

1. THE TOWN OF CAMP VERDE DOES NOT WARRANT ANY QUANTITIES SHOWN ON THESE PLANS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL QUANTITIES. THE TOWN OF CAMP VERDE SHALL NOT BE HELD RESPONSIBLE FOR ERRORS IN ESTIMATES OF QUANTITIES, MATERIALS, SCHEDULE, INSTALLATION REQUIREMENTS, OR SIZE.
2. THE TOWN OF CAMP VERDE ENGINEERING DIVISION AND INSPECTION STAFF SHALL BE NOTIFIED 48 HOURS PRIOR TO ANY CONSTRUCTION WORK BY TELEPHONE AT (928) 554-0823. ANY WORK CONCEALED WITHOUT INSPECTION SHALL BE SUBJECT TO EXCAVATION FOR INSPECTION AND REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
3. AN APPROVED SET OF PLANS MUST BE AVAILABLE ON THE JOB SITE AT ALL TIMES. THE CONTRACTOR'S REPRESENTATIVE (CAPABLE OF COMMUNICATING WITH THE TOWN'S REPRESENTATIVES) SHALL BE ON THE JOB AT ALL TIMES THE WORK IS BEING PURSUED.
4. THE PROCEDURES AND METHODS USED TO SAMPLE, TEST MATERIALS, AND REPORT TEST RESULTS WILL BE DETERMINED BY THE TOWN OF CAMP VERDE ENGINEERING DIVISION. FOR ALL PHASES OF CONSTRUCTION, THE TYPE, SCHEDULING, FREQUENCY AND LOCATION OF ALL MATERIALS TESTING AND SAMPLING SHALL BE DETERMINED BY THE ENGINEERING DIVISION. THE INSPECTOR SHALL SELECT TESTING LOCATIONS AND INCREASE OR DECREASE THE FREQUENCY OF THE TESTS. COSTS OF MATERIAL TESTING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. A THIRD PARTY TESTING LABORATORY SHALL BE USED FOR ALL MATERIAL TESTING. AS A GENERAL GUIDELINE TESTING FREQUENCY SHALL BE:
  - A. CONCRETE - 1 SET OF 4 CYLINDERS PER 50 CUBIC YARDS OR DAILY
  - B. SUBGRADE - 1 DENSITY TEST PER 500 LINEAL FEET - COMPACTION MINIMUM 95% MAXIMUM DRY DENSITY
  - C. BASE COURSE - 1 DENSITY TEST PER 500 LINEAL FEET - COMPACTION MINIMUM 100% MAXIMUM DRY DENSITY
  - D. ASPHALT - 1 DENSITY TEST PER 500 LINEAL FEET IN EACH LANE. 1 OIL CONTENT PER DAY OF PAVING. 1 GRADATION CHECK PER PAVING DAY. 1 MARSHALL TEST PER DAY OF PAVING.
5. THE CONTRACTOR IS RESPONSIBLE FOR THE DEMOLITION, REMOVAL, AND LEGAL DISPOSAL OF ALL ITEMS SHOWN AS BEING REMOVED ON THESE PLANS.
6. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO VERIFY THE PRESENCE AND LOCATION OF ALL EXISTING OVERHEAD AND /OR UNDERGROUND UTILITIES AND IRRIGATION LINES THAT MAY INTERFERE WITH THIS CONSTRUCTION, WHETHER OR NOT SAID UTILITIES ARE SHOWN ON THE CONSTRUCTION PLANS FOR THIS PROJECT AND TO ADEQUATELY PROTECT, REPAIR AS REQUIRED, AND MAINTAIN ANY SUCH UTILITIES AND IRRIGATION LINES.
7. THE CONTRACTOR IS ENCOURAGED TO USE RECLAIMED WATER FOR COMPACTION AND DUST CONTROL. RECLAIMED WATER PURCHASE IS AVAILABLE BY CONTACTING THE TOWN OF CAMP VERDE UTILITIES DIVISION (928) 554-0850.
8. ALL DRAINAGE PROTECTIVE DEVICES SUCH AS SWALES, INTERCEPTION DITCHES, PIPES PROTECTIVE BERMS, CONCRETE CHANNELS OR OTHER MEASURES DESIGNED TO PROTECT IMPROVEMENTS, WHETHER EXISTING OR PROPOSED, FROM RUNOFF OR DAMAGE FROM STORM WATER, MUST BE CONSTRUCTED PRIOR TO THE CONSTRUCTION OF ANY IMPROVEMENTS.
9. TRAFFIC CONTROL SHALL CONFORM WITH THE CURRENT TOWN OF CAMP VERDE R.O.W. PERMIT AND MUTCD GUIDELINES, AS APPLICABLE.
10. ALL CONTRACTORS ARE RESPONSIBLE TO OBTAIN AN AZPDES POLLUTION DISCHARGE ELIMINATION SYSTEM PERMIT IN ACCORDANCE WITH FEDERAL AND STATE REGULATIONS, INCLUDING NOTICE OF INTENT (NOI), NOTICE OF TERMINATION, AND STORM WATER POLLUTION PREVENTION PLAN (SWPPP). A COPY OF THE NOI AND SWPPP SHALL BE AVAILABLE ON THE JOB SITE AT ALL TIMES. THIS APPLIES TO ALL COMMERCIAL AND RESIDENTIAL SITES WITH A EARTHWORK DISTURBANCE GREATER THAN 1 ACRE IN SIZE.
11. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ANY AND ALL OTHER PERMITS AND MEET ANY REQUIREMENTS SET FORTH BY OTHER AGENCIES OR UTILITIES, WHICH HAVE JURISDICTION, AT THE CONTRACTOR'S EXPENSE, INCLUDING OSHA.
12. ALL CONTRACTORS ARE RESPONSIBLE TO CONSTRUCT STABILIZED CONSTRUCTION ENTRANCES, IF REQUIRED, IN ORDER TO REDUCE OR ELIMINATE THE TRACKING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAYS OR STREETS. GRAVEL TRACK-OUT PADS SHALL MEET CURRENT ADOT EROSION AND POLLUTION CONTROL MANUAL STANDARDS. THE CONTRACTOR SHALL IMMEDIATELY REMOVE ANY SEDIMENT TRACKED ONTO PUBLIC RIGHTS-OF-WAYS OR STREETS.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL WORK AREAS INCLUDING STREETS & PAVED AREAS, DRAINAGEWAYS AND DRAINAGE APPURTENANCES, WORK AREA UTILITIES WHETHER BURIED AND EXPOSED, EMBANKMENTS & CUT SLOPES, AND ALL UNFINISHED WORK AREAS. THE CONTRACTOR SHALL DO WHAT IS REQUIRED SO THAT ACCESS IS NOT DENIED TO ANY PROPERTY ALONG THE PROPOSED CONSTRUCTION FOR ANY DURATION THAT WOULD INTERFERE WITH NORMAL DAILY INGRESS AND EGRESS. ALL DRIVING AREAS SHALL BE GRADED TO FINISH SURFACE FOLLOWING THE REQUIRED TRENCH FILL SPECIFICATIONS IMMEDIATELY AFTER THE INSTALLATION IS COMPLETE IN ORDER THAT ACCESS IS NOT INTERRUPTED AND THAT ACCESS IS UNINHIBITED. NO UNEVEN SURFACES SHALL BE ALLOWED THAT COULD CAUSE ACCIDENTS, VEHICLE DAMAGE, OR LIMITED ACCESS. THE CONTRACTOR SHALL DO WHAT IS REQUIRED TO ASSURE THAT NO UTILITIES ARE INTERRUPTED ALONG THE PROPOSED CONSTRUCTION. THE CONTRACTOR SHALL LEAVE ALL DRAINAGEWAYS AND APPURTENANCES IN OPERATING ORDER THROUGHOUT THE CONSTRUCTION DURATION. THE CONTRACTOR SHALL ASSURE THAT ALL CUT AND FILL SLOPES ARE RESTORED TO THE PRIOR CONDITIONS OR AS SHOWN ON THE APPROVED PLANS. THE CONTRACTOR SHALL SEE THAT ALL UNFINISHED WORK AREAS SHALL BE MAINTAINED TO ASSURE THAT OPEN TRENCHES ARE SECURE AND NOT LEFT UNATTENDED, THAT DRAINAGE IS NOT ALLOWED TO ENTER OPEN TRENCHES AND DAMAGE EXISTING AND NEW UTILITIES, AND THAT PUBLIC SAFETY IS ASSURED ALONG THE ENTIRE CONSTRUCTION ROUTE AT ALL TIMES. CONTRACTOR SHALL MEET OSHA STANDARDS FOR TRENCH SAFETY.
14. PRIOR TO THE START OF ANY WORK, THE CONTRACTOR SHALL SCHEDULE AND ATTEND A PRE-CONSTRUCTION AND UTILITY COORDINATION MEETING. ALL WORK, PLANS, SPECIFICATIONS, INSPECTION REQUIREMENTS, AND SCHEDULING SHALL BE DISCUSSED AT THIS MEETING.
15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FOLLOWING ALL ARIZONA 811 LAWS PRIOR TO AND DURING CONSTRUCTION BY CONTACTING THE 811 AUTHORITY AT (602) 659-7500. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE INTEGRITY OF THE UTILITY LOCATION AS IS REQUIRED THROUGHOUT THE PROJECT CONSTRUCTION DURATION. THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE ARIZONA 811 AUTHORITY REGULATIONS. CONTRACTOR SHALL PROVIDE THE TOWN OF CAMP VERDE ENGINEERING STAFF WITH EVIDENCE OF ANY AREA BEING DISTURBED HAVING BEEN LOCATED PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.



## TOCV STANDARD DETAIL

## GENERAL ENGINEERING NOTES

REVISED:  
9/3/2025

DETAIL No:  
101CV-1

16. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE SUFFICIENT MANPOWER, MATERIALS, AND EQUIPMENT ON THE JOB AT ALL TIMES DURING THE DURATION OF THE CONSTRUCTION PROJECT TO BOTH COMPLY WITH THE PROJECT SPECIFICATIONS AND ALSO ACCOMPLISH THE WORK IN A TIMELY MANNER.
17. CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE SPECIFICATIONS AS REQUIRED IN THE CURRENT UNIFORM STANDARD SPECIFICATIONS AND DETAILS OF PUBLIC WORKS CONSTRUCTION BY MARICOPA ASSOCIATION OF GOVERNMENT COMMONLY REFERRED TO AS MAG STANDARDS, TOWN OF CAMP VERDE REGULATIONS OR SPECIFICATIONS, ANSI/AWWA SPECIFICATIONS, AND/OR OTHER STATE AND FEDERAL SPECIFICATIONS, AS APPLICABLE.
18. THE CONTRACTOR SHALL BE RESPONSIBLE TO DETERMINE TRENCH BRACING, SHEATHING, SHORING OR SIDE SLOPES AS REQUIRED FOR THE SAFETY AND CONFORMANCE TO ALL APPLICABLE OSHA LAWS AND CONSTRUCTION STANDARDS FOR THE EXCAVATION AND TRENCHING OF THIS PROJECT. THE CONTRACTOR SHALL ASSURE THAT SUITABLE AND SAFE CONDITIONS, INCLUDING PROPER TRAFFIC AND SAFETY CONTROL, ARE MET THROUGHOUT THE PROJECT DURATION OR WORK WILL BE CEASED UNTIL SUCH TIME THAT THE UNSAFE CONDITION IS RECTIFIED. THE TOWN OF CAMP VERDE SHALL NOT BE HELD IN ANY WAY RESPONSIBLE FOR ANY LOST TIME BY THE CONTRACTOR DUE TO UNSAFE CONDITIONS OR THE ENFORCEMENT OF THIS SPECIFICATION
19. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN TO THE TOWN OF CAMP VERDE PUBLIC WORKS PROJECT MANAGER FOR APPROVAL PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
20. THE TOWN OF CAMP VERDE MAY SUSPEND THE WORK BY WRITTEN NOTICE WHEN, IN THEIR JUDGMENT, PROGRESS IS UNSATISFACTORY OR UNAUTHORIZED, THE PRODUCT IS UNSATISFACTORY, WEATHER CONDITIONS ARE UNSUITABLE OR THERE IS DANGER TO THE PUBLIC.
21. SHOP DRAWINGS SHALL BE PROVIDED BY THE CONTRACTOR PER MAG SECTION 105.2.
22. THE CONTRACTOR MAY SUBMIT CAREFULLY DOCUMENTED AND CONSIDERED WRITTEN PROPOSALS FOR ALTERNATE MATERIALS AND CONSTRUCTION METHODS WHICH WILL BE CONSIDERED BY THE TOWN ENGINEER.
23. ALL IMPROVEMENTS SHALL BE CONSTRUCTED BY CONTRACTORS LICENSED BY THE ARIZONA STATE REGISTRAR OF CONTRACTORS, WITH A CLASS OF LICENSE(S) FOR THE SPECIFIC WORK BEING PERFORMED.
24. THE TOWN OF CAMP VERDE INSPECTION STAFF SHALL BE NOTIFIED 48 HOURS PRIOR TO BEGINNING DIFFERENT PHASES OF CONSTRUCTION THAT WILL REQUIRE INSPECTION.
25. THE TOWN OF CAMP VERDE RESERVES THE RIGHT TO REQUIRE MODIFICATIONS TO THESE PLANS DURING CONSTRUCTION IF FIELD CONDITIONS WARRANT.
26. ANY DEFECTS WHICH APPEAR IN THE WORK WITHIN THE WARRANTY PERIOD GIVEN IN THE PROJECT CONTRACT FROM THE DATE OF ACCEPTANCE AND WHICH ARE DUE TO IMPROPER WORKMANSHIP OR INFERIOR MATERIALS SUPPLIED SHALL BE CORRECTED BY AND AT THE EXPENSE OF THE CONTRACTOR.
27. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE STREETS AND OF PARTIALLY COMPLETED PORTIONS OF THE WORK UNTIL FINAL ACCEPTANCE OF THE WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE QUALITY OF EXISTING STREETS LEADING TO THE PROJECT SITE. EXISTING STREETS FOUND TO BE DAMAGED BY CONSTRUCTION TRAFFIC SHALL BE REPAIRED TO THE SATISFACTION OF THE TOWN OF CAMP VERDE TOWN ENGINEER BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.
28. ALL ITEMS REMOVED AND NOT NOTED TO BE SALVAGED IN THE PLANS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE HAULED AWAY.
29. STREETS CLOSED BECAUSE OF CONSTRUCTION SHALL BE PROVIDED WITH BARRICADES AND/OR HAZARD SIGNS AS REQUIRED AND APPROVED BY THE TOWN OF CAMP VERDE ENGINEERING DIVISION AND INSPECTION STAFF. THE TOWN OF CAMP VERDE EMERGENCY SERVICES SHALL BE NOTIFIED 48 HOURS PRIOR TO ANY STREET CLOSURE.
30. PRIOR TO APPROVAL OF AN IMPROVEMENT PROJECT, AN "AS-BUILT" PLAN MUST BE SUBMITTED TO THE TOWN OF CAMP VERDE ENGINEER IN THE FORM OF HARD COPIES, DIGITAL PDF, AND CAD DRAWING. THE AS-BUILT PLAN SHALL INDICATE THE ACTUAL LOCATION OF WATER MAINS, SEWER MAINS, UNDERGROUND DRAINAGE STRUCTURES, ALL SEWER AND WATER SERVICES, ALL FITTINGS, VALVES AND MANHOLES RELATIVE TO RIGHT-OF-WAY BOUNDARIES, LOT LINE, OTHER POINTS OF SURVEY, OR OTHER IMPROVEMENTS IN PLANS.
31. THE ACCURACY OF ALL CONSTRUCTION WORK SHALL BE MAINTAINED AND VERIFIED BY THE CONTRACTOR'S SURVEYOR AT THE CONTRACTOR'S EXPENSE. STAKES WILL BE SET ESTABLISHING LINES AND GRADES (FINISH OR FLOWLINE) FOR ALL CONSTRUCTION INCLUDING ROADS, CURB AND GUTTER, SIDEWALKS, UTILITIES, STRUCTURES, AND OTHER WORK AS CONSIDERED NECESSARY. ALL SURVEY CONTROL SHALL BE SET BY THE CONTRACTOR'S SURVEYOR FROM MONUMENTS PER THESE APPROVED PLANS.
32. A COPY OF THE A.D.E.Q. PERMITS ISSUED PRIOR TO NEW CONSTRUCTION, EXTENSION TO, OR MODIFICATION OF A WATER DISTRIBUTION SYSTEM, SEWAGE COLLECTION OR INDIVIDUAL SEWAGE TREATMENT SYSTEM SHALL BE ONSITE AT ALL TIMES.
33. RELOCATION OF SIGNS, TREES, SHRUBS, MAILBOXES AND OTHER INCIDENTALS SHALL BE MOVED ONLY FAR ENOUGH TO ALLOW CONSTRUCTION OF THE PROJECT AND CAUSE THE LEAST DISRUPTION TO PRIVATE PROPERTY, AND LANDSCAPE. FINAL POSITIONS SHALL BE APPROVED BY THE TOWN OF CAMP VERDE PRIOR TO RELOCATION. ALL RELOCATED ITEMS SHALL CONTINUE TO WORK IN THEIR INTENDED CAPACITY AFTER THE RELOCATION HAS BEEN ACCOMPLISHED. NO SIGNS SHALL BE RELOCATED TO POSITIONS OUTSIDE DESIGNATED RIGHTS-OF-WAY. SAFETY SHALL BE A PRIMARY CONSIDERATION IN THE PLACEMENT OF SHRUBBERY AND SIGNS WHICH COULD POSSIBLY DISRUPT THE SIGHT DISTANCE OF MOTORISTS.
34. NO JOB WILL BE CONSIDERED COMPLETE UNTIL FINAL GRADING IS COMPLETE AND ALL CURBS, PAVEMENT, AND SIDEWALKS HAVE BEEN SWEEPED CLEAN OF ALL DIRT AND DEBRIS, ALL SURVEY MONUMENTS ARE INSTALLED, AND ALL VALVES, MANHOLES AND BOXES HAVE BEEN ADJUSTED TO GRADE ACCORDING TO THESE APPROVED PLANS.
35. TOWN OF CAMP VERDE TOWN ENGINEER RESERVES THE RIGHT TO AMEND NOTES AND DETAILS AS DEEMED NECESSARY WITH APPROPRIATE DIRECTOR LEVEL APPROVAL.



## TOCV STANDARD DETAIL

## GENERAL ENGINEERING NOTES

REVISED:  
9/3/2025

DETAIL No:  
101CV-2

1. EXCAVATING CONTRACTOR MUST GIVE LOCATION FOR WASTING EXCESS EXCAVATION IF LOCATED WITHIN THE TOWN OF CAMP VERDE AND A LETTER FROM OWNER GIVING PERMISSION FOR DUMPING PRIOR TO STARTING ON-SITE CONSTRUCTION. IF EXCESS EXCAVATION EXCEEDS 100 CUBIC YARDS AND IS DISPOSED OF ON PRIVATE PROPERTY THE DISPOSAL SITE WILL ALSO REQUIRE A GRADING AND DRAINAGE PERMIT.
2. GRADING AND DRAINAGE PLAN APPROVAL INCLUDES THE CONSTRUCTION OF ALL SURFACE IMPROVEMENTS SHOWN ON THE APPROVED PLANS.
3. COMPACTION SHALL COMPLY WITH M.A.G. SECTION 601 OR AS SPECIFIED IN THESE PLANS.
4. TREES AND SHRUBBERY THAT CONFLICT WITH PROPOSED IMPROVEMENTS SHALL NOT BE REMOVED WITHOUT BEING SHOWN IN THE APPROVED PLANS OR APPROVAL OF THE TOWN ENGINEER.
5. NO CHANGES TO LANDSCAPE PLANS SHALL BE MADE WITHOUT WRITTEN APPROVAL FROM THE TOWN.
6. SUBGRADE PREPARATION SHALL CONFORM WITH THE GEOTECHNICAL REPORT, IF APPLICABLE, FOR THIS PROJECT UNLESS OTHERWISE DIRECTED IN THESE APPROVED PLANS.
7. THE CONTRACTOR SHALL PRESERVE AND MAINTAIN CONSTRUCTION STAKING AND REFERENCE AND CONTROL POINTS UNTIL SUCH A TIME THAT THEY ARE NO LONGER REQUIRED. IN THE EVENT THAT THESE ITEMS ARE MOVED OR DESTROYED, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO HAVE THOSE ITEMS RE-ESTABLISHED FOR LOCATION AND GRADE.
8. THE CONTRACTOR IS RESPONSIBLE FOR THE DEMOLITION, REMOVAL, AND LEGAL DISPOSAL OF ALL ITEMS SHOWN AS BEING REMOVED ON THESE PLANS.
9. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO VERIFY THE PRESENCE AND LOCATION OF ALL EXISTING OVERHEAD AND /OR UNDERGROUND UTILITIES AND IRRIGATION LINES THAT MAY INTERFERE WITH THIS CONSTRUCTION, WHETHER OR NOT SAID UTILITIES ARE SHOWN ON THE CONSTRUCTION PLANS FOR THIS PROJECT AND TO ADEQUATELY PROTECT, REPAIR AS REQUIRED, AND MAINTAIN ANY SUCH UTILITIES AND IRRIGATION LINES.
10. THE CONTRACTOR IS ENCOURAGED TO USE RECLAIMED WATER FOR COMPACTION AND DUST CONTROL. RECLAIMED WATER PURCHASE IS AVAILABLE BY CONTACTING THE TOWN OF CAMP VERDE UTILITIES DIVISION (928) 554-0850.
11. ALL DRAINAGE PROTECTIVE DEVICES SUCH AS SWALES, INTERCEPTION DITCHES, PIPES PROTECTIVE BERMS, CONCRETE CHANNELS OR OTHER MEASURES DESIGNED TO PROTECT IMPROVEMENTS, WHETHER EXISTING OR PROPOSED, FROM RUNOFF OR DAMAGE FROM STORM WATER, MUST BE CONSTRUCTED PRIOR TO THE CONSTRUCTION OF ANY IMPROVEMENTS.
12. ALL CONTRACTORS ARE RESPONSIBLE TO OBTAIN AN AZPDES POLLUTION DISCHARGE ELIMINATION SYSTEM PERMIT IN ACCORDANCE WITH FEDERAL AND STATE REGULATIONS, INCLUDING NOTICE OF INTENT (NOI), NOTICE OF TERMINATION, AND STORM WATER POLLUTION PREVENTION PLAN (SWPPP). A COPY OF THE NOI AND SWPPP SHALL BE AVAILABLE ON THE JOB SITE AT ALL TIMES. THIS APPLIES TO ALL COMMERCIAL AND RESIDENTIAL SITES WITH AN EARTHWORK DISTURBANCE GREATER THAN 1 ACRE IN SIZE.
13. ALL CONTRACTORS ARE RESPONSIBLE TO CONSTRUCT STABILIZED CONSTRUCTION ENTRANCES, IF REQUIRED, IN ORDER TO REDUCE OR ELIMINATE THE TRACKING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAYS OR STREETS. GRAVEL TRACK-OUT PADS SHALL MEET CURRENT ADOT EROSION AND POLLUTION CONTROL MANUAL STANDARDS. THE CONTRACTOR SHALL IMMEDIATELY REMOVE ANY SEDIMENT TRACKED ONTO PUBLIC RIGHTS-OF-WAYS OR STREETS.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL WORK AREAS INCLUDING STREETS & PAVED AREAS, DRAINAGEWAYS AND DRAINAGE APPURTENANCES, WORK AREA UTILITIES WHETHER BURIED AND EXPOSED, EMBANKMENTS & CUT SLOPES, AND ALL UNFINISHED WORK AREAS. THE CONTRACTOR SHALL DO WHAT IS REQUIRED SO THAT ACCESS IS NOT DENIED TO ANY PROPERTY ALONG THE PROPOSED CONSTRUCTION FOR ANY DURATION THAT WOULD INTERFERE WITH NORMAL DAILY INGRESS AND EGRESS. ALL DRIVING AREAS SHALL BE GRADED TO FINISH SURFACE FOLLOWING THE REQUIRED TRENCH FILL SPECIFICATIONS IMMEDIATELY AFTER THE INSTALLATION IS COMPLETE IN ORDER THAT ACCESS IS NOT INTERRUPTED AND THAT ACCESS IS UNINHIBITED. NO UNEVEN SURFACES SHALL BE ALLOWED THAT COULD CAUSE ACCIDENTS, VEHICLE DAMAGE, OR LIMITED ACCESS. THE CONTRACTOR SHALL DO WHAT IS REQUIRED TO ASSURE THAT NO UTILITIES ARE INTERRUPTED ALONG THE PROPOSED CONSTRUCTION. THE CONTRACTOR SHALL LEAVE ALL DRAINAGE WAYS AND APPURTENANCES IN OPERATING ORDER THROUGHOUT THE CONSTRUCTION DURATION. THE CONTRACTOR SHALL ASSURE THAT ALL CUT AND FILL SLOPES ARE RESTORED TO THE PRIOR CONDITIONS OR AS SHOWN ON THE APPROVED PLANS. THE CONTRACTOR SHALL SEE THAT ALL UNFINISHED WORK AREAS SHALL BE MAINTAINED TO ASSURE THAT OPEN TRENCHES ARE SECURE AND NOT LEFT UNATTENDED, THAT DRAINAGE IS NOT ALLOWED TO ENTER OPEN TRENCHES AND DAMAGE EXISTING AND NEW UTILITIES, AND THAT PUBLIC SAFETY IS ASSURED ALONG THE ENTIRE CONSTRUCTION ROUTE AT ALL TIMES. CONTRACTOR SHALL MEET OSHA STANDARDS FOR TRENCH SAFETY.
15. ANY GRADING WITHIN A FLOOD HAZARD AREAS WILL REQUIRE THE REVIEW AND APPROVAL OF GRADING PLANS BY THE TOWN OF CAMP VERDE TOWN ENGINEER.
16. THE TOWN OF CAMP VERDE HAS ADOPTED THE MOST CURRENT YAVAPAI COUNTY DRAINAGE MANUAL.
17. ALL OUTFLOWS FROM DEVELOPED PROPERTY MUST BE EQUAL TO OR LESS THAN PRE-DEVELOPMENT HISTORIC FLOWS. ANY RESIDENTIAL OR COMMERCIAL DEVELOPMENT SHALL NOT CAUSE ADVERSE IMPACT TO ANY DOWNSTREAM OR NEIGHBORING PROPERTIES, INFRASTRUCTURE, DRAINAGES, AND WATERWAYS BY DISCHARGE OF AN INCREASED POST DEVELOPMENT FLOW.
18. ALL DEVELOPMENTS WILL REQUIRE SUBMITTAL OF GRADING & DRAINAGE PLANS AND DRAINAGE REPORT BY AN ARIZONA LICENSED PROFESSIONAL CIVIL ENGINEER.
19. GRADING & DRAINAGE PLANS AND DRAINAGE REPORT MUST INCLUDE NECESSARY CALCULATIONS TO ANALYZE ALL CHANGES MADE TO SITE FROM NATIVE LAND TO POST DEVELOPMENT SITE CONDITIONS FOR FIRST CATCH/FLUSH & DETENTION.
20. DETENTION/ RETENTION FACILITIES SHALL CONFORM TO THE CURRENT YAVAPAI COUNTY DRAINAGE MANUAL AND ARIZONA DEPARTMENT OF WATER RESOURCES (ADWR) STATE STANDARD 8-99.



