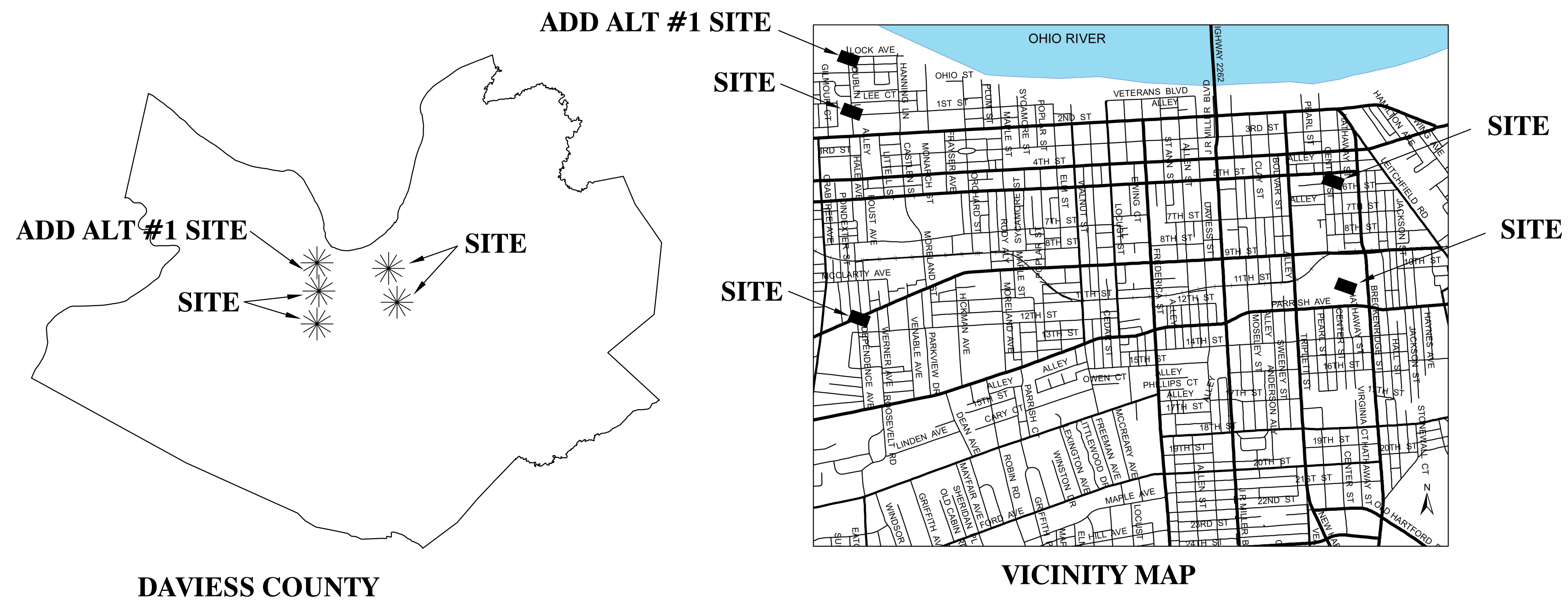


REGIONAL WATER RESOURCE AGENCY (R.W.R.A.)

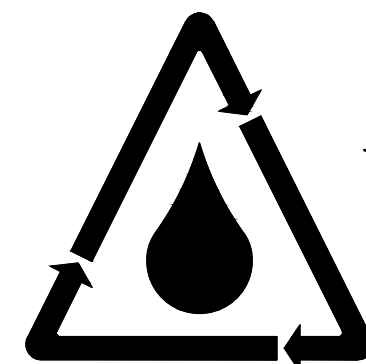
TUNNEL MANHOLE REHABILITATION

CONTRACT NO. C-2024-22

OCTOBER 2024
OWENSBORO, DAVIESS COUNTY, KY



Know what's below.
Call before you dig.



REGIONAL
WATER RESOURCE AGENCY

SHEET INDEX	
SHEET NO.	DESCRIPTION
1	COVER SHEET
2	GENERAL NOTES
3-7	MAINTENANCE OF TRAFFIC
8-10	MANHOLE REHAB DETAILS

GENERAL NOTES

SPECIFICATIONS:

THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THESE CONTRACT SPECIFICATIONS, THE "OWENSBORO METROPOLITAN PUBLIC IMPROVEMENT SPECIFICATIONS", THE KENTUCKY TRANSPORTATION CABINET, DEPARTMENT OF HIGHWAYS "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", CURRENT EDITION. ANY REFERENCE TO METRIC UNITS IN ANY ABOVE MENTIONED SPECIFICATIONS SHALL BE CONVERTED TO IMPERIAL UNITS WHEN APPLIED TO THIS PROJECT.

CONTROL OF WORK

THE RIGHT IS RESERVED BY RWRA TO HAVE OTHER WORK PERFORMED BY OTHER CONTRACTORS AND BY ITS OWN FORCES AND TO PERMIT PUBLIC UTILITY COMPANIES AND OTHERS TO DO WORK DURING THE CONSTRUCTION OF, AND WITHIN THE LIMITS OF OR ADJACENT TO THE PROJECT. THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS AND COOPERATE WITH SUCH OTHERS SO THAT INTERFERENCE WITH SUCH OTHER WORK WILL BE REDUCED TO A MINIMUM. THE CONTRACTOR SHALL AGREE, AND HEREBY DOES AGREE TO MAKE NO CLAIMS AGAINST RWRA FOR ADDITIONAL COMPENSATION DUE TO DELAYS OR OTHER CONDITIONS CREATED BY THE OPERATIONS OF SUCH OTHER PARTIES. SHOULD A DIFFERENCE OF OPINION ARISE AS TO THE RIGHTS OF THE CONTRACTOR AND OTHERS WORKING WITHIN THE LIMITS OF OR ADJACENT TO THE PROJECT, THE ENGINEER WILL DECIDE AS TO THE RESPECTIVE RIGHTS OF THE VARIOUS PARTIES INVOLVED IN ORDER TO ASSURE THE COMPLETION OF RWRA'S WORK IN GENERAL HARMONY AND IN A SATISFACTORY MANNER AND HIS DECISIONS SHALL BE FINAL AND BINDING UPON THE CONTRACTOR.

NOTICE – CAUTION – CLASSIFICATION

WITHOUT REGARDS TO THE MATERIALS ENCOUNTERED, ALL ROADWAY AND PIPE EXCAVATION SHALL BE UNCLASSIFIED. IT SHALL BE DISTINCTLY UNDERSTOOD THAT ANY REFERENCE TO ROCK, EARTH, OR ANY OTHER MATERIAL ON THE PLANS OR CROSS-SECTIONS, WHETHER IN NUMBERS, WORDS, LETTERS OR LINES, IS SOLELY FOR RWRA'S INFORMATION AND IS NOT TO BE TAKEN AS AN INDICATION OF CLASSIFIED EXCAVATION OR THE QUANTITY OF EITHER ROCK, EARTH OR ANY OTHER MATERIAL INVOLVED. THE BIDDER MUST DRAW HIS OWN CONCLUSION AS TO THE CONDITIONS TO BE ENCOUNTERED. RWRA DOES NOT GIVE ANY GUARANTEE AS TO THE ACCURACY OF THE DATA AND NO CLAIM WILL BE CONSIDERED FOR ADDITIONAL COMPENSATION IF THE MATERIALS ENCOUNTERED ARE NOT IN ACCORDANCE WITH THE CLASSIFICATION SHOWN.

EXISTING SANITARY SEWER FACILITIES

THE CONTRACTOR SHALL REPAIR ANY DISRUPTED SEWER/SEPTIC LINES CAUSED BY THEIR CONSTRUCTION ACTIVITIES.

POSITIVE DRAINAGE:

THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AT ALL TIMES DURING CONSTRUCTION. AT NO POINT SHALL DRAINAGE BE BLOCKED OR IMPEDED. ANY CONTRACTOR PROPOSED DIVERSION OF WATER SHALL BE APPROVED BY THE ENGINEER PRIOR TO IMPLEMENTATION.

MATCHING OF EXISTING GRADE:

WHERE APPLICABLE THE PROPOSED STRUCTURES ELEVATIONS AND HORIZONTAL LOCATIONS SHALL MATCH THE EXISTING CONDITIONS. THIS INCLUDES BUT IS NOT LIMITED TO MANHOLE TOP OF RIMS.

BEFORE YOU DIG

THE CONTRACTOR IS ADVISED THAT HE SHALL CALL 811 OR 1-800-752-6007 TOLL FREE A MINIMUM OF TWO AND NO MORE THAN TEN BUSINESS DAYS PRIOR TO EXCAVATION FOR INFORMATION ON THE LOCATION OF EXISTING UNDERGROUND UTILITIES WHICH SUBSCRIBE TO THE BEFORE-U-DIG (BUD) SERVICE. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE EXCAVATION WITH ALL UTILITY OWNERS, INCLUDING THOSE WHO DO NOT SUBSCRIBE TO BUD.

