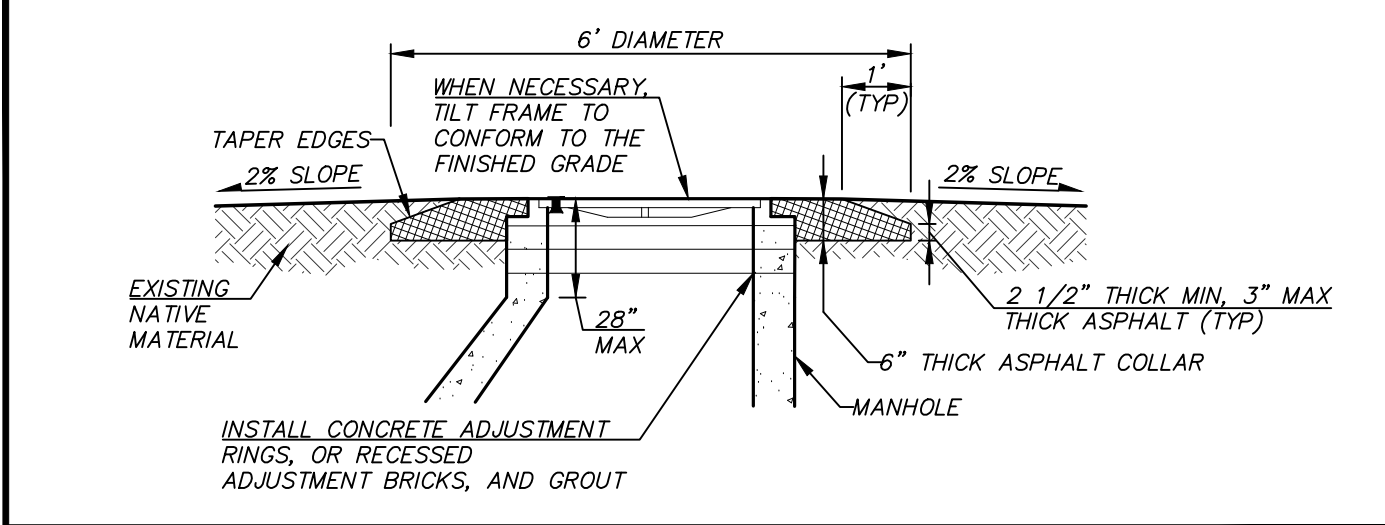
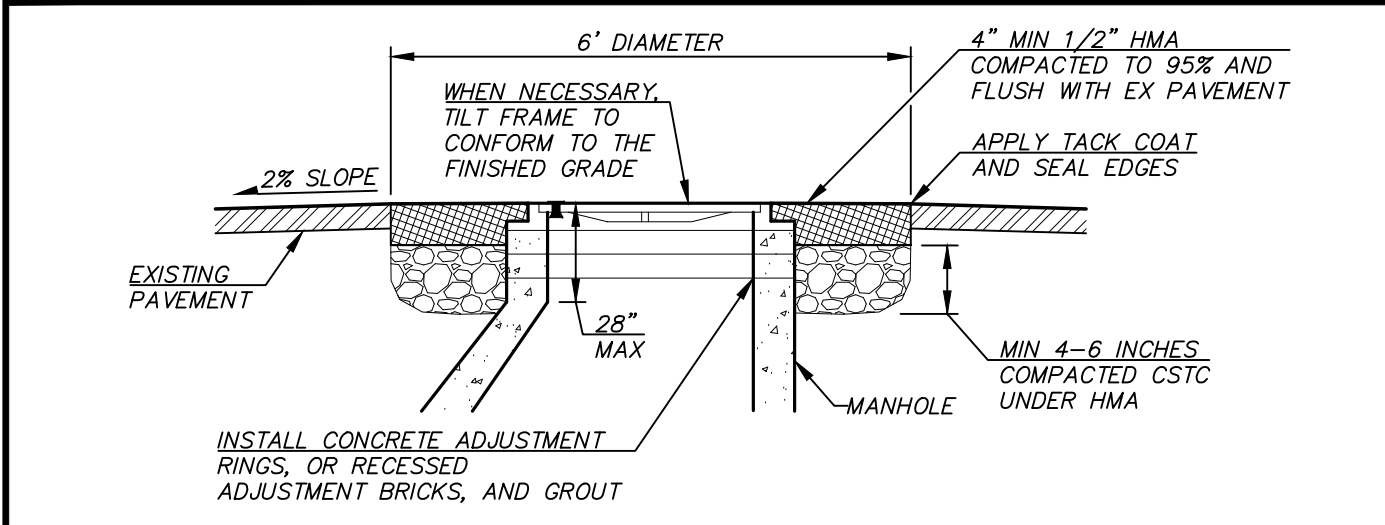


- NOTES**
- BACKFILLING AND MECHANICAL COMPACTION SHALL BE PERFORMED CAREFULLY SO THAT NO DAMAGE IS DONE TO THE PIPE OR TO ITS ALIGNMENT. THE DISTRICT MAY DIRECT THE CONTRACTOR TO USE SPECIAL BACKFILL TECHNIQUES WHEN THE DISTRICT DEEMS IT NECESSARY. COMPACTION IS TO MEET KING COUNTY REQUIREMENTS.
 - MANHOLES SET IN PAVED STREETS OR OTHER PAVED AREAS SHALL BE SET TO FINISHED GRADE OF THE PAVING, AND WHEN REQUIRED THE MANHOLE FRAME SHALL BE TILTED TO CONFORM TO THE GRADE OF THE PAVED SURFACE. REMOVE ASPHALT FROM COVER AFTER PAVING.
 - ASPHALT PATCH WILL BE REQUIRED ON ALL MANHOLES INSTALLED ON THE SHOULDER OF THE ROADWAY. (SEE SANITARY MANHOLE ASPHALT PATCH DETAIL).
 - IF MANHOLE IS INSTALLED ON UNIMPROVED GROUND SET MANHOLE TOP 6" ABOVE GRADE WITH LOCKING COVER AND FRAME (OLYMPIC FOUNDRY #MH 30 D/T) AND ASPHALT PATCH (SEE MANHOLE ASPHALT COLLAR DETAIL).
 - BASE SECTION OPENINGS TO RECEIVE PIPE SHALL BE CIRCULAR CORE-DRILLED OR KNOCK-OUTS. KOR-N-SEAL CONNECTOR REQUIRED.
 - HORIZONTAL DISTANCE BETWEEN MANHOLES SCALED FROM WORKSHEETS AND ROADWAY PLAN AND PROFILES. ACTUAL DISTANCES TO THE COMPUTED AT TIME OF STAKING.
 - MANHOLES BETWEEN 6- FEET AND 8- FEET DEEP REQUIRE WRITTEN DISTRICT APPROVAL. MANHOLES LESS THAN 6 FEET DEEP ARE NOT ALLOWED.
 - MANHOLES 20" AND GREATER IN DEPTH SHALL BE 60" DIAMETER. FOR PIPE 15" OR GREATER DIAMETER, MANHOLES SHALL BE 72" DIAMETER.

