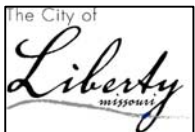


NOTES:

1. GRANULAR EMBEDMENT PER SECTION 3012 AND 3016.
2. TRENCH BACKFILL PER SECTION 3021.

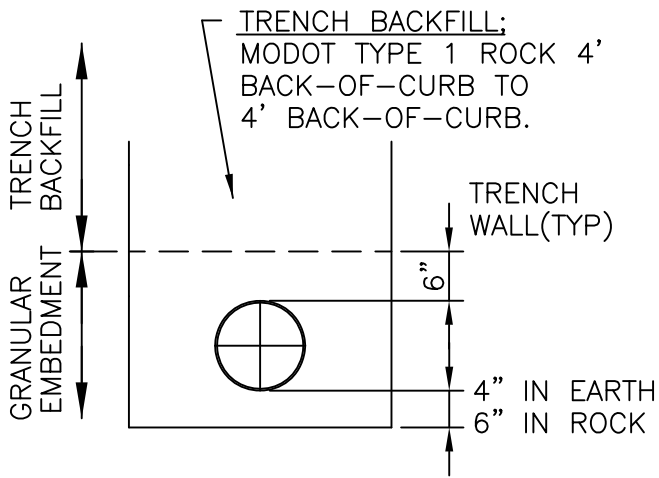
REV 2016



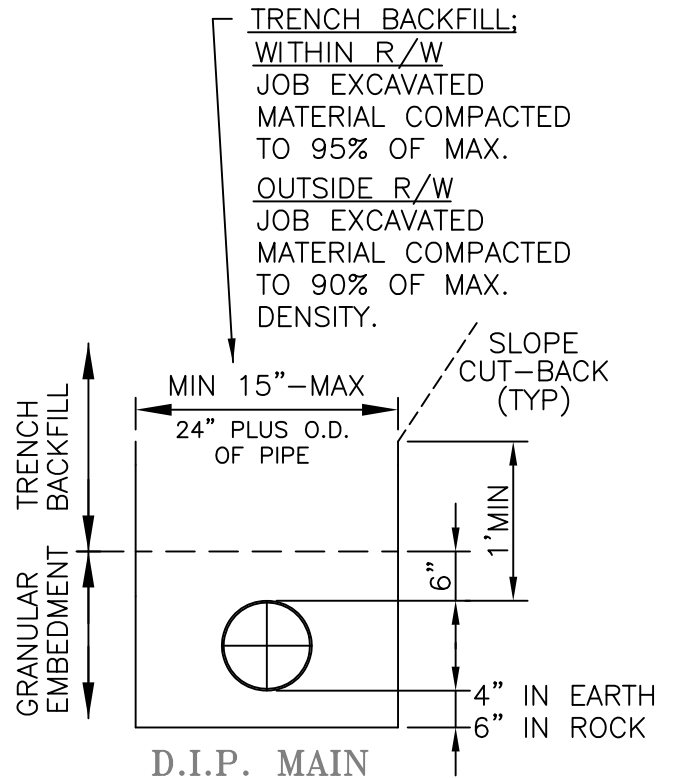
CITY OF LIBERTY, MO
DEPARTMENT OF
PUBLIC WORKS

**EMBEDMENT &
BACKFILL FOR
SANITARY SEWERS**

D30-1



UNDER PAVEMENT



D.I.P. MAIN
UNDER PAVEMENT

TRENCH BACKFILL:
WITHIN R/W
JOB EXCAVATED
MATERIAL COMPACTED
TO 95% OF MAX.
OUTSIDE R/W
JOB EXCAVATED
MATERIAL COMPACTED
TO 90% OF MAX.
DENSITY.

SLOPE
CUT-BACK
(TYP)

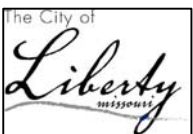
MIN 15" - MAX
24" PLUS O.D.
OF PIPE

1' MIN

6"

