliance with the appropriate Standard Drawings.

Contrary to Section 106.01, traffic control devices used on this project may be new, or used in like new condition at the beginning of the work and maintained in like new condition until completion of the work. Traffic control devices will conform to current MUTCD.

Except for the Roadway and Traffic Control bid items listed, all items of work necessary to maintain and control traffic will be paid at the Lump Sum bid price to "Maintain and Control Traffic" as set forth in the current *Standard Specifications for Road and Bridge Construction*, unless otherwise provided for in these notes. The Lump Sum bid to "Maintain and Control Traffic" shall also include, but is not limited to the following items and operations:

- A. All labor and materials necessary for construction and maintenance of traffic control devices and markings.
- B. All flagpersons and traffic control devices such as, but not limited to, flashers, signs, barricades, vertical panels, plastic drums (Steel drums will not be permitted), and cones necessary for the control and protection of vehicular and pedestrian traffic as specified in these notes, the plans, the MUTCD, or the Engineer.

Any temporary traffic control items, devices, materials, and incidentals shall remain the property of the Contractor when no longer needed.

Reduce the speed limit in work areas to 25 miles per hour.

During non-work periods, traffic is to be maintained in each direction utilizing 10' minimum width driving lanes unless otherwise directed by the Engineer.

The Contractor shall completely cover any signs, either existing, temporary, or permanent which do not properly apply to the current traffic phasing and shall maintain the covering until the signs are applicable or removed.

In general, all traffic control devices shall be placed starting and proceeding in the direction of the flow of traffic and removed starting and proceeding in the direction opposite the flow of traffic.

The Engineer and the Contractor, or their designated representatives, shall review the signing before traffic is allowed to use any lane closures, crossovers, or detours. All signing shall be approved by the Engineer before work can be started by the Contractor.

If the Contractor desires to deviate from the traffic control scheme and construction schedule outlined in the plans and this proposal, he shall prepare an alternate plan and present it in writing to the Engineer.

This alternate plan can be used only after review and approval of the Divisions of Traffic, Design, and Construction, and the Federal Highway Administration, where applicable.

If traffic should be stopped due to construction operations and an emergency vehicle on an official emergency run arrives at the scene, the Contractor shall make provisions for the passage of that vehicle as quickly as possible.

All signs necessary for a marked detour will be provided by the Contractor as required by the Standard Drawings and the MUTCD. Signs outside the project limits shall be paid for by the square foot. This quantity shall include sign mounting hardware and posts.

Night work is not permitted on this project. Working hours shall be between the hours of 7:00 AM and 9:00 PM.

### **PROJECT PHASING & CONSTRUCTION PROCEDURES**

No lane closures will be allowed during the following days and hours unless otherwise directed and/or approved by the Engineer:

Veterans Day	6:00 A.M. to 9:00 PM November 11, 2021
Thanksgiving	6:00 A.M. November 24, 2021, to 6:00 A.M. November 29, 2021
Christmas Day (observed)	6:00 A.M. December 23, 2021, to 6:00 A.M. December 28, 2021
New Year's Day (observed)	6:00 A.M. December 30, 2021, to 6:00 A.M. January 3, 2022
Martin Luther King Jr. Day	6:00 A.M. January 14, 2022, to 6:00 A.M. January 18, 2022
President's Day	6:00 A.M. February 18, 2022, to 6:00 A.M. February 22, 2022
Thunder Over Louisville	6:00 A.M. April 22, 2022, to 6:00 A.M. April 23, 2022
Kentucky Derby	6:00 A.M. May 6, 2022, to 6:00 A.M. May 9, 2022
Memorial Day	6:00 A.M. May 27, 2022, to 6:00 A.M. May 31, 2022
Juneteenth (observed)	6:00 A.M. June 17, 2022, to 6:00 A.M. June 21, 2022
Independence Day	6:00 A.M. July 1, 2022, to 6:00 A.M. July 5, 2022
Labor Day	6:00 A.M. September 2, 2022, to 6:00 A.M. September 6, 2022

**NOTE:** Other projects may be occurring in the area at the same time. Coordination with area projects shall be maintained to minimize disruption to the travelling public.

Place Type III Barricades immediately in front of pavement removal areas. Any Type III Barricades left at night shall have lights. Type III Barricades will not be measured for payment and will be considered incidental to "Maintain and Control Traffic."

Access to all approaches and entrances on the project shall be maintained, at all times, unless otherwise directed by the Engineer.

All removal of existing striping shall be by water blasting, unless otherwise directed by the Engineer, and this work shall be considered incidental to "Maintain and Control Traffic."

Note that lane shifts may be required throughout the project. Stripe according to the MUTCD.

During the days and hours when a lane closure is allowed, implement the following procedures: Maintain traffic as specified in the phasing notes and typical sections. Any other work not requiring traffic lane widths to be restricted due to barrels or equipment encroaching into the driving lanes can be done during the remaining hours when lane closures are not permitted. Please refer to the "Special Note for Fixed Completion Date and Liquidated Damages" for damage rates per hour associated with failure to maintain the required number of lanes during

the specified time period. Liquidated Damages, at the rate specified per hour in the “Special Note for Fixed Completion Date and Liquidated Damages”, will be assessed for each hour a lane closure is in place beyond the specified time allowed.

## **GENERAL PHASING**

### **PHASE I**

Close the southbound lane and shift traffic to the northbound lane and the parking lane on the east side. Complete any curb, curb inlet, and pavement repairs noted or as directed by the Engineer in the parking lane adjacent to the southbound lane. Place temporary striping throughout the project limits as needed and/or directed by the Engineer.

### **PHASE II**

Close the northbound lane and shift traffic to the southbound lane and the parking lane on the west side. Complete any curb, curb inlet, pipe lining, and pavement repairs noted or as directed by the Engineer in the parking lane adjacent to the northbound lane. Place temporary striping throughout the project limits as needed and/or directed by the Engineer.

### **PHASE III**

Using flaggers as traffic control, mill existing surface to depths noted on this proposal throughout the limits of construction. Construct final surface course, including Recyclable Geomaterial for Asphalt, to depths noted in the proposal throughout the limits of construction. Adjust any manholes, water valves, and the like, as required. Place temporary striping throughout the project limits as needed and/or directed by the Engineer.

### **PHASE IV**

Using flaggers for traffic control, place permanent striping throughout the limits of construction in accordance with the attached striping plan.

## **LANE/SHOULDER CLOSURES**

Limit the lengths of lane and shoulder closures to only that needed for actual operations in accordance with the phasing specified herein, or as directed by the Engineer. Any deviation from this scheme shall be approved by the Engineer. Contrary to section 112, lane and shoulder closures will **NOT** be measured for payment, but are considered incidental to “Maintain and Control Traffic,” lump sum.

## **SIGNS**

Additional traffic control signs in addition to normal lane closure signing detailed on the Standard Drawings may be required by the Engineer. Additional signs needed for lane closures may include, but are not limited to, dual mounted LEFT/RIGHT LANE CLOSED 1000 FEET, SLOWED/STOPPED TRAFFIC AHEAD. Signage for reduced speed limits will be furnished, relocated, and maintained by the Contractor.

Contrary to section 112, individual signs will be measured only once for payment, regardless of how many times they are set, reset, removed, and relocated during the duration of the project. Replacements for damaged signs or signs directed to be replaced by the Engineer due to poor legibility or reflectivity will not be measured for payment.

## **FLASHING ARROWS**

Provide flashing arrow panels in advance of or on the project at locations to be determined by the Engineer. The arrow panels shall be in operation at all times. In the event of damage or mechanical failure, immediately repair or replace the arrow panels. The KYTC will measure for payment the maximum number of arrow panels in concurrent use at the same time on a single day on all sections of the contract. Individual arrow panels will be measured only once for payment, regardless of how many times they are set, reset, removed, and relocated during the duration of the project. Replacements for damaged arrow panels directed by the Engineer to be replaced due to poor condition will not be measured for payment. Arrow panels will become the property of the Contractor after construction is complete.

## **PORTABLE CHANGEABLE MESSAGE SIGNS**

Provide portable changeable message signs (PCMS) in advance of or on the project at locations to be determined by the Engineer. The Engineer will designate the locations and messages to be provided. Unless directed otherwise by the Engineer, use messages and abbreviations according to the Policy for the Use and Placement of Changeable Message Signs. The PCMS shall be in operation at all times. In the event of damage or mechanical failure, immediately repair or replace the PCMS. The KYTC will measure for payment the maximum number of signs in concurrent use at the same time on a single day on all sections of the contract. Individual signs will be measured only once for payment, regardless of how many times they are set, reset, removed, and relocated during the duration of the project. Replacements for damaged signs directed by the Engineer to be replaced due to poor condition or readability will not be measured for payment. PCMS will become the property of the Contractor after construction is complete.

## **TRUCK MOUNTED ATTENUATORS**

Furnish and install MUTCD approved truck mounted attenuators (TMA) in advance of work areas when workers are present less than 12 feet from traffic. If there is less than 500 feet between work sites, only a single TMA will be required at a location directed by the Engineer. Locate the TMAs at the individual work sites and move them as the work zone moves within the project limits. All details of the TMA installations shall be approved by the Engineer. TMA will not be measured for payment, but are incidental to "Maintain and Control Traffic," lump sum. The KYTC **WILL NOT** take possession of the TMAs upon completion of the work.

## **PAVEMENT MARKINGS**

If lane closures are in place during nighttime hours, remove or cover the lenses of inlaid pavement markers that do not conform to the traffic control scheme in use, or as directed by the Engineer. Replace or uncover lenses before a closed lane is reopened to traffic. No direct payment will be made for removing and replacing or covering and uncovering the lenses, but will be incidental to "Maintain and Control Traffic," lump sum.

Place temporary and permanent striping in accordance with Section 112, except that:

1. Temporary striping will be 4" in width and permanent striping will be 4" in width.
2. If the contractor's operations or phasing requires temporary markings which must be subsequently removed from the ultimate pavement, an approved removable lane tape will be used; however removable tape will be measured and paid as Pavement Striping-Temporary Paint 4"; and
3. Edge lines will be required for temporary striping
4. Existing, temporary, or permanent striping will be in place before a lane is opened to

- traffic
5. Place permanent striping on pavement within the project limits.
  6. Permanent striping will be Permanent Paint

Should the Contractor change the existing striping pattern, the Contractor is to restripe the roadway back to its original configuration after a certain period of time especially if no work is anticipated for a period of time (i.e., Winter shutdown).

### **PAVEMENT EDGE DROP-OFFS**

Pavement edge drop-offs will be protected by a lane or shoulder closure. Lane closures will be protected with plastic drums, vertical panels, or barricades as shown on the Standard Drawings. Pavement edges that traffic is not expected to cross, except accidentally, shall be treated as follows:

Less than 2" – No protection required. Warning signs should be placed in advance and throughout the drop-off area.

2" to 4" – Protect with a lane closure. Place plastic drums, vertical panels, or barricades every 50 feet. Cones may not be used in place of plastic drums, panels, and barricades at any time. Construct a wedge with compacted cuttings from milling, trenching, or asphalt mixtures with a 3:1 or flatter slope, when work is not active in the drop-off area. Place Type III Barricades at the beginning of the lane closures, and place additional Type III Barricades spaced at 2,500 feet during the time the lane closure is in place.

Greater than 4" – Full Depth Pavement Repair and Widening areas – In areas where pavement is to be removed, work should proceed continuously so that traffic is exposed to a drop-off for the minimum amount of time necessary to bring the pavement back up to existing grade. Barrel spacing should be 20 feet.