STANDARD SANITARY MANHOLE REV. 10/19/17



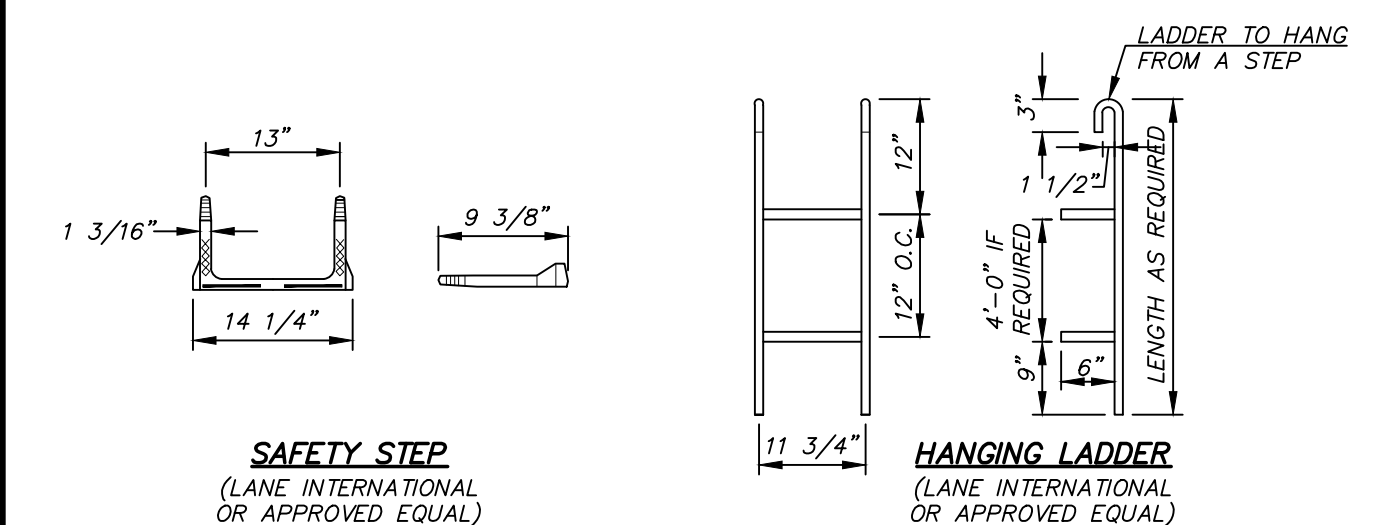
MANHOLE ASPHALT COLLAR FOR NON-PAVED AREAS REV. 10/19/17



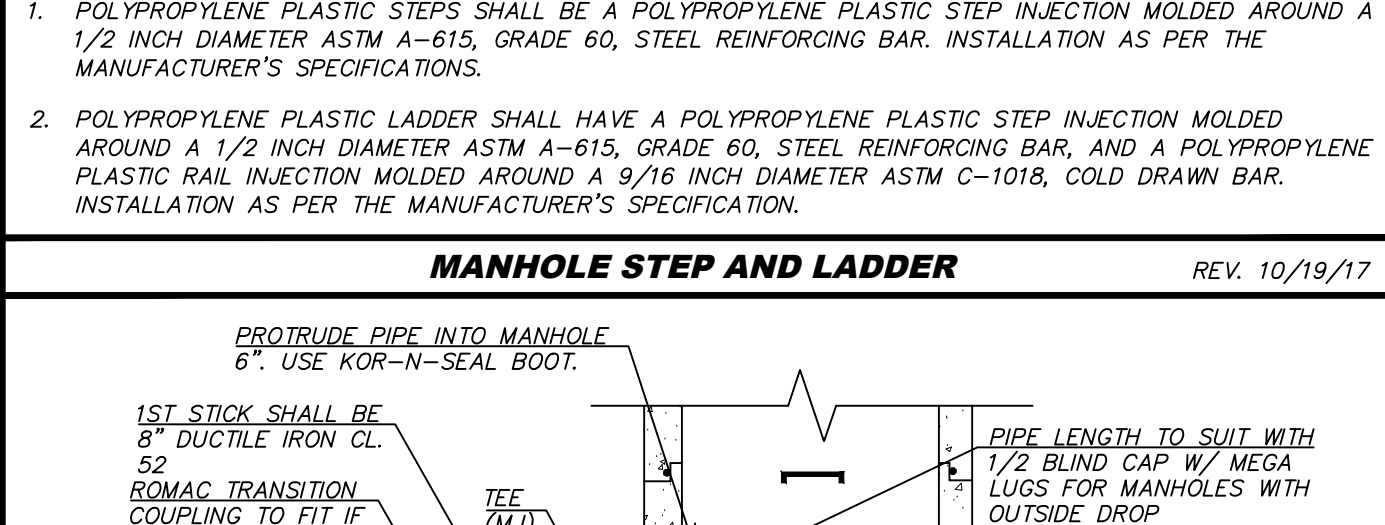
MANHOLE PAVEMENT PATCH FOR PAVED AREAS REV. 10/19/17

- NOTES**
- CONTRACTOR SHALL WARRANTY MANHOLE ADJUSTMENT AREA FREE FROM LEAKS FOR ONE YEAR.
 - IN PAVED AREAS, MANHOLE FRAMES SHALL BE RAISED TO GRADE AFTER PLACEMENT OF THE ASPHALT'S FINAL LIFT AND WITHIN 48 HOURS UNLESS OTHERWISE APPROVED BY THE DISTRICT.
 - IN PAVED AREAS, NEATLY REMOVE ASPHALT AROUND EXISTING MANHOLE FRAME.
 - INSTALL CHANNEL BOARD IN MANHOLE PRIOR TO ANY WORK, AND REMOVE AFTER FINAL ADJUSTMENT.
 - PRIOR TO ADJUSTMENT, NOTIFY DISTRICT IF THE FINAL MANHOLE NECK WILL EXCEED 28".
 - IN PAVED AREAS, EXCAVATE AROUND EXISTING MANHOLE FRAME TO A MIN. DEPTH OF 12".
 - REMOVE FRAME AND COVER, AND INSTALL ADJUSTMENT RINGS, TILTING FRAME AS NECESSARY TO MATCH EXISTING GRADE. ADJUSTMENT BRICKS RECESSED FOR GROUTING, CAN BE UTILIZED. REINSTALL FRAME AND COVER.
 - IN PAVED AREAS BACKFILL WITH CRUSHED SURFACING TOP COURSE (CSTC) COMPACTED TO 95% (MODIFIED PROCTOR).