4" IN EARTH
6" IN ROCK

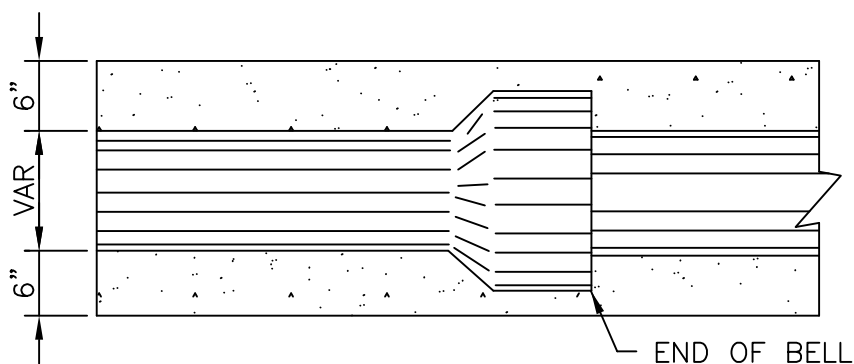
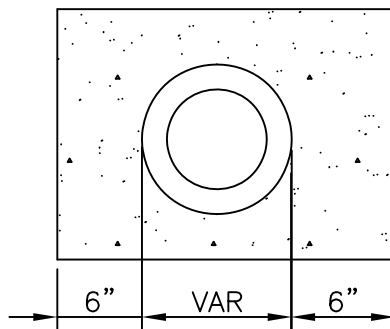
REV 2009



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EMBEDMENT &
BACKFILL FOR
SANITARY SEWERS

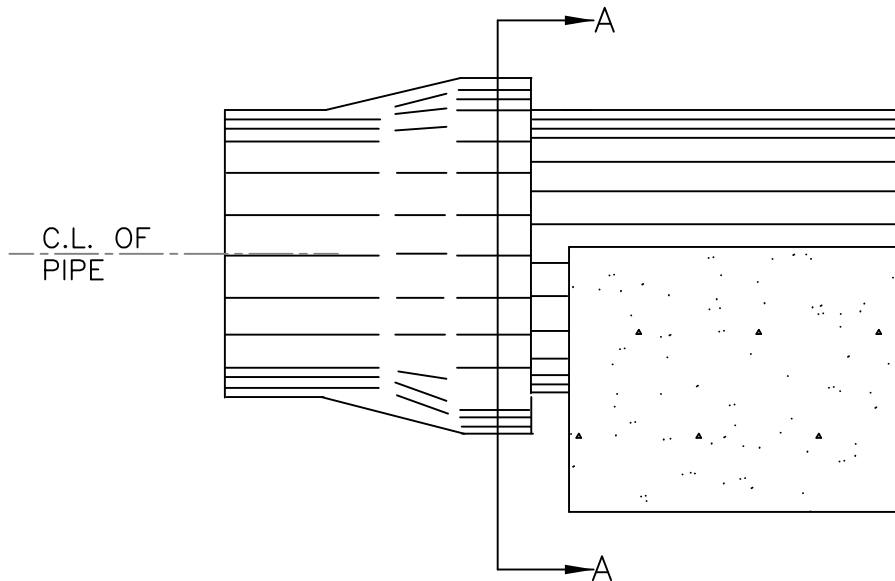
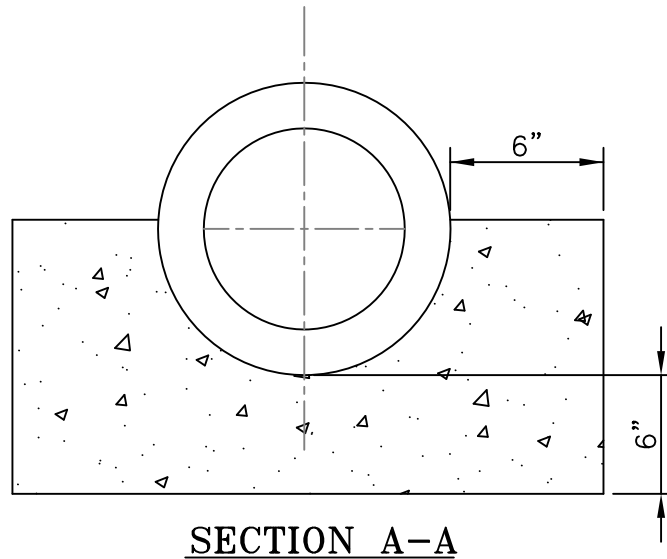
D30-1



FOR USE ONLY WHERE INDICATED ON PLANS THE CONCRETE ENCASEMENT SHALL BE OF MCIB 548 CONCRETE WITH A MINIMUM THICKNESS ON ALL SIDES OF 6".