UTILITY CONFLICTS

ANY ADJUSTMENTS OR RELOCATIONS OF UNFORESEEN EXISTING UTILITIES SERVICE LINES PERFORMED BY THE CONTRACTOR SHALL BE REIMBURSED UNDER THE UTILITY RELOCATE & MISC. ALLOWANCE, AND MUST BE PRE-APPROVED BY THE ENGINEER.

THE CONTRACTOR SHALL TAKE SPECIAL CARE TO PROTECT EXISTING UTILITIES TO THE MAXIMUM EXTENT PRACTICAL.

THE CONTRACTOR SHALL COORDINATE HIS WORK WITH THE OWNER TO MINIMIZE DISRUPTION OF EXISTING SERVICES.

THE CONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEER 2 BUSINESS DAYS IN ADVANCE OF ANY WORK WHICH REQUIRES EXISTING UTILITIES TO BE TAKEN OUT OF SERVICE. MANHOLE RIM ELEVATIONS SHALL BE ADJUSTED TO MATCH FINAL GRADE.

UTILITIES (HAZARDOUS OR FLAMMABLE MATERIAL)

THE CONTRACTOR IS ADVISED TO EXERCISE CAUTION IN HIS OPERATION IN AREAS WHERE PLANS INDICATE THE PRESENCE OF A GAS LINE OR OTHER LINES CARRYING HAZARDOUS MATERIAL.

UTILITIES

ANY UTILITIES SHOWN ON THE PLANS ARE FOR INFORMATION ONLY. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UTILITIES WITHIN THE PROJECT SITE AND EXERCISING CAUTION WHEN WORKING AROUND ALL UTILITIES.

UTILITY CONTACT INFORMATION

ELECTRIC POWER

OMU
2070 TAMARACK ROAD
OWENSBORO, KY 42301
(270) 926-3200
CONTACT: AUSTIN MCLIMORE

NATURAL GAS

ATMOS ENERGY
3275 HIGHLAND POINTE DRIVE
OWENSBORO, KY 42303
(270) 836-7229
CONTACT: CODY TOWNSEND

SANITARY SEWER

REGIONAL WATER RESOURCE AGENCY
2101 GRIMES AVENUE
OWENSBORO, KY 42303
(270) 297-9211
CONTACT: DAKOTA BASHAM

DEWATERING

THE CONTRACTOR/BIDDER IS ADVISED TO REFERENCE THE WORDING IN THE SPECIFICATIONS IN REGARDS TO DEWATERING (NOTE 3.04 OF SECTION 0049). IT IS RECOMMENDED THAT THE CONTRACTOR SCHEDULE HIS WORK WITHIN THE FLOOD PLAIN LIMITS TO TAKE PLACE DURING THE DRY SEASON.

HORIZONTAL & VERTICAL VERIFICATIONS

THE CONTRACTOR SHALL FIELD VERIFY ALL HORIZONTAL AND VERTICAL DIMENSIONS AS SHOWN ON THE PLANS. THE CONTRACTOR IS ADVISED THAT HE IS REQUIRED TO MATCH EXISTING CONDITIONS WITH REGARDS TO ALL TIE POINTS. THE CONTRACTOR MUST ENSURE THAT POSITIVE DRAINAGE IS ACHIEVED AND THAT THE EXISTING ELEVATIONS ARE CORRECT IN RELATIONSHIP TO THE PROPOSED.

PRIVATE PROPERTY/RELOCATION

ITEMS THE CONTRACTOR SHALL REMOVE AND RESET: ANY MAIL BOX, OR PRIVATE PROPERTY ITEMS WHICH ARE LOCATED ON THE EXISTING RIGHT OF WAY OR PUBLIC EASEMENTS AS NECESSARY FOR PROJECT CONSTRUCTION. FENCES, ORNAMENTAL SHRUBS, DECORATIVE AND/OR LANDSCAPE ITEMS SHALL BE REMOVED BY THE PROPERTY OWNER. THE CONTRACTOR SHALL GIVE THE RESPECTIVE PROPERTY OWNER THE FIRST CHANCE TO REMOVE THE ITEMS. CARE SHALL BE TAKEN BY THE CONTRACTOR TO AVOID DAMAGE TO ANY PRIVATE PROPERTY ITEMS REMOVED BY THE CONTRACTOR.

NO MATERIALS DISPOSAL, MATERIALS STORAGE NOR EQUIPMENT STORAGE SHALL BE PERFORMED ON PRIVATE PROPERTY AND EASEMENTS UNLESS:

- 1) WRITTEN PERMISSION FROM THE PRIVATE PROPERTY OWNER(S) IS GIVEN TO THE ENGINEER.
- 2) USE OF THE PRIVATE PROPERTY IS APPROVED BY THE ENGINEER ON A CASE BY CASE BASIS.
- 3) THE CONTRACTOR SHALL GIVE PRIVATE PROPERTY OWNERS A MINIMUM OF 24 HOURS OF NOTICE.

PRIVATE PROPERTY DAMAGE

THE CONTRACTOR SHALL BE RESPONSIBLE FOR REIMBURSING PROPERTY OWNERS AT FAIR MARKET VALUE FOR CROP DAMAGE AND/OR PROPERTY DAMAGE CAUSED BY THE CONTRACTOR'S DISTURBANCE OF PROPERTY OUTSIDE OF THE PERMITTED WORKING LIMITS. THE PERMITTED WORKING LIMITS SHALL BE DEFINED AS THE SUBJECT PROPERTY CONTAINED WITHIN THE PROJECT RIGHT-OF-WAY AND EASEMENTS. FAIR MARKET VALUES SHALL BE DETERMINED BY THE ENGINEER.

THE CONTRACTOR SHALL ASSUME THE RESPONSIBILITY TO COORDINATE WITH THE PROPERTY OWNERS FOR ACCESS TO ALL WORK AREAS.

ROADWAY CUTS

ALL STREETS ARE UNDER THE JURISDICTION OF THE CITY OF OWENSBORO. PRIOR TO CONDUCTING ANY WORK WITHIN SAID RIGHT-OF-WAY THE CONTRACTOR MUST SECURE ANY NECESSARY PERMITS WITH THE CITY OF OWENSBORO ENGINEERING OFFICE, REFERENCE THE REQUIREMENTS WITHIN THE SPECIFICATIONS.

PRIOR TO CONSTRUCTING ANY WORK WITHIN THE CITY'S RIGHT-OF-WAY, THE CONTRACTOR MUST COORDINATE WITH THE CITY ENGINEER.

ALL ROADWAY CUTS WITHIN CITY RIGHT-OF-WAY SHALL BE REPAIRED IN COMPLIANCE WITH THE PI SPECIFICATIONS.

DRIVEWAYS SHALL BE REPAIRED IN COMPLIANCE WITH THE REQUIREMENTS AS OUTLINED IN CHAPTER 9 OF THE PI SPECIFICATIONS.

DEFINITIONS

WHENEVER USED IN THE PLANS OR IN THE CONTRACT DOCUMENTATION, THE FOLLOWING TERMS HAVE THE MEANINGS INDICATED WHICH ARE APPLICABLE TO BOTH SINGULAR AND PLURAL THEREOF.

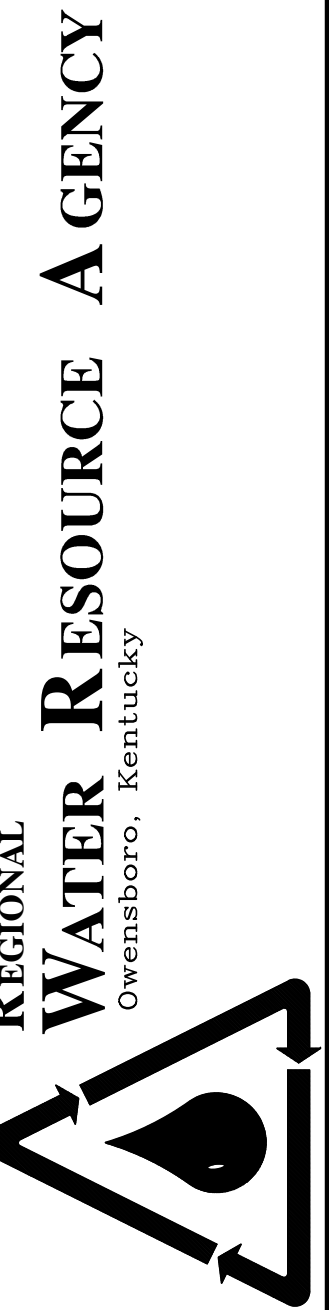
- ENGINEER SHALL MEAN THE ASSIGNED RESIDENT ENGINEER.
- OWNER SHALL MEAN RWRA.
- OWNERS REPRESENTATIVE SHALL MEAN RWRA'S DIRECTOR OF ENGINEERING.

ORDER OF MAGNITUDE

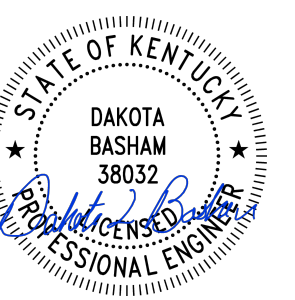
THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER SHOULD A CONFLICT BE FOUND IN THE PLANS OR SPECIFICATIONS.