 - IN NON-PAVED AREAS, BACKFILL WITH APPROVED BACKFILL MATERIAL COMPACTED TO 95%.
 - IN PAVED AREAS, INSTALL 1/2" HMA IN 2-INCH LIFTS, TO A COMPACTED DEPTH EQUAL TO THE EXISTING PAVEMENT OR A MINIMUM OF 4", WHICHEVER IS GREATER. TACK ALL EDGES AND SEAL FINISH JOINTS WITH TAR AND SAND.
 - IN UN-PAVED AREAS, INSTALL ASPHALT PATCH TO A MINIMUM COMPACTED DEPTH OF 6" AS SHOWN ABOVE.
 - GROUT MANHOLE NECK. "JESSET" NOT ALLOWED. DO NOT RUN GROUT ONTO MANHOLE FRAME.

GENERAL NOTES FOR ASPHALT COLLAR/PATCHES AROUND MANHOLES REV. 10/19/17



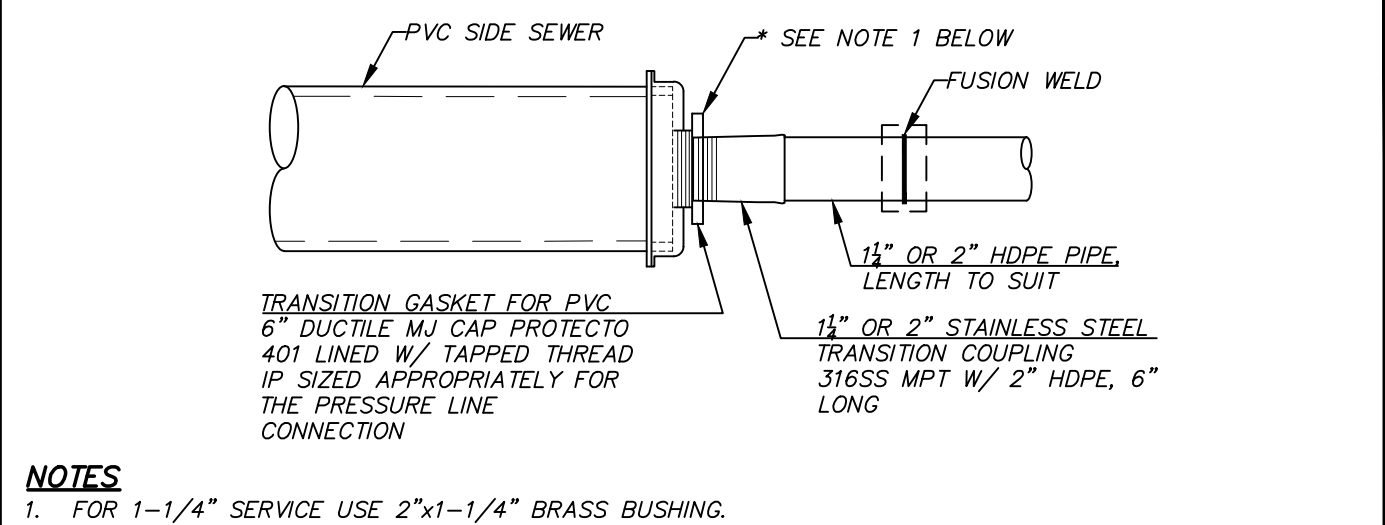
MANHOLE STEP AND LADDER REV. 10/19/17



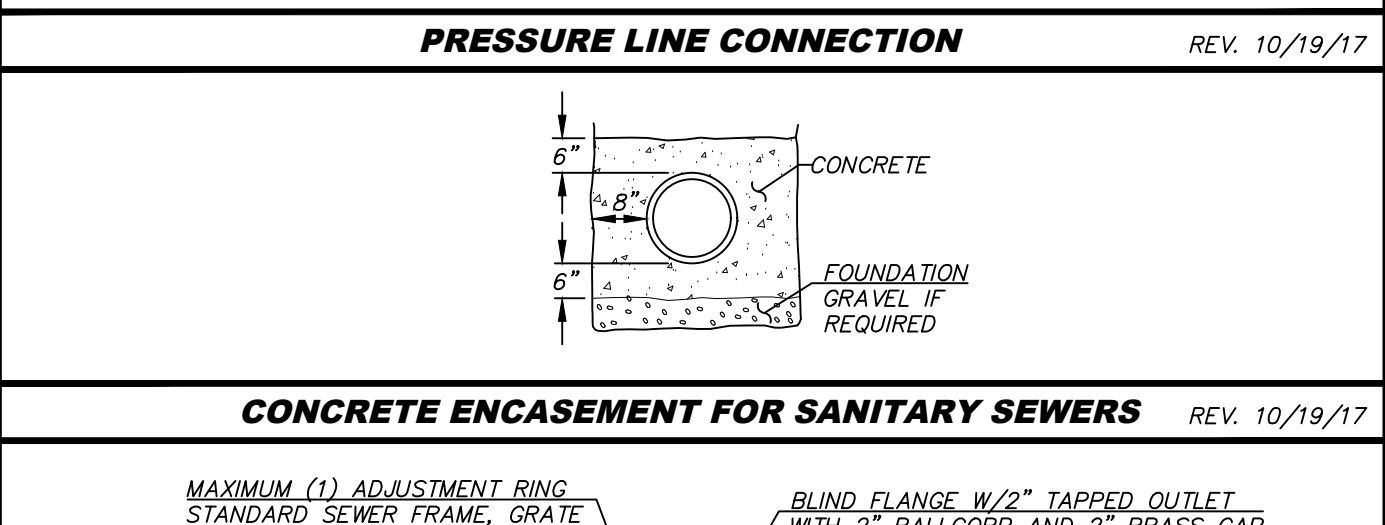
DROP MANHOLE REV. 10/19/17

- NOTES**
- ALL DUCTILE IRON PIPE AND FITTINGS SHALL BE PROTECTO 401 LINED.
 - DROP MANHOLE SHALL MEET ALL REQUIREMENTS AS STATED IN THE STANDARD MANHOLE DETAIL, MATERIALS AND CONSTRUCTION NOTES.
 - DROP MANHOLES SHALL ONLY BE USED IN STRAIGHT FLOW-THROUGH LOCATIONS (NO 90° TURNS).
 - ALL DUCTILE IRON FITTINGS WITH MEGA-LUGS.
 - VERTICAL BEND MAY BE REQUIRED DUE TO PIPE SLOPE CONDITIONS AT DUCTILE IRON TEE.