## TOCV STANDARD DETAIL

## GRADING AND DRAINAGE NOTES

REVISED:  
9/3/2025

DETAIL No:  
102CV

1. ALL PROJECT MATERIALS AND WORKMANSHIP SHALL COMPLY WITH THE MARICOPA ASSOCIATION OF GOVERNMENTS (MAG) STANDARD SPECIFICATIONS AND DETAILS FOR PUBLIC WORKS CONSTRUCTION, THE TOWN OF CAMP VERDE STD DETAILS AND SPECIFICATIONS, THE APPROVED PLANS, TOGETHER WITH GENERALLY ACCEPTED GOOD CONSTRUCTION PRACTICES.
2. THE CONTRACTOR SHALL PROVIDE SUFFICIENT MEN AND EQUIPMENT ON THE JOB SITE AT ALL TIMES TO ASSURE PUBLIC SAFETY AND COMPLY WITH THE CONSTRUCTION SPECIFICATIONS.
3. WATERMAIN PIPE INSTALLATION, EMBEDMENT, AND BACKFILL SHALL CONFORM TO TOWN OF CAMP VERDE STD DTL 200CV AND ITS REFERENCED SPECIFICATIONS.
4. THE TOWN OF CAMP VERDE ENGINEERING DIVISION AND INSPECTION STAFF WILL CONDUCT INSPECTIONS OF ALL OF THE PROPOSED IMPROVEMENTS. THESE REQUIRED INSPECTIONS WILL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING:
  - A. PRE-EXCAVATION LOCATION OF THE PROPOSED TRENCH AND ANY PROPOSED SAW CUTTING OF ASPHALT OR CONCRETE AND VERIFICATION OF BLUE STAKE.
  - B. EXCAVATED DEPTH AND TRENCH SUBGRADE PREPARATION: ANY CROSSED UTILITIES (PUBLIC OR PRIVATE) WILL BE INSPECTED TO ASSURE NO DAMAGE OCCURRED DURING EXCAVATION.
  - C. THE PLACEMENT OF TRENCH BOTTOM BEDDING INCLUDING QUALITY OF MATERIALS, THICKNESS, MOISTURE, AND COMPACTION IN ACCORDANCE TO THE PIPE BEDDING AND TRENCH DETAIL IN THE APPROVED PLANS.
  - D. THE INSTALLATION AND ASSEMBLY OF THE PROPOSED PIPE AND FITTINGS IN THE TRENCH ATOP THE TRENCH BOTTOM BEDDING. THIS WILL INCLUDE BUT NOT BE LIMITED TO INSPECTING THAT BEDDING HAS BEEN HAND REMOVED BELOW BELLS FOR FLUSH FIT ATOP TRENCH BOTTOM BEDDING, THAT PIPE ENDS HAVE BEEN MARKED AND THEN INSERTED INTO BELL ENDS FOR THE APPROPRIATE DEPTHS, THAT FITTINGS AND PIPE ARE PROPERLY ALIGNED AND BOLTED TOGETHER AS REQUIRED, THAT TRACING WIRE IS INSTALLED AS REQUIRED, THAT ALL DUCTILE IRON FITTINGS AND PIPE ARE WRAPPED AS REQUIRED, AND THAT ALL ITEMS ARE REASONABLY CENTERED IN THE TRENCH SO THAT BEDDING MATERIAL CAN BE PLACED ALONG THE SIDES OF THE PIPE AS REQUIRED BY THE PIPE BEDDING AND TRENCH DETAIL IN THE APPROVED PLANS
  - E. PIPES AND FITTINGS ARE APPROPRIATELY BEDDED AROUND AND OVER AS REQUIRED BY THE PIPE BEDDING AND TRENCH DETAIL IN THE APPROVED PLANS INCLUDING QUALITY OF BEDDING MATERIAL, WIDTH/THICKNESS, MOISTURE, AND COMPACTION PER TABLE #1 BELOW.
  - F. THAT CONTRACTOR SHALL PROVIDE A BLUE COATED SOLID #12 COPPER TRACER WIRE SECURED TO THE TOP CENTERLINE OF ALL WATER LINES AND SERVICES PER TOWN OF CAMP VERDE STD DETAIL 200CV. THE CONTRACTOR SHALL PROVIDE A LOOPED PIGTAIL AT ALL IN-LINE VALVE LOCATIONS. TRACER WILL BE INSPECTED FOR CONTINUITY PRIOR TO ACCEPTANCE OF THE WORK. NON-CONTINUOUS OR FAULTY WIRE WILL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
  - G. THAT "BURIED WATERLINE" LABELED DETECTOR TAPE IS INSTALLED PROPERLY ATOP THE FIRST COMPACTED LIFT OF NATIVE MATERIAL OR SLURRY ABOVE THE TOP OF PIPE BEDDING AND DIRECTLY ABOVE THE CENTERLINE OF THE BURIED WATERLINE PER CAMP VERDE DETAIL 200CV.
  - H. THAT NATIVE BACKFILL USED ABOVE THE BEDDING IS CAREFULLY PROCESSED TO REMOVE ALL ROCK LARGER THAN 3" DIAMETER AND OBTAIN THE APPROPRIATE MOISTURE AND THEN CAREFULLY PLACED IN EVEN AND UNIFORM LIFTS IN THE TRENCH AND COMPACTED TO THE DENSITY REQUIRED TO SATISFY BOTH MAG SPECIFICATIONS IN SECTION 601 AND ADOT REQUIREMENTS FOR WORK IN THEIR RIGHT OF WAY AND PER SPECIFICATIONS IN THESE APPROVED PLANS. THE ALLOWABLE DEPTH OF LIFT WILL BE DETERMINED BY THE CAPABILITIES OF THE COMPACTION EQUIPMENT PROVIDED BY THE CONTRACTOR. DENSITIES OF TRENCH BACKFILL WILL BE CHECKED BY THE PROJECT TESTING CONSULTANT AT THE FOLLOWING VERTICAL AND HORIZONTAL INTERVALS:

TABLE 1

| MATERIAL/LOCATION             | TEST INTERVAL-VERTICAL      | TEST INTERVAL-HORIZONTAL                   |
|-------------------------------|-----------------------------|--------------------------------------------|
| PIPE BEDDING BASE             | TOP OF LIFT                 | EVERY 350' OR DAILY (WHICHEVER IS GREATER) |
| PIPE BEDDING                  | TOP OF BEDDING              | EVERY 350' OR DAILY (WHICHEVER IS GREATER) |
| TRENCH BACKFILL ABOVE BEDDING | EVERY 18" OF VERTICAL FILL* | EVERY 350' OR DAILY (WHICHEVER IS GREATER) |

\* OR AS REQUIRED BY TOWN OF CAMP VERDE STD DTL 200CV

5. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE AN ACCURATE SET OF "AS-BUILT" PLANS AS HARD COPIES, DIGITAL PDF, AND CAD DRAWING TO THE TOWN OF CAMP VERDE TOWN ENGINEER PRIOR TO THE FINAL ACCEPTANCE OF THE PROJECT WORK. THESE AS-BUILT PLANS SHALL ACCURATELY SHOW THE LOCATIONS OF ALL CONSTRUCTED WATERLINES, FITTINGS, VALVES, BLOCKING, AND TIE-IN POINTS WITH THEIR RELATIONSHIP TO RIGHT OF WAY BOUNDARIES, LOT LINES, OR OTHER POINTS OF SURVEY.
6. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE SURVEY ACCURACY OF ALL OF THE PROPOSED WORK AT THEIR EXPENSE. THE PROPOSED WORK SHALL BE STAKED BY USE OF MONUMENTATION THAT IS ACCEPTABLE TO THE TOWN OF CAMP VERDE TOWN ENGINEER.
7. THE CONTRACTOR SHALL BE RESPONSIBLE TO "POT-HOLE" OR UNCOVER ALL EXISTING WATER LINE TIE-IN POINTS TO VERIFY THEIR SIZE, MATERIAL, LOCATION AND DEPTH PRIOR TO TRENCHING FOR NEW WATER LINE CONSTRUCTION. THIS MAY BE DONE WITH PROJECT EQUIPMENT JUST PRIOR TO NEW CONSTRUCTION AND SHALL BE DONE UNDER THE SUPERVISION OF THE WATER DIVISION MANAGER.



**TOCV STANDARD  
DETAIL**

## WATER PLAN GENERAL NOTES

REVISED:  
9/3/2025

DETAIL No:  
**103CV-1**

8. ALL WATER MAIN PIPING SHALL BE DUCTILE IRON PRESSURE CLASS 350 ENCASED IN POLYETHYLENE SLEEVING, OR PVC C-900 CLASS DR14 AS SHOWN IN THE APPROVED PLANS.
9. ALL WATER MAINLINE FITTINGS SHALL BE MECHANICAL JOINT WITH MEGA-LUG RESTRAINTS OR SIMILAR. WATER MAINS SHALL BE RESTRAINED PER MAG DETAIL 303-1/2. THRUST BLOCKING IS NOT REQUIRED.
10. WATER MAINS SHALL BE BURIED FOR A MINIMUM DEPTH OF 36-INCHES FOR PIPE DIAMETERS 10-INCHES OR LESS AND A MINIMUM OF 48-INCHES FOR PIPES WITH A DIAMETER GREATER THAN 10-INCHES UNLESS SHOWN DIFFERENTLY IN THE APPROVED PLANS OR APPROVED IN WRITING FROM THE TOWN ENGINEER. THE DEPTH SHOWN IN PLANS IS ASSUMED TO BE THE MINIMUM DEPTH.
11. ALL WATER LINES AND FITTINGS SHALL BE BEDDED AND SHADED ABOVE, BELOW, AND AROUND WITH AN APPROVED ROCK FREE, SANDY BEDDING MATERIAL PER THE PIPE BEDDING AND TRENCH DETAIL IN THE APPROVED PLANS. NO CLEAN CHIPS OR PEA GRAVEL WILL BE ALLOWED.
12. ALL SERVICE LINES THAT ARE UNDER PAVEMENT OR CONCRETE SHALL BE SLEEVED IN 4-INCH SDR 35 PVC OR APPROVED EQUAL. SERVICE LINES ARE TO BE CONSTRUCTED WITH MUNICIPEX CROSS-LINKED POLYETHYLENE PIPING.
13. ALL WATER LINE ENDS SHALL BE PROVIDED WITH AN APPROVED 2" FLUSH VALVE (BLOWOFF) PER TOWN OF CAMP VERDE STANDARD DETAIL 390CV OR AS SHOWN IN THE APPROVED PLANS.
14. ALL FIRE HYDRANT HOSE AND PUMPER CONNECTIONS SHALL MATCH STANDARD SIZE AND THREADS PER THE COPPER CANYON FIRE DEPARTMENT (NATIONAL STANDARD THREAD WITH 4 $\frac{1}{2}$ " PUMPER PORT ).
15. ALL FRAMES, COVERS, VALVE BOXES, VAULT LIDS, ETC., SHALL BE PROPERLY ADJUSTED TO FINISH GRADE WITH THE SURROUNDING GRADE OR PAVING AFTER THE COMPLETION OF PAVING AND GRADING.
16. THE CONTRACTOR SHALL DISINFECT EVERY PART OF THE NEWLY CONSTRUCTED WATER SYSTEM PER ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY BULLETIN #8. THE CONTRACTOR SHALL PROVIDE BACTERIOLOGICAL TESTING OF THE NEWLY CONSTRUCTED WATER SYSTEM AND SHALL PERFORM PRESSURE TESTING OF THE NEWLY CONSTRUCTED WATER SYSTEM AT THE DIRECTION OF THE TOWN OF CAMP VERDE TOWN ENGINEER.
17. THE TOWN OF CAMP VERDE ENGINEERING DIVISION AND INSPECTION STAFF SHALL BE NOTIFIED 48 HOURS PRIOR TO THE START OF CONSTRUCTION SO THAT INSPECTIONS MAY BE SCHEDULED.
18. ALL WORK AND MATERIALS THAT DO NOT CONFORM TO THESE SPECIFICATIONS OR THE APPROVED PLANS ARE SUBJECT TO REMOVAL AND REPLACEMENT TO MATCH THESE APPROVED PLANS UNDER THE DIRECTION OF THE TOWN OF CAMP VERDE ENGINEERING DEPARTMENT AND INSPECTION STAFF AT THE CONTRACTOR'S EXPENSE.
19. ALL WORK DONE BY THE CONTRACTOR SHALL BE SUBJECT TO INSPECTION BY THE TOWN OF CAMP VERDE ENGINEERING DIVISION AND INSPECTION STAFF, PRIOR TO BURIAL. ANY WORK PERFORMED WITHOUT THE KNOWLEDGE OF THE TOWN OF CAMP VERDE INSPECTION STAFF IS SUBJECT TO EXCAVATION AND INSPECTION, REMOVAL, REPLACEMENT, OR REPAIR AT THE DIRECTION OF THE TOWN OF CAMP VERDE ENGINEERING DIVISION SOLELY AT THE CONTRACTOR'S EXPENSE. REPAIR OF ANY DAMAGE DONE DURING THIS TYPE OF RE-EXPOSURE AND REQUIRED RE-TESTING, ETC. IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR.
20. ALL VAULTS OR OTHER UNDERGROUND STRUCTURES WILL BE PLACED ATOP SUBGRADE AND BASE COURSE PLACED AND COMPACTED TO 95% MOD, TO THE SATISFACTION OF THE TOWN OF CAMP VERDE ENGINEERING DIVISION.
21. ALL PLASTIC PIPES SHALL BEAR THE SEAL BY THE NATIONAL SANITATION FOUNDATION.
22. ALL MATERIALS AND PRODUCTS THAT COME INTO CONTACT WITH WATER OR WATER TREATMENT CHEMICALS SHALL CONFORM TO ANSI/NSF STANDARD 61.
23. ALL CONSTRUCTION MATERIALS USED IN A PUBLIC WATER SYSTEM INCLUDING ALL RESIDENTIAL AND NON-RESIDENTIAL FACILITIES WHICH WILL BE CONNECTED TO SAID PUBLIC WATER SYSTEM, SHALL BE LEAD-FREE AS DEFINED BY R18-5-504.
24. WHERE CULVERTS OR DRAINAGE PIPES CROSS WATER MAINS, A MINIMUM TWO FEET VERTICAL SEPARATION SHALL BE MAINTAINED.
25. WATER MAINS AND SEWER MAINS SHALL BE SEPARATED IN ORDER TO PROTECT PUBLIC WATER SYSTEMS FROM POSSIBLE CONTAMINATION PER MAG STANDARD DETAIL 404, MAG SPECIFICATION 610.5 AND ARIZONA ADMINISTRATIVE CODE R18-5-502.
26. SUBMITTAL OF AN ENGINEER'S CERTIFICATE OF COMPLETION IS REQUIRED BY ADEQ FOR ALL WATER AND SEWER SYSTEM CONSTRUCTION PRIOR TO TOWN FINAL APPROVAL OF USE.
27. ALIGNMENT AND GRADE STAKING WILL BE OFFSET TEN FEET (10') AND SET EVERY FIFTY FEET ALONG THE PIPE LINE. IN ADDITION, STAKING WILL BE PROVIDED AT ANY CHANGE IN DIRECTION, ANY FITTING AND VALVE, AND CHANGES IN SIZE OF THE LINE. STAKING WILL SHOW CUT TO FLOWLINE FOR PROPER DEPTH OF INSTALLATION. GRADE SHALL NOT DEVIATE BY  $\frac{1}{10} \pm$ . ALIGNMENT SHALL NOT DEVIATE  $\frac{5}{10} \pm$ . FINISH GRADE STAKES WILL BE PLACED AT ALL GROUND LEVEL APPURTENANCES SUCH AS METERS, BLOW-OFFS, AIR RELEASE, VALVES, AND FIRE HYDRANTS.
28. PIPE LINES WILL NOT BE INSTALLED MORE THAN SEVENTY TWO INCHES (72") DEEP WITHOUT PRIOR CONSENT FROM THE TOWN ENGINEER.
29. ALL SERVICE AND METER INSTALLATION SHALL CONFORM TO TOWN OF CAMP VERDE DETAILS AND AWWA STANDARDS C600 WITH THE PRESSURE AND LEAKAGE TEST BEING PERFORMED AT 200 PSI.
30. ALL WATER MAIN VALVES SHALL CONFORM TO AWWA C509 STANDARDS CAPABLE OF FUNCTIONING WITH A MINIMUM WORKING PRESSURE OF 200 PSI.
31. ALL METERS INSTALLED WILL BE RADIO READ METERS SPECIFIED BY THE TOWN OF CAMP VERDE. EACH METER SHALL HAVE A SEPARATE SERVICE. ALL NEW CONSTRUCTION THAT CROSSES THE EXPANSE OF A ROADWAY WILL BE SLEAVED WITH A MINIMUM OF 4" SDR 35 PVC PIPE.
32. ALL ACTIVITIES DURING CONSTRUCTION WILL BE REQUIRED TO HAVE A TEMPORARY RPA BACKFLOW ASSEMBLY INSTALLED PRIOR TO THE POINT OF USE. THIS ASSEMBLY MUST BE TESTED TO VERIFY CORRECT OPERATION BEFORE THE WATER CAN BE USED FOR CONSTRUCTION. ALL NON-RESIDENTIAL SERVICES AND METERS REQUIRE THE PERMANENT INSTALLATION OF A RPA BACKFLOW ASSEMBLY. RESIDENTIAL SERVICES AND METERS REQUIRE THE PERMANENT INSTALLATION OF A REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTER ASSEMBLY IF AN ALTERNATE WATER SUPPLY IS LOCATED ON THE LOT THAT THE WATER SERVICE IS PROVIDING.



## TOCV STANDARD DETAIL

## WATER PLAN GENERAL NOTES

REVISED:  
9/3/2025

DETAIL No:  
103CV-2

1. ALL FRAMES, COVERS, VALVE BOXES, CLEAN-OUTS, AND MANHOLES SHALL BE ADJUSTED TO FINISH GRADE UPON COMPLETION OF PAVING OR RELATED CONSTRUCTION.
2. INSULATED TRACER WIRE (BRIGHT GREEN COATED, #12, SOLID COPPER) SHALL BE PLACED UNDER MANHOLE FRAMES AND CLEANOUTS AND EXTEND ALONG MAINS AND LATERALS. ALL SPLICES SHALL BE WATER TIGHT. TRACER WIRE IS INSTALLED ABOVE THE CENTER LINE OF THE PIPE AND SECURED TO THE PIPE WITH PVC TAPE. TRACER WIRE SHALL NOT BE DAMAGED DURING CONSTRUCTION. BEFORE ACCEPTANCE FOR THE JOB TRACER WIRE WILL BE CHECKED FOR CONTINUITY. DAMAGED WIRE WILL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. SEWER FORCE MAIN SHALL HAVE THE SAME TRACER WIRE INSTALLED.
3. SEWER CASTINGS SHALL BE MANUFACTURED IN NORTH AMERICA OR APPROVED SPECIFICALLY BY THE TOWN ENGINEER.
4. THE CONTRACTOR IS RESPONSIBLE TO SCHEDULE AND PAY FOR VIDEO INSPECTION OF ALL PUBLIC SANITARY SEWER MAINLINES. COPIES OF THE VIDEO SHALL BE SUPPLIED TO THE TOWN OF CAMP VERDE UTILITIES DIVISION AND THE TOWN ENGINEER.
5. SANITARY SEWER PIPE AND MANHOLES SHALL BE TESTED ACCORDING TO THE FOLLOWING STANDARDS:
  - A. MANHOLE TESTING: THE CONTRACTOR SHALL TEST 100% OF THE MANHOLES USING THE FOLLOWING TEST PROTOCOL:
    1. AIR PRESSURE TESTING USING THE "STANDARD TEST METHOD FOR CONCRETE SEWER MANHOLES BY NEGATIVE AIR PRESSURE (VACUUM) TEST," PUBLISHED BY THE AMERICAN SOCIETY FOR TESTING AND MATERIALS, C 1244/C1244M-20.
    2. THE CONTRACTOR SHALL PERFORM MANHOLE TESTING AFTER INSTALLATION OF THE MANHOLE CONE TO VERIFY WATERTIGHTNESS OF THE MANHOLE FROM THE TOP OF THE CONE DOWN. UPON SATISFACTORY TEST RESULTS, THE CONTRACTOR SHALL INSTALL THE MANHOLE RING AND ANY SPACERS, COMPLETE THE JOINTS, AND SEAL THE MANHOLE TO A WATERTIGHT CONDITION. IF THE MANHOLE CONE, SPACERS, AND RING CAN BE INSTALLED TO FINAL GRADE WITHOUT DISTURBANCE OR ADJUSTMENT BY LATER CONSTRUCTION, THE CONTRACTOR MAY PERFORM THE TESTING FROM THE TOP OF THE MANHOLE RING DOWN.
  - B. LEAKAGE TESTING - THE CONTRACTOR SHALL TEST EACH SEGMENT OF THE SEWER LINE (100%) FOR LEAKAGE USING THE APPLICABLE METHOD BELOW AND RECORD THE RESULTS:
    1. "STANDARD TEST METHOD FOR INSTALLATION AND ACCEPTANCE OF PLASTIC GRAVITY SEWER LINES USING LOW-PRESSURE AIR" PER MAG SPECIFICATION (REV 2017) 611.3 (A) LOW PRESSURE TEST.
  - C. THE CONTRACTOR SHALL PERFORM A DEFLECTION TEST OF THE TOTAL LENGTH (100%) OF ALL SEWER LINES MADE OF FLEXIBLE MATERIALS TO ENSURE THAT THE INSTALLATION MEETS OR EXCEEDS THE MANUFACTURER'S RECOMMENDATIONS AND RECORD THE RESULTS.
  - D. ANY PART OF THE INSTALLATION WHICH SHOWS DEFLECTION IN EXCESS OF 5% OF THE NOMINAL INSIDE DIAMETER PER MAG SECTION 738 OR IN EXCESS OF 5% OF THE AVERAGE INSIDE DIAMETER PER ASTM D-3034 FOR PVC PIPE SHALL BE CORRECTED.
  - E. UNIFORM SLOPE: THE CONTRACTOR SHALL TEST THE TOTAL LENGTH (100%) OF THE SEWER LINE FOR UNIFORM SLOPE BY VISUALLY INSPECTING THE INTERIOR OF THE SEWER LINE USING A TELEVISION CAMERA AND RECORD THE RESULTS. THE CONTRACTOR SHALL COORDINATE THE TESTING WITH THE TOWN OF CAMP VERDE. SEE NOTE 25 FOR ACCEPTABLE DEFLECTION REQUIREMENTS.
6. SDR 26 PVC PIPE AND DUCTILE IRON PIPE WITH SPECIAL SEWER COATINGS ARE ALLOWED MATERIALS FOR SEWER LINES UNLESS OTHERWISE APPROVED BY TOWN ENGINEER.
7. A SEWER CLEANOUT AND BACKWATER DEVICE SHALL BE PROVIDED AT THE EDGE OF THE RIGHT-OF-WAY PER TOWN OF CAMP VERDE STANDARD DETAIL 440CV.
8. TRENCH BOTTOM SHALL BE COMPACTED BY SUITABLE MEANS PER THE PIPE BEDDING AND TOWN OF CAMP VERDE STANDARD DETAIL 200CV. THE INSTALLATION AND ASSEMBLY OF THE PROPOSED PIPE AND FITTINGS IN THE TRENCH ATOP THE TRENCH BOTTOM BEDDING. THIS WILL INCLUDE BUT NOT BE LIMITED TO INSPECTING THAT BEDDING HAS BEEN HAND REMOVED BELOW BELLS FOR FLUSH FIT ATOP TRENCH BOTTOM BEDDING, THAT PIPE ENDS HAVE BEEN MARKED AND THEN INSERTED INTO BELL ENDS FOR THE APPROPRIATE DEPTHS, THAT FITTINGS AND PIPE ARE PROPERLY ALIGNED AND BOLTED TOGETHER AS REQUIRED, THAT TRACING WIRE IS INSTALLED AS REQUIRED, THAT ALL DUCTILE IRON FITTINGS AND PIPE ARE WRAPPED AS REQUIRED, AND THAT ALL ITEMS ARE REASONABLY CENTERED IN THE TRENCH SO THAT BEDDING MATERIAL CAN BE PLACED ALONG THE SIDES OF THE PIPE AS REQUIRED BY THE PIPE BEDDING AND TRENCH DETAIL IN THE APPROVED PLANS.
9. "BURIED SEWER LINE" LABELED METALLIC DETECTOR TAPE SHALL BE INSTALLED PROPERLY ATOP THE FIRST COMPACTED LIFT OF FINAL BACKFILL. TAPE SHALL BE PLACED 18" TO 24" DIRECTLY ABOVE THE TOP OF PIPE.
10. ALL PROJECT MATERIALS AND WORKMANSHIP SHALL COMPLY WITH MAG STANDARD SPECIFICATIONS AND DETAILS, THE TOWN OF CAMP VERDE STANDARD DETAILS AND SPECIFICATIONS, THE APPROVED PLANS AND SPECIFICATIONS, TOGETHER WITH GENERALLY ACCEPTED GOOD CONSTRUCTION PRACTICES.
11. THE CONTRACTOR SHALL PROVIDE SUFFICIENT MEN AND EQUIPMENT ON THE JOB AT ALL TIMES TO ASSURE PUBLIC SAFETY AND COMPLY WITH THE CONSTRUCTION SPECIFICATIONS.
12. SEWER MAIN AND LATERAL TRENCHING, EMBEDMENT AND BACKFILL SHALL CONFORM TO TOCV STD DTL 200CV AND ITS REFERENCED SPECIFICATIONS.
13. CONTRACTOR SHALL PROVIDE ADEQUATE TRENCH OR EXCAVATION STABILIZATION/STEPPING AND SHORING FOR THE SAFETY FOR THE TOWN OF CAMP VERDE PERSONNEL TO ENTER EXCAVATION FOR SEWER TAP /INSPECTION
14. NATIVE BACKFILL USED ABOVE THE BEDDING SHALL BE CAREFULLY PROCESSED TO REMOVE ALL ROCK LARGER THAN 3" DIAMETER AND OBTAIN THE APPROPRIATE MOISTURE AND THEN CAREFULLY PLACED IN EVEN AND UNIFORM LIFTS IN THE TRENCH AND COMPACTED TO THE DENSITY REQUIRED TO SATISFY BOTH MAG SPECIFICATIONS IN SECTION 601 AND ARIZONA DEPARTMENT OF TRANSPORTATION REQUIREMENTS FOR WORK IN THEIR RIGHT-OF-WAY. THE ALLOWABLE DEPTH OF LIFT WILL BE DETERMINED BY THE CAPABILITIES OF THE COMPACTION EQUIPMENT PROVIDED BY THE CONTRACTOR. DENSITIES OF TRENCH BACKFILL WILL BE CHECKED BY TOWN OF CAMP VERDE UTILITY ENGINEER OR DESIGNEE AT THE FOLLOWING VERTICAL AND HORIZONTAL INTERVALS:



## TOCV STANDARD DETAIL

## WASTEWATER PLAN GENERAL NOTES

REVISED:  
9/3/2025

DETAIL No:  
104CV-1

TABLE 1

| MATERIAL/LOCATION             | TEST INTERVAL-VERTICAL      | TEST INTERVAL-HORIZONTAL                   |
|-------------------------------|-----------------------------|--------------------------------------------|
| PIPE BEDDING BASE             | TOP OF LIFT                 | EVERY 350' OR DAILY (WHICHEVER IS GREATER) |
| PIPE BEDDING                  | TOP OF BEDDING OR EVERY 12" | EVERY 350' OR DAILY (WHICHEVER IS GREATER) |
| TRENCH BACKFILL ABOVE BEDDING | EVERY 18" OF VERTICAL FILL* | EVERY 350' OR DAILY (WHICHEVER IS GREATER) |

\* OR AS REQUIRED BY TOWN OF CAMP VERDE

15. WHERE CULVERTS OR DRAINAGE PIPES CROSS GRAVITY SEWERS OR PRESSURE SEWERS, A MINIMUM OF TWO FEET OF VERTICAL SEPARATION SHALL BE MAINTAINED BETWEEN THE TWO PIPES UNLESS APPROVED BY TOWN ENGINEER.
16. WATER AND SEWER MAINS SHALL BE SEPARATED IN ORDER TO PROTECT PUBLIC WATER SYSTEMS FROM POSSIBLE CONTAMINATION. ALL DISTANCES ARE MEASURED PERPENDICULARLY FROM THE OUTSIDE OF THE SEWER MAIN TO THE OUTSIDE OF THE WATER MAIN. SEPARATION REQUIREMENTS ARE AS FOLLOWS:
  - A WATER MAINS AND SEWER MAINS SHALL BE SEPARATED IN ORDER TO PROTECT PUBLIC WATER SYSTEMS FROM POSSIBLE CONTAMINATION PER MAG STANDARD DETAIL 404, MAG SPECIFICATION 610.5, AND ARIZONA ADMINISTRATIVE CODE R18-5-502.
  - B NO WATER PIPE SHALL PASS THROUGH OR COME INTO CONTACT WITH ANY PART OF A SEWER MANHOLE. THE MINIMUM HORIZONTAL SEPARATION BETWEEN WATER MAINS AND MANHOLES SHALL BE SIX FEET, MEASURED FROM THE CENTER OF THE MANHOLE.
  - C THE MINIMUM SEPARATION BETWEEN FORCE MAINS OR PRESSURE SEWERS AND WATER MAINS SHALL BE TWO FEET VERTICALLY AND SIX FEET HORIZONTALLY UNDER ALL CONDITIONS. WHERE A SEWER FORCE MAIN CROSSES ABOVE OR LESS THAN SIX FEET BELOW A WATER LINE, THE SEWER MAIN SHALL BE ENCASED IN AT LEAST SIX INCHES OF CONCRETE OR CONSTRUCTED USING MECHANICAL JOINT DUCTILE IRON PIPE FOR TEN FEET ON EITHER SIDE OF THE WATER MAIN.
  - D THE SEPARATION REQUIREMENTS DO NOT APPLY TO BUILDING, PLUMBING, OR INDIVIDUAL HOUSE SERVICE CONNECTIONS.
17. ALL MANHOLES SHALL BE 5' IN DIAMETER WITH 30" MINIMUM RINGS AND LIDS.
18. ALL SEWER SERVICE LATERALS REQUIRE THE INSTALLATION OF A BACKWATER VALVE AT OR AS CLOSE AS POSSIBLE TO BUILDING PERIMETER PER TOWN OF CAMP VERDE STANDARD DETAIL 440CV.
19. ALL SEWER MANHOLE CONNECTIONS SHALL BE INSTALLED WITH A GASKET, JOINT SEALER, OR WATER STOP BETWEEN THE BASE AND RISER SECTION.
20. ALL MANHOLES AND COMPONENTS SHALL BE CONSTRUCTED OF CLASS A CONCRETE IN CONFORMANCE WITH MAG STANDARD SPECIFICATION SECTION 725. IF MANHOLE IS OVER 20' IN DEPTH OR WITHIN MAJOR ROAD INTERSECTION, POLYMER CONCRETE IS REQUIRED.
21. SEWER LINES SHALL REMAIN "PLUGGED" AT THE POINT(S) OF CONNECTION TO EXISTING LINES (OUTFALLS) UNTIL ALL PHASES OF THE PROJECT HAVE BEEN ACCEPTED BY THE TOWN OF CAMP VERDE ENGINEERING DIVISION AND INSPECTION STAFF. THE PLUG SHALL BE SECURED IN PLACE TO PREVENT THE PLUG FROM ENTERING THE SEWER SYSTEM.
22. NO FLOW SHALL BE RELEASED INTO THE TOWN SANITARY SEWER UNTIL AFTER ALL TESTS HAVE BEEN PASSED AND APPROVED BY THE TOWN OF CAMP VERDE ENGINEERING DIVISION AND THE ENGINEER'S CERTIFICATE OF COMPLETION HAS BEEN FILED AND APPROVAL OF CONSTRUCTION HAS BEEN ISSUED BY ADEQ.
23. ALL PAVEMENT REPLACEMENT SHALL CONFORM TO THE TOWN OF CAMP VERDE STD DETAIL 200CV.
24. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE AN ACCURATE SET OF "AS-BUILT" PLANS AS HARD COPIES, DIGITAL PDF, AND CAD DRAWING TO THE TOWN OF CAMP VERDE TOWN ENGINEER PRIOR TO THE FINAL ACCEPTANCE OF THE PROJECT WORK. THESE AS-BUILT PLANS SHALL ACCURATELY SHOW THE LOCATIONS OF ALL CONSTRUCTED SEWER LINES, FITTINGS, VALVES, BLOCKING, AND TIE-IN POINTS WITH THEIR RELATIONSHIP TO RIGHT OF WAY BOUNDARIES, LOT LINES, OR OTHER POINTS OF SURVEY.
25. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE ALL UNDERGROUND FACILITIES IN ADVANCE OF CONSTRUCTION AND TAKE ALL PRECAUTIONARY MEASURES NECESSARY TO AVOID DAMAGE TO THESE FACILITIES.
26. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE AN ACCURATE SET OF "AS-BUILT" PLANS AS HARD COPIES, DIGITAL PDF, AND CAD DRAWING TO THE TOWN OF CAMP VERDE TOWN ENGINEER PRIOR TO THE FINAL ACCEPTANCE OF THE PROJECT WORK. THESE AS-BUILT PLANS SHALL ACCURATELY SHOW THE LOCATIONS OF ALL CONSTRUCTED WATERLINES, FITTINGS, VALVES, BLOCKING, AND TIE-IN POINTS WITH THEIR RELATIONSHIP TO RIGHT OF WAY BOUNDARIES, LOT LINES, OR OTHER POINTS OF SURVEY.