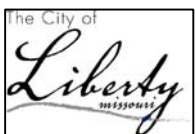
1. 8" DIA = .11 C.Y. OF CONCRETE PER LINEAL FT
2. 10" DIA = .12 C.Y. OF CONCRETE PER LINEAL FT
3. 12" DIA = .14 C.Y. OF CONCRETE PER LINEAL FT
4. 15" DIA = .15 C.Y. OF CONCRETE PER LINEAL FT

REV 2009



FOR USE ONLY WHERE INDICATED ON PLANS.
 THE CONCRETE SHALL BE 3000 PSI CONCRETE.
 THE MIN THICKNESS, ON THE SIDES AND BOTTOM
 SHALL BE 6" THE TOP OF THE CONCRETE SHALL
 BE AT LEAST TO THE CENTER OF THE PIPE.

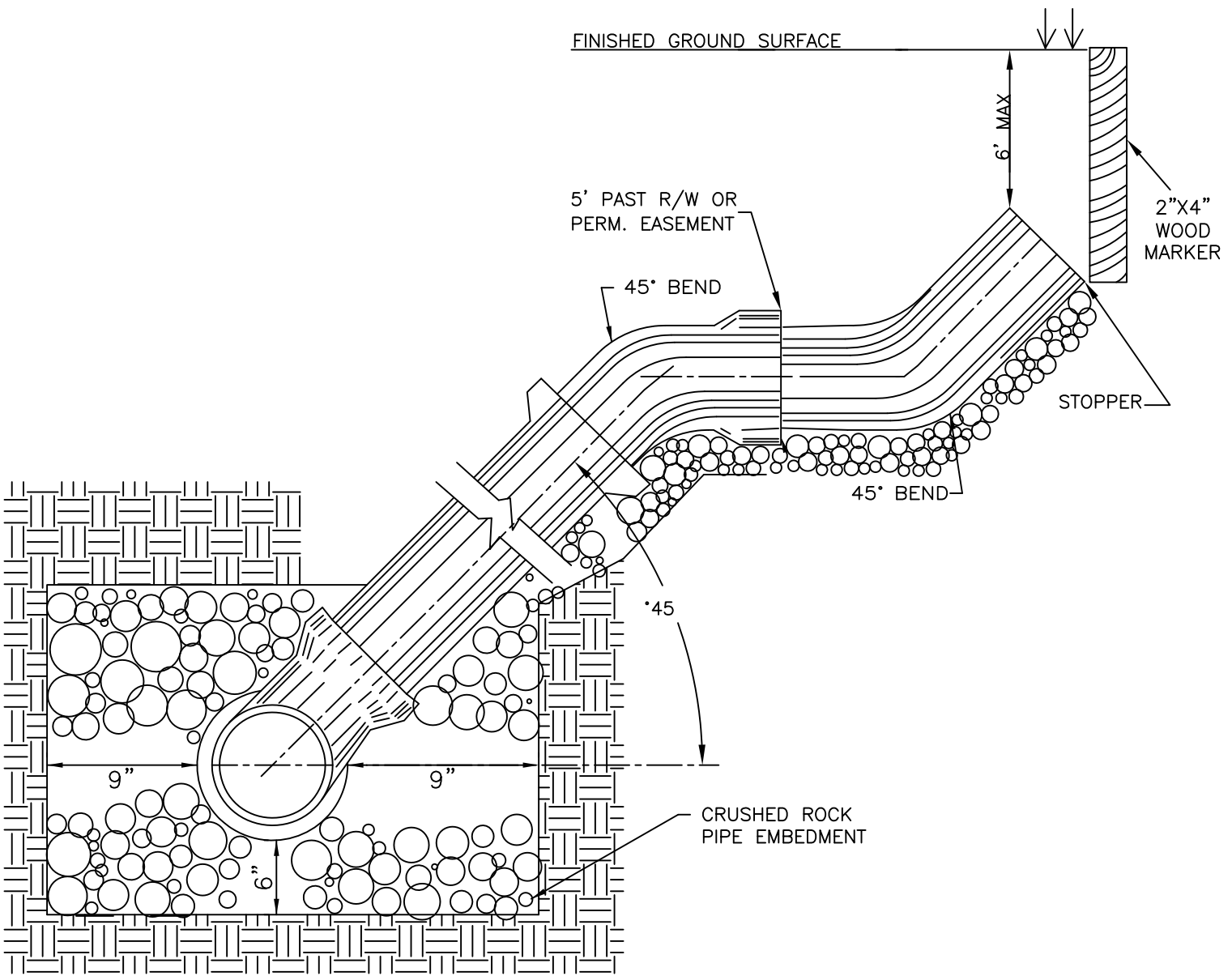
