



CALL NO. 307

CONTRACT ID. 221345

DAVISS COUNTY

FED/STATE PROJECT NUMBER FD04 030 0298 000-001

DESCRIPTION HILL BRIDGE ROAD (KY 298)

WORK TYPE ASPHALT SURFACE WITH GRADE & DRAIN

PRIMARY COMPLETION DATE 7/30/2023

LETTING DATE: September 22,2022

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 AM EASTERN DAYLIGHT TIME September 22,2022. Bids will be publicly announced at 10:00 AM EASTERN DAYLIGHT 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 - 02

CONTRACT ID - 221345

FD04 030 0298 000-001

COUNTY - DAVIESS

PCN - DE03002982245

FD04 030 0298 000-001

HILL BRIDGE ROAD (KY 298) (MP 0.000) CONSTRUCT IMPROVEMENTS AT SOUTHERN OAK ELEMENTARY SCHOOL (MP 0.250), A DISTANCE OF 0.25 MILES.ASPHALT SURFACE WITH GRADE & DRAIN SYP NO. 02-09022.00.

GEOGRAPHIC COORDINATES LATITUDE 0:00:00.00 LONGITUDE 0:00:00.00
ADT

COMPLETION DATE(S):

COMPLETED BY 07/30/2023

APPLIES TO CONTRACT - SEE
SPECIAL NOTE FOR LANE
CLOSURE

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) 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. 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). 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.

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.

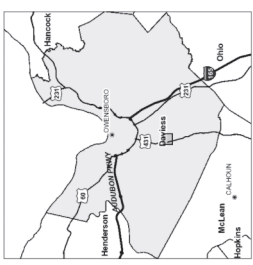
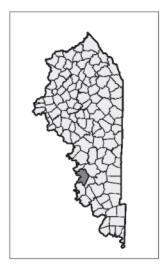
OPTION B

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.

Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS



PLANS OF PROPOSED PROJECT DAVISS COUNTY KY 298 IMPROVEMENTS AT SOUTHERN OAKS ELEMENTARY



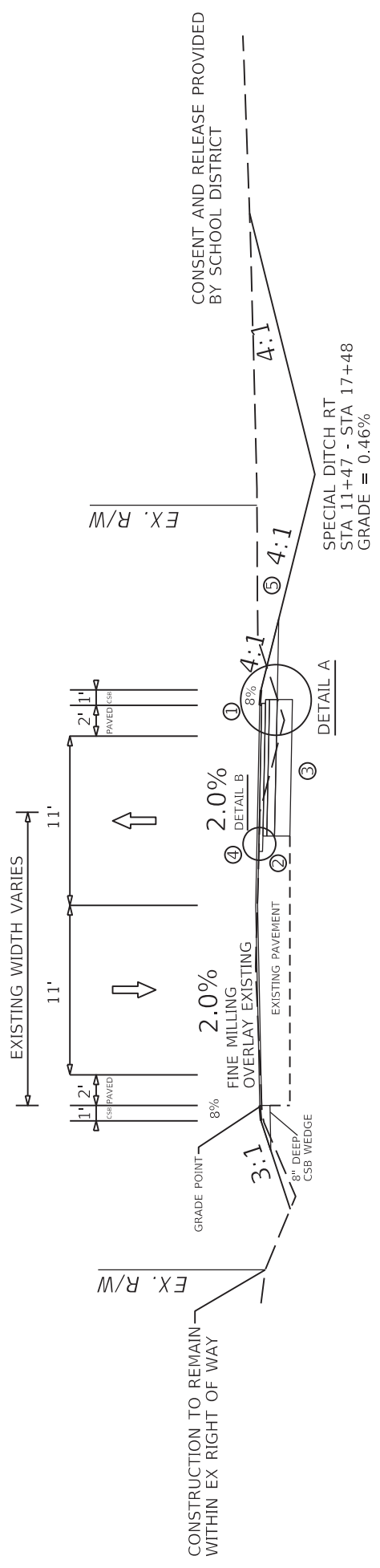
LAYOUT MAP

COUNTY OF	ITEM NO.	SHEET NO.
DAVISS	02-9022.00	R001

LAYOUT SHEET

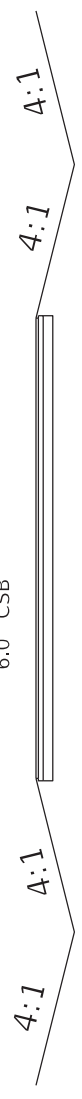
TYPICAL SECTIONS

KY 298 NORMAL SECTION

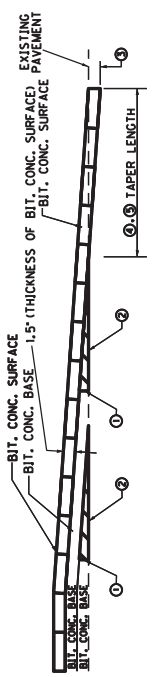


SCHOOL ENTRANCE

STA 17+96.68 RT
1.5" ASPHALT SURFACE
3.0" ASPHALT BASE
6.0" CSB



TAPERING OF OVERLAYS ON MEDIUM SPEED FACILITIES (45mph to 65mph)
RECOMMENDED TAPER RATE 1:600 (1" : 50')

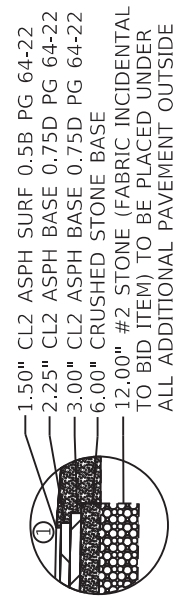


- ① MINIMUM COMPACTED THICKNESS
- ② BIT. MIXTURE FOR LEVELING & WEDGING OR NEXT COURSE OF BIT. MIX.
- ③ BIT. SURFACE THICKNESS (FULL DEPTH)
- ④ MILL EXISTING PAVEMENT TO RECEIVE BIT. SURFACE FULL DEPTH (EDGE KEY).
- ⑤ TAPER LENGTH (ft) = 1.5 (in) x 600

FOR A TAPER RATE OF 1:600 (1" : 50'),
TAPER LENGTH = 1.25 inches
TAPER LENGTH = 1.50 inches

NOTES

- ① PAVEMENT LAYERS ARE TO STEP OUT HORIZONTALLY EQUAL TO THE THICKNESS OF THE LAYER ABOVE
- ② FIELD VERIFY LOCATION OF EXISTING EDGE OF PAVEMENT EDGE KEY MUST BE PLACED OVER EXISTING FULL DEPTH PAVEMENT
- ③ #2 STONE (FABRIC INCIDENTAL TO BID ITEM) SEE CROSS SECTIONS FOR LOCATION
- ④ SAW CUT TO BE A BID ITEM; PAVEMENT REMOVAL TO BE INCIDENTAL TO ROADWAY EXCAVATION (SEE CROSS SECTIONS)
- ⑤ ASPHALT SEAL COAT REQUIRED FROM OUTSIDE EDGE OF PAVED SHOULDER TO A POINT 2' DOWN THE DITCH OR FILL SLOPE.
2.4 LB/SY ASPHALT SEAL COAT (TWO APPLICATIONS)
20 LB/SY ASPHALT SEAL AGGREGATE (TWO APPLICATIONS)



DETAIL A
ALL PAVEMENT



DETAIL B
ALL PAVEMENT

COUNTY OF	ITEM NO.	SHEET NO.
DAVISS	02-9022.00	R002

KY 298 IMPROVEMENTS AT
SOUTHERN OAKS ELEMENTARY

TYPICAL SECTION

SUMMARY OF QUANTITIES

ITEM	DESCRIPTION	UNIT	KY 298	TOTAL PROJECT
00078	CRUSHED AGGREGATE SIZE NO 2	④ TON	800	800
02200	ROADWAY EXCAVATION	② CU YD	2630	2630
02545	CLEARING AND GRUBBING (1.103 ACRES)	① LS	1	1
02562	TEMPORARY SIGNS	SF	400	400
02569	DEMOLITION	LS	1	1
02650	MAINTAIN & CONTROL TRAFFIC	LS	1	1
02676	MOBILIZATION FOR MILL & TEXT	LS	1	1
02677	ASPHALT PAVE MILLING & TEXTURING	TON	500	500
02704	SILT TRAP TYPE B	EACH	4	4
02705	SILT TRAP TYPE C	EACH	2	2
02707	CLEAN SILT TRAP TYPE B	EACH	4	4
02708	CLEAN SILT TRAP TYPE C	EACH	2	2
02585	EDGE KEY	LF	110	110
02726	STAKING	LS	1	1
06569	PAVE MARKING-THERMO CROSS-HATCH	SQ FT	150	150
24185ER	DURABLE WATERBORNE MARKING-6 IN W	LF	2033	2033
24190ER	DURABLE WATERBORNE MARKING-6 IN Y	LF	1129	1129
23745EC	YIELD LINES	⑤ EACH	7	7
06568	PAVE MARKING-THERMO STOP BAR-24IN	⑤ LF	39	39
20550ND	SAWCUT PAVEMENT	LF	1175	1175
21289ED	LONGITUDINAL EDGE KEY	LF	1175	1175
05950	EROSION CONTROL BLANKET	SOYD	3300	3300
05952	TEMPORARY MULCH	SOYD	3524	3524
05953	TEMP SEEDING AND PROTECTION	SOYD	2670	2670
05963	INITIAL FERTILIZER	TON	0.25	0.25
05964	MAINTENANCE FERTILIZER	TON	0.15	0.15
05985	SEEDING AND PROTECTION	SOYD	2040	2040
05992	AGRICULTURAL LIMESTONE	TON	3	3
21802EN	5/8" STEEL W BEAM-S FACE (7 FT POST)	LF	75	75
20061E5719	5/8" END TREATMENT TY 7 CR	EACH	1	1

ITEM CODE	ITEM	UNIT	KY 298	TOTAL PROJECT
23362E5403	CL 2 ASPH SURF 0.58 PG 64-22	⑥ TONS	320	320
00221	CL 2 ASPH BASE 0.75D PG 64-22	⑥ TONS	424	424
00003	CRUSHED STONE BASE	⑦ TONS	850	850
2497DEC	ASPHALT MATERIAL FOR TACK NON-TRACKING	⑩ TONS	1.50	1.5
00103	ASPHALT SEAL COAT	⑧ TONS	1.75	1.75
00100	ASPHALT SEAL AGGREGATE	⑨ TONS	14.6	14.6
00190	LEVELING & WEDGING PG 64-22	⑪ TONS	25	25

GENERAL SUMMARY NOTES:

- ① APPROXIMATELY 1.103 ACRES
- ② QUANTITIES ARE APPROXIMATE AND ARE FOR INFORMATION ONLY:
COM: 2,630 CU YDS TOTAL
EMB: 162 CU YDS TOTAL
- ③ WATER SHALL BE INCIDENTAL TO MAINTAIN AND CONTROL TRAFFIC
- ④ GEOTEXTILE FABRIC CLASS 1 SHALL BE WRAPPED AROUND #2 STONE. THE FABRIC SHALL BE INCIDENTAL TO THE CRUSHED AGGREGATE SIZE NO 2 BID ITEM.
- ⑤ FOR ALL LOCATIONS OF PAVEMENT WIDENING OR REPLACEMENT (SEE TYPICAL SECTIONS)

PAVING SUMMARY NOTES:

- ⑥ TONNAGE BASED ON END-AREA OF CROSS-SECTIONS / MODEL ESTIMATED AT 1.98 TONS PER CU. YD.
- ⑦ ESTIMATED AT 2.07 TONS/CUYD
- ⑧ ESTIMATED AT 2.40 LBS. PER SQ. YD., (TWO COATS)
- ⑨ ESTIMATED AT 20 LBS. PER SQ. YD., (TWO COATS)
- ⑩ TO BE USED BETWEEN ALL ASPHALT COURSE LAYERS AT A RATE OF 0.7 LB/SY
- ⑪ ESTIMATED QUANTITY FOR MAKING ADJUSTMENTS TO CROSS SLOPES AND WHERE NEEDED AT TIE-DOWNS; AS DIRECTED BY THE ENGINEER

DRAINAGE SUMMARY NOTES:

IF A PIPE COLLAR OR BEND CONNECTION IS NEEDED FOR CONSTRUCTION, IT SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE PIPE BEING CONSTRUCTED.
GEOTEXTILE FABRIC CLASS 2 INCIDENTAL TO CULVERT PIPE

STATION	SKEW	DESIGN PH	LEVEL	COVER HEIGHT FT	ENTRANCE PIPE 24 IN	CULVERT PIPE 48 IN	REMOVE PIPE	REMOVE HEADWALL	MANHOLE TYPE A	SLOPED BOX OUTLET	PIPE CULVERT IN HEADWALL-48 IN
11+37.56 RT		M			00443	00470	1310	02625	01756	01434	01216
17+96.68 RT		M			60	4	93	2			1
21+62.56 LT		M			26		25			2	
21+87 RT		M			128		110	1	1	1	
PROJECT TOTAL					214	4	228	3	1	5	1

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DAVISS	02-90222.00	R002A

KY 298 IMPROVEMENTS AT SOUTHERN OAKS ELEMENTARY

SUMMARY OF QUANTITIES

GENERAL NOTES

COMPACTION OF ASPHALT MIXTURES

WILL ACCEPT THE COMPACTION OF ASPHALT MIXTURES ON THIS PROJECT BY OPTION B ACCORDING TO SUBSECTIONS 402.03.02 OF THE STANDARD SPECIFICATIONS.

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

UTILITY OWNERS

AT&T - BellSouth Telecommunications, LLC
 Scott Roche
 Manager-OSP PLING & ENG Design
 Kentucky/Tennessee District
 1340 E John Rowan Blvd., Bardstowen, KY 40004
 o 502.348.4528
 m 502.827.4703
 scott.roche@att.com

RWRA
 Sean O'bryan
 obrvansm@rwra.org
 Joseph A. Murphy Building
 2101 Grimes Avenue
 Owensboro, KY 42303-0911
 Phone: (270) 687-8450

Kenergy
 Scott Atherton
 SAtherton@kenergycorp.com
 Manager of Field Engineering
 (o) 800.844.4832
 (d) 270.689.6110
 P.O. Box 1389 Owensboro KY 42302-1389

STANDARD DRAWINGS

STANDARD DRAWINGS ARE NOT ATTACHED TO THESE PLANS. A STANDARD DRAWING BOOK AND THE HEADWALL SUPPLEMENTAL BOOK MAY BE OBTAINED FROM THE POLICY SUPPORT BRANCH OF THE DEPARTMENT OF ADMINISTRATIVE SERVICES IN FRANKFORT, KY. AT (502) 564-3670

PAVEMENT MARKINGS / STRIPING / THERMO

CONTACT D2 KYTC TRAFFIC ENGINEER
 PRIOR TO PERMANENT STRIPING OR THERMO.

PROFILE / VERTICAL CONTROL

NO PROFILE IS PROVIDED FOR THE PROJECT. CONSTRUCT VIA SPLINE GRADE WITH EXISTING EDGE OF PAVEMENT BEING THE GRADE POINT. REFER TO CROSS SECTIONS FOR ALL ELEVATIONS/PERTINENT INFORMATION

SPECIAL NOTES

SPECIAL NOTE FOR NON-TRACKING TACK COAT

NOT TO SCALE

COUNTY OF	ITEM NO.	SHEET NO.
DAVISS	02-9022.00	R002B

KY 298 IMPROVEMENTS AT
 SOUTHERN OAKS ELEMENTARY

GENERAL NOTES

MAINTENANCE OF TRAFFIC NOTES

GENERAL NOTES

1. TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND THE STANDARD DRAWINGS, CURRENT EDITIONS.
2. 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, BARRICADES AND 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.
3. ANY TEMPORARY TRAFFIC CONTROL ITEMS, DEVICES, MATERIALS AND INCIDENTALS SHALL REMAIN THE PROPERTY OF THE CONTRACTOR WHEN NO LONGER NEEDED.
4. THE CONTRACTOR SHALL MAINTAIN A MINIMUM THROUGH LANE WIDTH OF 10 FEET (BOTH THROUGH LANES ON BOTH SIDES OF INTERSECTION).
5. THE CONTRACTOR SHALL COMPLETELY COVER ANY SIGNS, EITHER EXISTING, PERMANENT OR TEMPORARY, WHICH DO NOT PROPERLY APPLY TO THE CURRENT TRAFFIC PHASING, AND SHALL MAINTAIN THE COVERING UNTIL THE SIGNS ARE APPLICABLE OR ARE REMOVED.
6. 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.
7. THE ENGINEER AND THE CONTRACTOR, OR THEIR AUTHORIZED REPRESENTATIVES, SHALL REVIEW THE SIGNING BEFORE TRAFFIC IS ALLOWED TO USE ANY LANE CLOSURES, CROSSEVERS OR DETOURS. ALL SIGNING SHALL BE APPROVED BY THE ENGINEER BEFORE WORK CAN BE STARTED BY THE CONTRACTOR.
8. IF THE CONTRACTOR DESIRES TO DEVIATE FROM THE TRAFFIC CONTROL SCHEME AND CONSTRUCTION SCHEDULE OUTLINED IN THESE 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.
9. 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 THE PROVISIONS FOR THE PASSAGE OF THAT VEHICLE AS QUICKLY AS POSSIBLE.

PAVEMENT DROP-OFF

A PAVEMENT EDGE THAT TRAFFIC IS NOT EXPECTED TO CROSS, EXCEPT ACCIDENTALLY, SHOULD BE TREATED AS FOLLOWS:

- LESS THAN TWO INCHES - NO PROTECTION REQUIRED. WARNING SIGNS SHOULD BE PLACED IN ADVANCE AND THROUGHOUT THE DROP-OFF AREA.
- TWO TO FOUR INCHES - PLASTIC DRUMS, VERTICAL PANELS OR BARRICADES EVERY 100 FEET ON TANGENT SECTIONS FOR SPEEDS OF 50 MPH OR GREATER. CONES MAY BE USED IN PLACE OF PLASTIC DRUMS, PANELS AND BARRICADES DURING DAYLIGHT HOURS. FOR TANGENT SECTIONS WITH SPEEDS LESS THAN 50 MPH AND FOR CURVES, DEVICES SHOULD BE PLACED EVERY 50 FEET. SPACING OF DEVICES ON TAPERED SECTIONS SHOULD BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION.
- GREATER THAN FOUR INCHES - POSITIVE SEPARATION OR WEDGE WITH 3:1 OR FLATTER SLOPE NEEDED. IF THERE IS FIVE FEET OR MORE DISTANCE BETWEEN THE EDGE OF THE PAVEMENT AND THE DROP-OFF, THEN DRUMS, PANEL, OR BARRICADES MAY BE USED. IF THE DROP-OFF IS GREATER THAN 12 INCHES, POSITIVE SEPARATION IS STRONGLY ENCOURAGED. IF CONCRETE BARRIERS ARE USED, SPECIAL REFLECTIVE DEVICES OR STEADY BURN LIGHTS SHOULD BE USED FOR OVERNIGHT INSTALLATIONS.

FOR TEMPORARY CONDITIONS, DROP-OFFS GREATER THAN FOUR INCHES MAY BE PROTECTED WITH PLASTIC DRUMS, VERTICAL PANELS OR BARRICADES FOR SHORT DISTANCES DURING DAYLIGHT HOURS WHILE WORK IS BEING DONE IN THE DROP-OFF AREA.

LESSER TREATMENTS THAN THOSE DESCRIBED ABOVE MAY BE CONSIDERED FOR LOW-VOLUME LOCAL STREETS.

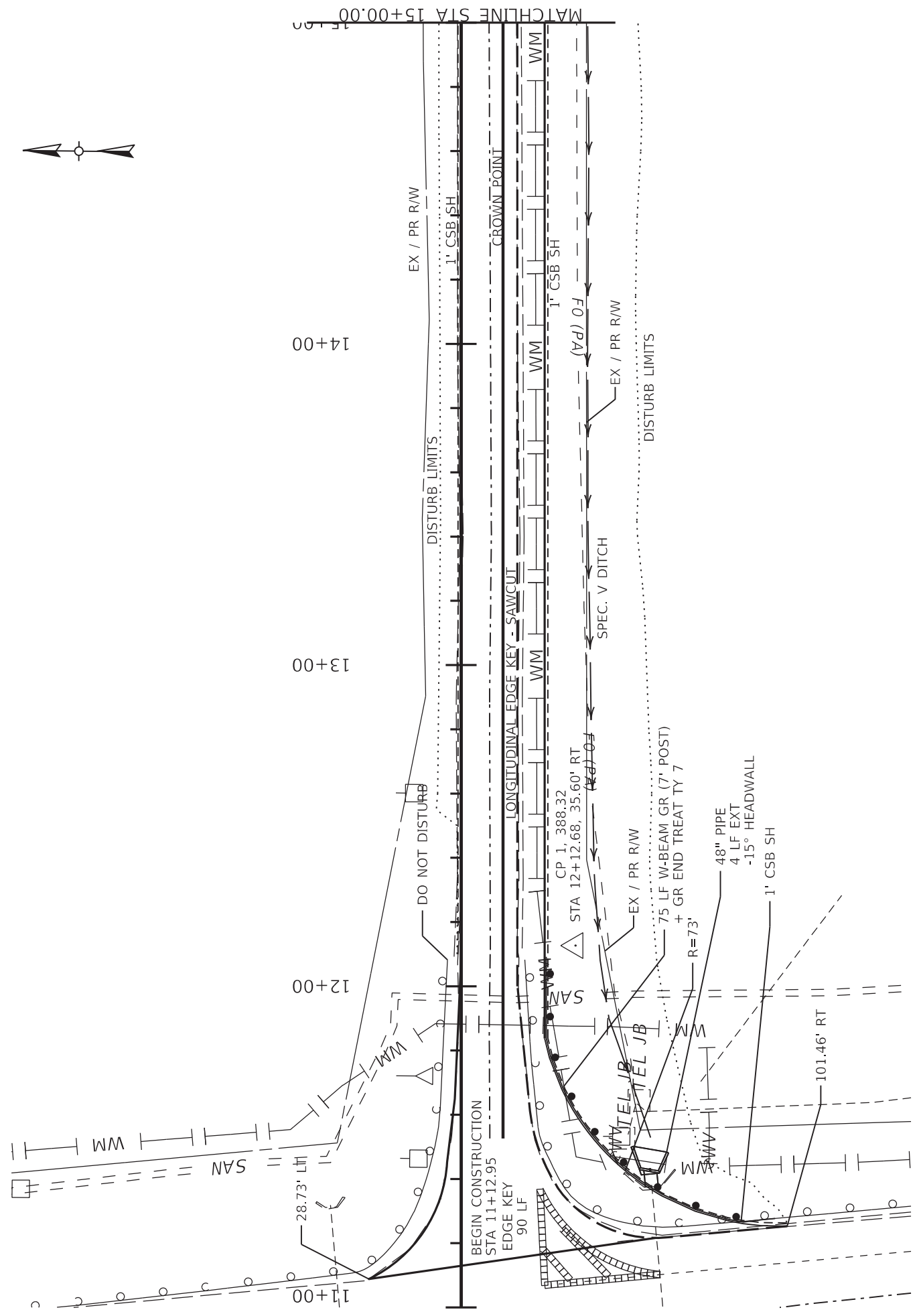
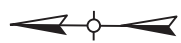
REASONABLE MEANS OF INGRESS AND EGRESS SHALL BE MAINTAINED TO ALL PROPERTIES WITHIN THE PROJECT LIMITS. ACCESS TO FIRE HYDRANTS MUST ALSO BE MAINTAINED AT ALL TIMES.

NOT TO SCALE

COUNTY OF	ITEM NO.	SHEET NO.
DAVISS	02-9022.00	R002C

KY 298 IMPROVEMENTS AT
SOUTHERN OAKS ELEMENTARY

MOT NOTES



ITEM NO.
02-90222.00

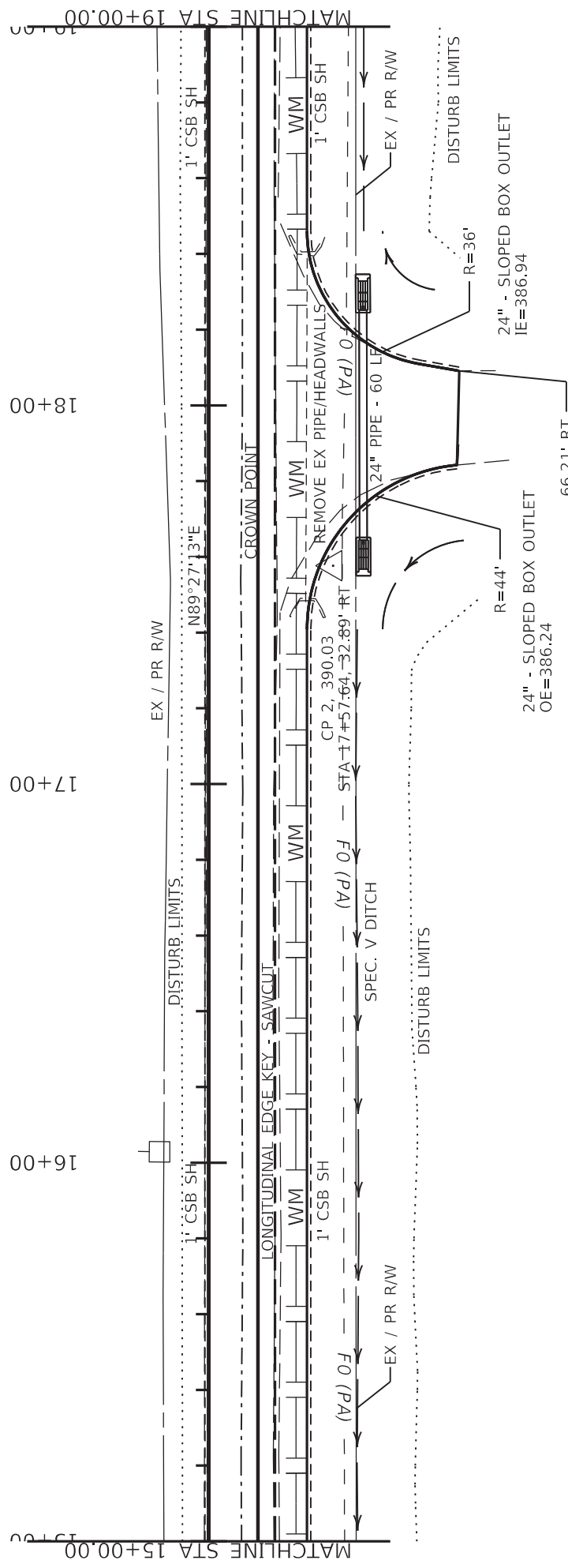
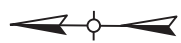
COUNTY OF
DAVISS

SHEET NO.
R003



DRAWING TITLE: PLAN SHEET
STA 11+00 TO STA 15+00

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS



ITEM NO. 02-9022.00
COUNTY OF DAVIESS
SHEET NO. R004

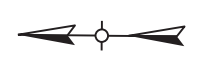
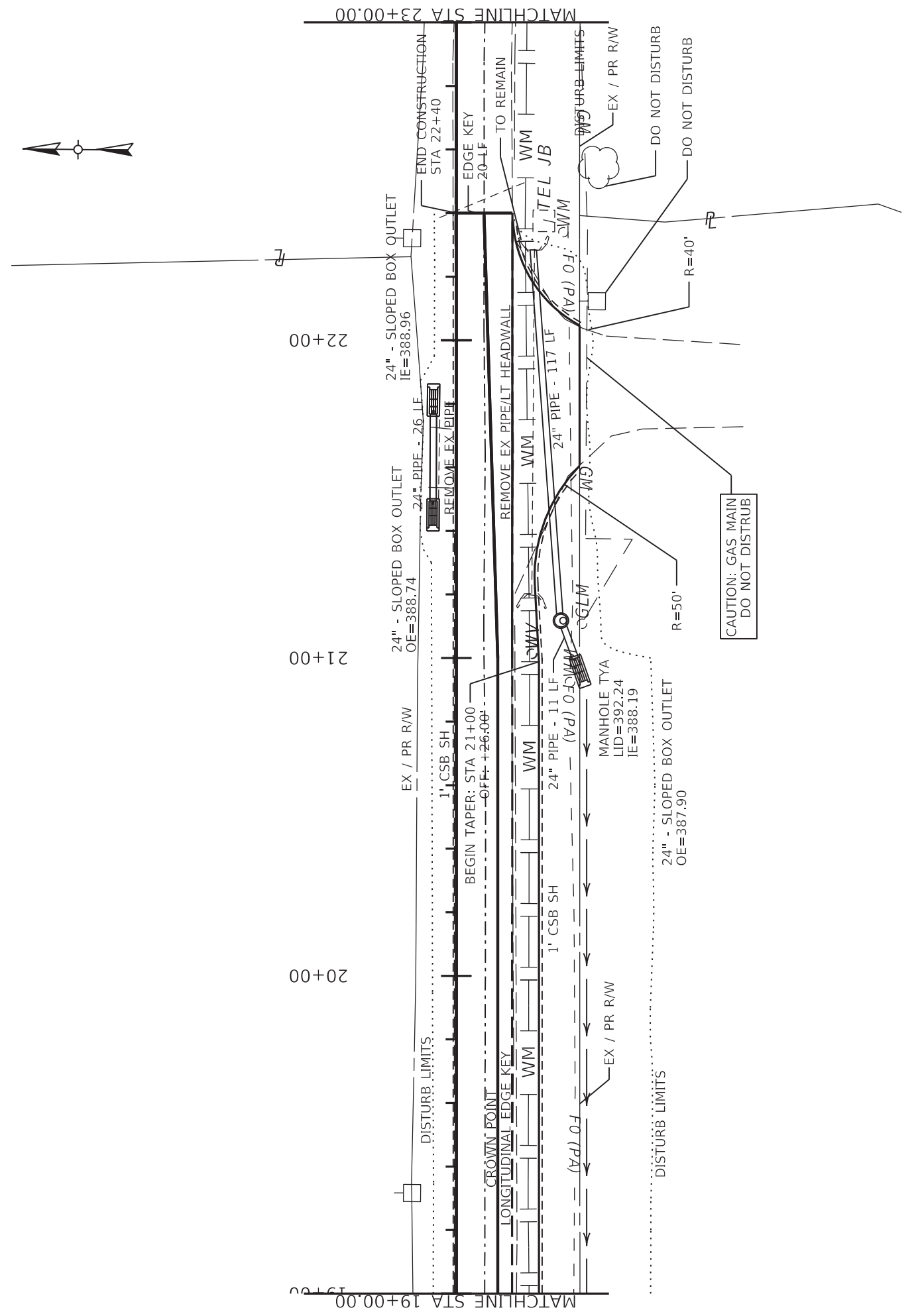
0' 40' 80' 160'
HORIZONTAL SCALE: 1"=40'

DRAWING TITLE: PLAN SHEET
STA 15+00 TO STA 19+00

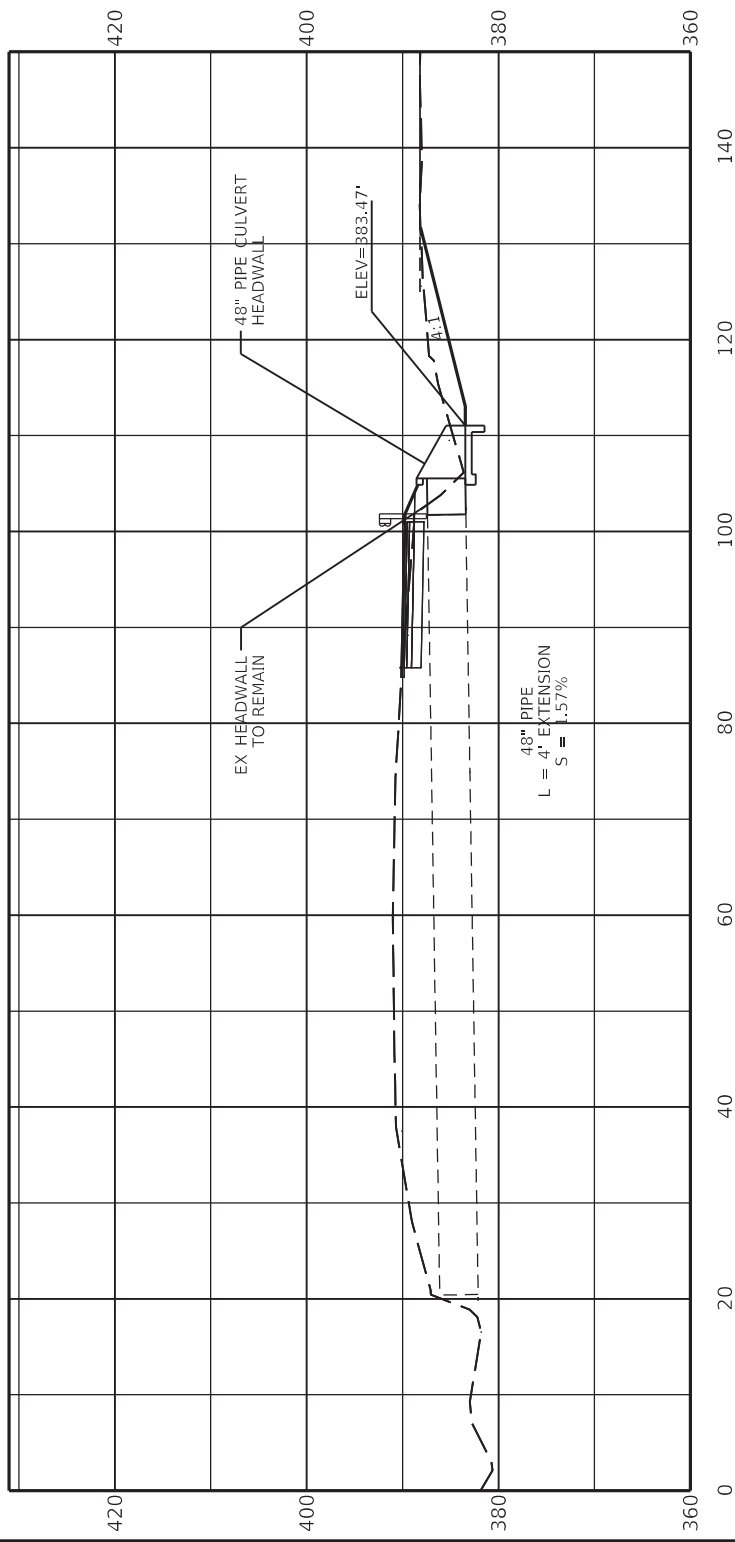
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

USER: chris.smith
FILE NAME: C:\P\WORK\CHRIS.SMITH\2038679\PLAN SHEETS.DGN

OpenRoads Designer v10.16.2.267



<p>COMMONWEALTH OF KENTUCKY DEPARTMENT OF HIGHWAYS</p>	<p>DRAWING TITLE: PLAN SHEET STA 19+00 TO STA 22+40</p>
<p>USER: chris.smith</p>	<p>ITEM NO. 02-9022.00 COUNTY OF DAVIESS SHEET NO. R005</p>
<p>HORIZONTAL SCALE: 1"=40' VERTICAL SCALE: 1"=40'</p>	



STA 11+37.56 59.46 RT

ITEM NO. 02-9022.00	COUNTY OF DAVISS
SHEET NO. R006	

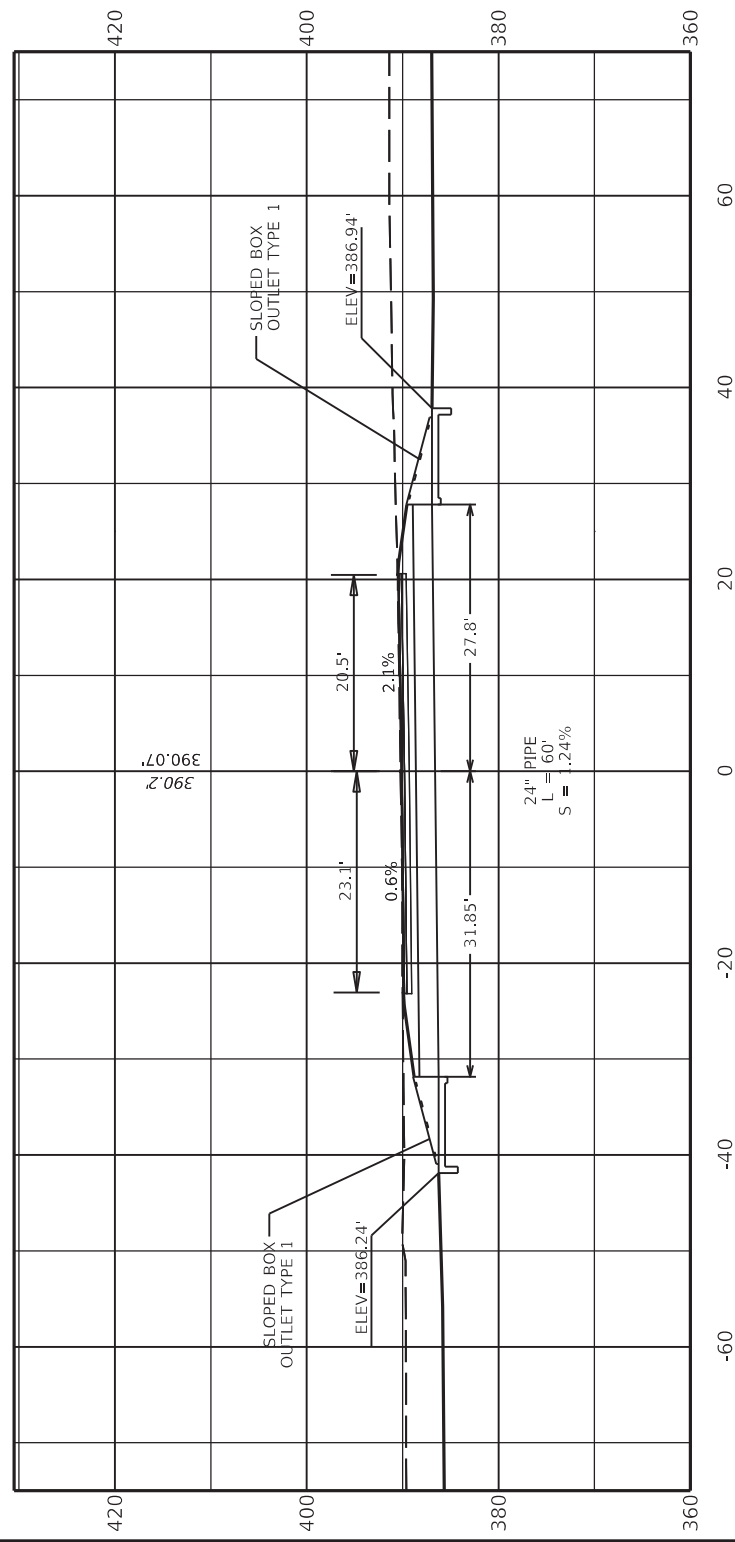


DRAWING TITLE: PIPE SHEET



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS





ENTRANCE - STA 17+96.68

ITEM NO. 02-9022.00	COUNTY OF DAVISS
SHEET NO. R007	



DRAWING TITLE: ENTRANCE PIPE STA 17+96.68 RT

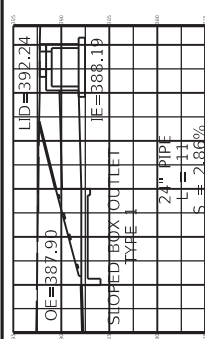
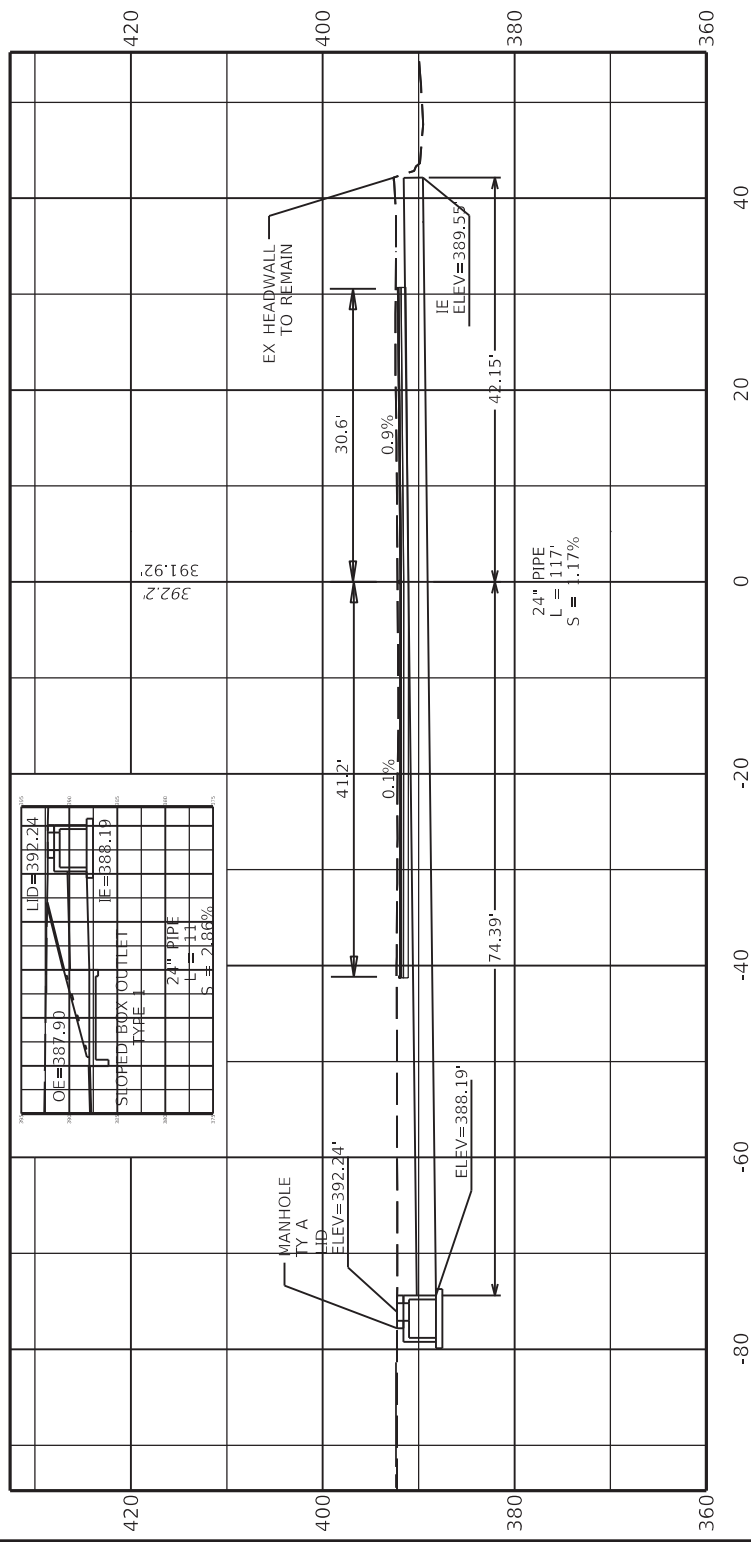


COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

DATE PLOTTED: 9/7/2005 7:08:02 PM

USER: chris.smith

OpenRoads Designer v10.16.0.80
FILE NAME: C:\PW\WORK\CHRIS.SMITH\2036686\2-9022_DRAINAGE.DGN



ENTRANCE PIPE STA 21+87 RT

ITEM NO. 02-90222.00	COUNTY OF DAVISS
SHEET NO. R008	

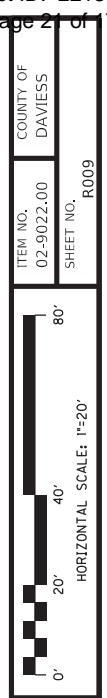
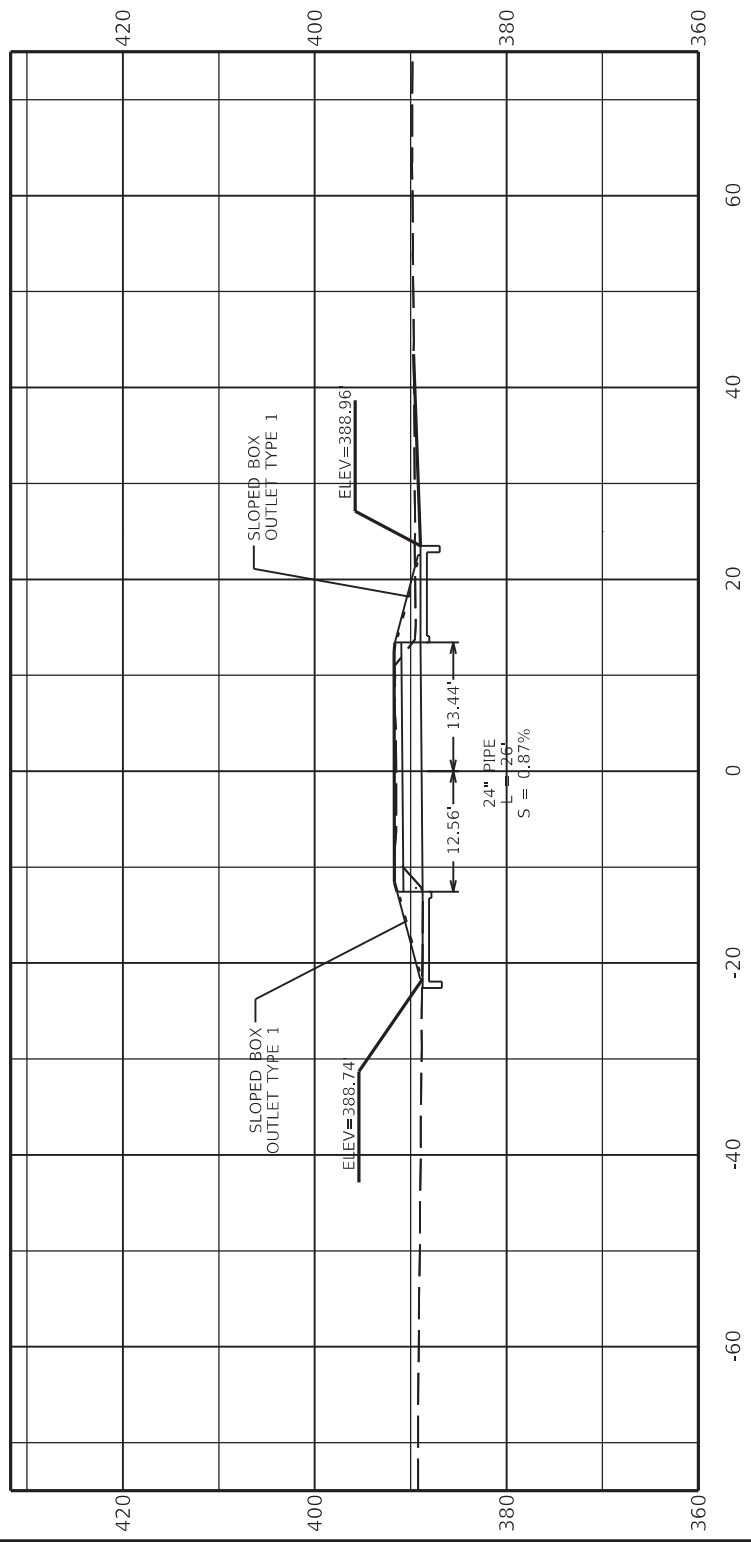


DRAWING TITLE: PIPE SHEET STA 21+87 RT



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS



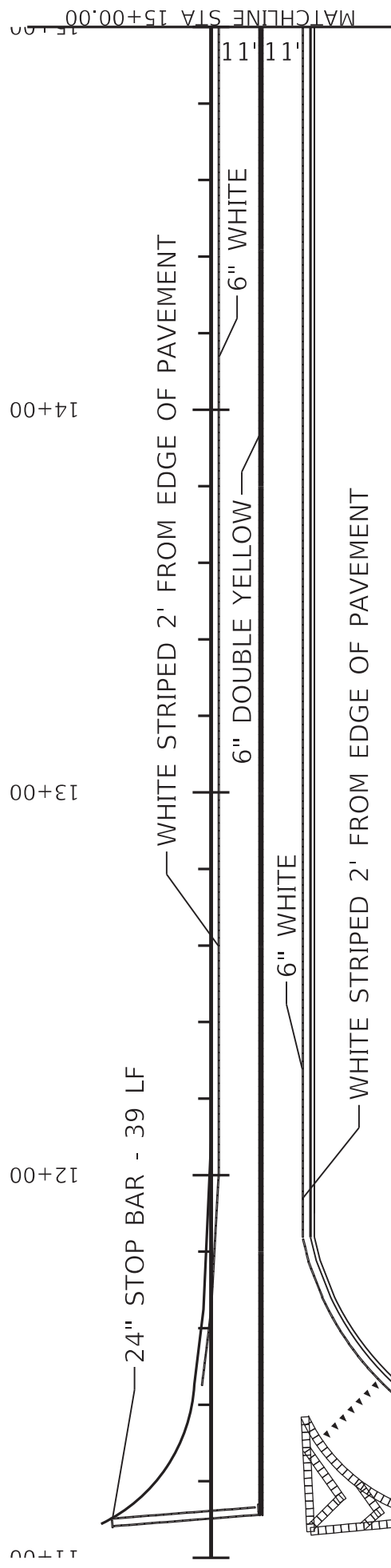
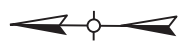


ITEM NO. 02-9022.00	COUNTY OF DAVISS
SHEET NO. R009	

DRAWING TITLE: FARM ENTRANCE
DATE PLOTTED: 9/7/2005 7:08:02 PM

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

USER: chris.smith



** 11' LANES - 2' PAVED SHOULDERS

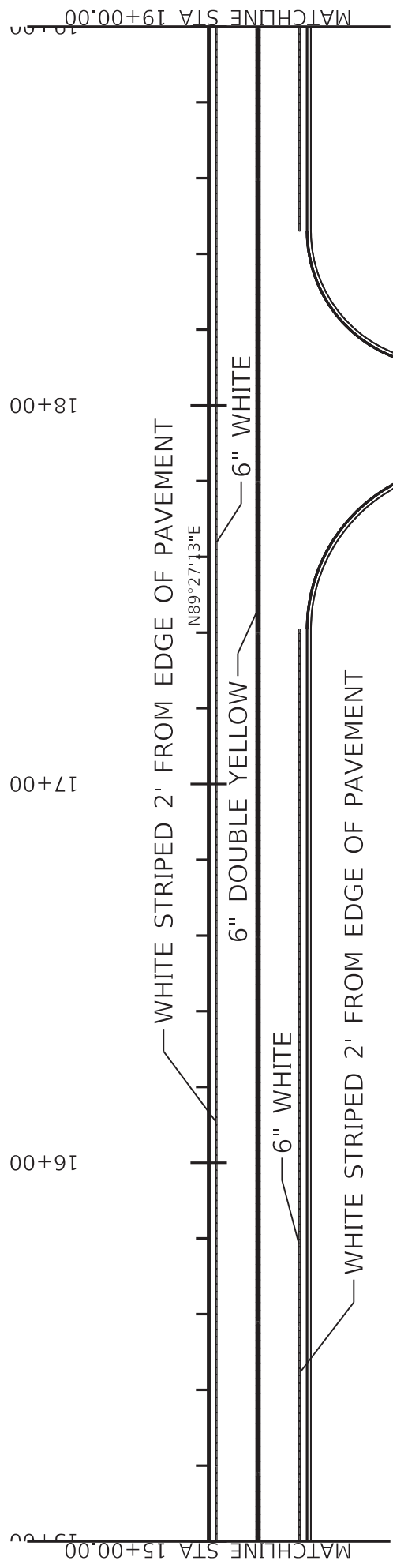
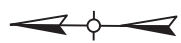
STRIPING QUANTITIES	
YIELD LINES	EA 7
24" STOP BAR	LF 39
THERMO CROSS-HATCH	SQFT 150
6" WHITE	LF 779
6" YELLOW	LF 389

ITEM NO. 02-9022.00	COUNTY OF DAVISS
SHEET NO. R010	



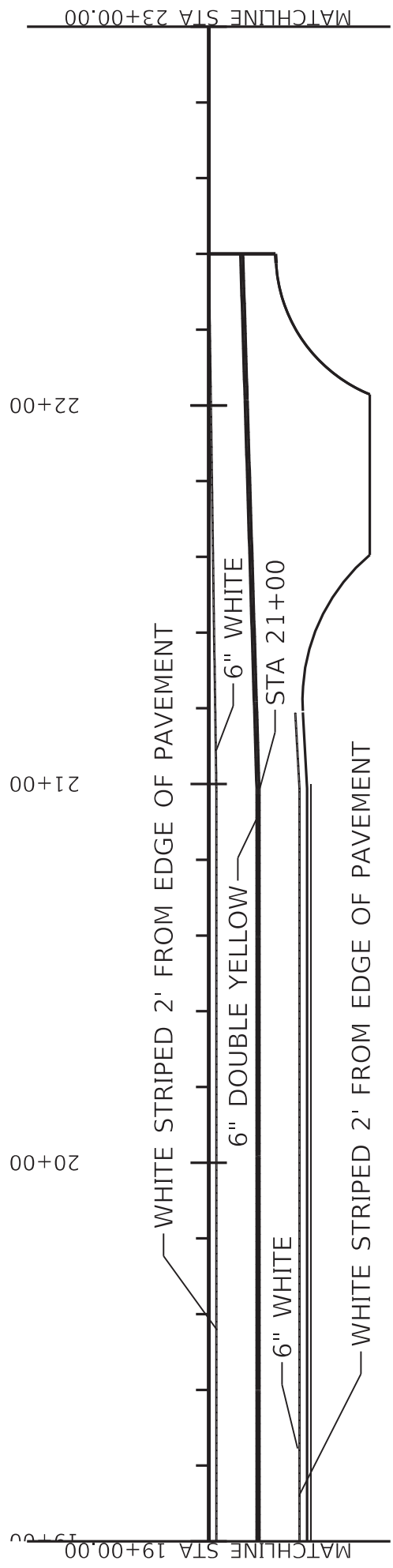
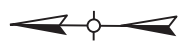
DRAWING TITLE: PLAN SHEET
 STA 11+00 TO STA 15+00

COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS
 USER: chris.smith



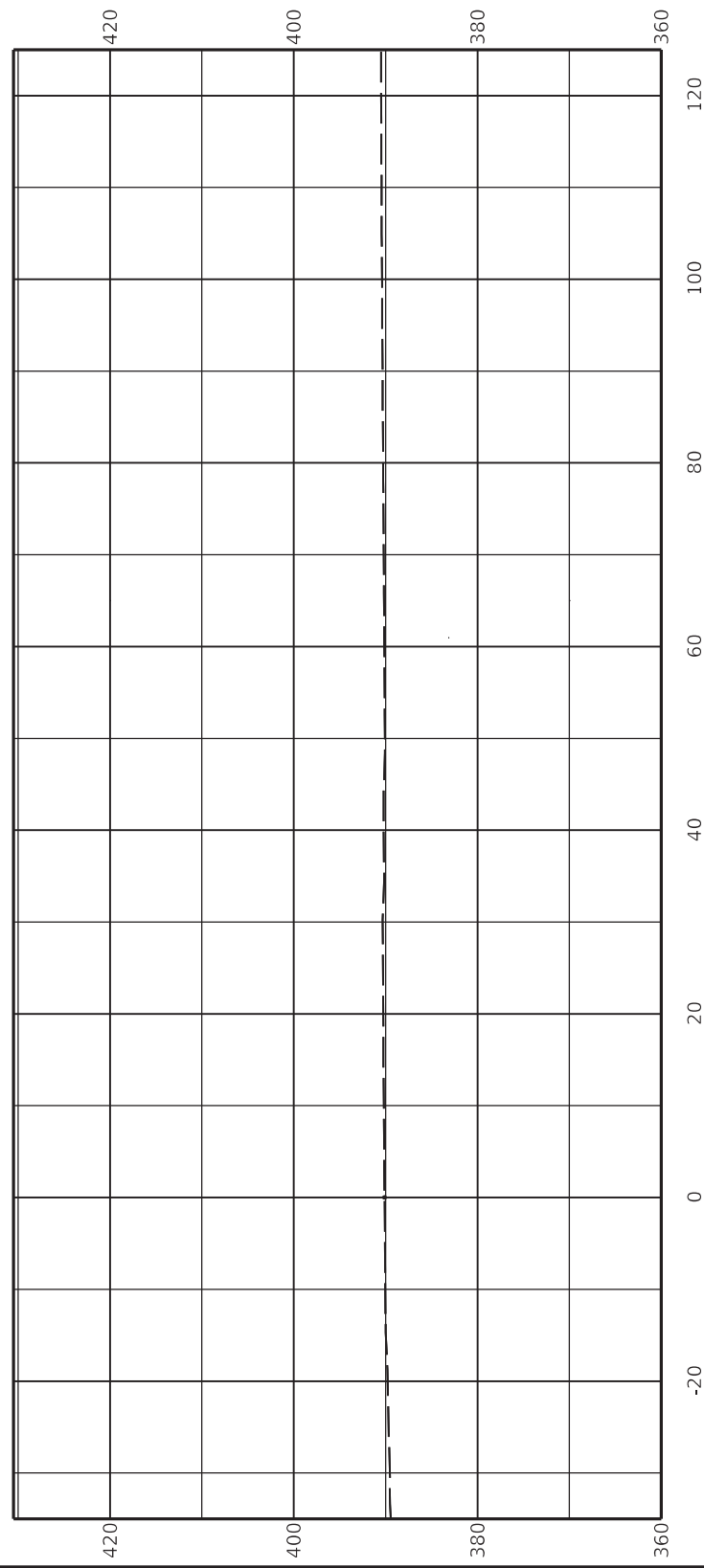
STRIPING QUANTITIES	
6" WHITE	LF 695
6" YELLOW	LF 400

COMMONWEALTH OF KENTUCKY DEPARTMENT OF HIGHWAYS	DRAWING TITLE: PLAN SHEET STA 15+00 TO STA 19+00	COUNTY OF DAVIESS ITEM NO. 02-9022.00 SHEET NO. R011
HORIZONTAL SCALE: 1"=40' 0' 40' 80' 160'		160'



STRIPING QUANTITIES		
6" WHITE	LF	559
6" YELLOW	LF	340

COMMONWEALTH OF KENTUCKY DEPARTMENT OF HIGHWAYS	DRAWING TITLE: PLAN SHEET STA 19+00 TO STA 22+40	COUNTY OF DAVIESS ITEM NO. 02-9022.00 SHEET NO. R012
HORIZONTAL SCALE: 1"=40'		0' 40' 80' 160'



1:1+20.00



ITEM NO.
02-9022.00
SHEET NO. X003

COUNTY OF
DAVISS

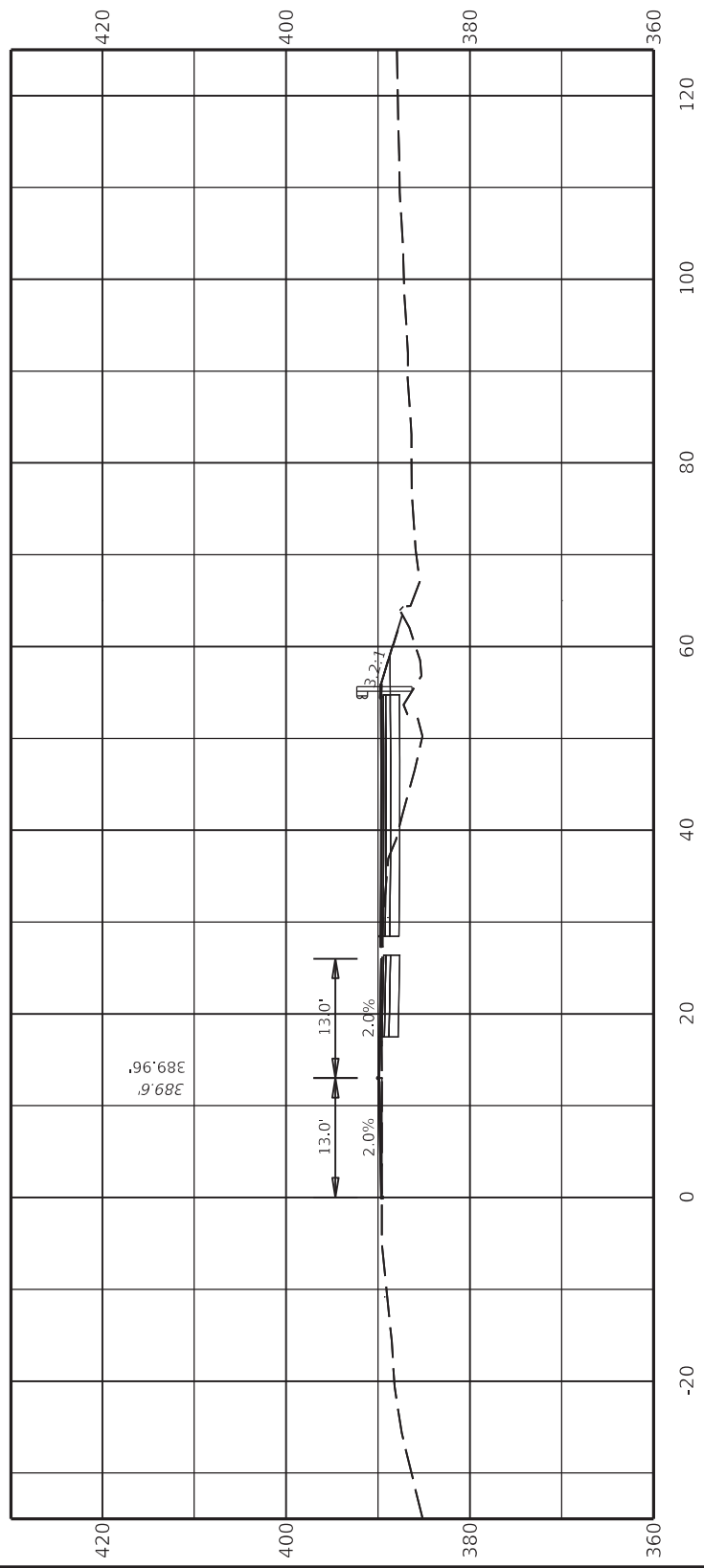
DRAWING TITLE: CROSS SECTION

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

USER: chris.smith

OpenRoads Designer v10.16.0.80
FILE NAME: C:\PW\WORK\CHRIS.SMITH\2036679\CROSS SECTIONS.DGN

Cut Area 32.38 SQ FT
Fill Area 37.96 SQ FT
Cut Vol. 11.99 CU YD
Fill Vol. 14.06 CU YD



11+40.00

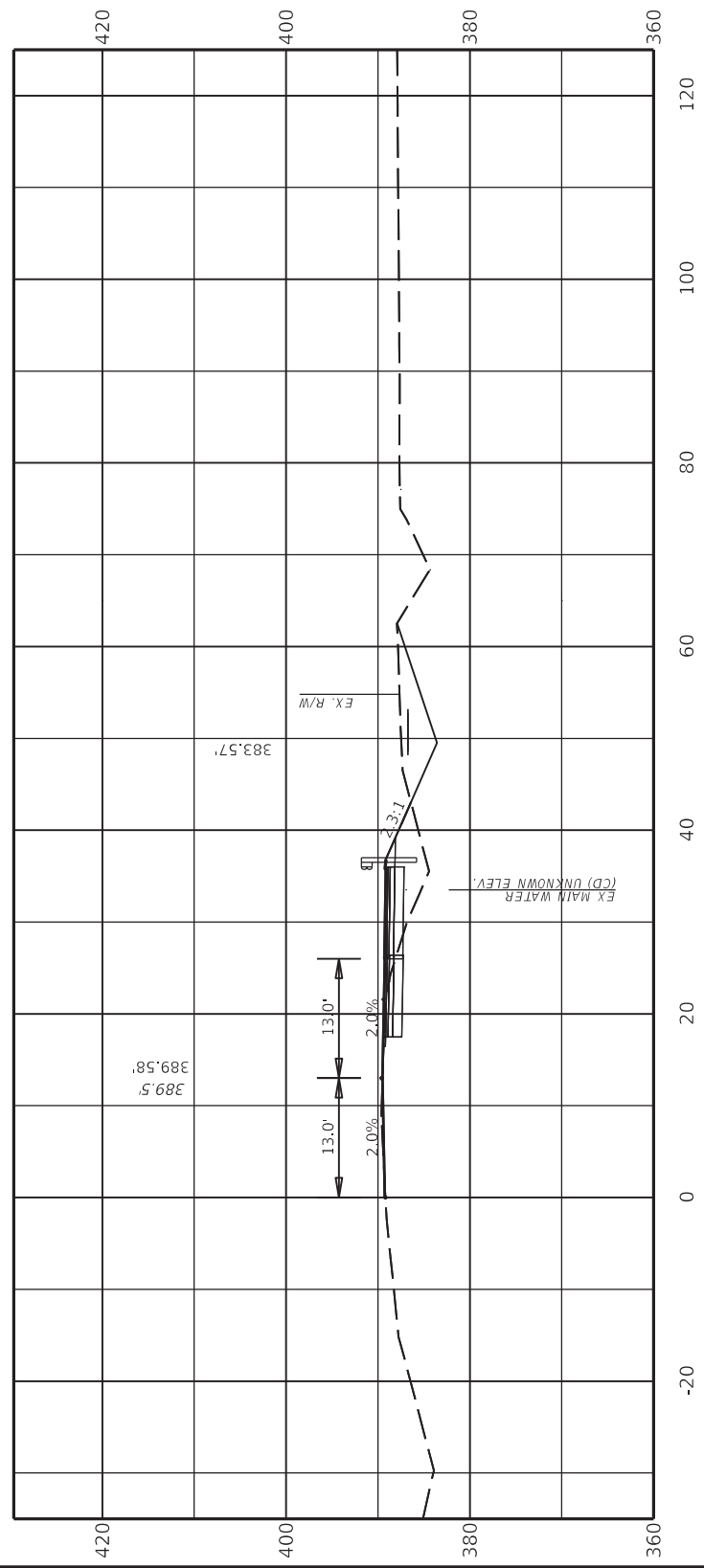
ITEM NO.
02-9022.00
SHEET NO.
X004

COUNTY OF
DAVISS

DRAWING TITLE: CROSS SECTION

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

Cut Area 17.16 SQ FT
 Fill Area 25.42 SQ FT
 Cut Vol. 18.35 CU YD
 Fill Vol. 23.47 CU YD



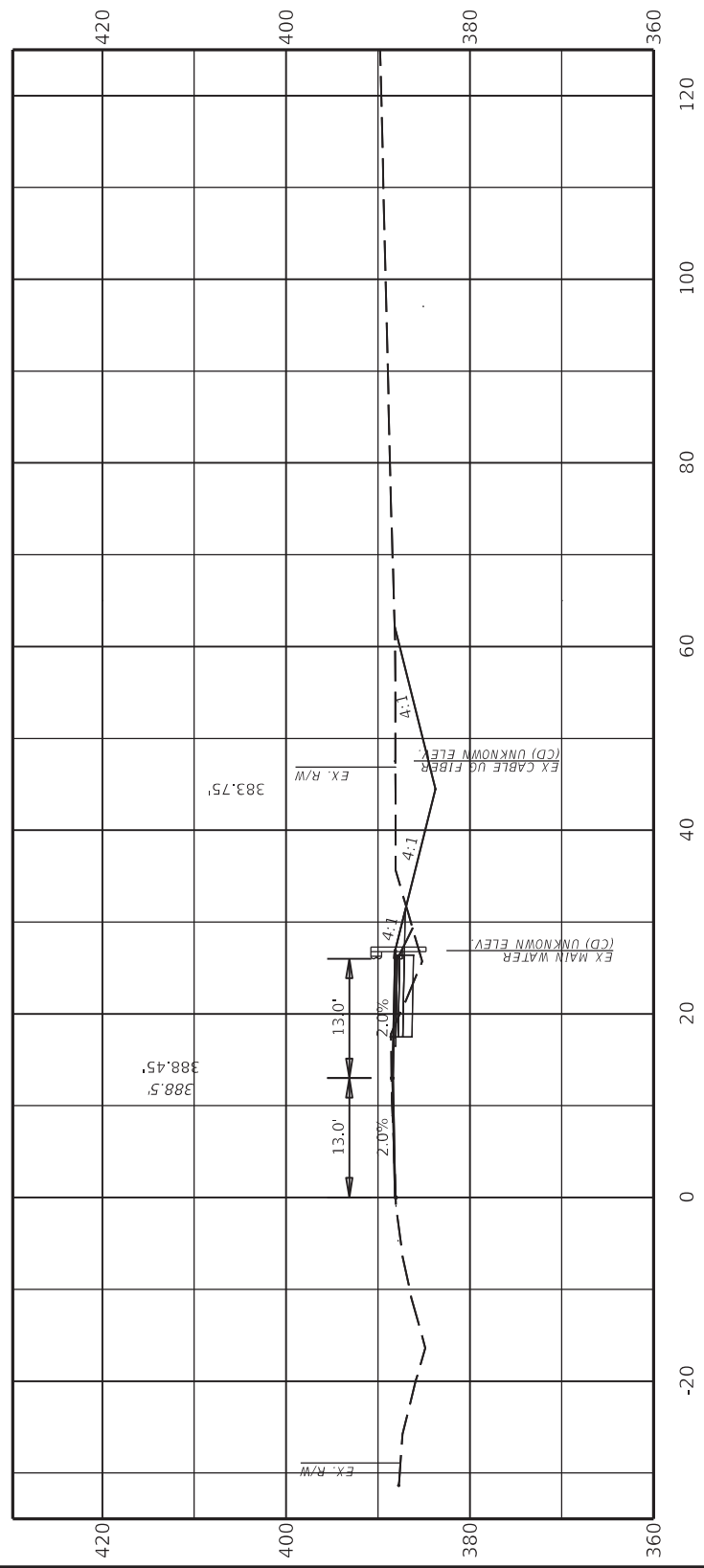
ITEM NO.
 02-9022.00
 COUNTY OF
 DAVIESS
 SHEET NO.
 X005



DRAWING TITLE: CROSS SECTION

COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS

Cut Area 80.70 SQ FT
Fill Area 5.84 SQ FT
Cut Vol. 33.77 CU YD
Fill Vol. 7.14 CU YD



12+00.00

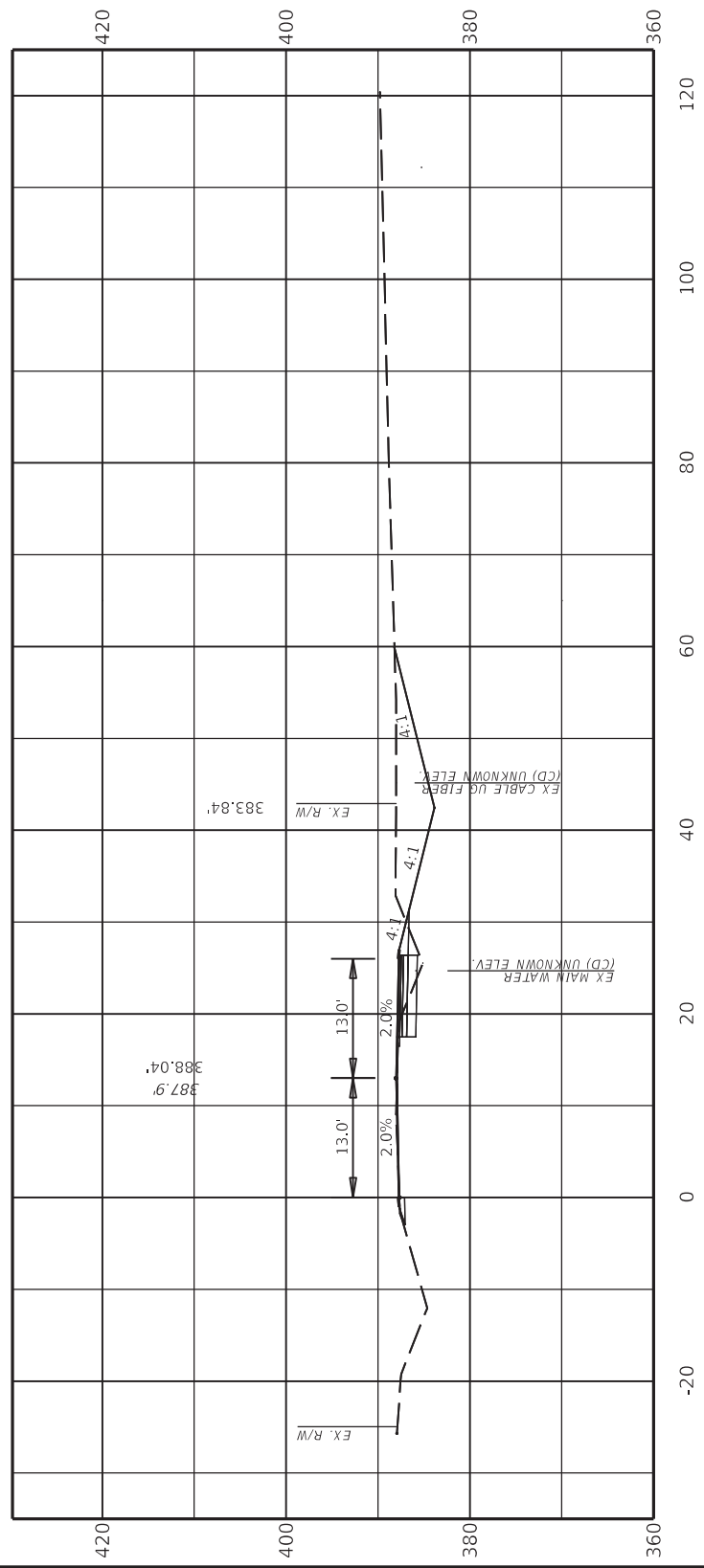
ITEM NO. 02-9022.00	COUNTY OF DAVISS
SHEET NO. X007	



DRAWING TITLE: CROSS SECTION

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

Cut Area 75.44 SQ FT
Fill Area 2.63 SQ FT
Cut Vol. 57.83 CU YD
Fill Vol. 3.14 CU YD



12+20.00

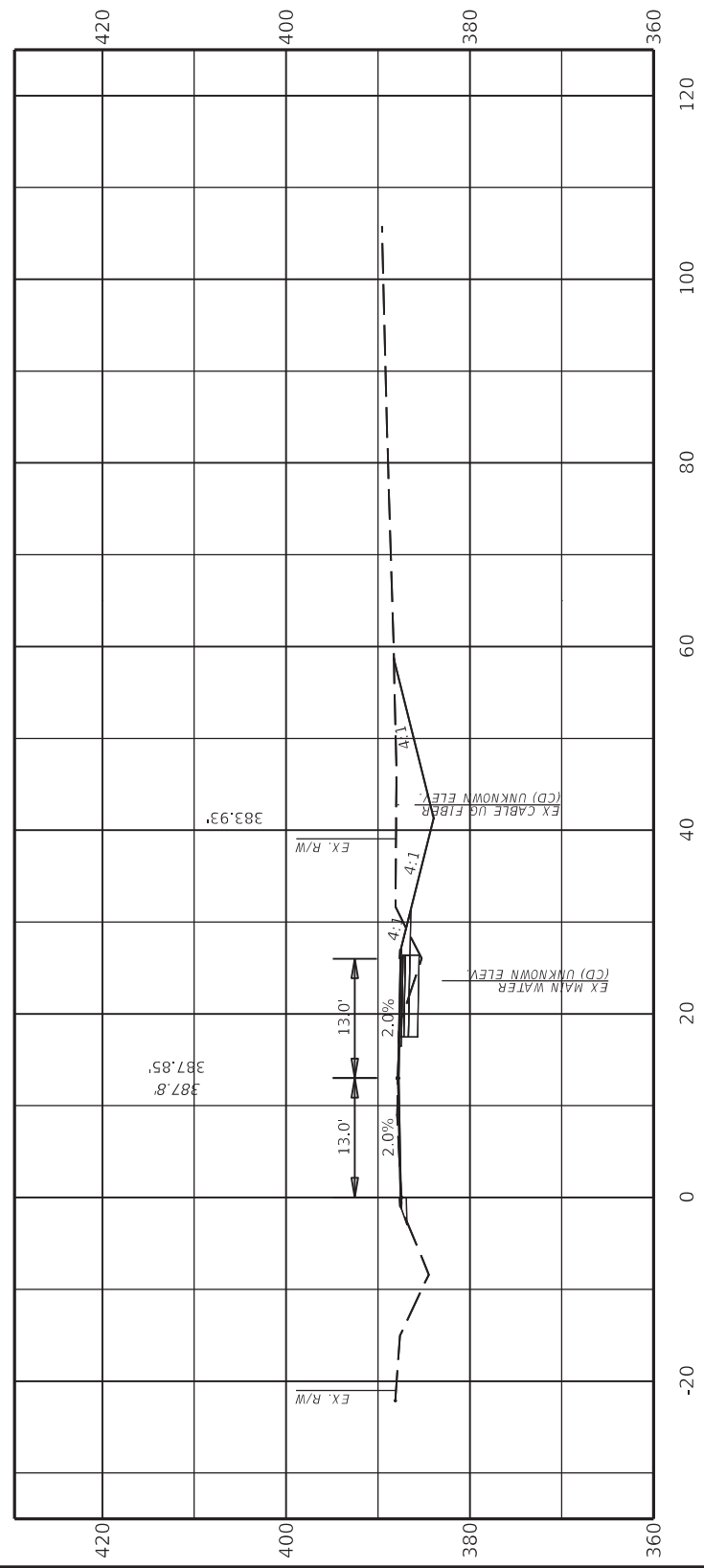
ITEM NO.	COUNTY OF
02-9022.00	DAVISS
SHEET NO.	X008



DRAWING TITLE: CROSS SECTION

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
USER: chris.smith

Cut Area 77.96 SQ FT
 Fill Area 1.34 SQ FT
 Cut Vol. 56.81 CU YD
 Fill Vol. 1.47 CU YD



12+40.00

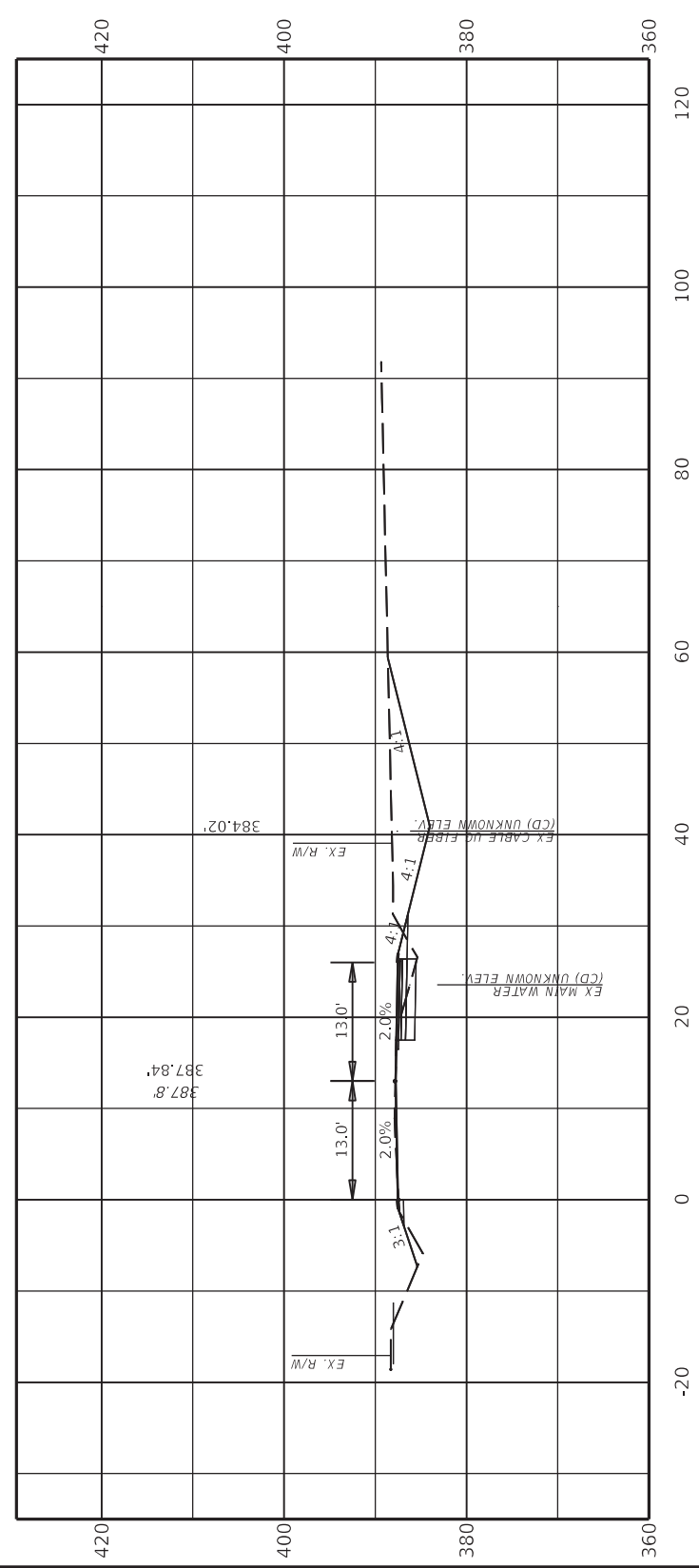
ITEM NO.	COUNTY OF
02-90222.00	DAVISS
SHEET NO.	X009



DRAWING TITLE: CROSS SECTION

COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS
 USER: chris.smith

Cut Area 81.21 SQ FT
 Fill Area 4.37 SQ FT
 Cut Vol. 58.95 CU YD
 Fill Vol. 2.11 CU YD



12+60.00

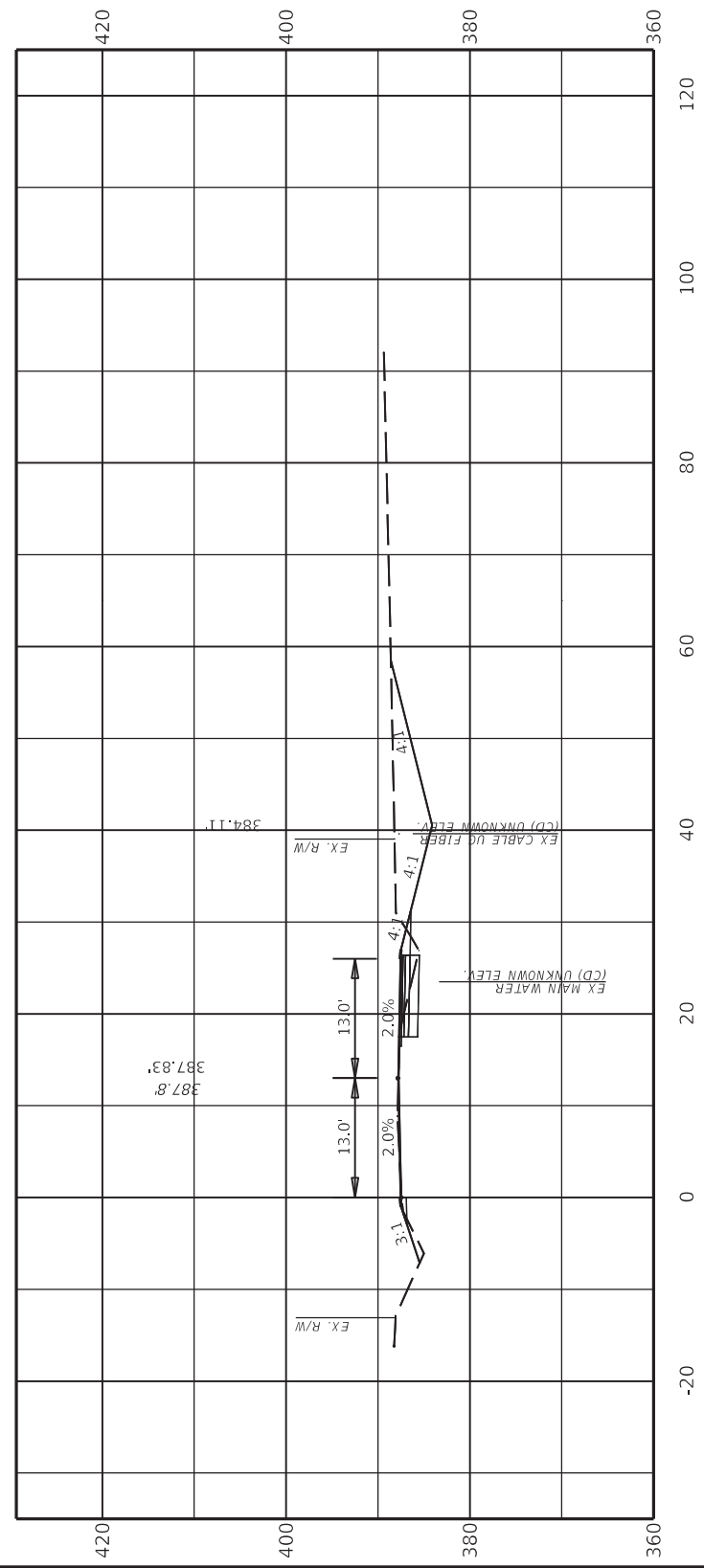
ITEM NO.	COUNTY OF
02-90222.00	DAVISS
SHEET NO.	X010



DRAWING TITLE: CROSS SECTION

COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS

Cut Area 78.77 SQ FT
Fill Area 3.45 SQ FT
Cut Vol. 59.25 CU YD
Fill Vol. 2.90 CU YD



12+80.00

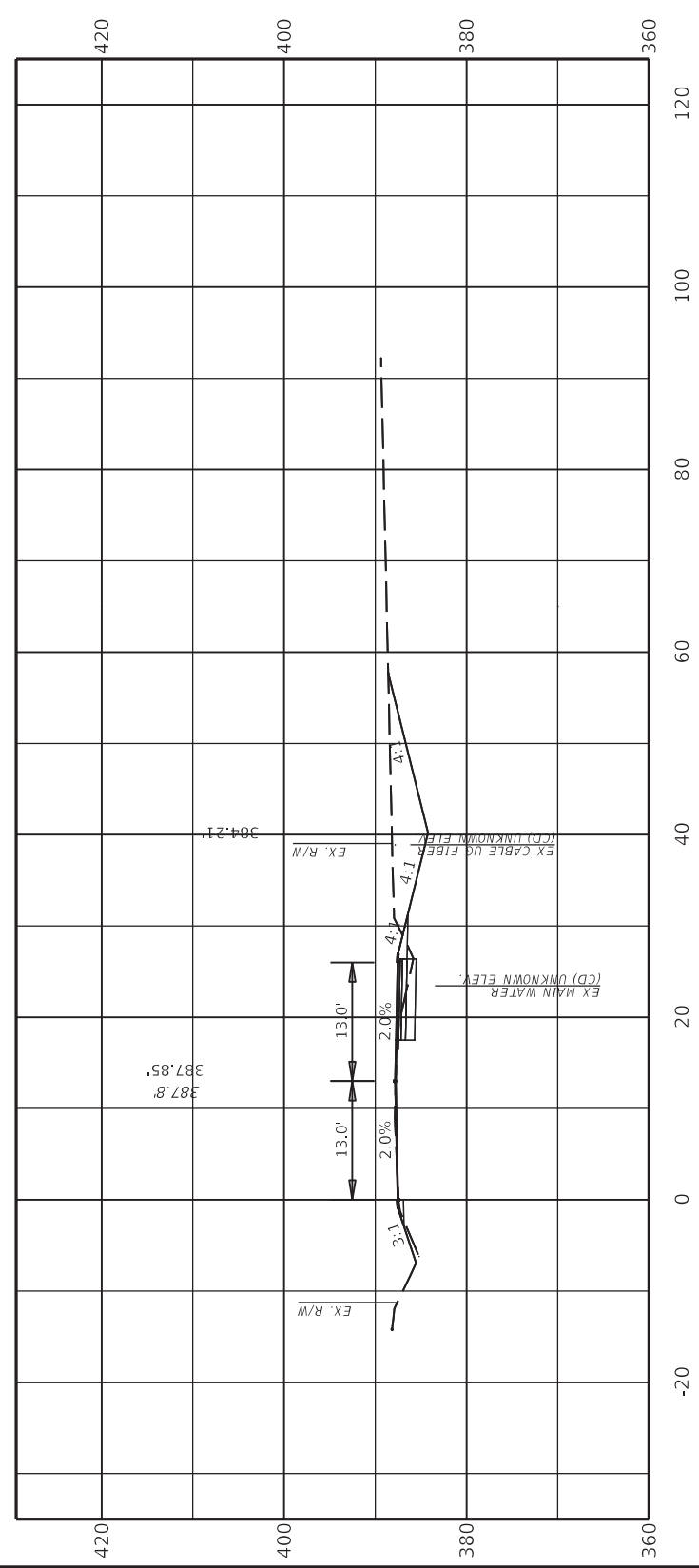
ITEM NO.	COUNTY OF
02-90222.00	DAVISS
SHEET NO.	X011



DRAWING TITLE: CROSS SECTION

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

Cut Area 75.38 SQ FT
Fill Area 2.28 SQ FT
Cut Vol. 57.09 CU YD
Fill Vol. 2.12 CU YD



13+00.00

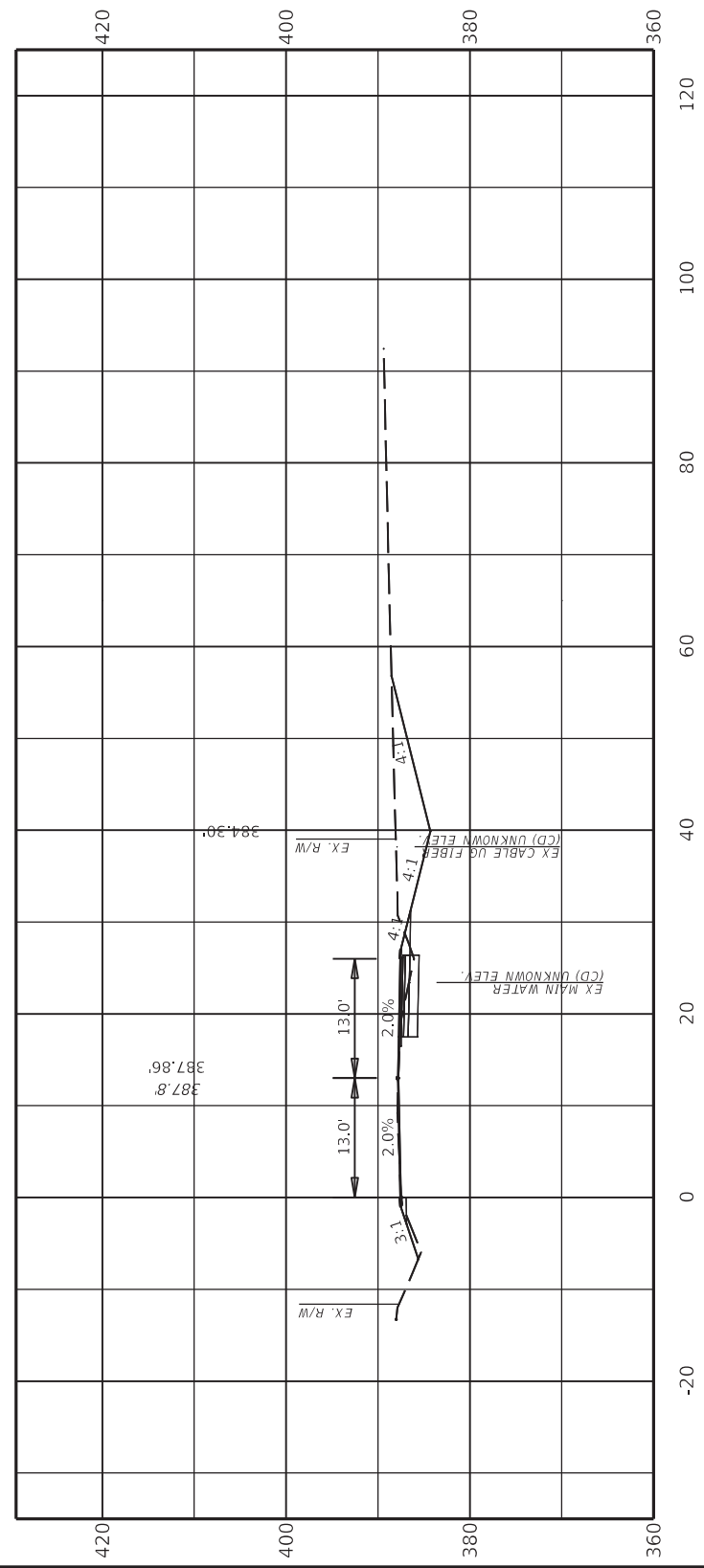


ITEM NO.
02-9022.00
SHEET NO.
X012

DRAWING TITLE: CROSS SECTION

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

Cut Area 71.86 SQ FT
 Fill Area 1.95 SQ FT
 Cut Vol. 54.53 CU YD
 Fill Vol. 1.57 CU YD



13+20.00

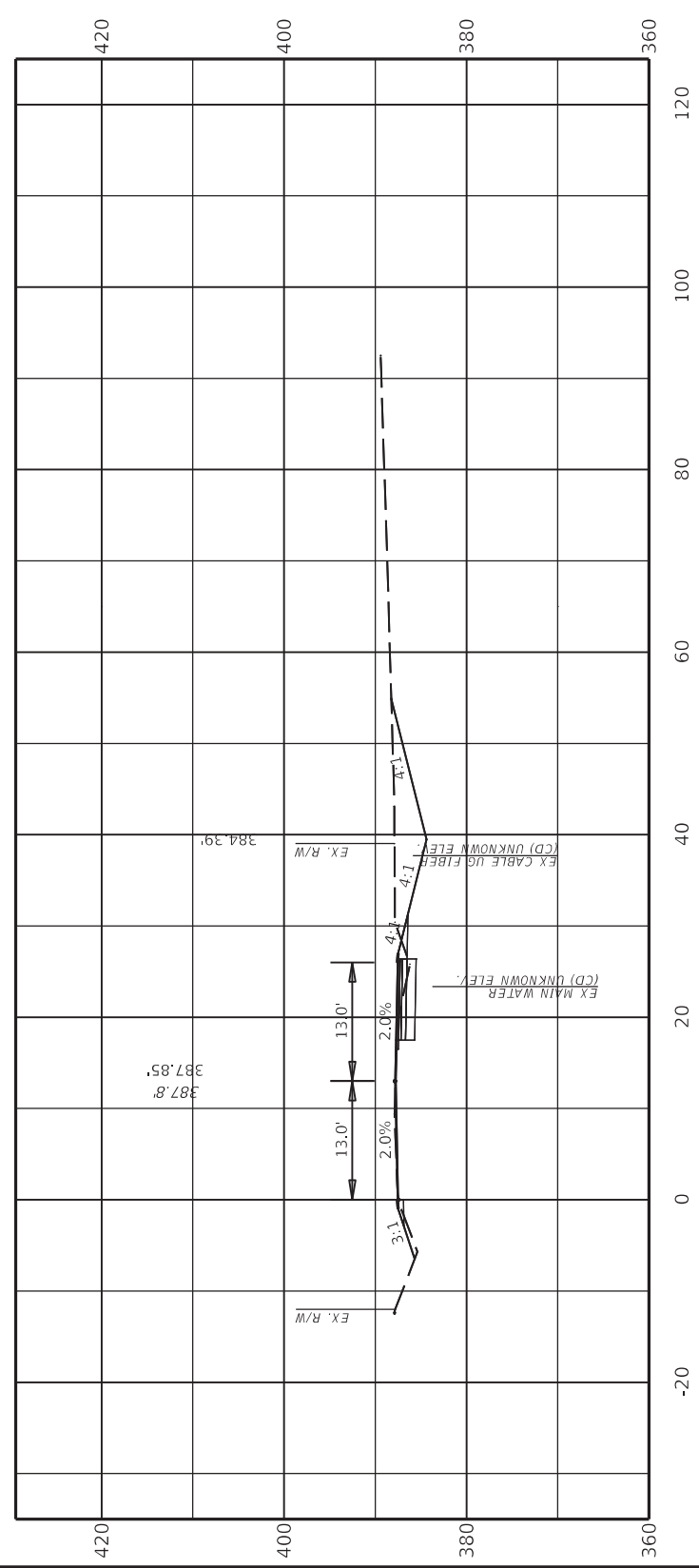
ITEM NO. 02-90222.00	COUNTY OF DAVISS
SHEET NO. X013	



DRAWING TITLE: CROSS SECTION

COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS
 USER: chris.smith

Cut Area 65.99 SQ FT
 Fill Area 1.84 SQ FT
 Cut Vol. 51.06 CU YD
 Fill Vol. 1.41 CU YD



13+40.00

ITEM NO.
02-9022.00
SHEET NO. X014



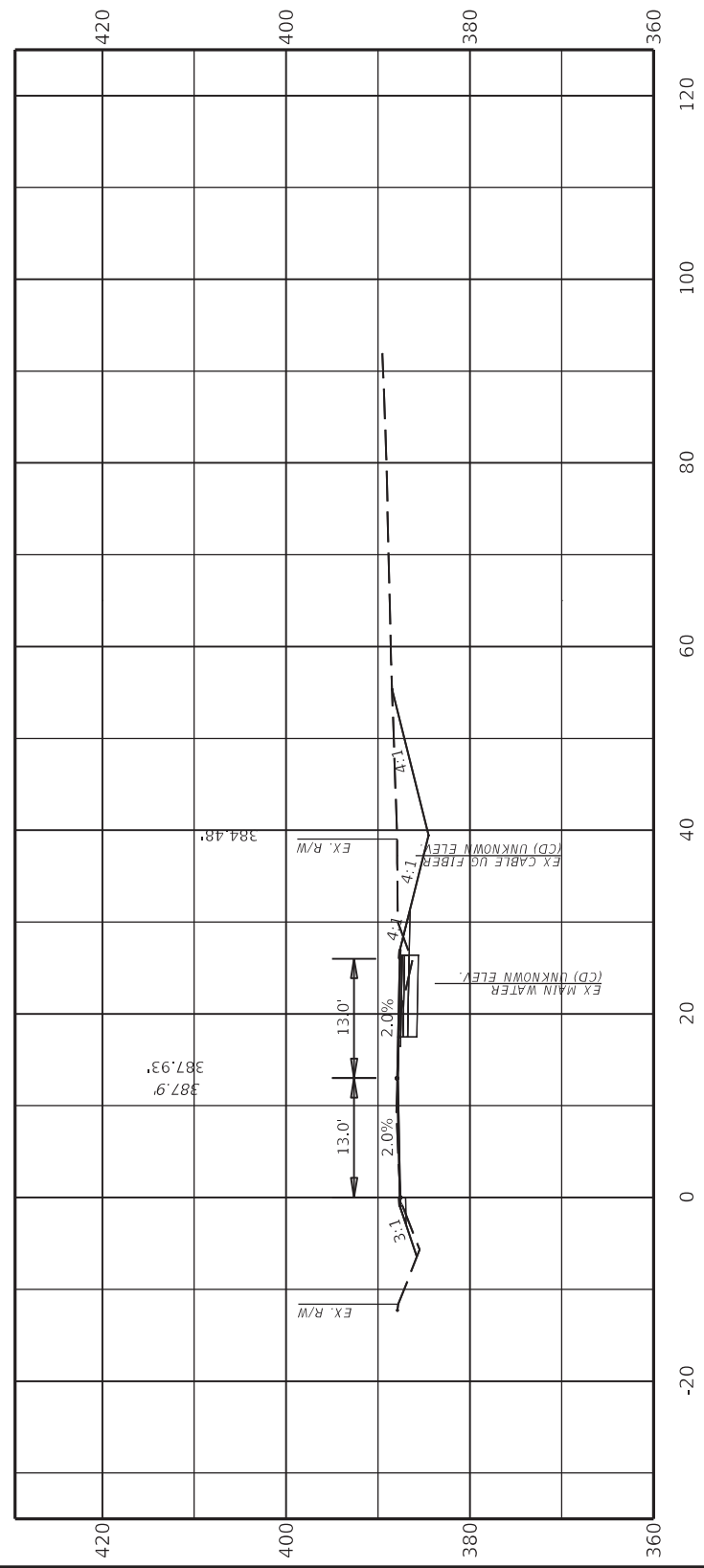
DRAWING TITLE: CROSS SECTION

COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS

USER: chris.smith

OpenRoads Designer v10.16.0.80
 FILE NAME: C:\PW\WORK\CHRIS.SMITH\2036679\CROSS SECTIONS.DGN

Cut Area 66.22 SQ FT
 Fill Area 1.80 SQ FT
 Cut Vol. 48.97 CU YD
 Fill Vol. 1.35 CU YD



13+60.00

ITEM NO. 02-9022.00	COUNTY OF DAVISS
SHEET NO. X015	

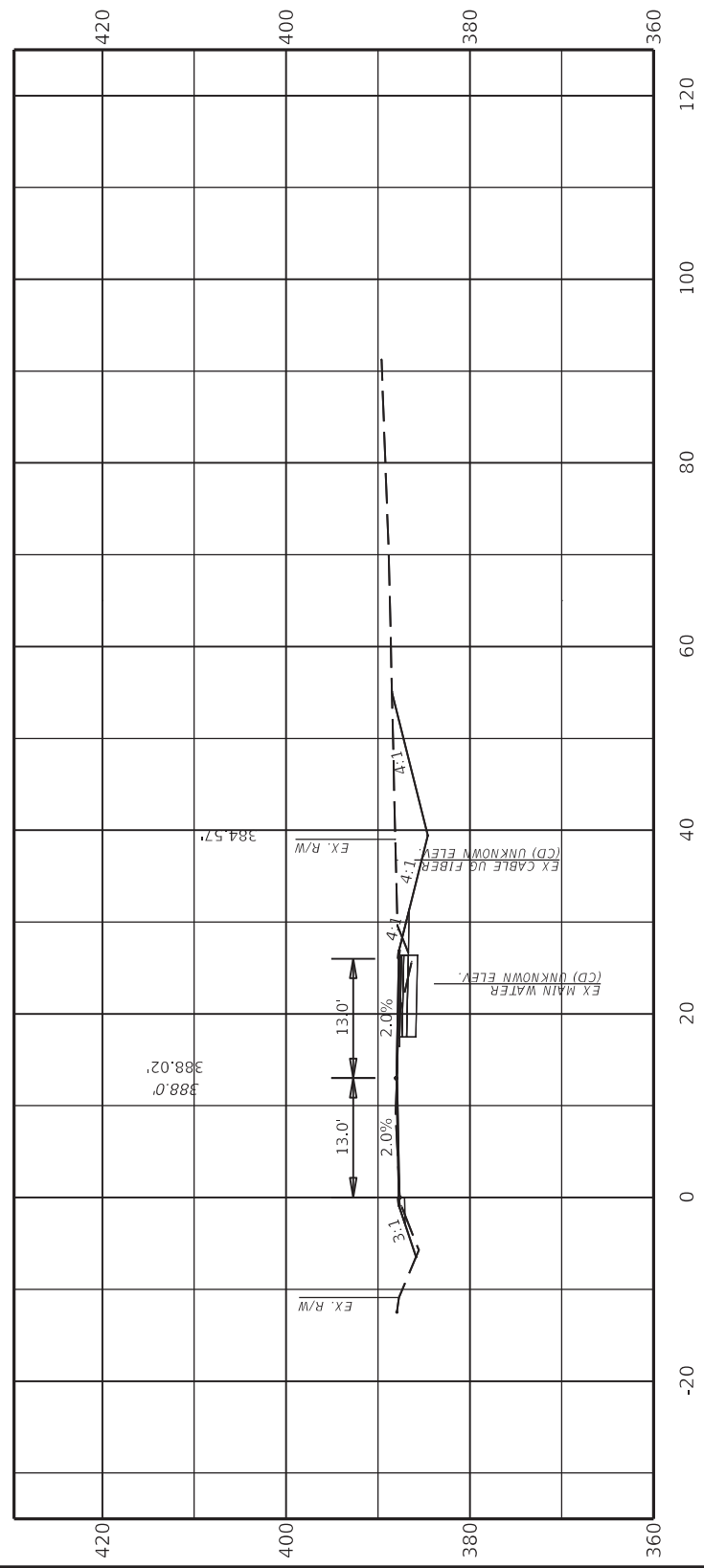


DRAWING TITLE: CROSS SECTION

COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS

USER: chris.smith

Cut Area 66.71 SQ FT
 Fill Area 1.74 SQ FT
 Cut Vol. 49.23 CU YD
 Fill Vol. 1.31 CU YD



13+80.00

ITEM NO.
02-9022.00
SHEET NO. X016

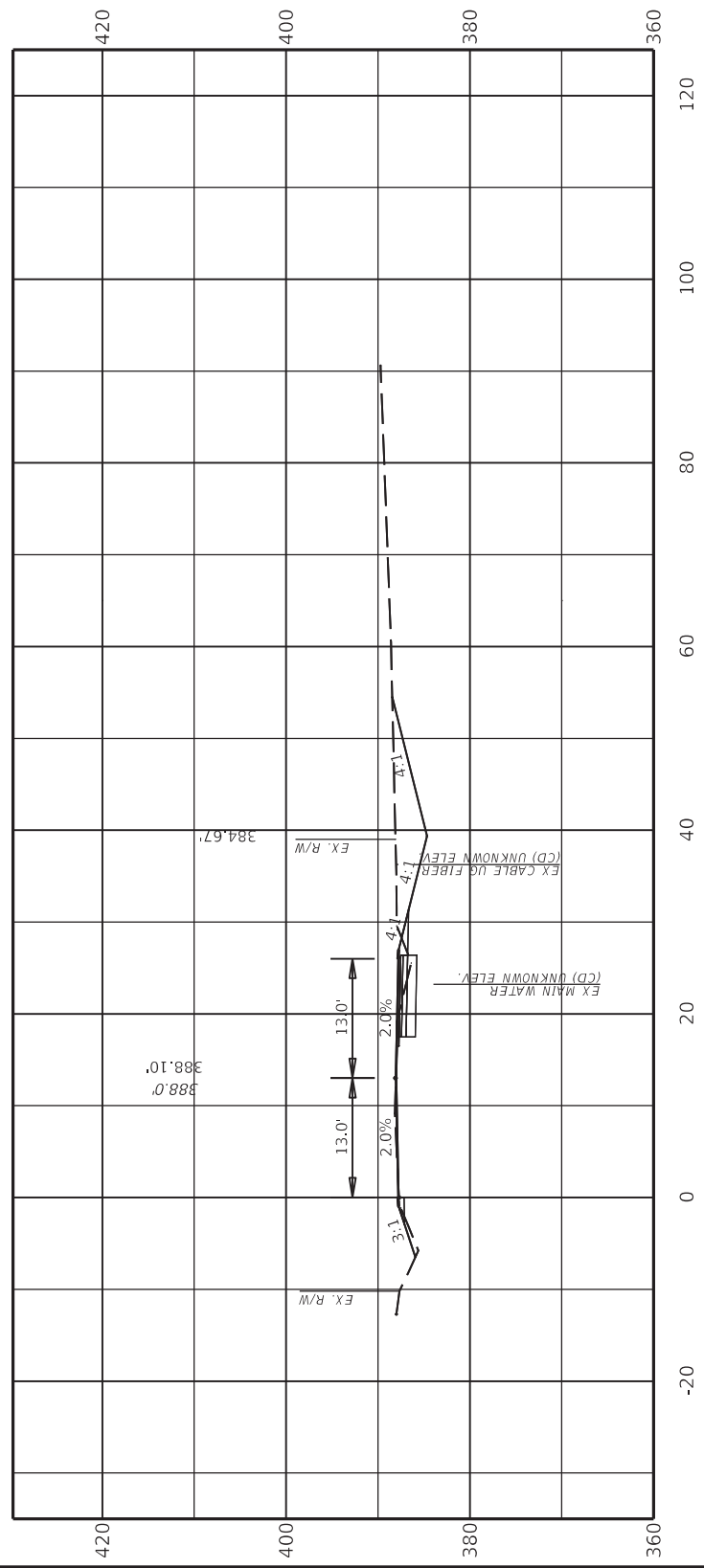


DRAWING TITLE: CROSS SECTION

COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS

USER: chris.smith

Cut Area 64.34 SQ FT
 Fill Area 1.60 SQ FT
 Cut Vol. 48.54 CU YD
 Fill Vol. 1.24 CU YD