1. WEATHER INFORMATION AND STORM PREDICTIONS CAN BE OBTAINED BY CALLING THE NATIONAL WEATHER SERVICE - FLAGSTAFF WEATHER FORECAST OFFICE AT 928.556.9161 OR BY VISITING THE NATIONAL WEATHER SERVICE WEBSITE AT [HTTP://WWW.WRH.NOAA.GOV/FGZ](http://www.wrh.noaa.gov/fgz)
2. PERMANENT EROSION CONTROL MEASURES SHALL BE INSTALLED AS AREAS ARE DETERMINED TO BE COMPLETE.
3. ALL DRAINAGE INLETS RECEIVING RUNOFF FROM DISTURBED SOIL AREAS SHALL BE PROTECTED WITH AN APPROVED SEDIMENT TRAP INLET PROTECTION MEASURE OR BMP.
4. A COPY OF THE APPROVED GRADING & DRAINAGE PLAN FOR THIS PROJECT, TOGETHER WITH A COPY OF THE NOTICE OF INTENT (NOI) AND THIS STORM WATER POLLUTION PREVENTION PLAN (SWPPP), SHALL BE MAINTAINED ON THE SITE AND AVAILABLE FOR REVIEW AT ALL TIMES. THOSE ELEMENTS OF THE GRADING & DRAINAGE PLAN PERTINENT TO OR REFERENCED ON THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) SHALL BE CONSIDERED A PART OF THE SWPPP.
5. THE NOTICE OF INTENT (NOI) SHALL BE COMPLETED AND SUBMITTED TO THE ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY (ADEQ) AND THE TOWN OF CAMP VERDE AT LEAST 48 HOURS PRIOR TO ANY CONSTRUCTION ACTIVITY.
6. THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND RELATED RECORDS SHALL BE MADE AVAILABLE UPON REQUEST TO THE ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY (ADEQ) AND THE TOWN OF CAMP VERDE.
7. THE OWNER OR DESIGNATED CONTRACTOR SHALL AMEND THIS PLAN AS RAINFALL EVENTS, DESIGN CHANGES AND CONSTRUCTION METHODS DICTATE. ALL MODIFICATIONS TO THIS PLAN SHALL BE SUBMITTED TO THE TOWN OF CAMP VERDE ENGINEERING DIVISION FOR REVIEW AND ACCEPTANCE PRIOR TO IMPLEMENTATION.
8. THE IMPLEMENTATION OF THESE PLANS, AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADES OF THESE FACILITIES IS THE RESPONSIBILITY OF THE OWNER OR DESIGNATED CONTRACTOR UNTIL ALL CONSTRUCTION HAS BEEN APPROVED AND A NOTICE OF TERMINATION (NOT) HAS BEEN SUBMITTED TO THE ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY (ADEQ) AND THE TOWN OF CAMP VERDE.
9. THE FACILITIES SHOWN ON THIS PLAN SHALL BE CONSTRUCTED IN CONJUNCTION WITH ALL CLEARING AND GRADING ACTIVITIES IN SUCH A MANNER AS TO ENSURE THAT SEDIMENT-LADEN WATER DOES NOT LEAVE THE PROJECT SITE, ENTER INTO THE DRAINAGE SYSTEM, OR VIOLATE APPLICABLE WATER QUALITY STANDARDS. ADDITIONALLY, THE FACILITIES SHALL BE INSTALLED AND OPERATIONAL PRIOR TO ANY GRADING OR LAND CLEARING ACTIVITIES.
10. WHEN POSSIBLE, MAINTAIN ANY NATURALLY OCCURRING VEGETATION AS A SILT CONTROL BEST MANAGEMENT PRACTICE (BMP).
11. THE CONTRACTOR TO WHOM THE 'AT-RISK'/FINAL GRADING & DRAINAGE PERMIT WILL BE ISSUED SHALL HAVE THE APPROVED STORM WATER POLLUTION PREVENTION PLAN (SWPPP) ISSUED IN THEIR NAME.
12. THE NOTICE OF INTENT (NOI), THE APPROVED STORM WATER POLLUTION PREVENTION PLAN (SWPPP) SHALL BE PROVIDED TO THE TOWN OF CAMP VERDE BEFORE THE GRADING & DRAINAGE PERMIT WILL BE ISSUED.
13. THE OWNER OR DESIGNATED CONTRACTOR OF THE PROJECT SHALL ALSO MAINTAIN RECORDS WITH THE FOLLOWING INFORMATION:
  - A) THE DATES WHEN MAJOR GRADING ACTIVITIES OCCUR IN A PARTICULAR AREA.
  - B) THE DATES WHEN CONSTRUCTION ACTIVITIES CEASE IN A PARTICULAR AREA (TEMPORARILY OR PERMANENTLY).
  - C) THE DATES WHEN AN AREA IS STABILIZED (TEMPORARILY OR PERMANENTLY).
  - D) THE DATES OF ANY MAINTENANCE, REPLACEMENT, OR REMOVAL OF REQUIRED BMP'S HAS OCCURRED.
14. ONCE THE CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED AND THE SITE HAS MET THE FINAL STABILIZATION REQUIREMENTS OF THE PERMIT, THE AUTHORIZED SITE REPRESENTATIVE SHALL FILE A NOTICE OF TERMINATION (NOT) WITH THE ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY (ADEQ) AND PROVIDE A COPY TO THE TOWN OF CAMP VERDE.
15. THE PERMITTEE SHALL MAINTAIN ALL RECORDS ON FILE, INCLUDING THE NOTICE OF INTENT (NOI), THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP), THE NOTICE OF TERMINATION (NOT), AND ANY AND ALL INSPECTION REPORTS FOR A MINIMUM OF THREE (3) YEARS FROM THE FILING DATE OF THE NOTICE OF TERMINATION (NOT).
16. THE OUTLETS OF ALL SEDIMENT BASINS, TRAPS, AND LOCATIONS OF ARTIFICIALLY CONCENTRATED FLOW SHALL BE PROVIDED WITH OUTLET PROTECTION TO PREVENT EROSION AND SCOUR.
17. THOSE RESPONSIBLE FOR SWPPP PREPARATION, IMPLEMENTATION AND PERMIT COMPLIANCE SHALL BE PROPERLY TRAINED, AND SHALL ATTEND THE PRE-CONSTRUCTION MEETING.
18. A CONCRETE WASHOUT SHALL BE INSTALLED FOR ALL PROJECTS THAT PROPOSE CONCRETE TO BE MIXED ON SITE OR BE DELIVERED FROM A BATCH PLANT. THE CONCRETE WASHOUT SHALL BE LOCATED A MINIMUM OF FIFTY (50) FEET FROM ANY DRAINAGE INFRASTRUCTURE OR NATURAL DRAINAGE FEATURES OR WATER BODIES AND INCORPORATE AN IMPERMEABLE LINER (6.0 MIL MINIMUM THICKNESS) TO CONTAIN THE REQUIRED VOLUME. ALL DRIED CONCRETE WASTE SHALL BE BROKEN INTO MANAGEABLE PIECES AND DISPOSED OF OFF-SITE AT AN APPROVED DISPOSAL FACILITY.
19. THE CONTRACTOR SHALL HAVE EMERGENCY MATERIALS AND EQUIPMENT ON-SITE FOR UNFORESEEN SITUATIONS, SUCH AS DAMAGE TO UNDERGROUND WATER AND SEWER UTILITIES WHEREBY FLOWS MAY GENERATE EROSION AND SEDIMENT POLLUTION.
20. SEDIMENT AND EROSION CONTROLS MAY BE REMOVED ONLY WHEN CONTRIBUTORY UPSTREAM AREAS BECOME STABILIZED OR ARE MANAGED UPSTREAM AND AS LONG AS SEDIMENT LADEN RUNOFF WILL NOT DISCHARGE FROM THE SITE.
21. THIS PLAN SHALL BE IN EFFECT UNTIL ALL DISTURBED AREAS ARE PERMANENTLY STABILIZED, TRANSFERRED TO NEW OWNERSHIP, OR DEVELOPED UNDER FUTURE PLANS WITH A NEW NOTICE OF INTENT (NOI), SWPPP, AND PERMIT.



## TOCV STANDARD DETAIL

## STORM WATER POLLUTION PREVENTION NOTES

REVISED:  
9/3/2025

DETAIL No:  
107CV

1. A COPY OF THE APPROVED GRADING AND DRAINAGE PLANS FOR THIS PROJECT, TOGETHER WITH A COPY OF THE NOTICE OF INTENT (NOI) AND THE STORM WATER POLLUTION PREVENTION PLANS, SHALL BE MAINTAINED ON THE SITE AND AVAILABLE FOR REVIEW. THOSE ELEMENTS OF THE GRADING AND DRAINAGE PLAN PERTINENT TO OR REFERENCED ON THE SWPPP SHALL BE CONSIDERED A PART OF THE SWPPP.
2. THE TOWN OF CAMP VERDE ENGINEERING DIVISION AND INSPECTION STAFF SHALL BE NOTIFIED 48 HOURS BEFORE ANY ON-SITE AND/OR OFF-SITE CONSTRUCTION BEGINS, AT (928) 554-0823.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING DUST CONTROL MEASURES. THE CONTRACTOR ENCOURAGED TO USE RECLAIMED WATER FOR COMPACTION AND DUST CONTROL. RECLAIMED WATER PURCHASE IS AVAILABLE BY CONTACTING THE TOWN OF CAMP VERDE UTILITIES DIVISION (928) 554-0823.
4. THE CONTRACTOR SHALL PERFORM, AT A MINIMUM, A VISUAL INSPECTION OF THE CONSTRUCTION SITE ONCE EVERY MONTH AND WITHIN 24 HOURS OF A RAINFALL GREATER THAN OR EQUAL TO A HALF OF AN INCH OR MORE. THE CONTRACTOR SHALL PREPARE A REPORT DOCUMENTING HIS/HER FINDINGS ON THE CONDITIONS OF THE SWMP CONTROLS AND NOTE ANY PROBLEM AREAS. THE CONTRACTOR'S REPORT IS TO BE SUBMITTED TO THE TOWN OF CAMP VERDE ENGINEERING DIVISION, INSPECTION STAFF, FOR REVIEW AND APPROVAL. FACILITIES SHALL BE MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUED FUNCTIONING. IN ADDITION, ALL TEMPORARY SILTATION CONTROLS SHALL BE MAINTAINED IN A SATISFACTORY CONDITION UNTIL SUCH TIME THAT CLEARING AND/OR CONSTRUCTION IS COMPLETED, PERMANENT DRAINAGE FACILITIES ARE OPERATIONAL, AND THE POTENTIAL FOR EROSION HAS PASSED.
5. THE CONTRACTOR SHALL AMEND THE SWPPP AS NECESSARY DURING THE COURSE OF CONSTRUCTION TO RESOLVE ANY PROBLEM AREAS, WHICH BECOME EVIDENT DURING THE CONSTRUCTION AND/OR DURING RAINFALLS.
6. THE PERMITTEE SHALL FILE A NOTICE OF TERMINATION (N.O.T.) AFTER COMPLETION OF CONSTRUCTION AND PLACEMENT OF FINAL LANDSCAPE MATERIALS. THE N.O.T. IS TO BE SUBMITTED TO THE TOWN OF CAMP VERDE ENGINEERING DIVISION. THE N.O.T. IS NOT TO BE FILED UNTIL FINAL ACCEPTANCE OF WORK HAS BEEN GRANTED BY THE TOWN OF CAMP VERDE ENGINEERING DIVISION.
7. THE PERMITTEE SHALL SAVE ALL RECORDS, INCLUDING THE N.O.I., SWMP, N.O.T., AND INSPECTION REPORTS ON FILE FOR A MINIMUM OF THREE YEARS FROM THE DATE OF FILING THE N.O.T.
8. THE IMPLEMENTATION OF THESE PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE FACILITIES IS THE RESPONSIBILITY OF THE PERMITTEE/CONTRACTOR UNTIL ALL CONSTRUCTION IS APPROVED AND THE N.O.T. IS SUBMITTED TO THE TOWN OF CAMP VERDE ENGINEERING DIVISION, INSPECTION STAFF.
9. THE FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED IN CONJUNCTION WITH ALL CLEARING AND GRADING ACTIVITIES IN SUCH A MANNER AS TO ENSURE THAT SEDIMENT-LADEN WATER DOES NOT ENTER THE DRAINAGE SYSTEM OR VIOLATE APPLICABLE WATER STANDARDS, AND MUST BE INSTALLED AND OPERATIONAL PRIOR TO ANY GRADING OR LAND CLEARING. WHEREVER POSSIBLE, MAINTAIN NATURAL VEGETATION FOR SILT CONTROL.
10. PLAN APPROVAL IS FOR 180 DAYS. PRIOR TO PLAN APPROVAL EXPIRATION, ALL ASSOCIATED PERMITS SHALL BE PURCHASED OR THE PLANS SHALL BE RESUBMITTED FOR EXTENSION OF PLAN APPROVAL.
11. IN AREAS REQUIRING SEEDING AS NOTED ON THESE APPROVED PLANS THE CONTRACTOR SHALL FOLLOW THE SPECIFICATIONS GIVEN IN SECTION 805 OF THE ADOT STANDARD SPECIFICATIONS.
12. ALL LANDSCAPE PROJECTS REQUIRING TOWN MAINTENANCE OR WITHIN THE TOWN RIGHT-OF-WAY SHALL BE INSPECTED FOR THE FOLLOWING:
  - A. PLANT LOCATIONS: THESE LOCATIONS SHALL BE STAKED IN THE FIELD WITH IDENTIFICATION AS TO TREES OR SHRUBS; OR HOLES FOR THE PLANT MATERIALS MAY BE DUG WITH IDENTIFICATION OF PLANT TYPE. USE OF THIS METHOD DOES NOT RELIEVE THE CONTRACTOR OF ANY PLANT RELOCATIONS MADE BY THE TOWN.
  - B. IRRIGATION INSTALLATION: INSPECTIONS SHALL BE MADE AT THE POINT THE IRRIGATION SYSTEM IS INSTALLED. INSPECTIONS OF THE PIPE DEPTH, AUTOMATIC VALVE INSTALLATION AND EMITTER/SPRAY INSTALLATIONS WILL BE MADE.
  - C. SUBSTANTIAL COMPLETION: AN INSPECTION AT COMPLETION OF THE LANDSCAPE AND IRRIGATION INSTALLATION WILL BE MADE. ANY DEFICIENCIES IN THE INSTALLATION WILL BE NOTED AND CORRECTED BY THE CONTRACTOR DURING THE MAINTENANCE PERIOD.
  - D. FINAL ACCEPTANCE: A FINAL INSPECTION IS REQUIRED PRIOR TO TOWN ACCEPTANCE OF THE LANDSCAPE AND IRRIGATION IMPROVEMENTS. THE ABOVE INSPECTIONS REQUIRE A MINIMUM OF 48-HOURS PRIOR NOTIFICATION TO THE TOWN. CALL THE TOWN OF CAMP VERDE ENGINEERING DIVISION, INSPECTION STAFF AT (928) 554-0823 TO ARRANGE FOR THESE INSPECTIONS.
13. ALL PLANTINGS AT MATURITY SHALL MAINTAIN A MINIMUM 6'-0" CLEARANCE AROUND ALL FIRE HYDRANTS AND FIRE SUPPRESSION DEVICES.
14. ALL PLANTING AREAS (EXCEPT TURF AREAS) TO BE MAINTAINED BY THE TOWN SHALL BE TREATED WITH A PRE-EMERGENT HERBICIDE BY A LICENSED APPLICATOR PRIOR TO AND AFTER THE PLACEMENT OF THE DECOMPOSED GRANITE, RIVER ROCK ETC. APPLICATION DOCUMENTATION WILL BE REQUIRED PRIOR TO ACCEPTANCE OF THE LANDSCAPING BY THE TOWN.
15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSPECTION, MODIFICATION, AND PROPER MAINTENANCE OF THE EROSION CONTROL DEVICES AS NECESSARY. IN THE EVENT OF FAILURE OR REFUSAL TO PROPERLY MAINTAIN SAID DEVICES, THE TOWN ENGINEER MAY CAUSE EMERGENCY MAINTENANCE WORK TO BE DONE TO PROTECT ADJACENT PRIVATE AND PUBLIC PROPERTY, THE COST (INCLUDING AN INITIAL MOBILIZATION AMOUNT) SHALL BE CHARGED TO THE CONTRACTOR.
16. ALL EROSION CONTROL MEASURES REQUIRED TO RETAIN SEDIMENT ON-SITE AND TO SAFELY DISCHARGE ANY ACCELERATED RUNOFF GENERATED BY THE PROJECT SHALL BE INSTALLED DURING THE INITIAL CONSTRUCTION PHASE OF THE PROJECT.
17. THE CONSTRUCTION AND MAINTENANCE OF ALL EROSION CONTROL SYSTEMS SHALL BE IN SUBSTANTIAL CONFORMANCE WITH THE APPROVED EROSION CONTROL PLAN.
18. TEMPORARY EROSION CONTROL DEVICES SHOWN ON THE EROSION CONTROL PLAN WHICH INTERFERE WITH THE WORK SHALL BE RELOCATED OR MODIFIED AS THE WORK PROGRESSES AS RECOMMENDED BY THE ENGINEER OF RECORD AND AS APPROVED BY THE TOWN ENGINEER.



## TOCV STANDARD DETAIL

## EROSION AND SEDIMENT CONTROL NOTES

REVISED:  
9/3/2025

DETAIL No:  
109CV-1

19. ALL REMOVABLE PROTECTION DEVICES SHOWN SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHEN THE 5-DAY RAIN PROBABILITY FORECAST EXCEEDS 25-PERCENT.
20. EROSION CONTROL SYSTEMS SHALL BE SERVICED AND MAINTAINED TO PROVIDE CONTINUOUS TOWN AND ADEQUACY TO FUNCTION AS DESIGNED. AFTER PRECIPITATION EXCEEDING ONE QUARTER (1/4) INCH IN ANY 12-HOUR PERIOD, OR UPON DIRECTION OF THE TOWN ENGINEER, SILT AND DEBRIS SHALL BE REMOVED FROM CHECK DAMS AND DESILTING BASINS AND THE BASINS PUMPED DRY AND OTHERWISE RESTORED TO THE ORIGINAL DESIGN CONDITION.
21. DESILTING BASINS CONSTRUCTED OF COMPACTED EARTH SHALL BE COMPACTED TO A RELATIVE COMPACTION OF 90 PERCENT OF MAXIMUM DENSITY. A SOIL ENGINEERING REPORT INCLUDING THE TYPE OF FIELD TESTING PERFORMED, LOCATION AND RESULTS OF TESTING SHALL BE SUBMITTED TO THE TOWN ENGINEER FOR APPROVAL UPON COMPLETING THE DESILTING BASIN.
22. EROSION CONTROL PROVISIONS SHALL INCLUDE AND COMPLEMENT DRAINAGE PATTERNS DURING THE CURRENT AND FUTURE PHASES OF GRADING THROUGHOUT THE RAINY SEASON.
23. PAVED STREETS, SIDEWALKS, AND OTHER IMPROVEMENTS SHALL BE MAINTAINED IN A NEAT AND CLEAN CONDITION, FREE OF LOOSE SOIL, CONSTRUCTION DEBRIS, AND TRASH. STREET SWEEPING OR OTHER EQUALLY EFFECTIVE MEANS SHALL BE USED ON A REGULAR BASIS TO CONTROL EROSION. WATERING SHALL NOT BE USED TO CLEAN STREETS EXCEPT FOR THE REMOVAL OF FINE MATERIAL NOT OTHERWISE REMOVED BY SWEEPING OR OTHER MECHANICAL MEANS.
24. STAND-BY CREWS SHALL BE ALERTED BY THE CONTRACTOR OR OWNER FOR EMERGENCY WORK DURING RAINSTORMS.
25. ALL UTILITY TRENCHES SHALL BE BACKFILLED WITHIN 24 HOURS AND MUST BE BACKFILLED BEFORE THE END OF THE WORK DAY IF A 25-PERCENT CHANCE OF RAIN IS PREDICTED.
26. A GRAVEL BAG SILT BASIN OR TRAP SHALL BE PROVIDED AT EVERY STORM DRAIN INLET TO PREVENT SEDIMENT FROM ENTERING THE STORM DRAIN SYSTEM.
27. ALL EROSION CONTROL PLANS MUST PROVIDE A 24-HOUR TELEPHONE NUMBER AND THE NAME(S) OF THE PERSON(S) RESPONSIBLE FOR EMERGENCY WORK. A TELEPHONE ANSWERING MACHINE OR ANSWERING SERVICE IS UNACCEPTABLE.
28. OWNER/CONTRACTOR SHALL USE APPLICABLE BEST MANAGEMENT PRACTICES (BMP'S) AS CONTAINED IN THE ADOT EROSION AND POLLUTION CONTROL MANUAL. OTHER BMP'S MAY BE CITED AND USED PROVIDED SUFFICIENT DETAIL IS CONTAINED IN THE SWPPP OR APPROVED EROSION CONTROL PLAN.
29. CONTRACTOR MUST ENSURE THAT THE CONSTRUCTION SITE IS PREPARED PRIOR TO THE ONSET OF ANY STORM. CONTRACTOR SHALL HAVE ALL EROSION AND SEDIMENT CONTROL MEASURES IN PLACE PRIOR TO THE ARRIVAL OF THE RAINY SEASON.
30. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED UNTIL DISTURBED AREAS ARE STABILIZED. CHANGES TO THIS EROSION AND SEDIMENT CONTROL PLAN SHALL BE MADE TO MEET FIELD CONDITIONS ONLY WITH THE APPROVAL OF OR AT THE DIRECTION OF THE TOWN ENGINEER.
31. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CHECKED BEFORE AND AFTER ALL STORMS TO ENSURE MEASURES ARE FUNCTIONING PROPERLY.
32. CONTRACTOR SHALL MAINTAIN A LOG AT THE SITE OF ALL INSPECTIONS OR MAINTENANCE OF BMP AS WELL AS ANY CORRECTIVE CHANGES TO THE BMPS OR EROSION AND SEDIMENT CONTROL PLAN.
33. THE CONTRACTOR SHALL INSTALL THE STABILIZED CONSTRUCTION ENTRANCE PRIOR TO COMMENCEMENT OF GRADING. LOCATION OF THE ENTRANCE MAY BE ADJUSTED BY THE CONTRACTOR TO FACILITATE GRADING OPERATIONS. ALL CONSTRUCTION TRAFFIC ENTERING THE PAVED ROAD MUST CROSS THE STABILIZED CONSTRUCTION ENTRANCE.
34. ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE SWEEPED AT THE END OF EACH WORKING DAY OR AS NECESSARY.
35. CONTRACTOR SHALL IMPLEMENT HOUSEKEEPING PRACTICES AS FOLLOWS: SOLID WASTE MANAGEMENT: PROVIDE DESIGNATED WASTE COLLECTION AREAS AND CONTAINERS. ARRANGE FOR REGULAR REMOVAL AND DISPOSAL. CLEAR SITE OF TRASH INCLUDING ORGANIC DEBRIS, PACKAGING MATERIALS, SCRAP, OR SURPLUS BUILDING MATERIALS AND DOMESTIC WASTE DAILY. MATERIAL DELIVERY AND STORAGE: PROVIDE A DESIGNATED MATERIAL STORAGE AREA WITH SECONDARY CONTAINMENT SUCH AS BERMING. CONCRETE WASTE: PROVIDE A DESIGNATED AREA FOR A TEMPORARY PIT TO BE USED FOR CONCRETE TRUCK WASH-OUT. DISPOSE OF HARDENED CONCRETE OFFSITE. AT NO TIME SHALL A CONCRETE TRUCK DUMP ITS WASTE AND CLEAN ITS TRUCK INTO THE TOWN STORM DRAINS. CONTRACTOR SHALL INSPECT DAILY TO CONTROL RUNOFF AND WEEKLY FOR REMOVAL OF HARDENED CONCRETE. VEHICLE FUELING, MAINTENANCE, AND CLEANING: PROVIDE A DESIGNATED FUELING AREA WITH SECONDARY CONTAINMENT SUCH AS BERMING. DO NOT ALLOW MOBILE FUELING OF EQUIPMENT. PROVIDE EQUIPMENT WITH DRIP PANS. RESTRICT ONSITE MAINTENANCE AND CLEANING OF EQUIPMENT TO A MINIMUM. INSPECT AREA WEEKLY. HAZARDOUS MATERIALS MANAGEMENT: PREVENT THE DISCHARGE OF POLLUTANTS FROM HAZARDOUS MATERIALS TO THE DRAINAGE SYSTEM THROUGH PROPER MATERIAL USE, WASTE DISPOSAL AND TRAINING OF EMPLOYEES. HAZARDOUS WASTE PRODUCTS COMMONLY FOUND ON-SITE INCLUDE BUT ARE NOT LIMITED TO PAINTS & SOLVENTS, PETROLEUM PRODUCTS, FERTILIZERS, HERBICIDES & PESTICIDES, SOIL STABILIZATION PRODUCTS, ASPHALT PRODUCTS AND CONCRETE CURING PRODUCTS.
36. MAINTENANCE IS TO BE PERFORMED AS FOLLOWS:
  - A. REPAIR DAMAGES CAUSED BY SOIL EROSION OR CONSTRUCTION AT THE END OF EACH WORKING DAY.
  - B. SWALES SHALL BE INSPECTED PERIODICALLY AND MAINTAINED AS NEEDED.
  - C. SEDIMENT TRAPS, BERMS, AND SWALES ARE TO BE INSPECTED AFTER EACH STORM AND REPAIRS MADE AS NEEDED.
  - D. SEDIMENT SHALL BE REMOVED AND SEDIMENT TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN SEDIMENT HAS ACCUMULATED TO A DEPTH OF 1 FOOT.
  - E. SEDIMENT REMOVED FROM TRAP SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
  - F. RILLS AND GULLIES MUST BE REPAIRED.
37. CONTROL MEASURES REQUIRING MAINTENANCE OR ADJUSTMENT SHALL BE REPAIRED IMMEDIATELY AFTER OBSERVATION OF THE FAILING CONTROL MEASURE.
38. SAND BAG INLET PROTECTION SHALL BE CLEANED OUT WHENEVER SEDIMENT DEPTH IS ONE HALF THE HEIGHT OF ONE SAND BAG.
39. REASONABLE CARE SHALL BE TAKEN WHEN HAULING ANY EARTH, SAND, GRAVEL, STONE, DEBRIS, PAPER, OR ANY OTHER SUBSTANCE OVER ANY PUBLIC STREET, ALLEY, OR OTHER PUBLIC PLACE. SHOULD ANY BLOW, SPILL, OR TRACK OVER AND UPON SAID PUBLIC OR ADJACENT PROPERTY, IMMEDIATE REMEDY SHALL OCCUR.
40. DURING THE RAINY SEASON, ALL PAVED AREAS SHALL BE KEPT CLEAR OF EARTH MATERIAL AND DEBRIS. THE SITE SHALL BE MAINTAINED SO AS TO MINIMIZE SEDIMENT LADEN RUNOFF TO AN STORM DRAINAGE SYSTEMS, INCLUDING EXISTING DRAINAGE SWALES AND WATERCOURSES.
41. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION WILL BE MINIMIZED. STATE AND LOCAL LAWS CONCERNING POLLUTION ABATEMENT SHALL BE COMPLIED WITH.



## TOCV STANDARD DETAIL

## EROSION AND SEDIMENT CONTROL NOTES

REVISED:  
9/3/2025

DETAIL No:  
109CV-2

1. ALL CONSTRUCTION SHALL CONFORM TO THE LATEST APPLICABLE MARICOPA ASSOCIATION OF GOVERNMENTS (MAG) UNIFORM STANDARD SPECIFICATIONS AND DETAILS OR SPECIFICALLY AS SHOWN IN THESE PLANS..
2. THE TOWN OF CAMP VERDE ENGINEERING DIVISION, (928) 554-0826, SHALL BE NOTIFIED 48 HOURS PRIOR TO ANY CONSTRUCTION WORK COMMENCING.
3. EXISTING OR NEWLY DAMAGED AND/OR DISPLACED CONCRETE CURB, GUTTER, SIDEWALK, OR DRIVEWAY SLABS SHALL BE REPAIRED OR REPLACED, AS NOTED BY TOWN INSPECTORS, BEFORE FINAL ACCEPTANCE OF THE WORK.
4. OBSTRUCTIONS TO PROPOSED IMPROVEMENTS SHALL BE REMOVED OR RELOCATED BEFORE BEGINNING CONSTRUCTION OF THE PROPOSED IMPROVEMENTS.
5. PAVING SHALL NOT START UNTIL ALL APPROPRIATE TESTING HAS BEEN COMPLETED AND ACCEPTED BY THE TOWN OF CAMP VERDE ENGINEERING DIVISION.
6. SUBGRADE COMPACTION SHALL COMPLY WITH MARICOPA ASSOCIATION OF GOVERNMENTS (MAG) SECTION 601 OR PER GEOTECHNICAL RECOMMENDATIONS.
7. BASE MATERIAL SHALL COMPLY WITH MARICOPA ASSOCIATION OF GOVERNMENTS (MAG) SECTION 702. PLACEMENT AND CONSTRUCTION SHALL BE PER MAG 310.
8. BASE MATERIAL SHALL BE PLACED IN UNIFORM LAYERS NOT TO EXCEED 6" IN DEPTH. EACH LAYER SHALL BE BLADED TO A SMOOTH SURFACE CONFORMING TO THE CROSS SECTION SHOWN ON THE PLANS AND SHALL BE WATERED AND THOROUGHLY ROLLED IN A MANNER SATISFACTORY TO THE TOWN OF CAMP VERDE.
9. ASPHALTIC CONCRETE REQUIREMENTS SHALL BE IN ACCORDANCE WITH SECTION 409 OF ADOT STANDARD SPECIFICATIONS OR SECTION 321 OF M.A.G. STANDARD SPECIFICATIONS. MIX DESIGN SHALL BE SUBMITTED TO THE TOWN OF CAMP VERDE ENGINEER FOR REVIEW AND APPROVAL.
10. ASPHALTIC CONCRETE SHALL BE COMPACTED TO NOT LESS THAN 95.0 PERCENT OF LABORATORY DENSITY. THE LABORATORY DENSITY WILL BE DETERMINED BY THE CONTRACTOR'S ENGINEER BASED UPON FIELD SAMPLES IN ACCORDANCE WITH THE REQUIREMENTS OF AASHTO T-245, 75 BLOW MARSHALL DENSITY.
11. CORE SAMPLES SHALL BE TAKEN BY THE CONTRACTOR AT RANDOM LOCATIONS IN ACCORDANCE WITH QUALITY CONTROL TESTING.
12. WHEN THE AVERAGE PERCENT OF COMPACTION IS LESS THAN 95.0%, THE CONTRACTOR WILL BE REQUIRED TO REMOVE AND REPLACE ANY PORTIONS AT THE SOLE DISCRETION OF THE TOWN OF CAMP VERDE ENGINEER.
13. BITUMINOUS TACK COAT SHALL BE APPLIED TO ALL ADJACENT CONCRETE AND ASPHALT SURFACES ADJACENT TO THE AREA TO RECEIVE ASPHALTIC CONCRETE. IF THE ASPHALTIC CONCRETE IS TO BE INSTALLED IN MULTIPLE LIFTS THE CONTRACTOR SHALL INSTALL BITUMINOUS TACK COAT IN BETWEEN EACH LIFT AT A MINIMUM APPLICATION OF 0.10 GALLON PER SQUARE YARD.
14. THE MAXIMUM THICKNESS OF A SINGLE LIFT OF PAVEMENT SHALL BE 4".
15. THE EXACT POINT OF MATCHING TERMINATION AND OVERLAY, IF NECESSARY, SHALL BE DETERMINED IN THE FIELD BY THE TOWN ENGINEER OR HIS AUTHORIZED REPRESENTATIVE. WHEN A LONGITUDINAL JOINT ASSOCIATED WITH A TRENCH PATH, PAVEMENT MATCHUP, OR OTHER OCCURS ON A STREET THAT INCLUDES A BIKE LANE, THE JOINT SHALL BE LOCATED OUTSIDE OF THE BIKE LANE.
16. NO JOB WILL BE CONSIDERED COMPLETE UNTIL:
  - A. ALL CURBS, PAVEMENTS, SIDEWALKS, CATCH BASINS, STORM DRAINS, AND MANHOLES HAVE BEEN CLEANED OF ALL DIRT AND DEBRIS.
  - B. SURVEY MONUMENTS ARE INSTALLED AND STAMPED.
  - C. ALL FRAMES, COVERS, AND VALVE BOXES ARE ADJUSTED TO GRADE
17. NO PAVING CONSTRUCTION SHALL BE STARTED UNTIL ALL UTILITY LINES UNDER PROPOSED PAVED AREAS ARE COMPLETED, TESTED, AND APPROVED.
18. THE BASE COURSE WILL NOT BE PLACED UNTIL THE SUBGRADE HAS BEEN APPROVED BY THE TOWN ENGINEER OR HIS AUTHORIZED REPRESENTATIVE.
19. THE LOCATION OF ALL WATER VALVES, FIRE HYDRANTS, AND MANHOLES MUST AT ALL TIMES DURING CONSTRUCTION BE REFERENCED AND MADE ACCESSIBLE TO THE TOWN.
20. ANY UTILITY FACILITIES IN CONFLICT WITH THIS WORK WILL BE RELOCATED BY THE PERMITTEE OR THE UTILITY OWNER. THIS ACTIVITY SHALL BE COORDINATED WITH THE OWNER OF THE UTILITY TO PREVENT ANY UNNECESSARY INTERRUPTION OF SERVICE TO EXISTING CUSTOMERS.
21. ANY EXISTING STREET NAME SIGNS, TRAFFIC SIGNAL DEVICES DESIGNED WITH THE PROJECT SHALL BE MAINTAINED DURING CONSTRUCTION AND PROTECTED BY THE CONTRACTOR AS SHOWN ON THE APPROVED PLANS.
22. ANY CHANGES OR ADDITIONS TO THE PAVEMENT MARKINGS CAUSED BY PAVEMENT OVERLAY, CHIP SEAL, OR INSTALLATION OF UNDERGROUND FACILITIES SHALL BE SHOWN ON THE APPROVED PLANS.
23. PAVING CONSTRUCTION AND CHIP SEAL TO BE APPROVED BY THE TOWN ENGINEER OR PUBLIC WORKS REPRESENTATIVE PRIOR TO PAYMENT.