GENERAL NOTES FOR ASPHALT COLLAR/PATCHES AROUND MANHOLES REV. 10/19/17



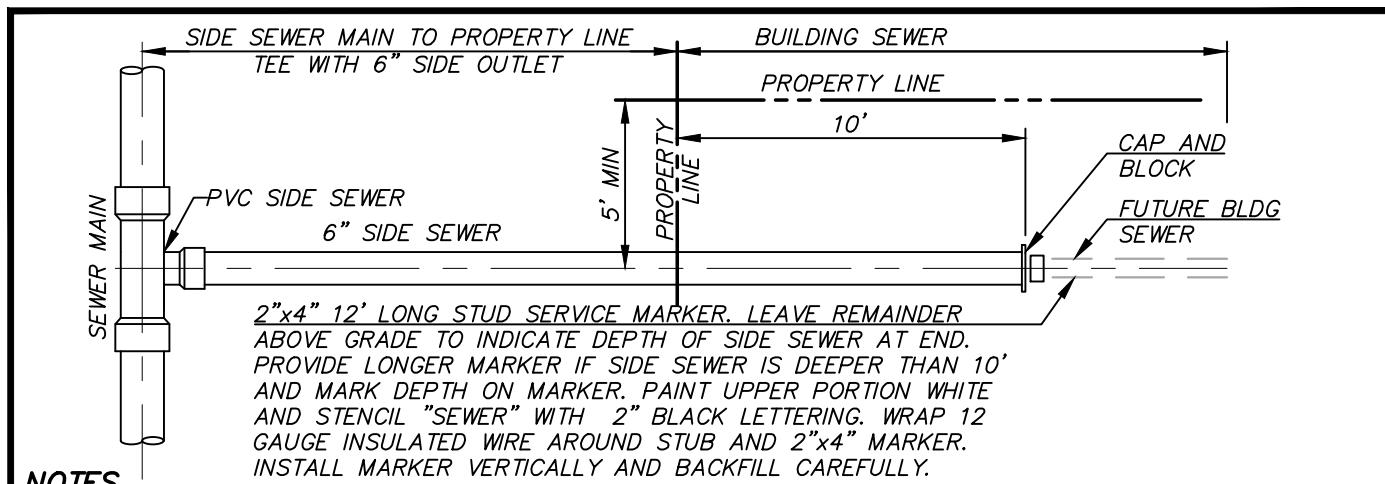
PRESSURE LINE CONNECTION REV. 10/19/17



CONCRETE ENCASEMENT FOR SANITARY SEWERS REV. 10/19/17

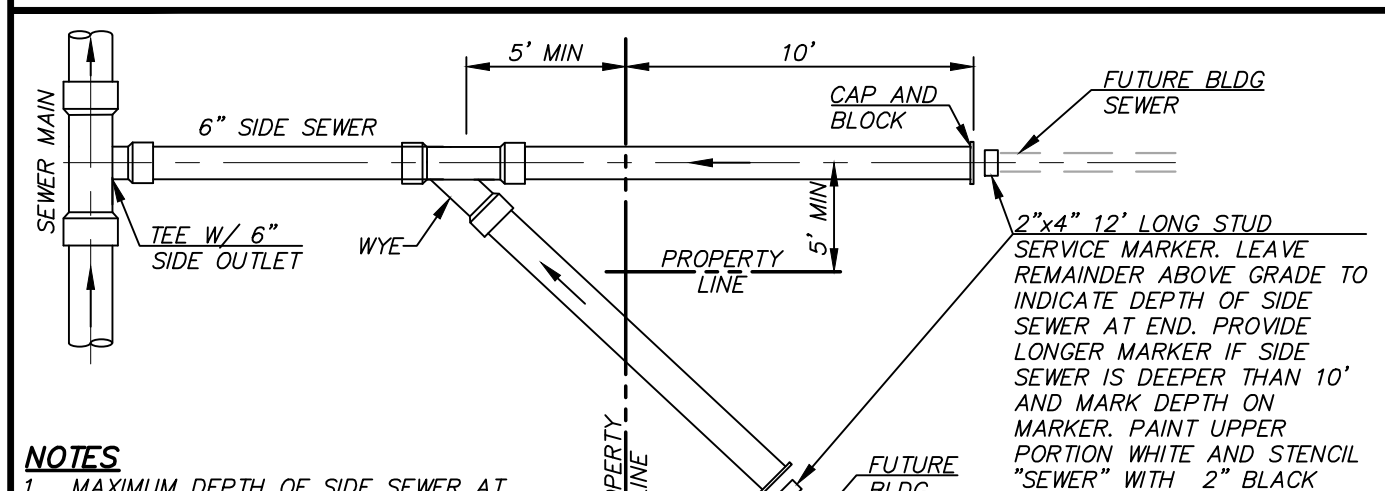
- NOTES**
- VALVES, VALVE BOXES AND VALVE EXTENSIONS SHALL MEET THE SAME REQUIREMENTS AS SHOWN IN THE STANDARD WATER DETAILS. VALVE BOX COVERS SHALL OLYMPIC FOUNDRY 940 OR EQUAL MARKED "SEWER".
 - VALVE MARKER POSTS SHALL MEET THE SAME REQUIREMENTS AS SHOWN IN THE WATER DETAILS AND BE PAINTED AS SPECIFIED IN THE STANDARD CONSTRUCTION NOTES.
 - ALL D.I. PIPE AND FITTINGS SHALL BE PROTECTOR 401 EPOXY COATED. ALL PIPE AND FITTINGS SHALL BE RESTRAINED JOINT.