IN CASE OF DESIGN/SPECIFICATION CONFLICT THE FOLLOWING ORDER OF MAGNITUDE SHALL BE APPLIED:

- 1.) CONSTRUCTION PLANS
- 2.) CONTRACT SPECIFICATIONS
- 3.) OMPC PUBLIC IMPROVEMENT SPECIFICATIONS
- 4.) KYTC STANDARD DRAWINGS AND SPECIFICATIONS
- 5.) MANUFACTURER SPECIFICATIONS



CONTRACT NO. 2024-22
TUNNEL MANHOLE REHABILITATION
REGIONAL WATER RESOURCE AGENCY
OWENSBORO, DAVIESS COUNTY, KENTUCKY



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DATE:

JOB NO.

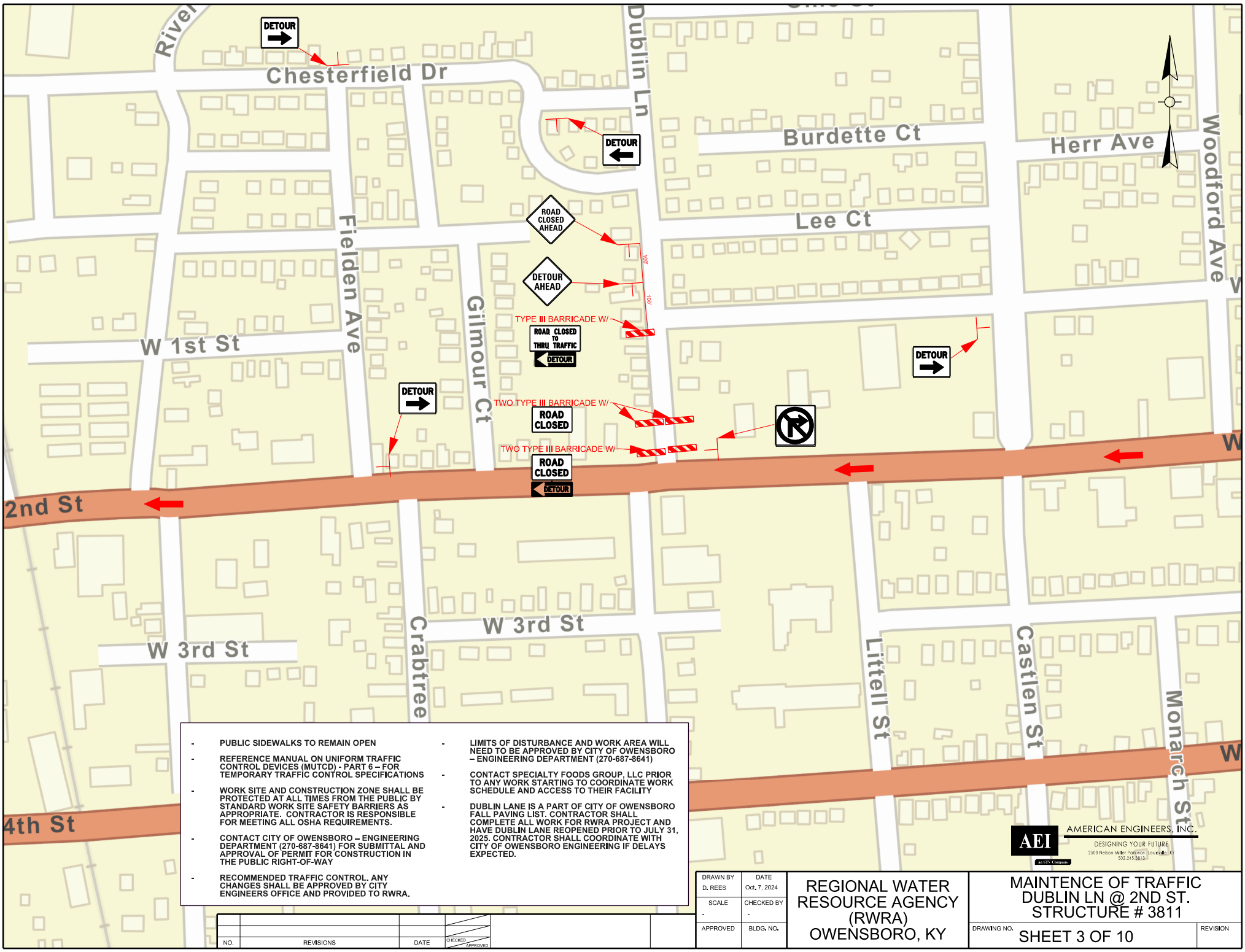
REVISIONS: NO.	DESCRIPTION	BY	DATE				

SHEET 2 OF 10

GENERAL NOTES



Know what's below.
Call before you dig.



- PUBLIC SIDEWALKS TO REMAIN OPEN
- REFERENCE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) - PART 6 - FOR TEMPORARY TRAFFIC CONTROL SPECIFICATIONS
- WORK SITE AND CONSTRUCTION ZONE SHALL BE PROTECTED AT ALL TIMES FROM THE PUBLIC BY STANDARD WORK SITE SAFETY BARRIERS AS APPROPRIATE. CONTRACTOR IS RESPONSIBLE FOR MEETING ALL OSHA REQUIREMENTS.
- CONTACT CITY OF OWENSBORO - ENGINEERING DEPARTMENT (270-687-8641) FOR SUBMITTAL AND APPROVAL OF PERMIT FOR CONSTRUCTION IN THE PUBLIC RIGHT-OF-WAY
- RECOMMENDED TRAFFIC CONTROL. ANY CHANGES SHALL BE APPROVED BY CITY ENGINEERS OFFICE AND PROVIDED TO RWRA.
- LIMITS OF DISTURBANCE AND WORK AREA WILL NEED TO BE APPROVED BY CITY OF OWENSBORO - ENGINEERING DEPARTMENT (270-687-8641)
- CONTACT SPECIALTY FOODS GROUP, LLC PRIOR TO ANY WORK STARTING TO COORDINATE WORK SCHEDULE AND ACCESS TO THEIR FACILITY
- DUBLIN LANE IS A PART OF CITY OF OWENSBORO FALL PAVING LIST. CONTRACTOR SHALL COMPLETE ALL WORK FOR RWRA PROJECT AND HAVE DUBLIN LANE REOPENED PRIOR TO JULY 31, 2025. CONTRACTOR SHALL COORDINATE WITH CITY OF OWENSBORO ENGINEERING IF DELAYS EXPECTED.

NO.	REVISIONS	DATE	CHECKED	APPROVED

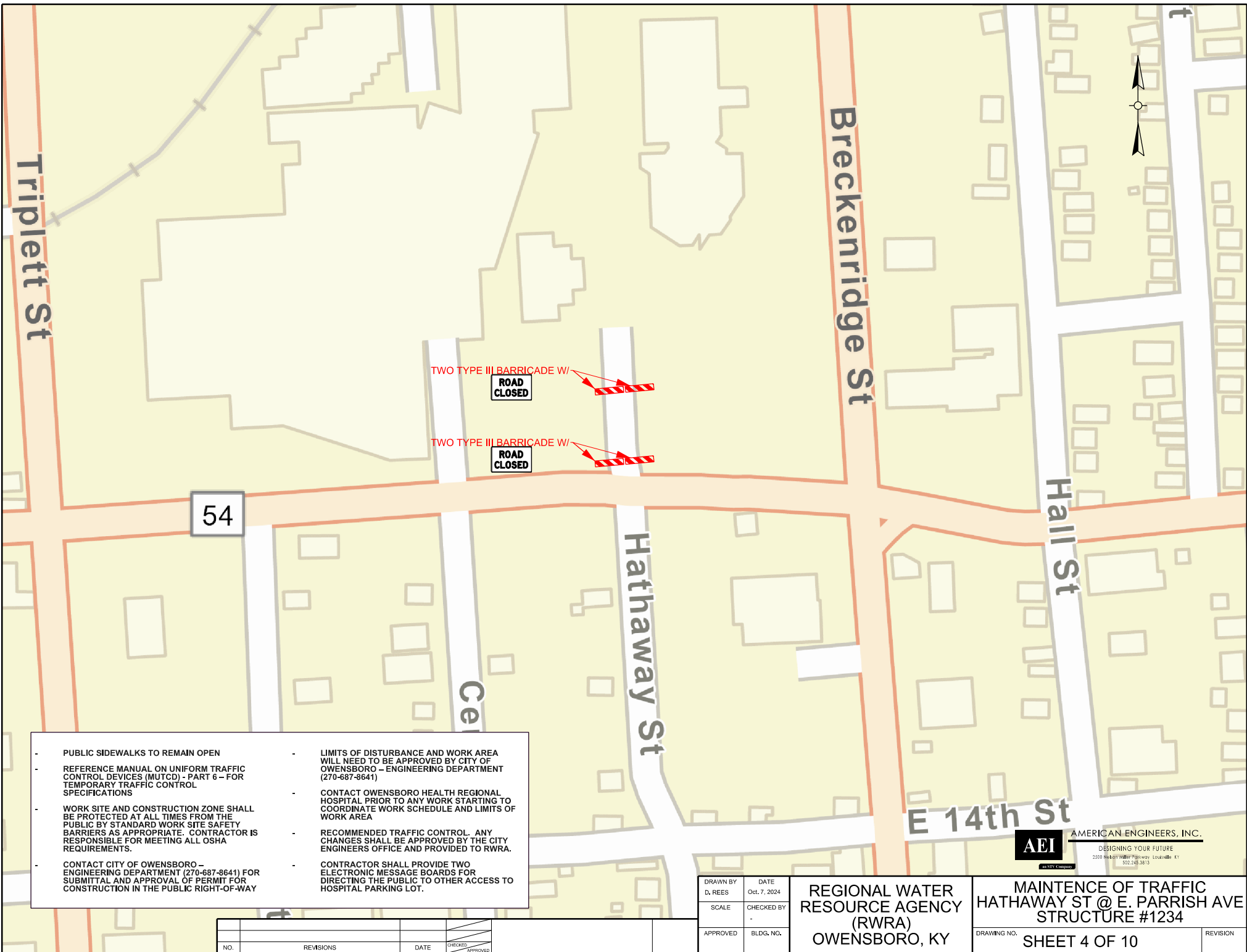
DRAWN BY D. REES	DATE Oct. 7, 2024
SCALE -	CHECKED BY -
APPROVED	BLDG. NO.