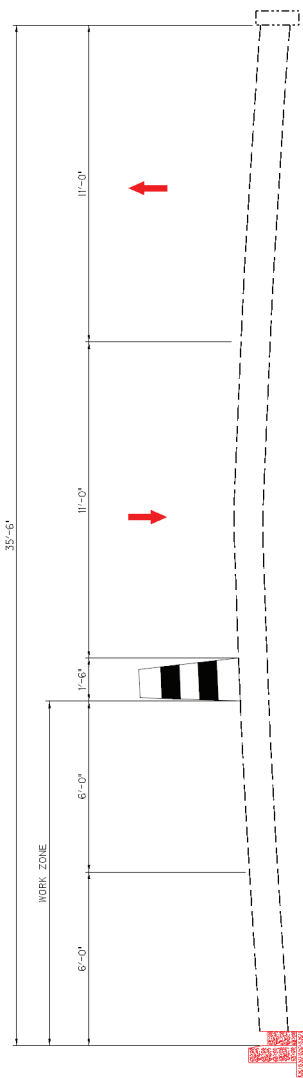
Pavement edges that traffic is expected to cross, either in a lane or in a lane change, shall not have an elevation difference greater than 1.5 inches. Drops greater than 1.5 inches shall have a temporary 1:25 asphalt taper constructed at the drop. A warning sign shall be placed in advance of the work area when pavement drops are greater than 0.5 inches.

### **COORDINATION OF WORK**

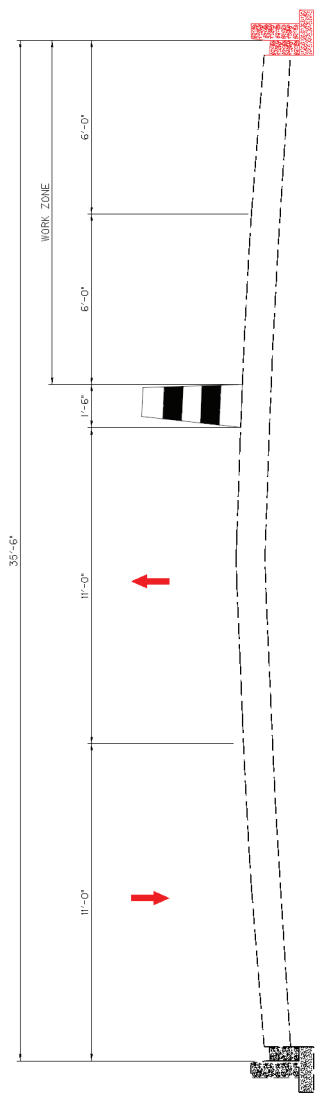
The Contractor is advised that other projects may be in progress within or in the near vicinity of this project. The traffic control of those projects may affect this project and the traffic control of this project may affect those projects. The Contractor will coordinate the work on this project with the work of the other contractors. In case of conflict, the Engineer will determine the relative priority to give to work phasing on the various projects.

REASONABLE MEANS OF INGRESS AND EGRESS SHALL BE MAINTAINED TO ALL PROPERTIES WITHIN THE PROJECT LIMITS, ACCESS TO FIRE HYDRANTS MUST ALSO BE MAINTAINED AT ALL TIMES.

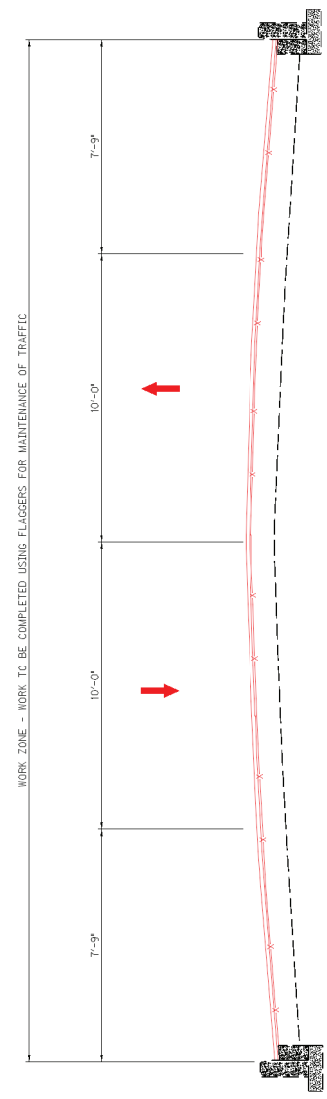
FOR MAINTENANCE OF  
TRAFFIC ONLY



**PHASE I**



**PHASE II**



**PHASE III**

NOT TO SCALE

DATE: 10 / 1 / 21  
SHEET NO.: 1 OF 1



MAINTENANCE OF TRAFFIC  
TYPICAL SECTIONS

SHEET TITLE:

COUNTY: JEFFERSON  
CROSSING:

ROUTE: TYLER PARK PEDESTRIAN PATH

BRIDGE NUMBER: 056B00296N

ROUTE: BAXTER AVENUE (KY 1703)

## REFERENCES

1. Kentucky Transportation Cabinet, Department of Highways, Standard Specifications for Road and Bridge Construction, Latest Edition.
2. FHWA Manual on Uniform Traffic Control Devices (MUTCD), Latest Edition.
3. Kentucky Department of Highways Standard Drawings, current editions, as applicable:
  - RDX-210 Temporary Silt Fence
  - RDX-220 Silt Trap Type A
  - RDX-225 Silt Trap Type B
  - RDX-230 Silt Trap Type C
  - RGX-001 Miscellaneous Standards Part I
  - RPM-170 Curb and Gutter, Curbs and Valley Gutter
  - TPM-115 Pavement Marker Arrangements Two-Lane, Two Way Roadways
  - TTC-100-04 Lane Closure Two-Lane Highway
  - TTD-120 Work Zone Speed Limit and Double Fine Signs
  - TTD-125 Pavement Condition Warning Signs
  - TTS-105 Mobile Operation for Paint Striping Case II
4. Louisville and Jefferson County Metropolitan Sewer District Standard Drawings, current editions, as applicable:
  - EF-01-02 Filter Fabric Inlet Protection
  - EF-03-02 Stone Bag Inlet Protection
5. Kentucky Transportation Cabinet, Department of Highways, Standard Specifications for Road and Bridge Construction, Latest Edition - Supplemental Specifications, as applicable:
  - Special Note 11 Portable Changeable Message Signs (6/15/2012)
  - Special Note Typical Section Dimensions *attached*
  - Special Note Before You Dig *attached*
  - Special Note Fixed Completion Date and Liquidated Damages *attached*
  - Special Note Erosion Control *attached*
  - Special Note Asphalt Milling and Pavement Texturing *attached*
  - Special Note Historic Materials *attached*
  - Special Note Pipe Liner Acceptance Testing *attached*
  - Special Note PVC Fold and Form Pipe Liner *attached*
  - Special Note Geocomposite Reinforcement for Asphalt *attached*
  - Special Note Asphalt Waterproofing Mix *attached*
  - Special Note Epoxy Injection Crack Repair *attached*
  - General Provision 444 Asphalt Pavement Ride Quality (Category B)
  - General Provision 447 Compaction of Asphalt Mixtures

**SPECIAL NOTE FOR TYPICAL SECTION DIMENSIONS  
BAXTER AVENUE (KY 1703) OVER TYLER PARK**

The dimensions shown on the typical sections for pavement and shoulder widths are nominal or typical dimensions. The actual dimensions to be constructed may be varied to fit existing conditions as directed or approved by the Engineer. It is not intended that existing pavement or shoulders be widened unless specified elsewhere in the Proposal.

**SPECIAL NOTE FOR BEFORE YOU DIG  
BAXTER AVENUE (KY 1703) OVER TYLER PARK**

The contractor is instructed to call 1-800-752-6007 to reach KY 811, the one-call system for information on the location of existing underground utilities. The call is to be placed a minimum of two (2) and no more than ten (10) business days prior to excavation. The contractor should be aware that owners of underground facilities are not required to be members of the KY 811 one-call Before –U-Dig (BUD) service. The contractor must coordinate excavation with the utility owners, including those who do not subscribe to KY 811. It may be necessary for the contractor to contact the County Court Clerk to determine what utility companies have facilities in the area.

**SPECIAL NOTE FOR EROSION CONTROL  
BAXTER AVENUE (KY 1703) OVER TYLER PARK**

The Contractor shall be responsible for filing the Kentucky Pollution Discharge Elimination System (KPDES) KYR10 permit Notice of Intent (NOI) with the Kentucky Division of Water (DOW) and any KPDES local Municipal Separate Storm Sewer System (MS4) program that has jurisdiction. The NOI shall name the contractor as the Facility Operator and include the KYTC and Contact ID Number (CID) for reference.

Erosion Control includes installation, maintenance, cleaning, removal, proper disposal of materials, and all incidentals necessary to provide erosion control per Metropolitan Sewer District (MSD) Specifications and Standard Drawings.

All inlets shall be protected with inlet protection filter bags per MSD recommendations and MSD Standard Drawings will be required for the project.

The Contractor shall be responsible for filing the KPDES permit Notice of Termination (NOT) with the Kentucky DOW and any local MS4 program that has jurisdiction. The NOT shall be filed after the Engineer agrees that the project is stabilized, or the project has been formally accepted.

**SPECIAL NOTE FOR ASPHALT MILLING AND PAVEMENT TEXTURING  
BAXTER AVENUE (KY 1703) OVER TYLER PARK**

The contractor will take possession of the millings on this project. If contractor chooses to dispose of the millings, he must do so off Right-of-Way limits at sites obtained by the Contractor at no additional cost to the KYTC.

Removal of the existing pavement markers prior to the milling operation is considered incidental to the bid item "Asphalt Pavement Milling and Texturing".

**SPECIAL NOTE FOR HISTORIC MATERIALS  
BAXTER AVENUE (KY 1703) OVER TYLER PARK**

Historic Materials, including brick masonry pavers, limestone curb, and limestone cobblestone, that are deemed salvageable by the Engineer shall be salvaged by the Contractor and delivered to storage locations.

Prior to their removal from the site, any historic material such as, but not limited to, brick masonry pavers, limestone curb, limestone cobblestone, etc., that are deemed salvageable by the Engineer and shall be delivered to sites designated by the Engineer, at no additional cost. All other existing concrete or other material that is required to be removed shall be disposed of off-site by the contractor at no additional cost.

## **SPECIAL NOTE FOR PIPE LINER ACCEPTANCE TESTING**

### **PART 1 -- GENERAL**

#### **1.01 SCOPE OF WORK**

- A. Furnish all necessary labor, materials, equipment, services and incidentals required to visually inspect by means of closed-circuit television (CCTV) designated pipe sections including, but not limited to, recording and playback equipment, materials and supplies.
- B. The inspection shall be performed on one section (i.e. curb box inlet to curb box inlet) at a time. The section being inspected shall be suitably isolated from the remainder of the system.
- C. Video recordings shall be made of the television inspections and copies of both the recordings and printed inspection logs shall be supplied to the Engineer.
- D. Contractor may have to perform point repairs, remove obstructions or remove protruding service connections to complete pre-rehabilitation TV inspection.

### **PART 2 -- PRODUCTS**

#### **2.01 EQUIPMENT**

- A. The television camera used for inspection shall be one specifically designed and constructed for such inspection. Lighting for the camera shall be suitable to allow a clear picture for the entire periphery of the pipe. The camera shall be operative in 100 percent humidity conditions. The camera, television monitor and other components of the video system shall be capable of producing a minimum 500-line resolution color video picture. Picture quality and definition shall be to the satisfaction of the Engineer and if unsatisfactory, inspection shall be performed again with the appropriate changes made as designated by the Engineer at no additional cost to the Engineer. The television inspection equipment shall have an accurate footage counter that shall display on the monitor, the exact distance of the camera from the centerline of the starting manhole.