SANITARY FORCE MAIN CLEANOUT TYPE II REV. 10/19/17



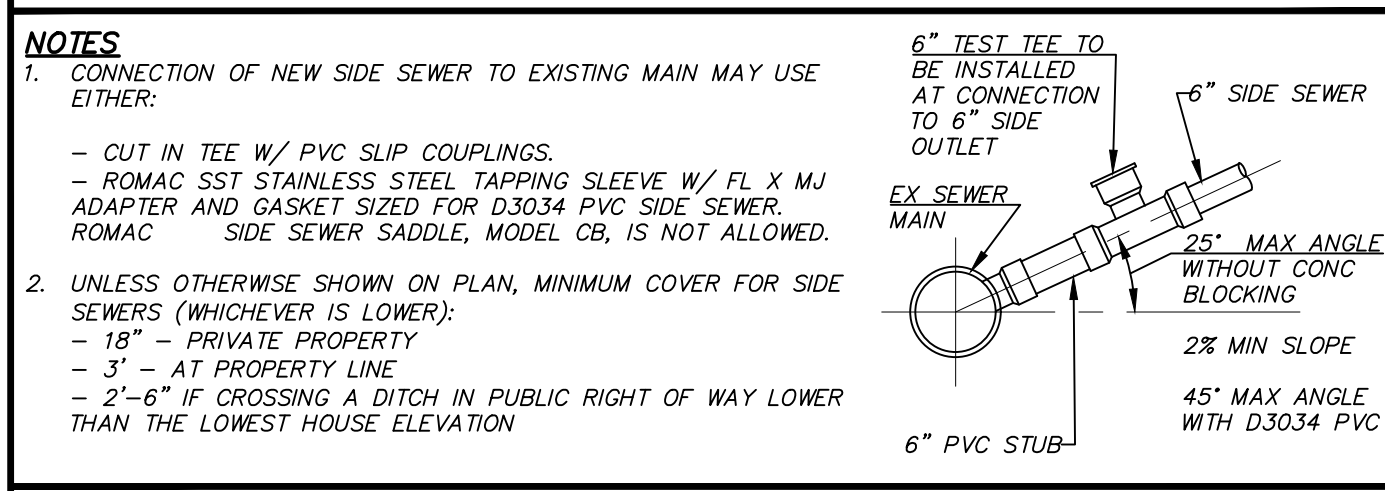
- NOTES**
- MAXIMUM DEPTH OF SIDE SEWER AT END IS 10' UNLESS ADDITIONAL DEPTH IS NEEDED TO PROVIDE GRAVITY SEWER SERVICE.
 - FOR MULTI-FAMILY AND/OR COMMERCIAL PROJECTS, SIDE SEWERS MAY BE EXTENDED, AT THE DISTRICT'S DISCRETION, FROM THE EDGE OF THE ROAD OR PROPERTY LINE TO WITHIN 3 FEET OF THE BUILDING FOUNDATION.

SINGLE SIDE SEWER REV. 10/19/17

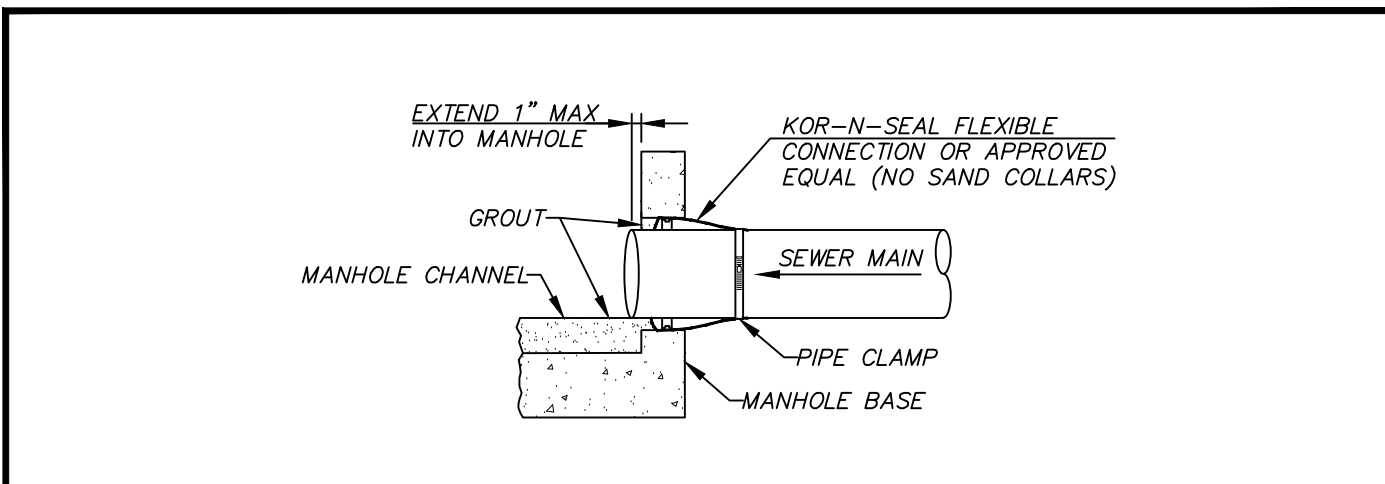


- NOTES**
- CONNECTION OF NEW SIDE SEWER TO EXISTING MAIN MAY USE EITHER:
 - CUT IN TEE W/ PVC SLIP COUPLINGS.
 - ROMAC SST STAINLESS STEEL TAPPING SLEEVE W/ FL X MJ ADAPTER AND GASKET SIZED FOR D3034 PVC SIDE SEWER. ROMAC SIDE SEWER SADDLE, MODEL CB, IS NOT ALLOWED.
 - UNLESS OTHERWISE SHOWN ON PLAN, MINIMUM COVER FOR SIDE SEWERS (WHICHEVER IS LOWER):
 - 18" - PRIVATE PROPERTY
 - 3' - AT PROPERTY LINE
 - 2'-6" IF CROSSING A DITCH IN PUBLIC RIGHT OF WAY LOWER THAN THE LOWEST HOUSE ELEVATION