14+00.00

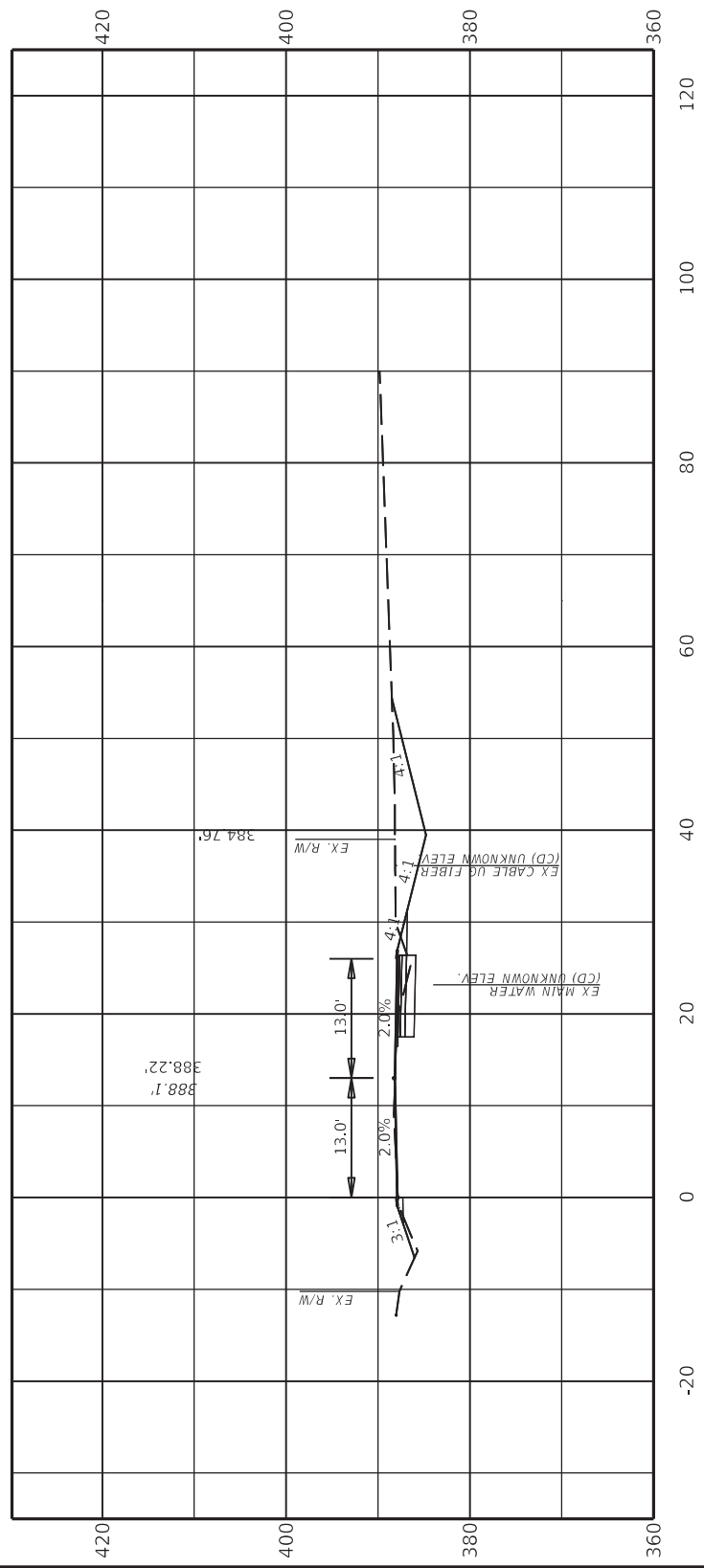
ITEM NO. 02-90222.00	COUNTY OF DAVISS
SHEET NO. X017	



DRAWING TITLE: CROSS SECTION

COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS
 USER: chris.smith

Cut Area 61.98 SQ FT
Fill Area 1.70 SQ FT
Cut Vol. 46.79 CU YD
Fill Vol. 1.22 CU YD



14+20.00

ITEM NO.
02-9022.00
SHEET NO.
X018

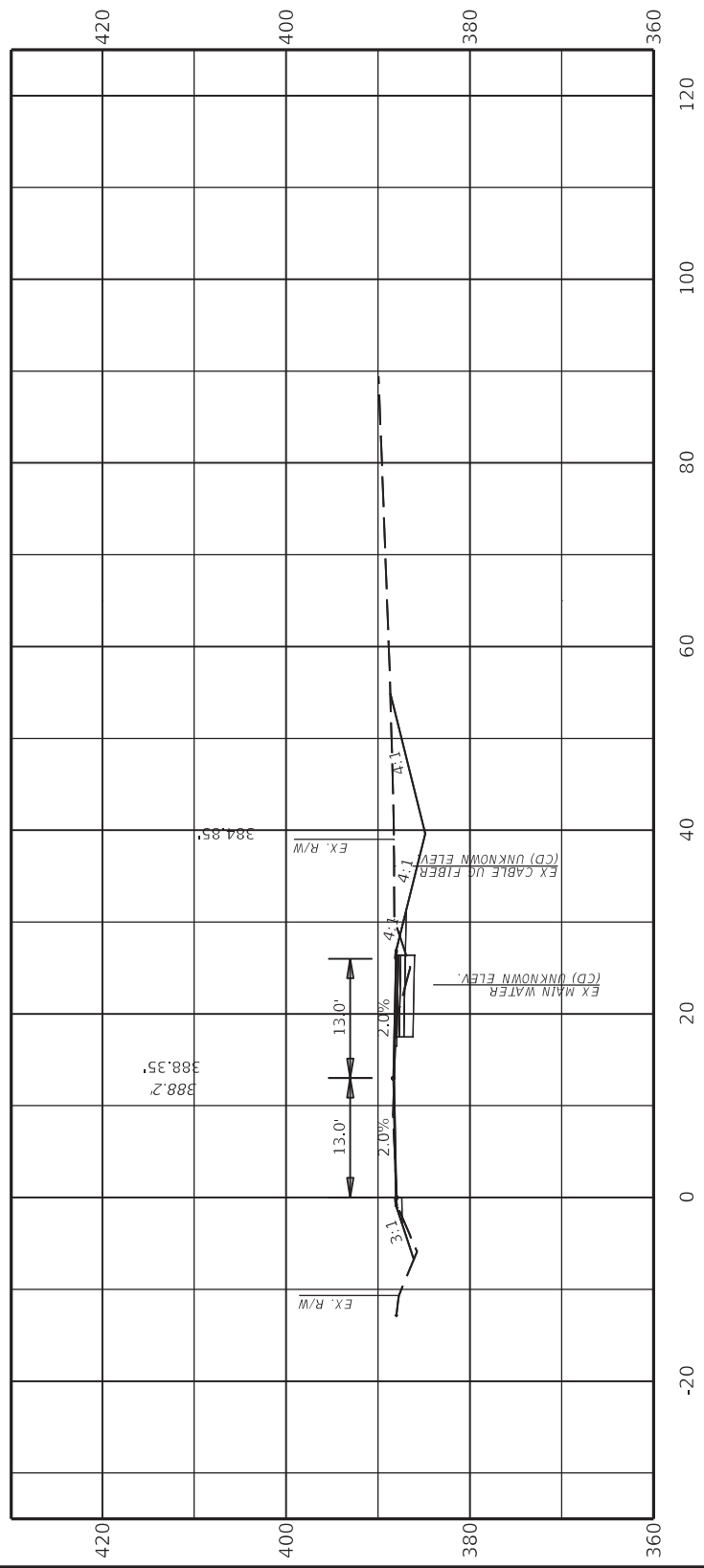


DRAWING TITLE: CROSS SECTION

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

USER: chris.smith

Cut Area 62.48 SQ FT
 Fill Area 1.84 SQ FT
 Cut Vol. 46.10 CU YD
 Fill Vol. 1.31 CU YD



14+40.00

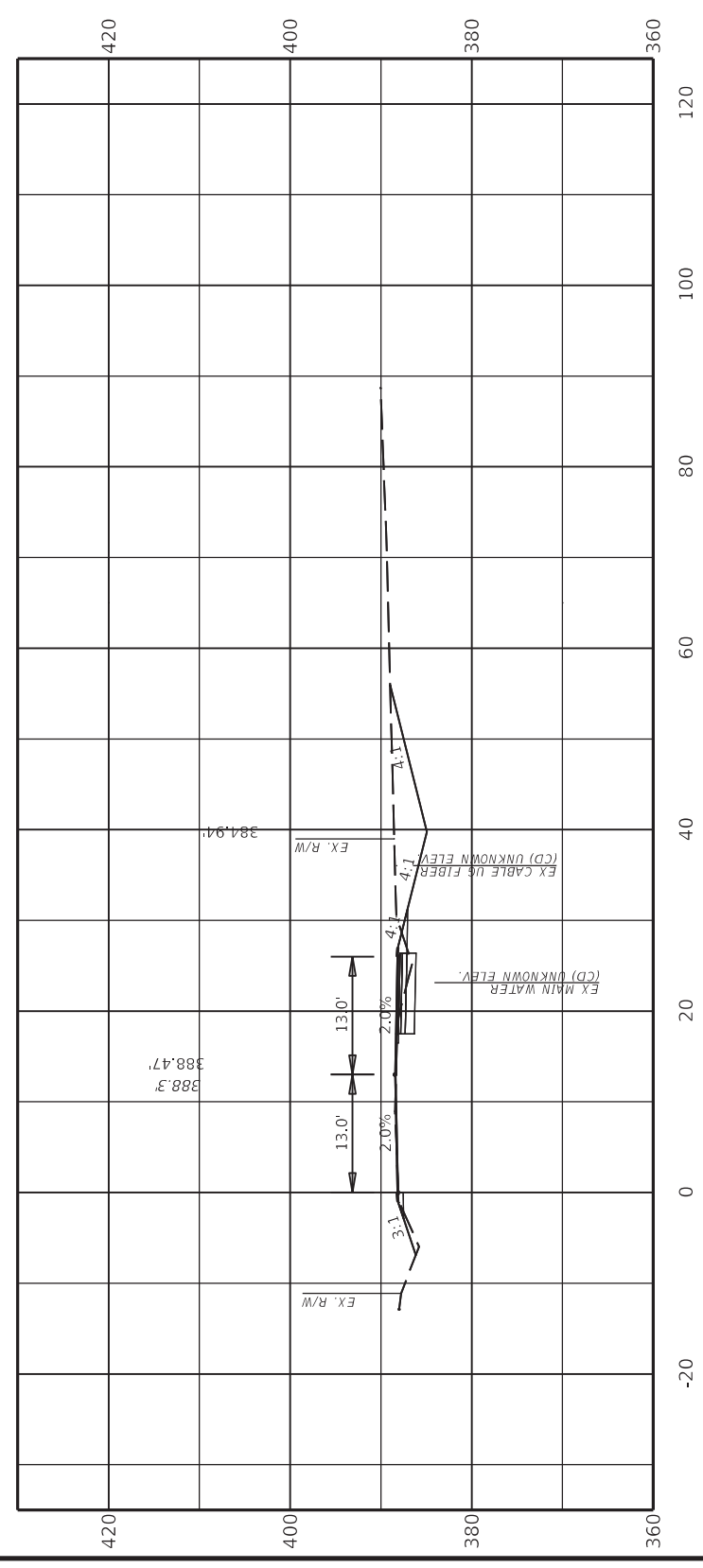
ITEM NO. 02-9022.00	COUNTY OF DAVISS
SHEET NO. X019	



DRAWING TITLE: CROSS SECTION

COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS
 USER: chris.smith

Cut Area 65.97 SQ FT
 Fill Area 1.99 SQ FT
 Cut Vol. 47.57 CU YD
 Fill Vol. 1.42 CU YD



14+60.00

ITEM NO.	COUNTY OF
02-9022.00	DAVISS
SHEET NO.	X020

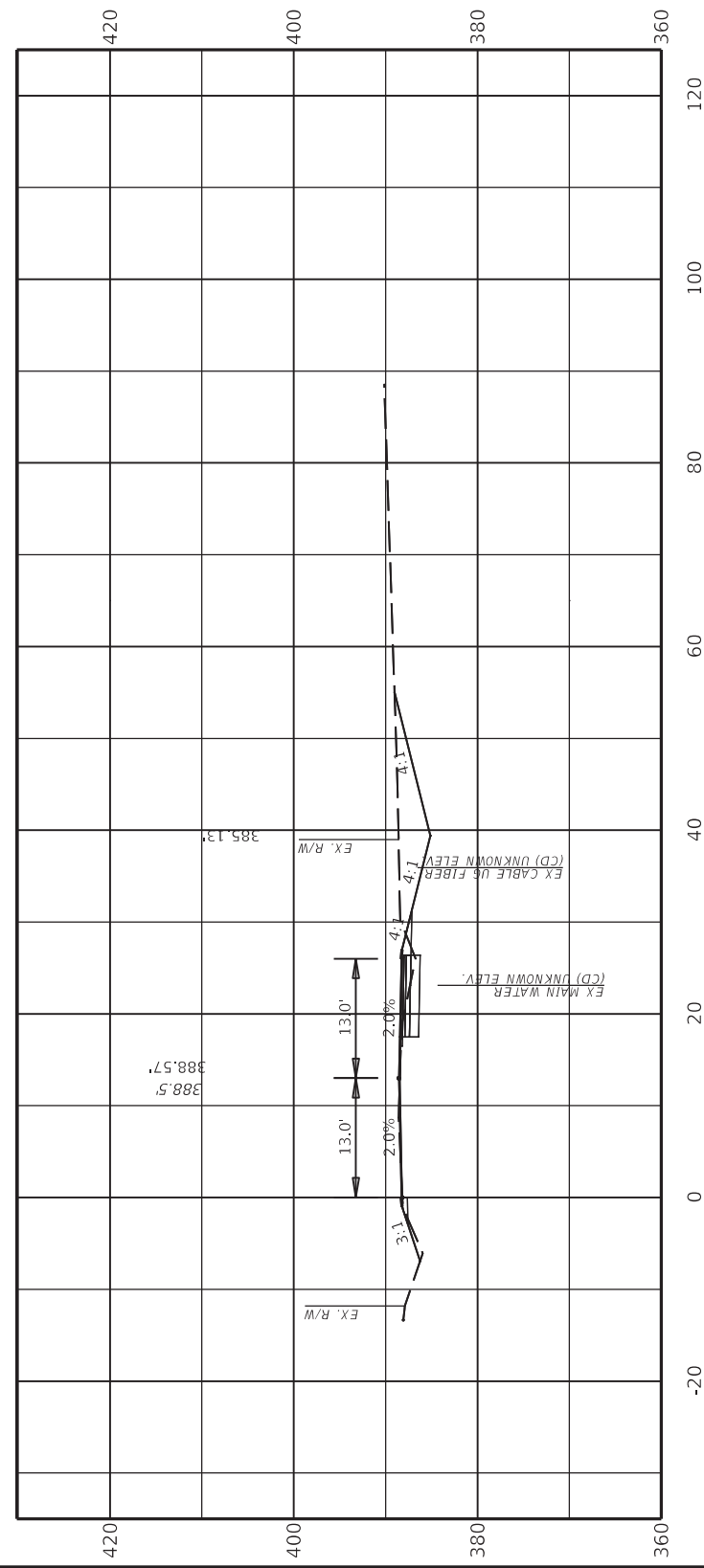


DRAWING TITLE: CROSS SECTION

COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS

USER: chris.smith

Cut Area 62.73 SQ FT
 Fill Area 1.81 SQ FT
 Cut Vol. 47.82 CU YD
 Fill Vol. 1.38 CU YD



15+00.00

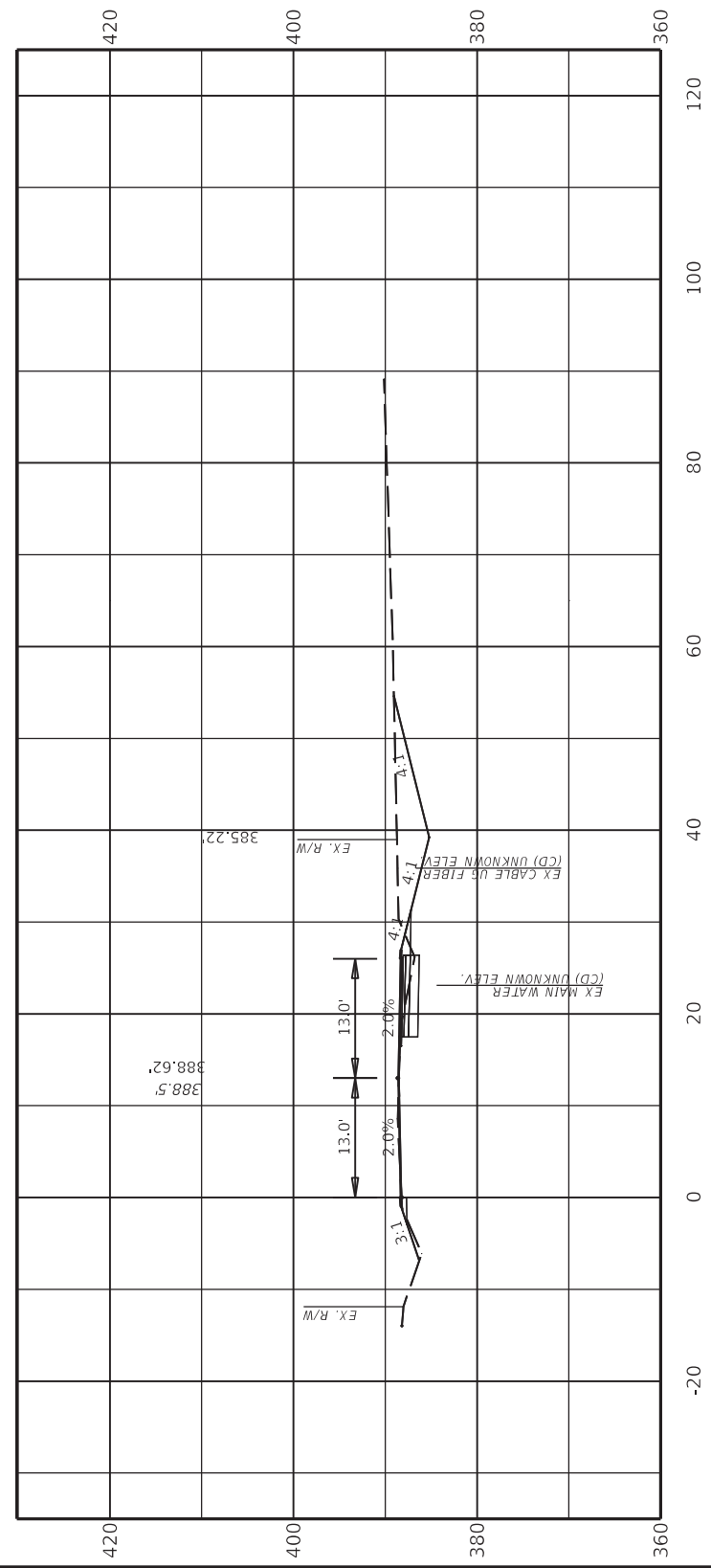
ITEM NO. 02-9022.00	COUNTY OF DAVISS
SHEET NO. X022	



DRAWING TITLE: CROSS SECTION

COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS

Cut Area 63.77 SQ FT
Fill Area 1.63 SQ FT
Cut Vol. 46.85 CU YD
Fill Vol. 1.27 CU YD



15+20.00

ITEM NO. 02-9022.00	COUNTY OF DAVIESS
SHEET NO. X023	

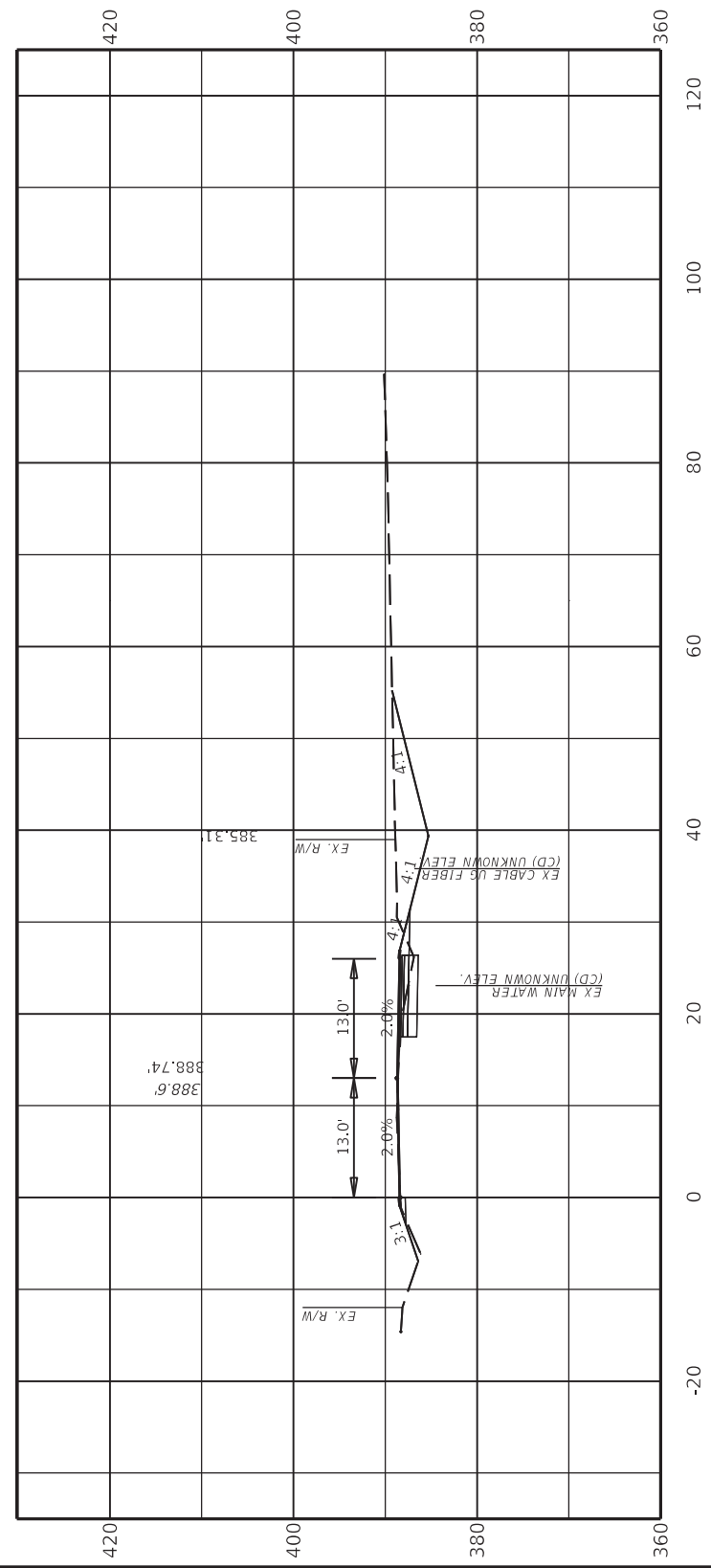


DRAWING TITLE: CROSS SECTION

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

USER: chris.smith

Cut Area 65.17 SQ FT
 Fill Area 1.75 SQ FT
 Cut Vol. 47.75 CU YD
 Fill Vol. 1.25 CU YD



15+40.00

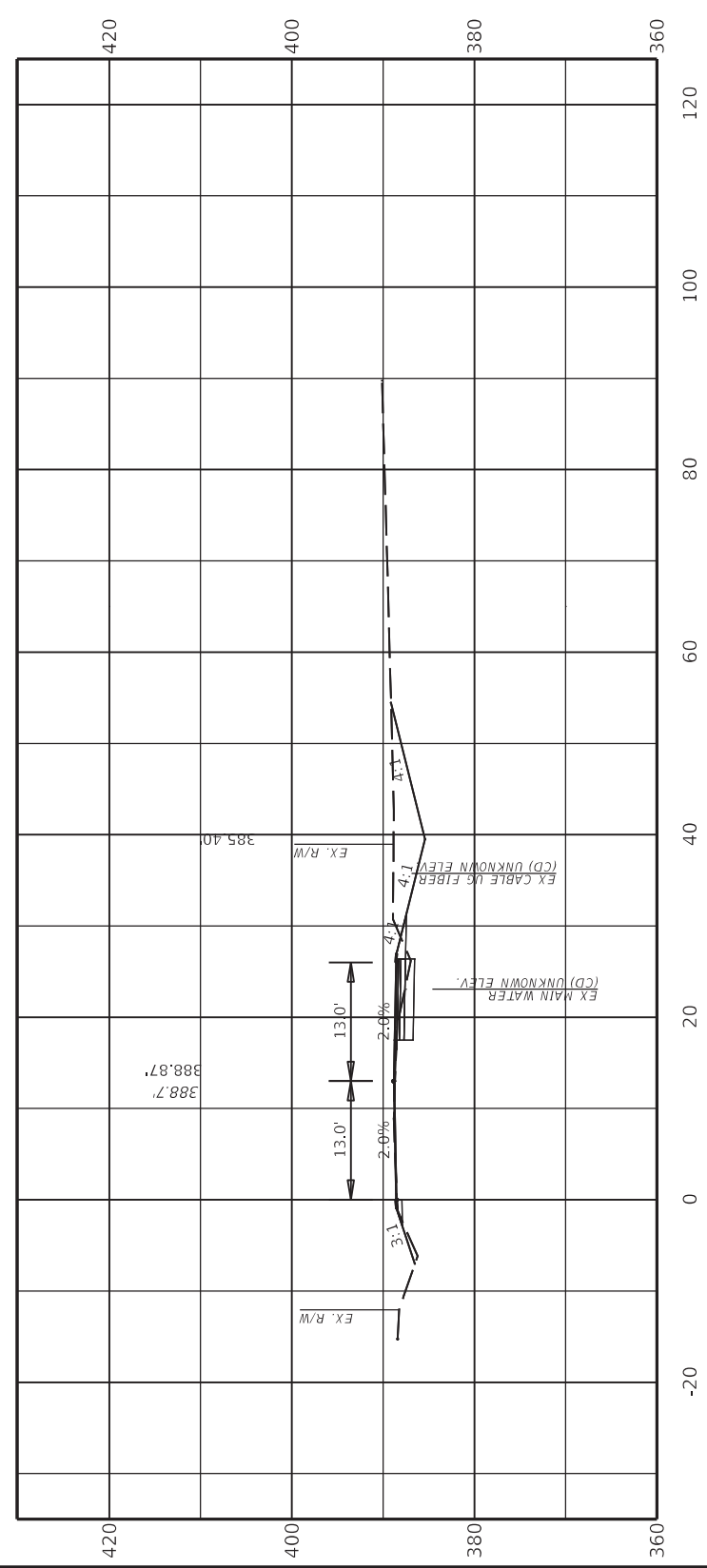


ITEM NO.
02-90222.00
 COUNTY OF
DAVIESS
 SHEET NO.
X024

DRAWING TITLE: CROSS SECTION

COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS

Cut Area 61.16 SQ FT
Fill Area 1.89 SQ FT
Cut Vol. 46.79 CU YD
Fill Vol. 1.35 CU YD



15+60.00

ITEM NO. 02-90222.00	COUNTY OF DAVIESS
SHEET NO. X025	

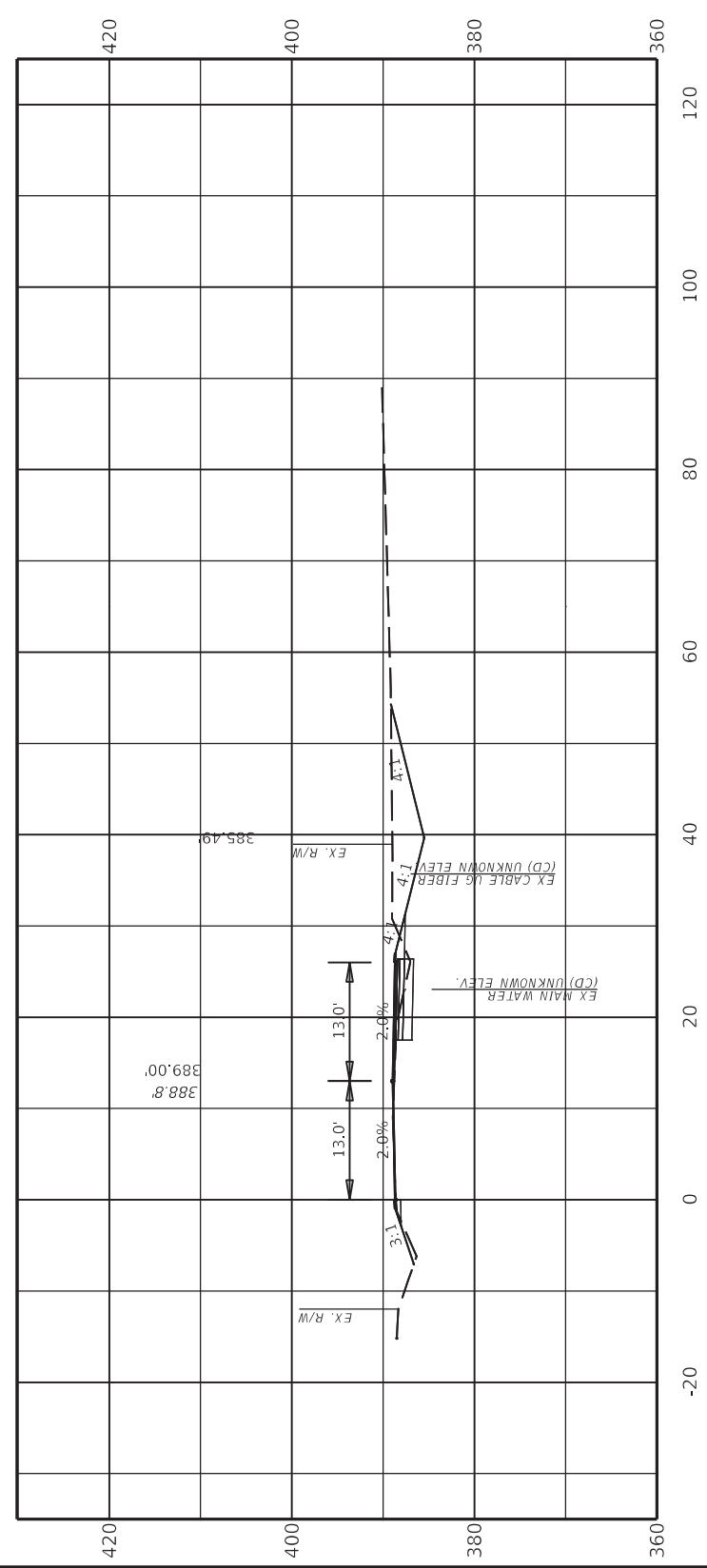


DRAWING TITLE: CROSS SECTION

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

USER: chris.smith

Cut Area 60.98 SQ FT
Fill Area 2.00 SQ FT
Cut Vol. 45.24 CU YD
Fill Vol. 1.44 CU YD



15+80.00

ITEM NO.
02-90222.00
SHEET NO.
X026

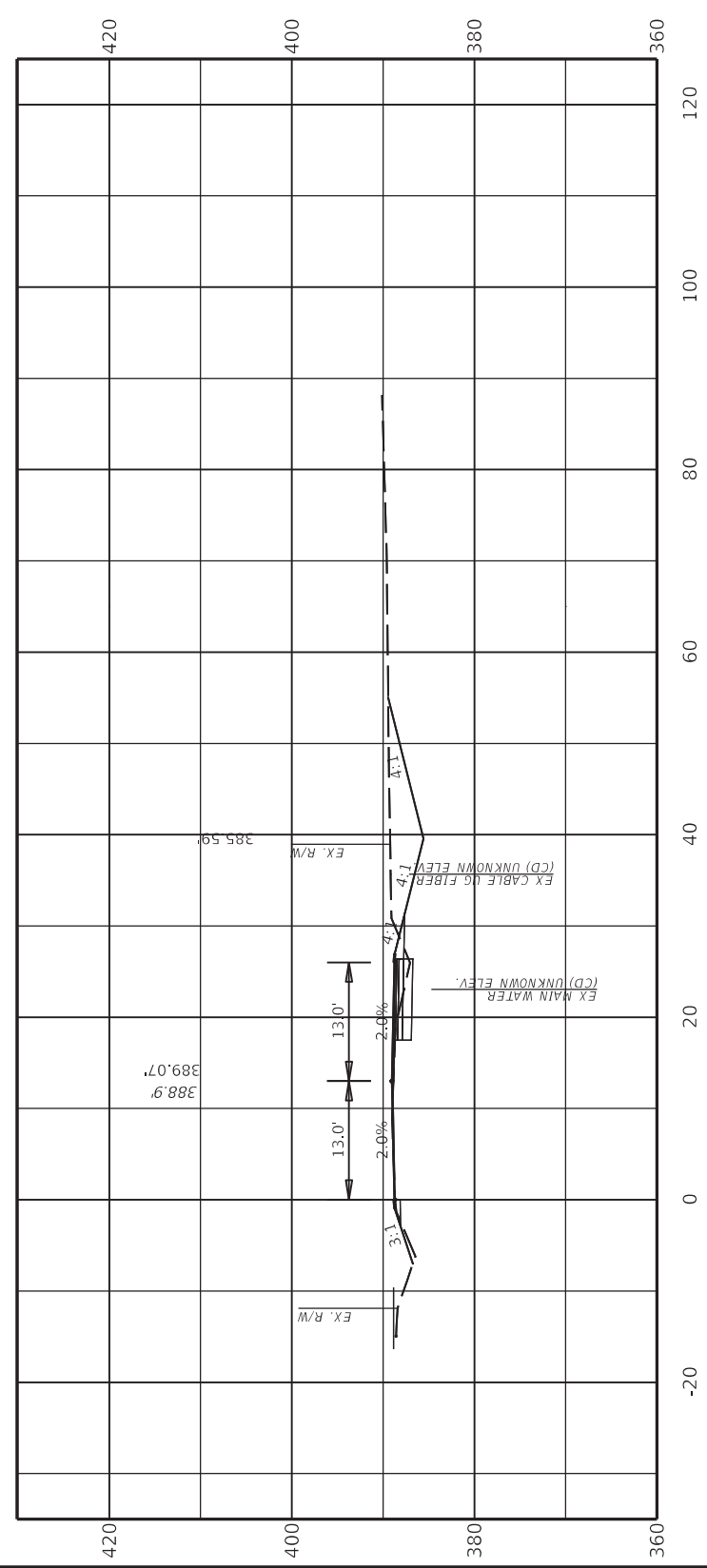


DRAWING TITLE: CROSS SECTION

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

USER: chris.smith

Cut Area 64.22 SQ FT
Fill Area 1.84 SQ FT
Cut Vol. 46.37 CU YD
Fill Vol. 1.42 CU YD



16+00.00

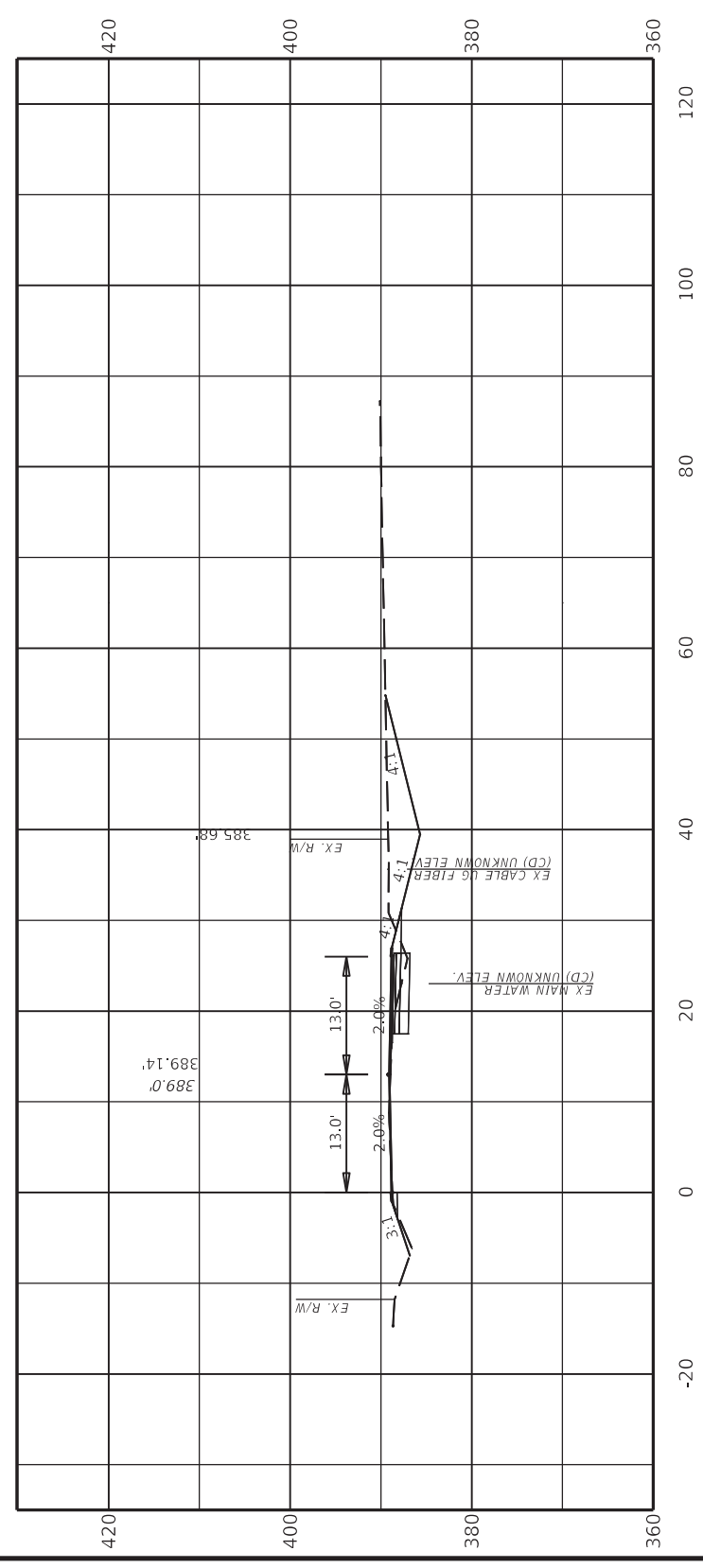


ITEM NO.
02-90222.00
SHEET NO.
X027

DRAWING TITLE: CROSS SECTION

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

Cut Area 61.64 SQ FT
 Fill Area 1.67 SQ FT
 Cut Vol. 46.62 CU YD
 Fill Vol. 1.30 CU YD



16+20.00

ITEM NO.
02-90222.00
SHEET NO.
X028



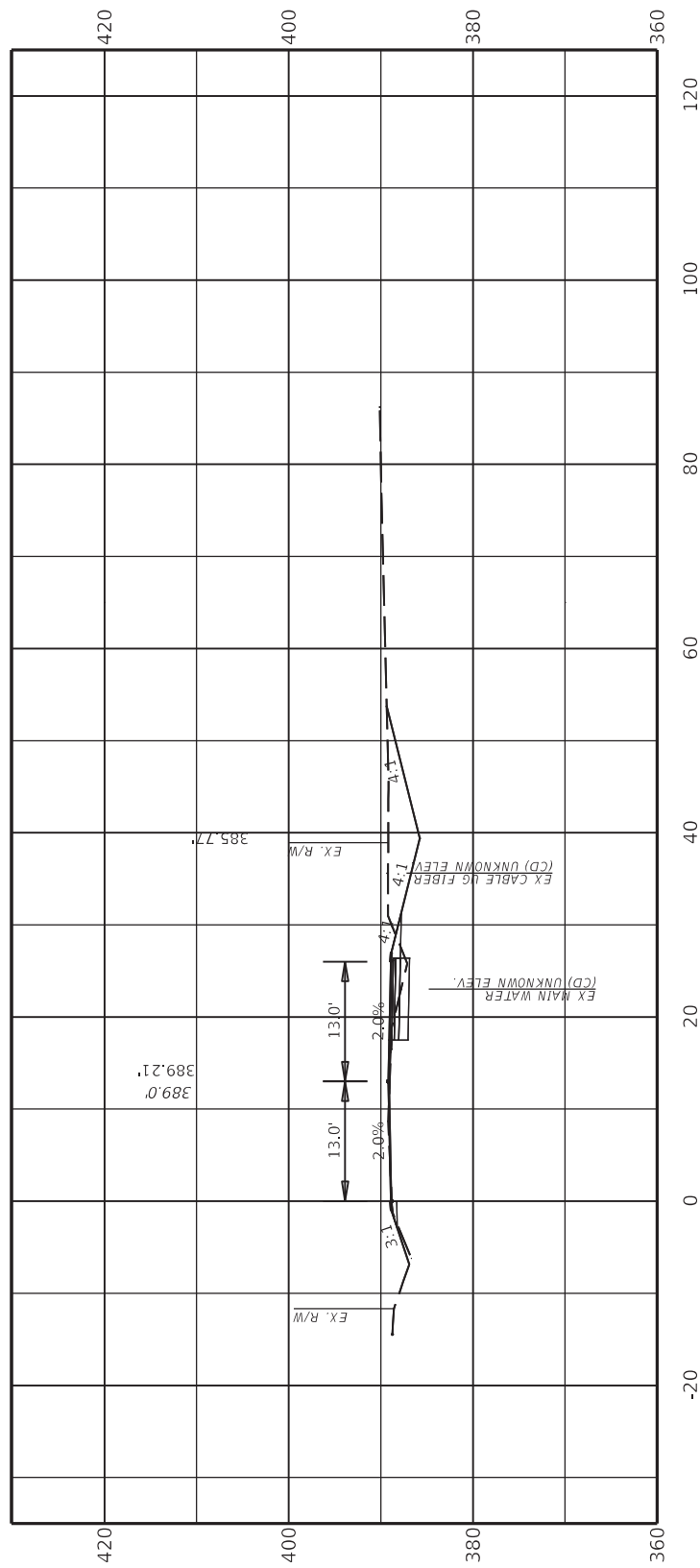
DRAWING TITLE: CROSS SECTION

COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS

USER: chris.smith

Cut Vol. 44.11 CU YD
Fill Vol. 1.19 CU YD

Cut Area 57.46 SQ FT
Fill Area 1.54 SQ FT



16+40.00

ITEM NO. 02-90222.00	COUNTY OF DAVIESS
SHEET NO. X029	

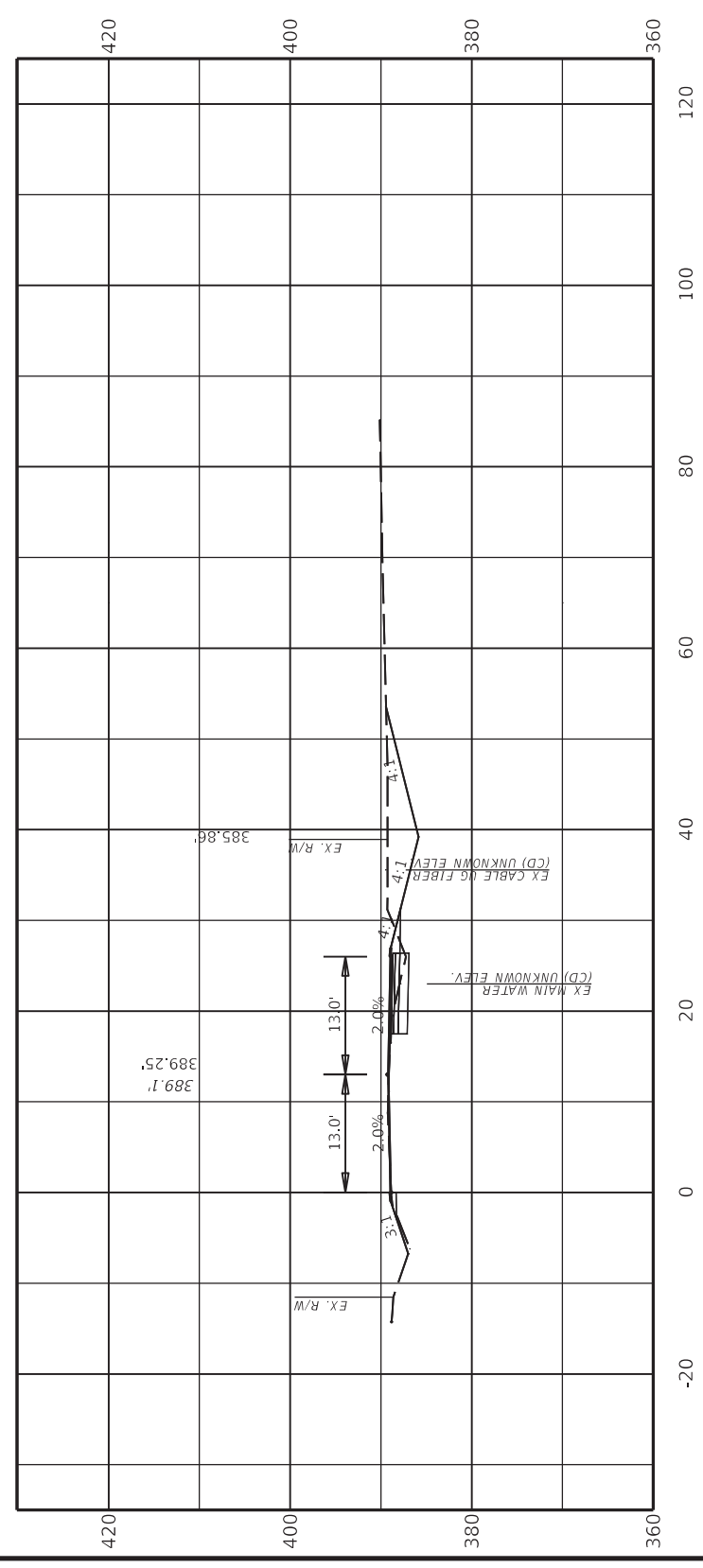


DRAWING TITLE: CROSS SECTION

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

USER: chris.smith

Cut Area 58.60 SQ FT
Fill Area 1.37 SQ FT
Cut Vol. 42.99 CU YD
Fill Vol. 1.07 CU YD



16+60.00

ITEM NO. 02-90222.00	COUNTY OF DAVISS
SHEET NO. X030	

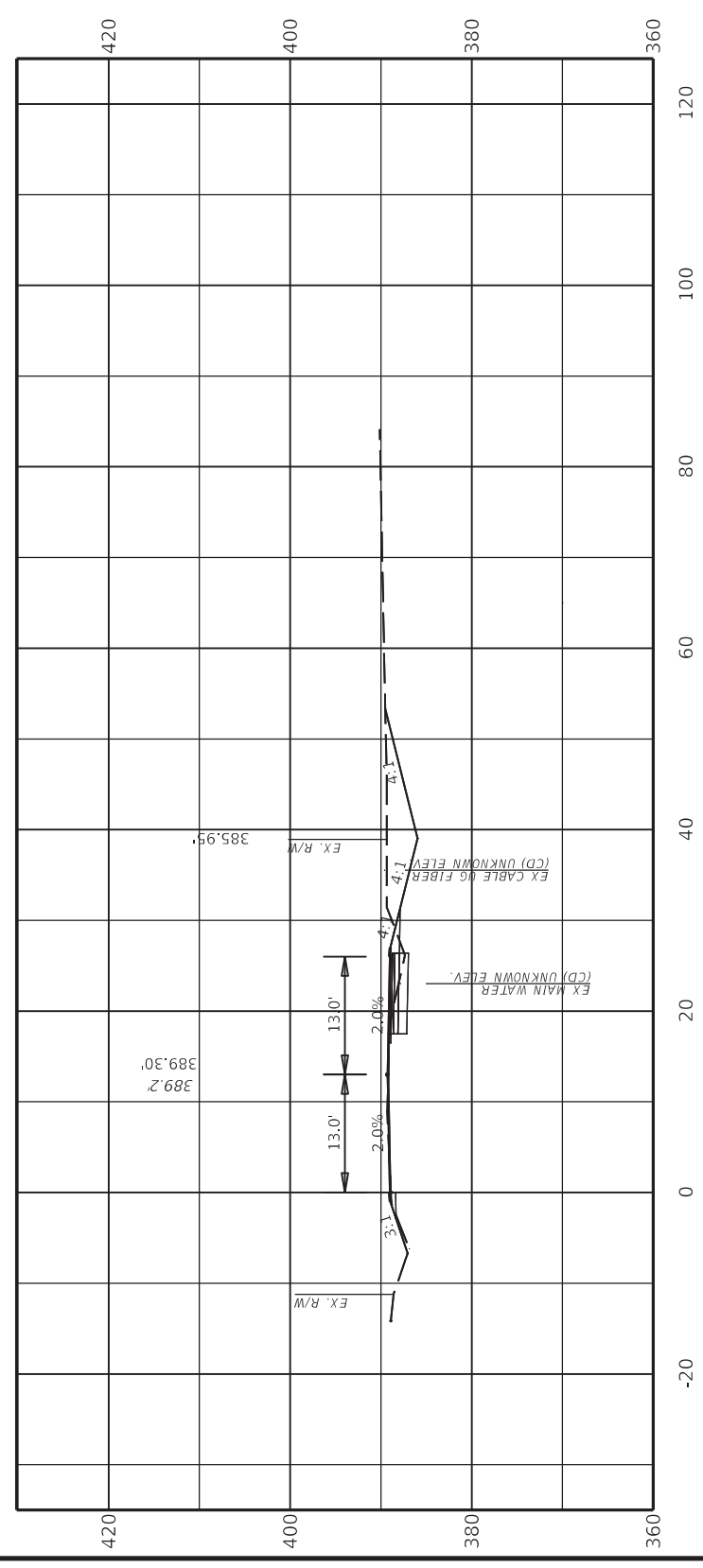


DRAWING TITLE: CROSS SECTION

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

USER: chris.smith

Cut Area 56.04 SQ FT
Fill Area 1.31 SQ FT
Cut Vol. 42.46 CU YD
Fill Vol. 0.99 CU YD



16+80.00

ITEM NO.	COUNTY OF
02-90222.00	DAVISS
SHEET NO.	X031

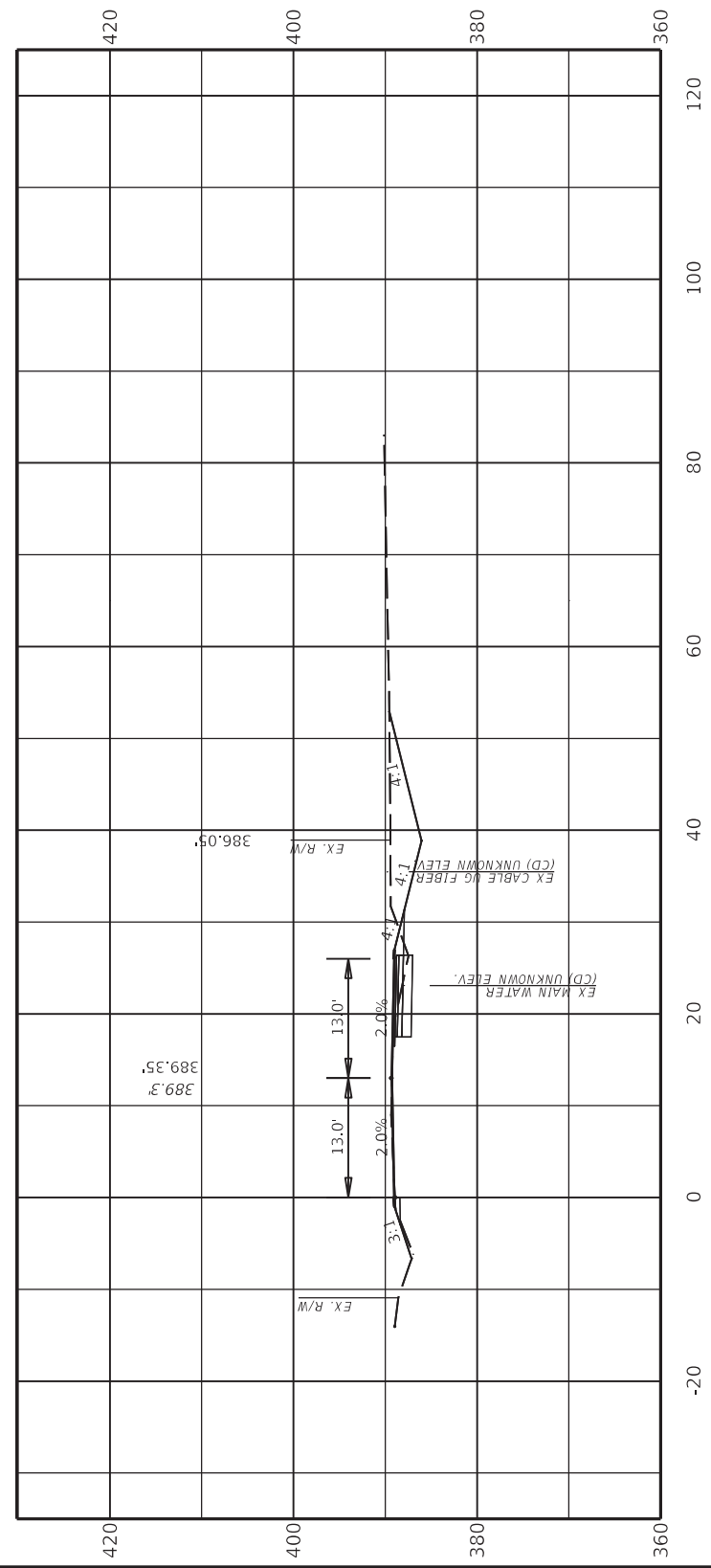


DRAWING TITLE: CROSS SECTION

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

USER: chris.smith

Cut Area 58.62 SQ FT
Fill Area 1.24 SQ FT
Cut Vol. 42.46 CU YD
Fill Vol. 0.94 CU YD