### **PART 3 -- EXECUTION**

#### **3.01 PROCEDURE**

- A. The camera shall be moved through the pipe in either direction at a uniform rate, stopping when necessary to ensure proper documentation of the pipe's condition but in no case will the television camera be pulled at a speed greater than 30 fpm. Manual winches, power winches, TV cable and powered rewinds or other devices that do not obstruct the camera view or interfere with proper documentation of the pipe conditions shall be used to move the camera through the line. If, during the inspection operation, the television camera will not pass through the entire section, the equipment shall be removed and repositioned in a manner so that the inspection can be performed from the opposite opening. All set-up costs for the inspection shall be included in the unit prices bid. If the camera fails to pass through the entire section, the Contractor shall perform point repairs as required or approved by the Engineer. Point repairs will be paid as each at the bid price for "PIPE REPAIR". The Contractor shall re-clean or further remove blockage after the point repairs at no additional cost to the Engineer.
- B. Whenever non-remote powered and controlled winches are used to pull the television camera through the line, telephones, radios, or other suitable means of communication shall be set up between the two openings of the line being inspected to ensure that good communications exist between members of the crew.

The camera height shall be adjusted such that the camera lens is always centered in the pipe being

televised. Flow shall be controlled such that depth of flow shall not exceed 20% of pipe's diameter.

Lighting system shall be adequate for quality pictures.

### **3.02 RECORDING OF FIELD OBSERVATIONS**

#### **A. Television Inspection logs**

1. Printed location records shall be kept which shall clearly show the location. In addition, other data of significance including joints, unusual conditions, roots, collapsed sections, or presence of scale and corrosion that the camera failed to pass through and reasons for the failure and other discernible features shall be recorded and annotated using the PACP system and a copy of such records shall be supplied to the Engineer.

#### **B. Digital Recordings**

1. The purpose of digital recording shall be to supply a visual and audio record of areas of interests of the pipe segments that may be replayed by the Engineer. Digital recording playback shall be at the same speed that it was recorded and shall be made in color. The Contractor shall be required to have all digital media and necessary playback equipment readily accessible for review by the Engineer during the project.
2. The Contractor shall perform CCTV inspection of each newly installed or rehabilitated pipe segment after testing and before re-introducing any flow into the pipe. Each test shall be witnessed by the Engineer.
3. The Contractor shall record each CCTV inspection on a DVD and submit such recordings to the Engineer as a prerequisite for Partial Utilization/Substantial Completion.
4. CCTV inspections shall be performed by a PACP certified and trained person.
5. Inspections shall include narration that notes the location and type of defects, if any.
6. At the completion of the project, the Contractor shall furnish all of the original digital recordings to the Engineer. Each disc shall be labeled as to its contents. Labels shall include the disc number, date televised, sewer segment reach designation, street location, and structure numbers on the disc. The Contractor shall keep a copy of the discs for 30 days after the final payment for the project, at which time the discs may be erased at the Contractor's option.

### **PART 4 – PAYMENT**

Payment for both the video inspection prior to and after the Pipe Liners have been installed will be made as one lump sum payment as PIPE LINER ACCEPTANCE TESTING. Payment for PIPE LINER ACCEPTANCE TESTING will be considered full compensation for all work, equipment, and incidentals necessary to perform the video inspection in accordance with this note.

Payment for pipe point repairs will be made as each at the bid price for PIPE REPAIR. Payment for PIPE REPAIR will be considered full compensation for all work, equipment, and incidentals necessary to make point repairs as required and approved by the Engineer.

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## SPECIAL NOTE FOR PVC FOLD-AND-FORM PIPE LINER

### I. GENERAL

#### A. SUMMARY

1. Section Includes: Definition of the approved methods and materials to rehabilitate gravity pipelines by the insertion of a continuously extruded, folded, PVC Fold-and-Form Pipe Liner into a conduit (host pipe), and the “blow-molding” (thermoforming) of the pipe liner to conform to the shape of the existing pipe. The pipe liner shall:

- a) Extend continuously from one access point to the next access point with no joints.
- b) Provide a tightly conforming fit against the inner wall of the host pipe.
- c) Definitions:
  - (1) PVC Fold-and-Form Pipe Liner: A continuously extruded (joint-less), polyvinyl chloride (PVC) Pipe Liner that is shaped into a reduced form to facilitate insertion into existing pipelines or conduits. The Pipe Liner shall return to its extruded, round memory upon application of heat and pressure and form tightly against the host pipe by “blow molding” (thermoforming) techniques.
  - (2) Host Pipe: An existing gravity pipeline or conduit to be internally rehabilitated by installation of the PVC Fold-and-Form Pipe Liner.

#### B. REFERENCES

1. Codes and standards referred to in this Special Note are:
  - a) ASTM D 256: Standard Test Methods for Determining the Pendulum Impact Resistance of Notched Specimens of Plastics.
  - b) ASTM D 638: Standard Test Method for Tensile Properties of Plastics
  - c) ASTM D 790: Standard Test Method for Flexural Properties of Unreinforced and Reinforced Plastics
  - d) ASTM D 1784: Standard Specification for Rigid Polyvinyl Chloride (PVC) Compounds and Chlorinated Polyvinyl Chloride (CPVC) Compounds
  - e) ASTM D 2122: Standard Test Method for Determining Dimensions of Thermoplastic Pipe and Fittings
  - f) ASTM D 2152: Standard Test Method for Extrusion Quality using Acetone Immersion
  - g) ASTM D 2444: Standard Test Method for Impact Strength
  - h) ASTM F 1057: Standard Test Method for Extrusion Quality using Heat Reversion
  - i) ASTM F 1504: Standard Specification for Folded/Formatted Poly (Vinyl Chloride) Pipe for Existing Sewer and Conduit rehabilitation

#### C. PIPE DESIGN AND DIMENSION

1. Submittals: The Contractor shall furnish engineering data covering materials and installation procedures.

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2. Unless otherwise specified, the Contractor shall determine the minimum and maximum length of liner to effectively span the distance from the inlet to the outlet of the respective pipelines.
3. The pipe liner shall have a nominal outside diameter and minimum wall thickness based upon project parameters and the condition of the host pipe.

D. SAFETY

1. The CONTRACTOR shall conform to all safety requirements of pertinent regulatory agencies and shall secure the site for the working conditions in compliance with the same. The CONTRACTOR shall erect signs and devices as are necessary for the safety of the work site.
2. The CONTRACTOR shall also provide all of the WORK in accordance with applicable OSHA standards. Emphasis shall be placed upon the requirements for entering confined spaces and working with steam.

II. PRODUCTS

A. MATERIAL SPECIFICATIONS:

1. The PVC Fold-and-Form Pipe Liner will be manufactured from virgin PVC Fold-and-Form Pipe Liner compound, containing no fillers, and meet or exceed the following minimum physical properties:
  - a) COMBUSTIBILITY: Self-Extinguishing
  - b) FLEXURAL MODULUS: ASTM D 790 280,000 PSI @73F
  - c) FLEXURAL STRENGTH: ASTM D 790 5,000 PSI @73F
  - d) IZOD IMPACT: ASTM D 256 1.5 FT-LB/IN
  - e) CHEMICAL RESISTANCE: suitable under general sanitary sewer conditions
2. CHARACTERISTICS: The PVC Fold-and-Form Pipe Liner shall be designed to meet the following installation performance requirements:
  - a) The Pipe Liner shall be capable of expanding a full pipe size larger than the nominal diameter (ex: 8" to 10") without splitting or rupturing with the understanding that the pipe liner dimension ratio will increase when so expanded.
  - b) After being expanded by "blow-molding", the installed Pipe Liner will match the configuration of the host pipe.
  - c) The Pipe Liner shall be capable of negotiating pipeline bends in the host pipe without splitting, rupturing, or wrinkling of the pipe liner material.
  - d) The pipe liner shall be dimensionally stable after cool-down.
  - e) Processing of the pipe liner shall cause no degradation of the pipe liner physical properties.
3. MARKINGS: The pipe liner shall be marked at maximum five (5) foot intervals indicating ASTM D 1784 cell classification, manufacturer, and size (diameter and SDR). Each production lot will be uniquely coded.

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4. DIMENSIONS:

a) The Pipe Liner outside diameter will be manufactured substantially smaller than the inside diameter of the host pipe. The pipe liner shall be manufactured with sufficient excess wall thickness to allow the pipe liner to meet or exceed the DR requirements after being expanded by “blow-molding” within the host pipe.

b) Unless otherwise specified, the Standard Dimension Ration (SDR) of 4” to 15” diameter Pipe Liner will be SDR 35. 18” to 36” Pipe Liner will be specified by wall thickness. The Pipe Liner will be continuously extruded (no joints) at the factory to the minimum length required to effectively span the distance between access points, in accordance with actual distances which shall be field verified by the Contractor prior to manufacturing.

B. MATERIAL TESTING: Each production lot of Pipe Liner will be inspected and tested at the time of manufacture for defects in accordance with ASTM D 2444, and ASTM D 2152. All pipe liners shall conform to the specified dimensions. Material design properties shall be confirmed in accordance with ASTM D 790.

III. EXECUTION

A. HOST PIPE PREPARATION

1. The existing pipeline shall be cleaned of any obstructions and televised using CCTV immediately prior to installation of the pipe liner. The host pipe condition shall be acceptable to the ENGINEER as appropriate for lining prior to the insertion of the pipe Liner.

2. Prior to beginning the insertion of the pipe liner, the CONTRACTOR shall confirm that the host pipe is adequately cleaned.

B. INSTALLATION PROCEDURES:

1. The pipe liner manufacturer’s installation instructions and procedures shall be followed during installation.

2. Point Repairs

a) Point repairs and obstruction removals shall be completed, as necessary, in order to enable lining.

3. Liner Insertion

a) The entrance to the host pipe shall be covered so as to provide a smooth surface to prevent damage to the Pipe Liner.

b) The Pipe Liner shall be positioned to enable it to naturally curve into the access point and the host pipe.

c) The insertion end of the Pipe Liner shall be sealed to inhibit fluids and solids from entering the lumen of the Pipe Liner.

d) Insert the Pipe Liner into the entry access point. Slowly feed the Pipe Liner from the supply reel, while simultaneously pulling the Pipe Liner at the exit access point, to minimize tension on the Pipe Liner. Maintain two-way communication between personnel at entry and exit access points to coordinate the rate of Pipe Liner supply and pulling operations.

e) Use a power winch and a steel cable connected to the pulling head as recommended by the manufacturer to advance the Pipe Liner.

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4. Pipe Liner Processing and “Blow-Molding”:
  - a) Process and “blow-mold” the PVC Fold and-Form Pipe Liner in accordance with the manufacturer’s instructions for heating and expanding the Pipe Liner. Upon completion of processing and “blow-molding”, the Pipe Liner shall fit tightly against the inside wall of the host pipe and be locked into the joints of the host pipe, if possible.
  - b) Temperature and pressure gauges shall be used at the insertion and termination access points to monitor internal conditions during Pipe Liner processing and “blow-molding”.
  - c) Introduce pressurized steam to heat and relax the Pipe Liner in strict accordance with the recommendations of the Pipe Liner manufacturer.
  - d) Continue the application of steam while introducing compressed air to increase internal pressure on the Pipe Liner as recommended by the manufacturer. **DO NOT ALLOW PRESSURE TO EXCEED 12 PSI, AS DAMAGE MAY OCCUR TO HOST PIPE.**
  - e) Discontinue the use of steam while continuing the use of compressed air to maintain the internal pressure. Allow the Pipe Liner to cool below 100 F before releasing pressure.
5. Liner Termination:
  - a) During the pulling in place and “blow-molding” process, the PVC liner shall form a bell shape at each end effectively locking the liner in place.