## TOCV STANDARD DETAIL

## PAVING NOTES

REVISED:  
9/3/2025

DETAIL No:  
110CV-1

### CHIP SEAL

1. EMULSIFIED ASPHALT SHALL BE TYPE CRS-2P APPLIED AT A RATE OF 0.30 TO 0.40 GALLONS PER SQUARE YARD AND 3/8" INCH CHIP COVER AGGREGATE. EMULSIFIED ASPHALT SHALL BE APPLIED TO THE SURFACE OF THE ROAD IN ACCORDANCE WITH SECTION 330.4 OF THE MAG STANDARD SPECIFICATIONS. TYPE CRS-2P EMULSIFIED ASPHALT SHALL CONFORM TO TABLE 330-2 OF MAG STANDARD SPECIFICATIONS.
2. CHIP SEAL COAT SHALL NOT BE APPLIED FOR A MINIMUM OF 14 DAYS AFTER COMPLETION OF THE ASPHALTIC CONCRETE.
3. THE COVER MATERIAL SHALL CONFORM TO MAG SPECIFICATION 716. THE COVER MATERIAL SHALL BE APPLIED AT A RATE OF 25 TO 30 POUNDS PER SQUARE YARD.

| SIEVE SIZE | % PASSING |
|------------|-----------|
| 1/2 INCH   | 100       |
| 3/8 INCH   | 97/100    |
| 1/4 INCH   | 70/100    |
| NO 8       | 0-5       |
| NO 200     | 0-2       |

5. THE CONTRACTOR IS RESPONSIBLE FOR ALL LABORATORY TEST AND CERTIFICATIONS TO ASSURE THAT THE CHIP MATERIAL IS IN CONFORMANCE TO THE REQUIREMENTS SET FORTH IN THESE SPECIFICATIONS.
6. REPRESENTATIVE SAMPLES OF THE AGGREGATE COVER MATERIAL SHALL BE TAKEN DAILY, AND THE LABORATORY TEST RESULTS AND CERTIFICATES OF COMPLIANCE, CERTIFIED BY THE CONTRACTOR'S ENGINEER, SHALL BE SUBMITTED TO THE TOWN OF CAMP VERDE ENGINEER. THE TOWN OF CAMP VERDE ENGINEER MAY REJECT DELIVERED CHIP MATERIAL IF, IN HIS OPINION, THE DELIVERED MATERIAL DIFFERS SIGNIFICANTLY FROM THE REPRESENTATIVE SAMPLE.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUCCESSFUL PLACEMENT OF THE CHIP SEAL COAT REGARDLESS OF TEMPERATURES OF MATERIAL COMPLIANCE, AND SHALL GUARANTEE THE SUCCESS OF THE CHIP SEAL COAT PER MAG SPECIFICATION SECTION 330.
8. THE CONTRACTOR SHALL HAVE EACH INDIVIDUAL ROAD SWEEPED WITHIN 24 HOURS OF THE COMPLETION OF THE CHIP SEAL. THE CONTRACTOR SHALL MAINTAIN TRAFFIC CONTROL AND LOOSE GRAVEL SIGNS UNTIL ALL SWEEPING HAS BEEN COMPLETED.
9. BLOTTING SHALL BE DONE WHEREVER AND WHENEVER NECESSARY, WITH A MATERIAL APPROVED BY THE TOWN OF CAMP VERDE ENGINEER. ALL EXCESS BLOTTER MATERIAL SHALL BE SWEEPED AWAY AND SURFACE OF THE BITUMINOUS ROADWAY SHALL BE REASONABLY CLEAN AND FREE OF ALL LOOSE MATERIAL BEFORE THE SEAL COAT MAY BE APPLIED.

### PERMANENT PAVEMENT MARKINGS

1. LONGITUDINAL PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH ADOT STANDARD SPECIFICATION 708.
2. TRANSVERSE PAVEMENT MARKINGS SUCH AS STOP BARS, CROSSWALKS, ARROWS AND LEGENDS SHALL BE INSTALLED IN ACCORDANCE WITH ADOT STANDARD SPECIFICATION 705 OR 709.



TOCV STANDARD  
DETAIL

## CHIP SEAL & MARKINGS NOTES

REVISED:  
9/3/2025

DETAIL No:  
110CV-2

### SURVEYOR CERTIFICATION

I HEREBY CERTIFY THAT THIS SURVEY, PLAN OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED LAND SURVEYOR UNDER THE LAWS OF THE STATE OF ARIZONA.

SURVEYOR \_\_\_\_\_

DATE \_\_\_\_\_

LICENSE # \_\_\_\_\_



FOR AS-BUILT MEASUREMENT ONLY  
TOWN OF CAMP VERDE  
PUBLIC WORKS DIVISION

### AS-BUILT CERTIFICATION

I HEREBY CERTIFY, TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, THAT THIS PROJECT HAS BEEN COMPLETED IN SUBSTANTIAL CONFORMANCE WITH THE APPROVED PLANS, SPECIFICATIONS AND REFERENCED STANDARDS, EXCEPT AS SHOWN HEREON; THAT THESE AS-BUILT PLANS REFLECT THE POSITION OF CONSTRUCTED IMPROVEMENTS BASED ON FIELD MEASUREMENTS; AND THAT THE MATERIALS USED IN CONSTRUCTION ARE AS SHOWN BASED ON FIELD OBSERVATION AND TEST RESULTS.

THIS CERTIFICATION DOES NOT WARRANT MATERIALS, WORKMANSHIP, METHODS OF CONSTRUCTION, OR OTHER ITEMS AFFECTING THE WARRANTY OF THIS PROJECT TO THE TOWN OF CAMP VERDE. USERS OF THIS INFORMATION ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ACTUAL CONDITIONS.

### AS-BUILT CERTIFICATION

DESCRIPTION OF AREA

REGISTERED PROFESSIONAL ENGINEER (CIVIL) \_\_\_\_\_ DATE



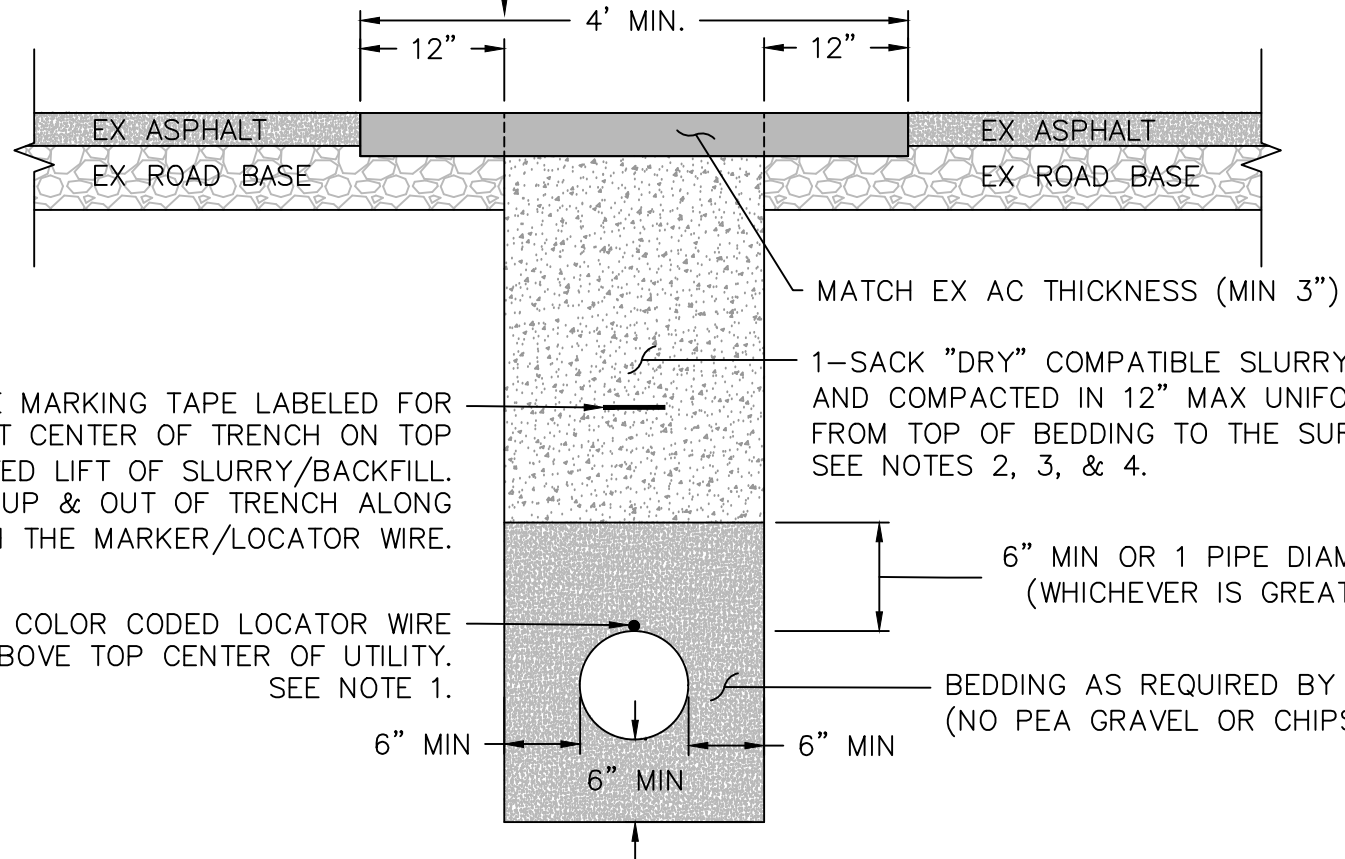
TOCV STANDARD  
DETAIL

AS-BUILT CERTIFICATION

REVISED:  
9/3/2025

DETAIL No:  
125CV

INITIAL SAW-CUT (TYP BOTH SIDES). ADD NEW SAW-CUT 12" OUT WHEN TRENCH WORK IS COMPLETED TO AVOID DAMAGE TO REPAIR EDGE. TACK-COAT ALL REPAIR EDGES BEFORE PLACING ASPHALT (TYP).



INSTALL DETECTABLE MARKING TAPE LABELED FOR PRESENT UTILITY AT CENTER OF TRENCH ON TOP OF FIRST COMPACTED LIFT OF SLURRY/BACKFILL. TAPE SHALL TRAVEL UP & OUT OF TRENCH ALONG WITH THE MARKER/LOCATOR WIRE.

INSTALL #12 COLOR CODED LOCATOR WIRE IMMEDIATELY ABOVE TOP CENTER OF UTILITY. SEE NOTE 1.

#### NOTES

1. MARKER WIRE SHALL BE TAPED TO PIPE EVERY 6'. LOOP UP TO SURFACE AT ALL MANHOLES, STUB-OUTS, SERVICE BOXES, CLEANOUTS, BLOW-OFFS, VAULTS, RISERS, ETC.
2. REMOVE SLURRY AS REQUIRED TO PLACE ASPHALT.
3. IF TRENCH (INCLUDING CROSS-TRENCH ENDS) IS WITHIN 4' OF THE PAVEMENT EDGES, TRENCH SHALL BE BACKFILLED WITH THE SAME COMPACTED SLURRY AS CALLED OUT ABOVE TO WITHIN 4" OF THE SURFACE. FILL LAST 4" TO SURFACE WITH NATIVE SOILS.
4. DURING NEW CONSTRUCTION OR IF TRENCH IS FURTHER THAN 4' FROM PAVEMENT EDGE, SLURRY IS NOT REQUIRED. TRENCH MAY BE BACKFILLED WITH NATIVE OR SELECT SOIL AND COMPACTED TO 95% PER MAG STD 601.
5. SEE MAG SPEC 601 FOR ADDITIONAL TRENCH WIDTH, EXCAVATION, BACKFILL, AND COMPACTION REQUIREMENTS.

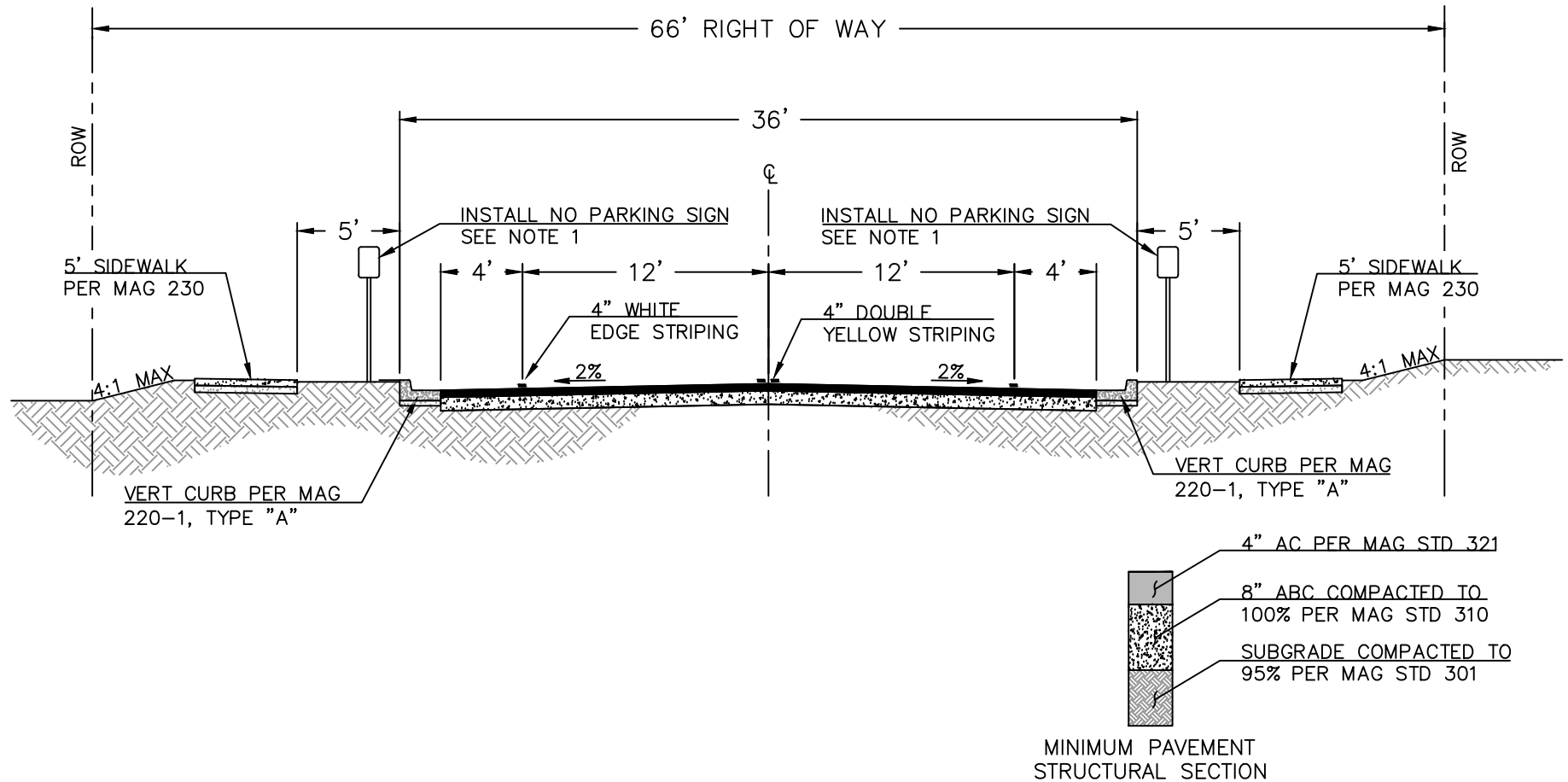


**TOCV STANDARD  
DETAIL**

## TYPICAL TRENCH BACKFILL AND REPAIR SURFACE

REVISED:  
9/3/2025

DETAIL No:  
**200CV**



#### NOTES

1. R7-1 NO-PARKING SIGNS TO BE POSTED BOTH SIDES OF STREET PER STD DTL 290CV.
2. ROAD STRUCTURAL SECTION TO BE DETERMINED BY GEOTECHNICAL ENGINEER BUT NOT LESS THAN MINIMUM PER THIS DETAIL.
3. 4" ABC COMPACTED TO 95% TO BE PLACED UNDER CURB, GUTTER, & SIDEWALK.
4. ALL DIMENSIONS SHOWN ARE MINIMUM.

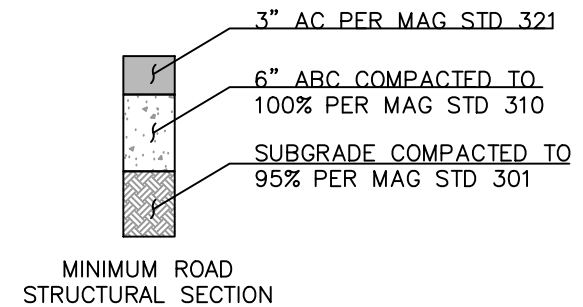
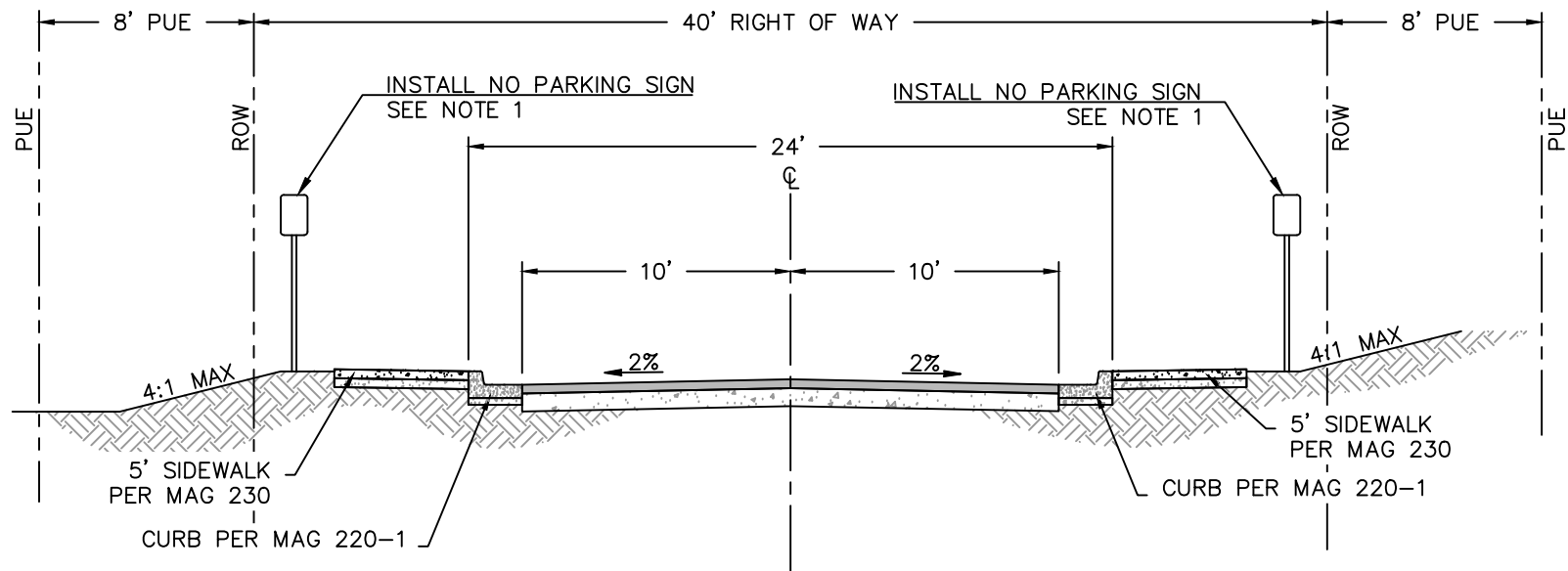


**TOCV STANDARD  
DETAIL**

**MINOR COLLECTOR WITH CURB, GUTTER, AND  
OFFSET SIDEWALK TYPICAL STREET SECTION**

REVISED:  
9/3/2025

DETAIL No:  
**284CV**



#### NOTES

1. R7-1 NO-PARKING SIGNS TO BE POSTED BOTH SIDES OF STREET PER STD DTL 290CV.
2. LOW VOLUME SECTION MAY BE USED WHEN SERVES LESS THAN 10 SINGLE-FAMILY UNITS.
3. ROAD STRUCTURAL SECTION TO BE DETERMINED BY GEOTECHNICAL ENGINEER BUT NOT LESS THAN MINIMUM PER THIS DETAIL.
4. 4" AB COMPACTED TO 95% TO BE PLACED UNDER CURB, GUTTER, & SIDEWALK.
5. SIDEWALKS SUBJECTED TO VEHICLE LOADING TO CONFORM TO MAG STD DTL 250.
6. ALL DIMENSIONS SHOWN ARE MINIMUM.

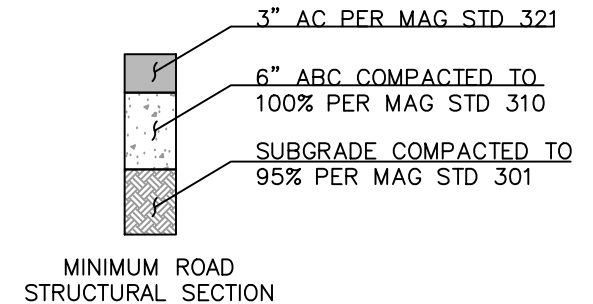
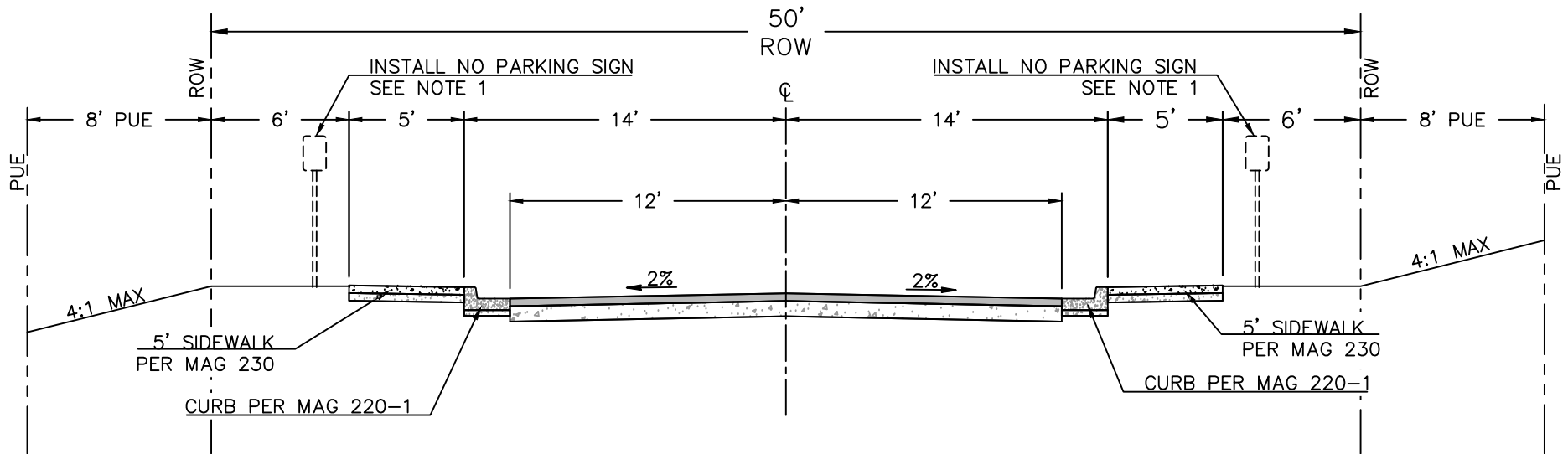


TOCV STANDARD  
DETAIL

## LOW VOLUME LOCAL STREET TYPICAL STREET SECTION

REVISED:  
9/3/2025

DETAIL No:  
285CV



#### NOTES

1. R7-1 NO-PARKING SIGNS TO BE POSTED BOTH SIDES OF STREET PER STD DTL 290CV.
2. ROAD STRUCTURAL SECTION TO BE DETERMINED BY GEOTECHNICAL ENGINEER BUT NOT LESS THAN MINIMUM PER THIS DETAIL.
3. 4" ABC COMPACTED TO 95% TO BE PLACED UNDER CURB, GUTTER, & SIDEWALK.
4. SIDEWALKS SUBJECTED TO VEHICLE LOADING TO CONFORM TO MAG STD DTL 250.
5. ALL DIMENSIONS SHOWN ARE MINIMUM.

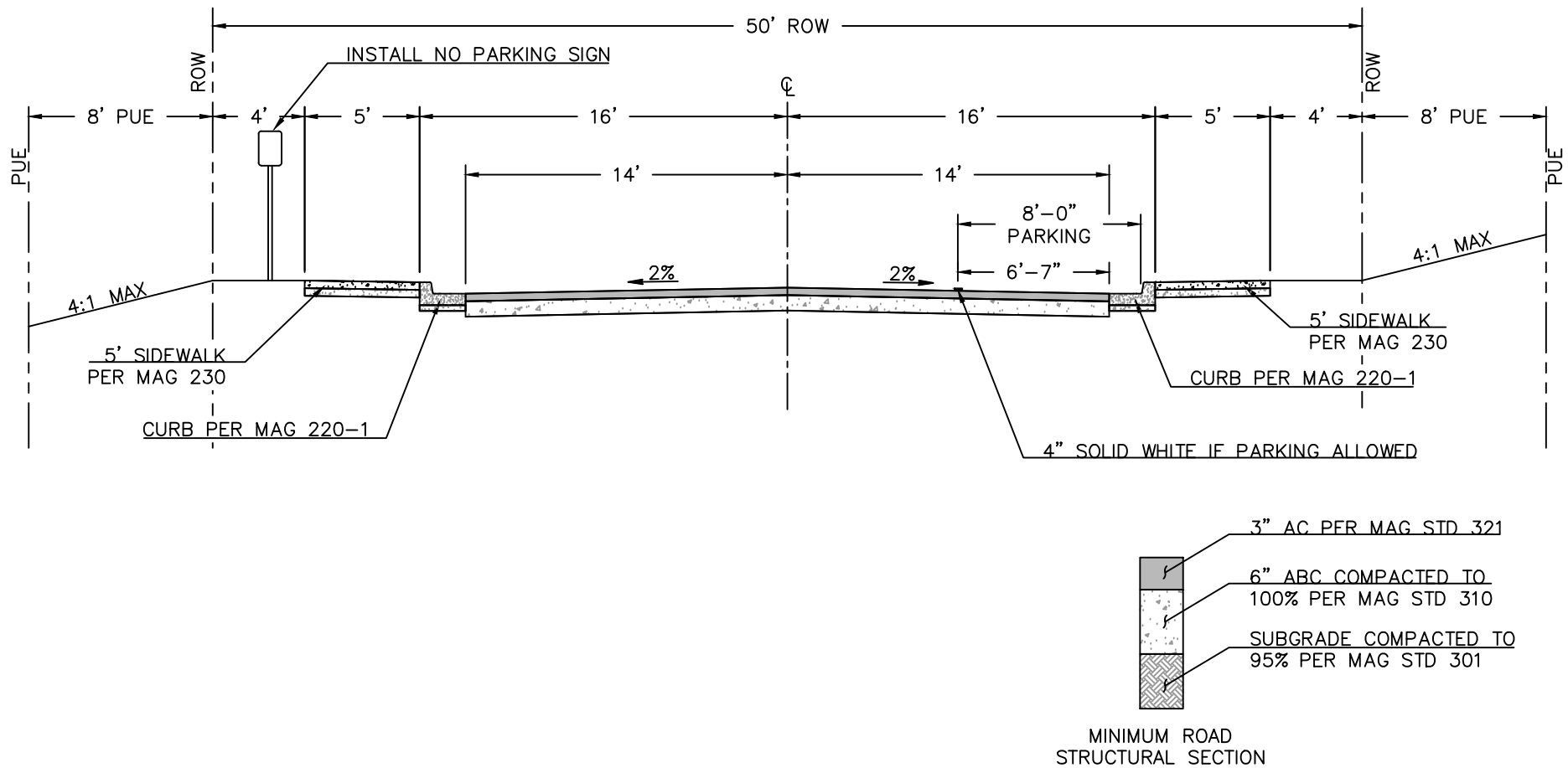


TOCV STANDARD  
DETAIL

LOCAL STREET WITH CURB, GUTTER, & SIDEWALK  
NO STREET PARKING - TYPICAL STREET SECTION

REVISED:  
9/3/2025

DETAIL No:  
286CV



#### NOTES

1. R7-1 NO-PARKING SIGNS TO BE POSTED ON ONE SIDE OF STREET PER STD DTL 290CV.
2. ROAD STRUCTURAL SECTION TO BE DETERMINED BY GEOTECHNICAL ENGINEER BUT NOT LESS THAN MINIMUM PER THIS DETAIL.
3. 4" ABC COMPACTED TO 95% TO BE PLACED UNDER CURB, GUTTER & SIDEWALK.
5. SIDEWALKS SUBJECTED TO VEHICLE LOADING TO CONFORM TO MAG STD DTL 250.
6. ALL DIMENSIONS SHOWN ARE MINIMUM.