17+00.00

ITEM NO.
02-90222.00
SHEET NO.
X032

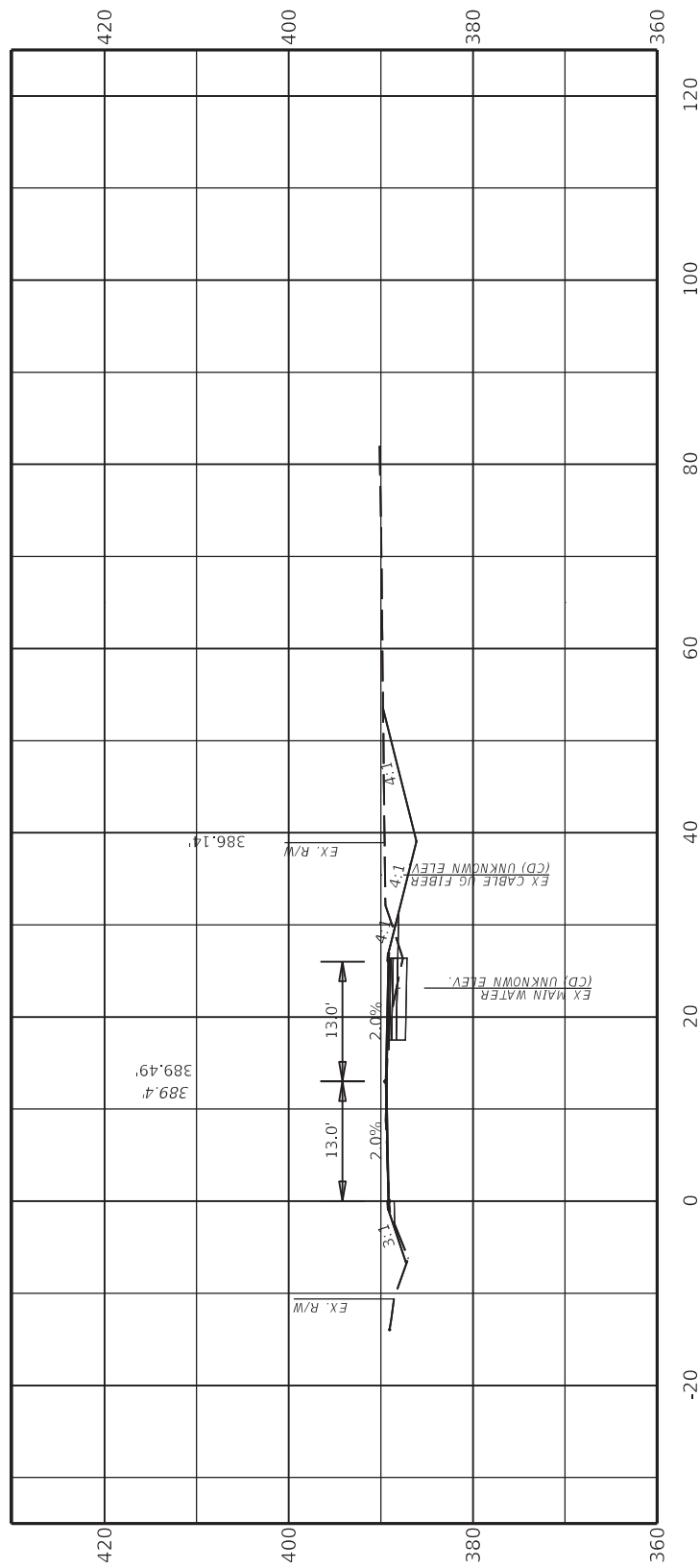


DRAWING TITLE: CROSS SECTION

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

USER: chris.smith

Cut Area 59.23 SQ FT
Fill Area 1.51 SQ FT
Cut Vol. 43.65 CU YD
Fill Vol. 1.02 CU YD



17+20.00

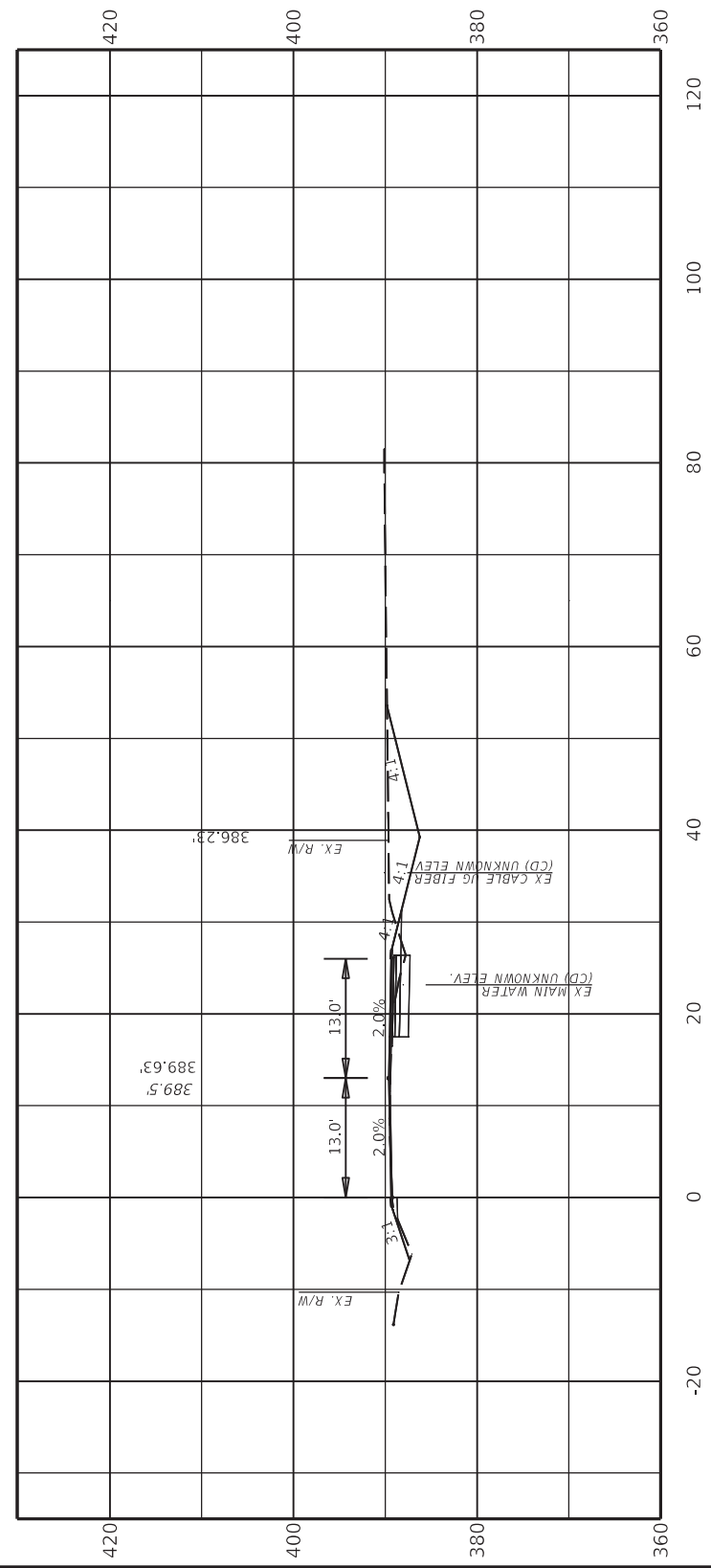
ITEM NO.	COUNTY OF
02-90222.00	DAVISS
SHEET NO.	X033



DRAWING TITLE: CROSS SECTION

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

Cut Area 59.25 SQ FT
 Fill Area 1.75 SQ FT
 Cut Vol. 43.88 CU YD
 Fill Vol. 1.21 CU YD



17+40.00

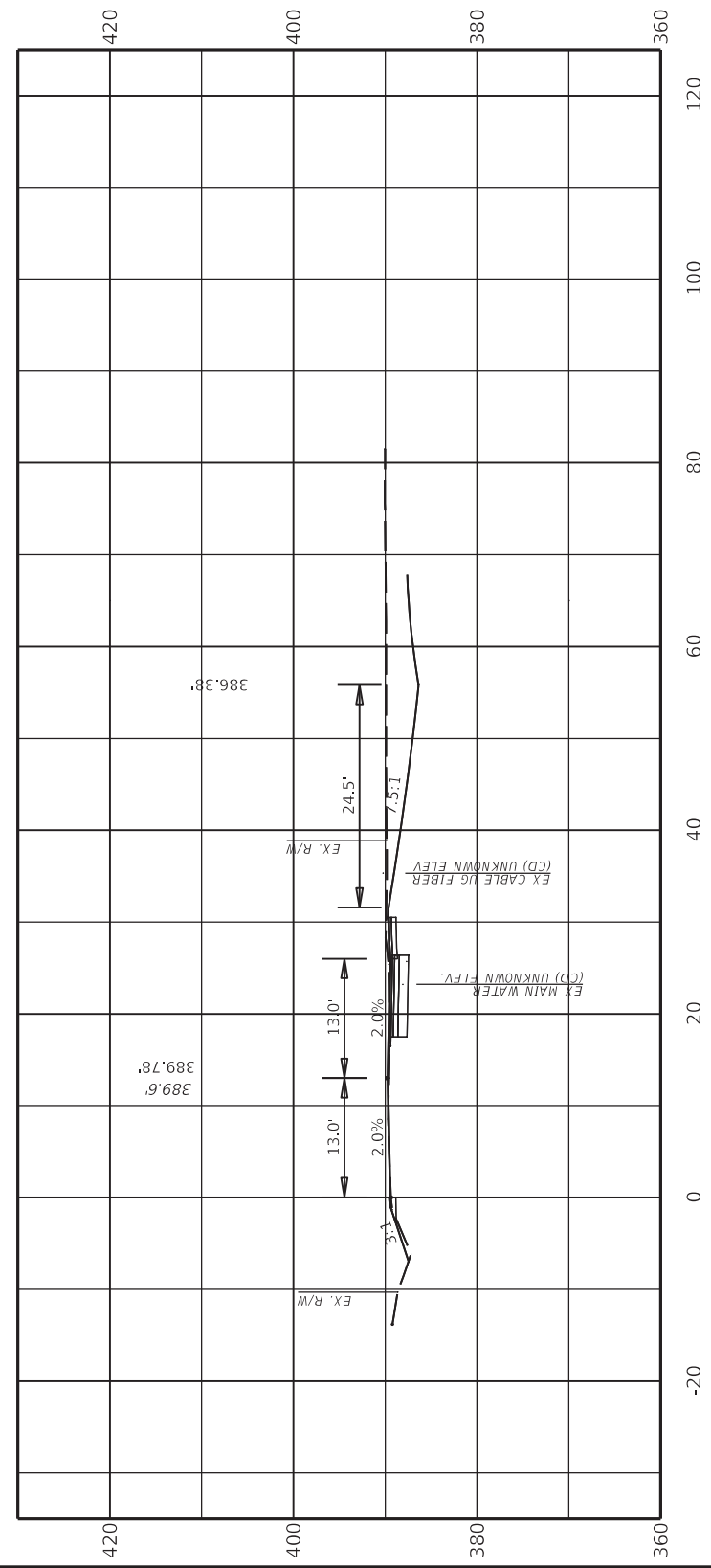
ITEM NO. 02-90222.00	COUNTY OF DAVISS
SHEET NO. X034	



DRAWING TITLE: CROSS SECTION

COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS

Cut Area 105.73 SQ FT
 Fill Area 1.53 SQ FT
 Cut Vol. 61.11 CU YD
 Fill Vol. 1.21 CU YD



17+60.00



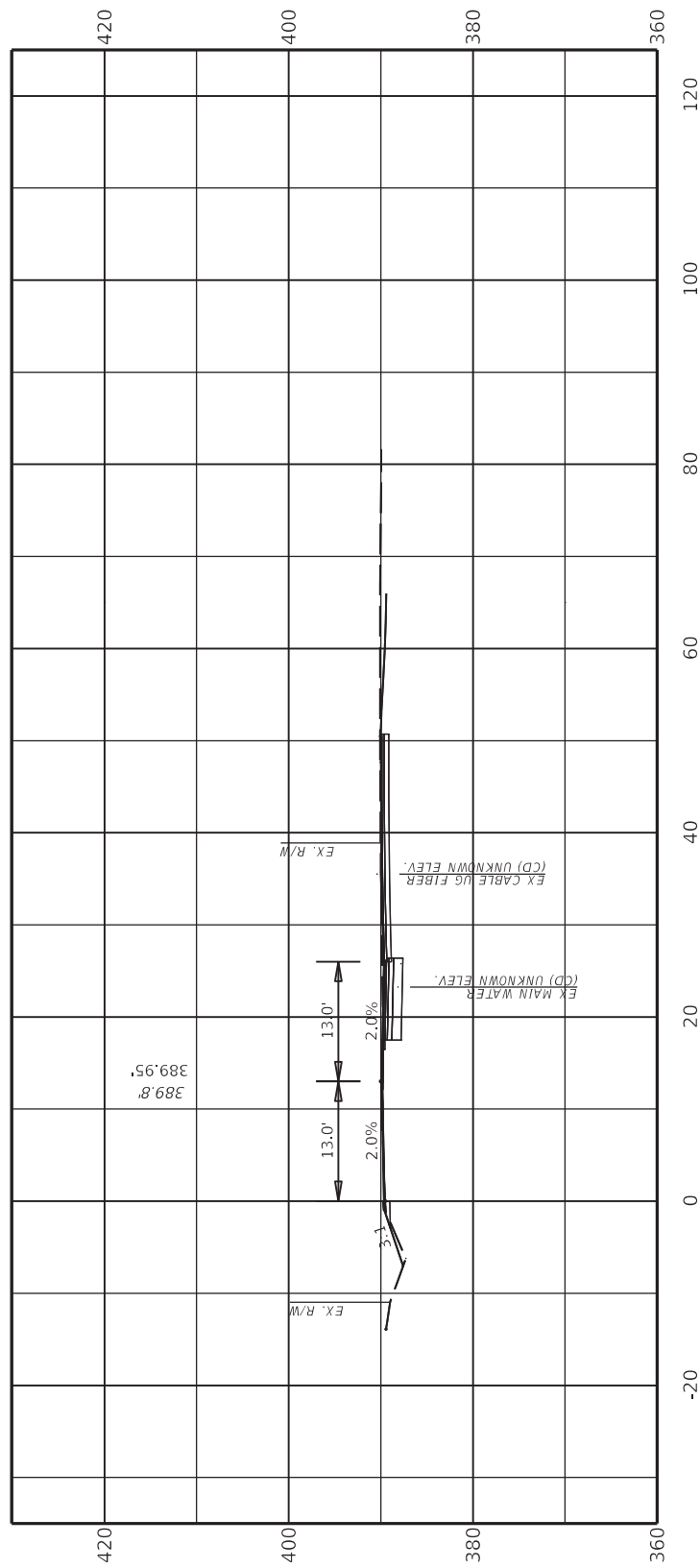
ITEM NO.
02-90222.00
 COUNTY OF
DAVISS
 SHEET NO.
X035

DRAWING TITLE: CROSS SECTION

COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS

Cut Vol. 57.38 CU YD
Fill Vol. 1.20 CU YD

Cut Area 49.19 SQ FT
Fill Area 1.71 SQ FT



17+80.00

ITEM NO.
02-9022.00
SHEET NO.
X036

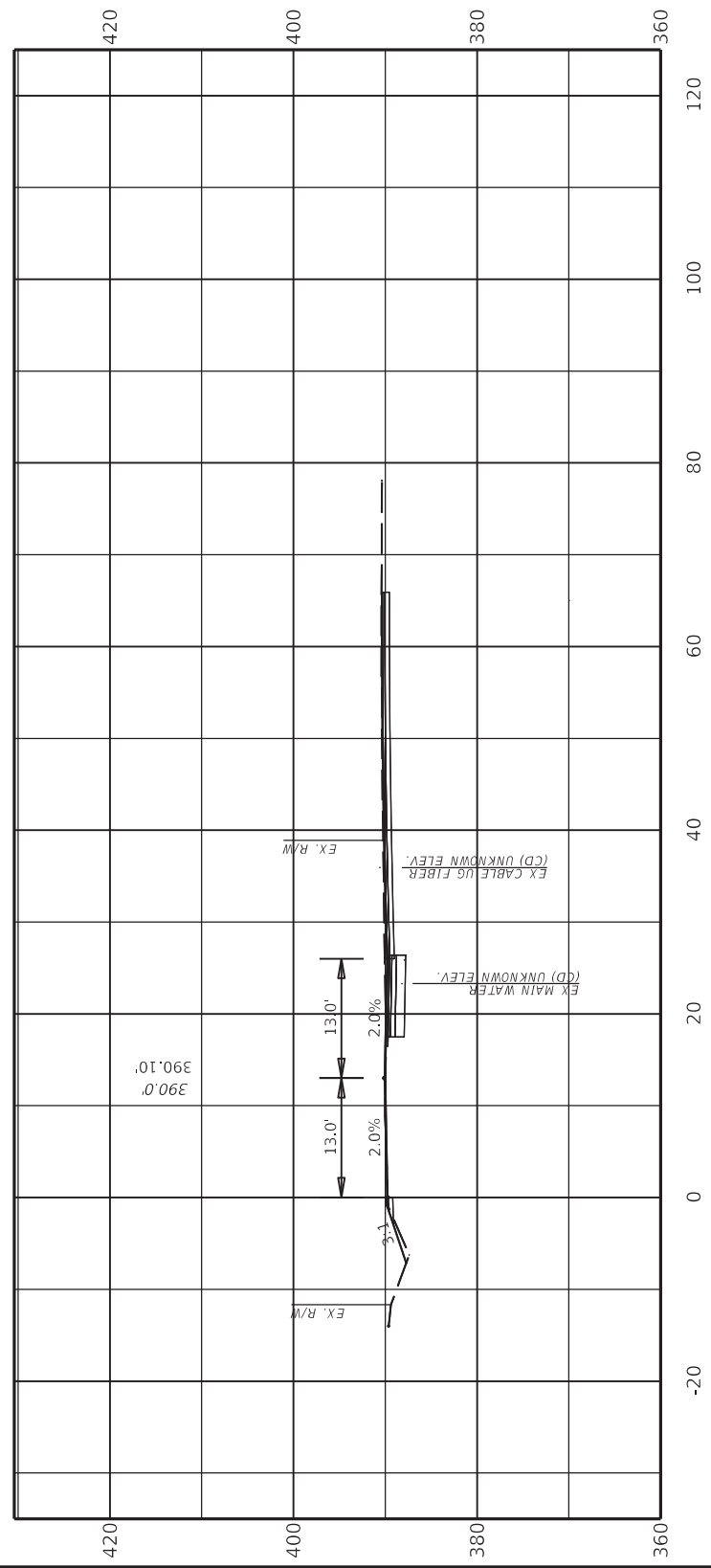


DRAWING TITLE: CROSS SECTION

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

USER: chriss.smith

Cut Area 54.91 SQ FT
 Fill Area 1.86 SQ FT
 Cut Vol. 38.55 CU YD
 Fill Vol. 1.32 CU YD



18+00.00

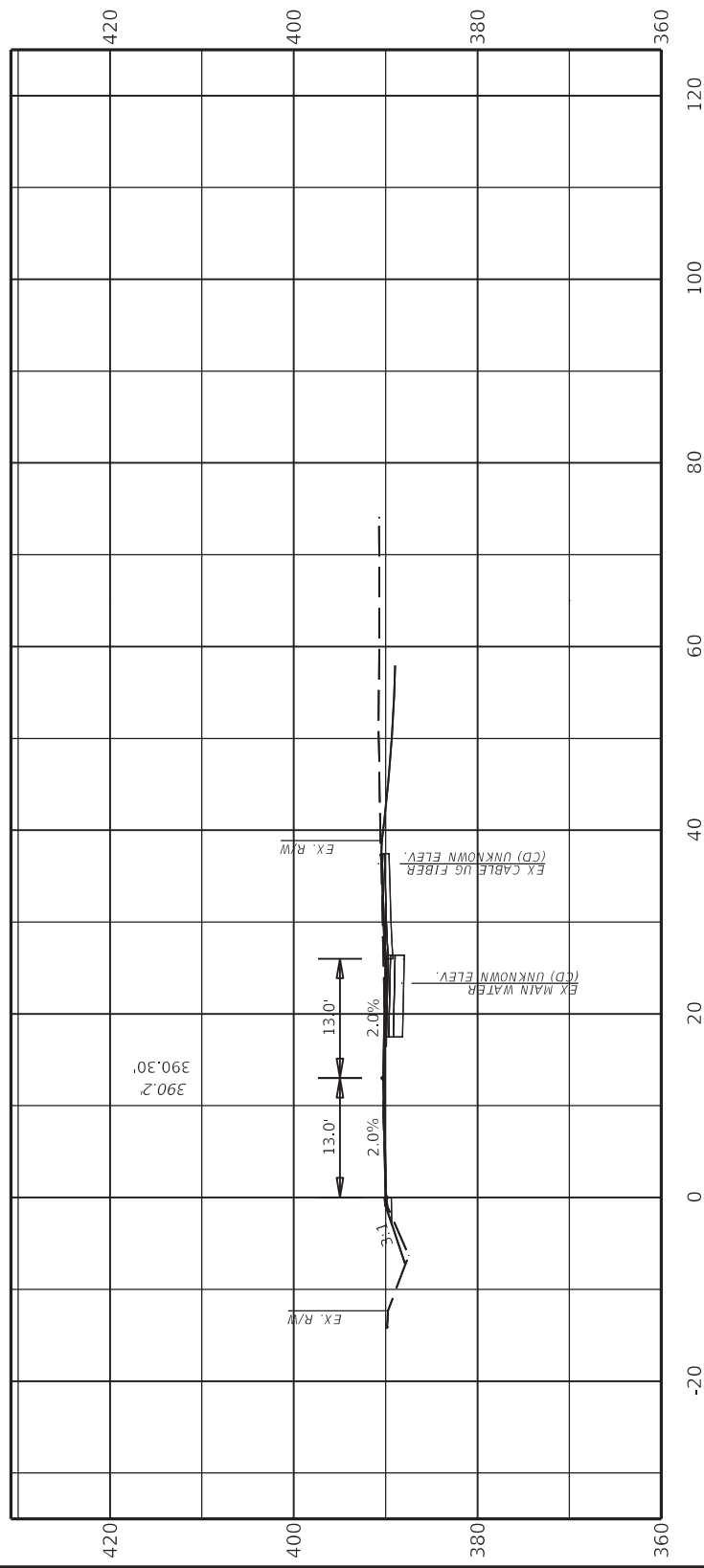
ITEM NO. 02-90222.00	COUNTY OF DAVISS
SHEET NO. X037	



DRAWING TITLE: CROSS SECTION

COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS
 USER: chris.smith

Cut Area 51.31 SQ FT
 Fill Area 2.28 SQ FT
 Cut Vol. 39.34 CU YD
 Fill Vol. 1.54 CU YD



18+20.00

ITEM NO. 02-90222.00	COUNTY OF DAVISS
SHEET NO. X038	

0' 20' 40' 80'

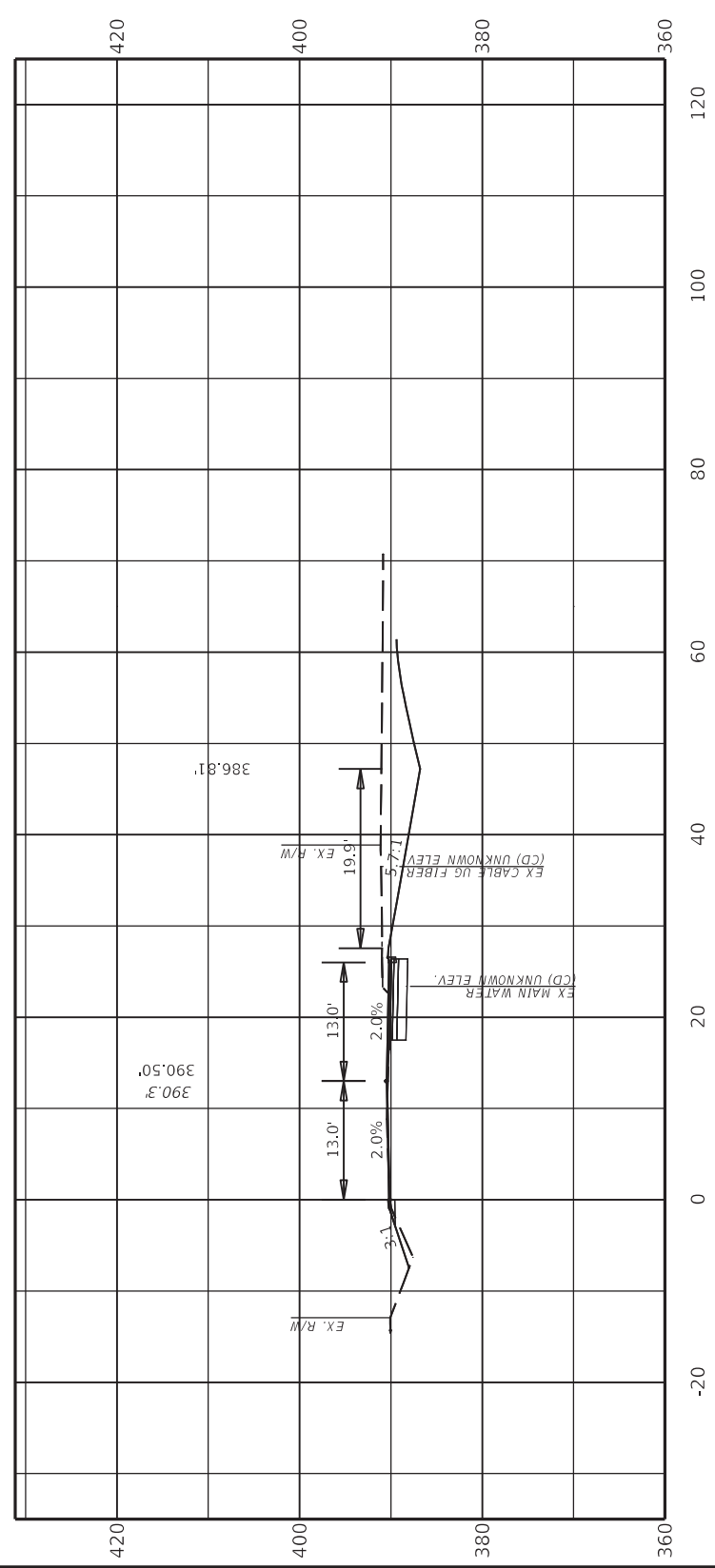
HORIZONTAL SCALE: 1"=20'

COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS

DRAWING TITLE: CROSS SECTION

USER: chris.smith

Cut Area 109.79 SQ FT
Fill Area 2.79 SQ FT
Cut Vol. 59.67 CU YD
Fill Vol. 1.88 CU YD



18+40.00

ITEM NO.
02-90222.00
SHEET NO.
X039

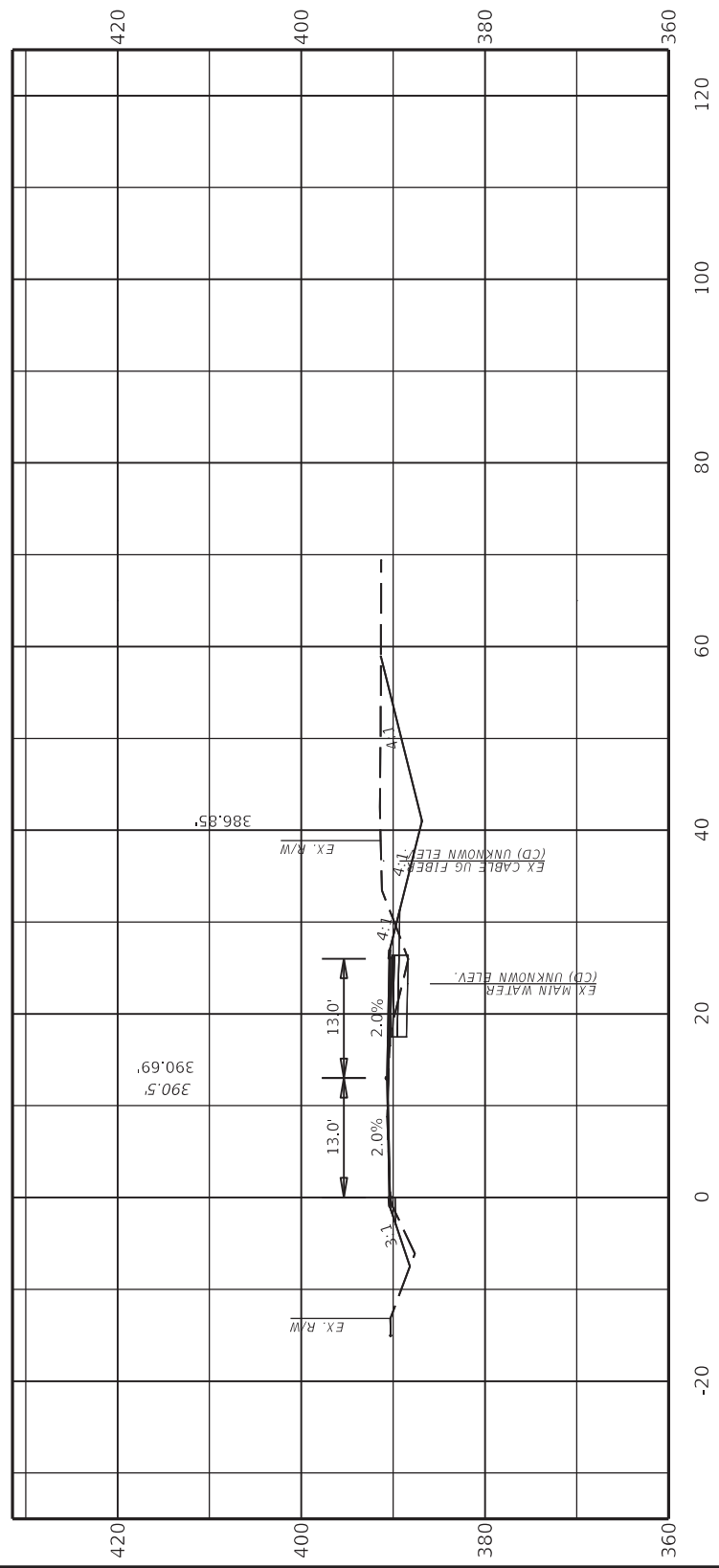


DRAWING TITLE: CROSS SECTION

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

USER: chris.smith

Cut Area 82.31 SQ FT
 Fill Area 4.54 SQ FT
 Cut Vol. 71.15 CU YD
 Fill Vol. 2.71 CU YD



18+60.00

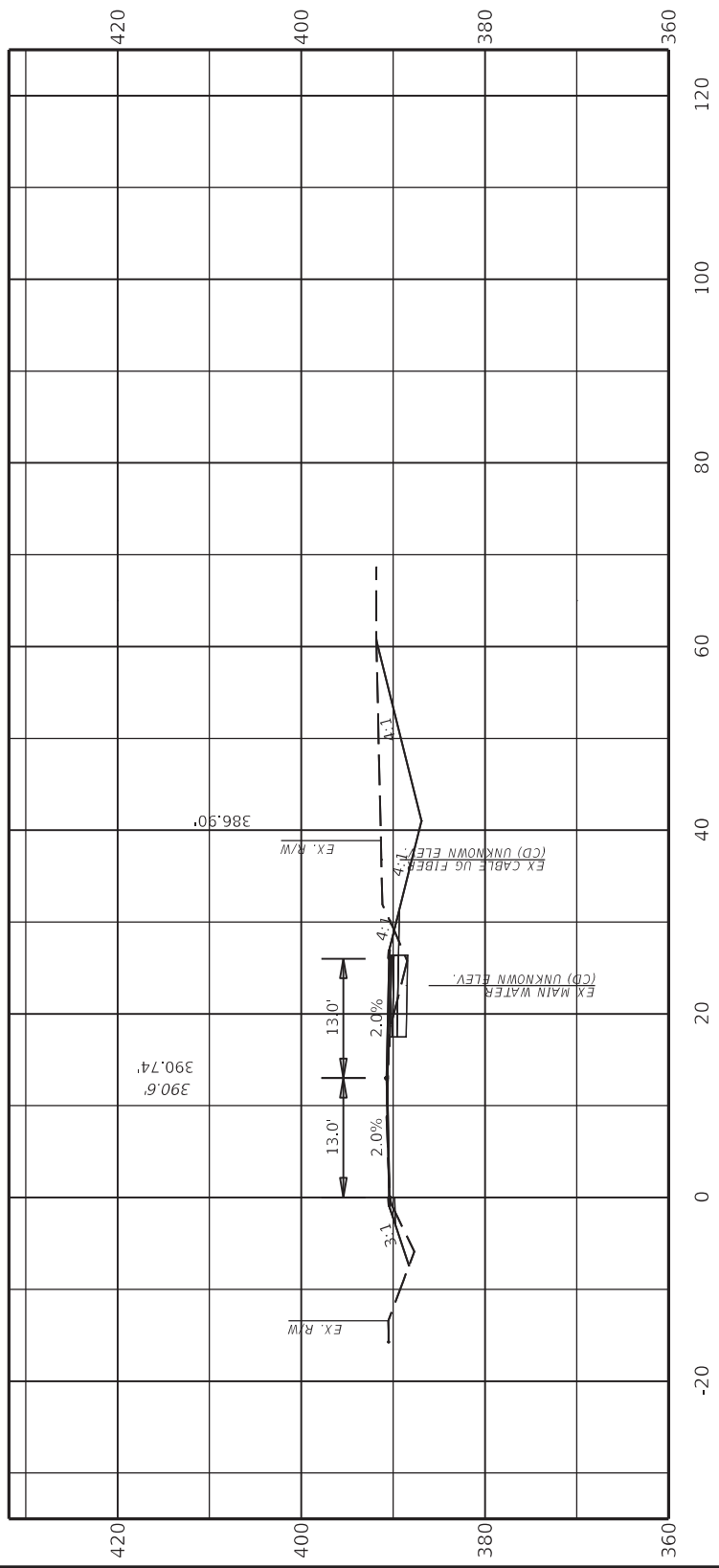
ITEM NO. 02-90222.00	COUNTY OF DAVISS
SHEET NO. X040	



DRAWING TITLE: CROSS SECTION

COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS

Cut Area 87.39 SQ FT
Fill Area 4.30 SQ FT
Cut Vol. 62.85 CU YD
Fill Vol. 3.27 CU YD



18+80.00

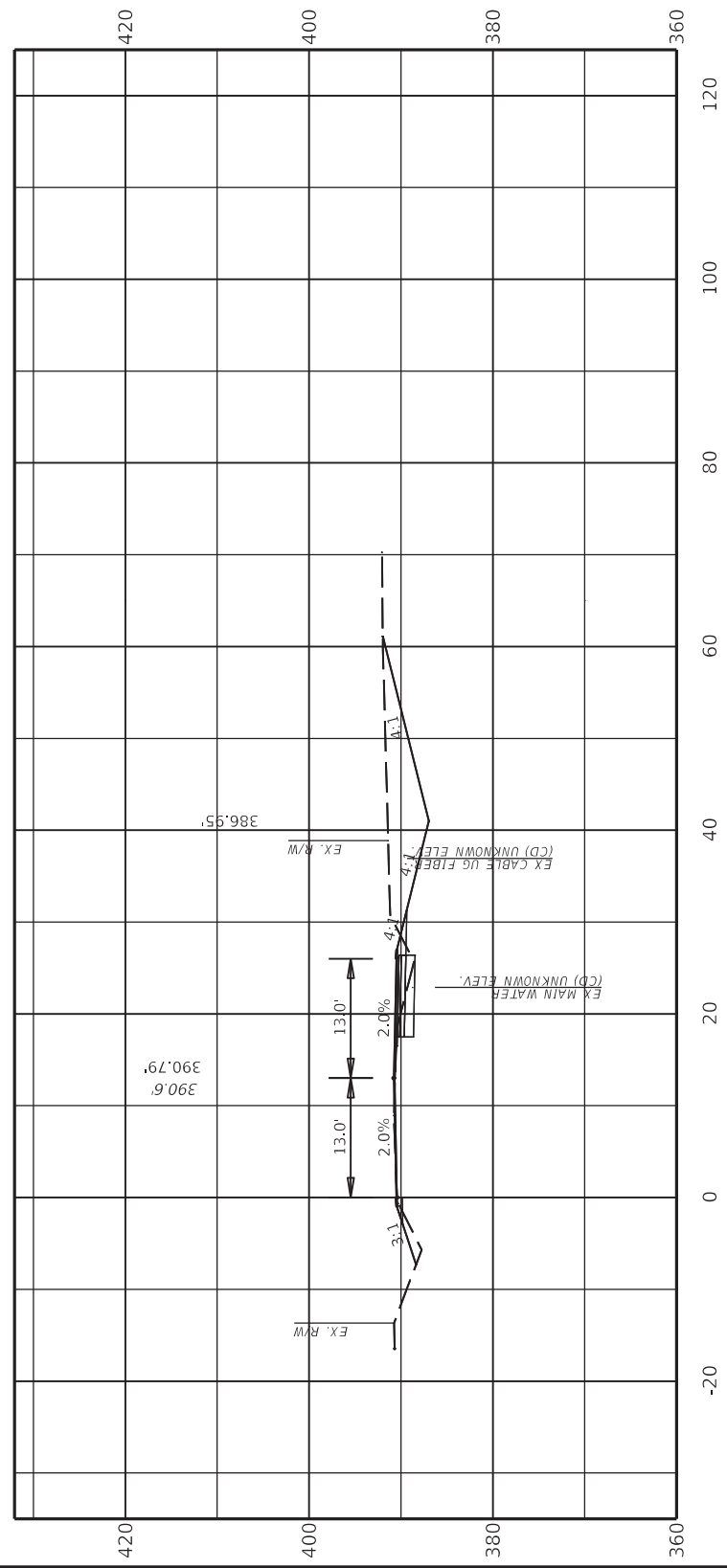
ITEM NO.
02-90222.00
SHEET NO.
X041



DRAWING TITLE: CROSS SECTION

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

Cut Area 90.88 SQ FT
 Fill Area 4.17 SQ FT
 Cut Vol. 66.03 CU YD
 Fill Vol. 3.14 CU YD



19+00.00

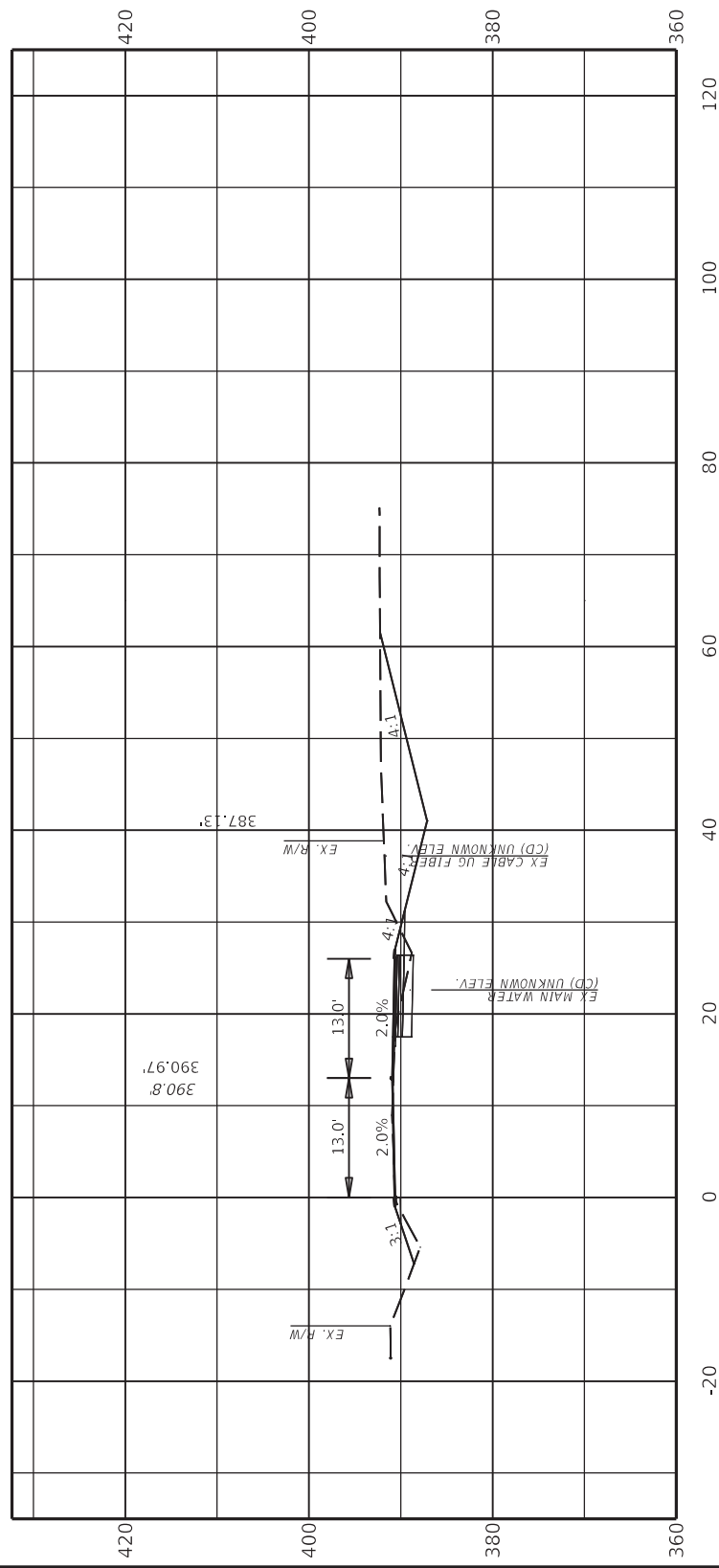
ITEM NO.
 02-90222.00
 COUNTY OF
 DAVIESS
 SHEET NO.
 X042



DRAWING TITLE: CROSS SECTION

COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS

Cut Area 97.34 SQ FT
Fill Area 5.16 SQ FT
Cut Vol. 71.51 CU YD
Fill Vol. 3.61 CU YD



19+40.00

ITEM NO.
02-90222.00
SHEET NO.
X044

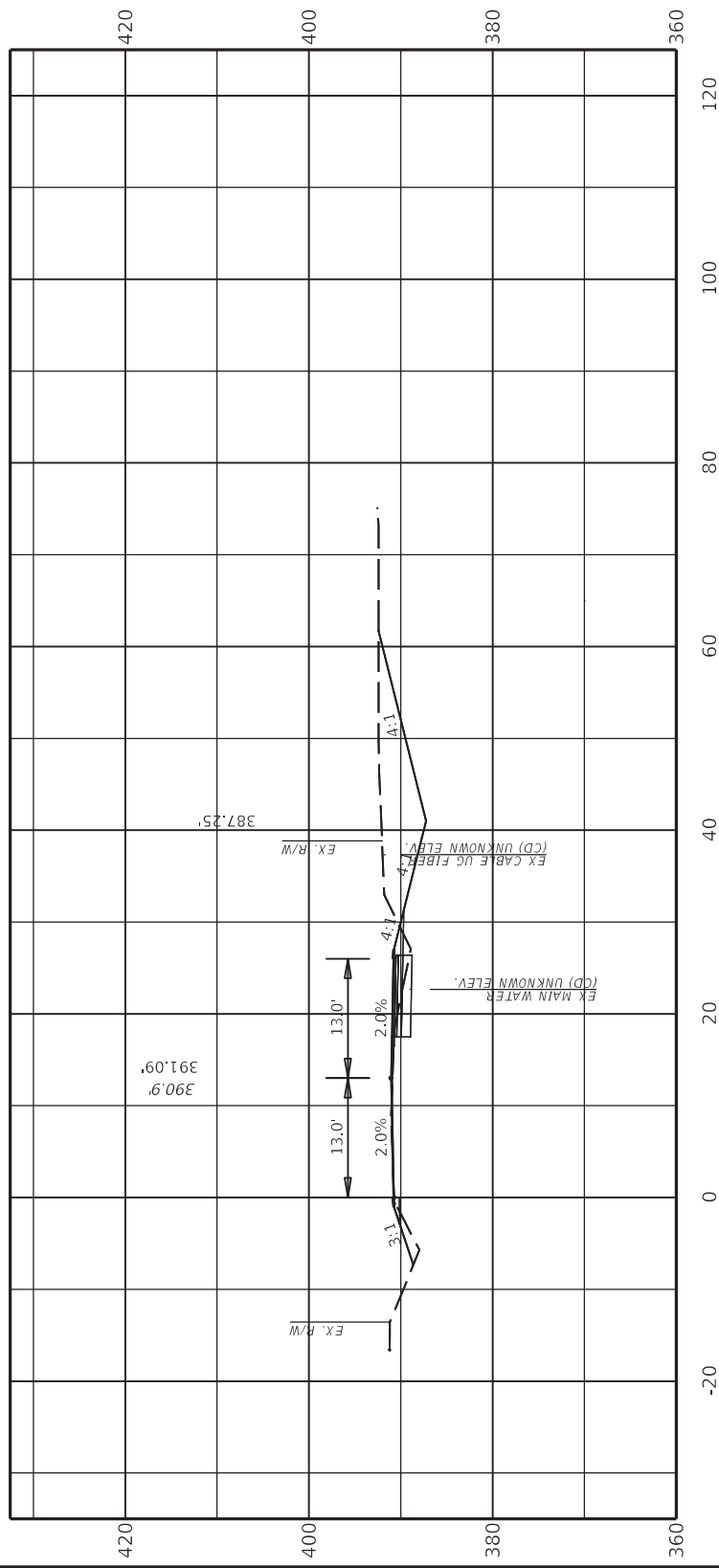


DRAWING TITLE: CROSS SECTION

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

USER: chris.smith

Cut Area 98.56 SQ FT
Fill Area 5.38 SQ FT
Cut Vol. 72.56 CU YD
Fill Vol. 3.90 CU YD



19+60.00

ITEM NO.
02-90222.00
SHEET NO.
X045

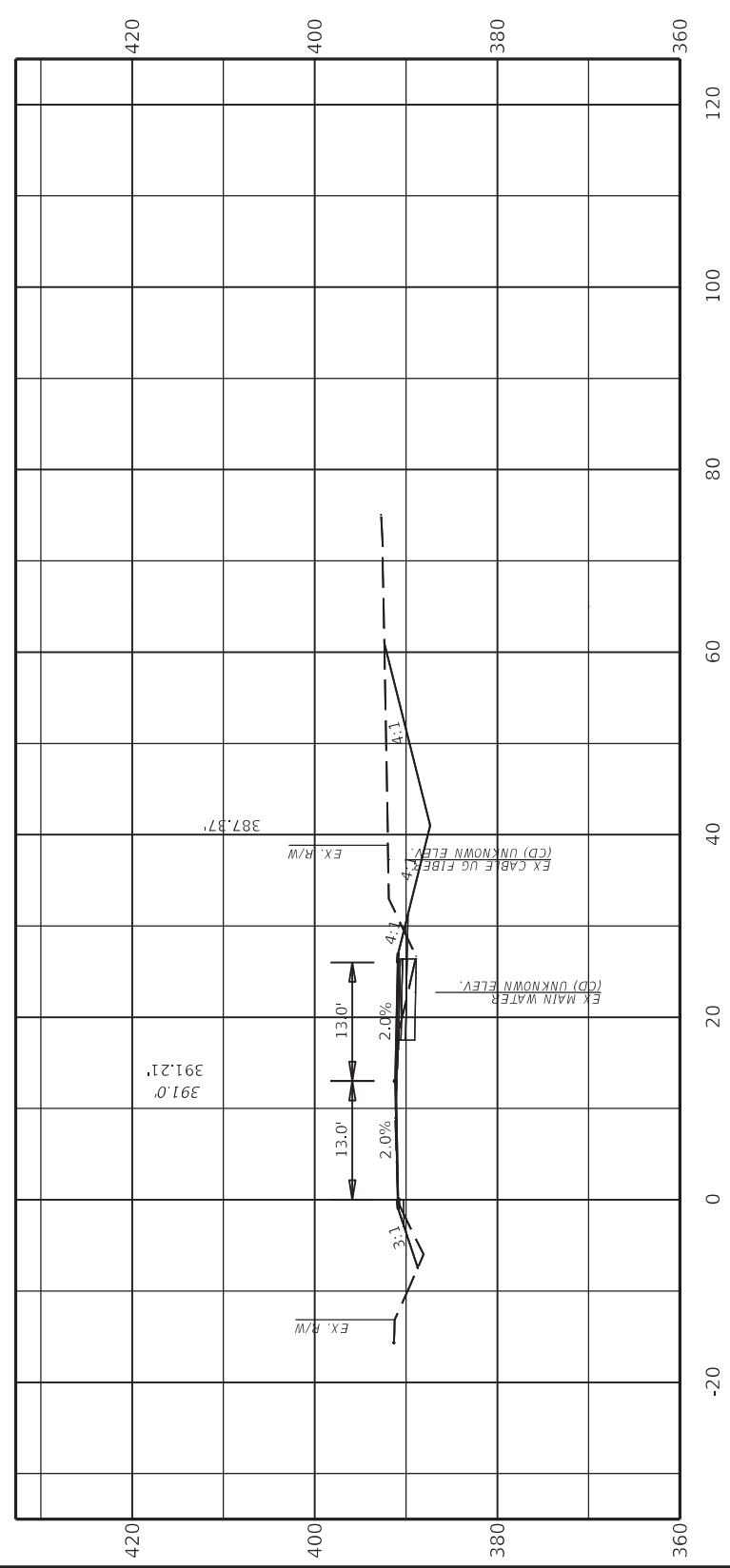


DRAWING TITLE: CROSS SECTION

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

USER: chris.smith

Cut Area 91.06 SQ FT
 Fill Area 5.18 SQ FT
 Cut Vol. 70.23 CU YD
 Fill Vol. 3.91 CU YD



19+80.00

ITEM NO.
02-90222.00
SHEET NO.
X046

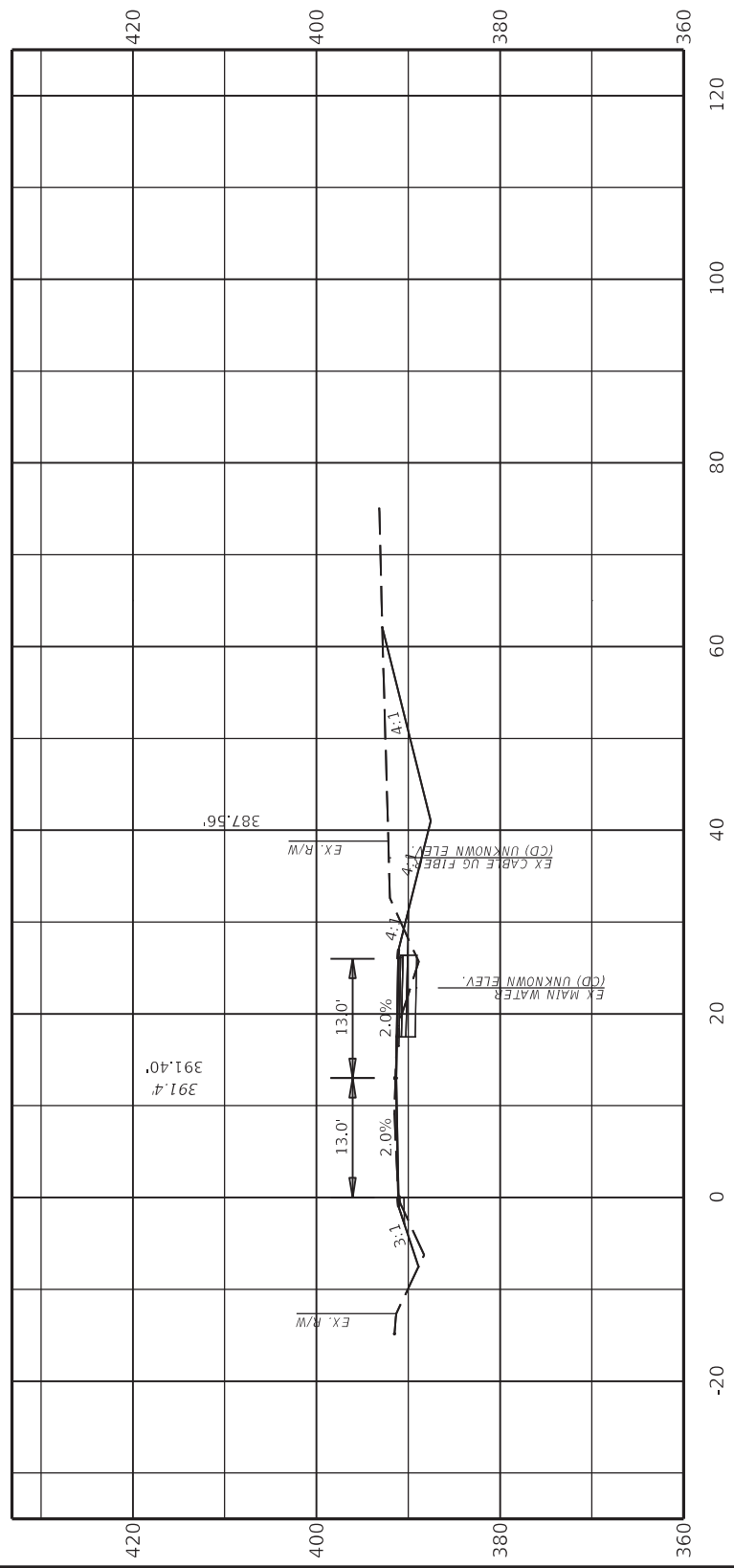


DRAWING TITLE: CROSS SECTION

COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS

USER: chris.smith

Cut Area 95.13 SQ FT
 Fill Area 4.77 SQ FT
 Cut Vol. 69.28 CU YD
 Fill Vol. 3.55 CU YD