#### IV. **PAYMENT**

- A. Payment for PVC Fold and Form Pipe Liners will be made per linear foot as
  1. PVC FOLD AND FORM PIPE LINER – 12 IN - ITEM 24860EC
  2. PVC FOLD AND FORM PIPE LINER – 15 IN - ITEM 24861EC
  3. PVC FOLD AND FORM PIPE LINER – 18 IN - ITEM 24862EC
  4. PVC FOLD AND FORM PIPE LINER – 24 IN - ITEM 24863EC
  5. PVC FOLD AND FORM PIPE LINER – 30 IN - ITEM 24864EC
  6. PVC FOLD AND FORM PIPE LINER – 36 IN - ITEM 24865EC
- B. Payment will be considered full compensation for all work, equipment, and incidentals necessary to install the pipe liners in accordance with this note.

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**SPECIAL NOTE FOR GEOCOMPOSITE REINFORCEMENT FOR ASPHALT**

This Special Note will apply where indicated on the plans or in the proposal. Section references herein are to the Department’s 2019 Standard Specifications for Road and Bridge Construction.

**1.0 DESCRIPTION.** This specification covers geocomposites used as an interlayer in asphalt pavements.

**2.0 MATERIALS AND EQUIPMENT.**

**2.1 Geocomposite.** The geocomposite shall consist of a geogrid component with a non-woven geotextile (paving fabric) backing. Furnish fiberglass-reinforced or polyester geogrid coated with an elastomeric polymer. Ensure the geogrid forms a stable network such that the ribs, filaments, or yarns retain their dimensional stability, including selvages. Furnish geogrid with a non-woven paving fabric backing composed of long chain synthetic polymers that are 95 percent by weight polyolefins or polyesters.

**A) Physical Requirements.** Furnish the specified geogrid type conforming to the Physical Requirements Table and ASTM D 4759. Ensure that each geogrid shipment is accompanied by a manufacturer’s certification listing minimum average roll specification values (MARV) of each lot number for those properties listed in the table below. Furnish geogrid with a non-woven geotextile backing that conforms to AASHTO M288 Type II paving fabric with the exception of mass per unit area. Products that meet all Type II requirements except mass per unit area will be acceptable.

PROPERTY	TEST METHOD	SPECIFICATION
Geogrid Tensile Strength, lb/in (min.)	ASTM D6637 Test Method A	560
Geogrid Elongation, % (max.)	ASTM D6637	< 3
Melting Point of Paving Fabric Component, °F (min.)	ASTM D 276	320
Grid Size, inch (min/max)	Calipered	0.5/1.25

**B) Packaging, Shipment, and Storage.** Ensure that each roll is labeled with the manufacturer’s name, product type, style number, lot number, roll number, manufactured date, roll dimensions, chemical composition, and applicable physical properties. Protect the geocomposite from direct sunlight, ultraviolet rays, flames, aggressive chemicals, mud, dirt, dust, and debris during all periods of shipment and storage. Keep geocomposite dry until installation, and do not store directly on the ground.

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**2.2 Asphalt Distributor. Conform to 406.02.05.**

**2.3 Rolling Equipment.** Use pneumatic-tired rollers that weigh at least 12 tons and have 7 to 9 tires capable of inflation pressures up to 125 psi. Maintain an inflation pressure in all tires within  $\pm 5$  psi of the manufacturer's recommended pressure. Arrange the tires so that the gap between the tires of the front axle is covered by the tires of the rear axle. Mount wheels to provide equal contact pressure under each wheel. Use a tire tread that is satisfactory to the Engineer. Maintain tire size and inflation pressure such that the contact pressure is at least 80 psi.

**3.0 CONSTRUCTION.**

**3.1 Geocomposite Representative.** Ensure that a representative of the geocomposite manufacturer is on the project when work begins, and remains on call as the project progresses, to advise the Engineer.

**3.2 Weather Restrictions.** Do not place the geocomposite when weather conditions, in the opinion of the Engineer, are not suitable. Ensure the air and pavement temperatures are sufficient to allow the tack coat to hold the geocomposite in place. Specifically, ensure the temperature is at least 50 °F and rising.

**3.3 Surface Preparation.** Perform any needed base repairs and repair all potholes, cracks greater than 1/4 inch, and any badly damaged or rough pavement, which may require milling or placement of leveling course. Ensure the surface is dry, clean, dust-free, and between 40 and 140 °F. Unless the geocomposite is precoated with an adhesive, apply tack according to the manufacturer's recommendations. This tack coat will not be measured for payment and will be considered incidental to the geocomposite. Distributor truck must be calibrated to supply the tack at the manufacturer's recommended rate before the job begins and this calibration is to be witnessed by the representative of the geocomposite manufacturer on the project. No work to install the geocomposite shall take place unless a representative from the geocomposite manufacture is on site.

**3.4 Geocomposite Placement.** Place the geocomposite while the tack coat is still tacky/broken. Keep the material flat and wrinkle free throughout the installation. Roll the geocomposite until the adhesive is activated or the geocomposite is seated in the tack coat. Clean the roller with an asphalt release agent. Brooming may be required. On sharp curves, cut the edges and fold the geocomposite over in the direction of the placement of the asphalt overlay. Overlap side joints by one to 2 inches. Overlap all end-of-roll joints by 3 to 6 inches. Ensure that the overlaps are shingled in the direction of paving.

**3.5 Asphalt Placement.** Place the asphalt overlay at a minimum 2-inch compacted thickness. Pave over the geocomposite on the same day of its placement. Except for paving equipment and vehicles, allow no traffic on the grid. Do not place tack coat on top of the interlayer grid.

**3.6 Geocomposite Repair.** Repair any visible distress that occurs due to movement of the geocomposite immediately after rolling. For small areas, remove the asphalt

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mixture from the affected area; replace the geocomposite in its original position, and replace, level, and compact the asphalt mixture. Cut the geocomposite if necessary for it to lie flat.

**3.7 Sampling and Testing.** The Department will sample the geocomposite at the project site according to ASTM D 4354 and KM 64-113 at a frequency the Engineer determines. The Department will test the geocomposite for all properties possible given the testing equipment availability. When the Department determines that an individual sample fails to meet any specification requirement, the Department will reject that roll and sample two additional rolls from the same lot. When the Department determines that either of these two additional samples fails to comply with any part of the specification, the Department will reject the entire quantity of rolls represented by that sample.

**4.0 MEASUREMENT.** The Department will measure the quantity of geocomposite in square yards. The Department will not measure geocomposite when the contract indicates that the geocomposite are incidental to the work being performed or when no separate bid item for geocomposite is listed in the proposal. The Department will not measure providing the geocomposite manufacturer's representative for payment and will consider it incidental to the geocomposite. Tack coat, applied per the geocomposite manufacturer's recommendations, will not be paid and will be considered incidental to the geocomposite.

**5.0 PAYMENT.** The Department will make payment for the installed and accepted quantities under the following:

<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
25010EC	Geocomposite Reinforcement for Asphalt	Square Yard

## SPECIAL NOTE FOR ASPHALT WATERPROOFING MIX

**1. DESCRIPTION.** Asphalt Waterproofing Mix (AWM) is a highly elastomeric, polymer-modified, impermeable asphalt mixture that is designed to be a one-step, waterproof, wearing course system for bridge-deck overlays and the adjacent approaches. Place AWM at a minimum thickness of 1.50 in. directly on the prepared surface using a conventional paver(s) and roller(s). Apply this material according to the lines, grades, and typical cross-sections in the plans or as established by the Engineer.

Unless otherwise noted, Section references herein are to the Department's *Standard Specifications for Road and Bridge Construction*. Conform to all requirements for CL3 ASPH SURF 0.50A PG76-22 unless specifically modified herein.

### 2. MATERIALS AND PERSONNEL.

**2.1 Aggregate.** Provide polish-resistant coarse and fine aggregate conforming to Subsection 403.03.03 for a Type A mixture. Do not use mineral aggregates that are inherently porous, such as blast-furnace slag, expanded shale, porous limestone, and lightweight aggregates, in this mixture.

**2.2 AWM Binder.** Provide a performance-graded (PG) 64-22 binder conforming to Section 806. Add 2.25 percent of a concentrated, thermoplastic, virgin polymeric material by weight of the total mixture. Ensure that the modified binder conforms to AASHTO M 320 with a high temperature of 94 °C or higher and a low temperature of -34 °C or lower. In addition, ensure that the AWM binder conforms to the following criteria:

<u>Test</u>	<u>Criteria</u>
Elastic Recovery at 10 °C (ASTM D 6084)	92 % (min)
Toughness (ASTM D 5801)	210 in.-lbf (min)
Tenacity (ASTM D 5801)	141 in.-lbf (min)

**2.3 Edge Sealant.** Provide a material for edge sealant as recommended by the producer of the thermoplastic polymer modifier utilized in the AWM. Ensure the material is a highly thixotropic edge sealant that dries to a soft consistency and will not dry out, crack, or split under vibration or slight movement of opposing surfaces.

**2.4 Adhesive Tack Coat.** Provide a solvent-based, elastomeric primer adhesive tack coat as recommended by the producer of the thermoplastic polymer modifier utilized in the AWM.

**2.5 Joint Sealant [Rubber Expansion Joint Compound (REJC)].** Provide a flexible, cold-pour, two-part polyurethane joint sealant conforming to the Special Note for Rubber Expansion Joint Compound.

**2.6 Preconstruction Meeting.** At least two weeks prior to the anticipated start of the project, the Department will schedule a preconstruction meeting to discuss the production and placement of AWM.

**2.7 AWM Representative.** Ensure a technical representative from the producer of the thermoplastic polymer modifier utilized in the AWM is present at the preconstruction meeting, during the initial construction activities, and available upon the request of the Engineer.

**3. CONSTRUCTION.**

**3.1 Preparation of Mixture.** Submit component material samples to the thermoplastic polymer modifier manufacturer for formulation of a mix design. Ensure the AWM contains no reclaimed materials. After receiving the completed mix design from the thermoplastic polymer modifier manufacturer, submit the AWM design and component material samples to the Division of Materials according to Subsection 402.03.

**3.2 Job-Mix Formula (JMF).** Contrary to Subsection 402.03, formulate and submit a JMF conforming to the following total binder content and gradation limits.

<u>Sieve Size</u>	<u>Percent Passing</u>	<u>Production Tolerance (%)</u>
½ in.	100	---
¾ in.	80-100	± 6
No. 4	50-76	± 6
No. 8	37-54	± 5
No. 16	26-40	± 4
No. 30	17-29	± 4
No. 50	10-21	± 3
No. 100	5-16	± 2
No. 200	2.0-8.0	± 1.5
% Virgin PG binder	5.0-7.0	
% Thermoplastic Polymer	2.25 by weight of total mixture	
% Total binder (Including PG binder and Thermoplastic polymer)	7.25-9.25	± 0.5

**3.3 Mix Design Criteria.** Contrary to Subsection 403.03, using a compaction effort of  $N_{des} = 75$  gyrations, perform and submit a laboratory mix design conforming to the following mixture specifications.

**Test** **Criteria**

% Air Voids (AV) (AASHTO R 35)	2.0 ± 2.0
% Voids-in-Mineral Aggregate (VMA) (AASHTO R 35)	16.0 (min)
Permeability (ASTM D 5084)	10 <sup>-8</sup> to 10 <sup>-10</sup> m/s
Flexural Beam Fatigue (AASHTO T 321) (750 microstrains, 10 Hz, 2.0 % AV min)	250,000 cycles (min) (average of two samples)

The Department will not require AWM blends previously documented as satisfying the flexural beam fatigue specification to be tested again for flexural beam fatigue. Also, the Department will not require flexural beam fatigue testing for projects with a total AWM quantity of less than 1000 tons.

**3.4 Surface Preparation.** Prior to the preconstruction meeting, review the existing bridge deck(s) and approach pavement with a technical representative from the producer of the thermoplastic polymer modifier utilized in the AWM and Department personnel to develop a strategy for repairing distressed areas.

Prior to the placement of the AWM over PCC bridge deck(s) and approach pavement and as directed by the Engineer, repair any moderately or highly “D-cracked” areas, high-severity “punch-outs,” “blow-ups,” and other severe distresses with a doweled, full-depth patch. Ensure the patching material satisfies the applicable requirements of Section 502.