REGIONAL WATER RESOURCE AGENCY (RWRA)
OWENSBORO, KY

AEI AMERICAN ENGINEERS, INC.
DESIGNING YOUR FUTURE
2500 Nelson Huber Parkway Louisville, KY 40224-3811

MAINTENANCE OF TRAFFIC DUBLIN LN @ 2ND ST. STRUCTURE # 3811

DRAWING NO. SHEET 3 OF 10 REVISION



- PUBLIC SIDEWALKS TO REMAIN OPEN
- REFERENCE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) - PART 6 - FOR TEMPORARY TRAFFIC CONTROL SPECIFICATIONS
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- LIMITS OF DISTURBANCE AND WORK AREA WILL NEED TO BE APPROVED BY CITY OF OWENSBORO - ENGINEERING DEPARTMENT (270-687-8641)
- CONTACT OWENSBORO HEALTH REGIONAL HOSPITAL PRIOR TO ANY WORK STARTING TO COORDINATE WORK SCHEDULE AND LIMITS OF WORK AREA
- RECOMMENDED TRAFFIC CONTROL. ANY CHANGES SHALL BE APPROVED BY THE CITY ENGINEERS OFFICE AND PROVIDED TO RWRA.
- CONTRACTOR SHALL PROVIDE TWO ELECTRONIC MESSAGE BOARDS FOR DIRECTING THE PUBLIC TO OTHER ACCESS TO HOSPITAL PARKING LOT.

NO.	REVISIONS	DATE	CHECKED	APPROVED

DRAWN BY D. REES	DATE Oct. 7, 2024
SCALE	CHECKED BY -
APPROVED	BLDG. NO.

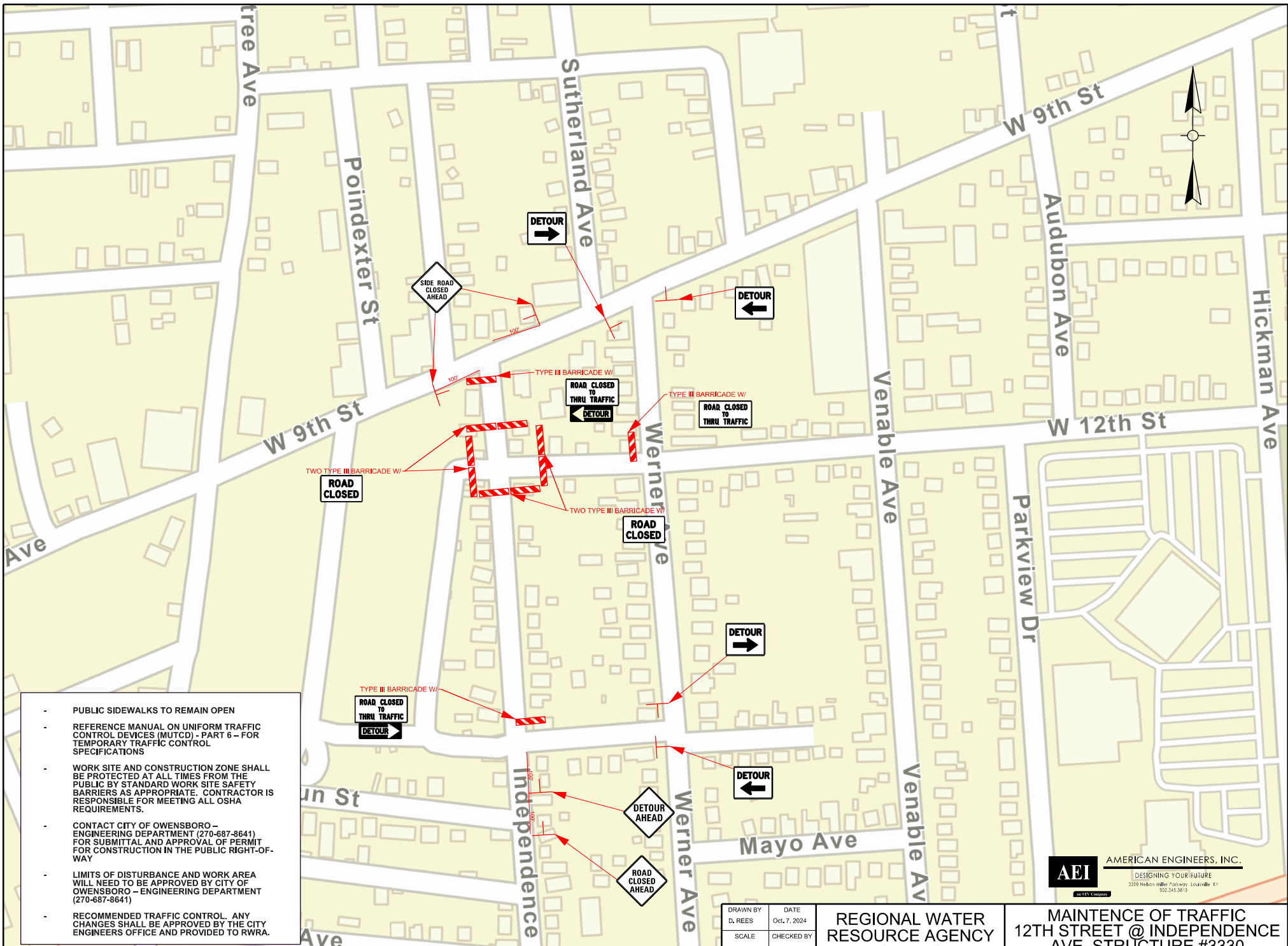
REGIONAL WATER RESOURCE AGENCY (RWRA)
OWENSBORO, KY

MAINTENANCE OF TRAFFIC HATHAWAY ST @ E. PARRISH AVE STRUCTURE #1234

DRAWING NO. SHEET 4 OF 10

REVISION





- PUBLIC SIDEWALKS TO REMAIN OPEN
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- RECOMMENDED TRAFFIC CONTROL. ANY CHANGES SHALL BE APPROVED BY THE CITY ENGINEERS OFFICE AND PROVIDED TO RWRA.

NO.	REVISIONS	DATE	CHECKED	APPROVED

DRAWN BY D. REES	DATE Oct. 7, 2024
SCALE	CHECKED BY
APPROVED	BLDG. NO.

REGIONAL WATER RESOURCE AGENCY (RWRA)
OWENSBORO, KY

MAINTENANCE OF TRAFFIC
12TH STREET @ INDEPENDENCE
AVE. STRUCTURE #3330

DRAWING NO. SHEET 5 OF 10





- PUBLIC SIDEWALKS TO REMAIN OPEN
- REFERENCE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) - PART 6 - FOR TEMPORARY TRAFFIC CONTROL SPECIFICATIONS
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- LIMITS OF DISTURBANCE AND WORK AREA WILL NEED TO BE APPROVED BY CITY OF OWENSBORO - ENGINEERING DEPARTMENT (270-687-8641)
- RECOMMENDED TRAFFIC CONTROL. ANY CHANGES SHALL BE APPROVED BY CITY ENGINEERS OFFICE AND PROVIDED TO RWRA.

NO.	REVISIONS	DATE	CHECKED	APPROVED

DRAWN BY D. REES	DATE Oct. 7, 2024
SCALE	CHECKED BY
APPROVED	BLDG. NO.