20+20.00

ITEM NO.
02-90222.00
 COUNTY OF
DAVISS
 SHEET NO.
X048

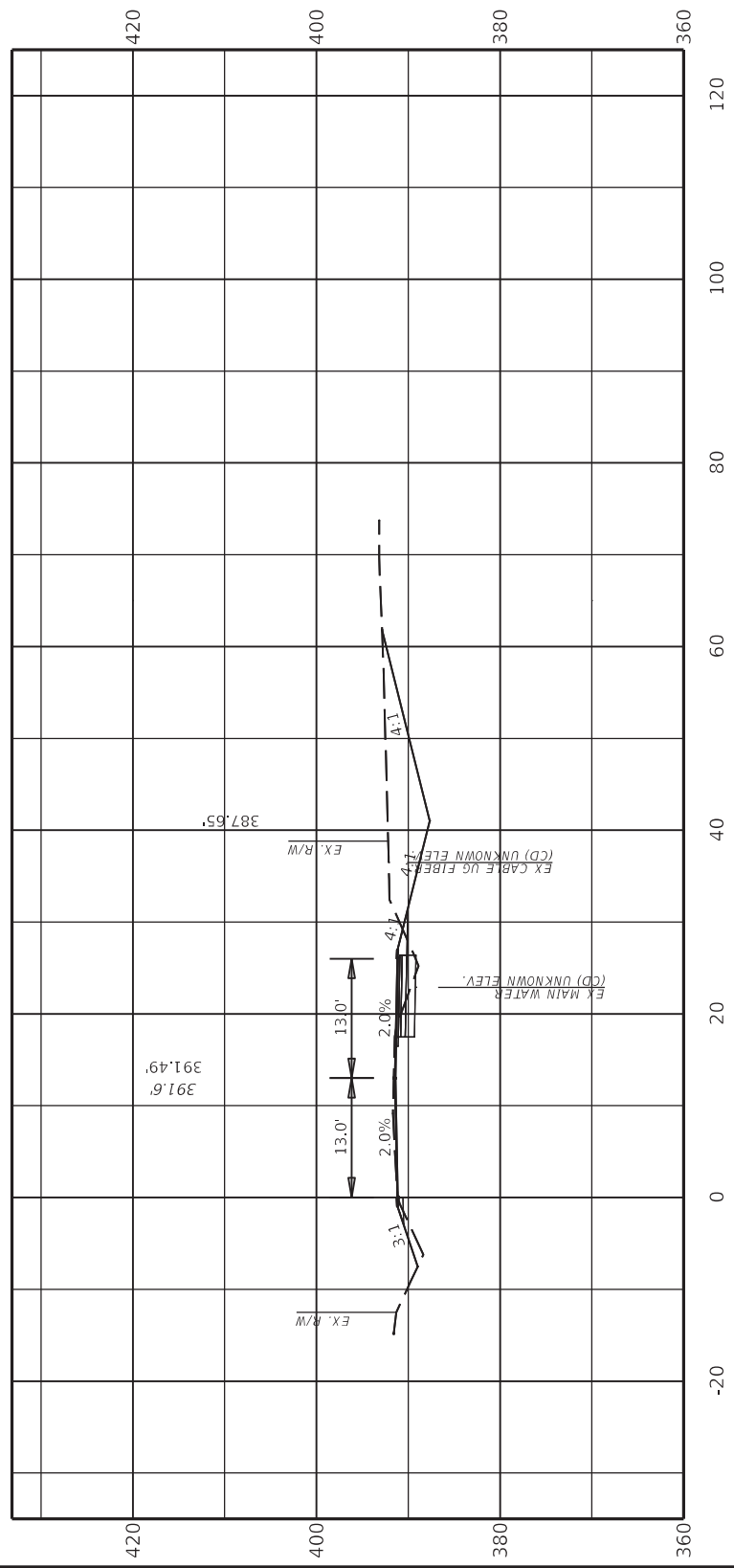


DRAWING TITLE: CROSS SECTION

COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS

USER: chris.smith

Cut Area 93.83 SQ FT
 Fill Area 4.80 SQ FT
 Cut Vol. 69.99 CU YD
 Fill Vol. 3.55 CU YD



20+40.00

ITEM NO.
02-90222.00
SHEET NO.
X049

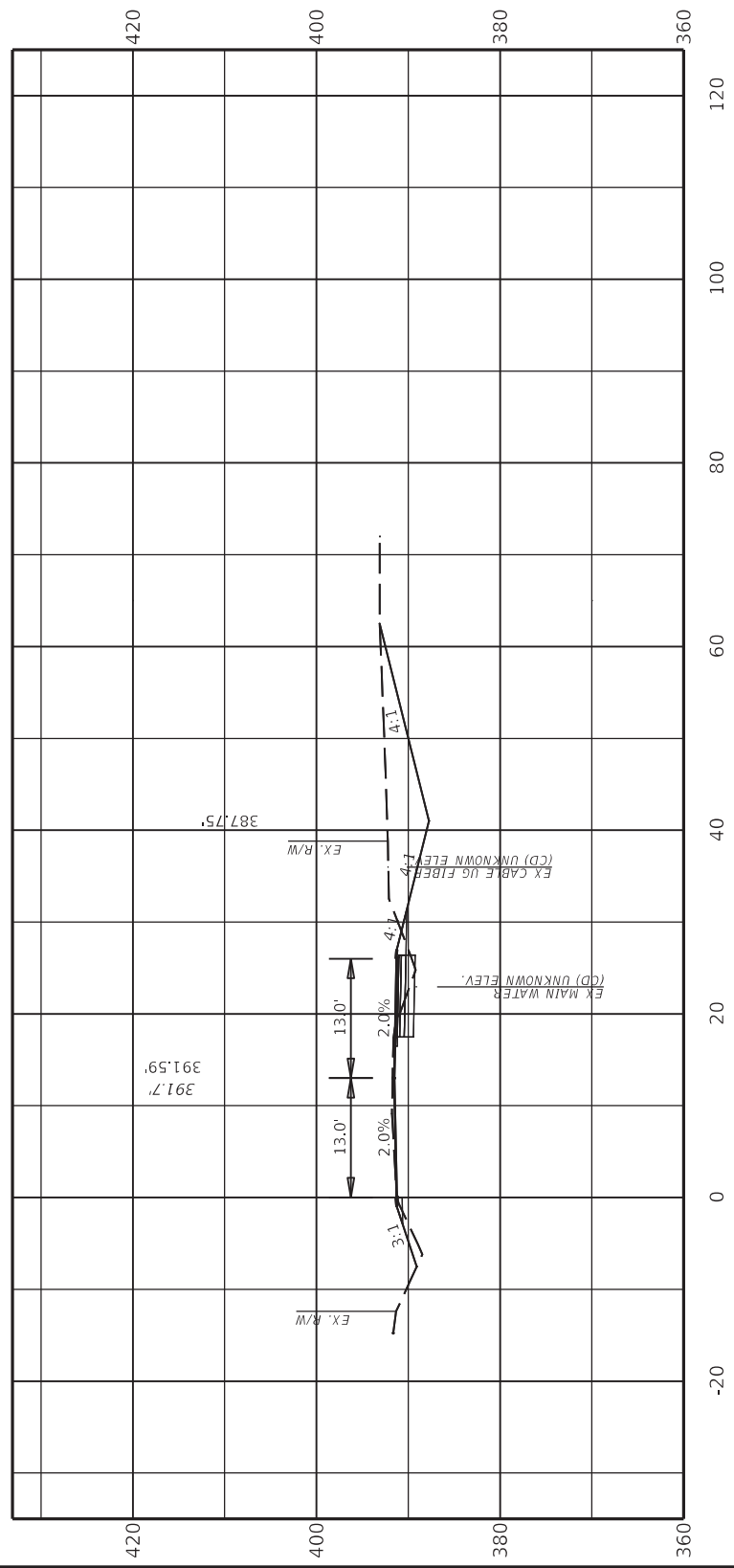


DRAWING TITLE: CROSS SECTION

COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS

USER: chris.smith

Cut Area 95.83 SQ FT
 Fill Area 4.22 SQ FT
 Cut Vol. 70.24 CU YD
 Fill Vol. 3.34 CU YD



ITEM NO. 02-90222.00
 COUNTY OF DAVIESS
 SHEET NO. X050

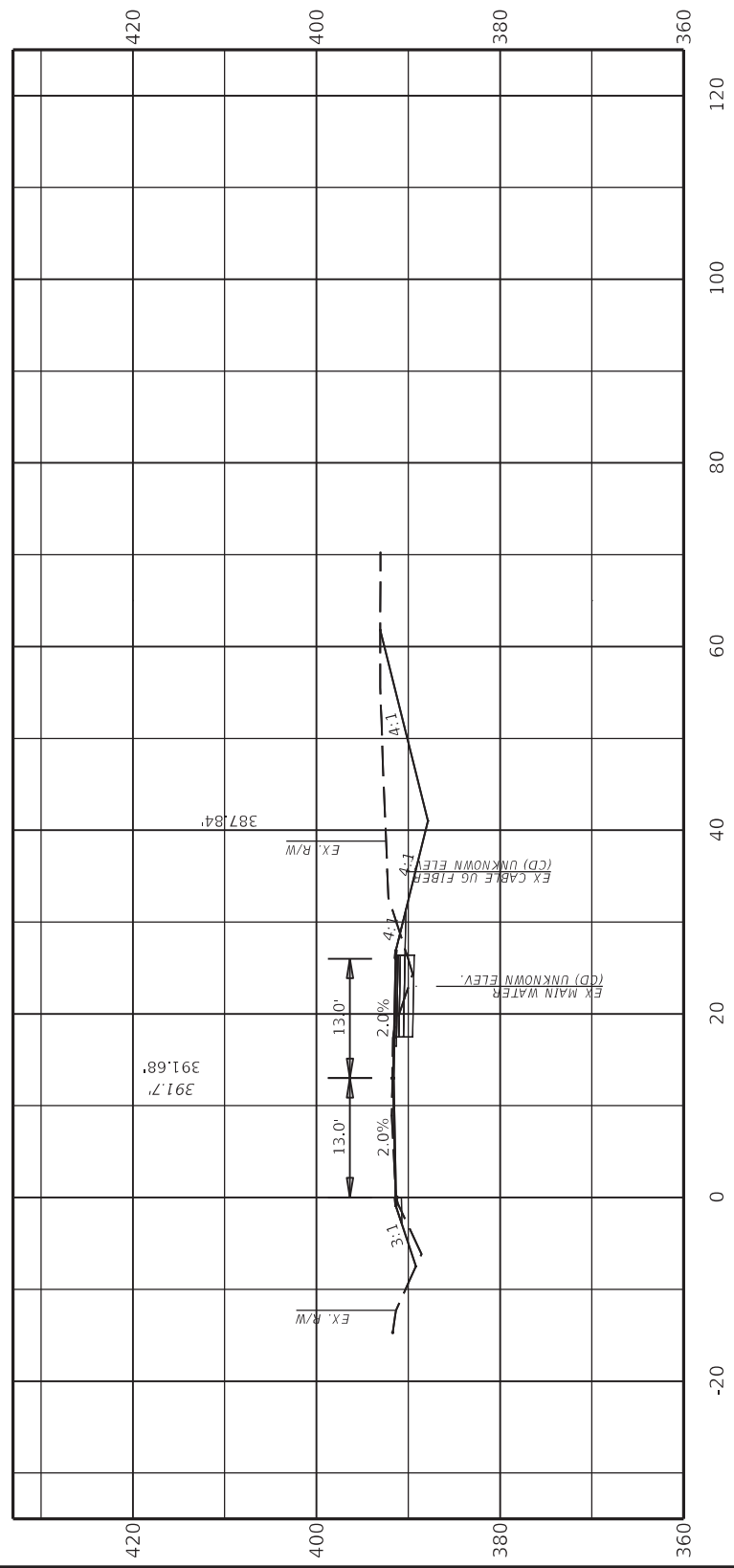


DRAWING TITLE: CROSS SECTION

COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS

USER: chris.smith

Cut Area 98.15 SQ FT
 Fill Area 3.99 SQ FT
 Cut Vol. 71.84 CU YD
 Fill Vol. 3.04 CU YD



20+80.00

ITEM NO. 02-90222.00	COUNTY OF DAVISS
SHEET NO. X051	

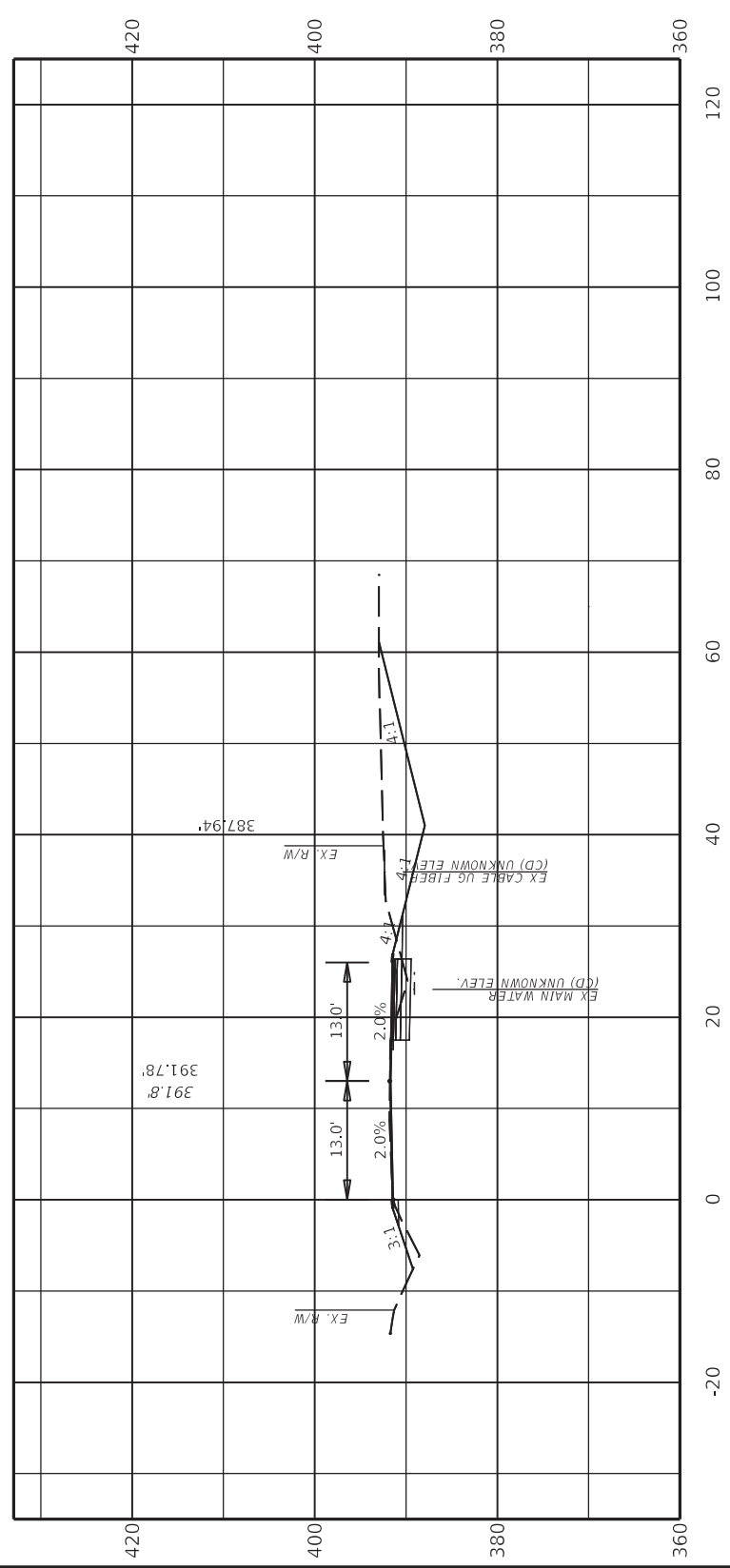


DRAWING TITLE: CROSS SECTION

COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS

USER: chris.smith

Cut Area 0.00 SQ FT
 Fill Area 0.00 SQ FT
 Cut Vol. 36.35 CU YD
 Fill Vol. 1.48 CU YD



21+00.00

ITEM NO.
02-90222.00
SHEET NO.
X052

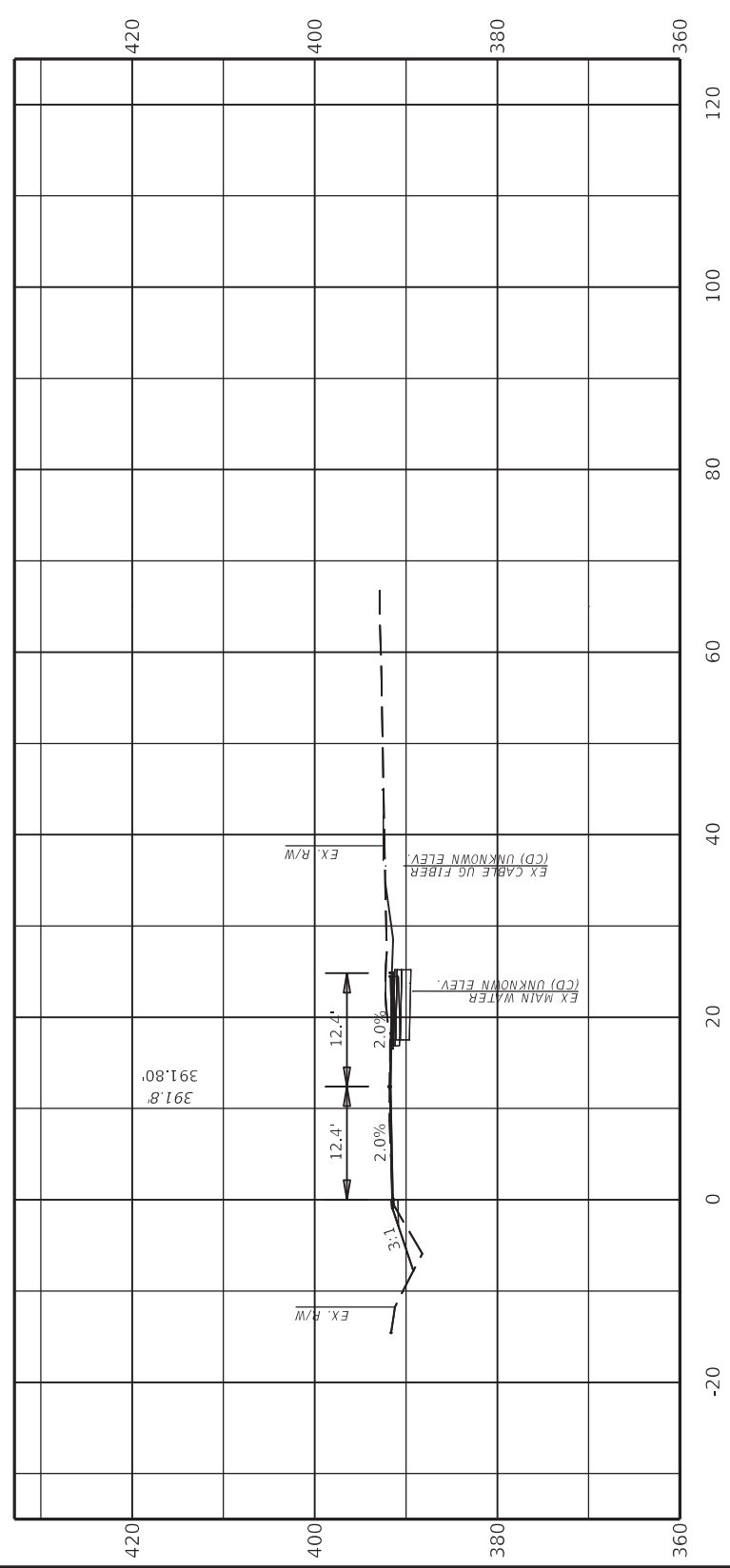


DRAWING TITLE: CROSS SECTION

COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS

USER: chris.smith

Cut Area 22.91 SQ FT
 Fill Area 5.90 SQ FT
 Cut Vol. 8.49 CU YD
 Fill Vol. 2.18 CU YD



21+20.00

ITEM NO. 02-9022.00
 COUNTY OF DAVIESS
 SHEET NO. X053

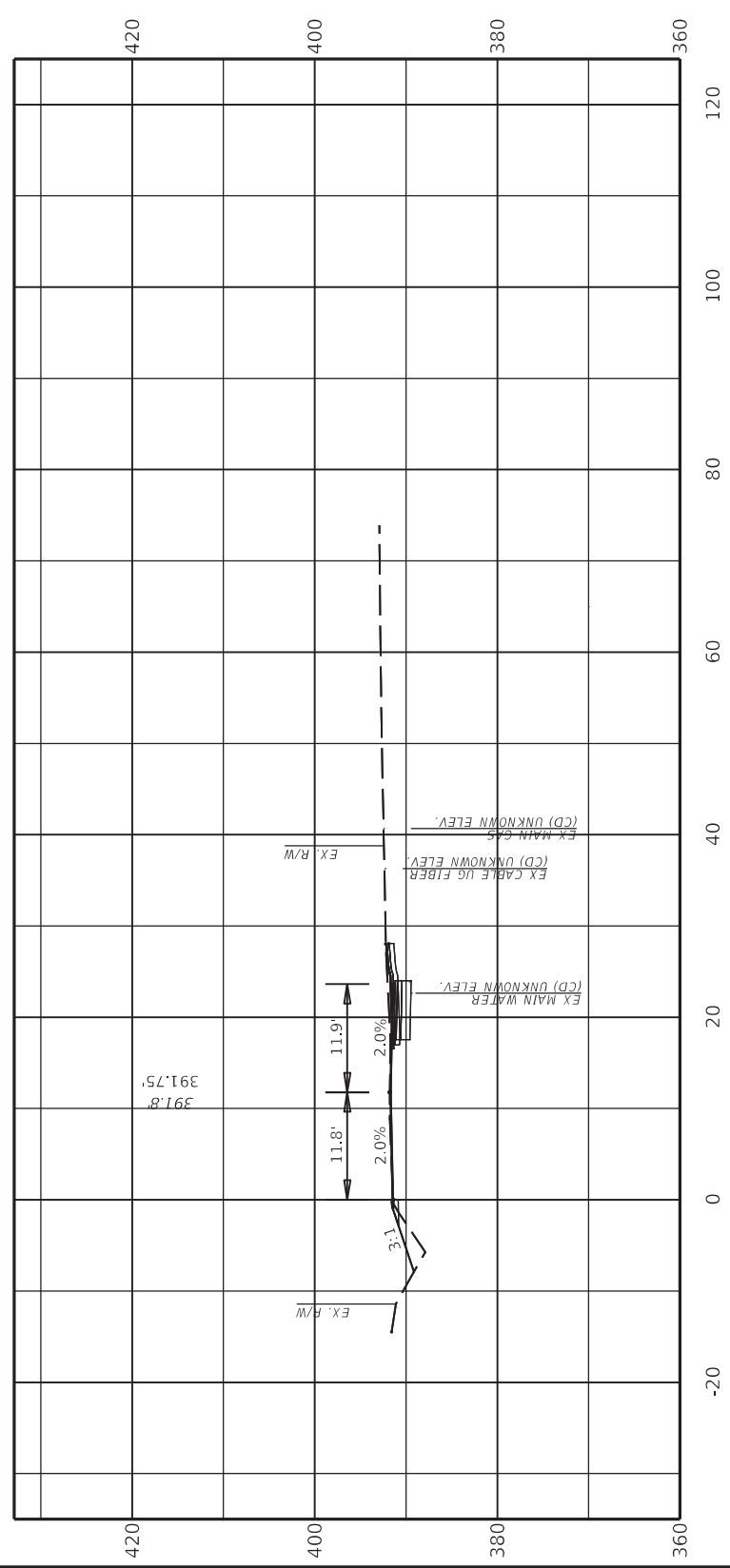
0' 20' 40' 80'
 HORIZONTAL SCALE: 1"=20'

DRAWING TITLE: CROSS SECTION

COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS

USER: chris.smith

Cut Area 22.82 SQ FT
 Fill Area 7.07 SQ FT
 Cut Vol. 16.94 CU YD
 Fill Vol. 4.80 CU YD



21+40.00

ITEM NO.
02-9022.00
SHEET NO.
X054

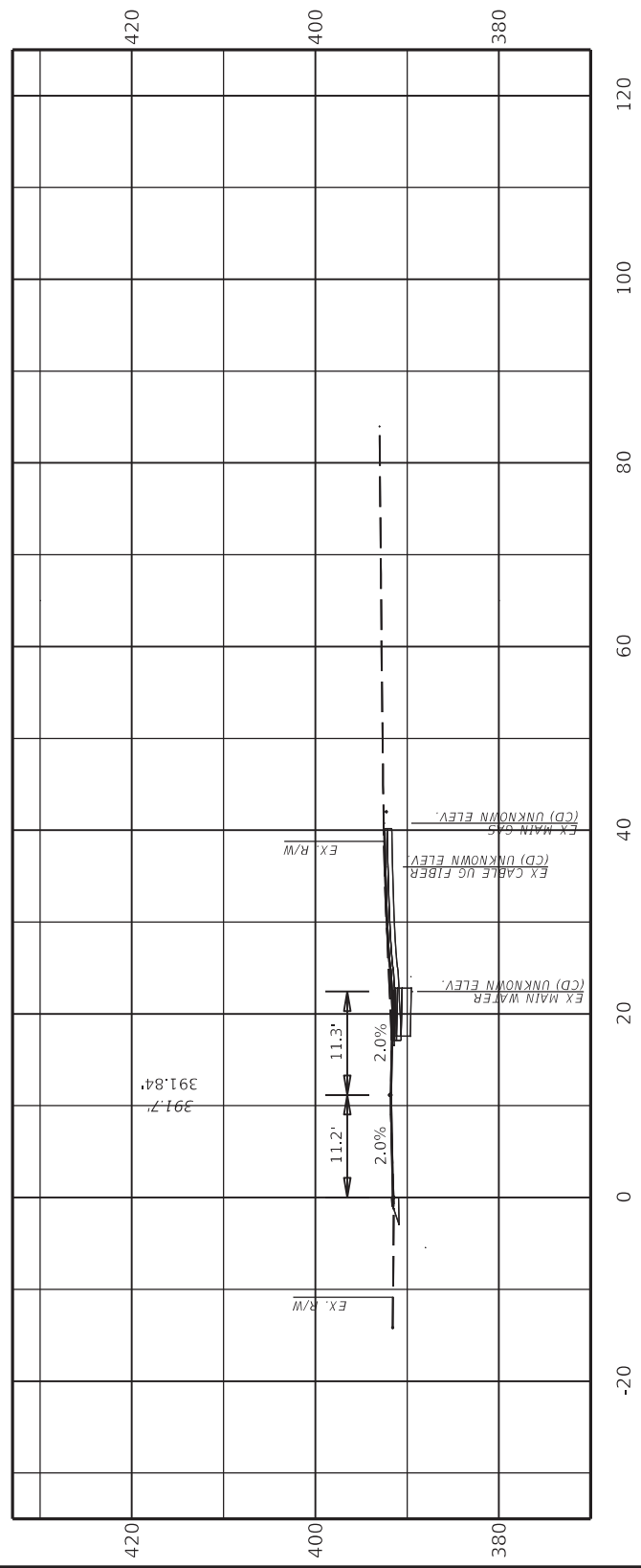


DRAWING TITLE: CROSS SECTION

COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS

USER: chris.smith

Cut Area 30.24 SQ FT
 Fill Area 0.00 SQ FT
 Cut Vol. 19.65 CU YD
 Fill Vol. 2.62 CU YD



21+60.00

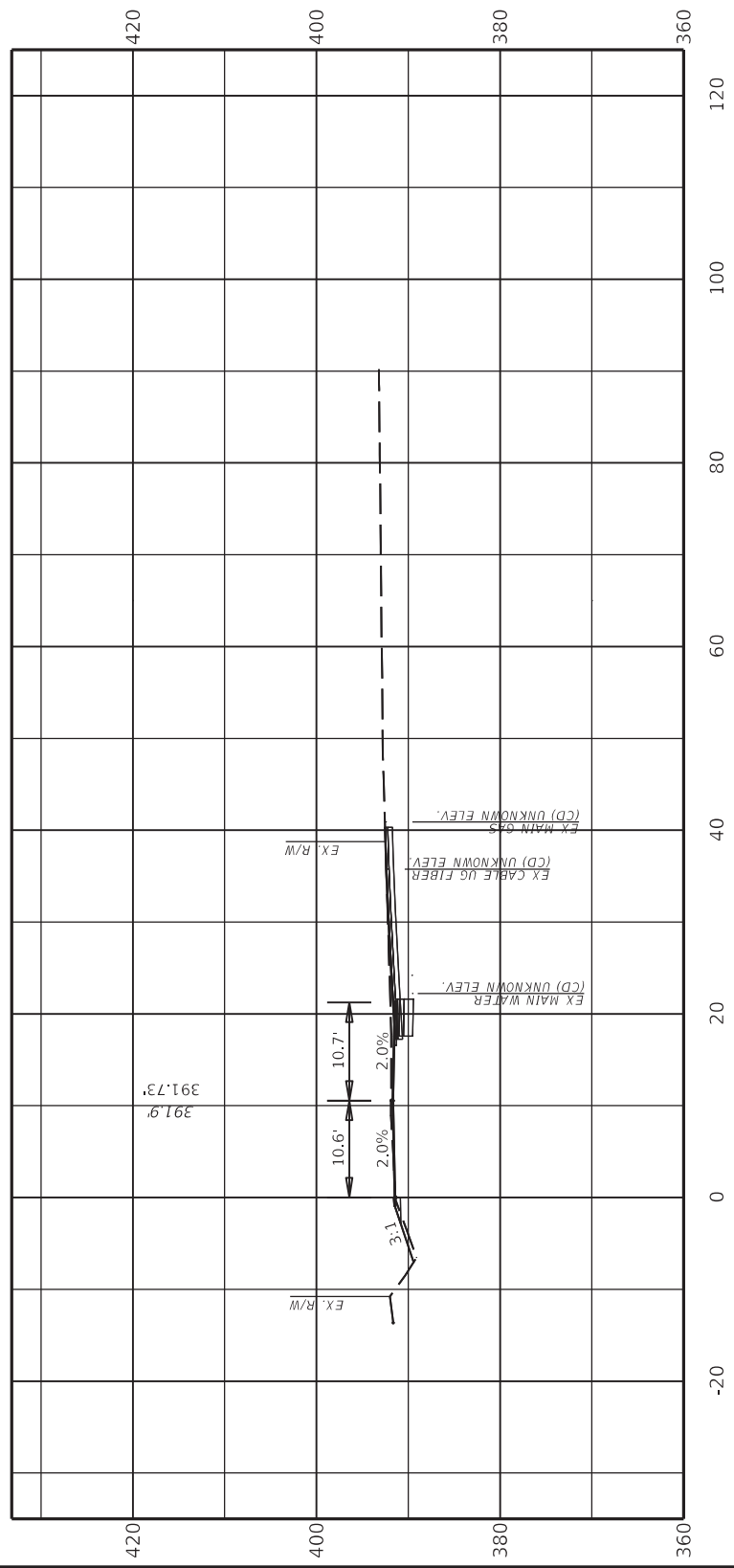
ITEM NO.
02-90222.00
SHEET NO.
X055



DRAWING TITLE: CROSS SECTION

COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS

Cut Area 30.31 SQ FT
 Fill Area 2.01 SQ FT
 Cut Vol. 22.42 CU YD
 Fill Vol. 0.74 CU YD



21+80.00



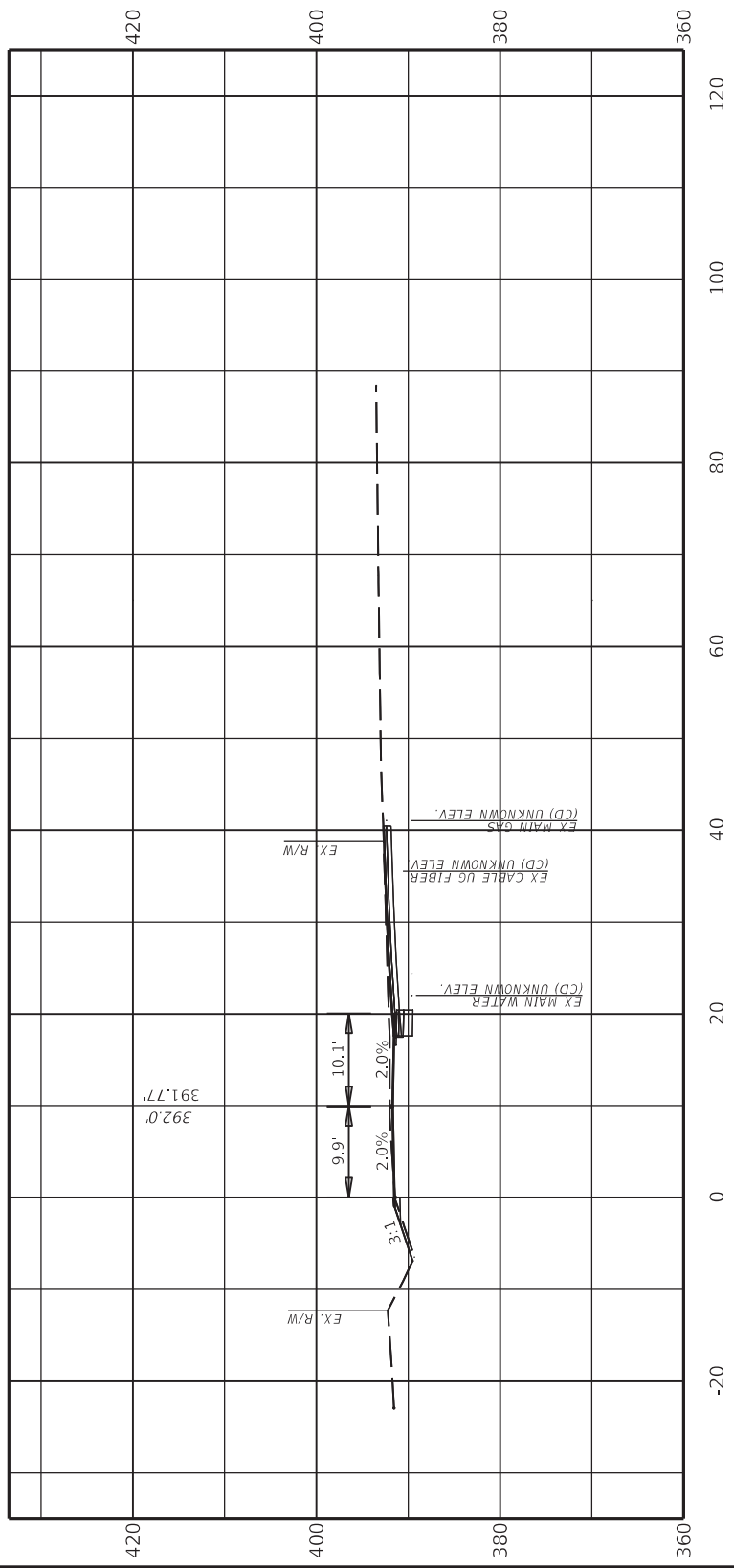
ITEM NO. 02-9022.00
 COUNTY OF DAVIESS
 SHEET NO. X056

DRAWING TITLE: CROSS SECTION

COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS

Cut Vol. 23.29 CU YD
 Fill Vol. 1.28 CU YD

Cut Area 32.57 SQ FT
 Fill Area 1.45 SQ FT



22+00.00

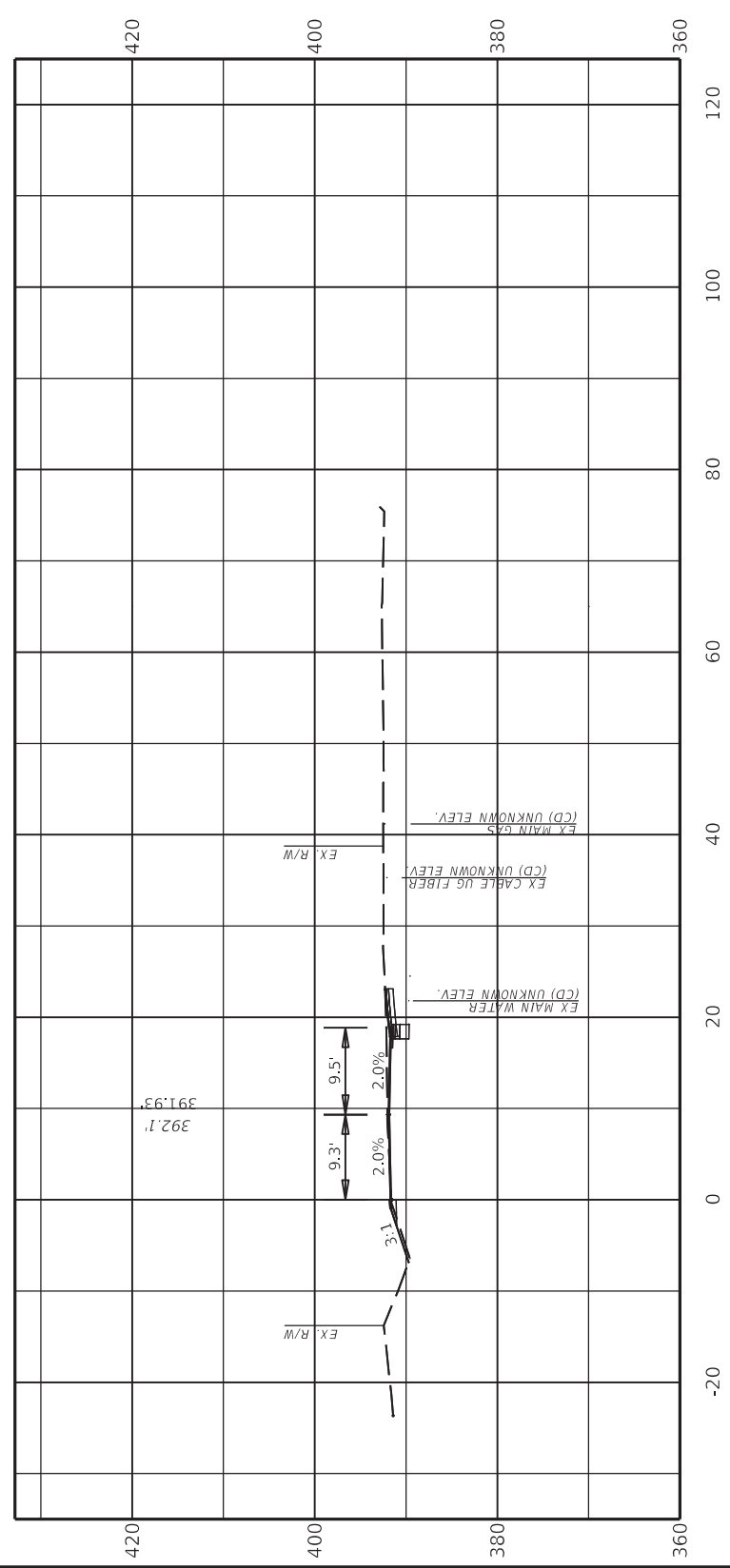


ITEM NO. 02-90222.00
 COUNTY OF DAVIESS
 SHEET NO. X057

DRAWING TITLE: CROSS SECTION

COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS

Cut Area 12.70 SQ FT
 Fill Area 1.16 SQ FT
 Cut Vol. 16.77 CU YD
 Fill Vol. 0.97 CU YD



22+20.00

ITEM NO.
02-90222.00
SHEET NO.
X058

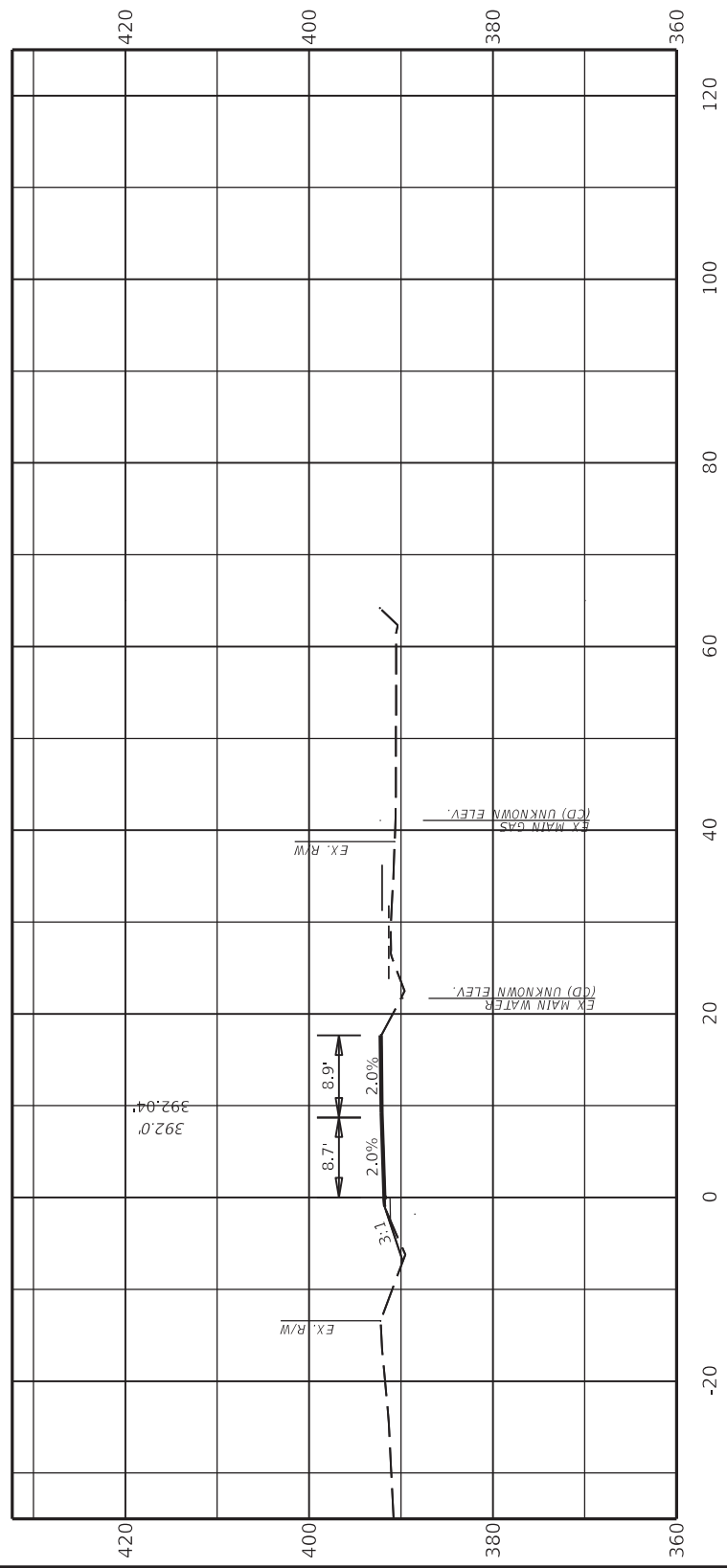


DRAWING TITLE: CROSS SECTION

COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS

USER: chrfs.smith

Cut Area 0.00 SQ FT
 Fill Area 0.00 SQ FT
 Cut Vol. 4.70 CU YD
 Fill Vol. 0.43 CU YD



22+40.00

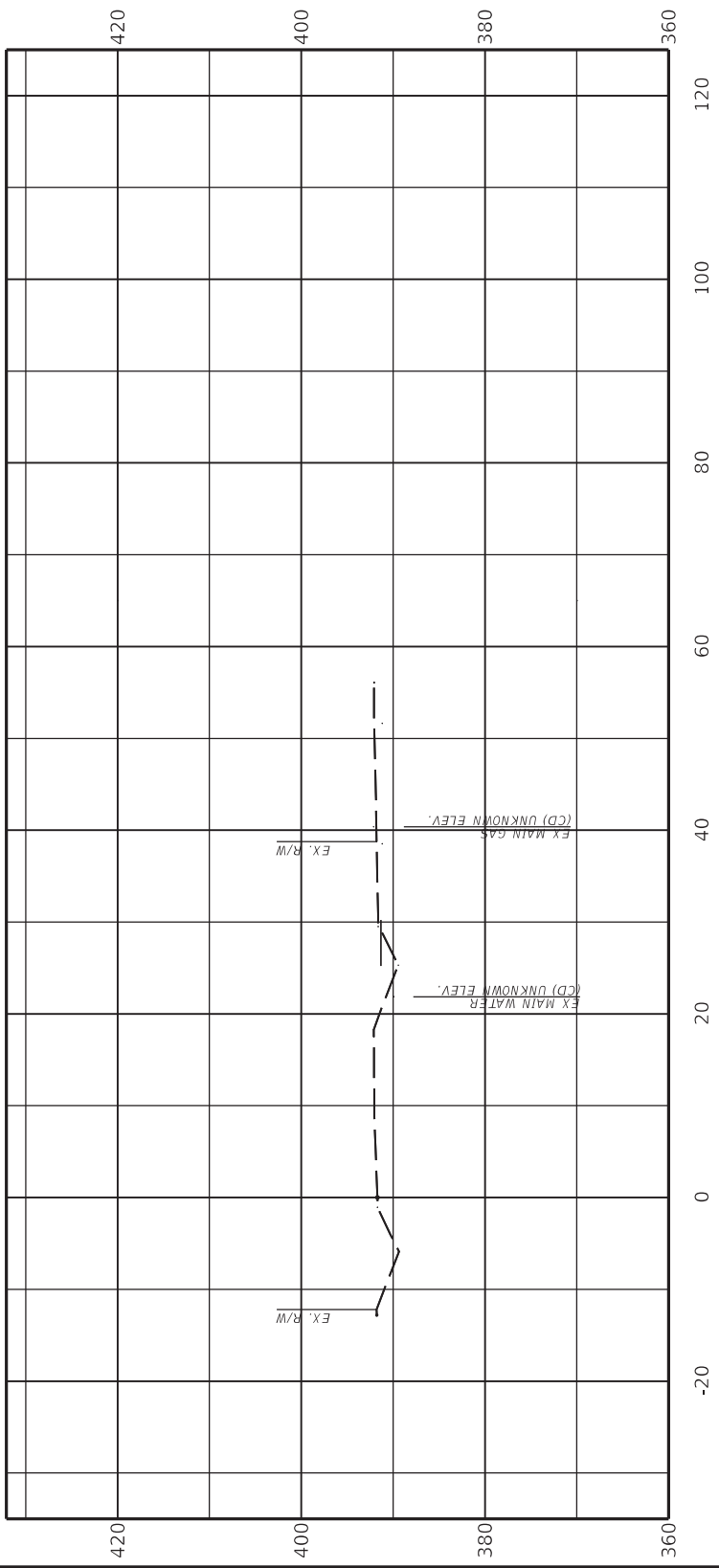
ITEM NO.
02-9022.00
SHEET NO.
X059



DRAWING TITLE: CROSS SECTION

COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS

USER: chris.smith



ITEM NO.
02-9022.00
SHEET NO.
X060



DRAWING TITLE: CROSS SECTION

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

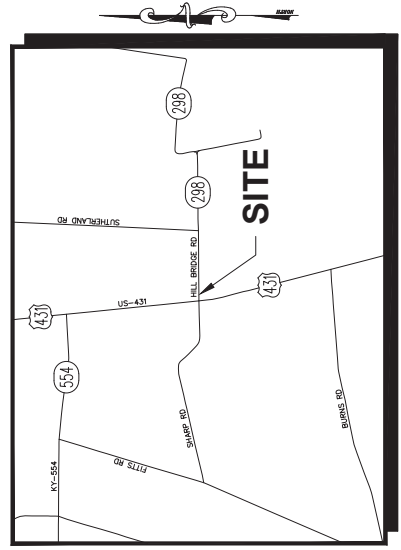
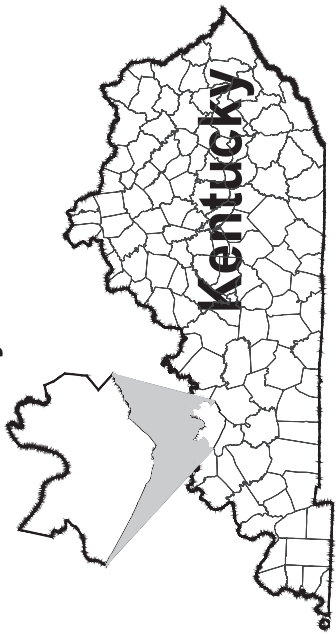
DAVISS COUNTY WATER DISTRICT



CONSTRUCTION PLANS

**PROJECT: WATER MAIN RELOCATION (US-431 & HILL BRIDGE ROAD)
UTICA, KENTUCKY**

Daviness County



VICINITY MAP

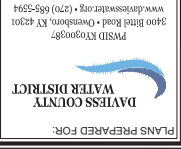
SHEET INDEX	
SHEET NO.	DESCRIPTION
C001	COVER SHEET
C100	GENERAL SUMMARY
C101 - C104	CONSTRUCTION PLANS
C201 - C203	KYTC CROSS SECTIONS
C301 - C303	DETAILS

PROFESSIONAL ENGINEER'S SEAL SIGNATURE _____ DATE _____ NO. _____ DATE _____ REVISIONS DESCRIPTION _____	PLANS PREPARED BY: 1505 FREDERICK STREET - PO BOX 2182 OWENSBORO, KENTUCKY 42301 (270) 665-2811	PLANS PREPARED FOR: PWSID K709087 3400 Hill Road - Owensboro, KY 42301 www.davinesswater.org • (270) 665-5594	SHEET TITLE: COVER SHEET WATERLINE RELOCATION LOCATED AT US HWY 431 & HILL BRIDGE ROAD (KY-298) DAVIENS COUNTY, KENTUCKY	PROJECT NO.: 22-6502	PLAN DATE: 07-19-2022	SCALE: NOT TO SCALE	CONSTRUCTION DOCUMENTS	SHEET NO.: C0.01
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Professional Engineer's Seal

DATE	
REVISIONS	
NO.	DATE
DESCRIPTION	

PLANS PREPARED BY:	DAVISS COUNTY
PLANS PREPARED FOR:	WATER DISTRICT
PROJECT TITLE:	GENERAL SUMMARY
PLAN DATE:	07-19-2022
SCALE:	NOT TO SCALE
PROJECT NO.:	22-6502
CONSTRUCTION DOCUMENTS	
SHEET NO.:	C1.00



3400 Brith Road • Owensboro, KY 42301
PWSID K5709087
www.davisswater.org • (270) 665-3594

GENERAL SUMMARY

ITEM	DESCRIPTION	UNIT	HILL BRIDGE ROAD US 431
2000ED	6" C-90 WATERLINE	LF	1095
2000ED	6" TAPPING VALVE & SLEEVE	EACH	2
2000ED	6" GATE VALVE	EACH	1
2000ED	OPEN CUTTING OF ACCESS POINT	EACH	2
2000ED	2"-3/4" TYPE K COPPER WATER SERVICE VIA A HORIZONTAL BORE	LF	280
2000ED	CUT & PLUG EX. 6" AC WATER MAIN WITHRUST BLOCK	EACH	2
2000ED	CUT & PLUG EX. 6" AC WATER MAIN	EACH	2
2000ED	INSTALL 2" METER AND RECONST. SERVICE (METER SUPPLIED BY WATER DISTRICT)	LUMP SUM	1
2000ED	INSTALL 3/4" METER AND RECONST. SERVICE (METER SUPPLIED BY WATER DISTRICT)	LUMP SUM	1
2000ED	6"x6" TEE W/ GATE VALVE & THURST BLOCK (RECONNECT FIRE LOOP)	LP SUM	1
2001ED	CONCRETE CAP OVER FORCE MAIN	LP SUM	1

NOTES:

6" C-90 WATERLINE
THE BID ITEM SHALL BE COMPLETE IN PLACE AND READY TO USE. THE MATERIALS ARE DEFINED IN THE DAVISS COUNTY WATER DISTRICT SPECIFICATIONS. REFERENCE THE PROVIDED DETAIL. TYPICAL BEDDING, BACKFILL, TRACER WIRE, RESTORATION, PRESSURE AND LEAK TESTING, DISINFECTION, LABOR, EQUIPMENT, MATERIAL. ALL IN COMPLIANCE WITH DAVISS COUNTY WATER DISTRICT SPECIFICATIONS.

6" TAPPING VALVE & SLEEVE
THE BID ITEM SHALL BE COMPLETE IN PLACE AND READY TO USE. THE MATERIALS ARE DEFINED IN THE DAVISS COUNTY WATER DISTRICT SPECIFICATIONS. REFERENCE THE PROVIDED DETAIL. TYPICAL BEDDING, BACKFILL, TRACER WIRE, RESTORATION, PRESSURE AND LEAK TESTING, DISINFECTION, LABOR, EQUIPMENT, MATERIAL. ALL IN COMPLIANCE WITH DAVISS COUNTY WATER DISTRICT SPECIFICATIONS.

6" GATE VALVE
THE BID ITEM SHALL BE COMPLETE IN PLACE AND READY TO USE. REFERENCE THE PROVIDED DETAIL. BACKFILL, TRACER WIRE, RESTORATION, LABOR, EQUIPMENT, MATERIAL. ALL IN COMPLIANCE WITH DAVISS COUNTY WATER DISTRICT SPECIFICATIONS.

OPEN CUTTING OF ACCESS POINT
THE BID ITEM SHALL BE COMPLETE IN PLACE AND READY TO USE. REFERENCE THE PROVIDED DETAIL. PERMANENT STREET CUT REPAIR. THE BID ITEM GENERALLY INCLUDES TRENCHING, BEDDING, BACKFILL, SAW DUTTING, 6" CONCRETE CAP, ASPHALT REPAIR, LABOR, EQUIPMENT, MATERIAL. ALL IN COMPLIANCE WITH DAVISS COUNTY WATER DISTRICT SPECIFICATIONS.

2" METER AND RECONST. SERVICE (METER SUPPLIED BY WATER DISTRICT)
THE BID ITEM SHALL BE COMPLETE IN PLACE AND READY TO USE. THE MATERIALS ARE DEFINED IN THE DAVISS COUNTY WATER DISTRICT SPECIFICATIONS. THE BID ITEM GENERALLY INCLUDES PIPE, FITTINGS, LABOR, EQUIPMENT, MATERIAL. ALL IN COMPLIANCE WITH DAVISS COUNTY WATER DISTRICT SPECIFICATIONS.

3/4" METER AND RECONST. SERVICE (METER SUPPLIED BY WATER DISTRICT)
THE BID ITEM SHALL BE COMPLETE IN PLACE AND READY TO USE. REFERENCE THE PROVIDED DETAIL. CONCRETE THURST BLOCK. THE BID ITEM GENERALLY INCLUDES PIPING MATERIALS, CONCRETE, RESTORATION, AND MATERIAL. ALL IN COMPLIANCE WITH DAVISS COUNTY WATER DISTRICT SPECIFICATIONS.

6"x6" TEE W/ GATE VALVE & THURST BLOCK (RECONNECT FIRE LOOP)
THE BID ITEM SHALL BE COMPLETE IN PLACE AND READY TO USE. THE BID ITEM GENERALLY INCLUDES PIPING MATERIALS, LABOR, EQUIPMENT, AND MATERIAL. ALL IN COMPLIANCE WITH DAVISS COUNTY WATER DISTRICT SPECIFICATIONS.

CUT & PLUG EX. 6" AC WATER MAIN
THE BID ITEM SHALL BE COMPLETE IN PLACE AND READY TO USE. THE BID ITEM GENERALLY INCLUDES PIPING MATERIALS, LABOR, EQUIPMENT, AND MATERIAL. ALL IN COMPLIANCE WITH DAVISS COUNTY WATER DISTRICT SPECIFICATIONS.