Prior to the placement of the AWM over asphalt pavement and as directed by the Engineer, fill large surface deformities, greater than 3 in. deep and 4 ft in diameter, with an approved asphalt mixture.

Immediately prior to placing the AWM, thoroughly clean the surface of all vegetation, loose materials, dirt, mud, and objectionable materials. Ensure the surface is dry. During placement of the AWM, fill smaller pavement deformities in the underlying bridge deck(s) and approach pavement with the AWM.

**3.5 Application of Edge Sealant.** Apply edge sealant, at 4 to 6 in. wide and approximately 0.03 in. thick, before and after AWM application in accordance with the guidelines from the producer of the thermoplastic polymer modifier utilized in the AWM. Apply the sealant to all perimeter surfaces adjacent to the AWM, such as curbs, parapet walls, headers, drains, scuppers, and joints, in order to reduce moisture infiltration into the AWM. Also apply edge sealant to all longitudinal or transverse joints in the AWM that have cooled below 150 °F. When practical, apply the edge sealant the day before, or as early as possible on the day of, paving to maximize drying time.

**3.6 Application of Adhesive Tack Coat.** Contrary to Subsection 406.03, cold-apply an adhesive tack coat to the existing pavement at a rate to achieve an undiluted residue of 0.10 to 0.15 gal/yd<sup>2</sup>. For milled surfaces, apply the tack coat at a rate to achieve an

undiluted residue of 0.15 gal/yd<sup>2</sup>. For smaller projects as defined by the Engineer, cold-apply the tack coat by hand with a brush, roller, or hand-wand sprayer. Allow the adhesive tack coat to cure for a period of at least 40 min, or until the tack coat is dry, depending on local conditions.

**3.7 Application of Joint Sealant (REJC).** For continuous paving operations over existing bridge/pavement joints, saw-cut a construction joint, 1.0 to 1.5 in. wide, in the AWM and fill the joint with joint sealant (REJC) as directed by the technical representative from the producer of the thermoplastic polymer modifier utilized in the AWM or the Engineer. Additionally, conform to the construction requirements in the Special Note for Rubber Expansion Joint Compound.

**3.8 Production, Transport, and Placement of AWM.** For batch plants, after adding the concentrated thermoplastic virgin polymeric material, dry-mix for approximately ten seconds. Next, add the asphalt binder, and wet-mix for 80 seconds to ensure a homogenous blend.

Do not use parallel-flow drum plants for production. For other types of drum plants, refer to the producer of the thermoplastic polymer modifier utilized in the AWM for mixing times.

Ensure the pavement surface or ambient air temperature is a minimum of 50 °F and rising at the time of AWM placement.

Contrary to Subsection 401.03, produce and place AWM at the following temperatures:

	<u>Temperature (°F)</u>
Mixing	410-450
Laydown at Paver	350-410
Compaction	250-410

Do not permit any truck containing AWM to leave the asphalt mixing plant without inspection and approval by the technical representative from the producer of the thermoplastic polymer modifier utilized in the AWM or by the Engineer.

Ensure that the paving process begins on the downhill side of the crown and works upward in order to keep the excess water from the rollers, which may cause the mat to blister, away from the paving process.

**3.9 Compaction of AWM.**

**3.9.1 Rollers.** Contrary to Subsection 403.03, compact the AWM only with steel, double-drum drive rollers in the static mode. Provide breakdown rollers with a static weight of approximately eight tons. Provide finish rollers with a static weight of four to eight tons and a maximum drum width of 60 in. Due to the elevated temperature of the mat, utilize approximately twice the water for the

rollers than that of standard paving. Because the rollers will require more frequent filling, provide an additional roller to replace the roller being filled with water. Also provide a small roller or vibratory plate to compact smaller areas such as headers, scuppers, expansion joints, etc. that cannot accommodate a full-size roller.

**3.9.2 Opening to Traffic.** Open lanes to traffic when the AWM pavement reaches 140 °F or a minimum of one hour after compaction is completed.

**3.10 Trial Demonstration(s).** At least two days prior to beginning mainline paving, demonstrate that satisfactory production and placement of AWM is possible. Furnish at least 50 tons for the trial demonstration. The Engineer will determine the site, outside of the driving lanes, and exact quantity of the trial placement. Perform a minimum of one volumetric analysis (two gyratory specimens and two  $G_{mm}$  tests), one total binder content determination, and one gradation determination. Document that the AWM satisfies the applicable requirements of Sections 3.2 and 3.3 of this note for total binder content, gradation, AV, and VMA prior to beginning mainline paving.

Use the paver and rollers to be used on the project to construct the trial placement. Obtain and test a minimum of four roadway cores from the trial placement according to KM 64-442. Ensure the density of each core is within the range of  $96.0 \pm 2.0$  percent of the theoretical maximum density prior to beginning mainline paving.

Furnish additional 50-ton production lots until achieving mixture properties that satisfy the requirements above. Construct additional trial sections until establishing a rolling pattern that provides the density specified above.

Also furnish an additional 50-ton production lot and construct a new trial placement whenever a change in the mix design, compaction method, or compaction equipment occurs. When directed by the Engineer, remove and replace trial sections with unacceptable results.

**3.11 Acceptance Sampling and Testing.** Contrary to Subsection 402.03.02, the Department will accept AWM as follows:

**3.11.1 Definitions for Sublot, Lot, and Minimum Level of Testing.** Contrary to Subsection 402.03.02, for projects with a total AWM quantity of less than 4000 tons, the Department will define a sublot as 250 tons and a lot as 1000 tons. For these projects, the Department will define the setup period as the first 250 tons of production. For projects with a total AWM quantity of 4000 tons or more, the Department will define a sublot, a lot, and the setup period according to Subsection 402.03.02. In either case, perform a minimum of one complete set of acceptance tests, as defined by this note, each day that any AWM is produced.

**3.11.2 Total Binder Content and Gradation.** Perform one evaluation per sublot according to Subsection 402.03.02. By the end of the setup period,

establish a JMF conforming to the total binder content and gradation limits from Section 3.2 of this note. The Department will allow the established JMF to vary within the production tolerances from Section 3.2 of this note provided the percent passing each sieve remains within the gradation limits and the total binder content remains within the specified range.

**3.11.3 AV.** Prepare and analyze one set of two gyratory specimens per subplot according to Subsection 402.03.02. By the end of the setup period, test the AWM to document that the average AV value of each set of specimens conforms to the limits from Section 3.3 of this note.

**3.11.4 VMA.** Prepare and analyze one set of two gyratory specimens per subplot according to Subsection 402.03.02. By the end of the setup period, test the AWM to document that the average VMA value of each set of specimens conforms to a minimum of 15.5 percent.

**3.11.5 Density.** For each subplot of production after the setup period, randomly select locations for four cores from the bridge approach areas, not the bridge deck itself, in order to preserve the integrity of the AWM over the bridge deck. Obtain and furnish the cores to the Engineer according to Subsection 402.03.02. The Department will test the cores to ensure that the density of each core is within the range of  $96.0 \pm 2.0$  percent of the  $G_{mm}$  value for that subplot.

**3.11.6 Unsatisfactory Work Based on Laboratory Data.** When the total binder content, gradation, AV, VMA, or density value from any test after the setup period fails to satisfy the applicable requirements of this note, cease all shipments to the project. Adjust procedures or mixture composition until all properties satisfy the applicable requirements of this note. Document acceptable materials and work before restarting operations.

**3.12 Verification Sampling and Testing.** Contrary to Subsection 402.03.03, the Department will verify AWM as follows. Using the definition for a lot from Section 3.11.1 of this note, the Department will perform a minimum of one verification test for total binder content, gradation, AV, and VMA for each lot according to Subsection 402.03.03. Provided the differences between the contractor's acceptance test and the Department's verification test are within the tolerances given in Subsection 402.03.03, the Department will accept the AWM for that lot.

When the differences between the contractor's acceptance test and the Department's verification test are not within the tolerances given in Subsection 402.03.03, cease all shipments to the project. Adjust procedures or mixture composition until the differences are within the tolerances given in Subsection 402.03.03. Document compliance with these tolerances before restarting operations.

**4. MEASUREMENT.**

**4.1 Trial Demonstrations.** The Department will measure up to 100 tons of AWM used in the Trial Demonstration. The Department will not measure quantities exceeding 100 tons for payment and will consider them incidental to the AWM.

**4.2 AWM.** The Department will measure AWM in tons. The Department will not measure the surface preparation, edge sealant, or adhesive tack coat for payment and will consider them incidental to AWM.

**4.3 Joint Sealant (REJC).** The Department will measure joint sealant (REJC) according to the Special Note for Rubber Expansion Joint Compound. The Department will not measure saw-cutting joints for payment and will consider that operation incidental to the joint sealant (REJC).

**5. PAYMENT.**

**5.1 Trial Demonstrations.** The Department will pay for the measured quantities at the Contract unit bid price for AWM.

**5.2 AWM.** The Department will consider the unit bid price per ton to include all labor, materials, and equipment necessary to complete the work. The Department will make payment for the completed and accepted quantities according to the following:

<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
21138ED	Asphalt Waterproofing Mix	Ton

## SPECIAL NOTE FOR EPOXY INJECTION CRACK REPAIR

### I. DESCRIPTION

Perform all work in accordance with the Kentucky Transportation Cabinet, Department of Highways current Standard Specifications for Road and Bridge Construction and applicable Supplemental Specifications, the Standard Drawings, this Note, and the Contract Documents. Section references are to the Standard Specifications.

This work consists of the following:

1. Furnish all labor, materials, tools, equipment, and incidental items necessary to complete the work.
2. Provide safe access to the bridge, in accordance with Section 107.01.01, for the Engineer to sound possible repair areas and for workers to complete the construction.
3. Drill injection port holes.
4. Epoxy injection.
5. Finish the repaired surface.
6. Obtain core samples for the Engineer's visual inspection.
7. Repair core holes.
8. Any other work specified as part of this contract.

### II. MATERIALS, EQUIPMENT, PERSONNEL

**A. Type IV Epoxy Resin.** Use either Category I or II suitable for epoxy injection applications. See Section 826. All cracks shall be injected using an adhesive suitable for the field conditions (crack width, temperature, humidity, etc.) recommended by the adhesive manufacture as shown on material data sheets.

**B. Equipment.** Equipment used to inject the epoxy shall meet the recommendations of the epoxy injection material manufacturer.

**C. Personnel.** Arrange to have a manufacturer's representative at the job site to familiarize him and the Engineer with the epoxy materials, application procedures and recommended pressure practice. The representative shall direct at least one complete crack or area injection and be assured prior to his departure from the project that the personnel are adequately informed to satisfactorily perform the remaining repairs.

Furnish the Engineer a copy of the manufacturer's comprehensive preparation, mixing and application instructions which have been developed especially for use with the proposed epoxy injection system. Ensure that any significant changes to these instructions which are recommended by the representative for an unanticipated situation have been approved by the Engineer prior to the adoption of such changes.

