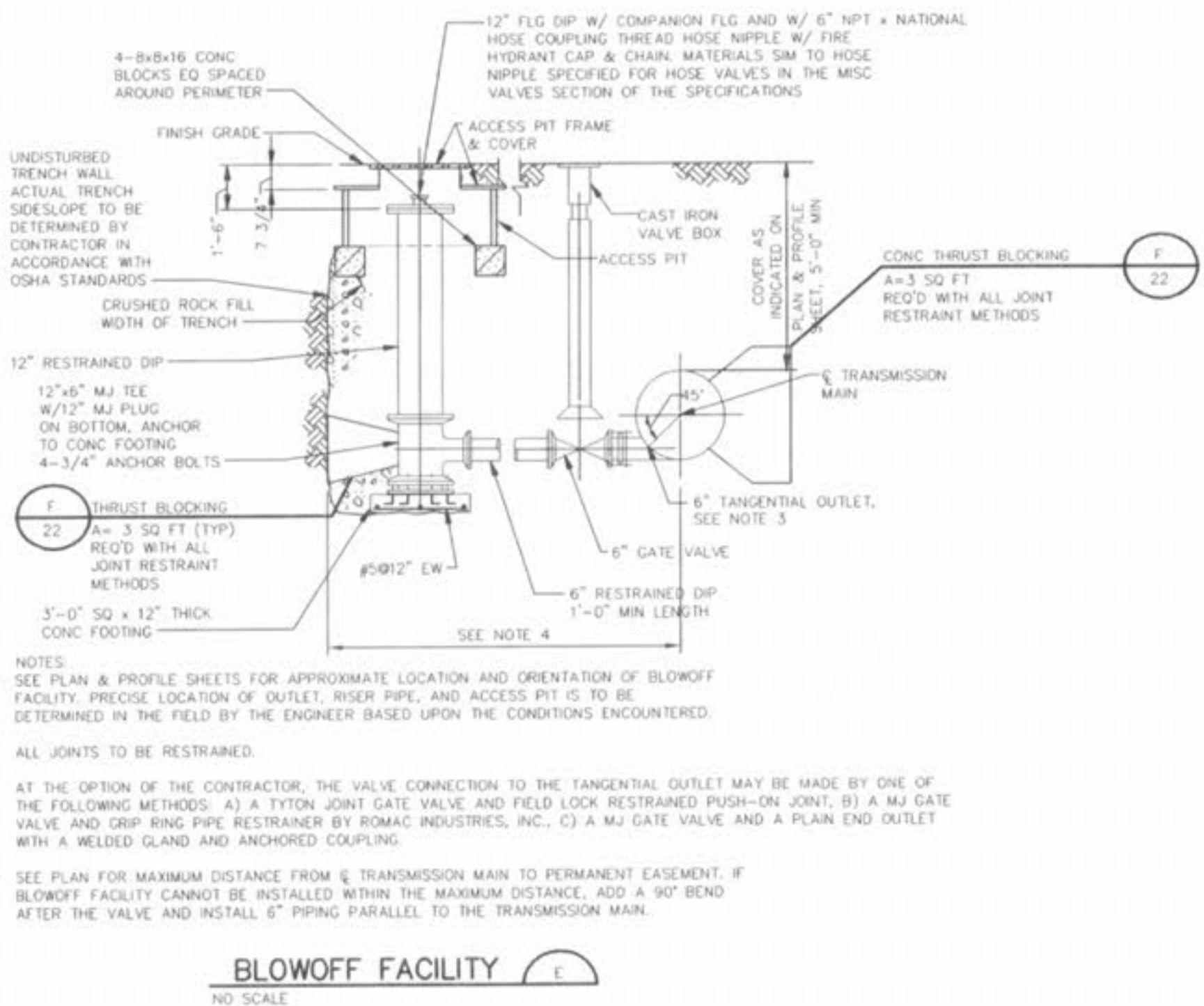