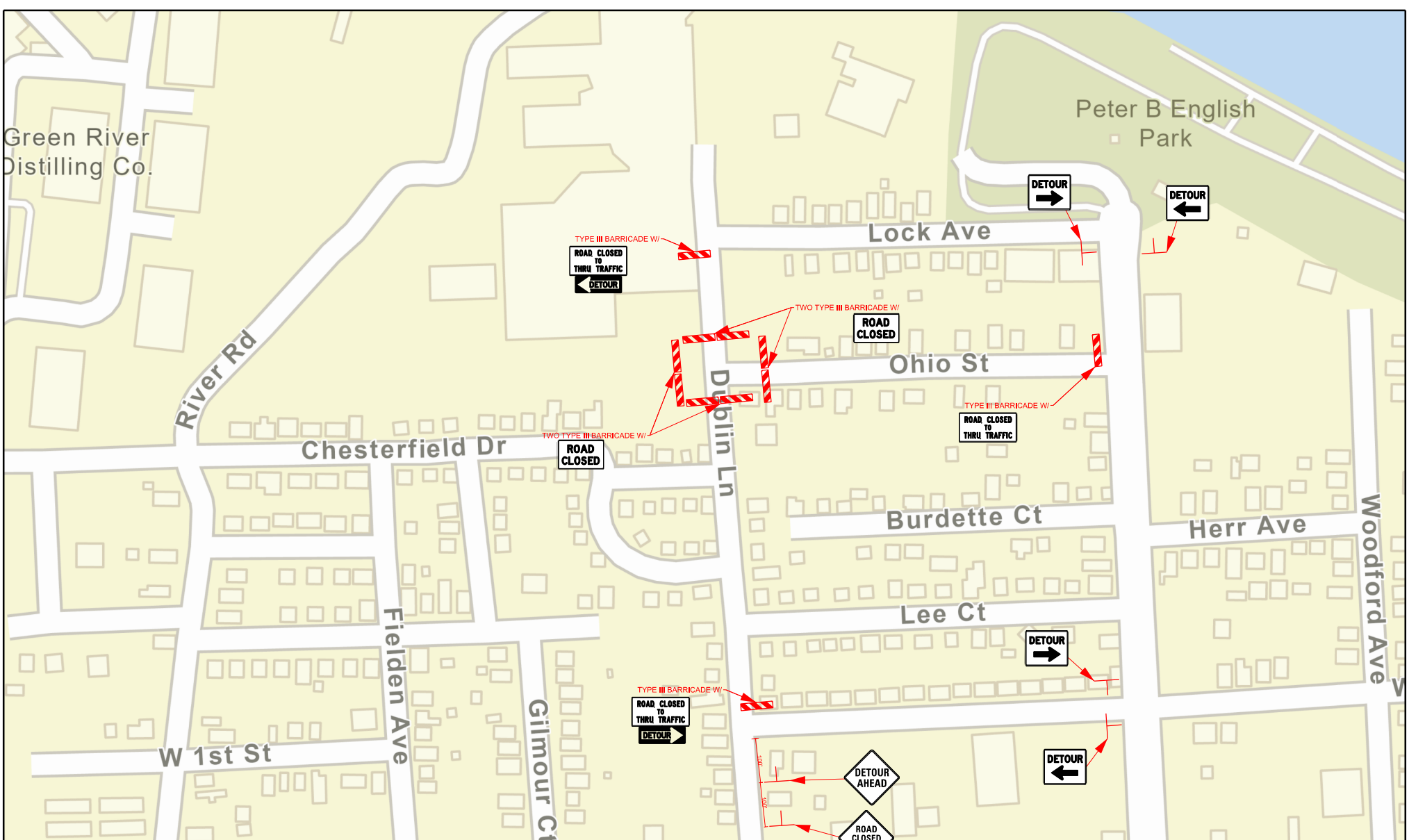
REGIONAL WATER RESOURCE AGENCY (RWRA)
OWENSBORO, KY

MAINTENANCE OF TRAFFIC CENTER STREET @ 6TH STREET STRUCTURE #789
DRAWING NO. SHEET 6 OF 10



Green River Distilling Co.

Peter B English Park



- PUBLIC SIDEWALKS TO REMAIN OPEN
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- LIMITS OF DISTURBANCE AND WORK AREA WILL NEED TO BE APPROVED BY CITY OF OWENSBORO - ENGINEERING DEPARTMENT (270-687-8641)
- CONTACT SPECIALTY FOODS GROUP, LLC PRIOR TO ANY WORK STARTING TO COORDINATE WORK SCHEDULE AND ACCESS TO THEIR FACILITY
- DUBLIN LANE IS A PART OF CITY OF OWENSBORO FALL PAVING LIST. CONTRACTOR SHALL COMPLETE ALL WORK FOR RWRA PROJECT AND HAVE DUBLIN LANE REOPENED PRIOR TO JULY 31, 2025. CONTRACTOR SHALL COORDINATE WITH CITY OF OWENSBORO ENGINEERING IF DELAYS EXPECTED.



2nd

DRAWN BY D. REES	DATE Oct. 7, 2024
SCALE	CHECKED BY
APPROVED	BLDG. NO.

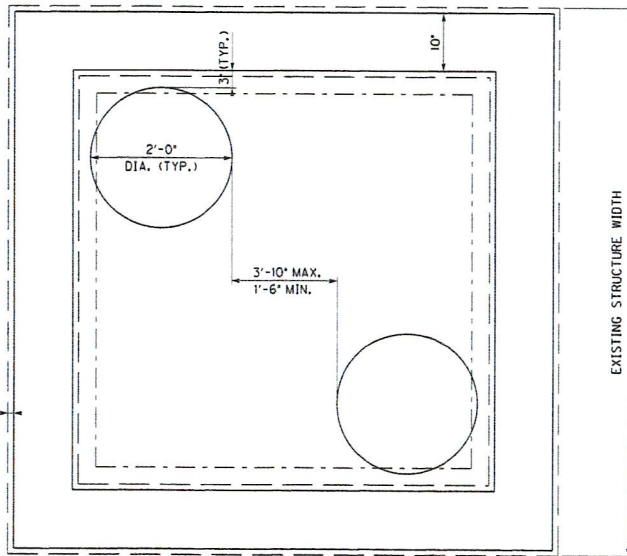
REGIONAL WATER RESOURCE AGENCY (RWRA)
OWENSBORO, KY

MAINTENANCE OF TRAFFIC
DUBLIN LANE @ OHIO STREET
STRUCTURE #3827

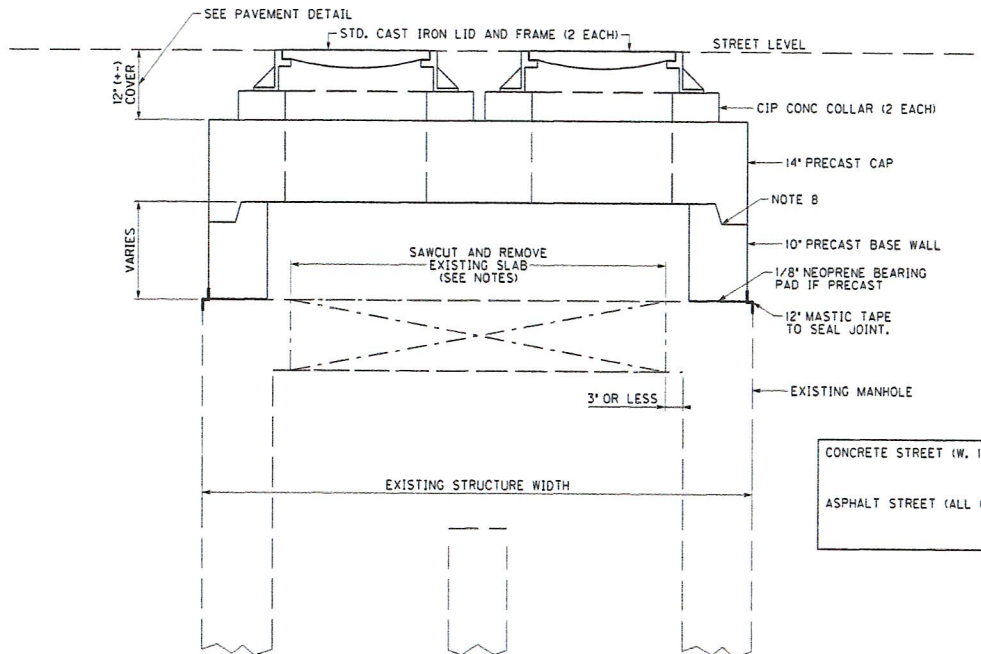
DRAWING NO. SHEET 7 OF 10

REVISION

NO.	REVISIONS	DATE	CHECKED	APPROVED

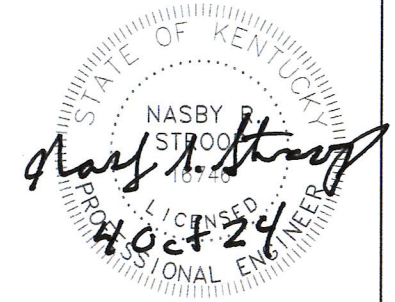


PLAN



ELEVATION

EXISTING STRUCTURES				
INTERSECTION	MANHOLE	OUTSIDE DIMENSIONS	WALL THICKNESS	CAP THICKNESS
2nd & DUBLIN	*3811	8'-0" X 8'-6"	12"	12"
PARRISH & HATHAWAY	*1234	7'-8" X 7'-8"	10"	12"
12th & INDEPENDENCE	*3330	8'-0" X 8'-0"	12"	12"
6th & CENTER	*789	7'-8" X 9'-10"	3 SIDES = 12" 1 SIDE = 10"	10"
DUBLIN & OHIO	*3827	9'-7" X 7'-8"	12"	12"