### III. CONSTRUCTION

- A. Investigate Remedial Action.** If the crack is larger than or equal to 0.025" wide or has rust stains, repair the crack by epoxy injection. If the crack is less than 0.025" wide, the crack shall be sealed in accordance with the Special Note for Concrete Sealing. Areas of map cracking are to be sounded by the Engineer with a hammer. If the areas are delaminated or spalled, they shall be repaired in accordance with the Special Note for Concrete Patching. Otherwise, the cracks shall be repaired in accordance with this Note.
- B. Drill Injection Port Holes.** Install injection ports or tees in cracks to be injected. Space injection ports or tees at 6 to 12 inches vertically and 6 to 18 inches horizontally but in no case closer together than the thickness of the concrete member if full depth penetration is desired unless otherwise specified or directed. Set ports or tees in dust free holes made either with vacuum drills or chipping hammers.
- C. Epoxy Injection.** Seal all surface cracks in the area to be repaired, after injection ports or tees have been inserted into the holes, with paste epoxy between ports to insure retention of the pressure injection within the confines of the member. An alternate procedure of sealing the cracks before the injection holes have been made can be submitted to the Engineer for approval. Limit the application of paste epoxy to clean and dry surfaces. Limit substrate temperatures to not less than 45°F during epoxy applications.
- Begin the epoxy injection at the bottom of the fractured area and progress upward using a port or tee filling sequence that will ensure the filling of the lowermost injection ports or tees first.
- Establish injection procedures and the depths and spacings of holes at injection ports or tees. Use epoxy with flow characteristics and injection pressure that ensure no further damage will be done to the member being repaired. Ensure that the epoxy will first fill the innermost portion of the cracked concrete and that the potential for creating voids within the crack or epoxy will be minimized.
- D. Finish the Repaired Surface.** Remove the injection ports or tees flush with the concrete surface after the fractured area has been filled and the epoxy has partially cured (24 hours at ambient temperature not less than 60°F, otherwise not less than 48 hours). Roughen the surfaces of the repaired areas to achieve uniform surface texture. Remove any injection epoxy runs or spills from concrete surfaces.
- E. Obtain Core Samples.** Obtain two 4-inch diameter core samples in the first 25 linear feet of crack repaired and one core for each 25 linear feet thereafter. Take the core samples from locations determined by the Engineer and for the full crack depth. Cores will be visibly examined by the Engineer to determine the extent of epoxy penetration.
- F. Repair Core Holes.** Repair core holes in the concrete with non-shrink grout in accordance with Section 601.03.03(B) within 24 hours.

**IV. MEASUREMENT**

The Department will measure the quantity in linear feet along the centerline of the cracks. The Department will not measure preparation of the site for the Engineer's access or removal and reapplication of repairs that do not satisfy the Engineer's approval for payment and will consider them incidental to "Epoxy Injection Crack Repair".

**V. PAYMENT.**

The Department will make payment for the completed and accepted quantities of concrete cracks repaired with epoxy injection under the following:

<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
23744EC	Epoxy Injection Crack Repair	Linear Feet

The Department will consider payment as full compensation for all work required.

**SPECIAL NOTE FOR FIXED COMPLETION DATE AND LIQUIDATED DAMAGES  
BAXTER AVENUE (KY 1703) OVER TYLER PARK**

Contrary to Section 108.09 of the KYTC Standard Specifications for Road and Bridge Construction, Liquidated Damages of \$5,000 per calendar day will be assessed for each day or fraction thereof work remains uncompleted beyond the Specified Completion Date. This project has a Fixed Completion Date of October 1, 2022

In addition to the Liquidated Damages specified above, Liquidated Damages in the following amounts will be charged when a lane closure remains in place during the prohibited period outlined in the Traffic Control Plan:

\$2,500 for the first hour or fraction thereof  
\$5,000 for any additional hour or fraction thereof

These hourly disincentives will still be in effect after the Fixed Completion Date and will be charged in addition to the \$5,000 per calendar day if warranted. The contractor is expected to make every effort to complete the work in order to open the mainline lane closure within the specified timeframe.

Contrary to Section 108.09 of the Standard Specifications, the disincentive fee will be charged during those periods when seasonal limitations of the Contract prohibit the Contractor from working on a controlling item or operation. This includes the months from December through March.

All liquidated damages will be applied cumulatively.  
All other applicable portions of Section 108 apply.

## **SPECIAL NOTE FOR PIPELINE INSPECTION**

**1.0 DESCRIPTION.** The Department will perform visual inspections on all pipe on the project. A video inspection will be required on projects having more than 250 linear feet of storm sewer and/or culvert pipe and on routes with an ADT of greater than 1,000 vehicles. Conduct video inspections on all pipe located under the roadway and 50 percent of the remaining pipe not under the roadway. Storm sewer runs and outfall pipes not under the roadway take precedence over rural entrance pipes. Contractors performing this item of work must be prequalified with the Department in the work type J51 (Video Pipe Inspection and Cleaning). Deflection testing shall be completed using a mandrel in accordance with the procedure outlined below or by physical measurement for pipes greater than 36 inches in diameter. Mandrel testing for deflection must be completed prior to the video inspection testing. Unless otherwise noted, Section references herein are to the Department's Standard Specifications for Road and Bridge Construction, current edition.

**2.0 VIDEO INSPECTION.** Ensure pipe is clear of water, debris or obstructions. Complete the video inspection and any necessary measurement prior to placing the final surface over any pipe. When paving will not be delayed, take measurements 30 days or more after the completion of earthwork to within 1 foot of the finished subgrade. Notify the Engineer a minimum of 24 hours in advance of inspection and notify the Engineer immediately if distresses or locations of improper installation are logged.

### **2.1 INSPECTION FOR DEFECTS AND DISTRESSES**

**A)** Begin at the outlet end and proceed through to the inlet at a speed less than or equal to 30 ft/minute. Remove blockages that will prohibit a continuous operation.

**B)** Document locations of all observed defects and distresses including but not limited to: cracking, spalling, slabbing, exposed reinforcing steel, sags, joint offsets, joint separations, deflections, improper joints/connections, blockages, leaks, rips, tears, buckling, deviation from line and grade, damaged coatings/paved inverts, and other anomalies not consistent with a properly installed pipe.

**C)** During the video inspection provide a continuous 360 degree pan of every pipe joint.

**D)** Identify and measure all cracks greater than 0.1" and joint separations greater than 0.5".

**E)** Video Inspections are conducted from junction to junction which defines a pipe run. A junction is defined as a headwall, drop box inlet, curb box inlet, manhole, buried junction, or other structure that disturbs the continuity of the pipe. Multiple pipe inspections may be conducted from a single set up location, but each pipe run must be on a separate video file and all locations are to be referenced from nearest junction relative to that pipe run.

**F)** Record and submit all data on the TC 64-765 and TC 64-766 forms.

**3.0 MANDREL TESTING.** Mandrel testing will be used for deflection testing. For use on Corrugated Metal Pipe, High Density Polyethylene Pipe, and Polyvinyl Chloride Pipe, use a mandrel device with an odd number of legs (9 minimum) having a length not less than the outside diameter of the mandrel. The diameter of the mandrel at any point shall not be less than the diameter specified in Section 3.6. Mandrels can be a fixed size or a variable size.

**3.1** Use a proving ring or other method recommended by the mandrel manufacturer to verify mandrel diameter prior to inspection. Provide verification documentation for each size mandrel to the Engineer.

**3.2** All deflection measurements are to be based off of the AASHTO Nominal Diameters. Refer to the chart in section 3.6.

**3.3** Begin by using a mandrel set to the 5.0% deflection limit. Place the mandrel in the inlet end of the pipe and pull through to the outlet end. If resistance is met prior to completing the entire run, record the maximum distance achieved from the inlet side, then remove the mandrel and continue the inspection from the outlet end of the pipe toward the inlet end. Record the maximum distance achieved from the outlet side.

**3.4** If no resistance is met at 5.0% then the inspection is complete. If resistance occurred at 5.0% then repeat 3.1 and 3.2 with the mandrel set to the 10.0% deflection limit. If the deflection of entire pipe run cannot be verified with the mandrel then immediately notify the Engineer.

**3.5** Care must be taken when using a mandrel in all pipe material types and lining/coating scenarios. Pipe damaged during the mandrel inspection will be video inspected to determine the extent of the damage. If the damaged pipe was video inspected prior to mandrel inspection then a new video inspection is warranted and supersedes the first video inspection. Immediately notify the Engineer of any damages incurred during the mandrel inspection and submit a revised video inspection report.

**3.6** AASHTO Nominal Diameters and Maximum Deflection Limits.

Base Pipe Diameter (inches)	AASHTO Nominal Diameter (inches)	Max. Deflection Limit	
		5.0%	10.0%
		(inches)	
15	14.76	14.02	13.28
18	17.72	16.83	15.95
24	23.62	22.44	21.26
30	29.53	28.05	26.58
36	35.43	33.66	31.89
42	41.34	39.27	37.21
48	47.24	44.88	42.52
54	53.15	50.49	47.84
60	59.06	56.11	53.15

**4.0 PHYSICAL MEASUREMENT OF PIPE DEFLECTION.** Alternate method for deflection testing when there is available access or the pipe is greater than 36 inches in diameter, as per 4.1. Use a contact or non-contact distance instrument. A leveling device is recommended for establishing or verifying vertical and horizontal control.

**4.1** Physical measurements may be taken after installation and compared to the AASHTO Nominal Diameter of the pipe as per Section 3.6. When this method is used, determine the smallest interior diameter of the pipe as measured through the center point of the pipe (D2). All measurements are to be taken from the inside crest of the corrugation. Take the D2 measurements at the most deflected portion of the pipe run in question and at intervals no greater than ten (10) feet through the run. Calculate the deflection as follows:

$$\% \text{ Deflection} = [(AASHTO \text{ Nominal Diameter} - D2) / AASHTO \text{ Nominal Diameter}] \times 100\%$$

Note: The Engineer may require that preset monitoring points be established in the culvert prior to backfilling. For these points the pre-installation measured diameter (D1) is measured and recorded. Deflection may then be calculated from the following formula:

$$\% \text{ Deflection} = [(D1 - D2) / D1] (100\%)$$

**4.2** Record and submit all data.

**5.0 DEDUCTION SCHEDULE.** All pipe deductions shall be handled in accordance with the tables shown below.

FLEXIBLE PIPE DEFLECTION	
Amount of Deflection (%)	Payment
0.0 to 5.0	100% of the Unit Bid Price
5.1 to 9.9	50% of the Unit Bid Price <sup>(1)</sup>
10 or greater	Remove and Replace <sup>(2)</sup>

<sup>(1)</sup> Provide Structural Analysis for HDPE and metal pipe. Based on the structural analysis, pipe may be allowed to remain in place at the reduced unit price. <sup>(2)</sup> The Department may allow the pipe to remain in place with no pay to the Contractor in instances where it is in the best interest to the public and where the structural analysis demonstrates that the pipe should function adequately.