INSTALL 2" METER AND RECONST. SERVICE (METER SUPPLIED BY WATER DISTRICT)
THE BID ITEM SHALL BE COMPLETE IN PLACE AND READY TO USE. THE BID ITEM GENERALLY INCLUDES PIPING MATERIALS, LABOR, EQUIPMENT, AND MATERIAL. ALL IN COMPLIANCE WITH DAVISS COUNTY WATER DISTRICT SPECIFICATIONS.

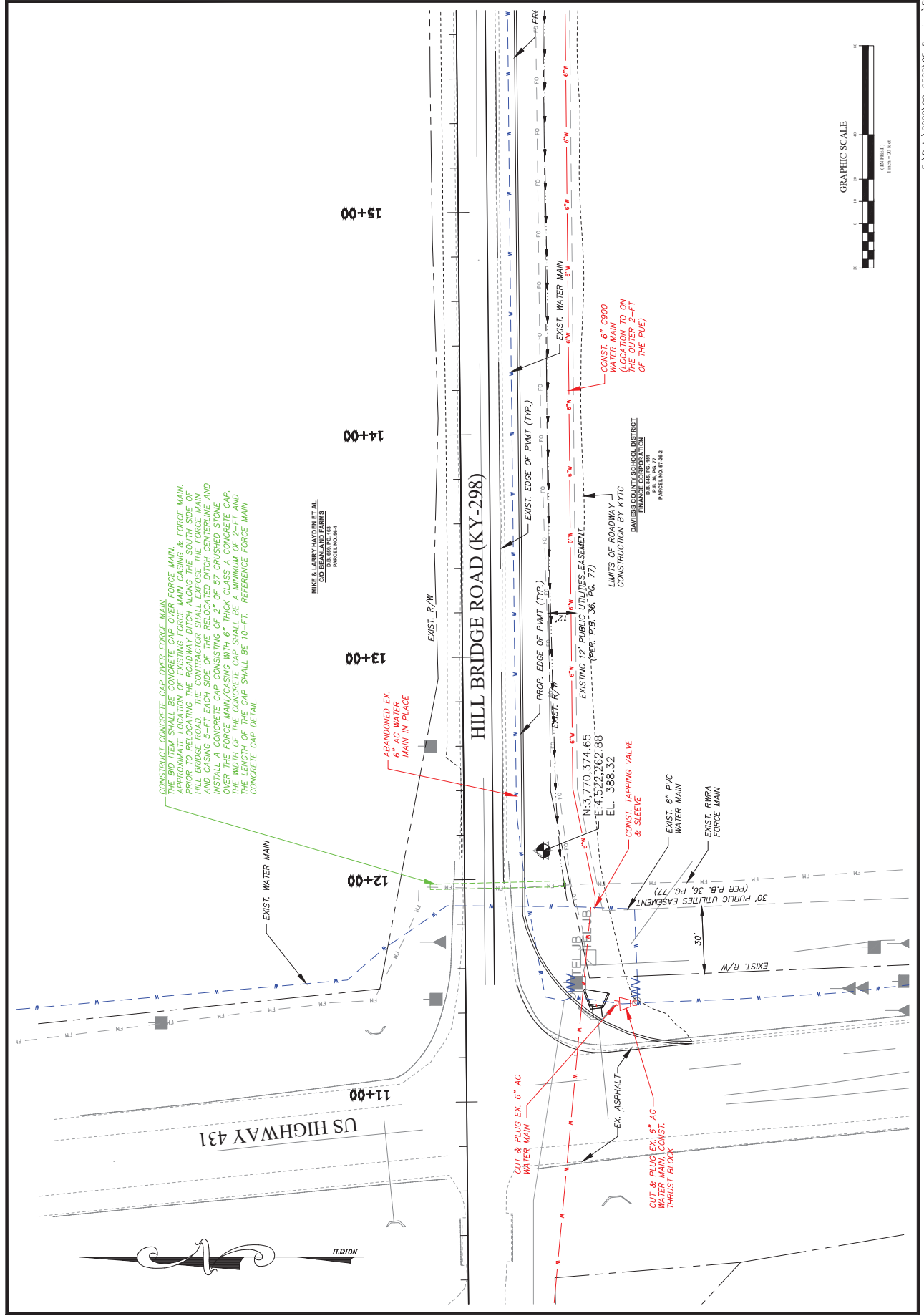
INSTALL 3/4" METER AND RECONST. SERVICE (METER SUPPLIED BY WATER DISTRICT)
THE BID ITEM SHALL BE COMPLETE IN PLACE AND READY TO USE. THE BID ITEM GENERALLY INCLUDES PIPING MATERIALS, LABOR, EQUIPMENT, AND MATERIAL. ALL IN COMPLIANCE WITH DAVISS COUNTY WATER DISTRICT SPECIFICATIONS.

6"x6" TEE W/ GATE VALVE & THURST BLOCK (RECONNECT FIRE LOOP)
THE BID ITEM SHALL BE COMPLETE IN PLACE AND READY TO USE. REFERENCE THE PROVIDED DETAIL. CONCRETE THURST BLOCK. THE BID ITEM GENERALLY INCLUDES PIPING MATERIALS, LABOR, EQUIPMENT, AND MATERIAL. ALL IN COMPLIANCE WITH DAVISS COUNTY WATER DISTRICT SPECIFICATIONS.

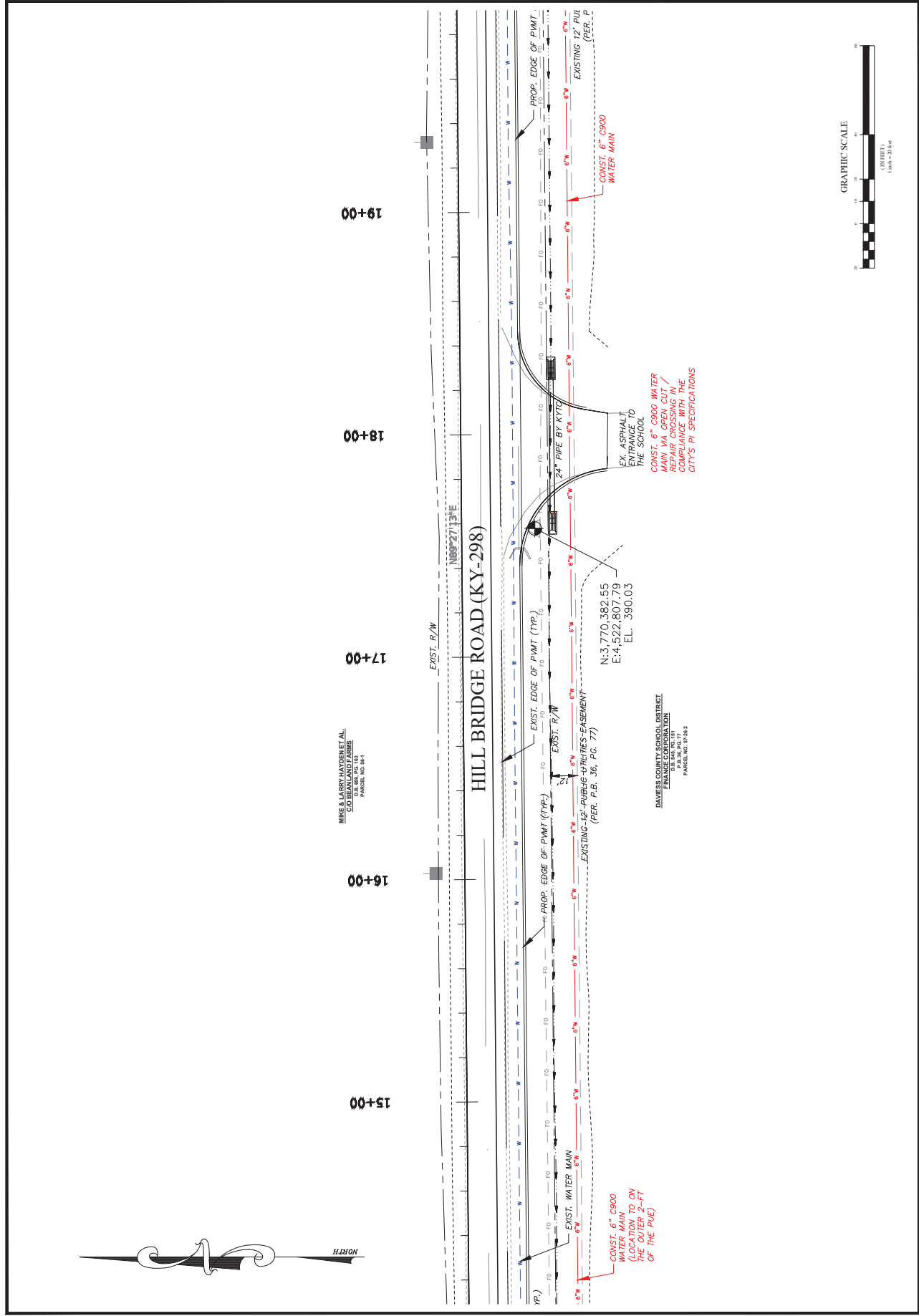
CONCRETE CAP OVER FORCE MAIN
THE BID ITEM SHALL BE COMPLETE IN PLACE AND READY TO USE. REFERENCE THE PROVIDED DETAIL. CONCRETE CAP, LABOR, EQUIPMENT, AND MATERIAL.

ALL ITEMS NOT QUANTIFIED AND NECESSARY FOR THE COMPLETION OF THE PROJECT SHALL BE INCIDENTAL INCLUDING BUT NOT LIMITED TO PLUGS, TESTING, STAMING, BEDDING, BACKFILL, PIPE REMOVAL, TIES TO EXISTING STRUCTURES, SMOKELOADING, BEDDING, RESTORATION, ETC.

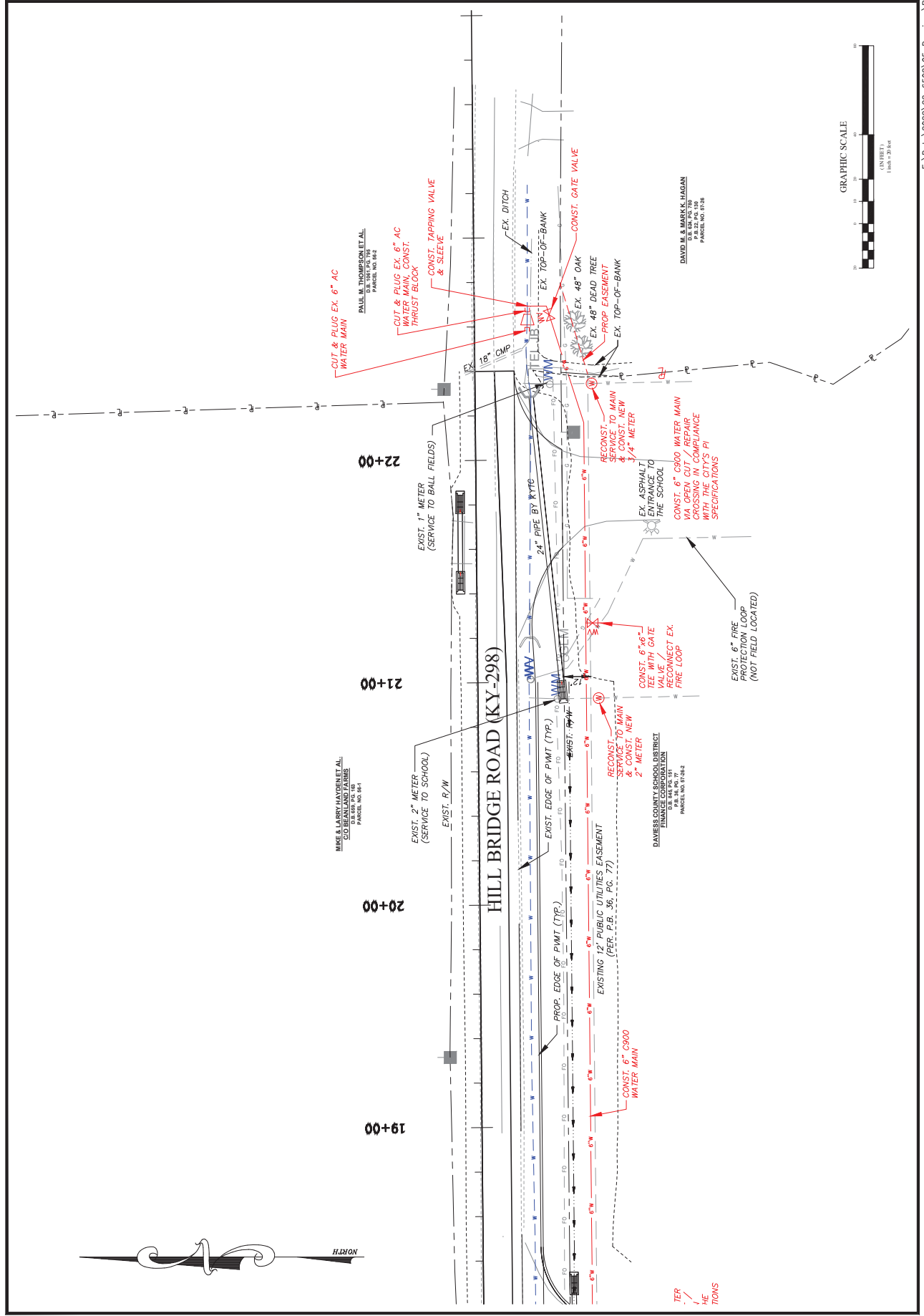
Professional Engineer's Seal DATE REVISIONS NO. DATE DESCRIPTION	 BEI ENGINEERING & SURVEYING 1505 HENRIETTA STREET - 2ND FLOOR OWSBORO, KENTUCKY 40266 (270) 665-2811	PLANS PREPARED FOR: DAVISS COUNTY WATER DISTRICT PWSID K709087 3400 Birch Road - Owensboro, KY 42301 www.davisswater.org • (270) 665-3594	SHEET TITLE: CONSTRUCTION PLAN PROJECT TITLE: WATERLINE RELOCATION LOCATED AT US HWY 431 & DAVISS COUNTY, KENTUCKY	PLAN DATE: 07-19-2022 SCALE: 1" = 20' PROJECT NO: 22-6502	CONSTRUCTION DOCUMENTS SHEET NO. C1.02
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Professional Engineer's Seal DATE REVISIONS NO. DATE DESCRIPTION	 BEI BRYANT ENGINEERING INC. Civil Engineering & Land Surveying 1505 FREEDOM STREET - 2ND FLOOR OWENSBORO, KENTUCKY 40246 (270) 665-2811	PLANS PREPARED FOR: DAVIESS COUNTY WATER DISTRICT PWSID KY09087 3400 Birch Road - Owensboro, KY 42301 www.davesswater.org • (270) 665-3594	SHEET TITLE: CONSTRUCTION PLAN WATERLINE RELOCATION LOCATED AT US HWY 431 & HILL BRIDGE ROAD (KY-298) DAVIESS COUNTY, KENTUCKY	PLAN DATE: 07-19-2022	SCALE: 1" = 20'	PROJECT NO: 22-6502	CONSTRUCTION DOCUMENTS SHEET NO. C1.03
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Professional Engineer's Seal DATE: _____ SIGNATURE: _____	REVISIONS <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>NO.</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </table>	NO.	DATE	DESCRIPTION													PLANS PREPARED BY:  (270) 665-2811 1505 BARKCROFT STREET • KENTUCKY 40301 Civil Engineering & Land Surveying	PLANS PREPARED FOR: DAVIESS COUNTY WATER DISTRICT PWSID K709087 3400 Brith Road • Owensboro, KY 42301 www.davieswater.org • (270) 653-5594	SHEET TITLE: CONSTRUCTION PLAN PROJECT TITLE: WATERLINE RELOCATION HILL BRIDGE ROAD (KY-298) LOCATED AT US HWY 431 & DAVIESS COUNTY, KENTUCKY	PLAN DATE: 07-19-2022 SCALE: 1" = 20' PROJECT NO: 22-6502 CONSTRUCTION DOCUMENTS SHEET NO.: C1.04
NO.	DATE	DESCRIPTION																		



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Professional Engineer's Seal

NO.	DATE	DESCRIPTION


NO.	DATE	DESCRIPTION

PLANS PREPARED BY:



(270) 665-2811
1585 HARRISON STREET - P.O. BOX 2182
OWENSBORO, KENTUCKY 40241
Civil Engineering & Land Surveying

PLANS PREPARED FOR:



DAVISS COUNTY
WATER DISTRICT
PWSID K709087
3400 Bird Road - Owensboro, KY 42301
www.davisswater.org • (270) 665-9394

SHEET TITLE:
KYTC CROSS SECTIONS
STA. 12+00 - STA. 15+00
WATERLINE RELOCATION
HILL BRIDGE ROAD (KY-298)
LOCATED AT US HWY 431 &
DAVISS COUNTY, KENTUCKY

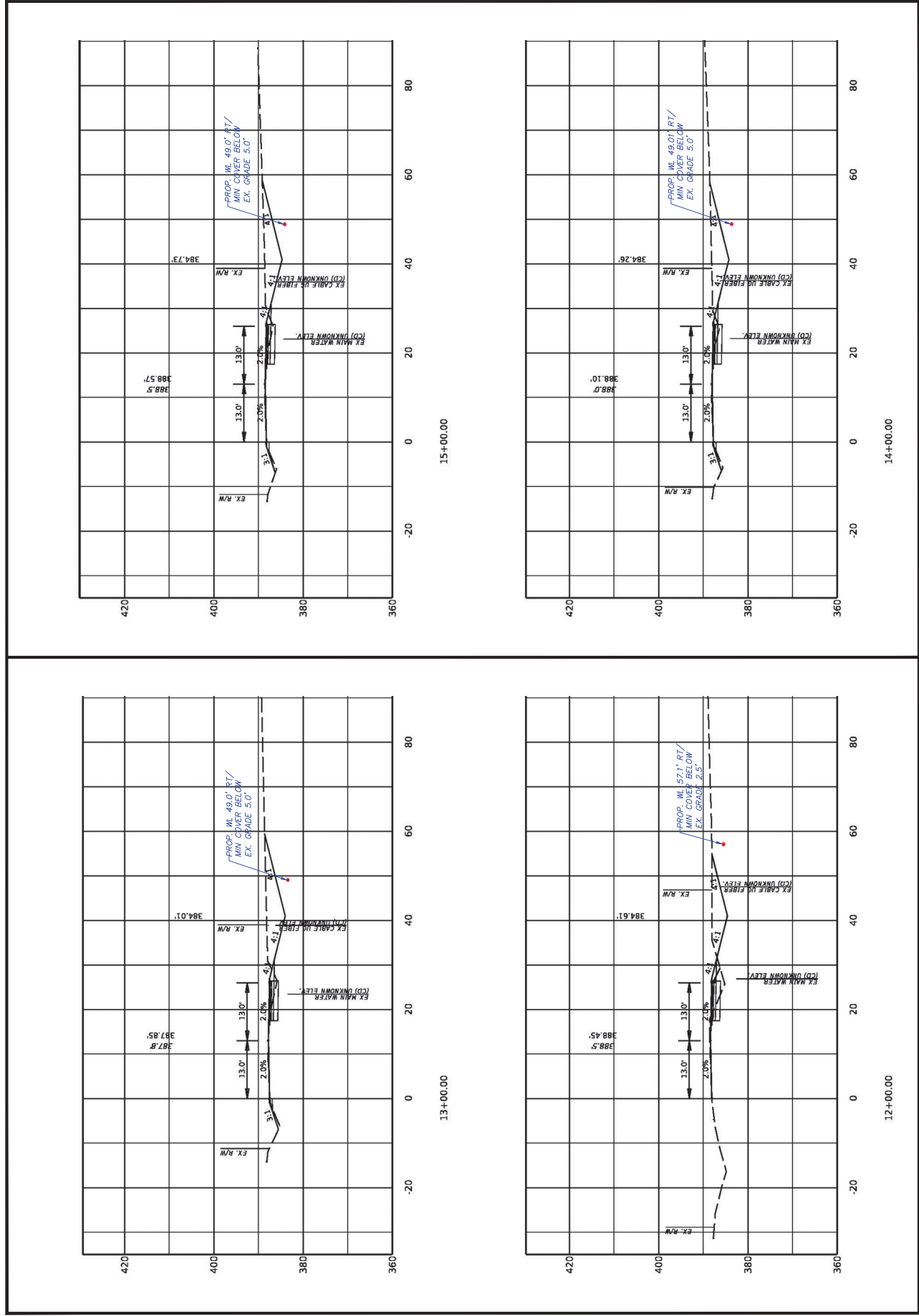
PLAN DATE:
07-19-2022

SCALE:
1" = 10'

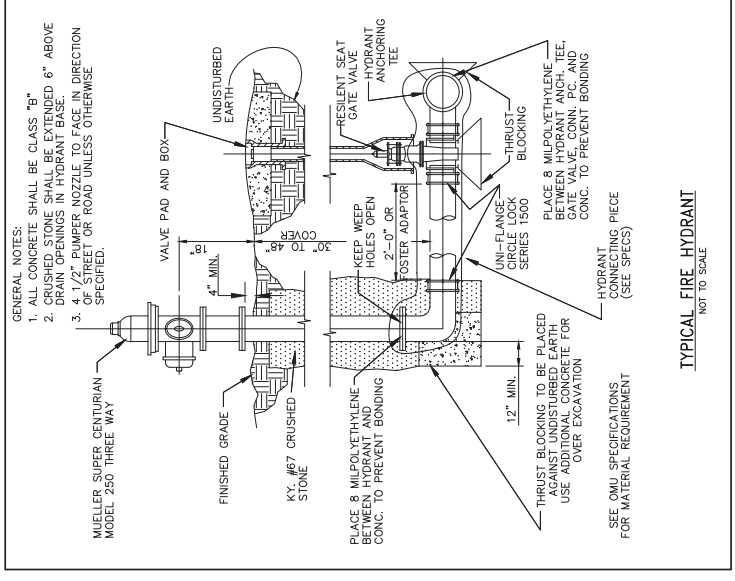
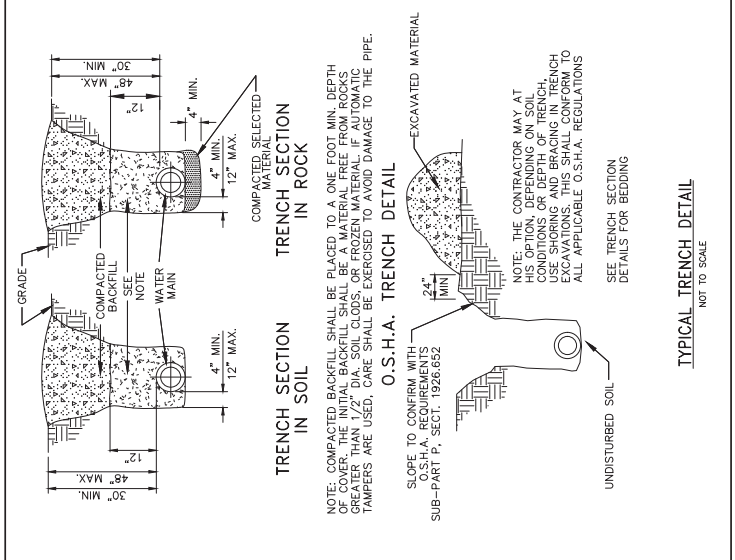
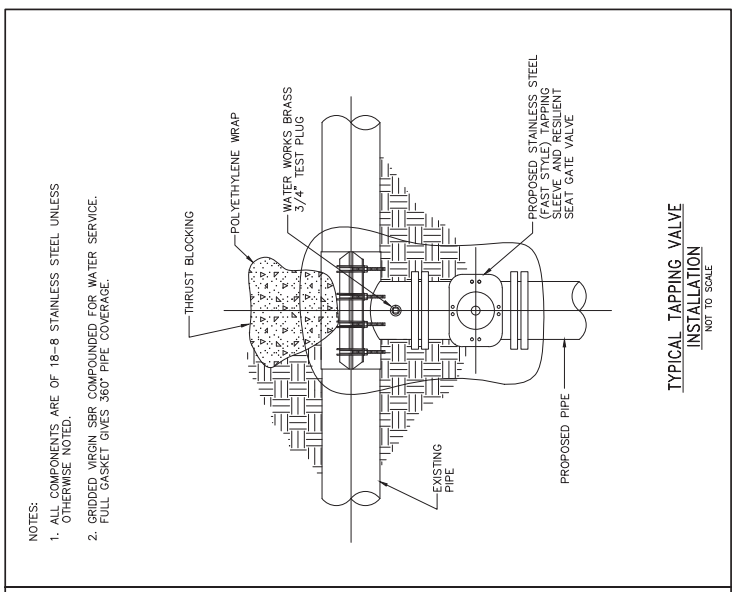
PROJECT NO:
22-6502

CONSTRUCTION DOCUMENTS

SHEET NO:
C2.01



Professional Engineer's Seal DATE SIGNATURE	REVISIONS NO. DATE DESCRIPTION	 BRYANT ENGINEERING INC. Civil Engineering & Land Surveying 1555 FRENCHBROOK TRAIL • SUITE 2182 OWENSBORO, KENTUCKY 40246 (270) 665-2811	PLANS PREPARED FOR: DAVIESS COUNTY WATER DISTRICT PWSID KY09087 3400 Bird Road • Owensboro, KY 42301 www.davieswater.org • (270) 665-9594	SHEET TITLE: DAVIESS COUNTY WATER DISTRICT STANDARD DETAILS WATERLINE RELOCATION HILL BRIDGE ROAD (KY-298) LOCATED AT US HWY 431 & DAVIESS COUNTY, KENTUCKY	PLAN DATE: 07-19-2022 SCALE: NOT TO SCALE PROJECT NO: 22-6502 CONSTRUCTION DOCUMENTS SHEET NO. C3.01
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Professional Engineer's Seal

DATE	
SIGNATURE	

NO.	DATE	DESCRIPTION

PLANS PREPARED BY:

1515 HENRIKSON DRIVE • BOX 2182
OWENSBORO, KENTUCKY 40246
(270) 665-2811

PLANS PREPARED FOR:

3400 BRIDLE ROAD • OWENSBORO, KY 42301
www.davisswater.org • (270) 665-9394

SHEET TITLE:
STANDARD DETAILS
DAVISS COUNTY WATER DISTRICT
WATERLINE RELOCATION
LOCATED AT US HWY 431 &
HILL BRIDGE ROAD (KY-298)
DAVISS COUNTY, KENTUCKY

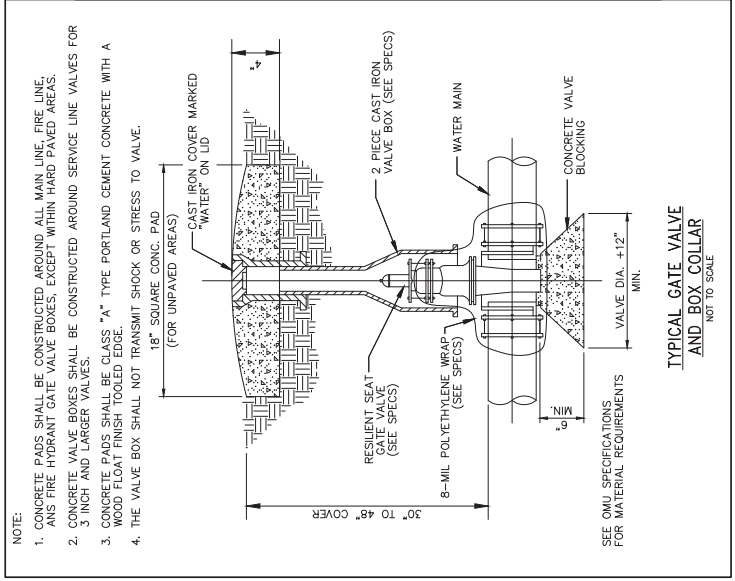
PLAN DATE:
07-19-2022

SCALE:
NOT TO SCALE

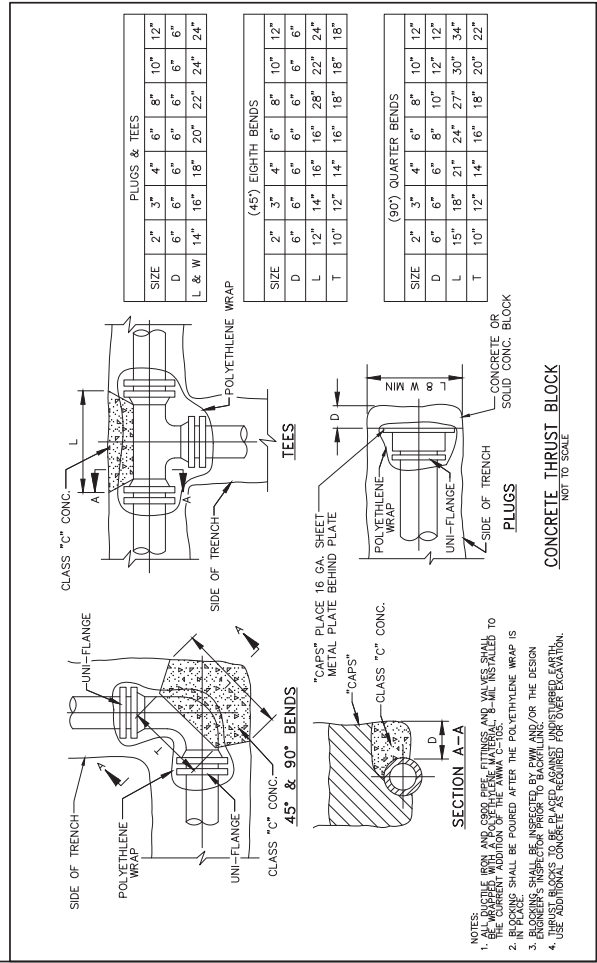
PROJECT NO.:
22-6502

CONSTRUCTION DOCUMENTS

SHEET NO.:
C3.02

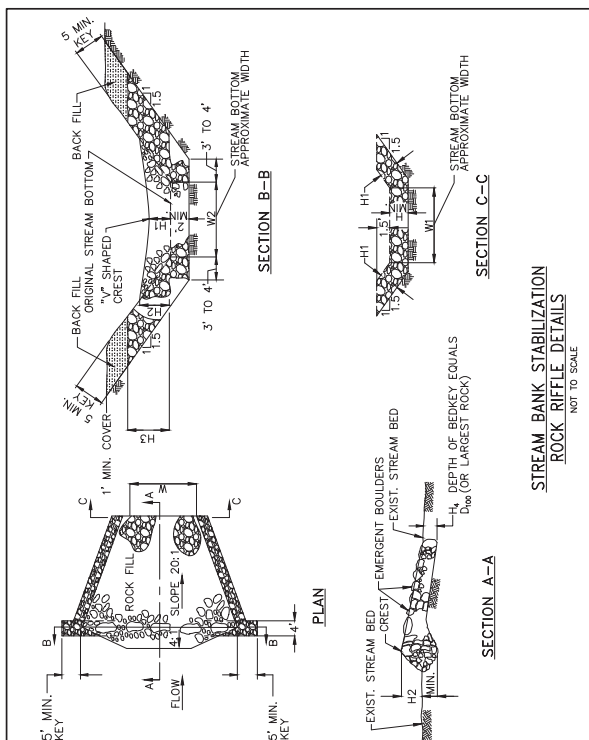


- NOTE:
1. CONCRETE PADS SHALL BE CONSTRUCTED AROUND ALL MAIN LINE, FIRE LINE, AND FIRE HYDRANT GATE VALVE BOXES, EXCEPT WITHIN HARD PAVED AREAS.
 2. CONCRETE VALVE BOXES SHALL BE CONSTRUCTED AROUND SERVICE LINE VALVES FOR 3 INCH AND LARGER VALVES.
 3. CONCRETE PADS SHALL BE CLASS "A" TYPE PORTLAND CEMENT CONCRETE WITH A WOOD FLOAT FINISH TOoled EDGE.
 4. THE VALVE BOX SHALL NOT TRANSMIT SHOCK OR STRESS TO VALVE.

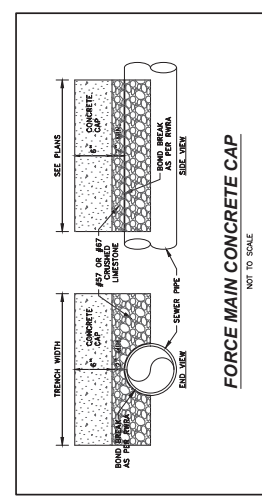


- NOTES:
1. ALL BLOCKS WITH AN OPEN TOP, PERKINS, TURNER, AND VALVES SHALL TO BE THE CURRENT ADDITION OF THE AWWA C-108.
 2. IF PAVED, SHALL BE POURED AFTER THE POLYETHYLENE WRAP IS LAPPED.
 3. BLOCKS SHALL BE REINFORCED TO BLOCK AND/OR THE DESIGN.
 4. THRUST BLOCKS TO BE PLACED AGAINST UNDISTURBED EARTH. USE ADDITIONAL CONCRETE AS REQUIRED FOR OVER EXCAVATION.

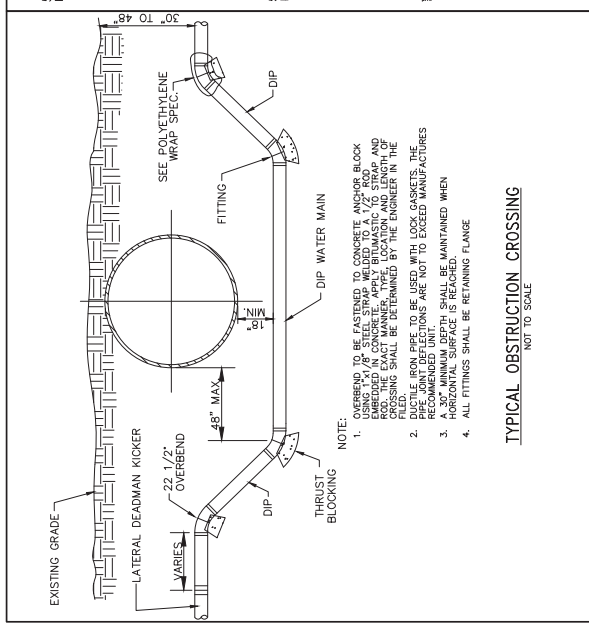
Professional Engineer's Seal DATE SIGNATURE	REVISIONS NO. DATE DESCRIPTION	PLANS PREPARED BY: 1505 FRENCH TRAIL • SUITE 100 • BOX 2182 OWENSBORO, KENTUCKY 40246 (270) 665-2811	PLANS PREPARED FOR: 3400 Bird Road • Owensboro, KY 42301 www.davisswater.org • (270) 683-9394	SHEET TITLE: STANDARD DETAILS DAVISS COUNTY WATER DISTRICT WATERLINE RELOCATION HILL BRIDGE ROAD (KY-298) LOCATED AT US HWY 431 & DAVISS COUNTY, KENTUCKY	PLAN DATE: 07-19-2022 SCALE: NOT TO SCALE PROJECT NO: 22-6502 CONSTRUCTION DOCUMENTS SHEET NO. C3.03
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STREAM BANK STABILIZATION
ROCK RIFLE DETAILS
NOT TO SCALE

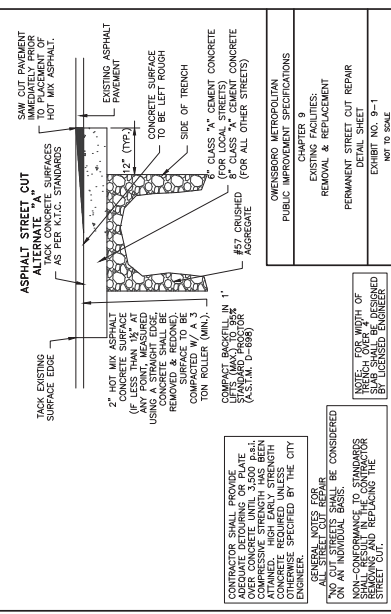


FORCE MAIN CONCRETE CAP
NOT TO SCALE



TYPICAL OBSTRUCTION CROSSING
NOT TO SCALE

- NOTE:
- OVERBEND TO BE FASTENED TO CONCRETE ANCHOR BLOCK EMBEDDED IN CONCRETE. APPLY BITUMASTIC TO STRAP AND CROSSING SHALL BE MAINTAINED IN THE ANGLE OF THE FILED.
 - IRON PIPE TO BE USED WITH LOCK WASHERS. THE PIPE JOINT DEFLECTIONS ARE NOT TO EXCEED MANUFACTURER'S RECOMMENDATION. SHALL BE MAINTAINED WHEN HORIZONTAL SURFACE IS REACHED.
 - HORIZONTAL SURFACE SHALL BE RETAINING FLANGE.
 - ALL FITTINGS SHALL BE RETAINING FLANGE.



ASPHALT STREET CUT
ALTERNATE 'A'
NOT TO SCALE

CONTRACTOR SHALL PROVIDE ADEQUATE DETOURING OR PLATE AHEAD OF STREET CUT. HIGH EARLY STRENGTH COMPRESSIVE STRENGTH HAS BEEN OBTAINED. HIGH EARLY STRENGTH OTHERWISE SPECIFIED BY THE CITY ENGINEER.

ASBESTOS VEHICLES SHALL BE CONSIDERED ON ANY INDIVIDUAL BLOCK.

NON-COMFORMANCE TO STANDARDS SHALL BE REMOVED AND REPLACED BY LICENSED ENGINEER.

OWENSBORO METROPOLITAN PUBLIC IMPROVEMENT SPECIFICATIONS
CHAPTER 9
STREETS AND SIDEWALKS
REMOVAL & REPLACEMENT
PERMANENT STREET CUT REPAIR
EXHIBIT NO. 9-1
NOT TO SCALE

Special Note for Daviess County

SYP 2-9022.00

KY 298 Improvements at Southern Oaks Elementary School.

Project completion date is July 30, 2023 with no lane closures between 7AM-8 AM and 1:45PM-2:45PM while school is in session).



KENTUCKY TRANSPORTATION CABINET
Department of Highways
DIVISION OF RIGHT OF WAY AND UTILITIES

TC 62-227
Rev. 05/2019
Page 1 of 1

CONSENT & RELEASE

COUNTY	ITEM NO.	PARCEL	NAME
Daviess	2-9022	n/a	DAVISS COUNTY SCHOOL DISTRICT FINANCE CORPORATION
PROJECT NO.	FEDERAL NUMBER	██████████ Elementary School PROJECT	
		KY 298 improvements at Southern Oaks Elementary School	

WHEREAS, the Transportation Cabinet, Commonwealth of Kentucky, finds it necessary to do the following work within, along, and/or adjacent to the existing right of way and has requested permission to:
widen the roadway, tie-in in the entrances, and ditch relocation and construction for Southern Oaks Elementary.

See attached exhibit "A" plan sheets.

On the Real Property of Property Owner(s): DAVIESS COUNTY SCHOOL DISTRICT FINANCE CORPORATION

Address of Property where work is to be done: Southern Oaks Elementary, 7525 US-431, Utica, KY 42376

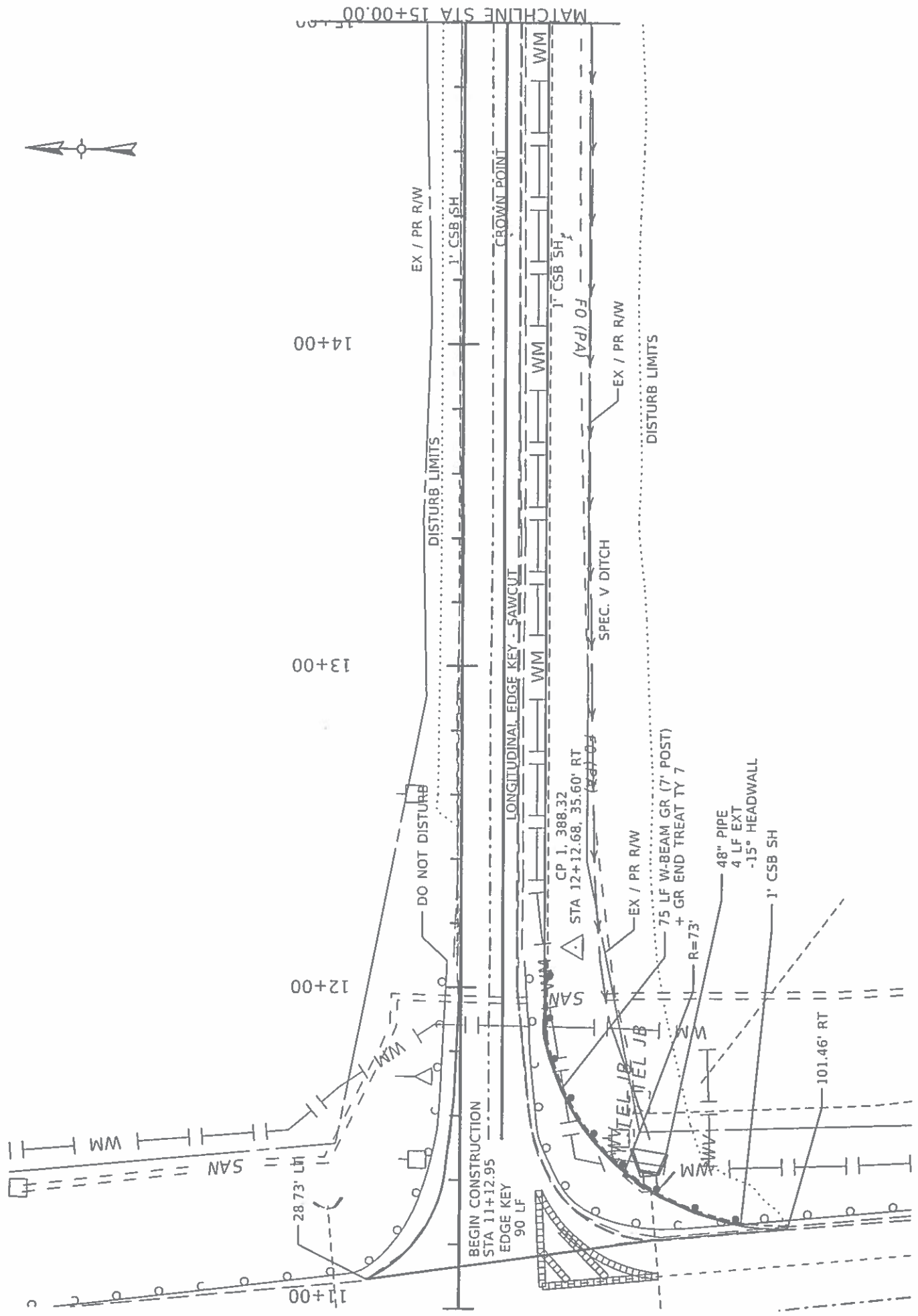
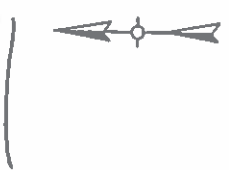
WHEREAS, the Transportation Cabinet is willing to maintain the property owner's reasonable access or other property rights, the above mentioned property owner(s) are voluntarily allowing the Transportation Cabinet to enter upon the above referenced property and do work set out above;

The Transportation Cabinet agrees that reasonable care will be taken by itself and its authorized contractors to avoid damage during this operation and to correct, within reason, any damage done to the property.

I hereby agree that I will assert no claim for damages against the Transportation Cabinet by reason of said work, but these presents shall be forever barred.

This Consent and Release was signed on the 11 day of July 20 22.

SIGNATURES OF AGENTS FOR TRANSPORTATION CABINET	SIGNATURES OF PROPERTY OWNERS

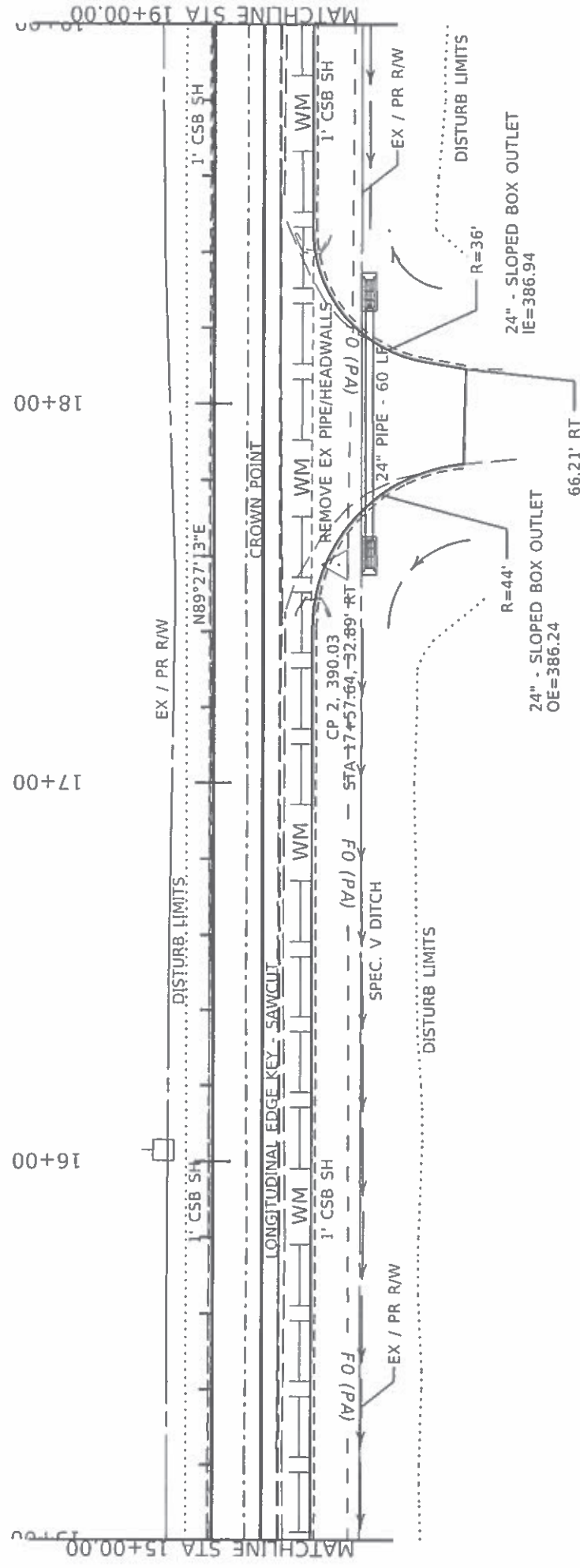
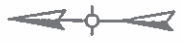


ITEM NO.	COUNTY OF
02-9022.00	DAVISS
SHEET NO.	R003

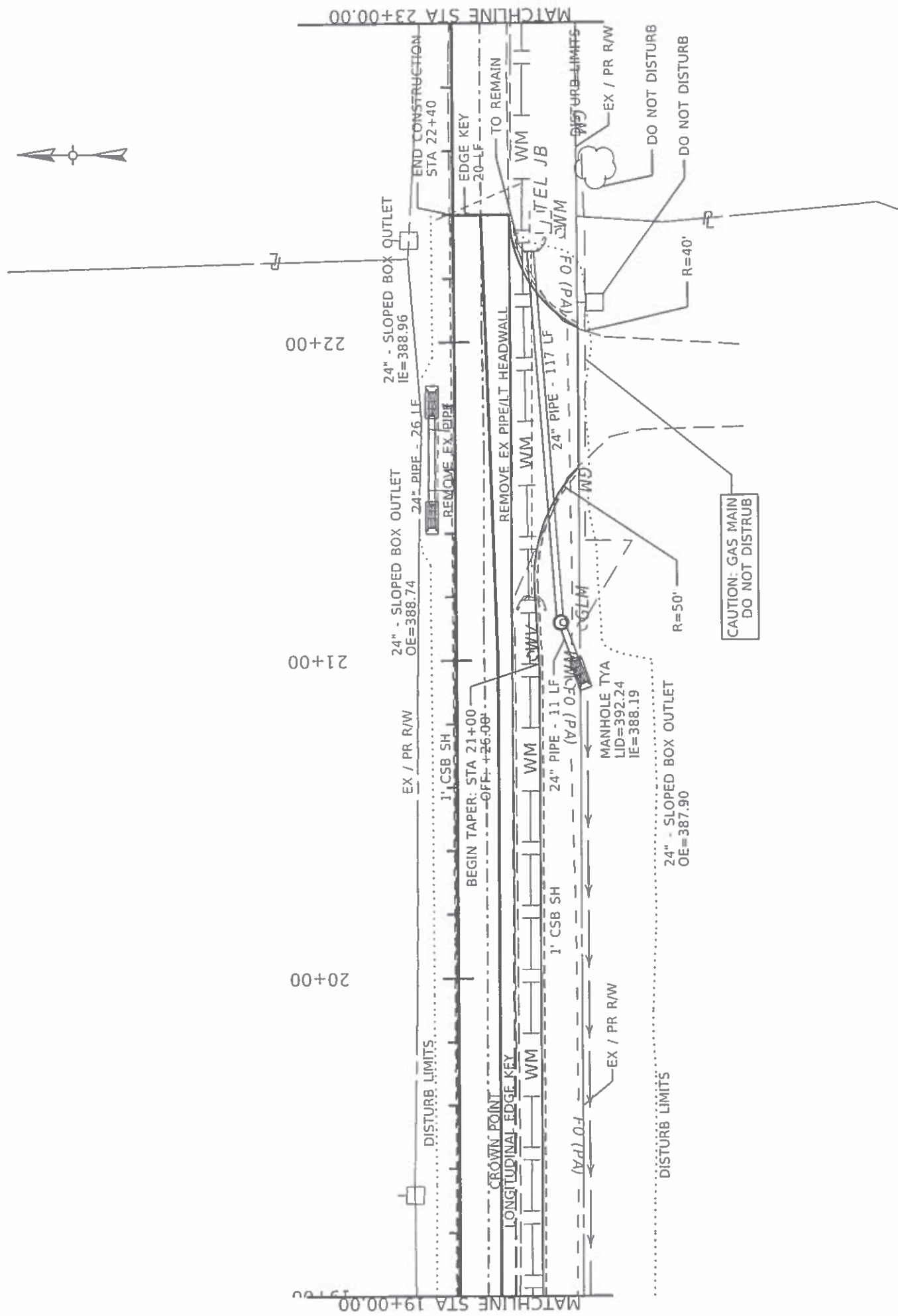


DRAWING TITLE: PLAN SHEET
STA 11+00 TO STA 15+00

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS



COMMONWEALTH OF KENTUCKY DEPARTMENT OF HIGHWAYS	DRAWING TITLE: PLAN SHEET STA 15+00 TO STA 19+00		COUNTY OF DAVIESS
	USER: chrisc.smith		
SCALE: 1"=40'		SHEET NO. R004	



ITEM NO.	02-9022.00	COUNTY OF	DAVISS
SHEET NO.	005		



DRAWING TITLE: PLAN SHEET
STA 19+00 TO STA 22+40

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

USER: chris.smith

OpenRoads Designer v10.15.2.267

SPECIAL NOTE FOR NON-TRACKING TACK COAT

1. DESCRIPTION AND USEAGE. This specification covers the requirements and practices for applying a non-tracking tack asphalt coating. Place this material on the existing pavement course, prior to placement of a new asphalt pavement layer. Use when expedited paving is necessary or when asphalt tracking would negatively impact the surrounding area. This material is not suitable for other uses. Ensure material can “break” within 15 minutes under conditions listed in 3.2.
2. MATERIALS, EQUIPMENT, AND PERSONNEL.

2.1 Non-Tracking Tack. Provide material conforming to Subsection 2.1.1.

2.1.1 Provide a tack conforming to the following material requirements:

Property	Specification	Test Procedure
Viscosity, SFS, 77 ° F	20 – 100	AASHTO T 72
Sieve, %	0.3 max.	AASHTO T 59
Asphalt Residue ¹ , %	50 min.	AASHTO T 59
Oil Distillate, %	1.0 max.	AASHTO T 59
Residue Penetration, 77 ° F	0 - 30	AASHTO T 49
Original Dynamic Shear (G*/sin δ), 82 ° C	1.0 min.	AASHTO T 315
Softening Point, ° F	149 min.	AASHTO T 53
Solubility, %	97.5 min.	AASHTO T 44

¹ Bring sample to 212 °F over a 10-15 minute period. Maintain 212 °F for 15-20 minutes or until 30-40 mL of water has distilled. Continue distillation as specified in T59.

- 2.2. Equipment. Provide a distributor truck capable of heating, circulating, and spraying the tack between 170 °F and 180 °F. Do not exceed 180 °F. Circulate the material while heating. Provide the correct nozzles that is recommend by the producer to ensure proper coverage of tack is obtained. Ensure the bar can be raised to between 14” and 18” from the roadway.
- 2.3. Personnel. Ensure the tack supplier has provided training to the contractor on the installation procedures for this product. Make a technical representative from the supplier available at the request of the Engineer.

3. CONSTRUCTION.

3.1 Surface Preparation. Prior to the application of the non-tracking tack, ensure the pavement surface is thoroughly dry and free from dust or any other debris that would inhibit adhesion. Clean the surface by scraping, sweeping, and the use of compressed air. Ensure this preparation process occurs shortly before application to prevent the return of debris on to the pavement. If rain is expected within one hour after application, do not apply material. Apply material only when the surface is dry, and no precipitation is expected.

3.2 Non-tracking Tack Application. Placement of non-tracking tack is not permitted from October 1st to May 15th. When applying material, ensure the roadway temperature is a minimum of 40°F and rising. Prior to application, demonstrate competence in applying the tack according to this note to the satisfaction of the Engineer. Heat the tack in the distributor to between 170 – 180 °F. After the initial heating, between 170 – 180 °F, the material may be sprayed between 165 °F and 180 °F. Do not apply outside this temperature range. Apply material at a minimum rate of 0.70 pounds (0.08 gallons) per square yard. Ensure full coverage of the material on the pavement surface. Full coverage of this material is critical. Increase material application rate if needed to achieve full coverage. Schedule the work so that, at the end of the day's production, all non-tracking tack is covered with the asphalt mixture. If for some reason the non-tracking tack cannot be covered by an asphalt mixture, ensure the non-tracking tack material is clean and reapply the non-tracking tack prior to placing the asphalt mixture. Do not heat material more than twice in one day.

3.3 Non-tracking Tack Certification. Furnish the tack certification to the Engineer stating the material conforms to all requirements herein prior to use.

3.4 Sampling and Testing. The Department will require a sample of non-tracking tack be taken from the distributor at a rate of one sample per 15,000 tons of mix. Take two 1 gallon samples of the heated material and forward the sample to the Division of Materials for testing within 7 days. Ensure the product temperature is between 170 and 180 °F at the time of sampling.