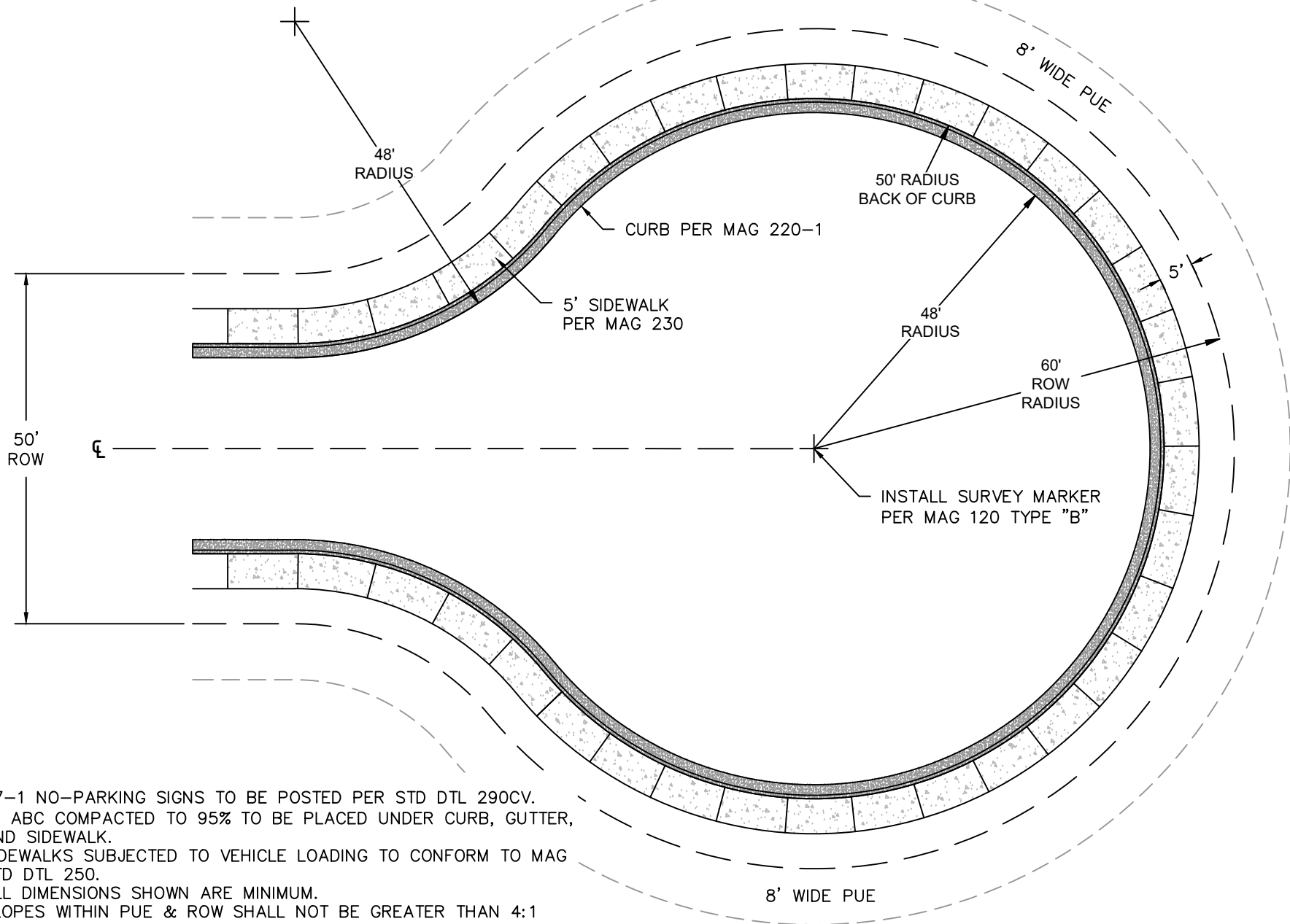


**TOCV STANDARD  
DETAIL**

**LOCAL STREET WITH CURB, GUTTER, & SIDEWALK  
PARKING ON ONE SIDE - TYPICAL STREET SECTION**

REVISED:  
9/3/2025

DETAIL No:  
**287CV**



#### NOTES

1. R7-1 NO-PARKING SIGNS TO BE POSTED PER STD DTL 290CV.
2. 4" ABC COMPACTED TO 95% TO BE PLACED UNDER CURB, GUTTER, AND SIDEWALK.
3. SIDEWALKS SUBJECTED TO VEHICLE LOADING TO CONFORM TO MAG STD DTL 250.
4. ALL DIMENSIONS SHOWN ARE MINIMUM.
5. SLOPES WITHIN PUE & ROW SHALL NOT BE GREATER THAN 4:1

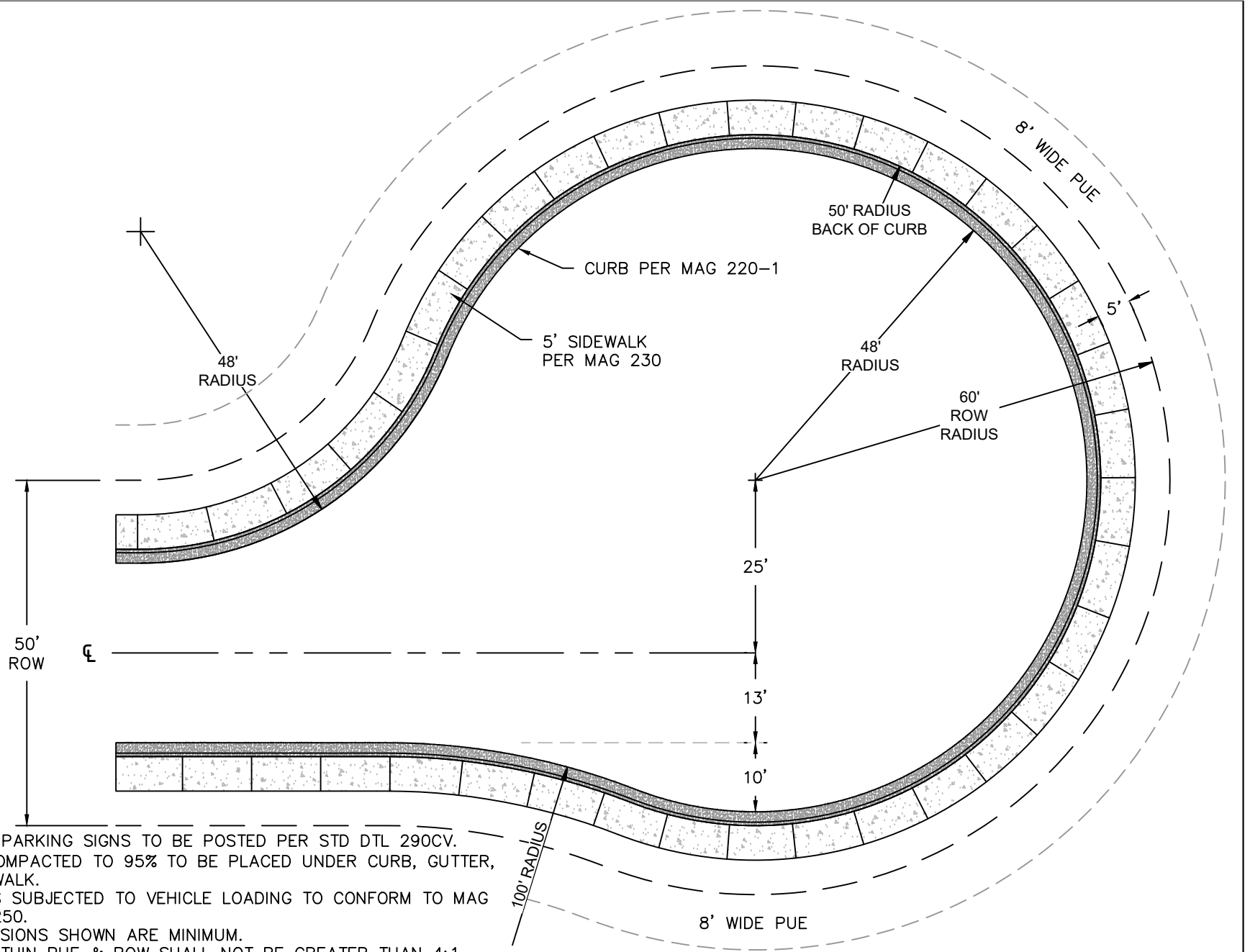


**TOCV STANDARD  
DETAIL**

**LOCAL STREET CUL-DE-SAC  
TYPICAL STREET SECTION**

REVISED:  
9/3/2025

DETAIL No:  
**289CV-1**



#### NOTES

1. R7-1 NO-PARKING SIGNS TO BE POSTED PER STD DTL 290CV.
2. 4" ABC COMPACTED TO 95% TO BE PLACED UNDER CURB, GUTTER, AND SIDEWALK.
3. SIDEWALKS SUBJECTED TO VEHICLE LOADING TO CONFORM TO MAG STD DTL 250.
4. ALL DIMENSIONS SHOWN ARE MINIMUM.
5. SLOPES WITHIN PUE & ROW SHALL NOT BE GREATER THAN 4:1

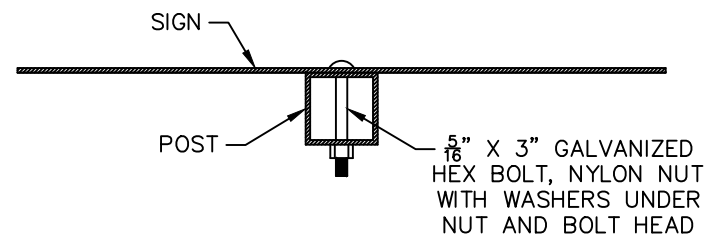


**TOCV STANDARD  
DETAIL**

**LOCAL STREET OFFSET CUL-DE-SAC  
TYPICAL STREET SECTION**

REVISED:  
9/3/2025

DETAIL No:  
**289CV-2**



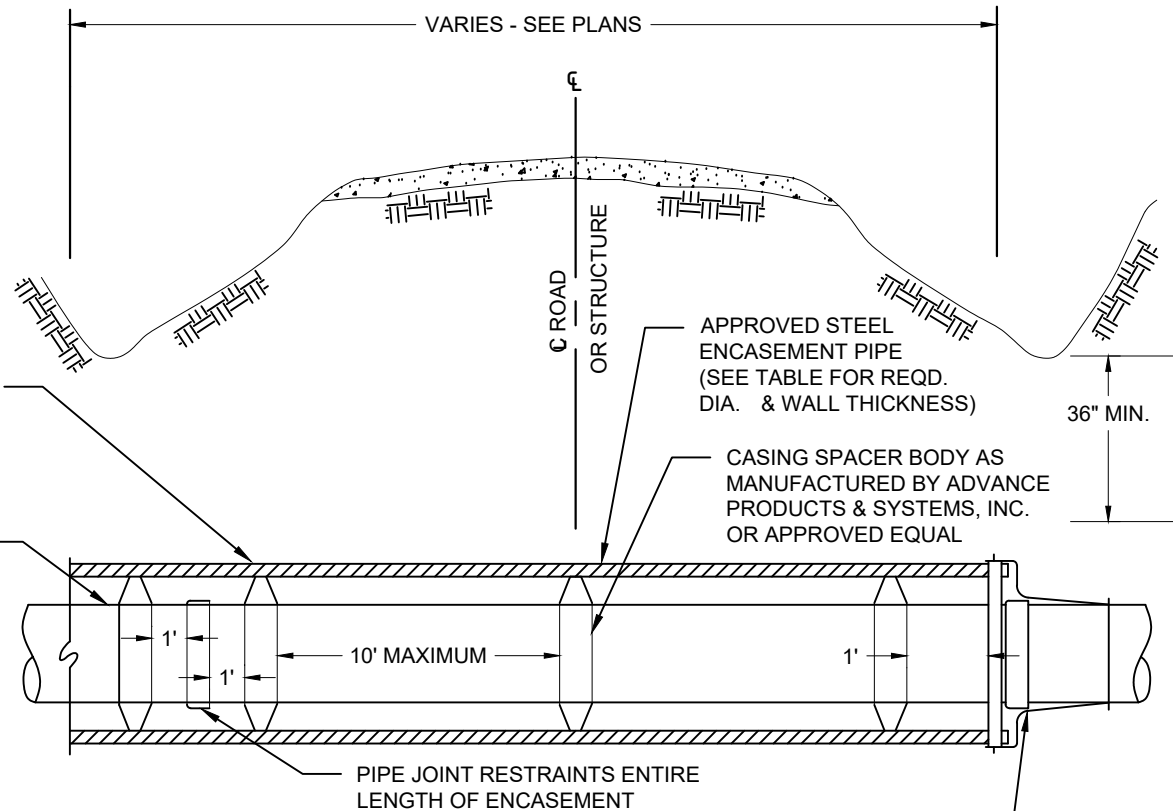
DETAIL B  
ANCHOR ASSEMBLY

3. ANCHOR - 2 $\frac{1}{4}$ " X 2 $\frac{1}{4}$ " X 24" SQUARE  
PERFORATED 12 GAUGE GALVANIZED STEEL  
TUBING

| CARRIER<br>PIPE SIZE (IN) | STEEL ENCASEMENT |                     |
|---------------------------|------------------|---------------------|
|                           | O.D. (IN MIN)    | WALL THICKNESS (IN) |
| 6                         | 14               | 1/4                 |
| 8                         | 18               | 1/4                 |
| 12                        | 21               | 1/4                 |
| 18                        | 27               | 3/8                 |
| 21                        | 30               | 3/8                 |
| 24                        | 36               | 3/8                 |
| 27                        | 39               | 1/2                 |

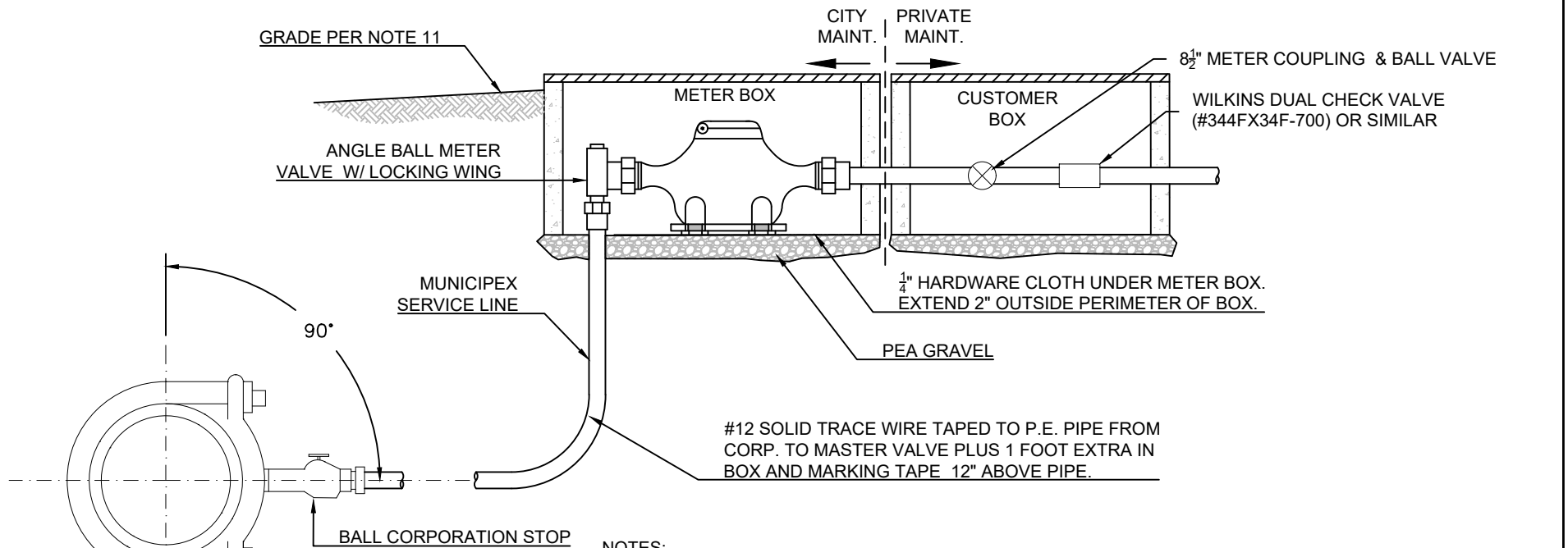
STEEL ENCASEMENT PIPE SHALL BE WELDED PER ASTM A53-GRADE B AND SHALL HAVE A MINIMUM YIELD STRENGTH OF 35,000 PSI. EXTERIOR OF PIPE SHALL BE COATED WITH COAL TAR EPOXY OR BITUMINOUS ASPHALT.

CARRIER PIPE SHALL BE DUCTILE IRON PIPE (DIP)



#### NOTES:

1. ALL BELL FITTINGS SHALL BE MECHANICALLY RESTRAINED
2. INSTALLATION SHALL BE IN ACCORDANCE WITH ADVANCE PRODUCTS & SYSTEMS, INC. RECOMENDATIONS OR APPROVED EQUAL.
3. TRACE WIRE PER AGENCY SPECIFICATIONS.
4. NO PIPE SHALL BE SUPPORTED BY BELL



**NOTES:**

1. BOXES SHALL BE PER MAG STD. DETAIL 320.
2. SERVICE LINE IS TO HAVE MIN. 3 FT. COVER WITHIN THE ROADWAY PRISM.
3. SERVICE LINE SHALL BE UNSPLICED FROM CORP. STOP AT MAIN TO CURB STOP AT METER BOX.
4. FOR CUT OR FILL SLOPE METER LOCATIONS, CMU WALL OR OTHER APPROVED METHOD SHALL BE REQUIRED FOR PROTECTION OF METER SET.
5. METER TO BE INSTALLED BY TOCV ONLY.
6. WATER SERVICE OR METER BOX SHALL NOT BE LOCATED IN DRIVEWAYS, SIDEWALKS, OR STREETS.
7. WATER METER SHALL BE PLACED IN PUBLIC R/W OR EASEMENT BETWEEN THE BACK OF CURB OR SIDEWALK AND PROPERTY LINE.
8. NO LANDSCAPE FEATURES OR VEGETATION WITHIN 5' OF METER BOXES.
9. CONTRACTOR SHALL VERIFY FACTORY SETTING ON PRESSURE REGULATOR.
10. PRIVATE MAINTENANCE RESPONSIBILITY STARTS AT THE CUSTOMER SHUTOFF VALVE AND BOX.
11. PAVED OR CONCRETE SURFACE - BOX TO BE  $\frac{1}{2}$ " ABOVE PAVED OR CONCRETE SURFACE. NATURAL GRADE - BOX TO BE 2" ABOVE SURFACE. TAPER TO EXISTING SURFACE WITHIN 2 FEET.
12. MUNICIPEX SERVICE LINE TO BE SLEAVED IN WHITE 4" SDR 35 PVC PIPE WHEN CROSSING UNDER ROADWAY.

| SERVICE SIZE | CITY BOX | CUSTOMER BOX | BALL CORP STOP (FORD OR EQ) - PJ x MIP | ANGLE BALL METER VALVE (FORD OR EQ) - PJ x MIP |
|--------------|----------|--------------|----------------------------------------|------------------------------------------------|
| 3/4"         | #1       | #1           | FB1100-3                               | BA43-332 W PJ X METER NUT                      |
| 1"           | #2       | #1           | FB1100-4                               | BA43-444 W PJ X METER NUT                      |
| 1.5"         | #3       | #2           | FB1100-6                               | BFA43-666 W PJ X METER FL.                     |
| 2"           | #4       | #2           | FB1100-7                               | BFA43-777 W PJ X METER FL.                     |

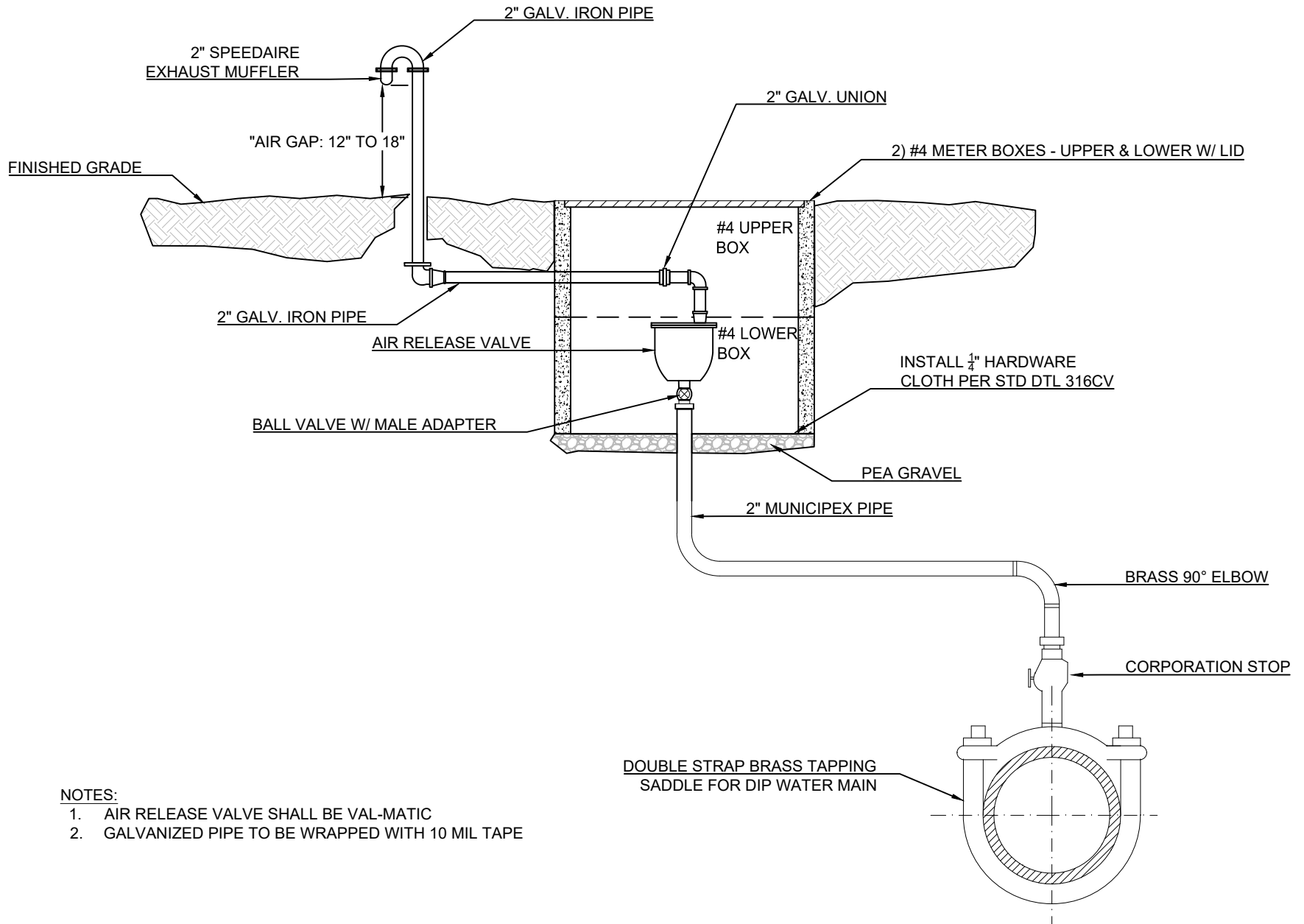


**TOCV STANDARD  
DETAIL**

**1", 1 1/2", & 2"  
SERVICE CONNECTION**

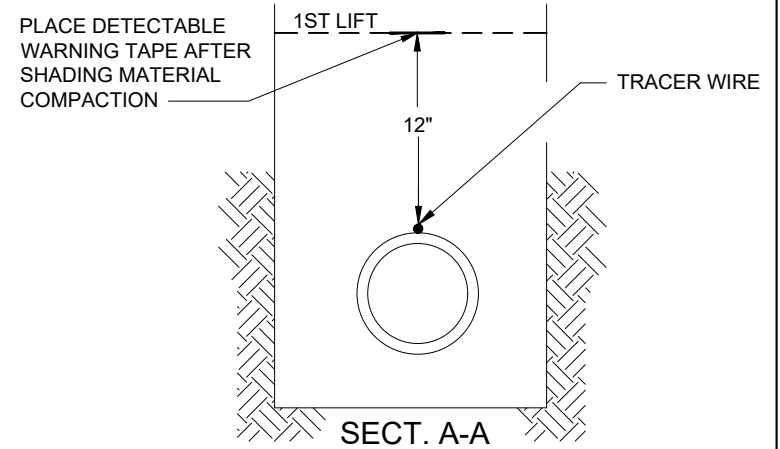
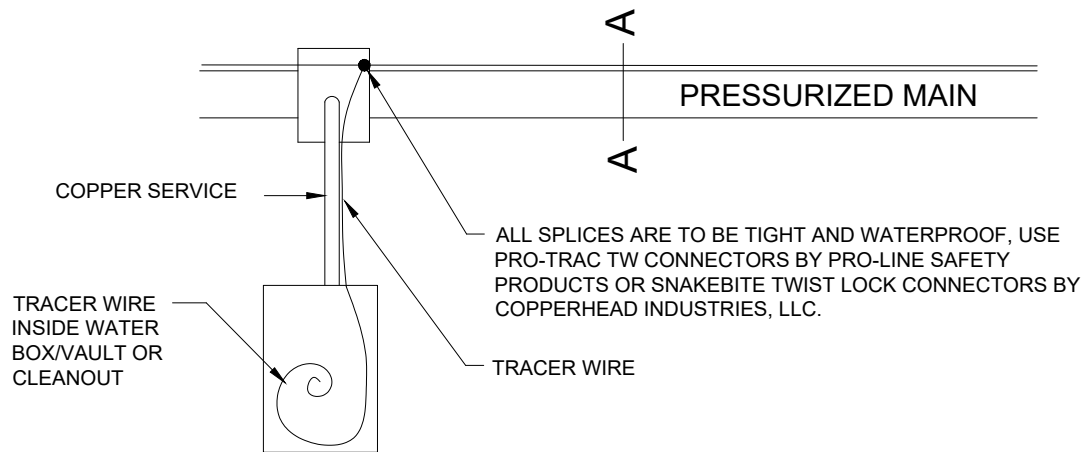
REVISED:  
9/3/2025

DETAIL No:  
**316CV**



NOTES:

1. AIR RELEASE VALVE SHALL BE VAL-MATIC
2. GALVANIZED PIPE TO BE WRAPPED WITH 10 MIL TAPE



### NOTES:

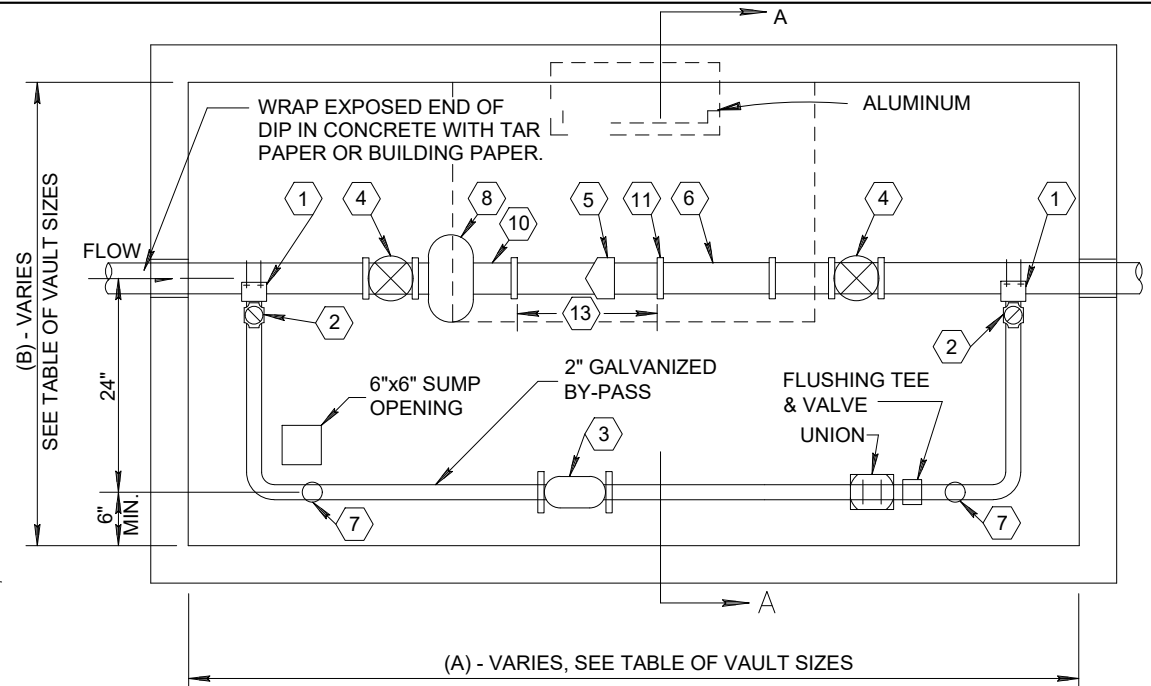
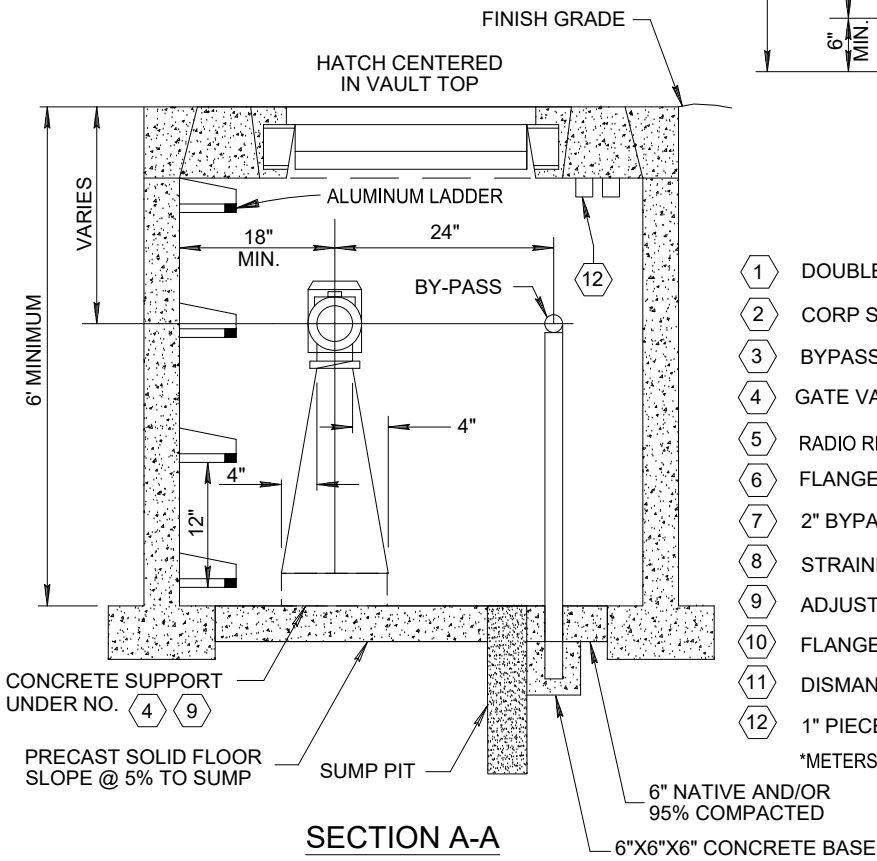
1. TRACER WIRE SHALL BE REQUIRED FOR ALL PRESSURE PIPE INSTALLATION AS INDICATED ON OTHER STANDARD DETAILS. TRACER WIRE SHALL BE #12 AWG HS-CCS, 30 MIL HDPE INSULATION.
2. FINAL CONTINUITY TESTING FOR ACCEPTANCE OF TRACER WIRE SHALL BE MADE AT PROJECT COMPLETION PRIOR TO PAVING.
3. WIRE IS TO BE ATTACHED TO ALL APPURTENANCES.
4. TRACER WIRE IS TO BE PLACED AT TOP CENTER OF PIPE AND SECURED BY TAPE AT A MINIMUM OF 6' INTERVALS.
5. THIS DETAIL DOES NOT PERTAIN TO STRAIGHT RUN GRAVITY SANITARY SEWER MAINS IN THE TOWN OF CAMP VERDE.
6. TRACER WIRE STATION SHALL BE USED AT ALL FIRE HYDRANTS, SEWER WET WELLS, FORCE MAIN DISCHARGE MANHOLES, FORCE MAIN CLEANOUTS, FORCE MAIN VALVE LOCATIONS AND LOW PRESSURE SEWER MAIN APPURTENANCES.
7. CONTRACTOR MUST PROVIDE ENGINEER OF RECORD (EOR) AND AGENCY WITH THE FOLLOWING:
  - A. SAMPLE OF TAPE
  - B. PASS A CONTINUITY TEST, CONDUCTED BY THE CONTRACTOR AND WITNESSED BY THE EOR. THE EOR SHALL PROVIDE A CERTIFICATION OF PASSING TO THE CONTRACTOR AND AGENCY.
8. TO PASS A CONTINUITY TEST, THE FOLLOWING CONDITIONS MUST BE MET:
  - A. CONTINUITY TEST SHALL BE PERFORMED BY USING A METALLIC LOCATOR WITH WITH AUDIBLE TONE AND NUMERIC VALUES FOR CERTIFICATION OF FACILITY LOCATIONS AND SHALL BE IDENTIFIABLE BETWEEN ACCESS POINTS.
  - B. THE WIRE SHALL BE ACCESSIBLE AT ALL ACCESS POINTS AND FROM ACCESS POINT TO ACCESS POINT.
  - C. DEPTH READINGS MUST BE ACCURATE AND CONSISTENT TO WITHIN 15 (DEPTH TO DIAMETER RATIO).
  - D. ACCESS POINTS THAT ARE WIDELY SPACED CAN BE TRACED IN WORST CASE FROM EACH END TO A COMMON MEETING POINT BETWEEN THEM.
9. CONTRACTOR MUST PROVIDE EOR AND TOWN WITH THE FOLLOWING:
  1. SAMPLE OF WIRE.
  2. SAMPLE OF CONNECTOR.
  3. INVOICE COPY SHOWING PURCHASE OF WIRE AND CONNECTOR.
10. TRACER WIRE INSULATION SHALL BE FREE OF NICKS & CUTS. ANY COMPROMISE IN THE INSULATION SHALL BE CUT OUT & TRACER WIRE SHALL BE SPLICED BACK TOGETHER WITH APPROVED CONNECTORS.

### DETECTABLE TAPE SHALL BE:

1. PRO-LINE SAFETY PRODUCTS OR HYTECH DETECTABLE TAPE (UNDERGROUND WARNING TAPE). NO EXCEPTIONS.
2. 3 INCHES IN WIDTH
3. 5 MIL OVERALL THICKNESS WITH A .35 MIL SOLID ALUMINUM FOIL CORE.
4. LETTERED WITH A MINIMUM OF 1" INCH.
5. COLOR CODED FOR SPECIFIC UTILITY. WATER - BLUE, SANITARY SEWER - GREEN, RECLAIMED WATER - PURPLE IN ACCORDANCE WITH APWA UNIFORM COLOR CODE.

| VAULT DIMENSION DETAILS<br>(MINIMUM) |       |        |     |     |
|--------------------------------------|-------|--------|-----|-----|
| METER SIZE                           | 3"    | 4"     | 6"  | 8"  |
| (A)                                  | 8'-4" | 10'-6" | 12' | 15' |
| (B)                                  | 4'-4" | 5'     | 5'  | 6'  |
| HATCH                                |       |        |     |     |
| (A)                                  | 6'    | 6'     | 6'  | 6'  |
| (B)                                  | 3'    | 3'     | 4'  | 4'  |

| METER LAY LENGTHS |        |        |        |         |
|-------------------|--------|--------|--------|---------|
| METER SIZE        | 3"     | 4"     | 6"     | 8"      |
| LENGTH            | 17.25" | 20.25" | 24.25" | 42.125" |



#### NOTES:

- BOTH METERS SHALL BE RADIO READ WITH ERT MOUNTED WITHIN 6" OF FINISH GRADE.
- METER VAULTS TO BE PRE-CAST CONCRETE
- JOINT RESTRAINT TO AND THROUGH REQUIRED. SUMP PIT TO BE 8 CUBIC FEET OF CLEAN #57 ROCK AND LINED WITH FABRIC FILTER LINER MIRAFI TYPE 140NL OR APPROVED EQUAL.
- ACCESS HATCH - USF FABRICATION INC. ALUMINUM SPRING OR TORSION BAR ASSISTED DOUBLE LIDS WITH 90 TO 180 DEGREE OPEN RANGE WITH RECESSED PADLOCK/HASP ASSEMBLY AND 30 PSF RATING.
- PIPELINE PRODUCTS VL-100 EXTENDABLE LADDER. TELESOPING LADDER MUST BE INSTALLED ON THE VERTICAL WALL JUST BELOW THE SAFETY NET. POSITION THE LADDER TO CENTER OF ACCESS HATCH OR EQUAL.
- ACCESS HATCH SAFETY NET - U.S. NETTING OR APPROVED EQUAL.

- DOUBLE STRAP ALL BRONZE SADDLE
- CORP STOP 2" BALL TYPE
- BYPASS METER\*
- GATE VALVE R/S FLANGED WITH HAND WHEEL
- RADIO READ\* METER PER AGENCY
- FLANGED SPOOL (MIN. 3 PIPE DIAMETERS IN LENGTH)
- 2" BYPASS SUPPORT
- STRAINER
- ADJUSTABLE PIPE SUPPORT
- FLANGED SPOOL. (MIN. 5 PIPE DIAMETERS IN LENGTH)
- DISMANTLING JOINT (DJ400 OR APPROVED EQUAL)
- 1" PIECE OF UNISTRUT FASTENED TO TOP OF VAULT

\*METERS TO BE SUPPLIED BY AGENCY

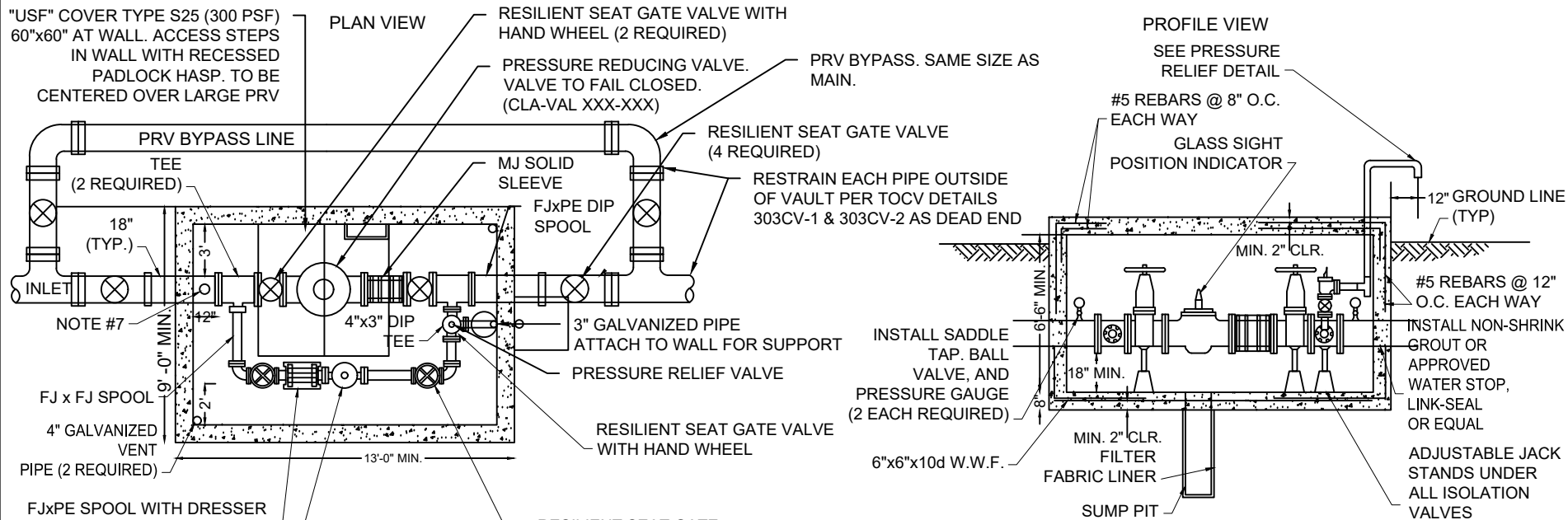


TOCV STANDARD  
DETAIL

LARGE METER AND VAULT

REVISED:  
9/3/2025

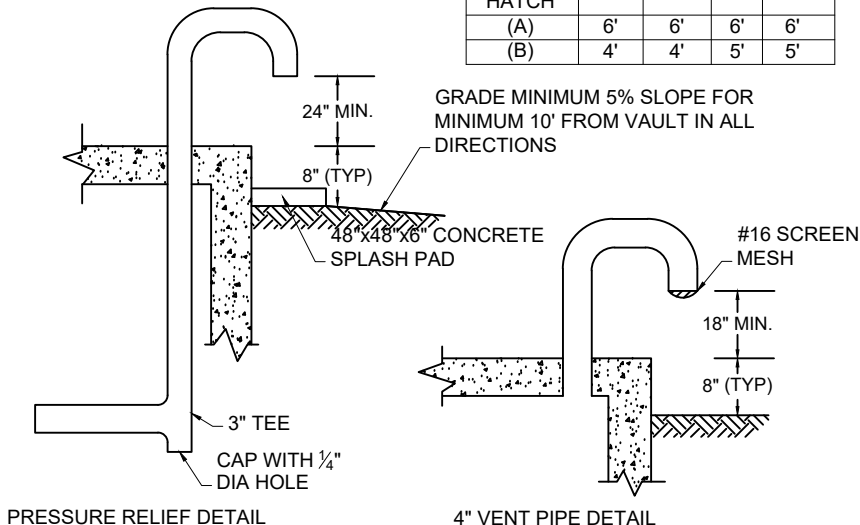
DETAIL No:  
321CV



| VAULT DIMENSION DETAILS (MINIMUM) |       |        |     |     |
|-----------------------------------|-------|--------|-----|-----|
| PIPE SIZE                         | 3"    | 4"     | 6"  | 8"  |
| (A)                               | 8'-4" | 10'-6" | 12' | 15' |
| (B)                               | 4'-4" | 5'     | 6'  | 6'  |
| HATCH                             |       |        |     |     |
| (A)                               | 6'    | 6'     | 6'  | 6'  |
| (B)                               | 4'    | 4'     | 5'  | 5'  |

### VALVE NOTES:

- PRESSURE REDUCING CLAVAL SHALL INCLUDE THE FOLLOWING FEATURES:
  - X46A FLOW CLEAN STRAINER
  - CK2 COOK (ISOLATION VALVE)
  - CV SPEED CONTROL (OPENING & CLOSING)
  - ALL PRV PILOT SYSTEMS MUST BE STAINLESS STEEL HIGH PRESSURE TUBING.
- FINAL PRESSURE SETTINGS TO BE DETERMINED BY AGENCY



### VAULT NOTES:

- ALL PRECAST OR POUR IN PLACE CONCRETE TO BE CLASS "A" PER M.A.G. STD. SPEC. 725. ALTERNATE DESIGN TO BE 8" C.M.U. WALLS. GROUT ALL CELLS SOLID. USE 2-#4 REBAR IN BOND BEAM AT TOP OF WALLS AND AT 30" ABOVE FOOTING. #4 REBAR AT 16" O.C. VERTICAL.
- SUMP PIT TO BE 8 CUBIC FEET OF CLEAN #57 ROCK AND LINED WITH FABRIC FILTER LINER MIRAFI TYPE 140NL OR APPROVED EQUAL.
- ALL FITTINGS AND VALVES TO BE FLANGE JOINT DUCTILE IRON PIPE.
- SLOPE FLOOR AT 5% TO SUMP.
- ACCESS HATCH - USF FABRICATION INC. ALUMINUM SPRING OR TORSION BAR ASSISTED DOUBLE LIDS WITH 90 TO 180 DEGREE OPEN RANGE WITH RECESSED PADLOCK/HASP ASSEMBLY AND 30 PSF RATING.
- PIPELINE PRODUCTS VL-100 EXTENDABLE LADDER. TELESCOPING LADDER MUST BE INSTALLED ON THE VERTICAL WALL JUST BELOW THE SAFETY NET. POSITION THE LADDER TO CENTER OF ACCESS HATCH OR EQUAL.
- 2" SADDLE WITH 2" BALL VALVE & 2" PLUG. THIS IS USED FOR FLOW MODELING & INSERTION PROBES.
- SAFETY NET - U.S. NETTING OR APPROVED EQUAL.

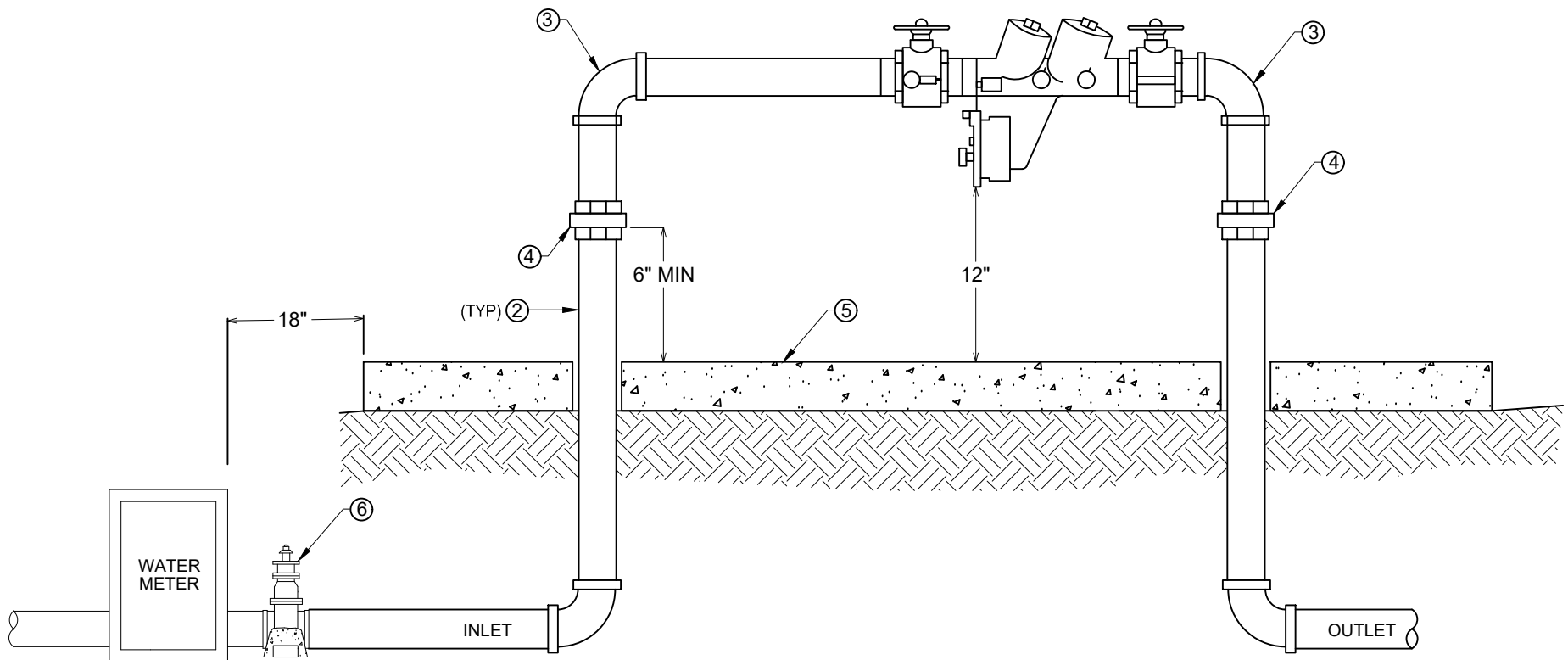


**TOCV STANDARD  
DETAIL**

## PRESSURE REDUCING VALVE STATION

REVISED:  
9/3/2025

DETAIL No:  
**323CV**



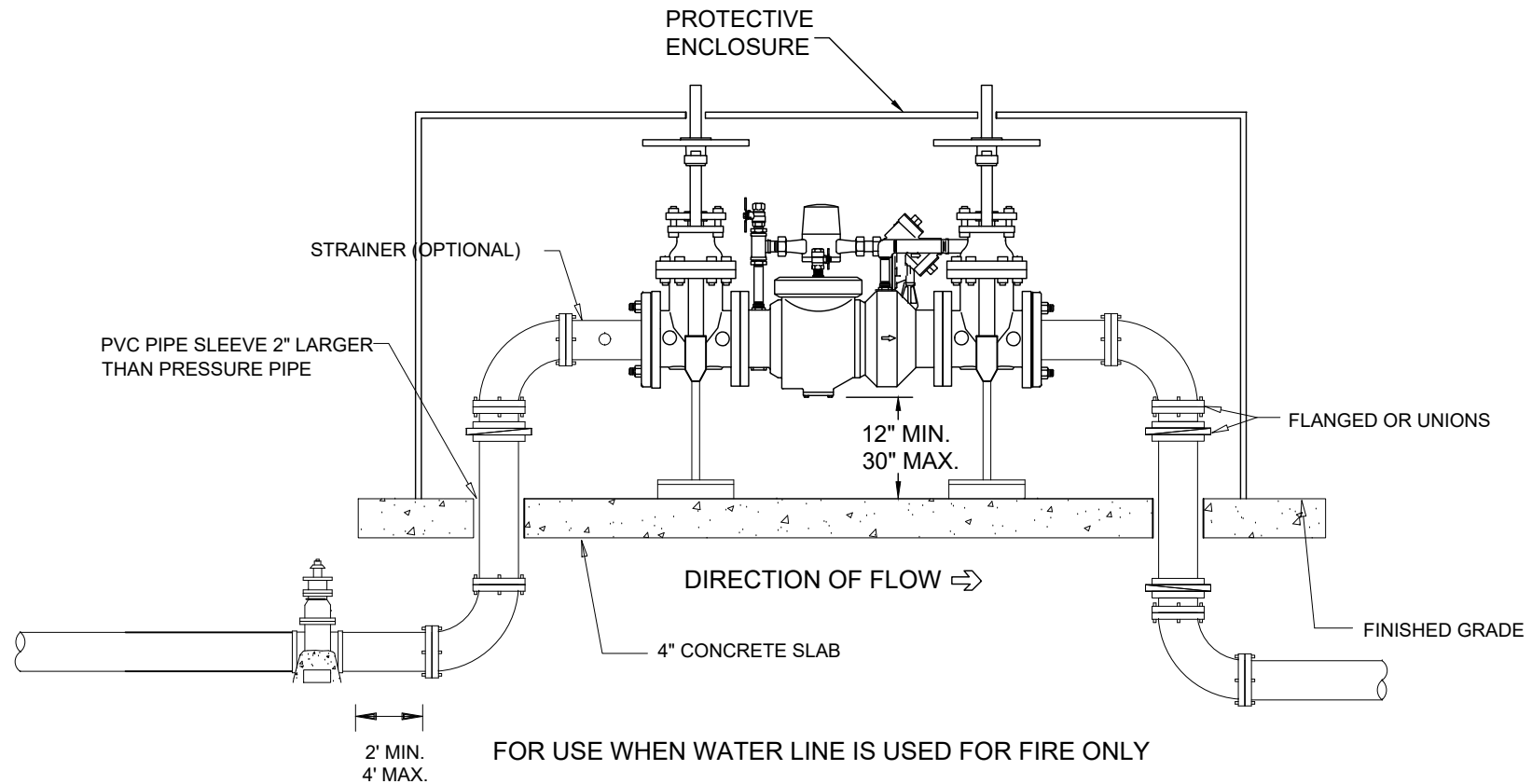
INLET AS CLOSE TO SERVICE CONNECTION AS POSSIBLE  
(IMMEDIATELY AFTER CUSTOMER SHUTOFF VALVE & BOX). NO  
CONNECTIONS BETWEEN CUSTOMER SHUTOFF AND ASSEMBLY.

#### NOTES:

1. ALL PIPE/FITTINGS TO BE EITHER TYPE "K" COPPER OR GALVANIZED INCLUDING PIPE BETWEEN CUSTOMER BOX AND BACKFLOW ASSEMBLY.
2. BACKFLOW PREVENTION ASSEMBLY MUST BE LEVEL AND INSTALLED A MINIMUM OF 16" FROM ASSEMBLY BODY TO FINAL GRADE.
3. ALL TEST COCKS (4 REQUIRED) SHALL BE FITTED WITH BRASS PLUGS INSTALLED WITH TEFLON TAPE.
4. INSTALL THE BACKFLOW PREVENTION ASSEMBLY IMMEDIATELY DOWNSTREAM WITHIN 18" OF THE AGENCY WATER METER. BALL VALVE REQUIRED BETWEEN METER & BACKFLOW DEVICE.
5. INSULATE BACKFLOW ASSEMBLY AS NECESSARY.

#### LIST OF MATERIALS:

1. REDUCED PRESSURE BACKFLOW PREVENTION ASSEMBLY, OR DOUBLE CHECK VALVE BACKFLOW PREVENTION ASSEMBLY AS APPROVED BY THE AGENCY, DOUBLE BALL VALVES INCLUDED.
2. PIPE, TYPE "K" HARD COPPER OR GALVANIZED,  $\frac{3}{4}$ " THRU 3".
3. 90° ELBOW, COPPER OR GALVANIZED,  $\frac{3}{4}$ " THRU 2"
4. PIPE UNION, BRASS OR COPPER.
5. OPTIONAL 4" CONCRETE PAD, ENCLOSURE, AND HARDWARE.
6. PRIVATE CUSTOMER VALVE.



#### NOTES:

1. NO OBSTRUCTIONS ON ONE SIDE.
2. BACKFLOW PROTECTION REQUIRED PER TOWN CODE.
3. ENCLOSURE REQUIRED (ASSE 1060 CLASS 1).
4. ALL CONNECTIONS SHALL BE FLANGED OR MECHANICALLY RESTRAINED JOINTS.
5. THERE SHALL NOT BE ANY CONNECTIONS ON THE SERVICE LINE BETWEEN THE DC AND THE WATER METER. ENCLOSURES INSTALLED MUST MEET CLEARANCE REQUIREMENTS IN ADDITION TO PROVIDING SIDE AND TOP ACCESS. ENCLOSURES MUST NOT RETAIN WATER.
6. THE ASSEMBLY SHALL BE ACCESSIBLE AT ALL TIMES.
7. INSTALLATION MUST MEET INTERNATIONAL PLUMBING CODES IN ADDITION TO STANDARD WATER DETAILS. INSTALLATION MUST BE LEFT EXPOSED UNTIL INSPECTED AND APPROVED BY THE TOWN.
8. DC SHALL BE LOCATED ABOVE GROUND AND ENCLOSED IN AN ASSE 1060 CLASS 1 APPROVED ENCLOSURE PER INTERNATIONAL BUILDING CODES.
9. DC SHALL BE LOCATED WITHIN 4' OF METER, UNLESS OTHERWISE APPROVED.
10. DOUBLE CHECK VALVE BACKFLOW PREVENTION ASSEMBLY USE SHALL BE REVIEWED AND APPROVED BY AGENCY.
11. ASSEMBLY SHALL BE APPROVED BY USC FOUNDATION FOR CROSS-CONNECTION CONTROL AND HYDRAULIC RESEARCH.