RIGID PIPE REMEDIATION TABLE PIPE	
Crack Width (inches)	Payment
≤ 0.1	100% of the Unit Bid Price
Greater than 0.1	Remediate or Replace <sup>(1)</sup>

*(1) Provide the Department in writing a method for repairing the observed cracking. Do not begin work until the method has been approved.*

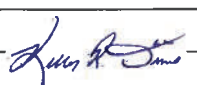
**6.0 PAYMENT.** The Department will measure the quantity in linear feet of pipe to inspect. The Department will make payment for the completed and accepted quantities under the following:

<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
24814EC	Pipeline Inspection	Linear Foot
10065NS	Pipe Deflection Deduction	Dollars



KENTUCKY TRANSPORTATION CABINET  
Department of Highways  
DIVISION OF RIGHT OF WAY & UTILITIES  
**RIGHT OF WAY CERTIFICATION**

TC 62-226  
Rev. 01/2016  
Page 1 of 1

<input checked="" type="checkbox"/>	<b>Original</b>	<input type="checkbox"/>	<b>Re-Certification</b>	<b>RIGHT OF WAY CERTIFICATION</b>			
<b>ITEM #</b>		<b>COUNTY</b>		<b>PROJECT # (STATE)</b>		<b>PROJECT # (FEDERAL)</b>	
5-80109.00		Jefferson		FD04 056 1703 004-005			
<b>PROJECT DESCRIPTION</b>							
REPAIR AND REHABILITATE THE BRIDGE AND DRAINAGE STRUCTURES ACROSS TYLER PARK							
<input checked="" type="checkbox"/> <b>No Additional Right of Way Required</b>							
Construction will be within the limits of the existing right of way. The right of way was acquired in accordance to FHWA regulations under the Uniform Relocation Assistance and Real Property Acquisitions Policy Act of 1970, as amended. No additional right of way or relocation assistance were required for this project.							
<input type="checkbox"/> <b>Condition # 1 (Additional Right of Way Required and Cleared)</b>							
All necessary right of way, including control of access rights when applicable, have been acquired including legal and physical possession. Trial or appeal of cases may be pending in court but legal possession has been obtained. There may be some improvements remaining on the right-of-way, but all occupants have vacated the lands and improvements, and KYTC has physical possession and the rights to remove, salvage, or demolish all improvements and enter on all land. Just Compensation has been paid or deposited with the court. All relocations have been relocated to decent, safe, and sanitary housing or that KYTC has made available to displaced persons adequate replacement housing in accordance with the provisions of the current FHWA directive.							
<input type="checkbox"/> <b>Condition # 2 (Additional Right of Way Required with Exception)</b>							
The right of way has not been fully acquired, the right to occupy and to use all rights-of-way required for the proper execution of the project has been acquired. Some parcels may be pending in court and on other parcels full legal possession has not been obtained, but right of entry has been obtained, the occupants of all lands and improvements have vacated, and KYTC has physical possession and right to remove, salvage, or demolish all improvements. Just Compensation has been paid or deposited with the court for most parcels. Just Compensation for all pending parcels will be paid or deposited with the court prior to AWARD of construction contract							
<input type="checkbox"/> <b>Condition # 3 (Additional Right of Way Required with Exception)</b>							
The acquisition or right of occupancy and use of a few remaining parcels are not complete and/or some parcels still have occupants. All remaining occupants have had replacement housing made available to them in accordance with 49 CFR 24.204. KYTC is hereby requesting authorization to advertise this project for bids and to proceed with bid letting even though the necessary right of way will not be fully acquired, and/or some occupants will not be relocated, and/or the just compensation will not be paid or deposited with the court for some parcels until after bid letting. KYTC will fully meet all the requirements outlined in 23 CFR 635.309(c)(3) and 49 CFR 24.102(j) and will expedite completion of all acquisitions, relocations, and full payments after bid letting and prior to AWARD of the construction contract or force account construction.							
Total Number of Parcels on Project				<b>EXCEPTION (S) Parcel #</b>		<b>ANTICIPATED DATE OF POSSESSION WITH EXPLANATION</b>	
Number of Parcels That Have Been Acquired							
Signed Deed							
Condemnation							
Signed ROE							
<b>Notes/ Comments (Use Additional Sheet if necessary)</b>							
<b>LPA RW Project Manager</b>				<b>Right of Way Supervisor</b>			
Printed Name				Printed Name		Tom Boykin	
Signature				Signature		Tom Boykin <small>Digitally signed by Tom Boykin Date: 2021.10.11 11:09:19 -0400</small>	
Date				Date			
<b>Right of Way Director</b>				<b>FHWA</b>			
Printed Name				Printed Name			
Signature				Signature			
Date		<small>Digitally signed by Kelly R. Divine Date: 2021.10.11 10:25:35 -05'00'</small>		Date			

## UTILITIES AND RAIL CERTIFICATION NOTE

**Jefferson County**  
**Mile point: 4.936 TO 4.947**  
**TYLER PARK/BAXTER AVE BRIDGE STUDY - CONDUCT ENGINEERING STUDY & STRUCTURAL  
INSPECTION TO DEVELOP A PRESERVATION PLAN TO GUIDE THE REPAIR, REHABILITATION AND  
MAINTENANCE OF THE TYLER PARK/BAXTER AVE BRIDGE (2014BOP).**  
**ITEM NUMBER: 05-3205.00**

### PROJECT NOTES ON UTILITIES

For all projects under 2000 Linear feet which require a normal excavation locate request pursuant to KRS 367.4901-4917, the awarded contractor shall field mark the proposed excavation or construction boundaries of the project (also called white lining) using the procedure set forth in KRS 367.4909(9)(k). For all projects over 2000 linear feet, which are defined as a "Large Project" in KRS 367.4903(18), the awarded contractor shall initially mark the first 2000 linear feet minimally of proposed excavation or construction boundaries of the project to be worked using the procedure set forth in KRS 367.4909(9)(k). This temporary field locating of the project excavation boundary shall take place prior to submitting an excavation location request to the underground utility protection Kentucky Contact Center. For large projects, the awarded contractor shall work with the impacted utilities to determine when additional white lining of the remainder of the project site will take place. This provision shall not alter or relieve the awarded contractor from complying with requirements of KRS 367.4905 to 367.4917 in their entirety.

Please Note: The information presented in this Utility Note is informational in nature and the information contained herein is not guaranteed.

The contractor will be responsible for contacting all utility facility owners on the subject project to coordinate his activities. The contractor will coordinate his activities to minimize and, where possible, avoid conflicts with utility facilities. Due to the nature of the work proposed, it is unlikely to conflict with the existing utilities beyond minor facility adjustments. Where conflicts with utility facilities are unavoidable, the contractor will coordinate any necessary relocation work with the facility owner and Resident Engineer. The Kentucky Transportation Cabinet maintains the right to remove or alter portions of this contract if a utility conflict occurs. The utility facilities as noted in the previous section(s) have been determined using data garnered by varied means and with varying degrees of accuracy: from the facility owners, a result of S.U.E., field inspections, and/or reviews of record drawings. The facilities defined may not be inclusive of all utilities in the project scope and are not Level A quality, unless specified as such. It is the contractor's responsibility to verify all utilities and their respective locations before excavating.

The contractor shall make every effort to protect underground facilities from damage as prescribed in the Underground Facility Damage Protection Act of 1994, Kentucky Revised Statute KRS 367.4901 to 367.4917. It is the contractor's responsibility to determine and take steps necessary to be in compliance

## UTILITIES AND RAIL CERTIFICATION NOTE

**Jefferson County**  
**Mile point: 4.936 TO 4.947**  
**TYLER PARK/BAXTER AVE BRIDGE STUDY - CONDUCT ENGINEERING STUDY & STRUCTURAL**  
**INSPECTION TO DEVELOP A PRESERVATION PLAN TO GUIDE THE REPAIR, REHABILITATION AND**  
**MAINTENANCE OF THE TYLER PARK/BAXTER AVE BRIDGE (2014BOP).**  
**ITEM NUMBER: 05-3205.00**

with federal and state damage prevention directives. The contractor is instructed to contact KY 811 for the location of existing underground utilities. Contact shall be made a minimum of two (2) and no more than ten (10) business days prior to excavation. The contractor shall submit Excavation Locate Requests to the Kentucky Contact Center (KY 811) via web ticket entry. The submission of this request does not relieve the contractor from the responsibility of contacting non-member facility owners, whom are to be contacted through their individual Protection Notification Center. It may be necessary for the contractor to contact the County Court Clerk to determine what utility companies have facilities in the area. Non-compliance with these directives can result in the enforcement of penalties.

Utility coordination efforts determined that no significant utility relocation work is required to complete the project. Any work pertaining to these utility facilities is defined in the bid package and is to be carried out as instructed by the Kentucky Transportation Cabinet. The contractor will be responsible for any coordination or adjustments that are discussed or quantified in the proposal.

**NOTE: DO NOT DISTURB THE FOLLOWING FACILITIES LOCATED WITHIN THE PROJECT DISTURB LIMITS**

Louisville Water Company - Water

Louisville Gas and Electric Company - Natural Gas

Louisville Gas and Electric Company - Electric

Metropolitan Sewer District - Sewer

**\*The Contractor is fully responsible for protection of all utilities listed above\***

## UTILITIES AND RAIL CERTIFICATION NOTE

**Jefferson County**  
**Mile point: 4.936 TO 4.947**  
**TYLER PARK/BAXTER AVE BRIDGE STUDY - CONDUCT ENGINEERING STUDY & STRUCTURAL**  
**INSPECTION TO DEVELOP A PRESERVATION PLAN TO GUIDE THE REPAIR, REHABILITATION AND**  
**MAINTENANCE OF THE TYLER PARK/BAXTER AVE BRIDGE (2014BOP).**  
**ITEM NUMBER: 05-3205.00**

**THE FOLLOWING FACILITY OWNERS ARE RELOCATING/ADJUSTING THEIR FACILITIES WITHIN THE PROJECT LIMITS AND WILL BE COMPLETE PRIOR TO CONSTRUCTION**

Not Applicable

**THE FOLLOWING FACILITY OWNERS HAVE FACILITIES TO BE RELOCATED/ADJUSTED BY THE OWNER OR THEIR SUBCONTRACTOR AND IS TO BE COORDINATED WITH THE ROAD CONTRACT**

Not Applicable

**THE FOLLOWING FACILITY OWNERS HAVE FACILITIES TO BE RELOCATED/ADJUSTED BY THE ROAD CONTRACTOR AS INCLUDED IN THIS CONTRACT**

Not Applicable

**RAIL COMPANIES HAVE FACILITIES IN CONJUNCTION WITH THIS PROJECT AS NOTED**

**No Rail Involvement**    **Rail Involved**    **Rail Adjacent**

## UTILITIES AND RAIL CERTIFICATION NOTE

**Jefferson County**

**Mile point: 4.936 TO 4.947**

**TYLER PARK/BAXTER AVE BRIDGE STUDY - CONDUCT ENGINEERING STUDY & STRUCTURAL  
INSPECTION TO DEVELOP A PRESERVATION PLAN TO GUIDE THE REPAIR, REHABILITATION AND  
MAINTENANCE OF THE TYLER PARK/BAXTER AVE BRIDGE (2014BOP).**

**ITEM NUMBER: 05-3205.00**

## UTILITIES AND RAIL CERTIFICATION NOTE

**Jefferson County**  
**Mile point: 4.936 TO 4.947**  
**TYLER PARK/BAXTER AVE BRIDGE STUDY - CONDUCT ENGINEERING STUDY & STRUCTURAL INSPECTION TO DEVELOP A PRESERVATION PLAN TO GUIDE THE REPAIR, REHABILITATION AND MAINTENANCE OF THE TYLER PARK/BAXTER AVE BRIDGE (2014BOP).**  
**ITEM NUMBER: 05-3205.00**

### AREA FACILITY OWNER CONTACT LIST

Facility Owner	Address	Contact Name	Phone	Email
Louisville Gas and Electric Company - Electric	P.O. Box 32020 Louisville KY 40202	Caroline Justice	5026273708	Caroline.Justice@lge-ku.com
Louisville Gas and Electric Company - Natural Gas	P.O. Box 32020 Louisville KY 40202	Caroline Justice	5026273708	Caroline.Justice@lge-ku.com
Louisville Water Company - Water	550 South Third Street Louisville KY 40202	Pat Howard	5025693615	poward@lwcky.com
Metropolitan Sewer District - Sewer	700 West Liberty Street Louisville KY 40203	Brandon Flaherty	5025406632	brandon.flaherty@louisvillemsd.org

**PART II**  
**SPECIFICATIONS AND STANDARD DRAWINGS**

### **SPECIFICATIONS REFERENCE**

Any reference in the plans or proposal to previous editions of the *Standard Specifications for Road and Bridge Construction* and *Standard Drawings* are superseded by *Standard Specifications for Road and Bridge Construction, Edition of 2019* and *Standard Drawings, Edition of 2020*.