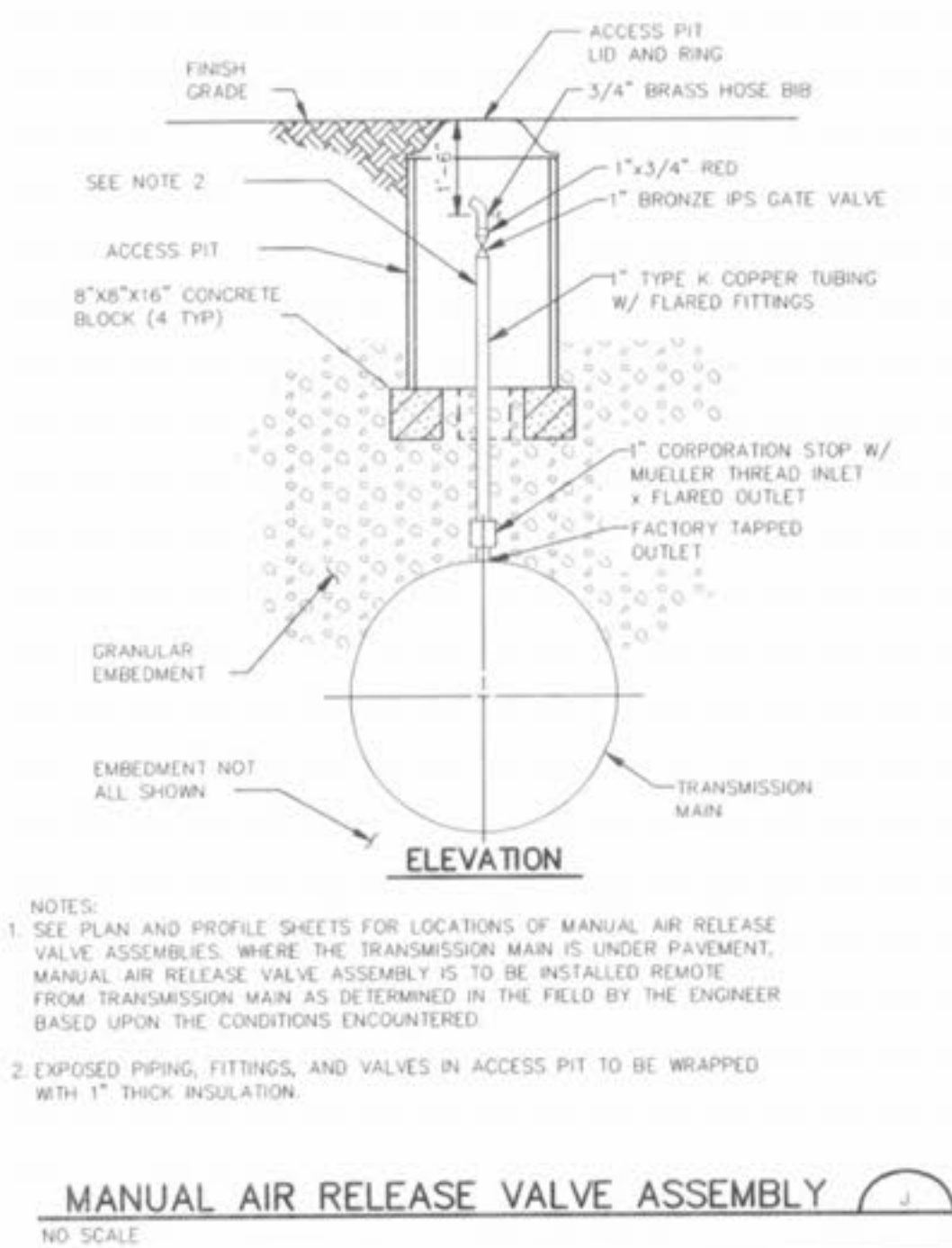