4. MEASUREMENT. The Department will measure the quantity of non-tracking tack in tons. The Department will not measure for payment any extra materials, labor, methods, equipment, or construction techniques used to satisfy the requirements of this note. The Department will not measure for payment any trial applications of non-tracking tack, the cleaning of the pavement surface, or furnishing and placing the non-tracking tack. The Department will consider all such items incidental to the non-tracking tack.
5. PAYMENT. The Department will pay for the non-tracking tack at the Contract unit bid price and apply an adjustment for each manufacturer's lot of material based on the degree of compliance as defined in the following schedule. Non-tracking tack will not be permitted for use from October 1st to May 15th. During this timeframe, the department will allow the use of an approved asphalt emulsion in lieu of a non-tracking tack product but will not adjust the unit bid price of the material. When a sample fails on two or more tests, the Department may add the deductions, but the total deduction will not exceed 100 percent.

Non-Tracking Tack Price Adjustment Schedule						
Test	Specification	100% Pay	90% Pay	80% Pay	50% Pay	0% Pay
Viscosity, SFS, 77 ° F	20 – 100	19 - 102	17 - 18	15 - 16	14	≤13
			103 - 105	106 - 107	108 - 109	≥ 110
Sieve, %	0.30 max.	≤ 0.40	0.41 - 0.50	0.51 - 0.60	0.61 - 0.70	≥ 0.71
Asphalt Residue, %	50 min.	≥49.0	48.5 – 48.9	48.0 – 48.4	47.5-47.9	≤ 47.4
Oil Distillate, %	1.0 max.	≤1.0	1.1-1.5	1.6 - 1.7	1.8-1.9	>2.0
Residue Penetration, 77 ° F.	30 max.	≤ 31	32 - 33	34 - 35	36 - 37	≥ 38
Original Dynamic Shear (G*/sin δ), 82 ° C	1.0 min.	≥0.95	0.92 – 0.94	0.90 – 0.91	0.85 - 0.89	≤ 0.84
Softening Point, ° F	149 min.	≥145	142 - 144	140 - 141	138 - 139	≤ 137
Solubility, %	97.5 min.	≥ 97.0	96.8 – 96.9	96.6 – 96.7	96.4 – 96.5	≤ 96.3

<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
24970EC	Asphalt Material for Tack Non-Tracking	Ton

Revised: May 23, 2022



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

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

RIGHT OF WAY CERTIFICATION

<input checked="" type="checkbox"/>	Original	<input type="checkbox"/>	Re-Certification	RIGHT OF WAY CERTIFICATION
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ITEM #	COUNTY	PROJECT # (STATE)	PROJECT # (FEDERAL)
2-9022.00	Daviess	1100 FD04 030 1348001D	N/A

PROJECT DESCRIPTION

Intersection radii and minor widening at Southern Oaks Elementary School on Hill Bridge Road.

No Additional Right of Way Required

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.

Condition # 1 (Additional Right of Way Required and Cleared)

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.

Condition # 2 (Additional Right of Way Required with Exception)



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

Condition # 3 (Additional Right of Way Required with Exception)

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	EXCEPTION (S) Parcel #	ANTICIPATED DATE OF POSSESSION WITH EXPLANATION
Number of Parcels That Have Been Acquired		
Signed Deed		
Condemnation		
Signed ROE		

Notes/ Comments (Text is limited. Use additional sheet if necessary.)

LPA RW Project Manager		Right of Way Supervisor	
Printed Name		Printed Name	
Signature		Signature	
Date		Date	Digitally signed by Jennifer K Cox Date: 2022.07.18 08:13:48 -05'00'
Right of Way Director		FHWA	
Printed Name		Printed Name	
Signature		Signature	
Date	Kelly Divine Digitally signed by Kelly Divine Date: 2022.07.18 09:58:07 -05'00'	Date	

UTILITIES AND RAIL CERTIFICATION NOTE

**Item 2-9022
Daviness County
INTERSECTION RADII AND MINOR WIDENING AT SOUTHERN OAKS ELEMENTARY
(2020BOP) (2021SCHSAF)**

GENERAL PROJECT NOTE ON UTILITY PROTECTION

AT&T has facilities to be relocated by 12/1/2022

NOTE: DO NOT DISTURB THE FOLLOWING UTILITIES LOCATED WITHIN THE PROJECT DISTURB LIMITS

N/A

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

**THE FOLLOWING COMPANIES ARE RELOCATING/ADJUSTING THEIR UTILITIES WITHIN THE PROJECT LIMITS
AND WILL BE COMPLETE PRIOR TO CONSTRUCTION**

N/A

**THE FOLLOWING COMPANIES HAVE FACILITIES TO BE RELOCATED/ADJUSTED BY THE COMPANY OR THE
COMPANY'S SUBCONTRACTOR AND IS TO BE COORDINATED WITH THE ROAD CONTRACT**

AT&T will complete relocation of their facilities by 12/1/2022

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

Daviness County Water District

THE FOLLOWING RAIL COMPANIES HAVE FACILITIES IN CONJUNCTION WITH THIS PROJECT AS NOTED

No Rail Involved Minimal Rail Involved (See Below) Rail Involved (See Below)

UTILITIES AND RAIL CERTIFICATION NOTE

Item 2-9022
Daviess County
INTERSECTION RADII AND MINOR WIDENING AT SOUTHERN OAKS ELEMENTARY
(2020BOP) (2021SCHSAF)

UNDERGROUND FACILITY DAMAGE PROTECTION – BEFORE YOU DIG

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. 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.

SPECIAL CAUTION NOTE – PROTECTION OF UTILITIES

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.

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

UTILITIES AND RAIL CERTIFICATION NOTE

Item 2-9022
Daviess County
INTERSECTION RADII AND MINOR WIDENING AT SOUTHERN OAKS ELEMENTARY
(2020BOP) (2021SCHSAF)

AREA UTILITIES CONTACT LIST

NOTE: The Utilities Contact List is provided as informational only, and may not be a complete list of all Utility Companies with facilities in the project area.

AT&T	Scott Roche	1340 E John Rowan Blvd., Bardstown, KY 40004 o 502.348.4528 m 502.827.4703 scott.roche@att.com
Daviess County Water	Brent Wigginton	3400 Bittel Rd, Owensboro, KY 42301 Phone: (270) 685-5594 bwigginton@daviesswater.org

GENERAL UTILITY NOTES AND INSTRUCTIONS APPLICABLE TO ALL UTILITY WORK MADE A PART OF THE ROAD CONSTRUCTION CONTRACT

The contractor should be aware the following utility notes and KYTC Utility Bid Item Descriptions shall supersede, replace and take precedence over any and all conflicting information that may be contained in utility owner supplied specifications contained in the contract, on plans supplied by the utility owner, or any utility owner specifications or information externally referenced in this contract.

Where information may have been omitted from these notes, bid item descriptions, utility owner supplied specifications or plans; the KYTC Standard Specifications for Road and Bridge Construction shall be referenced.

PROTECTION OF EXISTING UTILITIES

The existing utilities shown on the plans are shown as best known at the time the plans were developed and are to be used as a guide only by the Contractor. The Contractor shall use all means at his disposal to accurately locate all existing utilities, whether shown on the plans or not, prior to excavation. The contractor shall protect these utilities during construction. Any damage to existing utilities during construction that are shown or not shown on the plans shall be repaired at the Contractor's expense.

PREQUALIFIED UTILITY CONTRACTORS

Some utility owners may require contractors that perform relocation work on their respective facilities as a part of the road contract be prequalified or preapproved by the utility owner. **Utility contractors may be added via addendum if KYTC is instructed to do so by the utility owner. Potential contractors must seek prequalification from the utility owner. Any revisions must be sent from the utility owner to KYTC a minimum of one week prior to bid opening.** Those utility owners with a prequalification or preapproval requirement are as follows:

Daviess County Water District

Ernie Davis and Sons

Jerry Davis

270-926-1350

jerrysr@mindspring.com

Envision Contractors

Kevin Grant

270-316-5965

kgrant@envisionky.com

Brown Service Co.

Bob Brown

270-281-9216

brownserviceco@aol.com

Bobby Luttrell & Sons

270-298-7861

luttrellandsons@dishmail.net

The bidding contractor needs to review the above list and choose from the list of approved subcontractors at the end of these general notes as identified above before bidding. When the list of approved subcontractors is provided, only subcontractors shown on the following list(s) will be allowed to work on that utility as a part of this contract. In such instances, the utility subcontractor is not required to be prequalified with the KYTC Division of Construction Procurement.

IF A UTILITY SUPPLIED CONTRACTOR LIST IS NOT PROVIDED

When the above list of approved subcontractors for the utility work is not provided, the utility work can be completed by the prime contractor, or a prime contractor-chosen subcontractor. In such instances, the subcontractor shall be prequalified with the KYTC Division of Construction Procurement in the work type of "Utilities" (I33). Those who would like to become prequalified may contact the Division of Construction Procurement at (502) 564-3500. Please note: it could take up to 30 calendar days for prequalification to be approved. The prequalification does not have to be approved prior to the bid, but must be approved before the subcontract will be approved by KYTC and the work can be performed.

CONTRACT ADMINISTRATION RELATIVE TO UTILITY WORK

All utility work is being performed as a part of a contract administered by KYTC; there is not a direct contract between the utility contractor and utility owner. The KYTC Section Engineer is ultimately responsible for the administration of the road contract and any utility work included in the contract.

SUBMITTALS AND CORRESPONDENCE

All submittals and correspondence of any kind relative to utility work included in the road contract shall be directed to the KYTC Section Engineer, a copy of which may also be supplied to the utility owner by the contractor to expedite handling of items like material approvals and shop drawings. All approvals and correspondence generated by the utility owner shall be directed to the KYTC Section Engineer. The KYTC Section Engineer will relay any approvals or correspondence to the utility contractor as appropriate. At no time shall any direct communication between the utility owner and utility contractor without the communication flowing through the KYTC Section Engineer be considered official and binding under the contract.

ENGINEER

Where the word "Engineer" appears in any utility owner specifications included in this proposal, utility owner specifications included as a part of this contract by reference or on the utility relocation plans, it shall be understood the "Engineer" is the Kentucky Transportation Cabinet (KYTC) Section Engineer or designated representative and the utility owner engineer or designated representative jointly. Both engineers must mutually agree upon all decisions made with regard to the utility construction. The Transportation Cabinet, Section Engineer shall make all final decisions in all disputes.

INSPECTOR OR RESIDENT PROJECT REPRESENTATIVE

Where the word “Inspector” or “Resident Project Representative” appears in the utility specifications included in this proposal, utility owner specifications included as a part of this contract by reference or on the utility relocation plans, it shall be understood the “Inspector” or “Resident Project Representative” is the utility owner inspector and KYTC inspector jointly. The Transportation Cabinet, Section Engineer shall make all final decisions in all disputes.

NOTICE TO UTILITY OWNERS OF THE START OF WORK

One month before construction is to start on a utility, the utility contractor shall make notice to the KYTC Section Engineer and the utility owner of when work on a utility is anticipated to start. The utility contractor shall again make confirmation notice to the KYTC Section Engineer and the utility owner one week before utility work is to actually start.

UTILITY SHUTDOWNS

The Contractor shall not shut down any active and in-service mains, utility lines or services for any reason unless specifically given permission to do so by the utility owner. The opening and closing of valves and operating of other active utility facilities for main, utility line or utility service shut downs are to be performed by the utility owner unless specific permission is given to the contractor by the owner to make shutdowns. If and when the utility owner gives the contractor permission to shutdown mains, utility lines or utility services, the contractor shall do so following the rules, procedures and regulations of the utility owner. Any permission given by the utility owner to the contractor to shutdown active and in-service mains, utility lines or services shall be communicated to the KYTC Section Engineer by the utility owner that such permission has been given.

Notice to customers of utility shut downs is sometimes required to be performed by the utility contractor. The contractor may be required; but, is not limited to, making notice to utility customers in a certain minimum amount of time in advance of the shut down and by whatever means of communication specified by the utility owner. The means of communication to the customer may be; but is not limited to, a door hanger, notice by newspaper ad, telephone contact, or any combination of communication methods deemed necessary, customary and appropriate by the utility owner. The contractor should refer to the utility owner specifications for requirements on customer notice.

Any procedure the utility owner may require the contractor to perform by specification or plan note and any expense the contractor may incur to comply with the utility owner’s shut down procedure and notice to customers shall be considered an incidental expense to the utility construction.

CUSTOMER SERVICE AND LATERAL ABANDONMENTS When temporary or permanent abandonment of customer water, gas, or sewer services or laterals are necessary during relocation of utilities included in the contract, the utility contractor shall perform these abandonments as part of the contract as incidental work. No separate payment will be made for service line and lateral abandonments. The contractor shall provide all labor, equipment and materials to accomplish the temporary or permanent abandonment in accordance with the plans, specifications and/or as directed by the engineer. Abandonment may include, but is not limited to, digging down on a water or gas main at the tap to turn off the tap valve

or corporation stop and/or capping or plugging the tap, digging down on a sewer tap at the main and plugging or capping the tap, digging down on a service line or lateral at a location shown on the plans or agreeable to the engineer and capping or plugging, or performing any other work necessary to abandon the service or lateral to satisfactorily accomplish the final utility relocation.

STATIONS AND DISTANCES

All stations and distances, when indicated for utility placement in utility relocation plans or specifications, are approximate; therefore, some minor adjustment may have to be made during construction to fit actual field conditions. Any changes in excess of 6 inches of plan location shall be reviewed and approved jointly by the KYTC Section Engineer or designated representative and utility owner engineer or designated representative. Changes in location without prior approval shall be remedied by the contractor at his own expense if the unauthorized change creates an unacceptable conflict or condition.

RESTORATION

Temporary and permanent restoration of paved or stone areas due to utility construction shall be considered incidental to the utility work. No separate payment will be made for this work. Temporary restoration shall be as directed by the KYTC Section Engineer. Permanent restoration shall be “in-kind” as existing.

Restoration of seed and sod areas will be measured and paid under the appropriate seeding and sodding bid items established in the contract for roadway work.

BELOW ARE NOTES FOR WHEN “INST” ITEMS ARE IN THE CONTRACT MEANING THE UTILITY COMPANY IS PROVIDING CERTAIN MATERIALS FOR UTILITY RELOCATION

MATERIAL

Contrary to Utility Bid Item Descriptions, those bid items that have the text “**Inst**” at the end of the bid item will have the major components of the bid item provided by the utility owner. No direct payment will be made for the major material component(s) supplied by the utility company. All remaining materials required to construct the bid item as detailed in utility bid item descriptions, in utility specifications and utility plans that are made a part of this contract will be supplied by the contractor. The contractor’s bid price should reflect the difference in cost due to the provided materials.

The following utility owners have elected to provide the following materials for work under this contract:

All materials are to be supplied by the contractor per bid item descriptions, utility specifications and utility plans.

SECURITY OF SUPPLIED MATERIALS

If any utility materials are to be supplied by the utility owner, it will be the responsibility of the utility contractor to secure all utility owner supplied materials after delivery to the project site. The utility

contractor shall coordinate directly with the utility owner and their suppliers for delivery and security of the supplied materials. Any materials supplied by the utility owner and delivered to the construction site that are subsequently stolen, damaged or vandalized and deemed unusable shall be replaced with like materials at the contractor's expense.

Standard Water Bid Item Descriptions

W AIR RELEASE VALVE This bid item description shall apply to all air release valve installations of every size except those defined as “Special”. This item shall include the air release valve, main to valve connecting line or piping, manhole, vault, structure, access casting or doors, tapping the main, labor, equipment, excavation, proper backfill and restoration required to install the air release valve at the location shown on the plans or as directed in accordance with the specifications and standard drawings complete and ready for use. All air release/vacuum valves on a project shall be paid under one bid item regardless of size. No separate pay items will be established for size variations. Only in the case of the uniqueness of a particular air release valve would a separate bid item be established. Please refer to the Utility Company’s Specifications. If the Company does not have specifications, KYTC’s Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

BOLLARDS This item is for payment for furnishing and installing protective guard posts at above ground utility installations. A bollard may consist of, but not limited to, a steel post set in concrete or any other substantial post material. This item shall include all labor, equipment, and materials needed for complete installation of the bollard as specified by the utility owner specifications and plans. If the Company does not have specifications, KYTC’s Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

NOTE: A bid code for this item has been established in standard roadway bid items and shall be used for payment of this item. The bid code is 21341ND

W CAP EXISTING MAIN This item shall include the specified cap, concrete blocking and/or mechanical anchoring, labor, equipment, excavation, backfill, and restoration required to install the cap at the location shown on the plans or as directed in accordance with the specifications. This item is not to be paid on new main installations. This pay item is only to be paid to cap existing mains. Caps on new mains are incidental to the new main. Any and all caps on existing mains shall be paid under one bid item included in the contract regardless of size. No separate bid items will be established for size variations. Please refer to the Utility Company’s Specifications. If the Company does not have specifications, KYTC’s Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W DIRECTIONAL BORE Payment under this item is made whenever the plans or specifications specifically show directional boring is to be utilized in order to minimize the impact of open cut for the installation of water main under streets, creeks, and etc. Payment under this item shall include the specified bore pipe, labor, and equipment. No separate payment shall be made for bore pipe installed in the bore whether used as a carrier pipe or an encasement of a separate carrier pipe. This item shall also include pipe anchors at each end of the bore when specified to prevent the creep or contraction of the bore pipe. Carrier pipe installed within a bore pipe shall be paid separately under pipe items. Payment under this item shall not be size specific and no separate bid items will be established for size variations. The bore pipe sizes to be included under this item shall be as shown on the plans and/or in the specifications. Any and all directional bores in each contract shall be paid under one directional bore bid item included in the contract regardless of size. Please refer to the Utility Company’s Specifications. If the Company does not have specifications, KYTC’s Specifications shall be referenced. This item shall be paid LINEAR FEET (LF) when complete.

W ENCASUREMENT CONCRETE Includes all labor, equipment, excavation, concrete, reinforcing steel, backfill, restoration, and etc., to construct the concrete encasement of the water main as shown on the plans, and in accordance with the specifications and standard drawings. Payment under this item shall be in addition to the carrier pipe as paid under separate bid items. Carrier pipe is not included in this bid item. Any and all concrete encasement shall be paid under one bid item included in the contract regardless of the size of the carrier pipe or the volume of concrete or steel reinforcement as specified in the plans and specifications. No separate bid items will be established for size variations. Measurement of pay quantity shall be from end of concrete to end of concrete. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid LINEAR FEET (LF) when complete.

W ENCASUREMENT STEEL BORED This item shall include the steel encasement pipe size as specified on the plans and in the specifications, casing spacers, end seals, labor, and equipment to bore and install the encasement in accordance with the plans and specifications, complete and ready for use. The size shall be the measured internal diameter of the encasement pipe. The sizes of encasement to be paid under the size ranges specified in the bid items shall be as follows:

- Range 1 = All encasement sizes greater than 2 inches to and including 6 inches
- Range 2 = All encasement sizes greater than 6 inches to and including 10 inches
- Range 3 = All encasement sizes greater than 10 inches to and including 14 inches
- Range 4 = All encasement sizes greater than 14 inches to and including 18 inches
- Range 5 = All encasement sizes greater than 18 inches to and including 24 inches
- Range 6 = All encasement sizes greater than 24 inches

(Encasement sizes of 2 inches internal diameter or less shall not be paid separately; but, shall be considered incidental to the carrier pipe.) Payment under this bid item shall not include the carrier pipe. Carrier pipe shall be paid under a separate bid item. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid LINEAR FEET (LF) when complete.

W ENCASUREMENT STEEL OPEN CUT This item shall include the steel encasement pipe size as specified on the plans and in the specifications, casing spacers, end seals, labor, and equipment to open cut and install the encasement in accordance with the plans and specifications, complete and ready for use. The size shall be the measured internal diameter of the encasement pipe. The size encasement to be paid under the size ranges specified in the bid items shall be as follows:

- Range 1 = All encasement sizes greater than 2 inches to and including 6 inches
- Range 2 = All encasement sizes greater than 6 inches to and including 10 inches
- Range 3 = All encasement sizes greater than 10 inches to and including 14 inches
- Range 4 = All encasement sizes greater than 14 inches to and including 18 inches
- Range 5 = All encasement sizes greater than 18 inches to and including 24 inches
- Range 6 = All encasement sizes greater than 24 inches

(Encasement sizes of 2 inches internal diameter or less shall not be paid separately; but, shall be considered incidental to the carrier pipe.) Payment under this bid item shall not include the carrier pipe. Carrier pipe shall be paid under a separate bid item. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid LINEAR FEET (LF) when complete.

W FIRE HYDRANT ADJUST Includes all labor, equipment, excavation, materials, and backfill to adjust the existing fire hydrant using the fire hydrant manufacturer's extension kit for adjustments of 18" or less. Adjustments greater than 18" require anchoring couplings and vertical bends to adjust to grade. The Contractor will supply and install all anchor couplings, bends, fire hydrant extension, concrete blocking, restoration, granular drainage material, etc. needed to adjust the fire hydrant complete and ready for use as shown on the plans, and in accordance with the specifications and standard drawings. This also includes allowing for the utility owner inspector to inspect the existing fire hydrant prior to adjusting, contractor returning unusable fire hydrants to the utility owner warehouse and picking up a replacement hydrant. No additional payment will be made for rock excavation. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete and ready for use.

W FIRE HYDRANT ASSEMBLY Includes all labor, equipment, new fire hydrant, isolating valve and valve box, concrete pad around valve box (when specified in specifications or plans), piping, anchoring tee, anchoring couplings, fire hydrant extension, excavation, concrete blocking, granular drainage material, backfill, and restoration, to install a new fire hydrant assembly as indicated on plans and on standard drawings complete and ready for use. No additional payment will be made for rock excavation. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W FIRE HYDRANT RELOCATE This item includes all labor and equipment to remove the existing fire hydrant from its existing location and reinstalling at a new location. This item shall include a new isolating valve and valve box, concrete pad around valve box (when required in specifications or plans), new piping, new anchoring tee, anchoring couplings, fire hydrant extensions, concrete blocking, restoration, granular drainage material, excavation, and backfill as indicated on plans, specifications, and on standard drawings complete and ready for use. This item shall also include allowing for utility owner inspector to inspect the existing fire hydrant prior to reuse, contractor returning unusable fire hydrants to the utility owner warehouse and picking up a replacement hydrant for use, if the existing fire hydrant is determined unfit for reuse. No additional payment will be made for rock excavation. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W FIRE HYDRANT REMOVE This bid item includes removal of an abandoned fire hydrant, isolating valve, and valve box to the satisfaction of the engineer. The removed fire hydrant, isolating valve and valve box shall become the property of the contractor for his disposal as salvage or scrap. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W FLUSH HYDRANT ASSEMBLY This item shall include the flushing hydrant assembly, service line, tapping the main, labor, equipment, excavation, backfill, and restoration required to install the flush hydrant at the location shown on the plans and in accordance with the specifications and standard drawings, complete and ready for use. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W FLUSHING ASSEMBLY This item shall include the flushing device assembly, service line, meter box and lid, tapping the main, labor, equipment, excavation, backfill, and restoration required to install the

flushing device at the location shown on the plans and in accordance with the specifications and standard drawings, complete and ready for use. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W LEAK DETECTION METER This item is for payment for installation of a water meter at main valve locations where shown on the plans for detection of water main leaks. The meter shall be of the size and type specified in the plans or specifications. This item shall include all labor, equipment, meter, meter box or vault, connecting pipes between main and meter, main taps, tapping saddles, casting, yoke, and any other associated material needed for installation of a functioning water meter in accordance with the plans and specifications, complete and ready for use. No separate payment will be made under any other contract item for connecting pipe or main taps. Any and all leak detection meters shall be paid under one bid item included in the contract regardless of size. No separate bid items will be established for size variations. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete and ready for use.

W LINE MARKER This item is for payment for furnishing and installing a water utility line marker as specified by the utility owner specifications and plans. A line marker may consist of a post or monument of whatever materials specified and shall include markings and/or signage on same as specified by plans or specifications. This item shall include all labor, equipment, and materials needed for complete installation of the marker. This item shall be paid EACH (EA) when complete.

W MAIN POINT RELOCATE This item is intended for payment for horizontal and/or vertical relocation of a short length of an existing main at the locations shown on the plans. This bid item is to be used to relocate an existing water main at point locations such as to clear a conflict at a proposed drainage structure, pipe or any other similar short relocation situation, and where the existing pipe material is to be reused. The contractor shall provide any additional pipe or fitting material needed to complete the work as shown on the plans and specifications. The materials provided shall be of the same type and specification as those that exist. Substitution of alternative materials shall be approved by the engineer in advance on a case by case basis. New polyethylene wrap is to be provided (if wrap exists or is specified in the specifications to be used). If it is necessary that the pipe be disassembled for relay, payment under this item shall also include replacement of joint gaskets as needed. Bedding and backfill shall be provided and performed the same as with any other pipe installation as detailed in the plans and specifications. Payment under this item shall be for each location requiring an existing main to be relocated horizontally or vertically regardless of pipe size or relocation length. No separate pay items will be established for pipe size variations or relocation segment length variations. Water Main Relocate shall not be paid on a linear feet basis; but, shall be Paid EACH (EA) at each location when complete and placed in service. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced.

W METER This item is for payment for installation of all standard water meters of all sizes 2 inches ID or less as specified on the plans. This item shall include all labor, equipment, meter, meter box, casting, yoke, and any other associated material needed for installation of a functioning water meter in accordance with the plans and specifications, complete and ready for use. This item shall include connections to the new or existing water service line. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W METER ADJUST This item includes all labor, equipment, excavation, materials, backfill, restoration, and etc., to adjust the meter casting to finished grade (whatever size exists) at the location shown on the plans or as directed in accordance with the specifications and standard drawings complete and ready for use. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W METER RELOCATE This item includes all labor, equipment, excavation, additional fittings, disinfection, testing, restoration, and etc., to relocate the existing water meter (whatever size exists), meter yoke, meter box, casting, and etc., from its old location to the location shown on the plans or as directed, in accordance with the specifications and standard drawings complete and ready for use. The new service pipe (if required) will be paid under short side or long side service bid items. Any and all meter relocations of 2 inches or less shall be paid under one bid item included in the contract regardless of size. Each individual relocation shall be paid individually under this item; however, no separate bid items will be established for meter size variations of 2 inches ID or less. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W METER VAULT SIZE RANGE 1 OR 2 This item is for payment for installation of an underground structure for housing of a larger water meter, fittings, and valves as required by the plans and specifications. This item shall include all labor, equipment, excavation, concrete, manhole castings or access doors, the specified meter(s) valve(s), all piping, and fitting materials associated with installing a functioning meter and vault in accordance with the plans, standard drawings, and specifications, complete and ready for use. The size shall be the measured internal diameter of the meter and piping to be installed. The size meter vault to be paid under size 1 or 2 shall be as follows:

Size Range 1 = All meter and piping sizes greater than 2 inches up to and including 6 inches
Size Range 2 = All meter and piping sizes greater than 6 inches

This item shall be paid EACH (EA) when complete. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced.

W METER/FIRE SERVICE COMBO VAULT This item is for payment for installation of an underground structure for housing of a water meter and fire service piping, fittings, and valves as required by the plans and specifications. This item shall include all labor, equipment, excavation, concrete, manhole castings or access doors, the specified meter(s), valve(s), all piping, and fitting materials associated with installing a functioning meter and fire service vault in accordance with the plans and specifications, complete and ready for use. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W METER WITH PRESSURE REDUCING VALVE (PRV) This item is for payment for installation of all standard water meters with pressure reducing valves (PRV) of all sizes 2 inches ID or less as specified on the plans. This item shall include all labor, equipment, meter, PRV, meter box, casting, yoke, and any other associated material needed for installation of a functioning water meter with PRV in accordance with the plans and specifications, complete and ready for use. This item shall include connections to the new or existing water service line. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced.

This item shall be paid EACH (EA) when complete.

W PIPE This description shall apply to all PVC, ductile iron, and polyethylene/plastic pipe bid items of every size and type to be used as water main, except those bid items defined as “Special”. This item includes the pipe specified by the plans and specifications, all fittings (including, but not limited to, bends, tees, reducers, plugs, and caps), tracing wire with test boxes (if required by specification), polyethylene wrap (when specified), labor, equipment, excavation, bedding, restoration, testing, sanitizing, backfill, and etc., required to install the specified new pipe and new fittings at the locations shown on the plans, or as directed, in accordance with the specifications and standard drawings complete and ready for use. No additional payment will be made for rock excavation. This bid item includes material and placement of flowable fill under existing and proposed pavement, and wherever else specified on the plans or in the specifications. **This item shall include all temporary and permanent materials and equipment required to pressure test and sanitize mains including, but not limited to, pressurization pumps, hoses, tubing, gauges, main taps, saddles, temporary main end caps or plugs and blocking, main end taps for flushing, chlorine liquids or tablets for sanitizing, water for testing/sanitizing and flushing (when not supplied by the utility), chlorine neutralization equipment and materials, and any other items needed to accomplish pressure testing and sanitizing the main installation.** This item shall also include pipe anchors, at each end of polyethylene pipe runs when specified to prevent the creep or contraction of the pipe. Measurement of quantities under this item shall be through fittings, encasements, and directional bores (only when a separate carrier pipe is specified within the directional bore pipe). Measurements shall be further defined to be to the center of tie-in where new pipe contacts existing pipe at the center of connecting fittings, to the outside face of vault or structure walls, or to the point of main termination at dead ends. No separate payment will be made under pipe items when the directional bore pipe is the carrier pipe. Please refer to the Utility Company’s Specifications. If the Company does not have specifications, KYTC’s Specifications shall be referenced. This item shall be paid LINEAR FEET (LF) when complete.

W PLUG EXISTING MAIN This item shall include the specified plug, concrete blocking and/or anchoring, labor, equipment, excavation, backfill, and restoration required to install the plug in an existing in-service main that is to remain at the location shown on the plans or as directed in accordance with the specifications. Any and all plugs on all existing in-service mains shall be paid under one bid item included in the contract regardless of size. No separate bid items will be established for size variations. Please refer to the Utility Company’s Specifications. If the Company does not have specifications, KYTC’s Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

NOTE: This utility bid item is not to be paid on new main installations or abandoned mains. This pay item is to plug existing in-service mains only. Plugs on new mains are incidental to the new main just like all other fittings.

NOTE: Plugging of existing abandon mains shall be performed and paid in accordance with Section 708.03.05 of KYTC Standard Specifications For Road And Bridge Construction and paid using Bid Code 01314 Plug Pipe.

W PRESSURE REDUCING VALVE This description shall apply to all pressure reducing valves (PRV) of every size required in the plans and specifications except those bid items defined as “Special”. Payment under this description is to be for PRVs being installed with new main. This item includes the PRV as specified in the plans and specifications, polyethylene wrap (if required by specification), labor, equipment, excavation, anchoring (if any), pit or vault, backfill, restoration, testing, disinfection, and etc., required to install the specified PRV at the location shown on the plans in accordance with the specifications and standard drawings complete and ready for use. If required on plans and/or proposed adjoining DIP is restrained, PRVs shall be restrained. PRV restraint shall be considered incidental to the

PRV and adjoining pipe. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W PUMP STATION This item is for payment for installation of pumps and an above or below ground structure for housing of the pumps. This item shall include all pumps, piping, fittings, valves, electrical components, building materials, concrete, any other appurtenances, labor, equipment, excavation, and backfill, to complete the pump station installation as required by the plans, standard drawings, and specifications, complete and ready for use. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid LUMP SUM (LS) when complete.

W REMOVE TRANSITE (AC) PIPE This item shall include all labor, equipment, and materials needed for removal and disposal of the pipe as hazardous material. All work shall be performed by trained and certified personnel in accordance with all environmental laws and regulations. Any and all transite AC pipe removed shall be paid under one bid item included in the contract regardless of size. No separate bid items will be established for size variations. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid LINEAR FEET (LF) when complete.

W SERVICE LONG SIDE This bid item description shall apply to all service line installations of every size bid up to and including 2 inch inside diameter, except those service bid items defined as "Special". This item includes the specified piping material, main tap, tapping saddle (if required), and corporation stop materials, coupling for connecting the new piping to the surviving existing piping, encasement of 2 inches or less internal diameter (if required by plan or specification), labor, equipment, excavation, backfill, testing, disinfection, and restoration, at the locations shown on the plans or as directed, in accordance with the specifications and standard drawings, complete and ready for use. This bid item is to pay for service installations where the ends of the service connection are on opposite sides of the public roadway and the service line crosses the centerline of the public roadway as shown on the plans. The length of the service line is not to be specified. Payment under this item shall not be restricted by a minimum or maximum length. The contractor shall draw his own conclusions as to the length of piping that may be needed. Payment under this item shall include boring, jacking, or excavating across the public roadway for placement. Placement of a service across a private residential or commercial entrance alone shall not be reason to make payment under this item. Private or commercial entrances shall not be considered a public roadway in defining payment under this item. This pay item does not include installation or relocation of meters. Meters will be paid separately. No additional payment will be made for rock excavation or for special bedding required in rock excavation. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W SERVICE SHORT SIDE This bid item description shall apply to all service line installations of every size up to and including 2 inch internal diameter, except those service bid items defined as "Special". This item includes installation of the specified piping material of the size specified on plans, encasement of 2 inches or less internal diameter (if required by plan or specification), main tap, tapping saddle (if required), corporation stop, coupling for connecting the new piping to the surviving existing piping, labor, equipment, excavation, backfill, testing, disinfection, and restoration, at the locations shown on the plans or as directed, in accordance with the specifications and standard drawings, complete and

ready for use. This bid item is to pay for service installations where both ends of the service connection are on the same side of the public roadway, or when an existing service crossing a public roadway will remain and is being extended, reconnected, or relocated with all work on one side of the public roadway centerline as shown on the plans. The length of the service line is not to be specified and shall not be restricted to any minimum or maximum length. Payment shall be made under this item even if the service crosses a private residential or commercial entrance; but, not a public roadway. Private or commercial entrances shall not be considered a public roadway in defining payment under this item. The contractor shall draw his own conclusions as to the length of piping that may be needed. This pay item does not include installation or relocation of meters. Meters will be paid separately. No additional payment will be made for rock excavation or for bedding required in rock excavation. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W SERVICE RELOCATE This item is for the relocation of an existing water service line where a meter is not involved, and where an existing service line can easily be adjusted by excavating alongside and moving the line horizontally and/or vertically a short distance without cutting the service line to avoid conflicts with road construction. This item shall include excavation, labor, equipment, bedding, and backfill to relocate the line in accordance with the plans and specifications complete and ready for use. Payment under this item shall be for each location requiring relocation. Payment shall be made under this item regardless of service size or relocation length. No separate pay items will be established for size or length variation. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W STRUCTURE ABANDONMENT This item is to be used to pay for abandonment of larger above or below ground water structures such as meter vaults, fire pits, pump stations, tanks, and etc. Payment under this item shall not be limited to size or scope; however structures with connecting pipes of 2 inches or less shall not be paid under this item; but, shall be considered incidental to water construction, (i.e., abandonment of standard water meters up to and including 2 inches would not be paid under this item). Payment under this item shall include all labor, equipment, and compacted fill or flowable fill for abandonment of the structure in place and restoration complete. No separate bid items will be established for size or structure variations. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W STRUCTURE REMOVAL This item is to be used to pay for removal of larger above or below ground water structures such as meter vaults, fire pits, pump stations, tanks, and etc. Payment under this item shall not be limited to size or scope; however structures with connecting pipes of 2 inches or less shall not be paid under this item; but, shall be considered incidental to water construction, (i.e., removal of standard water meters up to and including 2 inches would not be paid under this item). Payment under this item shall include all labor, equipment, and compacted backfill for removal of the structure and restoration complete. No separate bid items will be established for size or structure variations. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W TAPPING SLEVE AND VALVE SIZE 1 OR 2 This item shall include the specified tapping sleeve, valve, valve box, concrete pad around valve box (when required in specifications or plans), labor, and equipment to install the specified tapping sleeve and valve, complete and ready for use in accordance with

the plans and specifications. The size shall be the measured internal diameter of the live pipe to be tapped. The size tapping sleeve and valve to be paid under sizes 1 or 2 shall be as follows:

Size 1 = All live tapped main sizes up to and including 8 inches

Size 2 = All live tapped main sizes greater than 8 inches

Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W TIE-IN This bid description shall be used for all main tie-in bid items of every size except those defined as "Special". This item includes all labor, equipment, excavation, fittings, sleeves, reducers, couplings, blocking, anchoring, restoration, disinfection, testing and backfill required to make the water main tie-in as shown on the plans, and in accordance with the specifications complete and ready for use. Pipe for tie-ins shall be paid under separate bid items. This item shall be paid EACH (EA) when complete.

W VALVE This description shall apply to all valves of every size required in the plans and specifications except those bid items defined as "Special". Payment under this description is to be for gate or butterfly valves being installed with new main. This item includes the valve as specified in the plans and specifications, polyethylene wrap (if required by specification), labor, equipment, excavation, anchoring (if any), valve box and valve stem extensions, backfill, concrete pad around valve box (if required by specification), restoration, testing, disinfection, and etc., required to install the specified valve at the location shown on the plans in accordance with the specifications and standard drawings complete and ready for use. If required on plans and/or proposed adjoining DIP is restrained, valves shall be restrained. Valve restraint shall be considered incidental to the valve and adjoining pipe. This description does not apply to cut-in valves. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W VALVE ANCHOR EXISTING This bid item is intended to pay for installation of restraint hardware on an existing valve where no restraint exists to hold the valve in place to facilitate tie-ins and other procedures where restraint is prudent. This work shall be performed in accordance with water specifications and plans. This bid item shall include all labor equipment, excavation, materials and backfill to complete restraint of the designated valve, regardless of size, at the location shown on the plans, complete and ready for use. Materials to be provided may include, but is not limited to, retainer glands, lugs, threaded rod, concrete, reinforcing steel or any other material needed to complete the restraint. Should the associated valve box require removal to complete the restraint, the contractor shall reinstall the existing valve box, the cost of which shall be considered incidental to this bid item. No separate bid items are being provided for size variations. All sizes shall be paid under one bid item. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W VALVE BOX ADJUST Includes all labor, equipment, valve box and valve stem extensions (if required), excavation, backfill, concrete pad around valve box (when specified in specifications or plans), restoration, and etc., to adjust the top of the box to finished grade complete and ready for use. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W VALVE CUT-IN This bid description is for new cut-in valve installations of all sizes where installation is accomplished by cutting out a section of existing main. This item shall include cutting the existing pipe, supplying the specified valve, couplings or sleeves, valve box, concrete pad around valve box (when required in specifications or plans), labor, equipment, and materials to install the valve at the locations shown on the plans, or as directed by the engineer, complete and ready for use. Any pipe required for installation shall be cut from that pipe removed or supplied new by the contractor. No separate payment will be made for pipe required for cut-in valve installation. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

W VALVE VAULT This item is for payment for installation of an underground structure for housing of specific valve(s) as required by the plans and specifications. This item shall include all labor, equipment, excavation, concrete, manhole castings or doors, the specified valve(s), all piping, and fitting materials associated with installing a functioning valve vault in accordance with the plans, standard drawing, and specifications, complete and ready for use. Please refer to the Utility Company's Specifications. If the Company does not have specifications, KYTC's Specifications shall be referenced. This item shall be paid EACH (EA) when complete.

Daviess County Water District

Minimum Standard Specifications

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DAVISS COUNTY WATER DISTRICT
MINIMUM STANDARD SPECIFICATIONS

1.1 SCOPE OF WORK

Work under this section shall include providing labor, equipment, materials, hand tools and incidentals to place new water mains, miscellaneous fittings, fire hydrants and valve assemblies of the Project. The completed line will ultimately be operated and maintained by the Daviess County Water District and shall be completed under full coordination and cooperation with said agency. The Contractor shall fully coordinate the construction and phasing of each section of new water main with the Water District Manager and/or his representative.

The Contractor shall test, disinfect and place all lines into service. Bacteria and chlorination tests shall be certified by an independent laboratory hired by the Contractor.

1.2 CONTRACTOR'S FAMILIARITY WITH SITE

Prior to submitting a bid proposal the bidder shall become thoroughly familiar with the site and inform themselves of all conditions under which the proposed project is to be performed relative to but not limited to site location, existing line tie-in conditions, soil conditions, roadway and traffic conditions, existing improvements and utilities; by a personal visit to the site, by a complete study of the Contract Plans and Contract Documents, by personal interview with the Project Engineer, Water District Manager and applicable utility authorities. Submission of a Bid shall be prime facia evidence the Contractor has a thorough and complete understanding of the intent of this constructyion phase.

1.3 BID FORMAT

Bids for this project shall be of a Unit Price variety and shall be full compensation for all labor, equipment, special tools, materials, hand tools, insurance, overhead, etc. necessary to satisfactorily complete the work in accordance with the Contract Documents and Contract Plans.

1.4 DEFINITIONS

Consultant shall mean the firm responsible for project planning and layout designated by the owner to prepare the Contract Plans. The Project Consultant is HRG, PLLC.

Engineer shall mean the Project Engineer as designated by the Consultant and his duly appointed agents or representatives.

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Inspector shall mean the Project Engineer or other duly appointed individuals designated to review and inspect the construction work for compliance with the Contract Documents.

Owner shall mean the Daviess County Water District.

Project shall mean the water lines and associated construction described in the Contract Plans, Specifications and Documents.

1.5 STANDARD SPECIFICATION REFERENCES

A.S.T.M. - American Society for Testing Materials Standard Specifications for materials and testing procedure.

A.W.W.A. - American Water Works Association

N.S.F. - National Sanitation Foundation

Kentucky Standard Specifications for Road and Bridge Construction, Kentucky Department of Transportation, Bureau of Highways

1.6 BONDING AND INSURANCE

The Contractor shall execute and maintain for the duration of the project a performance and payment surety in the amount of 100 per cent of the total project bid price. Surety may be in the form of a bond or a certified check.

A Certificate of Insurance shall be furnished by the Contractor or any sub-contractors to the Owner certifying the following minimum coverage and limits:

Workman's Compensation Insurance - As required by statute.

Comprehensive General Liability Insurance:

Bodily Injury - \$100,000 each person

Property Damage - \$300,000 each person/\$500,000 aggregate

Employer's Public Liability Insurance - \$100,000 each person

Automobile Insurance:

Bodily Injury - \$100,000

Property Damage - \$500,000

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The above minimum insurance policies shall be secured and maintained by the Contractor during the life of the Contract.

1.7 MATERIALS

Water main piping sections shall be polyvinyl chloride materials or ductile iron materials as noted on the construction plans. The P.V.C. pipe shall conform to all requirements of A.S.T.M. Standard Specification D-2241 A.S.T.M. Standard D-3139 for Polyvinyl Chloride (P.V.C.) plastic pipe. The pipe shall bear the National Sanitation Foundation seal of approval and shall comply with the requirements for Type 1, Grade 1, of the A.S.T.M. Resin Specification D-1784. The pipe shall be jointed by means of rubber ring bell joint which shall be an integral and homogeneous part of the pipe barrel. The elastomeric seal gasket shall comply with requirements of A.S.T.M. F477. Each joint shall bear the manufactures name, its DR and the A.S.T.M. designation for P.V.C. compounds.

IPS Pipe

Pipe furnished for this project shall meet the following requirements:

- Dimension Ratio (DR) - 21
- Pressure Class - 200
- Joint Length (Laying Length) - 20 feet
- Test Pressure (2 hours minimum) - 150% of normal line pressure
(100 psi minimum)
- Minimum Cover - 30 inches
- Maximum Cover - 40 inches

D.I. Pipe

Ductile iron pipe for water mains shall conform to the requirements of A.W.W.A. Standard C-151 "Ductile-Iron Pipe, Centrifugally Cast Inmetal Molds or Sandlined Molds, for Water or Other Liquids".

Pipe Characteristics for the Project:

- Pipe Class - (4"-CL 51)(6" or larger-CL 50)
- Lining - Cement (AWWA C-104)
- Laying Length - 18 feet
- Joint Type - Push On
- Fitting Class - Ductile Iron
- Fitting Type - Mechanical Joint
- Minimum Cover - 30 inches
- Maximum Cover - 40 inches
- Outside Coating - Asphaltic (AWWA C-151)

C-900 Pipe

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Water main piping sections designated as C-900 materials shall be polyvinyl chloride (P.V.C.) conforming to all requirements of A.W.W.A. Standard Specification C-900 and shall meet the following requirements:

Dimension Ration (DR)	18
Pressure Class	150
Joint Length (Laying Length)	20 feet
Test Pressure (2 hrs. min.)	150% of normal line pressure (100 psi min.)
Minimum Cover	30 inches
Maximum Cover	40 inches

Water main fittings; i.e. valves, tees, etc.; shall be ductile iron materials.

The Contractor shall be responsible for all material furnished by him and shall replace at his own expense all such material found damaged or defective in manufacture. This shall include the furnishing of all material and labor required for the replacement of installed material discovered defective prior to the final acceptance of the work.

The contractor shall be responsible for the safe storage of material furnished by or to him, and accepted by him, and intended for the work until it has been incorporated in the completed project. The interior, as well as all sealing surfaces of all pipe, fittings, and other accessories shall be kept free from dirt and foreign matter at all times. Valves and hydrants shall be drained and stored in a manner that will protect them from damage by freezing. Pipe stored outside and exposed to prolonged periods of sunlight (several months or more) should be covered by canvas or other opaque material. Clear plastic sheets shall not be used. Air circulation shall be provided under covering. Care shall be taken at all times to avoid damage to pipe materials, fittings and appurtenances.

1.8 HDPE PIPE

HDPE water mains (PE 4710) shall comply to requirements of ASTM F417 and materials per ASTM D 3350. Pipe shall be DR 11 (200 psi) unless otherwise noted. All pipe bends, radii and fused joints shall be performed per the manufacturer's recommendations.

1.9 VALVES, HYDRANTS AND APPURTENANCES

Valve assemblies shall be set plumb with valve boxes set directly over the valve. All new valve boxes or existing boxes which are reset shall be placed with the top of the valve box at finished grade. Valve boxes shall be backfilled and the earth thoroughly compacted.

Install "BOXLOK" valve box alignment devices in valve boxes installed in pavement areas. Install alignment devices as manufactured by EMMA Sales, LLC

DAVISS COUNTY WATER DISTRICT
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(www.boxlok.com). Furnish valve stem extensions and valve box extensions as required by the Engineer for water line greater than 3-ft. cover depth.

Hydrants shall be set plumb with the nozzle being not less than twelve (12) inches above the finished grade. Hydrants shall be turned in order that the pumper nozzle is directed toward the street. Hydrants shall be provided with a concrete thrust block backing and conform to requirements of the contract plans and construction details.

All hydrants and all valves must be checked to verify that parts are in proper working order.

Valves, hydrant assemblies and associated fittings shall be of the mechanical joint type only. Valve stem extensions shall be installed as directed by the Engineer.

All valves, hydrants, fittings, etc. for this project shall be either cast iron or ductile iron materials. Cast iron items shall conform to the requirements of A.S.T.M. A126, Class B or A.S.T.M. A48. Ductile iron items shall conform to the requirements of A.S.T.M. A395, A.S.T.M. A445 or A.S.T.M. A536.

Valve Characteristics for the Project:

- | | |
|-------------------|--------------------|
| Gate Type | - Wedge Disc |
| Seat | - Resilient Seat |
| Opening Direction | - Counterclockwise |
| End Type | - Mechanical Joint |
| Operation | - Non-rising Stem |

Hydrant Characteristics for the Project:

- | | |
|----------------------------|--|
| Hydrant Type | - Dry Barrel Traffic Model |
| Main Valve Size | - 5-1/4" for Water Mains 6" Diameter & Larger; 4-1/2" for 4" Water Mains |
| Minimum Trench Depth | - 42 inches |
| Opening Direction | - Counterclockwise |
| Opening Nut Size and Shape | - 1-1/2" Pentagon, Point to Flat |
| Color | - Red |
| Number of Hose Nozzles | - Two |
| Connection Type | - Mechanical |

Hose Nozzle Specifications:

- | | |
|---------------------------|----------------------------|
| Inside Diameter of Nipple | - 2-1/2" |
| Thread Type | - National Standard Thread |

Pumper Nozzle Specifications:

- | | |
|---------------------------|----------------------------|
| Inside Diameter of Nipple | - 4-1/2"* |
| Thread Type | - National Standard Thread |

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*On projects within the City of Owensboro Fire Department service area the pumper nozzle diameter shall be 4" N.S.T.

1.10 PLACEMENT OF LINE FITTINGS

Valves, fittings and other appurtenances shall be the type and size shown on the construction plans; shall include the appropriate type and sized gaskets, transition gaskets, seals, bolts and other incidental hardware; the cost of additional miscellaneous hardware shall be merged into the bid price.

Line valves shall be placed: at the beginning and the end of each new water main section by the Contractor unless there is an existing valve in place; at approximately one mile intervals along new water mains; at junction points in water mains where other lines tee-off; at other locations as required.

A fire hydrant of compatible size with the water main shall be installed on the end of the water main, generally 10 - 20 feet beyond the end-of-line valve. Existing end-of-line hydrants shall be relocated, including installing a new hydrant valve, as a standard fire hydrant assembly at the time of tie-in for a water main extension. Payment for said hydrant relocation shall be included in the bid price.

Live valves and hydrants shall be placed in areas of least inconvenience to adjacent properties, at points which offer maximum protection to the items, at locations providing ease of access, operation and maintenance and as directed by the Project Engineer.

1.11 PIPE PLACEMENT

The trench bottom shall be constructed to provide a firm, stable and uniform support for the full length of the pipe. The trench shall be dug to the required alignment and depth and only so far in advance of pipe laying as is safe and practical. No trench shall be left open and unguarded while construction operations are not in progress.

All pipe, fittings, valves, hydrants, and accessories shall be carefully lowered into the trench using suitable equipment in such manner as to prevent damage to pipe and fittings. Under no circumstances shall the pipe or accessories be dropped or dumped into the trench.

All foreign matter or dirt shall be removed from the interior of the pipe before lowering into position in the trench. Pipe shall be kept clean by means approved by the Engineer during and after laying.

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The pipe shall be cut in a neat and workmanlike manner without damage to the pipe so as to have a smooth end at right angles to the axis of the pipe. Pipe ends shall be cut square, deburred and beveled in accordance with the pipe manufacturer's recommendations.

The pipe and accessories shall be inspected for defects prior to lowering into trench. Any defective, damaged or unsound material shall be repaired or replaced as directed by the Engineer.

The sealing surface of the pipe, the bell to be joined, and the elastomeric gaskets shall be cleaned immediately before assembly, and assembly shall be made as recommended by the manufacturer. When pipe laying is not in progress the open ends of installed pipe shall be closed to prevent entrance of trench water into the line. Whenever water is excluded from the interior of the pipe, enough backfill shall be placed on the pipe to prevent floating. Any pipe that has floated shall be removed from the trench and the backfill restored. No pipe shall be laid when trench conditions or the weather are unsuitable for proper installation as determined by the Engineer.

1.12 GENERAL INSTALLATION CONDITIONS

Existing water mains and service lines are to remain in service and functional until the new line has been tested, sanitized, and approved. New service lines shall be provided as quickly and as timely as possible with minimal inconvenience to the water customer.

Mains, service lines, and hydrant connectors shall have not less than 30 inches cover above the top edge of the line. Street cuts shall be backfilled with crushed limestone materials, and tamped in lifts not to exceed 10 inches uncompacted thickness.

The cost of furnishing, transporting, placing, and compacting granular fill material along water main sections, service line sections, etc. shall be included in the bid price, per linear foot of water main.

The Contractor shall remove pavement or other improved surfaces; excavate the trenches and pits to the required dimensions; provide for the maintenance of traffic and other utilities; sheet, brace, and support the adjoining ground or structures where necessary; handle all drainage or ground water; guard the site; distribute and lay the pipe and accessories; relocate any conduits, ducts or pipes where necessary; replace all damaged drains; sewers or other structures; backfill the trench and pits; remove surplus excavated material and clean the site of all debris; test the completed pipe line for pressure and leakage requirements; disinfect the completed pipeline; restore the pavements and other improved surfaces of the trench; and restore all disturbed ground surfaces to a condition equal to or better than the original surfaces as many times as required.

Temporary support, adequate protection and maintenance of all underground and surface utility structures, drains, sewers and other structures encountered in the progress of the

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work shall be furnished by the Contractor at his own expense. Where the grade, alignment or minimum cover of the pipe is obstructed by existing utility structures such as conduits, ducts, pipes, branch connections to main sewers, or main drains, the line shall be adjusted by raising or lowering the main where grades are not critical or the obstruction shall be permanently supported, relocated, removed, or reconstructed by the Contractor in cooperation with the owners of such utility structures where lines and grades are critical.

All pipe shall be laid to and maintained at the required lines and grades if shown on the plans. If lines and grades are not shown on the plans, the minimum cover as called for on the plans shall be maintained at all times. Fittings, valves, air vents and hydrants shall be installed at the required locations with valve and hydrant stems plumb. No deviation shall be made from the required line or grade or minimum cover without approval from the engineer or his representative.

All materials installed during the performance of this work shall be new materials and appurtenances in accordance with the contract specifications and contract plans with the exception of resetting of existing water meter boxes. New gaskets or fittings as required shall be furnished by the Contractor for the relocation and/or resetting of existing water meter assembly. After new water mains have been successfully placed into service the Contractor shall cut off, disconnect, plug and otherwise render inactive any cross-connection from the existing water lines (mains) which are being replaced. Additional compensation will not be allowed for such work; the cost of such work shall be considered incidental to the several Pay Items for the proposed water system.

The Contractor will not be responsible for securing permanent easements or rights-of-way for the water line location. The Contractor shall secure written permission for use of any private properties in conjunction with this project regarding equipment or materials storage, temporary office placement, or other construction related activities. Copies of the written private property access agreement shall be available to the Owner or Engineer upon request.

Do not lay P.V.C. pipe at ambient air temperatures at or below 20°(F) for any P.V.C. pipe installation.

1.13 DAMAGE TO EXISTING WATER FACILITIES

Repairs to existing facilities which are damaged by the Contractor, his agents or subcontractors shall be repaired entirely at the Contractor's expense. No water district supplied materials may be used for such repairs. Water district crews will not be available to repair damages resulting from damaging actions by the Contractor.