REV 2009



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CONCRETE
 CRADLE DETAIL

D30-3



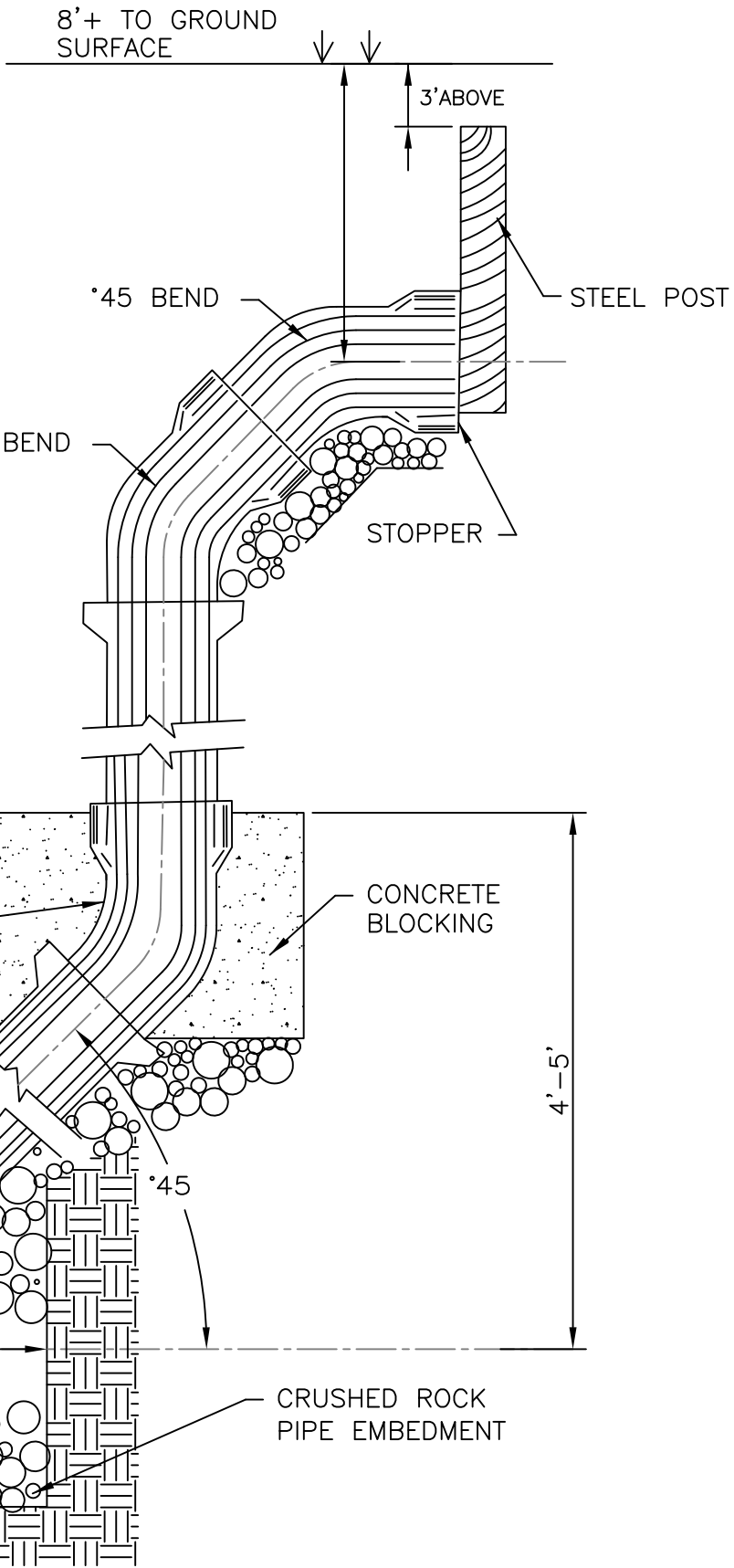
REV 2017



CITY OF LIBERTY, MO
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STANDARD
 SERVICE
 RISER

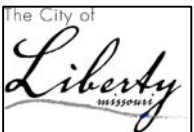
D30-4



NOTE:

THE DEEP SERVICE RISER IS ONLY AVAILABLE WHERE THE SERVICE LATERAL IS TO BE LAID ENTIRELY IN ROCK, WITH THE RECOMMENDATION OF THE DESIGN ENGINEER & APPROVED BY THE CITY ENGINEER.