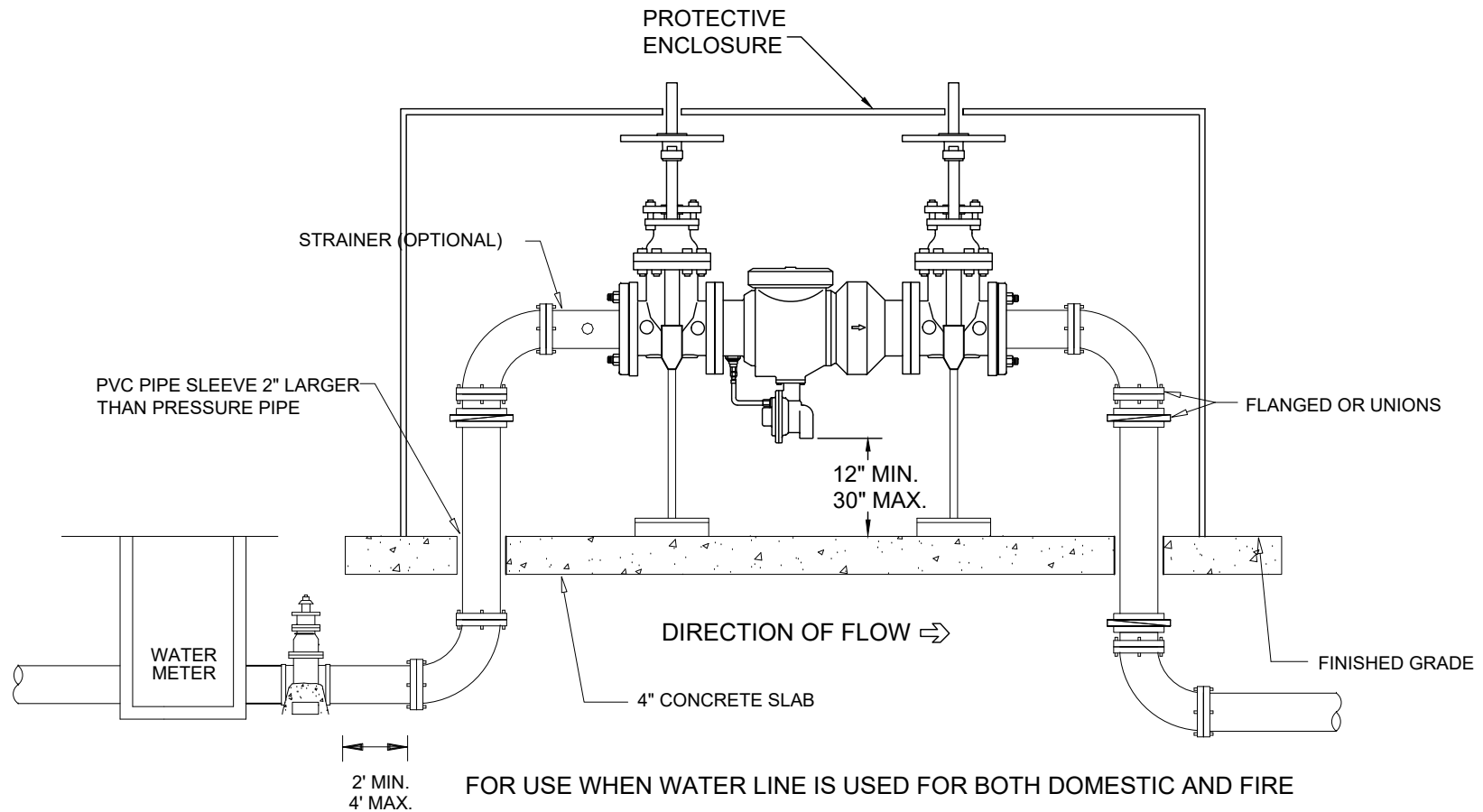


**TOCV STANDARD  
DETAIL**

**BACKFLOW PREVENTION ASSEMBLY OVER 3"  
DOUBLE CHECK DETECTOR ASSEMBLY (DCDA)**

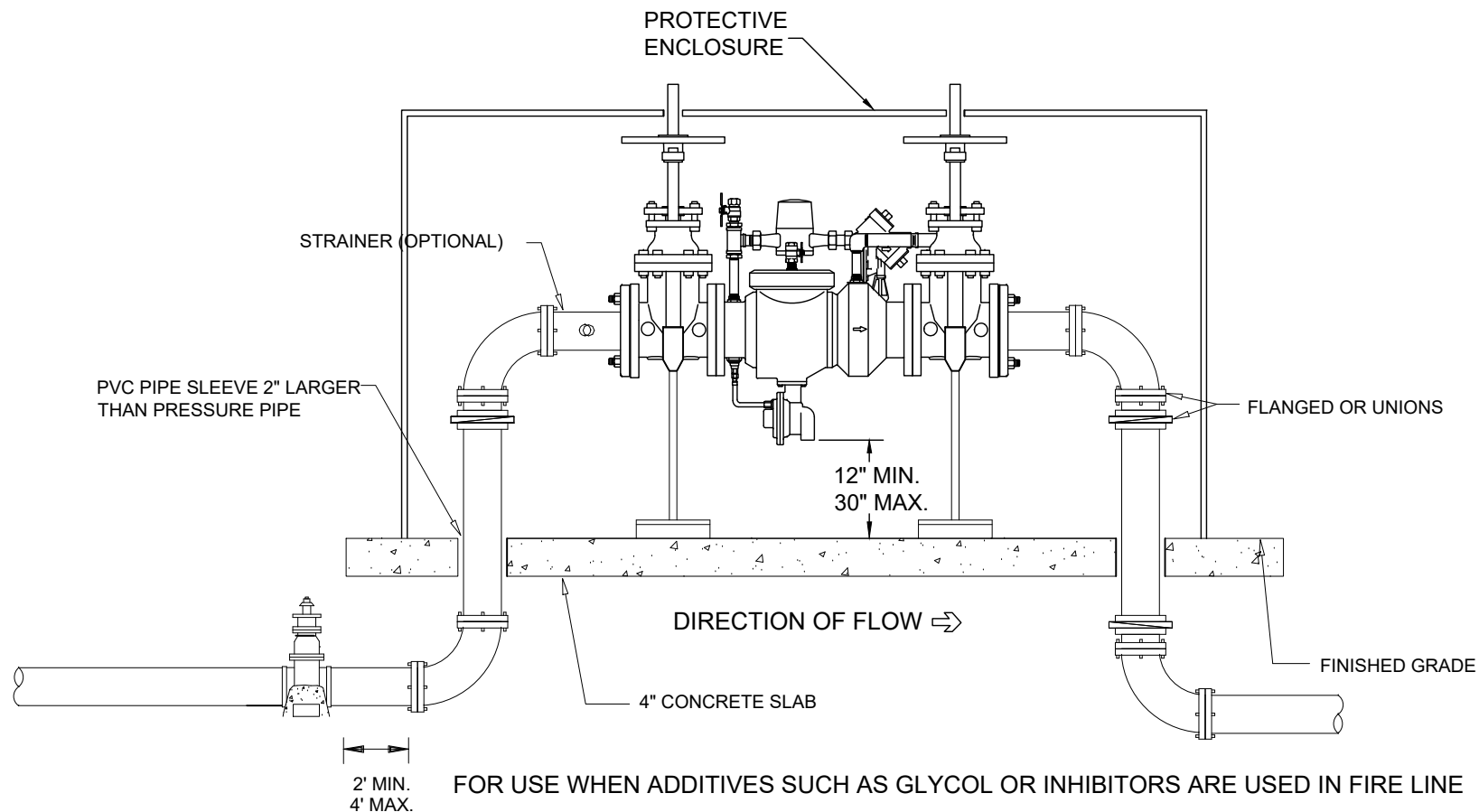
REVISED:  
9/3/2025

DETAIL No:  
**324CV-2**



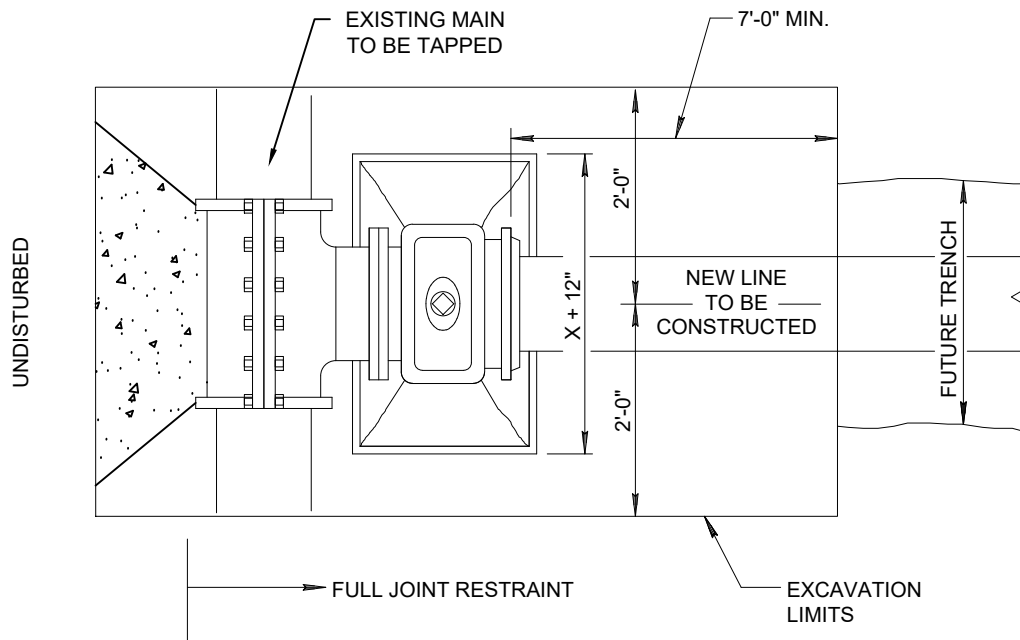
#### NOTES:

1. NO OBSTRUCTIONS ON ONE SIDE.
2. BACKFLOW PROTECTION REQUIRED PER TOWN CODE.
3. ENCLOSURE REQUIRED (ASSE 1060 CLASS 1).
4. ALL CONNECTIONS SHALL BE FLANGED OR MECHANICALLY RESTRAINED JOINTS.
5. THERE SHALL NOT BE ANY CONNECTIONS ON THE SERVICE LINE BETWEEN THE RP AND THE WATER METER. ENCLOSURES INSTALLED MUST MEET CLEARANCE REQUIREMENTS IN ADDITION TO PROVIDING SIDE AND TOP ACCESS. ENCLOSURES MUST NOT RETAIN WATER.
6. THE ASSEMBLY SHALL BE ACCESSIBLE AT ALL TIMES.
7. INSTALLATION MUST MEET INTERNATIONAL PLUMBING CODES IN ADDITION TO STANDARD WATER DETAILS. INSTALLATION MUST BE LEFT EXPOSED UNTIL INSPECTED AND APPROVED BY THE TOWN.
8. RP SHALL BE LOCATED ABOVE GROUND AND ENCLOSED IN AN ASSE 1060 CLASS 1 APPROVED ENCLOSURE PER INTERNATIONAL BUILDING CODES.
9. RP SHALL BE LOCATED WITHIN 4' OF METER, UNLESS OTHERWISE APPROVED.
10. DOUBLE CHECK VALVE BACKFLOW PREVENTION ASSEMBLY USE SHALL BE REVIEWED AND APPROVED BY AGENCY.
11. ASSEMBLY SHALL BE APPROVED BY USC FOUNDATION FOR CROSS-CONNECTION CONTROL AND HYDRAULIC RESEARCH.

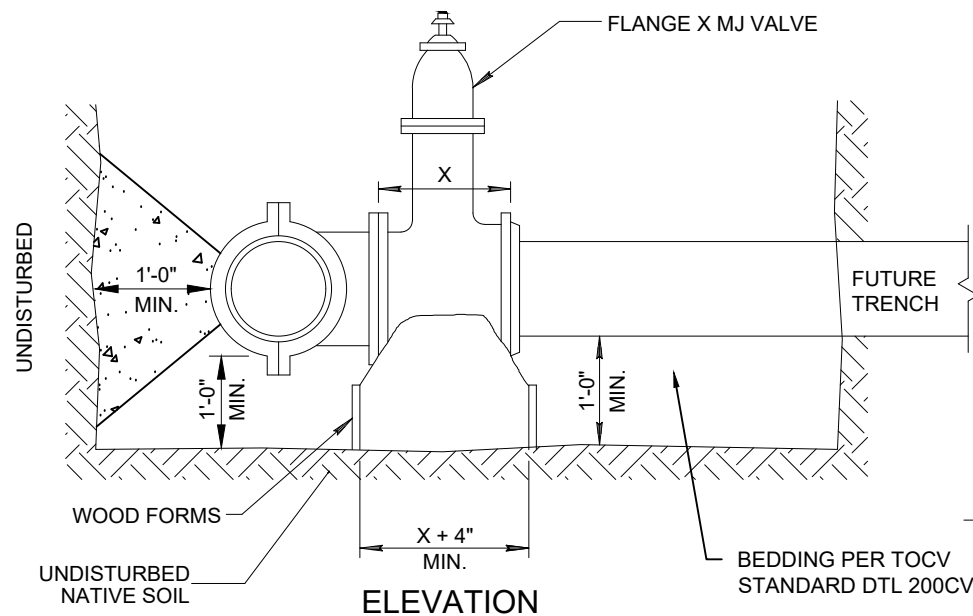


#### NOTES:

1. NO OBSTRUCTIONS ON ONE SIDE.
2. BACKFLOW PROTECTION REQUIRED PER TOWN CODE.
3. ENCLOSURE REQUIRED (ASSE 1060 CLASS 1).
4. ALL CONNECTIONS SHALL BE FLANGED OR MECHANICALLY RESTRAINED JOINTS.
5. THERE SHALL NOT BE ANY CONNECTIONS ON THE SERVICE LINE BETWEEN THE RP AND THE WATER METER. ENCLOSURES INSTALLED MUST MEET CLEARANCE REQUIREMENTS IN ADDITION TO PROVIDING SIDE AND TOP ACCESS. ENCLOSURES MUST NOT RETAIN WATER.
6. THE ASSEMBLY SHALL BE ACCESSIBLE AT ALL TIMES.
7. INSTALLATION MUST MEET INTERNATIONAL PLUMBING CODES IN ADDITION TO STANDARD WATER DETAILS. INSTALLATION MUST BE LEFT EXPOSED UNTIL INSPECTED AND APPROVED BY THE TOWN.
8. RP SHALL BE LOCATED ABOVE GROUND AND ENCLOSED IN AN ASSE 1060 CLASS 1 APPROVED ENCLOSURE PER INTERNATIONAL BUILDING CODES.
9. RP SHALL BE LOCATED WITHIN 4' OF METER, UNLESS OTHERWISE APPROVED.
10. DOUBLE CHECK VALVE BACKFLOW PREVENTION ASSEMBLY USE SHALL BE REVIEWED AND APPROVED BY AGENCY.
11. ASSEMBLY SHALL BE APPROVED BY USC FOUNDATION FOR CROSS-CONNECTION CONTROL AND HYDRAULIC RESEARCH.

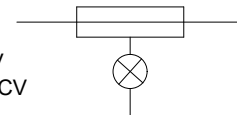


**PLAN**



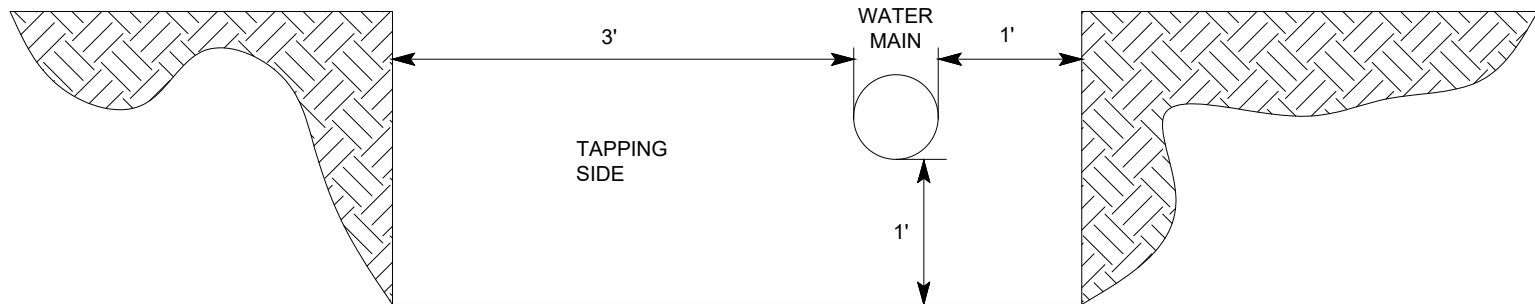
**ELEVATION**

**PLAN SYMBOL**



**NOTES:**

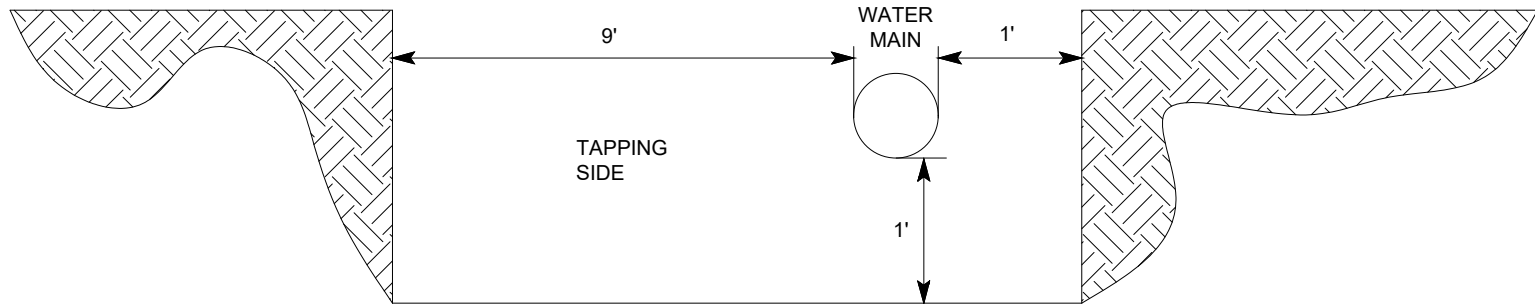
1. VALVE BLOCKING PER MAG STANDARD DETAIL 301CV.
2. TAPS SHALL BE MADE BY CONTRACTOR
3. INSTALL TEMPORARY BLOCKING UNDER VALVE BEFORE TAP IS MADE. ALL FLANGE BOLTS SHALL BE CLEAR OF FOOTING.
4. TAPPING SLEEVES SHALL BE FORD FTSS, ROMAC SST III OR APPROVED EQUAL.
5. INSTALLATION SHALL BE LEAK TESTED TO A MINIMUM OF 200 PSI FOR 30 MINUTES PRIOR TO TAP.
6. TAPPING SLEEVE SHALL BE PLACED AT A MINIMUM OF 3' FROM ANY BELL, COUPLING, VALVE, FITTING, OR OTHER OBSTRUCTION.
7. PROTECT ALL CONCRETE CONTACT AREAS WITH 8 MIL SHEET PLASTIC.
8. JOINT RESTRAINT PER TOCV STANDARD DETAIL 303CV USING A DEAD END ON NEW CONSTRUCTION.
9. INSTALL BOX, COVER, AND VALVE BOX STABILIZER PER AGENCY REQUIREMENTS.
10. ALL EXCAVATIONS SHALL BE OSHA COMPLIANT.
11. MIN. EXCAVATION LENGTH FOR THE TAPPING OPERATION SHALL BE 5' FROM THE FACE OF VALVE.
12. THRUST BLOCKS TO HAVE BEARING AREA AND FORMED PLACEMENT PER MAG STD DTL 380.



**NOTE**

CONTRACTOR TO EXPOSE AND MAINTAIN TRENCH/EXCAVATION  
PER OSHA REGULATIONS.

**3/4" THROUGH 2" SERVICE TAP**



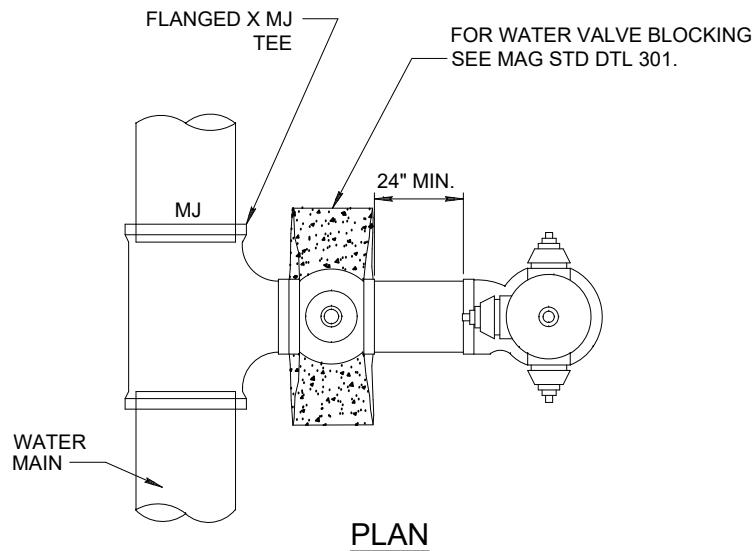
**NOTE**

CONTRACTOR TO EXPOSE AND MAINTAIN TRENCH/EXCAVATION  
PER OSHA REGULATIONS.

**NOTE:**

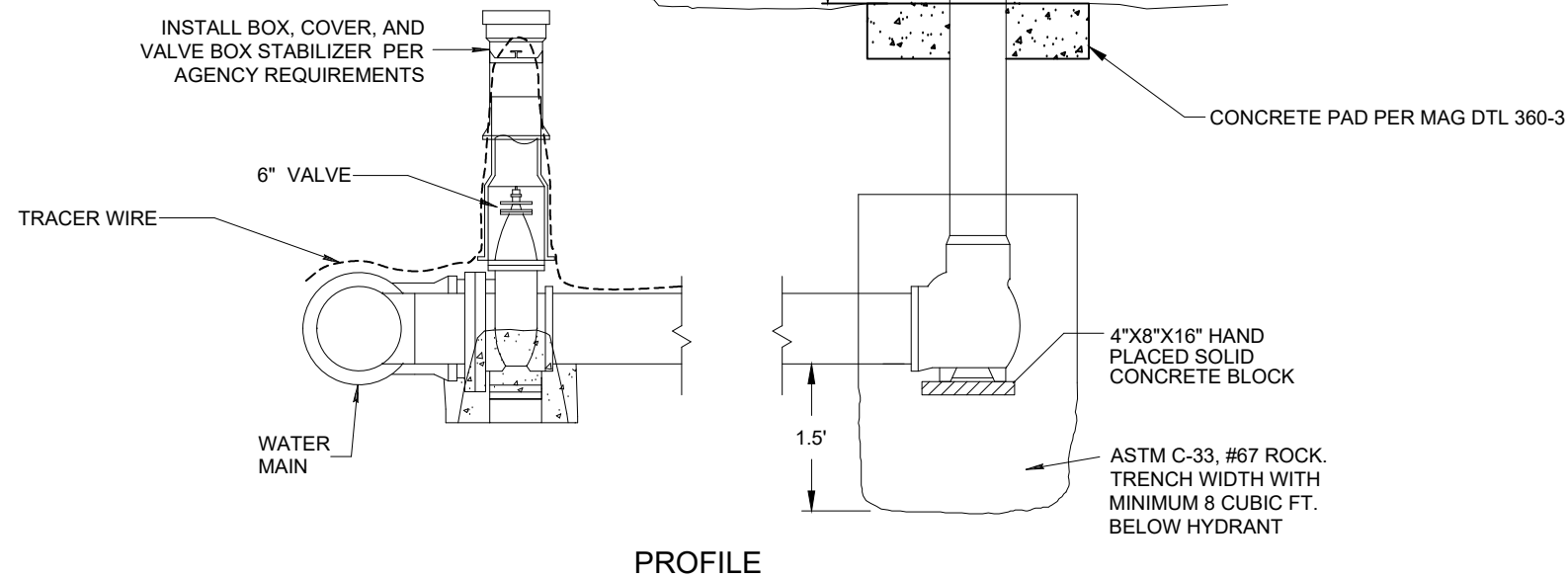
ALL TRENCHES FOR SERVICE TAPS  
SHALL BE MINIMUM 3' WIDE.

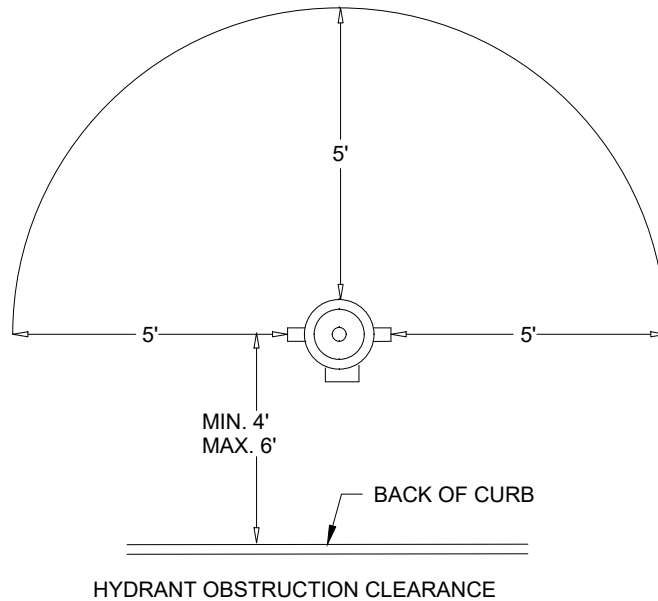
**3" THROUGH 12" SERVICE TAP**



# NOTES:

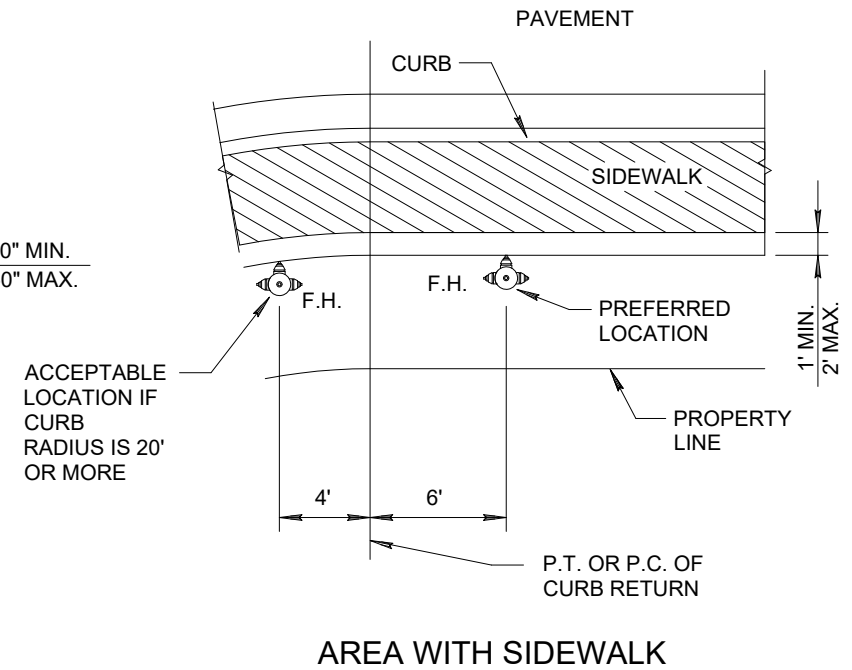
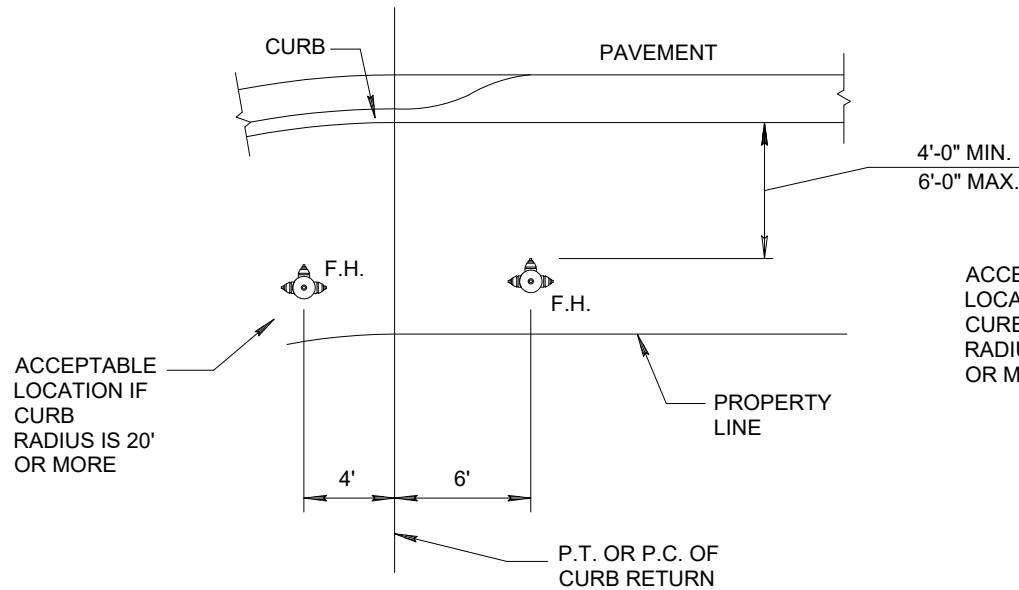
1. HYDRANTS TO BE WATEROUS W/ 4 1/2" PUMPER CONNECTION - NATIONAL STANDARD THREAD.
2. HYDRANT LEADS SHALL HAVE NO HORIZONTAL BENDS.
3. FULLY RESTRAIN HYDRANT LEAD AND HYDRANT.
4. PIPING BETWEEN WATER VALVE AND HYDRANT SHALL BE DUCTILE IRON.
5. ALL DUCTILE IRON PIPE AND FITTINGS SHALL BE MANUFACTURED IN THE U.S.A.
6. PUMPER CONNECTION TO FACE CURB.
7. MAXIMUM OF 1 HYDRANT EXTENSION- ORIGINAL MANUFACTURER.
8. PRIVATELY MAINTAINED AND OWNED HYDRANTS ARE TO BE PAINTED RED.





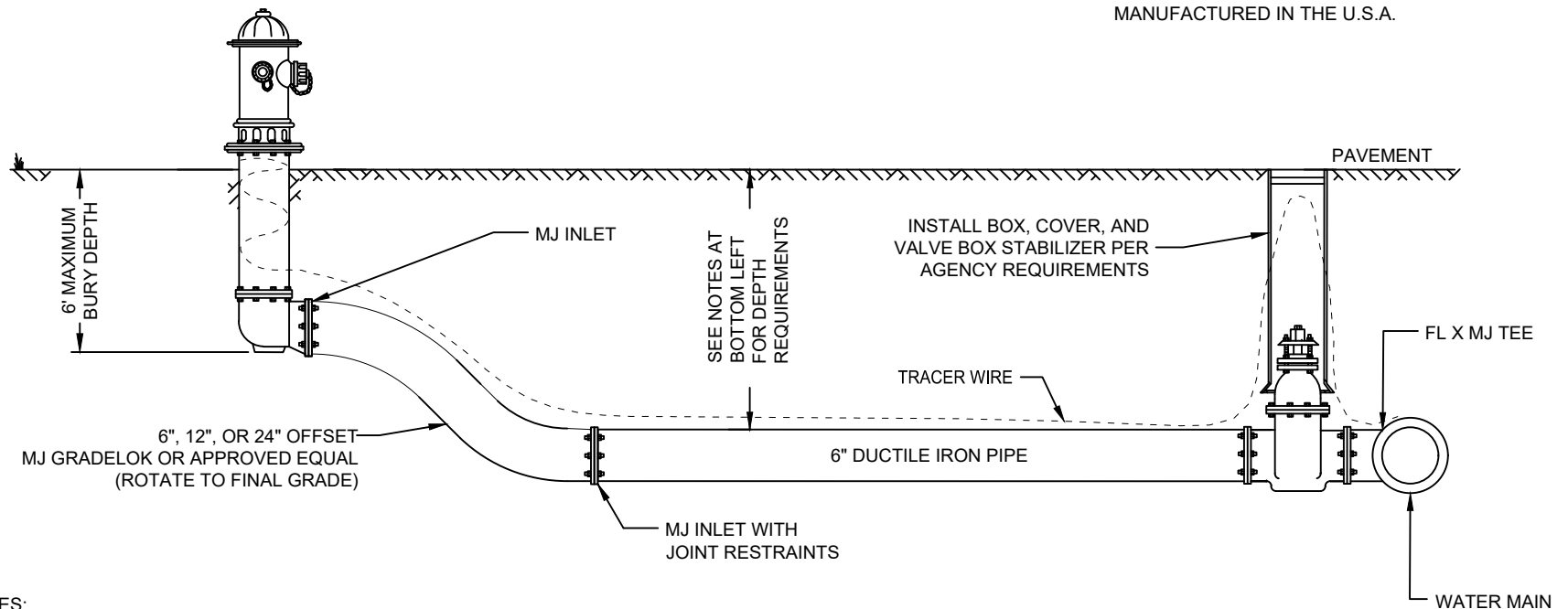
### NOTES:

1. OBSTRUCTIONS SUCH AS UTILITY POLES, STREET SIGNS, IRRIGATION BOXES, FENCES, LANDSCAPE VEGETATION, ETC. MUST NOT BE PLACED BETWEEN CURB AND HYDRANT.
2. IN PARKING LOT ISLANDS, HYDRANT TO BE MIN. 3' IN ALL DIRECTIONS FROM BACK OF CURB.
3. HYDRANTS TO BE CLEAR OF LANDSCAPE & VEGETATION, DRIVEWAYS, MAILBOXES, OR ANY OTHER VERTICAL OBSTRUCTIONS WITHIN A 5' RADIUS.
4. IF NO CURB AND GUTTER ON ROADWAY, PLACE HYDRANT 6' FROM EDGE OF PAVEMENT (EP) WITHIN RIGHT OF WAY OR UTILITY EASEMENT.