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1.14 RESTORATION OF PRIVATE AND PUBLIC PROPERTIES

The Contractor shall protect all private properties and public properties from unnecessary disturbance or damage. Any areas of public or private property which are damaged or otherwise disturbed by the Contractor or his agents during the completion of this project shall be restored to a condition equal to or greater than existing prior to the project at no additional compensation to the Contractor. The Contractor shall be responsible for adjusting to proper grade and alignment any existing or proposed water valves, water meter/box, fire hydrant, water mains, etc. within the limits of the construction project.

1.15 REACTION OR THRUST BLOCKING

A reaction or thrust blocking shall be provided at each hydrant, bend, tee, and at reducers or fittings where changes in pipe diameters or directions occur. Anchorage may also be made to the water main pipe with rods and clamps or by District approved mega-lug type restraining hardware. Cost for blocking and mechanical restraining hardware/materials shall be included in the respective bid prices.

Install mechanical joint restrainer assemblies at all bend and turn fittings (i.e. 90°, 45°, 22-1/2° and 11-1/4° fittings) in addition to the concrete thrust block requirement.

1.16 PRESSURE AND LEAKAGE TESTS

Sufficient backfill shall be placed prior to filling with water and field testing to prevent lifting of the pipe. When local conditions, require that the trenches be backfilled immediately after the pipe has been laid, the testing may be carried out after the backfilling has been completed but before placement of permanent surface.

At least 7 days shall elapse after the last concrete thrust or reaction blocking has been cast.

The Contractor may perform simultaneous Pressure and Leakage Testing or he may perform separate Pressure and Leakage Testing on the installed system at test durations and pressures specified.

The Contractor shall furnish the gauges (and measuring device for the leakage test), pump, tubing or pipe, connections and all other necessary apparatus, and shall furnish the necessary assistance to conduct the test.

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1.17 DISINFECTION

All new lines and exposed sections of existing lines shall be disinfected utilizing chlorine and flushed prior to being placed into service.

Due to safety and environmental hazards, **pressurized chlorine** gas shall NOT be used for waterline disinfection.

Disinfection of new, repaired or extended water distribution systems shall meet the requirements of the Kentucky Division of Water Quality and in accordance with AWWA Standard C-651 "Disinfection of Water Mains". Said system shall be thoroughly disinfected before being placed into service, by use of chlorine or chlorine compounds (chlorine gas is not acceptable) in such amounts as to produce a concentration of at least fifty (50) ppm and a residual of at least twenty-five (25) ppm at the end of twenty-four (24) hours and followed by thorough flushing. New water distribution lines shall not be placed into service until the property number of bacteriological samples taken at the points specified in the following paragraph of this section are examined and are shown to be negative following disinfection. Chlorination residual tests (50 and 25 ppm) shall be taken at each bacteriological test point. System disinfection water shall be dechlorinated at the time of discharge/disposal. Test points may be either corporation stop taps or fire hydrants.

Bacteriological samples shall be submitted for each new construction project, routine repair, replacement, or extension to existing systems after disinfection and flushing. A sample shall be taken within the first 1,200 feet of each connection point between the existing and new lines, at one mile intervals and at each connection point or at each dead end line. If bacteriological tests are positive, the sterilization and bacteriological tests shall be performed until bacteriological tests are negative. A complete chain of custody procedure shall be provided for each set of chlorine residual/bacteriological test samples.

All water sampling and testing shall be performed by independent laboratories/personnel which are deemed satisfactory and approved by the water district Manager or his project engineer. Sampling, testing, analysis, etc. shall be provided at the expense of the Contractor and the cost merged in the Bid Unit Prices for the water system.

Upon final testing, disinfection and blow-off, the tested water line shall be flushed and purged of air. Air shall be released at all hydrants, corporation stops or by other air release methods approved by the Engineer.

1.18 CONNECTIONS TO EXISTING LINES

Connection of a new main to an existing main shall be performed in a safe, neat, sanitary, workmanlike manner. Connection to existing water mains shall be made under full

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pressure unless otherwise approved by the Engineer. A tapping valve and sleeve shall be utilized to provide connection and shall be mechanical joint tapping sleeves.

Tapping sleeves shall all be stainless steel (including stainless steel bolts/hardware) of the proper size and shall be installed in accord with the manufacturer's recommendations.

In the event water service has to be interrupted, it must be under the approval and direct supervision of the Water District, and it will be the Contractor's responsibility to inform all affected customers 24 hours in advance of the interruption. The Contractor shall be responsible for opening and closing all valves that will affect customer service after coordinating with the Water District Manager.

Great care shall be taken to prevent pipe line contamination when dewatering, cutting into or making connections with existing pipelines used for the conveyance or distribution of water for domestic or public use. The Contractor shall work with the Engineer in isolating services and shall conduct his operation in such a manner that no trench water, mud or other contaminating substances are permitted to get into the connected line or lines at any time during the progress of the work. The interiors of all pipe, fittings and valves, both new and reused, installed in such connections, shall be thoroughly cleaned and disinfected in accordance with AWWA Standard C-601, "Disinfection of Water Main" and requirements of the Kentucky Division Water Quality.

**1.19 COORDINATION WITH WATER DISTRICT
& EMERGENCY SERVICES OFFICES**

The Contractor shall notify the Water District Manager not less than 24 hours prior to the time an active water main is temporarily shut down or otherwise disrupts existing water service. Active water mains shall not be temporarily shut off for more than 2 hours without approval by the scheduling with the Engineer and with the Water District Manager.

The Contractor shall notify the Daviess County Fire Department prior to temporarily shutting down an existing water main and shall notify all area emergency agencies (i.e. sheriff, ambulance, etc.) prior to blocking a public roadway in any manner which would result in the road becoming impassible by emergency vehicles.

1.20 STANDARD MANUFACTURED ITEMS AND OR EQUAL CLAUSES

Listed below are manufacturer's items which have been deemed acceptable materials in accord with these Water District Standards. This listing is in no manner exclusive and other suppliers items which are deemed equal will be acceptable. Suppliers or other manufacturer's items must submit specifications, technical data and materials testing

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reports for review and approval by the Water District Manager and the Engineer prior to materials acceptance under the "or equal" clause.

Polyvinyl Chloride Pipes:

Certaineed, Capco, H & W, Vulcan, or equal

Valves and Fittings:

Mueller, Kennedy or equal

Fire Hydrants:

Mueller, Kennedy or equal

Tapping Sleeve:

Power Seal, JCM Industries, Inc. Smith-Blair, Inc., or equal.

Insertion Valve:

Hydra-Stop or equal.

1.21 DITCH CROSSING PROTECTION

At ditch crossing locations shown on the construction plans bag concrete mix shall be placed on top of the water line for ballast and line protection. The water line trench shall be excavated to a depth which will provide a minimum of 30 inches cover between top of the special ditch crossing protection bags and the ditch bottom.

Bags of commercial pre-mixed cement concrete shall be placed over the pipe to form a continuous protective cover prior to backfilling the trench. The bags shall be placed flat over the pipe with the length dimension of the bag being perpendicular to the centerline of the water line. The paper bags shall be cut or perforated in order for the concrete mix to bond between bags. The protective concrete bags shall extend a minimum of four (4) feet beyond the limits of the natural or proposed ditch bottom. Compensation for the ditch crossing protection shall be included in the bid price.

1.22 PIPE GRADE

All pipe shall be laid to and maintained at the required lines and grades if shown on the plans. If lines and grades are not shown on the plans, the minimum cover as called for on the plans shall be maintained at all times. Fittings, valves, air vents and hydrants shall be installed at the required locations with valve and hydrant stems plumb. No deviation shall be made from the required line or grade or minimum cover without approval from the Engineer or his representative.

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**1.23 WATER LINE EASEMENTS AND TEMPORARY
WORK/STORAGE AREA**

The Contractor will not be responsible for securing permanent easements or rights-of-way for the water line location. The Contractor shall secure written permission for use of any private properties in conjunction with this project regarding equipment or materials storage, temporary office placement, or other construction related activities. Copies of the written private property access agreement shall be available to the Owner or Engineer upon request.

1.24 SALVAGE MATERIALS AND ITEMS

Existing water line pipe, fittings, blow-offs, hydrants, meters, valves and appurtenances required to be removed by the Contractor during the performance of this Contract shall be salvaged and returned by the Contractor to the water district storage yard unless otherwise directed by the Engineer.

1.25 TRACER LINE

The Contractor shall install a trace line along the entire water main system. The tracer shall be continuous along the main with no gaps, breaks nor open circuits. The insulated copper wire shall be installed along the side of the water line pipe trench and shall be connected to **the exterior** of each valve box for future electronic signal tracing.

Splices in the tracer wire shall provide a positive, secure connection and shall be protected by wrapping with electrical tape, approved electrical connector or electrical sealing compound. The wire shall be loosely strung and shall NOT be pulled taut. All tracer line shall be tested (in place conductivity test) by the Contractor and shall satisfactorily convey electrical signal. Any defective section of tracer line shall be repaired and/or replaced at the Contractors expense.

The cost of installing the tracer wire shall be included in the bid unit price(s) for the water main construction.

1.26 TRACER WIRE MATERIAL

Insulated copper wire: AWG 12, Type 1, THHN or THWN, 600 V; insulation shall be gasoline and oil resistant.

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1.27 WATER DISTRICT FINAL ACCEPTANCE

The following final approval criteria apply to publicly bid projects, privately contracted projects, subdivision projects and all other projects which are extensions of the Daviess County Water District System.

Before any project documents will be accepted and/or signed for including but not limited to:

- A. Bond Release
- B. Final Plat Approval
- C. Release of Contractor
- D. Release of Retainage
- E. Release of Final Payment
- F. Final Approval

the following items/criteria shall apply.

The District Manager, Superintendent, or authorized representative must be present at the time of a satisfactory waterline pressure test and at the time of a satisfactory tracer wire (conductivity) test. There will also be a visual inspection of the entire project, including but not limited to checks for:

- 1. Correct waterline cover depths
- 2. Site grading at valve boxes, blow-off boxes and other system appurtenances
- 3. Proper blow-off construction
- 4. Proper installation, grading and hardware at all fire hydrant assemblies

Subsequent to the initial visual inspection, a punch list of remedial and corrective items will be prepared by the District. The Contractor/Sub-contractor and/or developer shall correct all deficiencies at no cost to the District. When the waterline extension items are found to be in order, the District representative may accept the new construction items for operation and maintenance, subject to the standard Contractor's one-year warranty.

A District-supplied form; documenting dates, times, test results (chlorination, pressure, tracer wire, etc.) and satisfactory completion of all punch-list items/information; will be prepared. When the final inspection indicates satisfactory results of all items required by the District, the request action and/or release will be issued by the District. The form will remain on file at the District office for future reference with copies furnished upon requests. Contractor's with a history of unsatisfactory work or a history of repeated violations will not be accepted to perform future work on the respective systems.

1.28 PROXIMITY TO EXISTING SEWER MAINS

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Water mains crossing sewers shall be laid to provide a vertical distance of 18 inches between the outside of the water main and the outside of the existing or proposed sewer. A sewer is defined by the KY Division of Water as any conduit conveying fluids other than potable water. This shall be the case where the water main is either above or below the sewer. The crossing shall be arranged so that the sewer joints will be equidistant and as far as possible from the water main joints. Where a water main crosses under a sewer, adequate structural support shall be provided for the sewer to prevent damage to the water main.

Water mains shall be laid at least 10 feet horizontally from an existing or proposed sewer main. The distance shall be measured from outside edge to outside edge of pipe. Waterlines crossings "sewers" with less than 18" of clear separation shall be encased (either steel casing, PVC or HDPE Casing – no joints or cement concrete encasement). Deviation from the above required line separation requirements shall be on a case-by-case basis as permitted by the Kentucky Division of Water.

1.29 WATER SERVICE LINES

All service lines shall be Type-K soft (rolled) copper materials. No joint type (i.e. no 10-ft. or 20-ft. lengths) pipe sections with solder joints will be accepted. Materials shall conform to and be applicable for:

- C12200; ASTM-B88
- "Soft" Tempered in 60-foot or 100-foot coil length (varies with tubing I.D. size)
- For domestic water service (potable) and fire protection

1.30 INSERTION VALVES

Insertion valves shall be permanent in-line valves, installed under ambient line pressure and flow conditions without shutting down the water main or otherwise without disruption of water system service on the existing line(s). Installation shall be performed using the manufacturer's approved equipment, hardware and procedures. All work shall be performed in strict compliance with the manufacturer's recommendations.

The valve saddle, riser, fabricated body, bolts and incidental hardware shall be stainless steel materials. The insertion valve shall have:

- Standard water works valve nut (2" sq. steel)
- 304 stainless steel valve body and assembly
- SBR rubber valve gate
- Heavy duty valve stem in accord with AWWA C-500-93 (Section 3.12)
- Flanges in accord with ANSI A-105, 150 lb. rated flanges, heavy duty
- Triple O-ring seal
- Rated for a normal operating line pressure up to 150 psi

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- Clamp-on installation, heavy duty rated
- Bronze stem collar
- Full circle, full width neoprene gasket
- Band length – minimum 12-inches
- Anti-friction sealing material
- Installation – single circular hole cut (under normal line pressure and flow conditions) into top of existing water pipe – without line shut-down
- Rated for potable water applications/installations
- Provides radial axis seating area for a full seal and line shut-down

1.31 STAINLESS STEEL TAPPING VALVES

Stainless Steel Tapping Sleeve

Type	Full Circle Single or Double Panel
Material	Stainless Steel (Band and Armor Plate)
Gasket	Full Circle, Full Width Neoprene with Check-O-Seal design
Band Lugs	Stainless Steel
Nuts & Bolts	Stainless Steel
Band Length	12” minimum
Flange	Stainless Steel Standard AWWA C207 Class D, ANSI 150 lb. drilling with recessed flange to accept tapping valve

1.32 BACKFILLING PIPELINE TRENCHES

General Requirements

All backfilling shall be accomplished in accordance with the details shown on the plans.

The Contractor shall obtain a compaction of the backfill of at least 95 percent of standard (A.S.T.M. D-698) Proctor density where mechanical tamping of backfill is required.

Before final acceptance, the Contractor will be required to level off all trenches or to bring the trench up to the level of the surrounding terrain. The Contractor shall also

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remove from roadways, rights-of-way and/or private property all excess earth or other materials resulting from construction.

In the event that pavement is not placed immediately following trench backfilling in streets and highways, the Contractor shall be responsible for maintaining the trench surface in a level condition at proper pavement grade at all times for traffic and pedestrian crossing.

In all cases walking or working on the completed pipelines except as may be necessary in tamping or backfilling will not be permitted until the trench has been backfilled to a point one foot above the top of the pipe. The filling of the trench and the tamping of the backfill shall be carried on simultaneously on both sides of the pipe in such a manner that the completed pipeline will not be disturbed and injurious side pressures do not occur.

Method "A" -- Backfilling in Open Terrain

Backfilling of pipeline trenches in open terrain shall be accomplished in the following manner:

The Contractor shall backfill with natural soil to a point six (6) inches above top of pipe. The upper portion of the trench shall be backfilled with material which is free from large rock. Incorporation of rock having a volume exceeding one-half cubic foot is prohibited. Backfilling of this portion of the trench may be accomplished by any means approved by the Engineer. The trench backfill shall be heaped over until completely settled and then leveled.

Method "B" -- Backfilling under Sidewalks and Unpaved Driveways

Backfilling of pipeline trenches under sidewalks and unpaved driveways shall be accomplished in the following manner:

The Contractor shall backfill with natural soil to a point six (6) inches above top of pipe. That portion of the trench to a point six (6) inches below the grade line, shall be backfilled with material free from rock and acceptable to the Engineer. The material shall be placed and compacted in layers of approximately six (6) inches. Upon approval by the Engineer, the Contractor may backfill this portion of the trench with crushed stone in lieu of materials which require compaction.

The upper portion of the trench shall be temporarily backfilled and maintained with crushed stone until such time as the sidewalk is constructed or the driveway surface is restored.

Method "C" -- Backfilling under Streets, Roads & Paved Driveways

Backfilling of pipeline trenches under streets, roads and paved driveways shall be accomplished in the following manner:

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The Contractor shall backfill with natural soil to a point six (6) inches above top of pipe. That portion of the trench to a point six (6) inches below the bottom of the pavement or concrete sub-slab, shall be backfilled with crushed stone.

The upper portion of the trench, from a point six (6) inches below the pavement or concrete sub-slab up to grade, shall be backfilled with a base course of dense-graded aggregate or crushed stone suitable to the Engineer. At such time that pavement replacement is accomplished, the excess base course shall be removed as required.

Settlement of Trenches

The Contractor shall be responsible for any trench settlement which occurs within one year from the time of final acceptance of the work. The trench settlement shall be repaired at no additional cost to the Owner.

Backfilling at Unimproved Driveways, Rural Roads and Unimproved Streets

The Contractor shall backfill with natural soil to a point six (6) inches above the top of the pipe. The remainder of the trench shall be backfilled with dense-graded aggregate (DGA) or crushed limestone suitable to the Engineer.

1.33 STEEL CASED BORES

Steel cased bores shall be installed by the method indicated on the Plans (i.e. jack & bore, direction bore, pneumatic hammer, open cut, etc.) or as approved by the Project Engineer.

Roadway crossings and other sections of the proposed project requiring steel encasement pipe shall be installed at locations, to the line and grade, shown on the Project Plans. Compensation for the installed steel casing shall be paid per bid unit price for the respective size of installed steel casing sections as verified by and as approved by the Engineer.

Steel pipe shall conform to requirements of A.S.T.M. A53-B and shall not be less than the minimum diameter and wall thickness shown on the Project Plans. The steel pipe shall have a minimum yield strength of not less than 35,000 psi. Steel casing shall be new materials.

The void between the carrier pipe and the steel casing pipe shall be thoroughly sealed by use of rubber end seals. The casing end seals shall extend around the entire outside perimeter of the casing pipe. Casing skids shall be installed based upon the following maximum skid spacing schedule:

Maximum Casing Skid Spacing

Nominal Pipe Size
(Diameter in Inches)

Maximum Skid
Support Spacing
(Feet)

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4	6.0
6	7.8
8	9.5

Maximum Casing Skid Spacing (Cont'd)

Nominal Pipe Size (Diameter in Inches)	Maximum Skid Support Spacing (Feet)
10	11.0
12	12.4
15	14.2

Casing skids shall be fabricated using pre-molded plastic spacers. Casing spacers may be adjustable. The Contractor shall include all costs to furnish and install casing skids and end seals in his bid unit price for steel casing installed by the bid approved method. Casing spacers/centering rings and end seals as manufactured by Advance Products & System, Inc., PSI, or equal.

When a casing is extended under a road ditch, the top of the casing shall be a minimum of forty-two (42) inches below the ditch flow line.

1.34 METER SETTING HARDWARE

Meter Setting Equipment

The meter setting equipment shall consist of a copper meter yoke, with an inlet and outlet suitable for connection to the existing service pipes. The meter yoke shall be provided with a plain stop. Unless otherwise specified or required for the service, the yoke shall accept a 5/8 inch by 3/4 inch meter as specified below. The cost of existing service line tie-in shall be included with the unit price bid for meter setter change-out.

Copper meter yokes shall have angle ball valve inlet, double check valve outlet and 7" rise. Meter yokes shall include an individual PRV, the tandem yoke shall be A.Y. McDonald 22-207WD22 33 or approved equal.

Meter yokes shall be supplied with two (2) end connections (with gaskets) per meter setting. Inlet end connections shall be Ford Pack Joint or equal for 3/4" CTS or as required based upon type of service line used. Outlet end connections shall be FIP double purpose outlet, or as required based upon type of existing service line. Insert stiffeners (of approved length) shall be furnished and installed for each inlet and outlet meter setting service pipe connection.

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Existing meter setters shall be removed by the Contractor and returned by the Contractor to the Owner's maintenance shop for reuse/rebuilding by the Owner.

1.35 METER BOX AND COVER

Meter Box and Cover

A meter box with cover shall be provided for each service and shall be as near the property line as possible and shall be located as directed by the Engineer. The meter box shall be high density polyethylene (0.300 inch wall thickness) construction as manufactured by Carson Industries or approved equal. The size shall be 24" deep unless otherwise specified or required by the meter size (BR 1015-24 HDPE or approved equal).

The meter box cover shall be a non-hinged HDPE cover (BR 1015 CIR or approved equal) with a cast iron meter reading lid (BR 1015-24 CIR or approved equal).

Meter boxes and covers shall be set with backfill neatly compacted in place. In yards and other maintained areas, the top of the meter box cover shall be 1/2 inch to 1 inch above original grade, otherwise 2 inches above original grade.

Salvageable parts from damaged meter boxes shall be secured by the Contractor and be returned to the Owner's maintenance shop.

1.36 UTILITY CROSSINGS UNDER EXISTING WATERLINES

In the event future utility lines are installed under existing District water mains of any type, concrete encasement is required to reinforce the existing waterline. Temporarily support the existing water main during the time the new utility is being installed below, as necessary. Contact and coordinate with the Water District construction personnel for all crossing and temporary support work.

Encase the existing waterline on all sides with a minimum of 6" concrete encasement (3,000 psi minimum). Concrete encasement shall extend a minimum of 5-ft. beyond the new utility trench excavation into undisturbed embankment.

See also SECTION 1.28 "PROXIMITY TO SEWER LINES" for additional regulatory requirements and the required minimum clearances.

KyTC BMP Plan for Project CID ## - #####



Kentucky Transportation Cabinet

Highway District 2 (1)

And

_____ (2), Construction

**Kentucky Pollutant Discharge Elimination System
Permit KYR10**

Best Management Practices (BMP) plan

Groundwater protection plan

For Highway Construction Activities

For

**Daviess – KY 298 Improvements at Southern Oaks
Elementary School (1)**

Project: CID ## - #####

KyTC BMP Plan for Project CID ## -

Project information

Note – (1) = Design (2) = Construction (3) = Contractor

1. Owner – Kentucky Transportation Cabinet, District 2 (1)
2. Resident Engineer: (2)
3. Contractor name: (2)
Address: (2)

Phone number: (2)
Contact: (2)
Contractors: agent responsible for compliance with the KPDES permit requirements (3):
4. Project Control Number (2)
5. Route (Address) 7525 US-431, Utica, KY 42376(1)
6. Latitude/Longitude (project mid-point) 37.669814, -87.127152 (1)
7. County (project mid-point) Daviess (1)
8. Project start date (date work will begin): (2)
9. Projected completion date: (2)

KyTC BMP Plan for Project CID ## -

A. Site description:

1. Nature of Construction Activity (from letting project description) Minor Widening of KY 298 (1)
2. Order of major soil disturbing activities (2) and (3)
3. Projected volume of material to be moved 2630 CY (1)
4. Estimate of total project area (acres) 1.66 (1)
5. Estimate of area to be disturbed (acres) 1.66 (1)
6. Post construction runoff coefficient will be included in the project drainage folder. Persons needing information pertaining to the runoff coefficient will contact the resident engineer to request this information. (1)
7. Data describing existing soil condition (1) & (2) See Geotech report if available. See Roadway Plans.
8. Data describing existing discharge water quality (if any) No existing water quality information available (1) & (2)
9. Receiving water name Rhodes Creek (1)
10. TMDLs and Pollutants of Concern in Receiving Waters: (1 DEA)
11. Site map – Project layout sheet plus the erosion control sheets in the project plans that depict Disturbed Drainage Areas (DDAs) and related information. These sheets depict the existing project conditions with areas delineated by DDA (drainage area bounded by watershed breaks and right of way limits), the storm water discharge locations (either as a point discharge or as overland flow) and the areas that drain to each discharge point. These plans define the limits of areas to be disturbed and the location of control measures. Controls will be either site specific as designated by the designer or will be annotated by the contractor and resident engineer before disturbance commences. The project layout sheet shows the surface waters and wetlands.
12. Potential sources of pollutants:

The primary source of pollutants is solids that are mobilized during storm events. Other sources of pollutants include oil/fuel/grease from servicing

KyTC BMP Plan for Project CID ## -

and operating construction equipment, concrete washout water, sanitary wastes and trash/debris. (3)

B. Sediment and Erosion Control Measures:

1. Plans for highway construction projects will include erosion control sheets that depict Disturbed Drainage Areas (DDAs) and related information. These plan sheets will show the existing project conditions with areas delineated by DDA within the right of way limits, the discharge points and the areas that drain to each discharge point. Project managers and designers will analyze the DDAs and identify Best Management Practices (BMPs) that are site specific. The balance of the BMPs for the project will be listed in the bid documents for selection and use by the contractor on the project with approval by the resident engineer.

Projects that do not have DDAs annotated on the erosion control sheets will employ the same concepts for development and managing BMP plans.

2. Following award of the contract, the contractor and resident engineer will annotate the erosion control sheets showing location and type of BMPs for each of the DDAs that will be disturbed at the outset of the project. This annotation will be accompanied by an order of work that reflects the order or sequence of major soil moving activities. The remaining DDAs are to be designated as "Do Not Disturb" until the contractor and resident engineer prepare the plan for BMPs to be employed. The initial BMP's shall be for the first phase (generally clearing and grubbing) and shall be modified as needed as the project changes phases. The BMP Plan will be modified to reflect disturbance in additional DDA's as the work progresses. All DDA's will have adequate BMP's in place before being disturbed.
3. As DDAs are prepared for construction, the following will be addressed for the project as a whole or for each DDA as appropriate:
 - Construction Access – This is the first land-disturbing activity. As soon as construction begins, bare areas will be stabilized with gravel and temporary mulch and/or vegetation.
 - At the beginning of the project, all DDAs for the project will be inspected for areas that are a source of storm water pollutants. Areas that are a source of pollutants will receive appropriate cover or BMPs to arrest the introduction of pollutants into storm water.

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Areas that have not been opened by the contractor will be inspected periodically (once per month) to determine if there is a need to employ BMPs to keep pollutants from entering storm water.

- Clearing and Grubbing – The following BMP's will be considered and used where appropriate.
 - Leaving areas undisturbed when possible.
 - Silt basins to provide silt volume for large areas.
 - Silt Traps Type A for small areas.
 - Silt Traps Type C in front of existing and drop inlets which are to be saved
 - Diversion ditches to catch sheet runoff and carry it to basins or traps or to divert it around areas to be disturbed.
 - Brush and/or other barriers to slow and/or divert runoff.
 - Silt fences to catch sheet runoff on short slopes. For longer slopes, multiple rows of silt fence may be considered.
 - Temporary Mulch for areas which are not feasible for the fore mentioned types of protections.
 - Non-standard or innovative methods.
- Cut & Fill and placement of drainage structures - The BMP Plan will be modified to show additional BMP's such as:
 - Silt Traps Type B in ditches and/or drainways as they are completed
 - Silt Traps Type C in front of pipes after they are placed
 - Channel Lining
 - Erosion Control Blanket
 - Temporary mulch and/or seeding for areas where construction activities will be ceased for 21 days or more.
 - Non-standard or innovative methods
- Profile and X-Section in place – The BMP Plan will be modified to show elimination of BMP's which had to be removed and the addition of new BMP's as the roadway was shaped. Probably changes include:
 - Silt Trap Type A, Brush and/or other barriers, Temporary Mulch, and any other BMP which had to be removed for final grading to take place.
 - Additional Silt Traps Type B and Type C to be placed as final drainage patterns are put in place.
 - Additional Channel Lining and/or Erosion Control Blanket.
 - Temporary Mulch for areas where Permanent Seeding and Protection cannot be done within 21 days.
 - Special BMP's such as Karst Policy
- Finish Work (Paving, Seeding, Protect, etc.) – A final BMP Plan will result from modifications during this phase of construction. Probably changes include:

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- Removal of Silt Traps Type B from ditches and drainways if they are protected with other BMP's which are sufficient to control erosion, i.e. Erosion Control Blanket or Permanent Seeding and Protection on moderate grades.
 - Permanent Seeding and Protection
 - Placing Sod
 - Planting trees and/or shrubs where they are included in the project
- BMP's including Storm Water Management Devices such as velocity dissipation devices and Karst policy BMP's to be installed during construction to control the pollutants in storm water discharges that will occur after construction has been completed are : Seeding and Protection, Erosion Control Blanket. (1)

C. Other Control Measures

1. No solid materials, including building materials, shall be discharged to waters of the commonwealth, except as authorized by a Section 404 permit.
2. Waste Materials

All waste materials that may leach pollutants (paint and paint containers, caulk tubes, oil/grease containers, liquids of any kind, soluble materials, etc.) will be collected and stored in appropriate covered waste containers. Waste containers shall be removed from the project site on a sufficiently frequent basis as to not allow wastes to become a source of pollution. All personnel will be instructed regarding the correct procedure for waste disposal. Wastes will be disposed in accordance with appropriate regulations. Notices stating these practices will be posted in the office.

3. Hazardous Waste

All hazardous waste materials will be managed and disposed of in the manner specified by local or state regulation. The contractor shall notify the Section Engineer if there any hazardous wastes being generated at the project site and how these wastes are being managed. Site personnel will be instructed with regard to proper storage and handling of hazardous wastes when required. The Transportation Cabinet will file for generator, registration when appropriate, with the Division of Waste Management and advise the contractor regarding waste management requirements.

4. Spill Prevention

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The following material management practices will be used to reduce the risk of spills or other exposure of materials and substances to the weather and/or runoff.

➤ **Good Housekeeping:**

The following good housekeeping practices will be followed onsite during the construction project.

- An effort will be made to store only enough product required to do the job
- All materials stored onsite will be stored in a neat, orderly manner in their appropriate containers and, if possible, under a roof or other enclosure
- Products will be kept in their original containers with the original manufacturer's label
- Substances will not be mixed with one another unless recommended by the manufacturer
- Whenever possible, all of the product will be used up before disposing of the container
- Manufacturers' recommendations for proper use and disposal will be followed
- The site contractor will inspect daily to ensure proper use and disposal of materials onsite

➤ **Hazardous Products:**

These practices will be used to reduce the risks associated with any and all hazardous materials.

- Products will be kept in original containers unless they are not resealable.
- Original labels and material safety data sheets (MSDS) will be reviewed and retained
- Contractor will follow procedures recommended by the manufacturer when handling hazardous materials
- If surplus product must be disposed of, manufacturers' or state/local recommended methods for proper disposal will be followed

The following product-specific practices will be followed onsite:

➤ **Petroleum Products:**

Vehicles and equipment that are fueled and maintained on site will be monitored for leaks, and receive regular preventative maintenance to reduce the chance of

KyTC BMP Plan for Project CID ## -

leakage. Petroleum products onsite will be stored in tightly sealed containers, which are clearly labeled and will be protected from exposure to weather.

The contractor shall prepare an Oil Pollution Spill Prevention Control and Countermeasure plan when the project that involves the storage of petroleum products in 55 gallon or larger containers with a total combined storage capacity of 1,320 gallons. This is a requirement of 40 CFR 112.

This project (will / will not) (3) have over 1,320 gallons of petroleum products with a total capacity, sum of all containers 55 gallon capacity and larger.

➤ **Fertilizers:**

Fertilizers will be applied at rates prescribed by the contract, standard specifications or as directed by the resident engineer. Once applied, fertilizer will be covered with mulch or blankets or worked into the soil to limit exposure to storm water. Storage will be in a covered shed. The contents of any partially used bags of fertilizer will be transferred to a sealable plastic bin to avoid spills.

➤ **Paints:**

All containers will be tightly sealed and stored indoors or under roof when not being used. Excess paint or paint wash water will not be discharged to the drainage or storm sewer system but will be properly disposed of according to manufacturers' instructions or state and local regulations.

➤ **Concrete Truck Washout:**

Concrete truck mixers and chutes will not be washed on pavement, near storm drain inlets, or within 75 feet of any ditch, stream, wetland, lake, or sinkhole. Where possible, excess concrete and wash water will be discharged to areas prepared for pouring new concrete, flat areas to be paved that are away from ditches or drainage system features, or other locations that will not drain off site. Where this approach is not possible, a shallow earthen wash basin will be excavated away from ditches to receive the wash water

➤ **Spill Control Practices**

In addition to the good housekeeping and material management practices discussed in the previous sections of this plan, the following practices will be followed for spill prevention and cleanup:

- Manufacturers' recommended methods for spill cleanup will be clearly posted. All personnel will be made aware of procedures and the location of the information and cleanup supplies.

KyTC BMP Plan for Project CID ## -

- Materials and equipment necessary for spill cleanup will be kept in the material storage area. Equipment and materials will include as appropriate, brooms, dust pans, mops, rags, gloves, oil absorbents, sand, sawdust, and plastic and metal trash containers.
- All spills will be cleaned up immediately after discovery.
- The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contact with a hazardous substance.
- Spills of toxic or hazardous material will be reported to the appropriate state/local agency as required by KRS 224 and applicable federal law.
- The spill prevention plan will be adjusted as needed to prevent spills from reoccurring and improve spill response and cleanup.
- Spills of products will be cleaned up promptly. Wastes from spill clean up will be disposed in accordance with appropriate regulations.

D. Other State and Local Plans

This BMP plan shall include any requirements specified in sediment and erosion control plans, storm water management plans or permits that have been approved by other state or local officials. Upon submittal of the NOI, other requirements for surface water protection are incorporated by reference into and are enforceable under this permit (even if they are not specifically included in this BMP plan). This provision does not apply to master or comprehensive plans, non-enforceable guidelines or technical guidance documents that are not identified in a specific plan or permit issued for the construction site by state or local officials. No other local requirements are being added to this project. (1)

E. Maintenance

1. The BMP plan shall include a clear description of the maintenance procedures necessary to keep the control measures in good and effective operating condition.
- Maintenance of BMPs during construction shall be a result of weekly and post rain event inspections with action being taken by the contractor to correct deficiencies.
 - Post Construction maintenance will be a function of normal highway maintenance operations. Following final project acceptance by the cabinet, district highway crews will be responsible for identification and correction of deficiencies regarding ground cover and cleaning of storm water BMPs. The project manager shall identify any BMPs that will be for the purpose of post construction storm water management with specific guidance for any non-routine maintenance. No features of this project will

KyTC BMP Plan for Project CID ## -

require post construction maintenance over and above normal maintenance procedures. (1)

F. Inspections

Inspection and maintenance practices that will be used to maintain erosion and sediment controls:

- All erosion prevention and sediment control measures will be inspected at least once each week and following any rain of one-half inch or more.
- Inspections will be conducted by individuals that have successfully completed the KEPSC-RI course as required by Section 213.02.02 of the Standard Specifications for Road and Bridge Construction, current edition.
- Inspection reports will be written, signed, dated, and kept on file.
- Areas at final grade will be seeded and mulched within 14 days.
- Areas that are not at final grade where construction has ceased for a period of 21 days or longer and soil stock piles shall receive temporary mulch no later than 14 days from the last construction activity in that area.
- All measures will be maintained in good working order; if a repair is necessary, it will be initiated within 24 hours of being reported.
- Built-up sediment will be removed from behind the silt fence before it has reached halfway up the height of the fence.
- Silt fences will be inspected for bypassing, overtopping, undercutting, depth of sediment, tears, and to ensure attachment to secure posts.
- Sediment basins will be inspected for depth of sediment, and built-up sediment will be removed when it reaches 50 percent of the design capacity and at the end of the job.
- Diversion dikes and berms will be inspected and any breaches promptly repaired. Areas that are eroding or scouring will be repaired and re-seeded / mulched as needed.
- Temporary and permanent seeding and mulching will be inspected for bare spots, washouts, and healthy growth. Bare or eroded areas will be repaired as needed.
- All material storage and equipment servicing areas that involve the management of bulk liquids, fuels, and bulk solids will be inspected weekly for conditions that represent a release or possible release of pollutants to the environment.

KyTC BMP Plan for Project CID ## -

G. Non – Storm Water discharges

It is expected that non-storm water discharges may occur from the site during the construction period. Examples of non-storm water discharges include:

- Water from water line flushings.
- Water form cleaning concrete trucks and equipment.
- Pavement wash waters (where no spills or leaks of toxic or hazardous materials have occurred).
- Uncontaminated groundwater and rain water (from dewatering during excavation).

All non-storm water discharges will be directed to the sediment basin or to a filter fence enclosure in a flat vegetated infiltration area or be filtered via another approved commercial product.

H. Groundwater Protection Plan (3)

This plan serves as the groundwater protection plan as required by 401 KAR 5:037.

- Contractors statement: (3)

The following activities, as enumerated by 401 KAR 5:037 Section 2 that require the preparation and implementation of a groundwater protection plan, will or may be may be conducted as part of this construction project:

_____ 2. (e) land treatment or land disposal of a pollutant;

_____ 2. (f) Storing, ..., or related handling of hazardous waste, solid waste or special waste, ..., in tanks, drums, or other containers, or in piles, (This does not include wastes managed in a container placed for collection and removal of municipal solid waste for disposal off site);

_____ 2. (g) Handling of materials in bulk quantities (equal or greater than 55 gallons or 100 pounds net dry weight transported held in an individual container) that, if released to the environment, would be a pollutant;

KyTC BMP Plan for Project CID ## -

_____ 2. (j) Storing or related handling of road oils, dust suppressants,, at a central location;

_____ 2. (k) Application or related handling of road oils, dust suppressants or deicing materials, (does not include use of chloride-based deicing materials applied to roads or parking lots);

_____ 2. (m) Installation, construction, operation, or abandonment of wells, bore holes, or core holes, (this does not include bore holes for the purpose of explosive demolition);

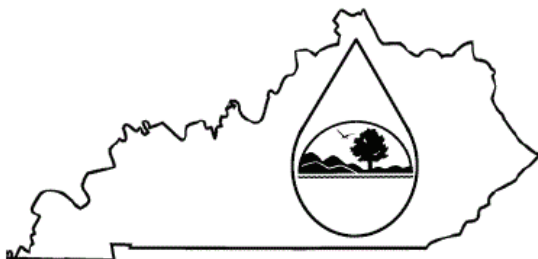
Or, check the following only if there are no qualifying activities

_____ There are no activities for this project as listed in 401 KAR 5:037 Section 2 that require the preparation and implementation of a groundwater protection plan.

The contractor is responsible for the preparation of a plan that addresses the

401 KAR 5:037 Section 3. (3) Elements of site specific groundwater protection plan:

- (a) General information about this project is covered in the Project information;
- (b) Activities that require a groundwater protection plan have been identified above;
- (c) Practices that will protect groundwater from pollution are addressed in section C. Other control measures.
- (d) Implementation schedule – all practices required to prevent pollution of groundwater are to be in place prior to conducting the activity;
- (e) Training is required as a part of the ground water protection plan. All employees of the contractor, sub-contractor and resident engineer personnel will be trained to understand the nature and requirements of this plan as they pertain to their job function(s). Training will be accomplished within one week of employment and annually thereafter. A record of training will be maintained by the contractor with a copy provide to the resident engineer.
- (f) Areas of the project and groundwater plan activities will be inspected as part of the weekly sediment and erosion control inspections
- (g) Certification (see signature page.)



KENTUCKY POLLUTION DISCHARGE ELIMINATION SYSTEM (KPDES)

Notice of Intent (NOI) for coverage of Storm Water Discharge
Associated with Construction Activities Under the KPDES Storm
Water General Permit KYR100000

[Click here for Instructions
\(Controls/KPDES_FormKYR10_Instructions.htm\)](#)

[Click here to obtain information and a copy of the KPDES General Permit.
\(http://dep.ky.gov/formslibrary/Documents/KYR10PermitPage.pdf\)](http://dep.ky.gov/formslibrary/Documents/KYR10PermitPage.pdf)

(*) indicates a required field; (✓) indicates a field may be required based on user input or is an optionally required field

Reason for Submittal:(*)

Application for New Permit Coverage

Agency Interest ID:

Agency Interest ID

Permit Number:(✓)

KPDES Permit Number

If change to existing permit coverage is requested, describe the changes for which modification of coverage is being sought:(✓)

ELIGIBILITY:

Stormwater discharges associated with construction activities disturbing individually one (1) acre or more, including, in the case of a common plan of development, contiguous construction activities that cumulatively equal one (1) acre or more of disturbance.

EXCLUSIONS:

The following are excluded from coverage under this general permit:

- 1) Are conducted at or on properties that have obtained an individual KPDES permit for the discharge of other wastewaters which requires the development and implementation of a Best Management Practices (BMP) plan;
- 2) Any operation that the DOW determines an individual permit would better address the discharges from that operation;
- 3) Any project that discharges to an Impaired Water listed in the most recent Integrated Report, §305(b) as impaired for sediment and for which an approved TMDL has been developed.

SECTION I -- FACILITY OPERATOR INFORMATION (PERMITTEE)

Company Name:(✓)

Kentucky Transportation Cabinet - District 2

First Name:(✓)

Deneatra

M.I.:

MI

Last Name:(✓)

Henderson

Mailing Address:(*)

1840 N. Main St.

City:(*)

Madisonville

State:(*)

Kentucky

Zip:(*)

42431

eMail Address:(*)

Deneatra.Henderson@ky.gov

Business Phone:(*)

270 824 7080

Alternate Phone:

270 791 4396

SECTION II -- GENERAL SITE LOCATION INFORMATION

Project Name:(*)

2-9022.00 - Daviess - Imprvmts on KY 298 (Intersection Radii and Minor Widen) a

Status of Owner/Operator(*)

State Government

SIC Code(*)

1611 Highway and Street Constr

Company Name:(✓)

Kentucky Transportation Cabinet - District 2

First Name:(✓)

Deneatra

M.I.:

MI

Last Name:(✓)

Henderson

Site Physical Address:(*)

2-9022.00 - Daviess - Imprvmts on KY 298 (Intersection Radii and Minor Widen) at Southern Oak Elem.

City:(*)

Utica

State:(*)

Kentucky

Zip:(*)

42376

County:(*)

Daviess

Latitude(decimal degrees)(*)DMS to DD Converter
(https://www.fcc.gov/media/radio/dms-decimal)

37.669814

Longitude(decimal degrees)(*)

-87.127152

SECTION III -- SPECIFIC SITE ACTIVITY INFORMATION

Project Description:(*)

2-9022.00 - Daviess - Improvements on KY 298 (Intersection Radii and Minor Widening) at Southern Oaks Elem. School

a. For single projects provide the following information

Total Number of Acres in Project:(✓) 1.66	Total Number of Acres Disturbed:(✓) 1.66
Anticipated Start Date:(✓) X/X/202X	Anticipated Completion Date:(✓) X/X/202X

b. For common plans of development provide the following information

Total Number of Acres in Project:(✓) # Acre(s)	Total Number of Acres Disturbed:(✓) # Acre(s)
Number of individual lots in development, if applicable:(✓) # lot(s)	Number of lots in development:(✓) # lot(s)
Total acreage of lots intended to be developed:(✓) Project Acres	Number of acres intended to be disturbed at any one time:(✓) Disturbed Acres
Anticipated Start Date:(✓)	Anticipated Completion Date:(✓)

List Building Contractor(s) at the time of Application:(*)

	Company Name	Delete
1		Delete
+		

SECTION IV -- IF THE PERMITTED SITE DISCHARGES TO A WATER BODY THE FOLLOWING INFORMATION IS REQUIRED ?

Discharge Point(s):

	Unnamed Tributary?	Latitude	Longitude	Receiving Water Name	Delete
1	Yes	37.669640	-87.128819	Rhodes Creek	Delete
2	Yes	37.669908	-87.128869	Rhodes Creek	Delete
+					

SECTION V -- IF THE PERMITTED SITE DISCHARGES TO A MS4 THE FOLLOWING INFORMATION IS REQUIRED ?

Name of MS4:

Date of application/notification to the MS4 for construction site permit coverage:
Date

Discharge Point(s):(*)

	Latitude	Longitude
+		

SECTION VI -- WILL THE PROJECT REQUIRE CONSTRUCTION ACTIVITIES IN A WATER BODY OR THE RIPARIAN ZONE?

Will the project require construction activities in a water body or the riparian zone?:(*)

	No
If Yes, describe scope of activity: (✓)	describe scope of activity
Is a Clean Water Act 404 permit required?:(*)	No
Is a Clean Water Act 401 Water Quality Certification required?:(*)	No

SECTION VII -- NOI PREPARER INFORMATION

First Name:(*) Jean	M.I.: MI	Last Name:(*) Jones	Company Name:(*) KYTC D-02
Mailing Address:(*) 1840 N. Main St.	City:(*) Madisonville	State:(*) Kentucky	Zip:(*) 42431
eMail Address:(*) JeanR.Jones@ky.gov	Business Phone:(*) 270 824 7080	Alternate Phone: Phone	

SECTION VIII -- ATTACHMENTS

Facility Location Map:(*)	<input type="button" value="Upload file"/>
Supplemental Information:	<input type="button" value="Upload file"/>

SECTION IX -- CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature:(*) Deneatra Henderson	Title:(*) Chief District Engineer		
First Name:(*) Deneatra	M.I.: MI	Last Name:(*) Henderson	
eMail Address:(*) Deneatra.Henderson@ky.gov	Business Phone:(*) 270 824 7080	Alternate Phone: 270 791 4396	Signature Date:(*) Date

<input type="button" value="Click to Save Values for Future Retrieval"/>	<input type="button" value="Click to Submit to EEC"/>
--	---

Daviess County

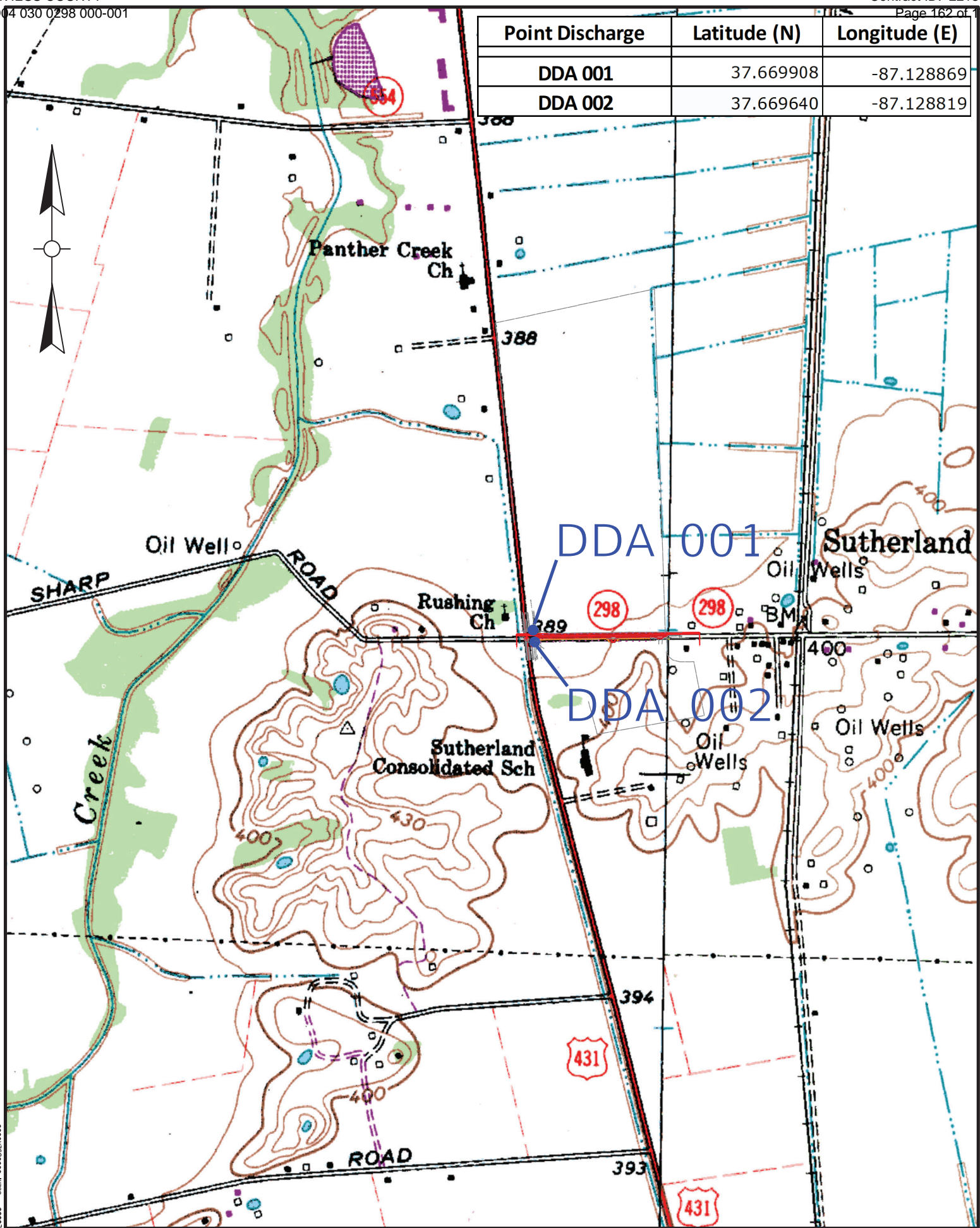
KY 298 Improvements – Intersection Radii and Minor Widening at Southern Oak Elem. School

KPDES NOI for Stormwater Discharges Associated with
Construction Activity Under the KPDES General Permit

Transaction ID:

9f0a889b-880a-4fd8-a137-32d7218d98a0

Point Discharge	Latitude (N)	Longitude (E)
DDA 001	37.669908	-87.128869
DDA 002	37.669640	-87.128819



DATE: ***/**/**** USER: ***/**/****

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, 1025 Capital Center Drive, Suite 104, Frankfort, Kentucky 40601; telephone (502) 564-7954.

Revised: May 23, 2022

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** 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

221345

Page 1 of 2

Report Date 8/18/22

Section: 0001 - PAVING

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0010	00003		CRUSHED STONE BASE	850.00	TON		\$	
0020	00100		ASPHALT SEAL AGGREGATE	14.60	TON		\$	
0030	00103		ASPHALT SEAL COAT	1.75	TON		\$	
0040	00190		LEVELING & WEDGING PG64-22	25.00	TON		\$	
0050	00221		CL2 ASPH BASE 0.75D PG64-22	424.00	TON		\$	
0060	23362ES403		CL2 ASPH SURF 0.50B PG64-22	320.00	TON		\$	
0070	24970EC		ASPHALT MATERIAL FOR TACK NON-TRACKING	1.50	TON		\$	

Section: 0002 - ROADWAY

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0080	00078		CRUSHED AGGREGATE SIZE NO 2	800.00	TON		\$	
0090	02200		ROADWAY EXCAVATION	2,630.00	CUYD		\$	
0100	02545		CLEARING AND GRUBBING APPROXIMATELY 1.103 ACRES	1.00	LS		\$	
0110	02562		TEMPORARY SIGNS	400.00	SQFT		\$	
0120	02585		EDGE KEY	110.00	LF		\$	
0130	02650		MAINTAIN & CONTROL TRAFFIC	1.00	LS		\$	
0140	02676		MOBILIZATION FOR MILL & TEXT	1.00	LS		\$	
0150	02677		ASPHALT PAVE MILLING & TEXTURING	500.00	TON		\$	
0160	02704		SILT TRAP TYPE B	4.00	EACH		\$	
0170	02705		SILT TRAP TYPE C	2.00	EACH		\$	
0180	02707		CLEAN SILT TRAP TYPE B	4.00	EACH		\$	
0190	02708		CLEAN SILT TRAP TYPE C	2.00	EACH		\$	
0200	02726		STAKING	1.00	LS		\$	
0210	05950		EROSION CONTROL BLANKET	3,300.00	SQYD		\$	
0220	05952		TEMP MULCH	3,524.00	SQYD		\$	
0230	05953		TEMP SEEDING AND PROTECTION	2,670.00	SQYD		\$	
0240	05963		INITIAL FERTILIZER	.25	TON		\$	
0250	05964		MAINTENANCE FERTILIZER	.15	TON		\$	
0260	05985		SEEDING AND PROTECTION	2,040.00	SQYD		\$	
0270	05992		AGRICULTURAL LIMESTONE	3.00	TON		\$	
0280	06568		PAVE MARKING-THERMO STOP BAR-24IN	39.00	LF		\$	
0290	06569		PAVE MARKING-THERMO CROSS-HATCH	150.00	SQFT		\$	
0300	20061ES719		G/R END TREATMENT TY 7 CR	1.00	EACH		\$	
0310	20550ND		SAWCUT PAVEMENT	1,175.00	LF		\$	
0320	21289ED		LONGITUDINAL EDGE KEY	1,175.00	LF		\$	
0330	21802EN		G/R STEEL W BEAM-S FACE (7 FT POST)	75.00	LF		\$	
0340	23745EC		YIELD LINES	7.00	EACH		\$	
0350	24189ER		DURABLE WATERBORNE MARKING-6 IN W	2,033.00	LF		\$	
0360	24190ER		DURABLE WATERBORNE MARKING-6 IN Y	1,129.00	LF		\$	

Section: 0003 - DRAINAGE

PROPOSAL BID ITEMS

221345

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Report Date 8/18/22

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0370	00443		ENTRANCE PIPE-24 IN	214.00	LF		\$	
0380	00470		CULVERT PIPE-48 IN	4.00	LF		\$	
0390	01216		PIPE CULVERT HEADWALL-48 IN	1.00	EACH		\$	
0400	01310		REMOVE PIPE	228.00	LF		\$	
0410	01434		SLOPED BOX OUTLET TYPE 1-24 IN	5.00	EACH		\$	
0420	01756		MANHOLE TYPE A	1.00	EACH		\$	
0430	02625		REMOVE HEADWALL	3.00	EACH		\$	

Section: 0004 - WATERLINE

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0440	14004		W DIRECTIONAL BORE	280.00	LF		\$	
0450	14059		W PIPE PVC 06 INCH (C-900)	1,095.00	LF		\$	
0460	14074		W PLUG EXISTING MAIN (6 INCH AC W/ THRUST BLOCK)	2.00	EACH		\$	
0470	14074		W PLUG EXISTING MAIN (6 INCH AC)	2.00	EACH		\$	
0480	14089		W TAPPING SLEEVE AND VALVE SIZE 1 (6 IN)	2.00	EACH		\$	
0490	14105		W VALVE 06 INCH (GATE)	2.00	EACH		\$	
0500	14148		W SERV COPPER LONG SIDE 3/4 IN (DOUBLE RUN)	560.00	EACH		\$	
0510	14516		W METER 2 INCH INST (METER SUPPLIED BY WATER DISTRICT)	1.00	EACH		\$	
0520	14517		W METER 3/4 INCH INST (METER SUPPLIED BY WATER DISTRICT)	1.00	EACH		\$	
0530	26177ED		CONCRETE CAP (OVER FORCE MAIN)	1.00	LS		\$	

Section: 0005 - DEMOBILIZATION &/OR MOBILIZATION

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0540	02569		DEMOBILIZATION	1.00	LS		\$	