## **SUPPLEMENTAL SPECIFICATIONS**

The contractor shall use the Supplemental Specifications that are effective at the time of letting.  
The Supplemental Specifications can be found at the following link:

<http://transportation.ky.gov/Construction/Pages/Kentucky-Standard-Specifications.aspx>

## **PART III**

### **EMPLOYMENT, WAGE AND RECORD REQUIREMENTS**

**TRANSPORTATION CABINET  
DEPARTMENT OF HIGHWAYS**

**LABOR AND WAGE REQUIREMENTS  
APPLICABLE TO OTHER THAN FEDERAL-AID SYSTEM PROJECTS**

- I. Application
- II. Nondiscrimination of Employees (KRS 344)

**I. APPLICATION**

1. These contract provisions shall apply to all work performed on the contract by the contractor with his own organization and with the assistance of workmen under his immediate superintendence and to all work performed on the contract by piecework, station work or by subcontract. The contractor's organization shall be construed to include only workmen employed and paid directly by the contractor and equipment owned or rented by him, with or without operators.

2. The contractor shall insert in each of his subcontracts all of the stipulations contained in these Required Provisions and such other stipulations as may be required.

3. A breach of any of the stipulations contained in these Required Provisions may be grounds for termination of the contract.

3. If the contractor is in control of apprenticeship or other training or retraining, including on-the-job training programs, he shall not discriminate against an individual because of his race, color, religion, national origin, sex, disability or age forty (40) and over, in admission to, or employment in any program established to provide apprenticeship or other training.

4. The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representative of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment. The contractor will take such action with respect to any subcontract or purchase order as the administrating agency may direct as a means of enforcing such provisions, including sanctions for non-compliance.

Revised: January 25, 2017

**II. NONDISCRIMINATION OF EMPLOYEES**

**AN ACT OF THE KENTUCKY  
GENERAL ASSEMBLY TO PREVENT  
DISCRIMINATION IN EMPLOYMENT  
KRS CHAPTER 344  
EFFECTIVE JUNE 16, 1972**

The contract on this project, in accordance with KRS Chapter 344, provides that during the performance of this contract, the contractor agrees as follows:

1. The contractor shall not fail or refuse to hire, or shall not discharge any individual, or otherwise discriminate against an individual with respect to his compensation, terms, conditions, or privileges of employment, because of such individual's race, color, religion, national origin, sex, disability or age (forty and above); or limit, segregate, or classify his employees in any way which would deprive or tend to deprive an individual of employment opportunities or otherwise adversely affect his status as an employee, because of such individual's race, color, religion, national origin, sex, disability or age forty (40) and over. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

2. The contractor shall not print or publish or cause to be printed or published a notice or advertisement relating to employment by such an employer or membership in or any classification or referral for employment by the employment agency, indicating any preference, limitation, specification, or discrimination, based on race, color, religion, national origin, sex, or age forty (40) and over, or because the person is a qualified individual with a disability, except that such a notice or advertisement may indicate a preference, limitation, or specification based on religion, national origin, sex, or age forty (40) and over, or because the person is a qualified individual with a disability, when religion, national origin, sex, or age forty (40) and over, or because the person is a qualified individual with a disability, is a bona fide occupational qualification for employment.

## EXECUTIVE BRANCH CODE OF ETHICS

In the 1992 regular legislative session, the General Assembly passed and Governor Brereton Jones signed Senate Bill 63 (codified as KRS 11A), the Executive Branch Code of Ethics, which states, in part:

KRS 11A.040 (7) provides:

No present or former public servant shall, within six (6) months following termination of his office or employment, accept employment, compensation, or other economic benefit from any person or business that contracts or does business with, or is regulated by, the state in matters in which he was directly involved during the last thirty-six (36) months of his tenure. This provision shall not prohibit an individual from returning to the same business, firm, occupation, or profession in which he was involved prior to taking office or beginning his term of employment, or for which he received, prior to his state employment, a professional degree or license, provided that, for a period of six (6) months, he personally refrains from working on any matter in which he was directly involved during the last thirty-six (36) months of his tenure in state government. This subsection shall not prohibit the performance of ministerial functions, including but not limited to filing tax returns, filing applications for permits or licenses, or filing incorporation papers, nor shall it prohibit the former officer or public servant from receiving public funds disbursed through entitlement programs.

KRS 11A.040 (9) states:

A former public servant shall not represent a person or business before a state agency in a matter in which the former public servant was directly involved during the last thirty-six (36) months of his tenure, for a period of one (1) year after the latter of:

- a) The date of leaving office or termination of employment; or
- b) The date the term of office expires to which the public servant was elected.

This law is intended to promote public confidence in the integrity of state government and to declare as public policy the idea that state employees should view their work as a public trust and not as a way to obtain private benefits.

If you have worked for the executive branch of state government within the past six months, you may be subject to the law's prohibitions. The law's applicability may be different if you hold elected office or are contemplating representation of another before a state agency.

Also, if you are affiliated with a firm which does business with the state and which employs former state executive-branch employees, you should be aware that the law may apply to them.

In case of doubt, the law permits you to request an advisory opinion from the Executive Branch Ethics Commission, 3 Fountain Place, Frankfort, Kentucky 40601; telephone (502) 564-7954.

Revised: January 27, 2017

### **Kentucky Equal Employment Opportunity Act of 1978**

The requirements of the Kentucky Equal Employment Opportunity Act of 1978 (KRS 45.560-45.640) shall apply to this Contract. The apparent low Bidder will be required to submit EEO forms to the Division of Construction Procurement, which will then forward to the Finance and Administration Cabinet for review and approval. No award will become effective until all forms are submitted and EEO/CC has certified compliance. The required EEO forms are as follows:

- EEO-1: Employer Information Report
- Affidavit of Intent to Comply
- Employee Data Sheet
- Subcontractor Report

These forms are available on the Finance and Administration's web page under ***Vendor Information, Standard Attachments and General Terms*** at the following address:  
**<https://www.eProcurement.ky.gov>**.

Bidders currently certified as being in compliance by the Finance and Administration Cabinet may submit a copy of their approval letter in lieu of the referenced EEO forms.

For questions or assistance please contact the Finance and Administration Cabinet by email at **[finance.contractcompliance@ky.gov](mailto:finance.contractcompliance@ky.gov)** or by phone at 502-564-2874.

# EMPLOYEE RIGHTS UNDER THE FAIR LABOR STANDARDS ACT

THE UNITED STATES DEPARTMENT OF LABOR WAGE AND HOUR DIVISION

## FEDERAL MINIMUM WAGE

# \$7.25

 PER HOUR

BEGINNING JULY 24, 2009

**OVERTIME PAY** At least 1½ times your regular rate of pay for all hours worked over 40 in a workweek.

**CHILD LABOR** An employee must be at least **16** years old to work in most non-farm jobs and at least **18** to work in non-farm jobs declared hazardous by the Secretary of Labor.

Youths **14** and **15** years old may work outside school hours in various non-manufacturing, non-mining, non-hazardous jobs under the following conditions:

**No more than**

- **3** hours on a school day or **18** hours in a school week;
- **8** hours on a non-school day or **40** hours in a non-school week.

Also, work may not begin before **7 a.m.** or end after **7 p.m.**, except from June 1 through Labor Day, when evening hours are extended to **9 p.m.** Different rules apply in agricultural employment.

**TIP CREDIT** Employers of “tipped employees” must pay a cash wage of at least \$2.13 per hour if they claim a tip credit against their minimum wage obligation. If an employee’s tips combined with the employer’s cash wage of at least \$2.13 per hour do not equal the minimum hourly wage, the employer must make up the difference. Certain other conditions must also be met.

**ENFORCEMENT** The Department of Labor may recover back wages either administratively or through court action, for the employees that have been underpaid in violation of the law. Violations may result in civil or criminal action.

Employers may be assessed civil money penalties of up to \$1,100 for each willful or repeated violation of the minimum wage or overtime pay provisions of the law and up to \$11,000 for each employee who is the subject of a violation of the Act’s child labor provisions. In addition, a civil money penalty of up to \$50,000 may be assessed for each child labor violation that causes the death or serious injury of any minor employee, and such assessments may be doubled, up to \$100,000, when the violations are determined to be willful or repeated. The law also prohibits discriminating against or discharging workers who file a complaint or participate in any proceeding under the Act.

### ADDITIONAL INFORMATION

- Certain occupations and establishments are exempt from the minimum wage and/or overtime pay provisions.
- Special provisions apply to workers in American Samoa and the Commonwealth of the Northern Mariana Islands.
- Some state laws provide greater employee protections; employers must comply with both.
- The law requires employers to display this poster where employees can readily see it.
- Employees under 20 years of age may be paid \$4.25 per hour during their first 90 consecutive calendar days of employment with an employer.
- Certain full-time students, student learners, apprentices, and workers with disabilities may be paid less than the minimum wage under special certificates issued by the Department of Labor.

For additional information:



# 1-866-4-USWAGE

(1-866-487-9243)

TTY: 1-877-889-5627



# WWW.WAGEHOUR.DOL.GOV

**PART IV**  
**INSURANCE**

Refer to  
*Kentucky Standard Specifications for Road and Bridge Construction,*  
current edition

**PART V**  
**BID ITEMS**

### PROPOSAL BID ITEMS

225221

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Report Date 1/24/22

#### Section: 0001 - ROADWAY

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0010	00001		DGA BASE	65.00	TON		\$	
0020	01875		STANDARD HEADER CURB	340.00	LF		\$	
0030	01877		SPECIAL HEADER CURB	788.00	LF		\$	
0040	02381		REMOVE GUARDRAIL	1.00	LF		\$	
0050	02562		TEMPORARY SIGNS	100.00	SQFT		\$	
0060	02585		EDGE KEY	73.00	LF		\$	
0070	02650		MAINTAIN & CONTROL TRAFFIC	1.00	LS		\$	
0080	02671		PORTABLE CHANGEABLE MESSAGE SIGN	2.00	EACH		\$	
0090	02676		MOBILIZATION FOR MILL & TEXT	1.00	LS		\$	
0100	02677		ASPHALT PAVE MILLING & TEXTURING	245.00	TON		\$	
0110	02726		STAKING	1.00	LS		\$	
0120	02775		ARROW PANEL	2.00	EACH		\$	
0130	04820		TRENCHING AND BACKFILLING	4.00	LF		\$	
0140	04830		LOOP WIRE	284.00	LF		\$	
0150	04895		LOOP SAW SLOT AND FILL	108.00	LF		\$	
0160	04960		REMOVE AND REPLACE SIDEWALK	20.00	SQYD		\$	
0170	06510		PAVE STRIPING-TEMP PAINT-4 IN	4,512.00	LF		\$	
0180	06514		PAVE STRIPING-PERM PAINT-4 IN	2,666.00	LF		\$	
0190	06565		PAVE MARKING-THERMO X-WALK-6 IN	105.00	LF		\$	
0200	06568		PAVE MARKING-THERMO STOP BAR-24IN	10.00	LF		\$	
0210	08100		CONCRETE-CLASS A	21.00	CUYD		\$	
0220	21138ED		ASPHALT WATERPROOFING MIX	245.00	TON		\$	
0230	21415ND		EROSION CONTROL	1.00	LS		\$	
0240	23484EC		PIPE LINER ACCEPTANCE TESTING	1.00	LS		\$	
0250	23744EC		EPOXY INJECTION CRACK REPAIR	100.00	LF		\$	
0260	23956EC		PIPE REPAIR	10.00	EACH		\$	
0270	24542EC		REPAIR Handrail Repair	11.00	LF		\$	
0280	24814EC		PIPELINE INSPECTION	137.00	LF		\$	
0290	24861EC		PVC FOLD AND FORM PIPE LINER-15 IN	17.00	LF		\$	
0300	24862EC		PVC FOLD AND FORM PIPE LINER-18 IN	48.00	LF		\$	
0310	24863EC		PVC FOLD AND FORM PIPE LINER-24 IN	166.00	LF		\$	
0320	24969ED		LONGITUDINAL SAW CUT	1,128.00	LF		\$	
0330	25010EC		GEOCOMPOSITE REINFORCEMENT FOR ASPHALT	2,225.00	SQYD		\$	

#### Section: 0002 - DEMOBILIZATION &/OR MOBILIZATION

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0340	02569		DEMOBILIZATION	1.00	LS		\$	