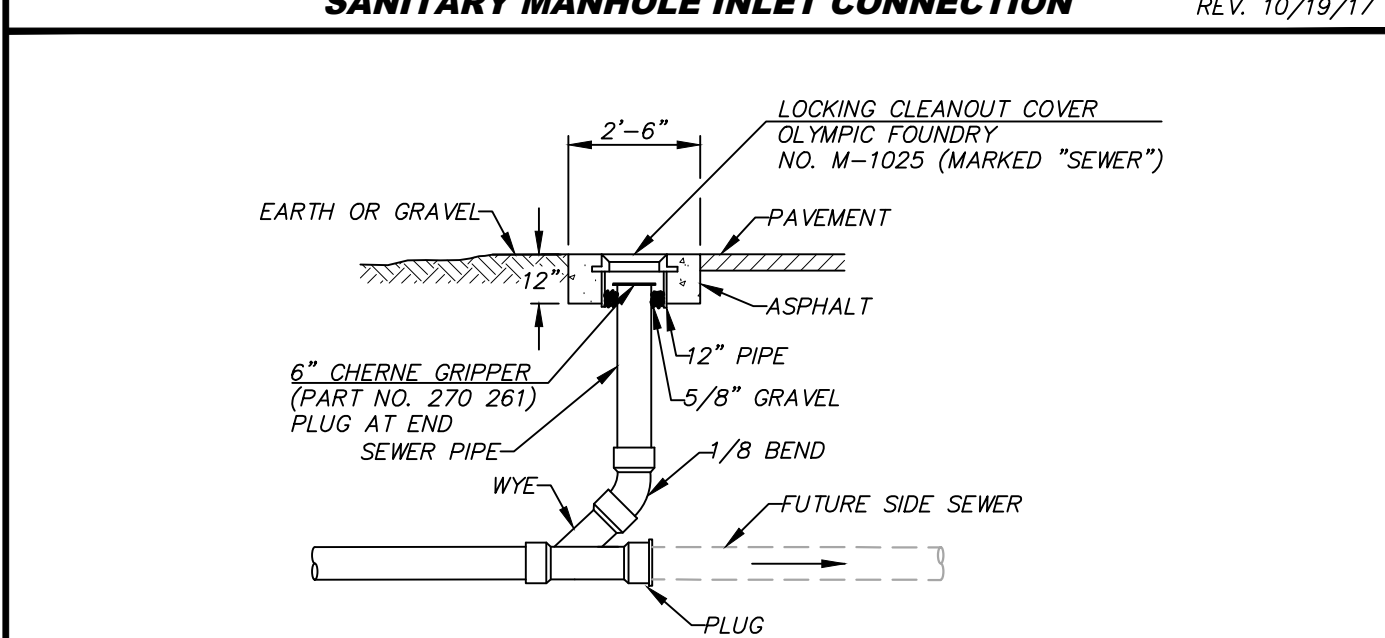
DOUBLE SIDE SEWER REV. 10/19/17



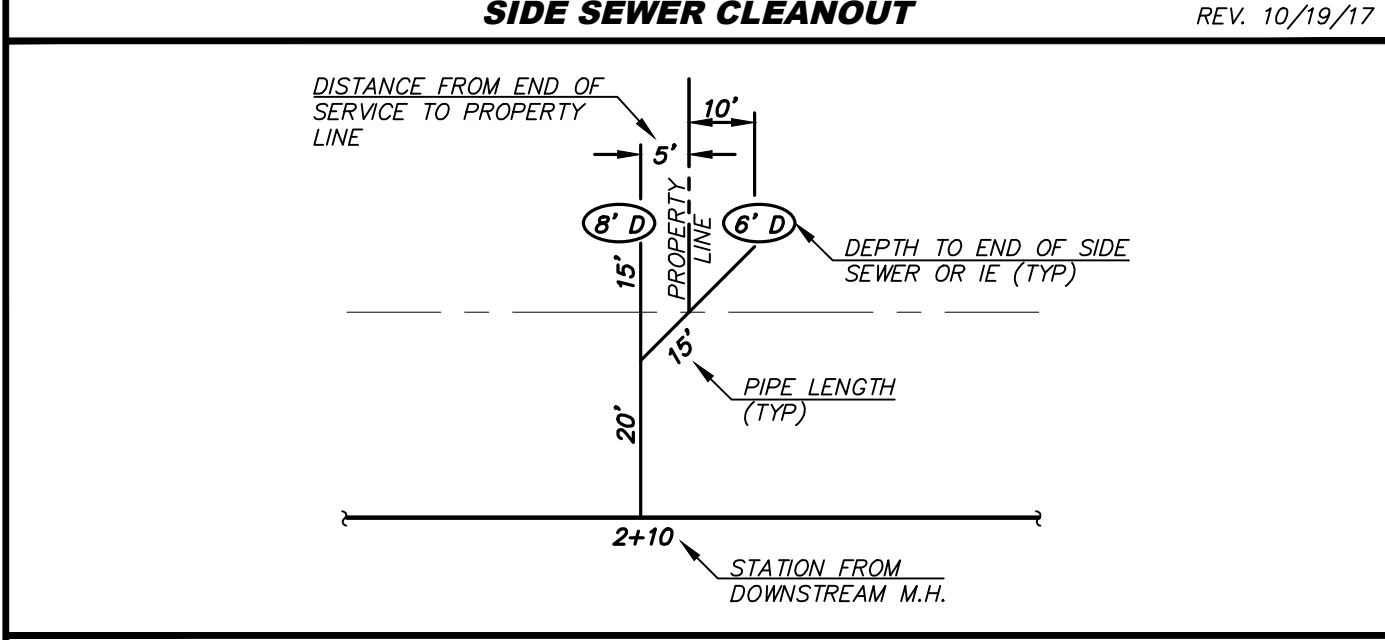