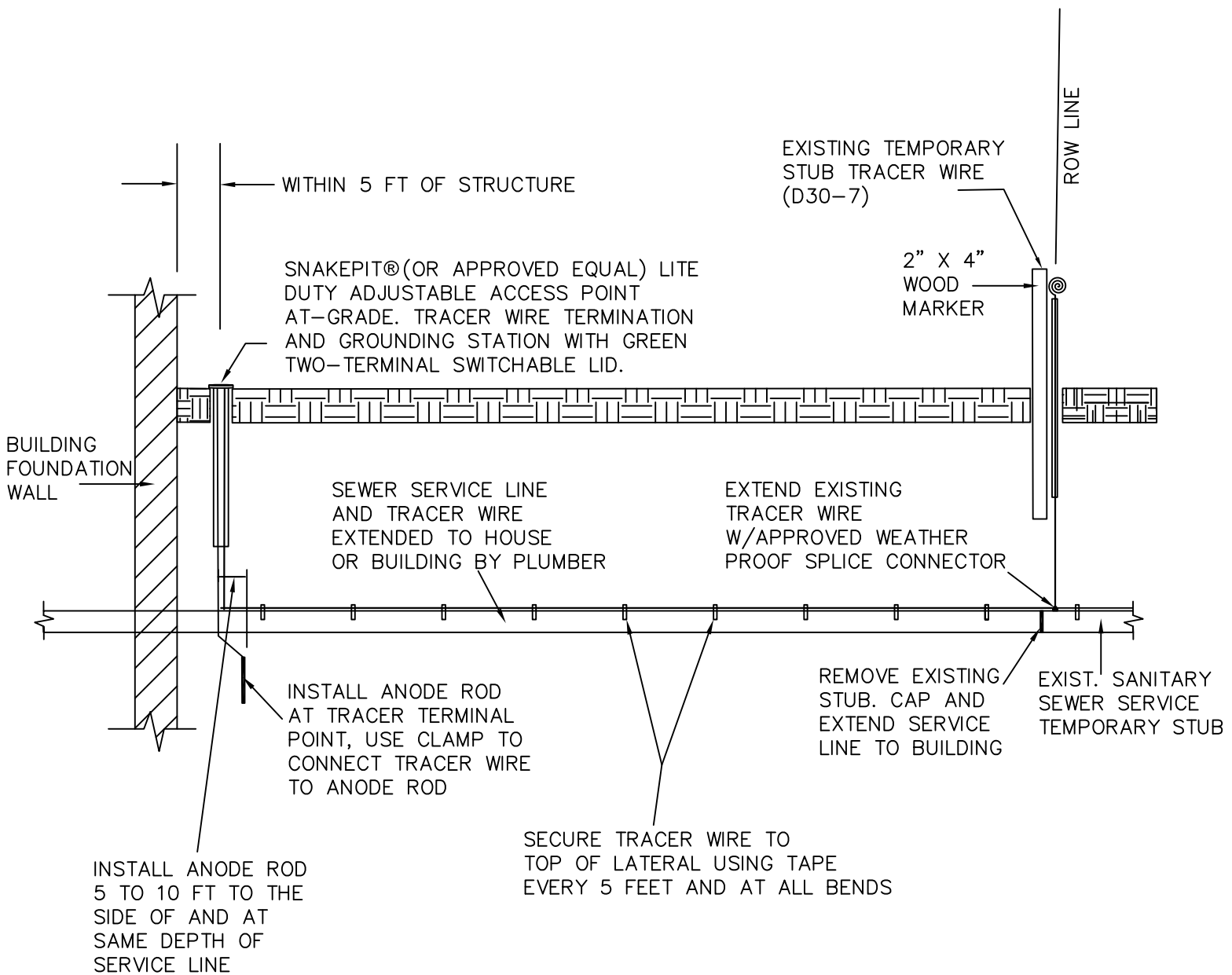
REV 2009



CITY OF LIBERTY, MO
DEPARTMENT OF
PUBLIC WORKS

STANDARD DEEP
TRENCH SERVICE
RISER

D30-5



NOTES:

- * ALL CONNECTORS SHALL BE MOISTURE-DISPLACEMENT TYPE CONNECTORS.
- * IT SHALL BE THE CONTRACTOR'S AND DEVELOPER'S RESPONSIBILITY TO PROVIDE A CONTINUOUS AND FUNCTIONING TRACER WIRE SYSTEM.
- * AT GRADE ACCESS POINT SHALL BE SNAKEPIT® LITE DUTY ADJUSTABLE TERMINATION AND GROUNDING STATION (OR APPROVED EQUAL) WITH GREEN COLOR CODED LID BEARING THE WORDS "SEWER". SNAKEPIT® CONCRETE/DRIVEWAY ACCESS POINT TO BE USED IN DRIVEWAYS.
- * LID SHALL BE TWO-TERMINAL SWITCHABLE LID PROVIDING DIRECT CONNECTION POINT FOR UTILITY LOCATE TRANSMITTER PLUS GROUND SWITCH WITH NO NEED TO REMOVE LID TO ACCESS WIRES.