- NOTES:
- CONTRACTOR TO OBTAIN RIGHT-OF-WAY CONSTRUCTION UTILITY PERMIT FROM THE JOHNSON COUNTY KANSAS PUBLIC WORKS DEPARTMENT AND NOTIFY THEM FOR INSPECTION PRIOR TO ANY REPAIRS. SEE APPENDIX C OF THE SPECIFICATIONS FOR COPY OF UTILITY PERMIT FORM.
 - ACTUAL TRENCH SIDESLOPE TO BE DETERMINED BY CONTRACTOR IN ACCORDANCE WITH OSHA STANDARDS.
 - SEE PLAN SHEETS FOR LOCATION OF TRANSMISSION MAIN WITHIN STREET AND ROADWAYS.
 - THE DIMENSION OF THE GRANULAR EMBEDMENT ABOVE THE TOP OF THE TRANSMISSION MAIN SHALL BE 1/8 TIMES COVER, 6" MIN.
 - ASPHALTIC CONC BASE COURSE OR CONC CAP AS REQUIRED BY APPLICABLE CITY OR COUNTY.

- NOTES:
- ANODE SHALL BE LOWERED INTO HOLES WITH A ROPE. ANODE SHALL NOT BE SUSPENDED BY THE LEAD WIRE.
 - AT LEAST 5 GALLONS OF WATER SHALL BE Poured OVER THE ANODE BEFORE BACKFILLING.
 - ALL LEAD WIRES SHALL BE INSTALLED WITH A MINIMUM OF 18 INCHES OF SLACK IN EACH PLACE INDICATED TO PREVENT BREAKAGE OF WIRE DUE TO BACKFILL SETTLEMENT.
 - A SACRIFICIAL ANODE IS TO BE INSTALLED AT EACH END OF TUNNEL LINER. WHEN THE TRANS MAIN IS PCCP, AN ANODE IS ALSO TO BE INSTALLED ON THE PCCP AT EACH END OF THE TUNNEL LINER.
- ANODE INSTALLATION FOR STEEL PIPE ADAPTERS FOR PCCP ALTERNATIVE AND FOR TUNNEL LINERS**
NO SCALE



- NOTES:
- SEE PLAN & PROFILE SHEETS FOR APPROXIMATE LOCATION AND ORIENTATION OF BLOWOFF FACILITY. PRECISE LOCATION OF OUTLET, RISER PIPE, AND ACCESS PIT IS TO BE DETERMINED IN THE FIELD BY THE ENGINEER BASED UPON THE CONDITIONS ENCOUNTERED.
 - ALL JOINTS TO BE RESTRAINED.
 - AT THE OPTION OF THE CONTRACTOR, THE VALVE CONNECTION TO THE TANGENTIAL OUTLET MAY BE MADE BY ONE OF THE FOLLOWING METHODS: A) A TYTON JOINT GATE VALVE AND FIELD LOCK RESTRAINED PUSH-ON JOINT, B) A MJ GATE VALVE AND CRIP RING PIPE RESTRAINER BY ROMAC INDUSTRIES, INC., C) A MJ GATE VALVE AND A PLAIN END OUTLET WITH A WELDED GLAND AND ANCHORED COUPLING.
 - SEE PLAN FOR MAXIMUM DISTANCE FROM Q TRANSMISSION MAIN TO PERMANENT EASEMENT. IF BLOWOFF FACILITY CANNOT BE INSTALLED WITHIN THE MAXIMUM DISTANCE, ADD A 90° BEND AFTER THE VALVE AND INSTALL 6" PIPING PARALLEL TO THE TRANSMISSION MAIN.

CITY OF O'FALLON
COMMUNITY DEVELOPMENT
DESIGN DIVISION
O'FALLON, MISSOURI

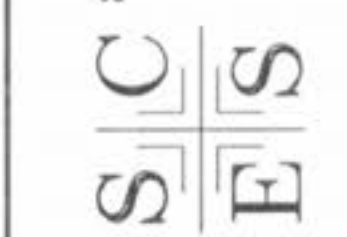


DISCLAIMER OF RESPONSIBILITY
I HEREBY CERTIFY THAT THE DOCUMENTS REFERRED TO ARE AUTHENTICATED BY MY SEAL AND ARE TRUE TO THE BEST OF MY KNOWLEDGE AND BELIEF. ANY REQUIREMENTS FOR ALL OTHER DRAWINGS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS OR INSTRUMENTS SHALL BE THE SOLE RESPONSIBILITY OF THE PROFESSIONAL ENGINEERING PRODUCT OR BUYER.

DESIGNED: _____
CHECKED: _____
DATE: _____
PROJECT NO.: _____
SHEET _____ OF _____

IMPROVEMENT PLANS
ELK RIDGE
WATER DETAILS 2

ST. CHARLES ENGINEERING & SURVEYING, INC.
801 S. FIFTH STREET, SUITE 202
ST. CHARLES, MO 63301
TEL: (636) 947-0607 FAX: (636) 947-2448



ORDER NO. 040486
DATE 04/15/05
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06/24/05 REVISED PER CITY OF O'FALLON COMMENTS