SIDE SEWER DETAILS REV. 10/19/17



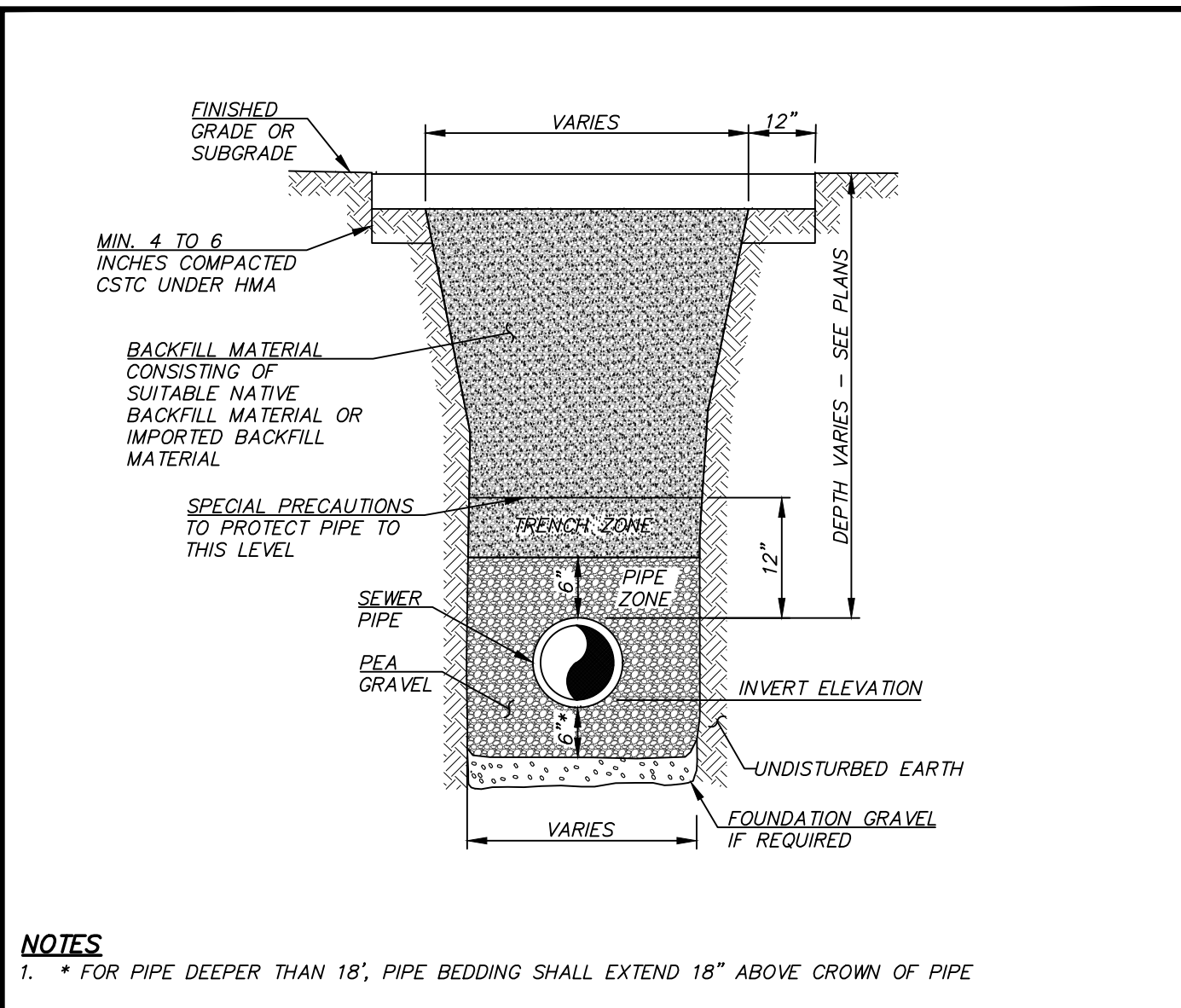
SANITARY MANHOLE INLET CONNECTION REV. 10/19/17