NOTES:

- ALL DIMENSIONS ABOVE AND THE DEPTH TO THE TOP OF THE EXISTING STRUCTURE MUST BE VERIFIED BY THE CONTRACTOR.
- ALL CONCRETE SHALL BE CLASS AA F'C = 4000 PSI AND ALL REINFORCEMENT SHALL BE FY - 60,000 PSI
- LOAD AND RESISTANCE FACTOR METHOD OF CURRENT AASHTO SPECIFICATIONS WAS USED FOR DESIGN.
- SEE RWRA 2024-22 TUNNEL-MH-REHAB APPENDIX-B.PDF FOR EXISTING MANHOLE PLANS.
- WHEN REMOVING EXISTING BRICK CONE AND CONCRETE SLAB, IT MUST BE SUPPORTED OR HELD SO IT DOES NOT FALL INTO THE MANHOLE. JACKHAMMER REMOVAL WILL NOT BE ALLOWED. ANY DEBRIS FALLING INTO THE MANHOLE MUST BE REMOVED.
- SHOP DRAWINGS OF EACH STRUCTURE ARE REQUIRED TO BE SUBMITTED BASED UPON THE CONTRACTOR'S FIELD MEASUREMENT. THESE WILL BE REVIEWED AND APPROVED BEFORE PRECASTING CAN BEGIN.
- BACKFILL ALL EXCAVATION TO SUBGRADE WITH FLOWABLE FILL.
- USE BUTYL SEALANT OR GASKETED PER ASTM C-443.
- PRECAST OPTION SHOWN, CONTRACTOR MAY CAST-IN-PLACE USING THE SAME DIMENSION AND REINFORCEMENT, DRAWINGS STILL REQUIRED.
- THE LIMITS OF REPAIR WILL HAVE TO BE APPROVED BY THE CITY ENGINEERS OFFICE.
- ALL CONCRETE SHALL BE TREATED WITH XYPEX ADMIX C-1000 (DYE) OR APPROVED EQUAL. SEE PROJECT SPECIFICATIONS FOR DETAILS.

RWRA STANDARD DRAWING:
MANHOLE CASTING LID & FRAME

CONCRETE STREET (W. 12TH ST. @ INDEPENDENCE AVE.):	- 2" DGA - MIN. THICKNESS OF 6" CONCRETE SLAB (MATCH EXISTING IF MORE) - 4,000 PSI WITH FIBER
ASPHALT STREET (ALL OTHER LOCATIONS):	- 6" DGA - 2" CL2 ASPHALT BASE 0.75D PG 64-22 - 1.25" CL2 ASPHALT SURFACE 0.38D PG 64-22

PAVEMENT DETAIL



NO	REVISIONS	DATE	BY

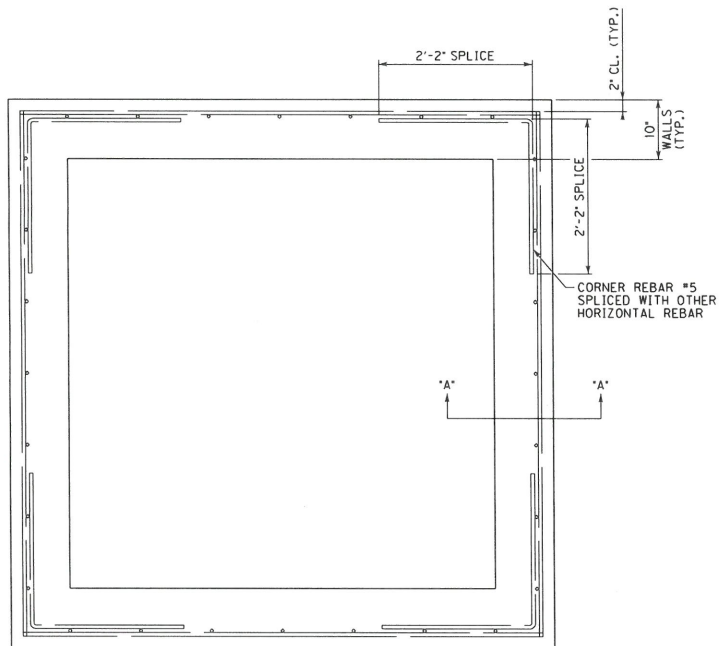
UNLESS ALL PROJECT REVISIONS ARE "AS BUILT", INFORMATION MUST BE FIELD VERIFIED.

DRAWN BY	DATE
M. HUFFMAN	Oct. 04, 2024
SCALE	CHECKED BY
NONE	N. STROOP
APPROVED	BLDG. NO.

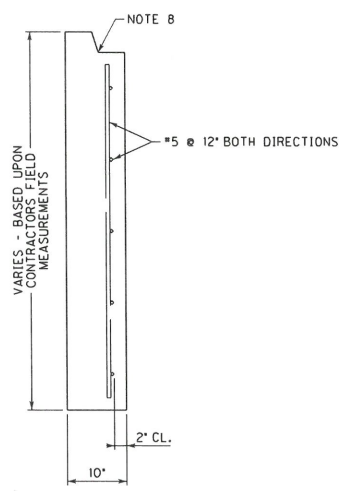
REGIONAL WATER RESOURCE AGENCY (RWRA)
OWENSBORO, KY

MANHOLE REHAB DETAILS

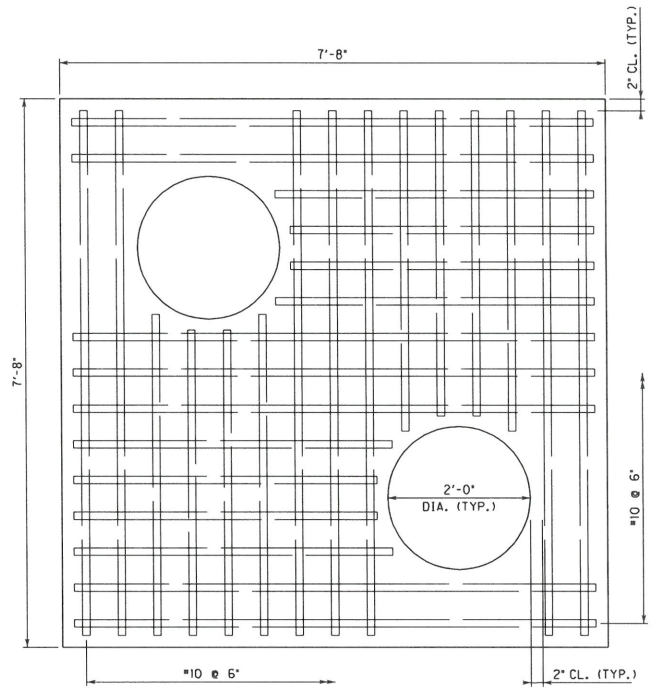
REVISION



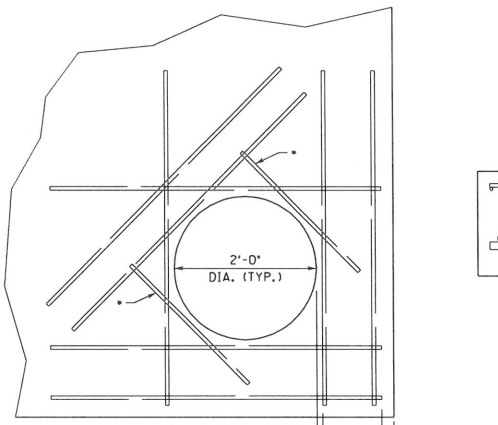
REINFORCEMENT PLAN - BASE



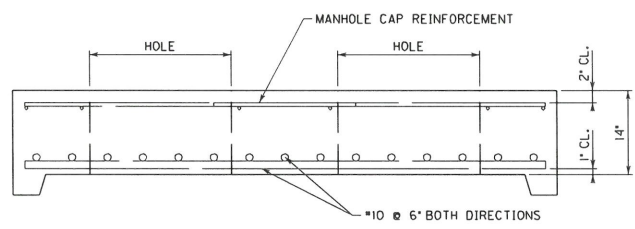
WALL SECTION "A-A"



BOTTOM REINFORCEMENT PLAN - CAP



MANHOLE CAP REINFORCEMENT



REINFORCEMENT ELEVATION - CAP

PARRISH & HATHAWAY (*1234) - SMALLEST STRUCTURE SHOWN AS EXAMPLE
(REINFORCEMENT SIZE AND SPACING - APPLIES TO ALL MANHOLES.)



DRAWN BY M. HUFFMAN	DATE Sept. 30, 2024
SCALE NONE	CHECKED BY N. STROOP
APPROVED	BLDG. NO.