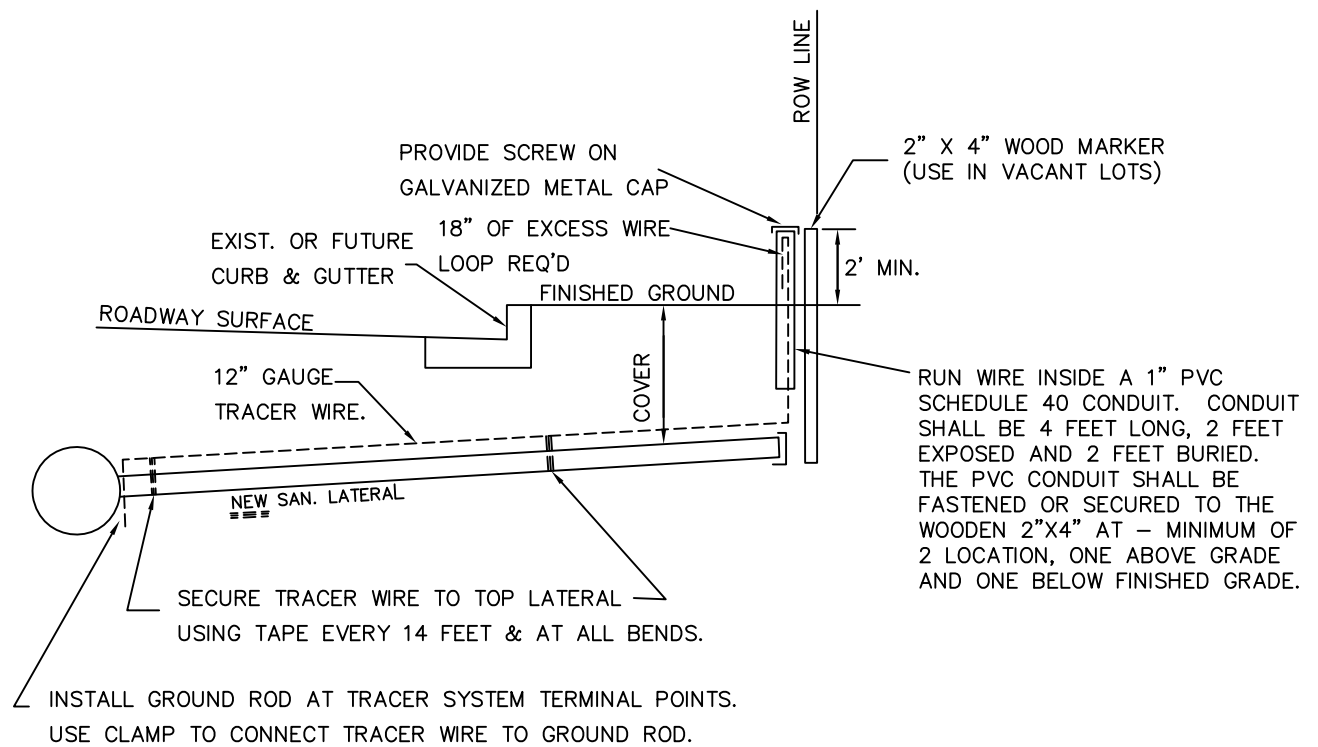
REV 2019



CITY OF LIBERTY, MO
DEPARTMENT OF
PUBLIC WORKS

SANITARY SERVICE
TRACER WIRE
DETAIL

D30-6

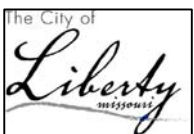


TRACER WIRE PIPE DETECTION SYSTEM PER SECTION 9100.

NOTES:

1. WHEN NEW PRIVATE SERVICE LINE TIES INTO STUB, INSTALL A PERMANENT TWO-WAY CLEANOUT WITH TRACER WIRE TERMINAL IN CLEANOUT FRAME PER DETAIL D30-6.

REV 2017



CITY OF LIBERTY, MO
DEPARTMENT OF
PUBLIC WORKS

TEMPORARY STUB
TRACER WIRE
DETAIL

D30-7