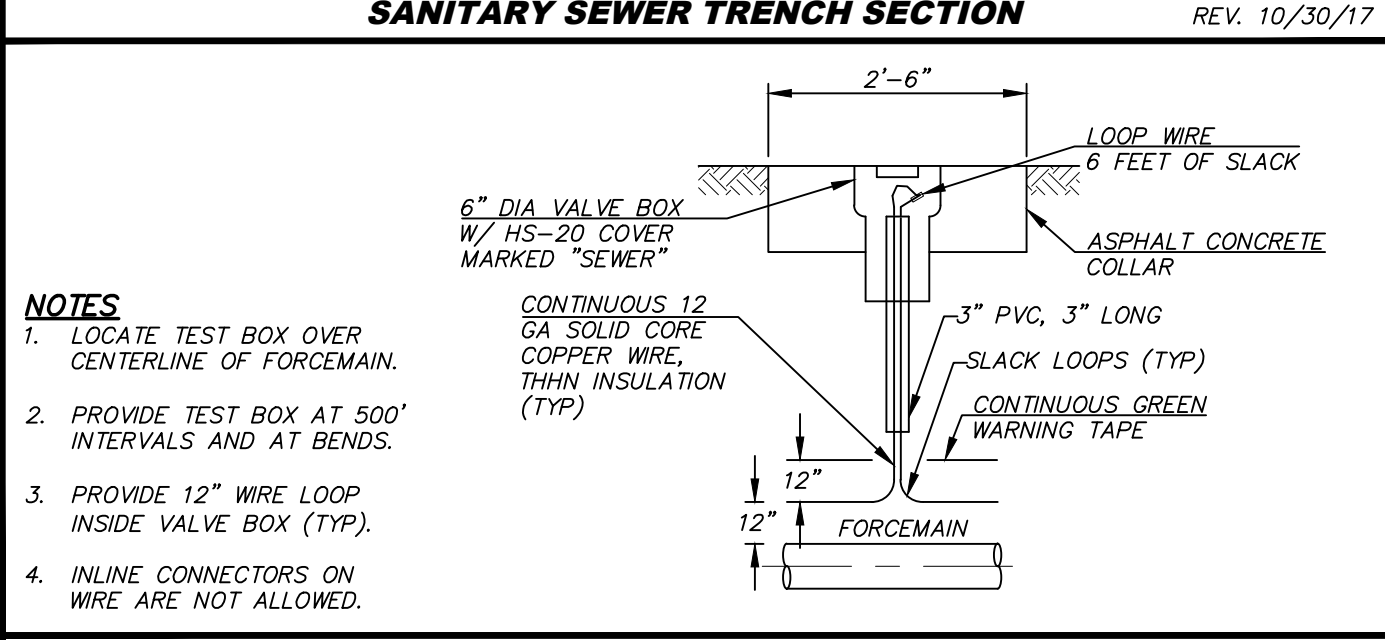
SIDE SEWER CLEANOUT REV. 10/19/17



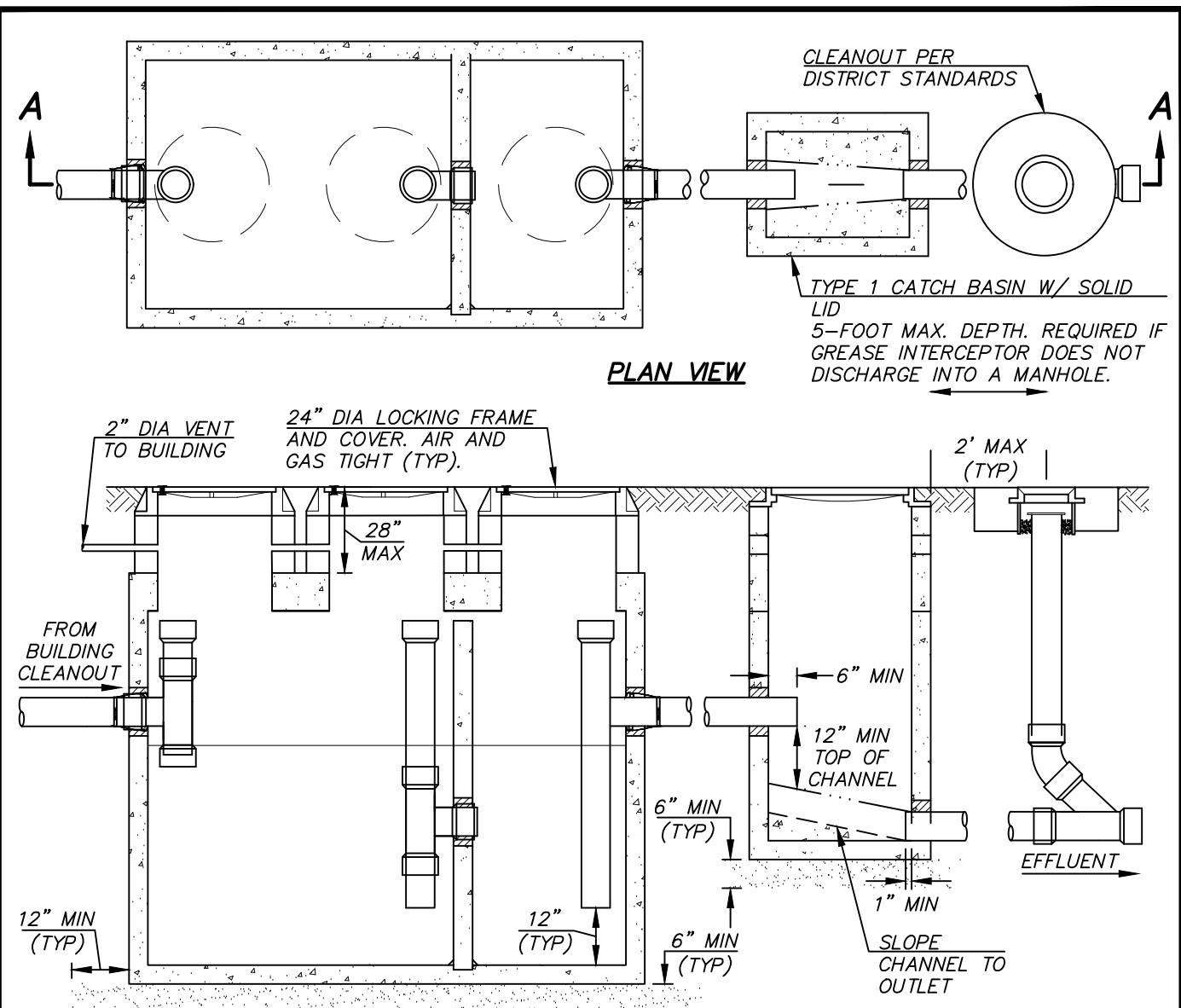
SIDE SEWER AS-BUILT REV. 10/19/17



SANITARY SEWER TRENCH SECTION REV. 10/30/17



FORCEMAIN TRACER WIRE LOCATE STATION REV. 10/19/17



STANDARD GREASE INTERCEPTOR (1,000 GALLON MIN) REV. 10/19/17

- CONSTRUCTION NOTES**
- VAULT SHALL BE UTILITY VAULT GREASE INTERCEPTOR (1000 GALLON MINIMUM). VAULT SIZING CALCULATIONS SHALL BE SUBMITTED FOR REVIEW AND APPROVAL TO THE DISTRICT PRIOR TO APPROVAL OF CONSTRUCTION. LOCATED 50-FT MAX. FROM POINT OF ENTRY.
 - THE EXTERIOR OF VAULTS BELOW GRADE SHALL BE PAINTED WITH TWO (2) COATS OF BLACK BITUMASTIC SOLUTION. NO MOISTURE SHALL BE PRESENT DURING APPLICATION OF COATINGS.
 - NO MORE THAN 1-FOOT OF RISER RINGS FROM FINISHED GRADE. ADDITIONAL SECTIONS SHALL BE PROVIDED AS NECESSARY.
 - CLEAN OUTS PROVIDED 2-FOOT MAXIMUM AWAY FROM TYPE 1 CATCH BASIN.
 - MINIMUM OF 6-INCHES OF PEA GRAVEL BELOW STRUCTURES. EXTEND 12-INCHES BEYOND EDGES OF STRUCTURES.
 - ALL PIPING SHOWN IS 6" Ø PVC PER DISTRICT STANDARDS.
- INSPECTION REQUIREMENTS**
- CONSTRUCTION WILL BE INSPECTED IN ACCORDANCE WITH THE DISTRICT'S SIDE SEWER STANDARDS. DOUBLE INSPECTION SHALL BE REQUIRED.
 - LEAK TESTING: VAULT MUST BE FILLED WITH WATER TO TEST FOR LEAKS. VAULT AND TYPE 1 CATCH BASIN MUST HOLD WATER FOR 10-MINUTES.
 - ALL PIPING PENETRATIONS MUST BE INSPECTED. ALL PENETRATIONS MUST BE PROVIDED WITH A KOR-N-SEAL ADAPTER. UNLESS OTHERWISE DIRECTED BY THE DISTRICT.
 - TRENCHES SHALL BE LEFT OPEN SO ALL STRUCTURES, PIPING, AND BEDDING CAN BE INSPECTED AND THE SIDE SEWER AS-BUILT DRAWING PROVIDED BY THE CONTRACTOR CAN BE CONFIRMED BY THE INSPECTOR.
 - INSPECTION IS REQUIRED AT THE EXISTING SIDE SEWER STUB OF WHERE THE FINAL CONNECTION WILL OCCUR.

STANDARD GREASE INTERCEPTOR (1,000 GALLON MIN) REV. 10/19/17