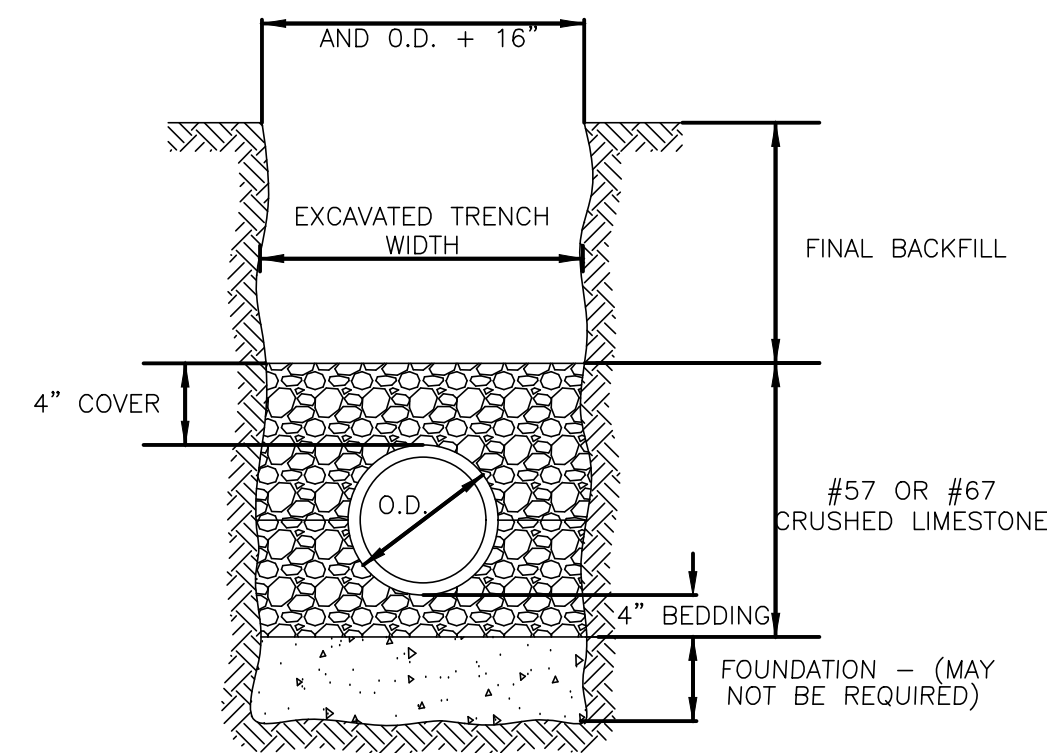
**REGIONAL WATER
RESOURCE AGENCY
(RWRA)
OWENSBORO, KY**

**MANHOLE REHAB
DETAILS - CONTINUED**

SHEET 9 OF 10

NO.	REVISIONS	DATE	CHECKED	APPROVED

UNLESS ALL PROJECT REVISIONS ARE "AS BUILT", INFORMATION MUST BE FIELD VERIFIED.



PVC PIPE BEDDING DETAIL

NOTES:

WHEN COVER FROM STREET GRADE TO TOP OF PIPE IS 2'-0" OR LESS, PIPE SHALL BE BEDDED IN DRY MIX, OR SHALL HAVE A 6" CONCRETE ARCH.

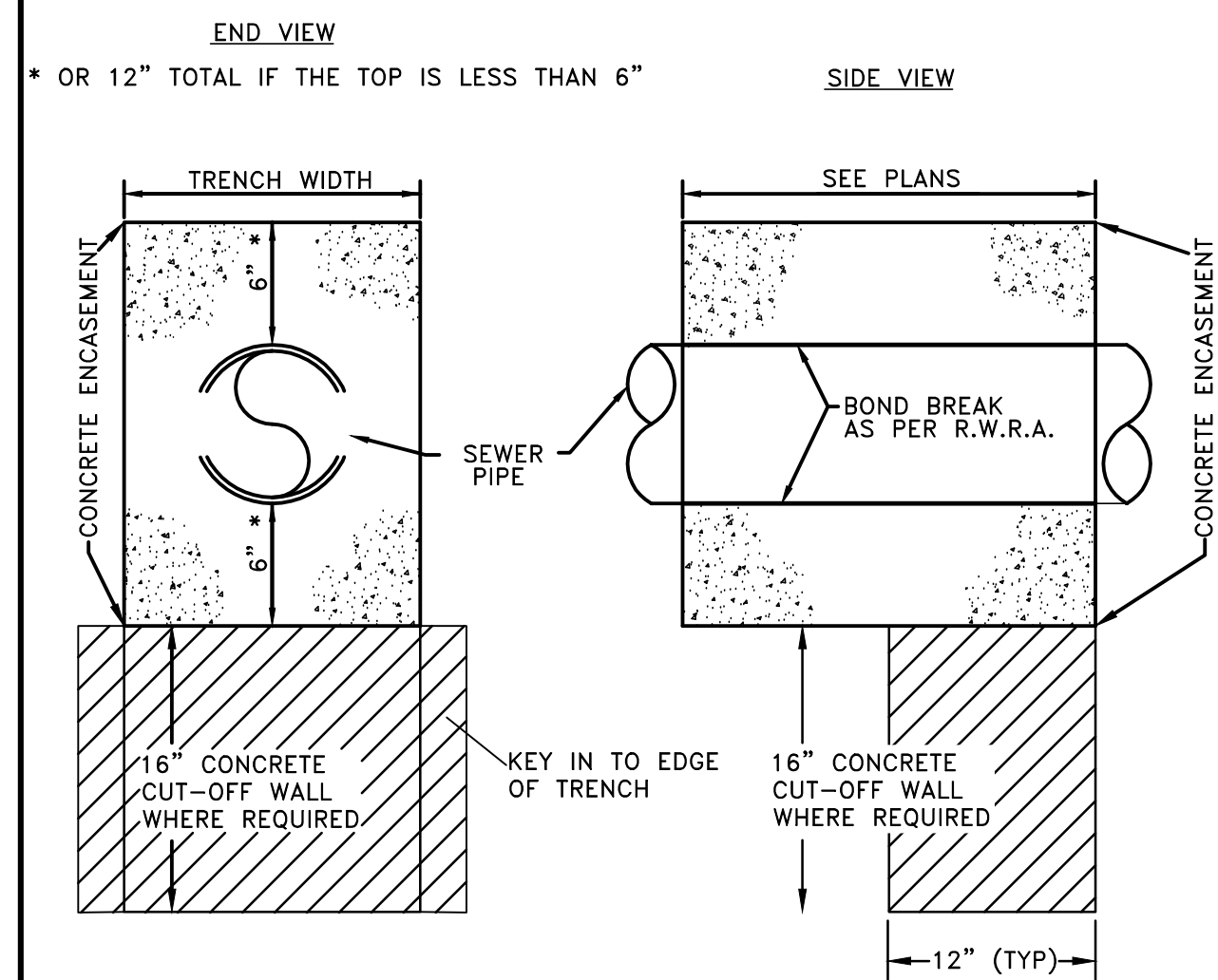
WHEN COVER IS GREATER THAN 2'-0", ABOVE DETAIL SHALL BE USED.

OWENSBORO METROPOLITAN
PUBLIC IMPROVEMENT SPECIFICATIONS

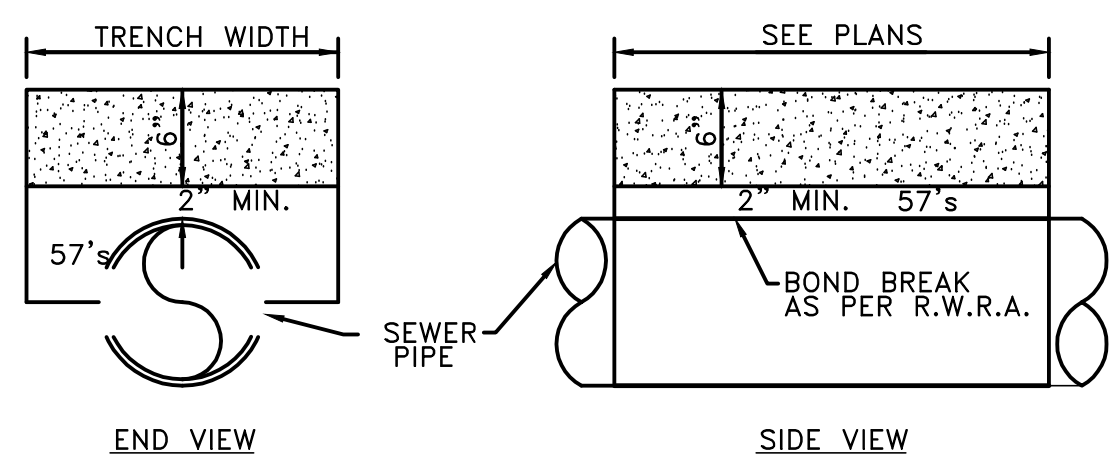
PVC PIPE
BEDDING DETAIL

NOT TO SCALE

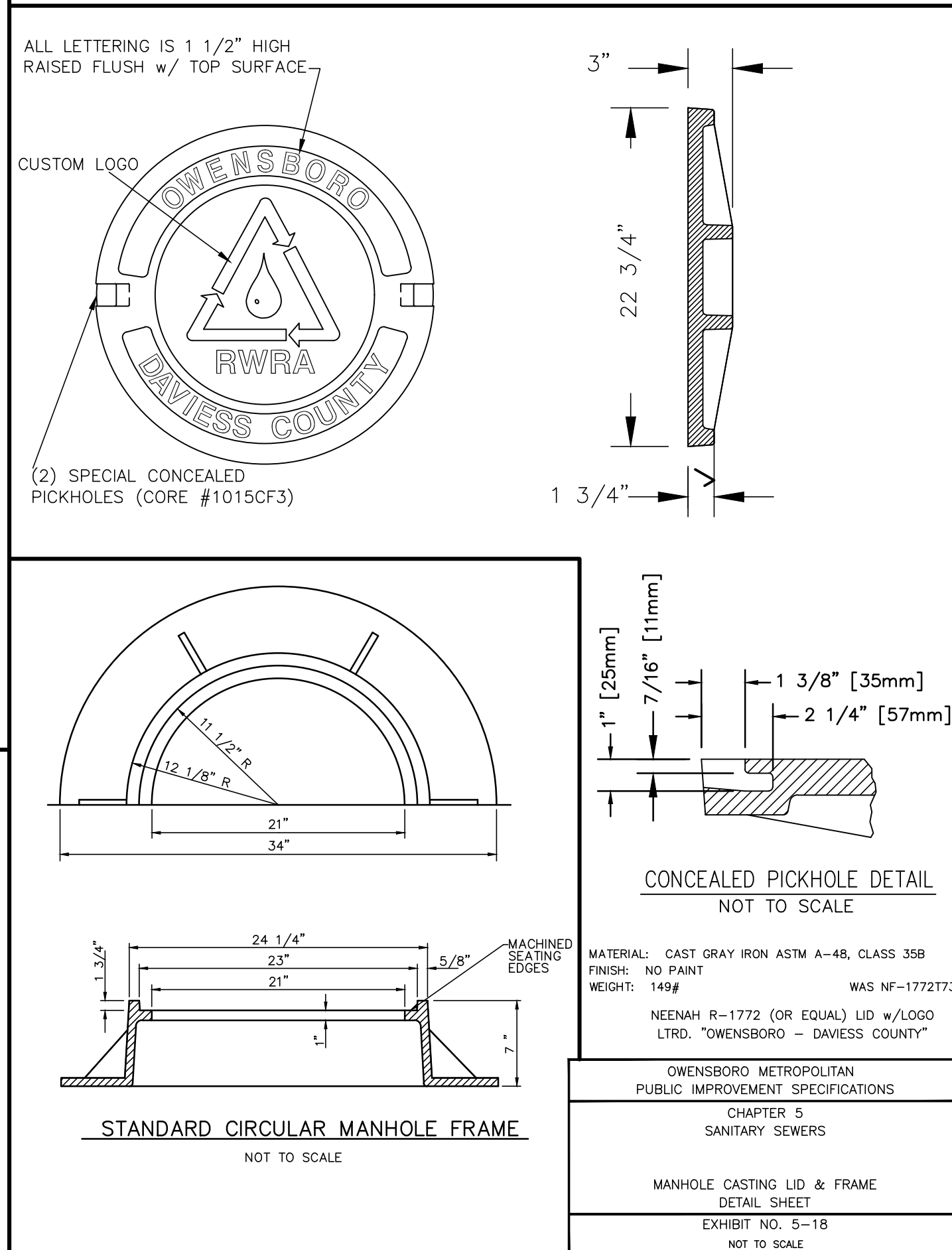
NO GRAVEL BEDDING REQUIRED FOR CONCRETE ENCASEMENT



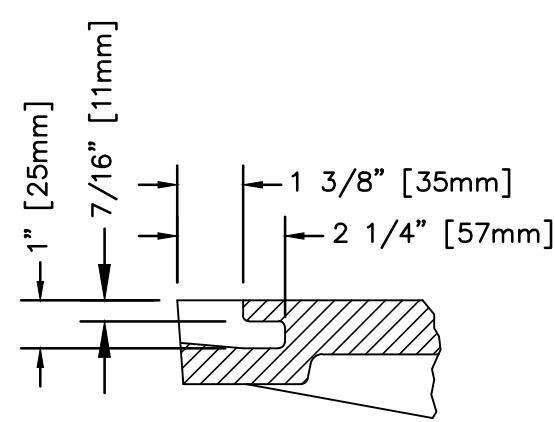
CONCRETE ENCASEMENT/CUT-OFF WALL
NOT TO SCALE



CONCRETE CAP
NOT TO SCALE



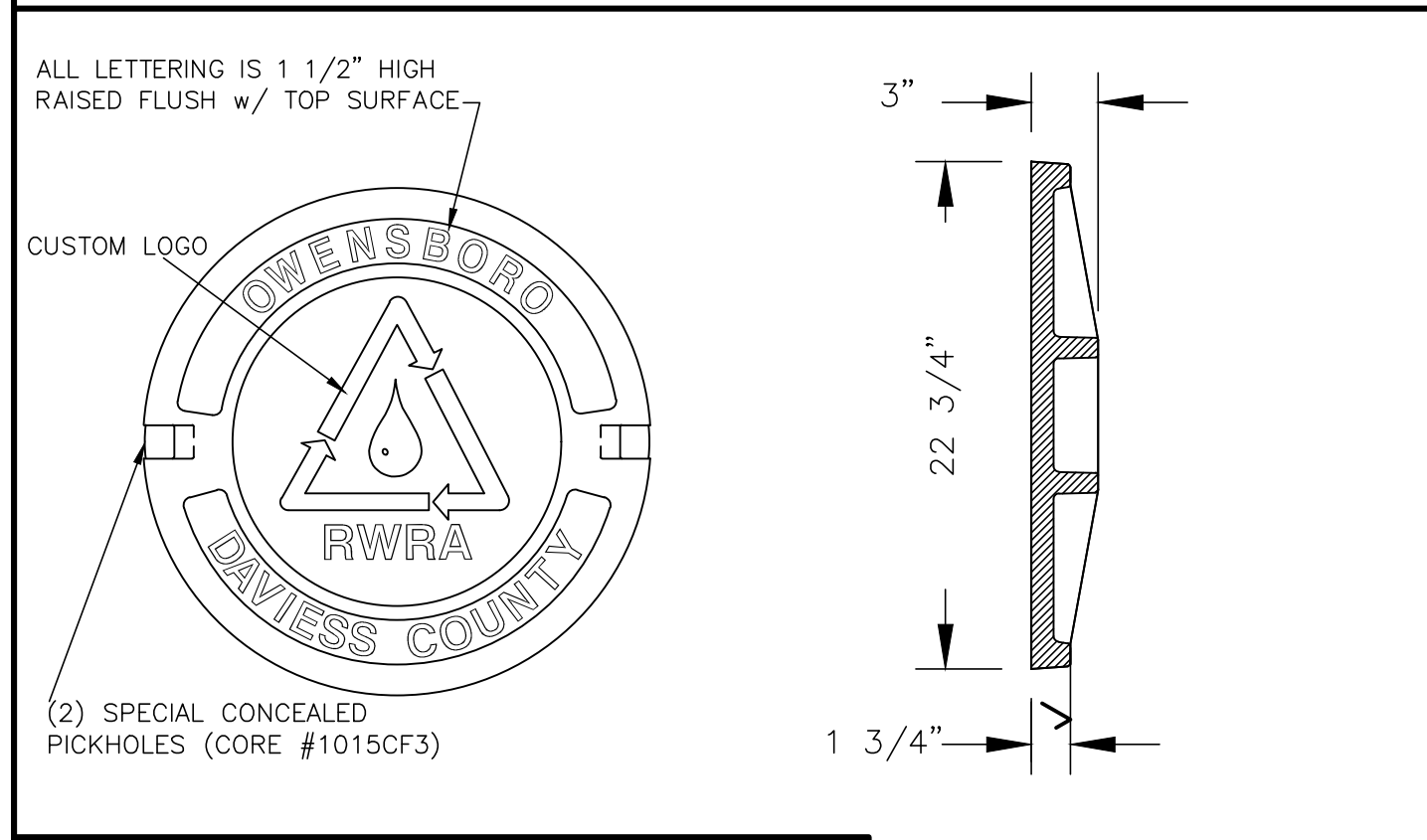
STANDARD CIRCULAR MANHOLE FRAME
NOT TO SCALE



CONCEALED PICKHOLE DETAIL
NOT TO SCALE

MATERIAL: CAST GRAY IRON ASTM A-48, CLASS 35B
FINISH: NO PAINT
WEIGHT: 149# WAS NF-1772173
NEENAH R-1772 (OR EQUAL) LID w/LOGO
LTRD. "OWENSBORO - DAVIESS COUNTY"

OWENSBORO METROPOLITAN
PUBLIC IMPROVEMENT SPECIFICATIONS
CHAPTER 5
SANITARY SEWERS
MANHOLE CASTING LID & FRAME
DETAIL SHEET
EXHIBIT NO. 5-1B
NOT TO SCALE



SCALE: 1" =

DATE:

JOB NO.

NO.	DESCRIPTION	DATE	BY

SHEET 10 OF 10

DETAIL SHEET