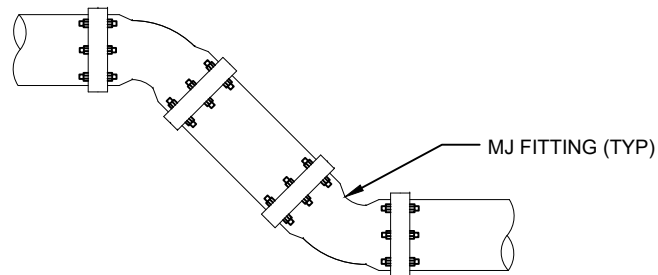


## NOTES:

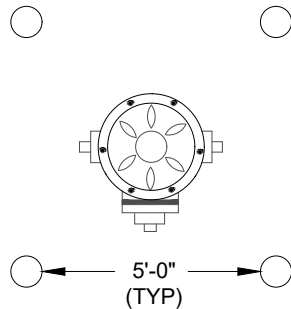
1. THIS DETAIL IS FOR VERTICAL TOCV STD DTL 360CV FOR HYDRANT DETAILS.
2. MECHANICALLY RESTRAIN ALL JOINTS FROM HYDRANT TO WATERMAIN TEE.
3. ALL PIPE, VALVES, FITTINGS, AND APPURTENANCES SHALL BE MANUFACTURED IN THE U.S.A.



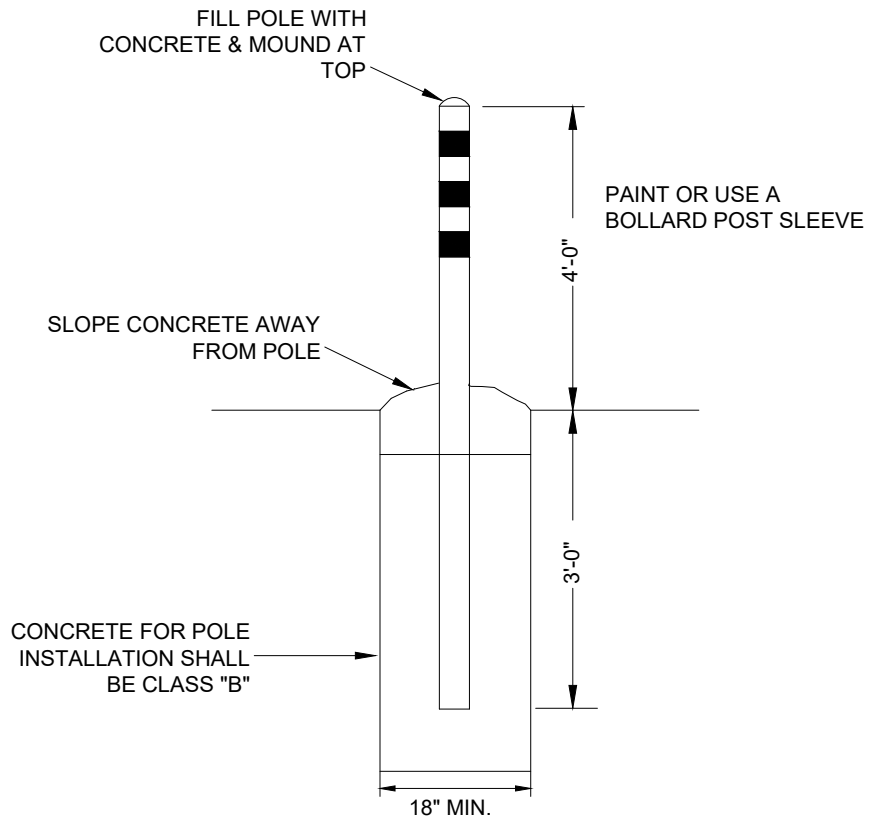
NOTES:  
IF DEPTH OF MAIN EXCEEDS 8' CONTRACTOR SHALL INSTALL  
2-45° BENDS IN LIEU OF GRADE LOC



NOT TO SCALE

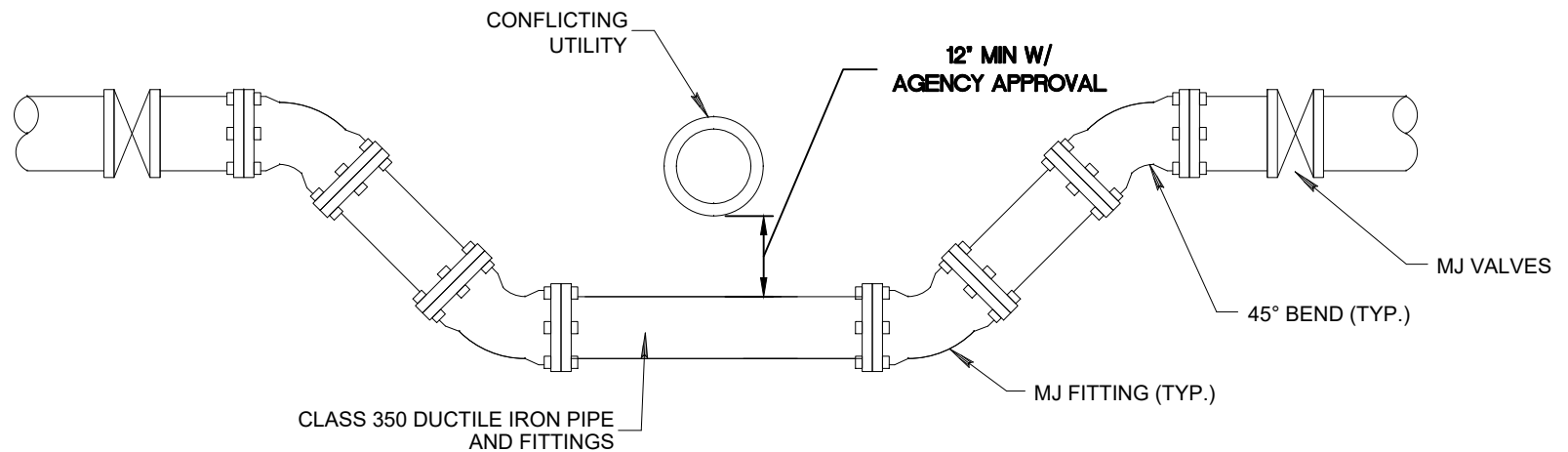


### PROTECTION POLE PLACEMENT



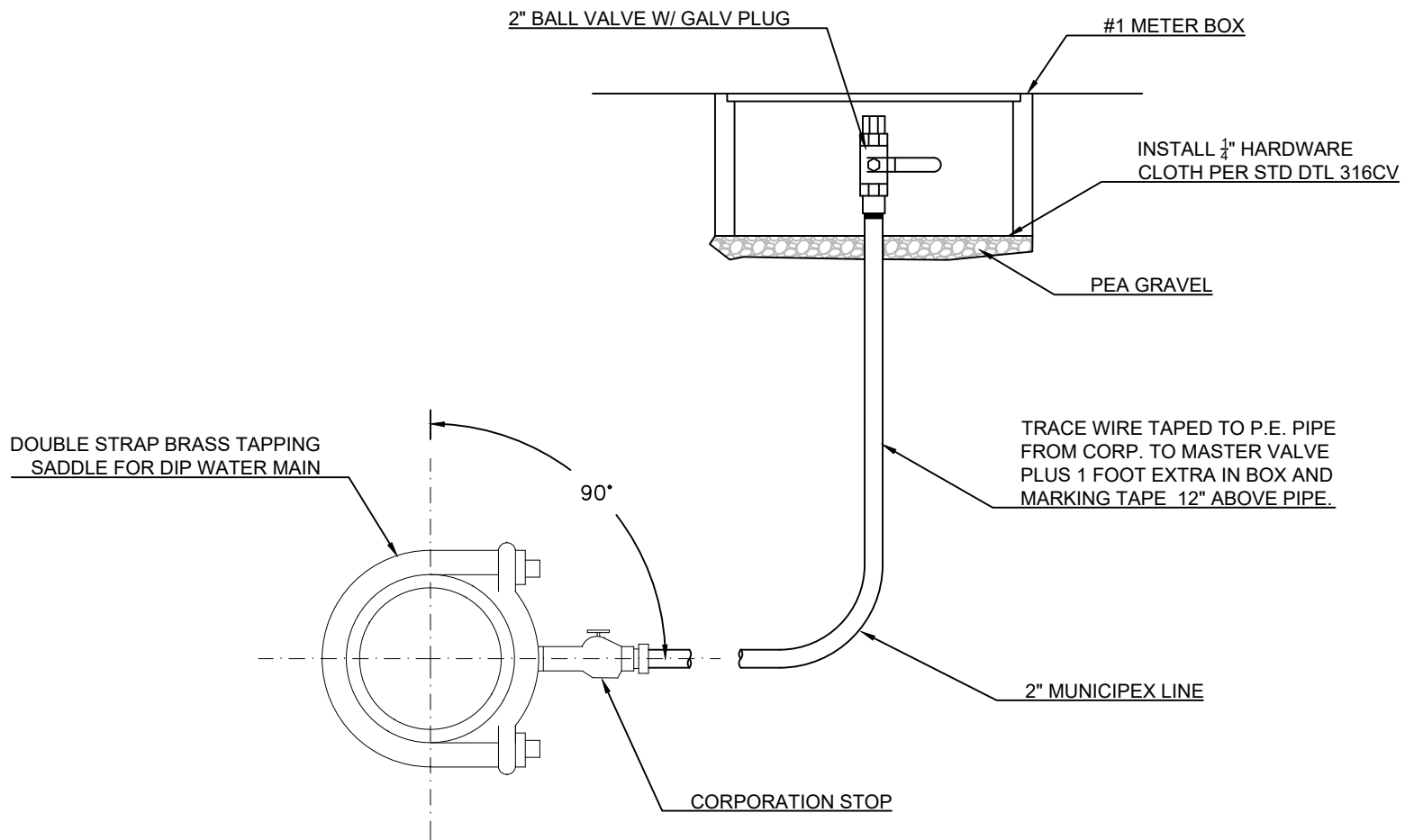
### NOTES:

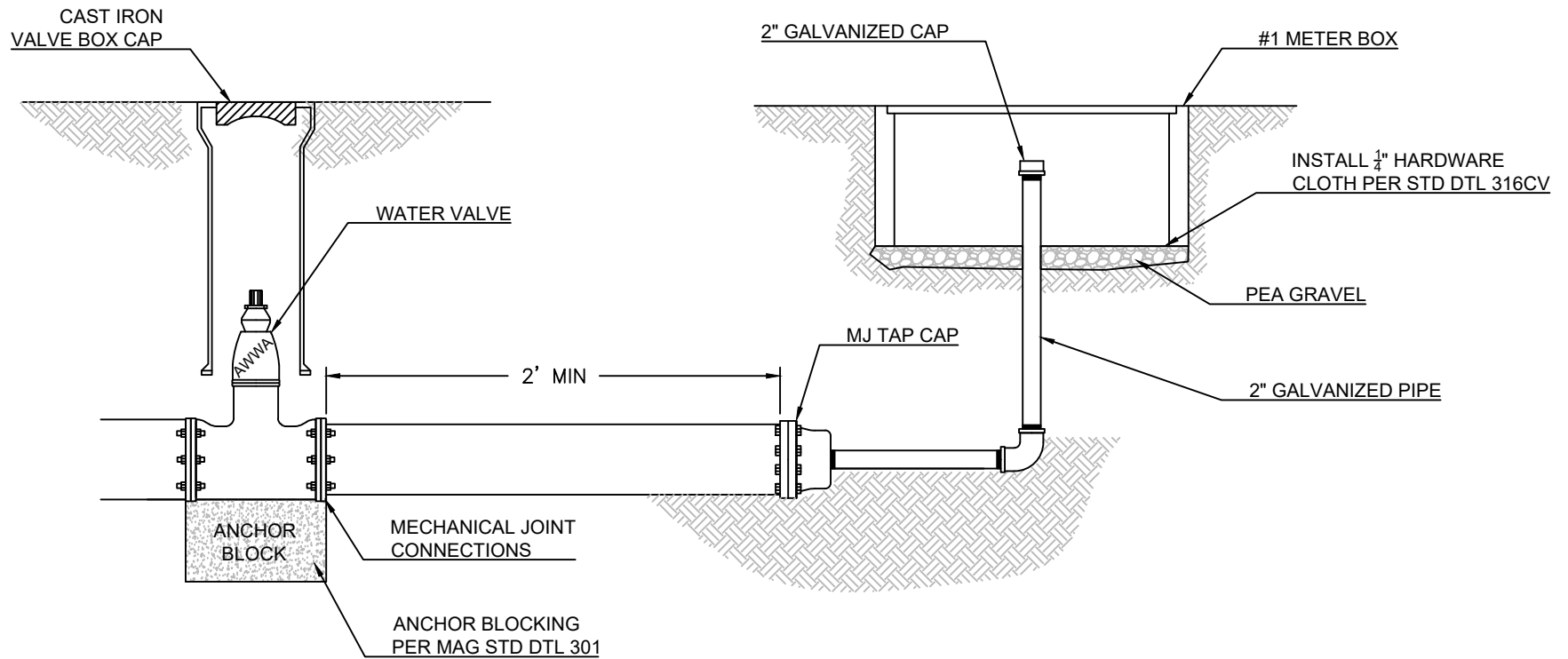
1. DO NOT PLACE POLES IN FRONT OF NOZZLE.
2. POLES MAY BE CHANGED IN NUMBER AND ARRANGEMENT DEPENDING ON INDIVIDUAL NEED.
3. REQUIRED AT SPECIFIED LOCATIONS ONLY.
4. POLE SHALL BE SCHEDULE 40 4" STEEL.
5. PAINT POLE YELLOW AND PLACE 3 - 3" RED REFLECTIVE BANDS.



### NOTES:

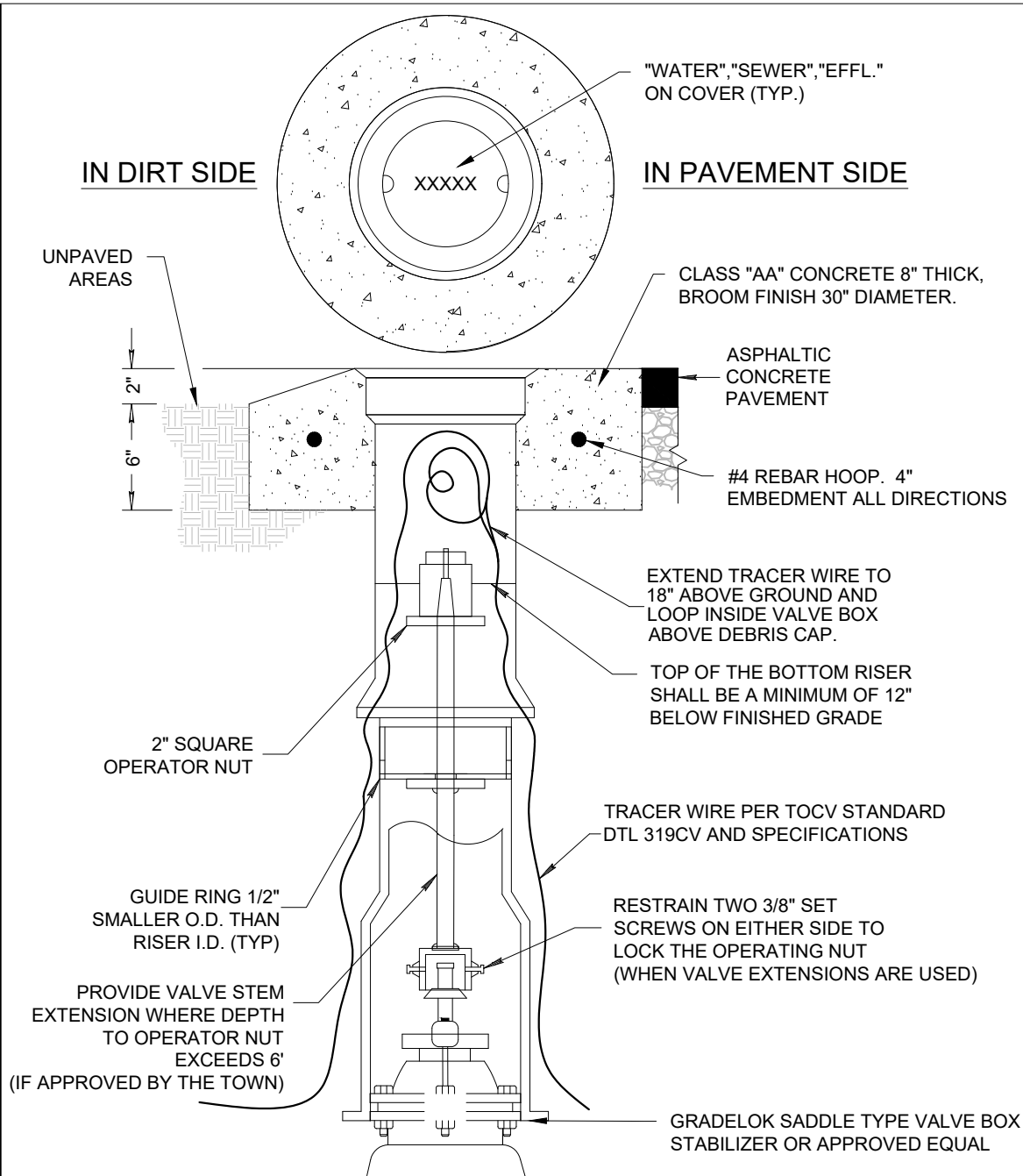
1. ALL PIPE, VALVES, FITTINGS, AND APPURTENANCES SHALL BE MANUFACTURED IN THE U.S.A.
2. ENTIRE VERTICAL REALIGNMENT SHALL BE MECHANICALLY RESTRAINED CL. 350 D.I.P. PER TOCV 303CV-1 AND 303CV-2. RESTRAINED LENGTHS FROM VALVES SHALL BE THE SAME AS DEAD ENDS ON NEW CONSTRUCTION.
3. BOTTOM OF VERTICAL ALIGNMENT SHALL BE ONE PIECE. IF JOINTS ARE REQUIRED, WATER MAIN SEGMENT SHALL BE CENTERED BELOW PIPE OR IN A CASING PIPE.
4. NO SERVICE CONNECTIONS SHALL BE LOCATED WITHIN VERTICAL REALIGNMENT.
5. AIR RELEASE VALVE TO BE INSTALLED ON THE VERTICAL REALIGNMENT AT THE HIGH POINT OF THE LOW SIDE.
6. VALVE(S) AND BLOCKING PER TOCV 301CV (MJ VALVE, TYP.)
7. MJ VALVES NOT REQUIRED.
8. 2" BLOW-OFF REQUIRED AT LOW POINT IN BEND. BLOW-OFF TO BE MIN. 12" FROM NEAREST FITTING.





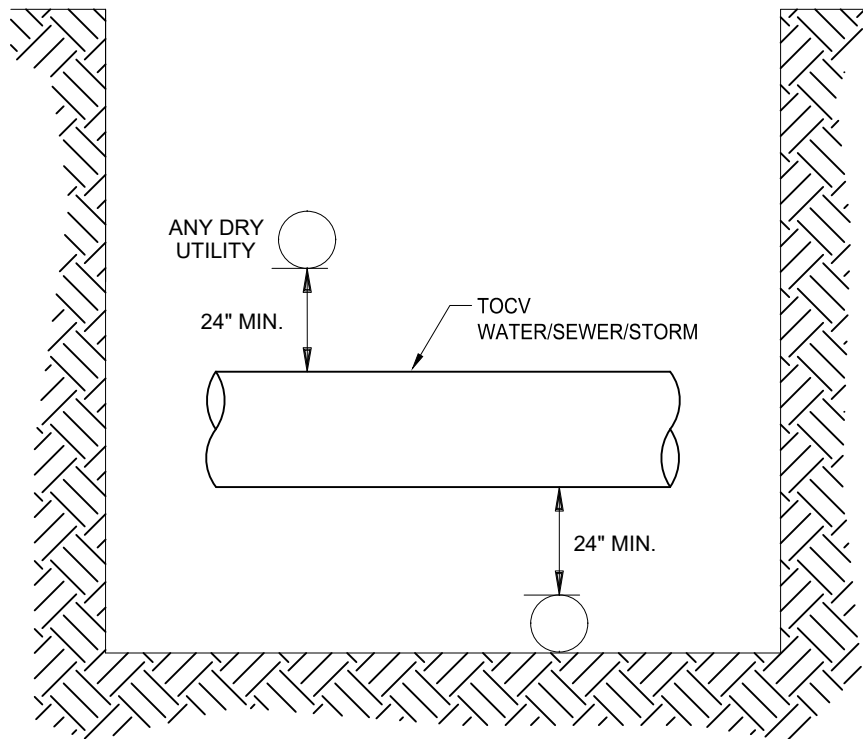
NOTES:

1. ALL DUCTILE TO BE WRAPPED. GALVANIZED PIPE TO BE WRAPPED WITH 10 MIL TAPE
2. RESTRAINED JOINT LENGTH PER MAG STD DTL 303
3. SEE STD DTL 316CV FOR BOX INSTALLATION

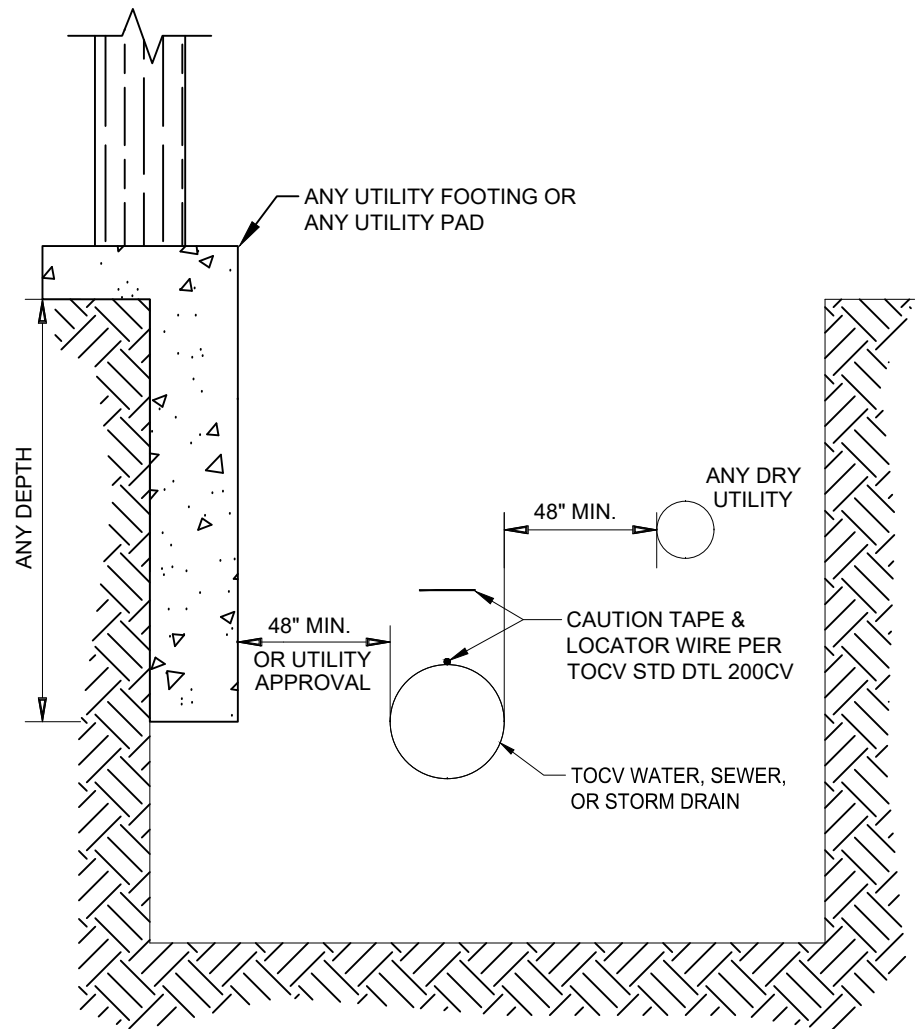


## NOTES:

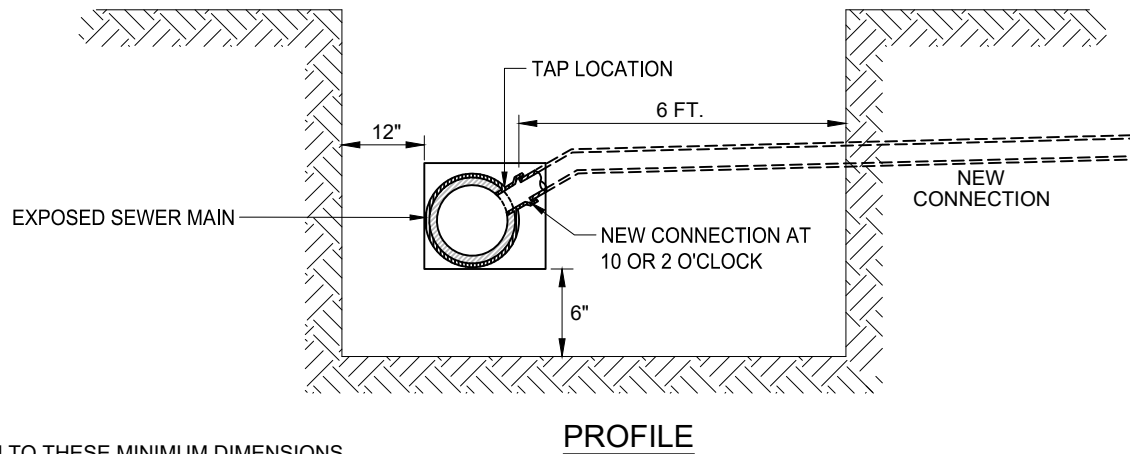
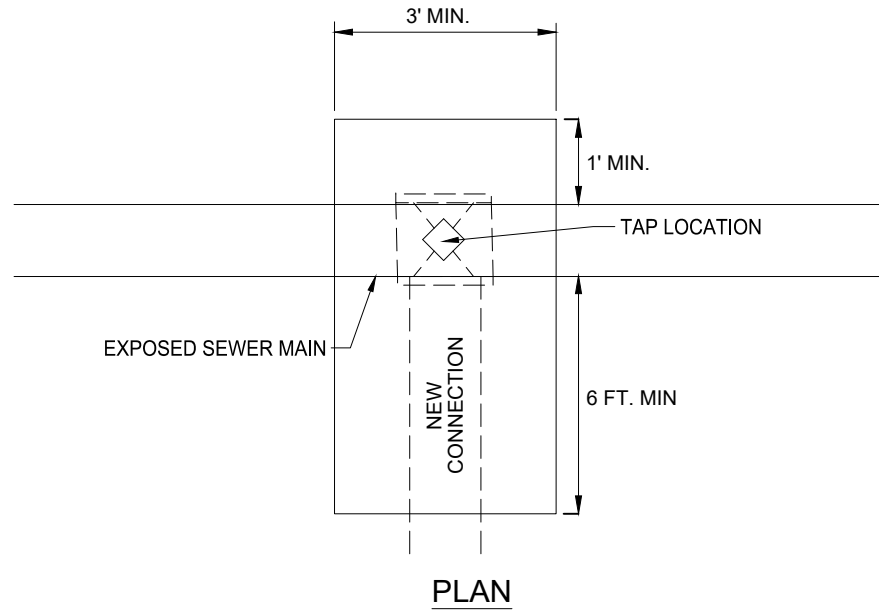
1. VALVE BOX SHALL BE ADJUSTED TO THE FINISHED GRADE AFTER PLACING OF THE FINISH PAVEMENT SURFACE.
2. USE PARKSON TYLER #6855, APCO OR EQUAL DEEP SKIRTED LID (4" OR MORE) TYPE, SLIDING ADJUSTABLE CAST IRON VALVE BOX C.I. MIN. T.S. 30,000 P.S.I.
3. ALL VALVES CONNECTED TO EXISTING MAINS ARE TO BE OPERATED BY AGENCY PERSONNEL ONLY.
4. ALL STEEL FOR EXTENSION TO HAVE SHOP PRIME COAT ZINC CHROMATE, AND ONE HEAVY APPLICATION NO-OX-10 "A" IN ACCORDANCE WITH MANUFACTURE'S DIRECTION.
5. DEBRIS CAP PER MAG DETAIL 392.
6. VALVE BLOCKING REQUIRED PER TOCV STANDARD DETAIL 301CV.



VERTICAL CLEARANCE

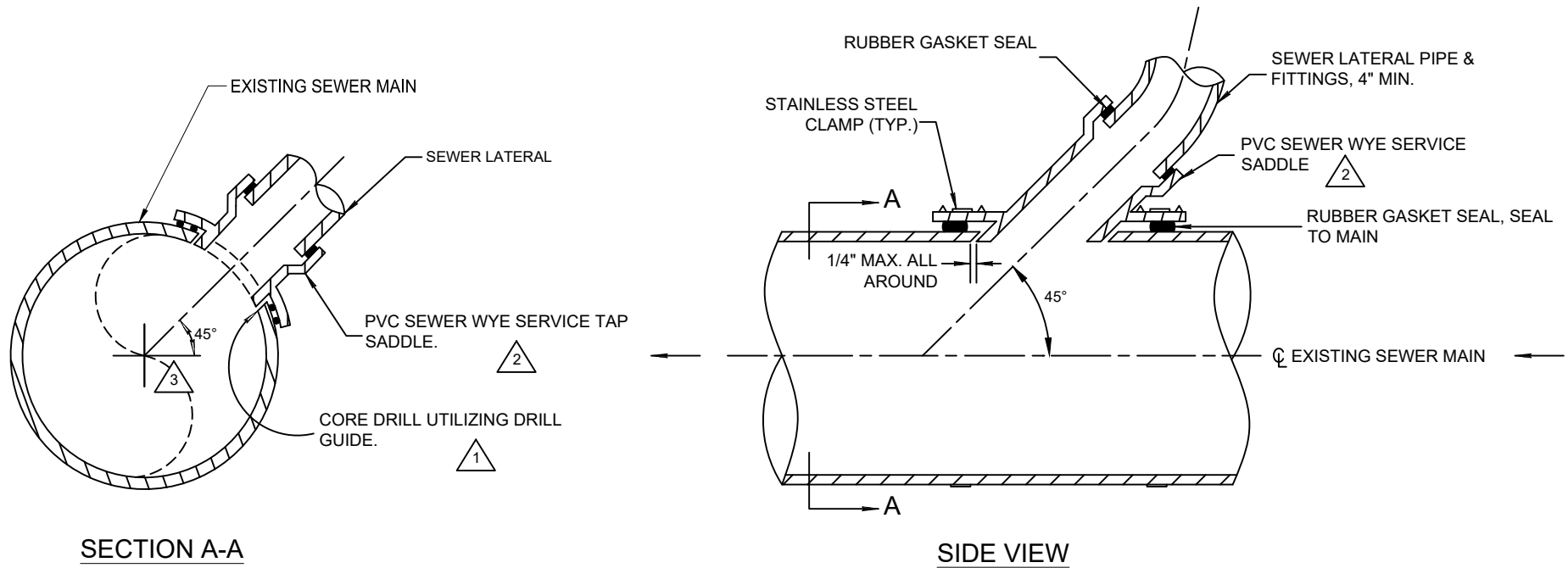


HORIZONTAL CLEARANCE



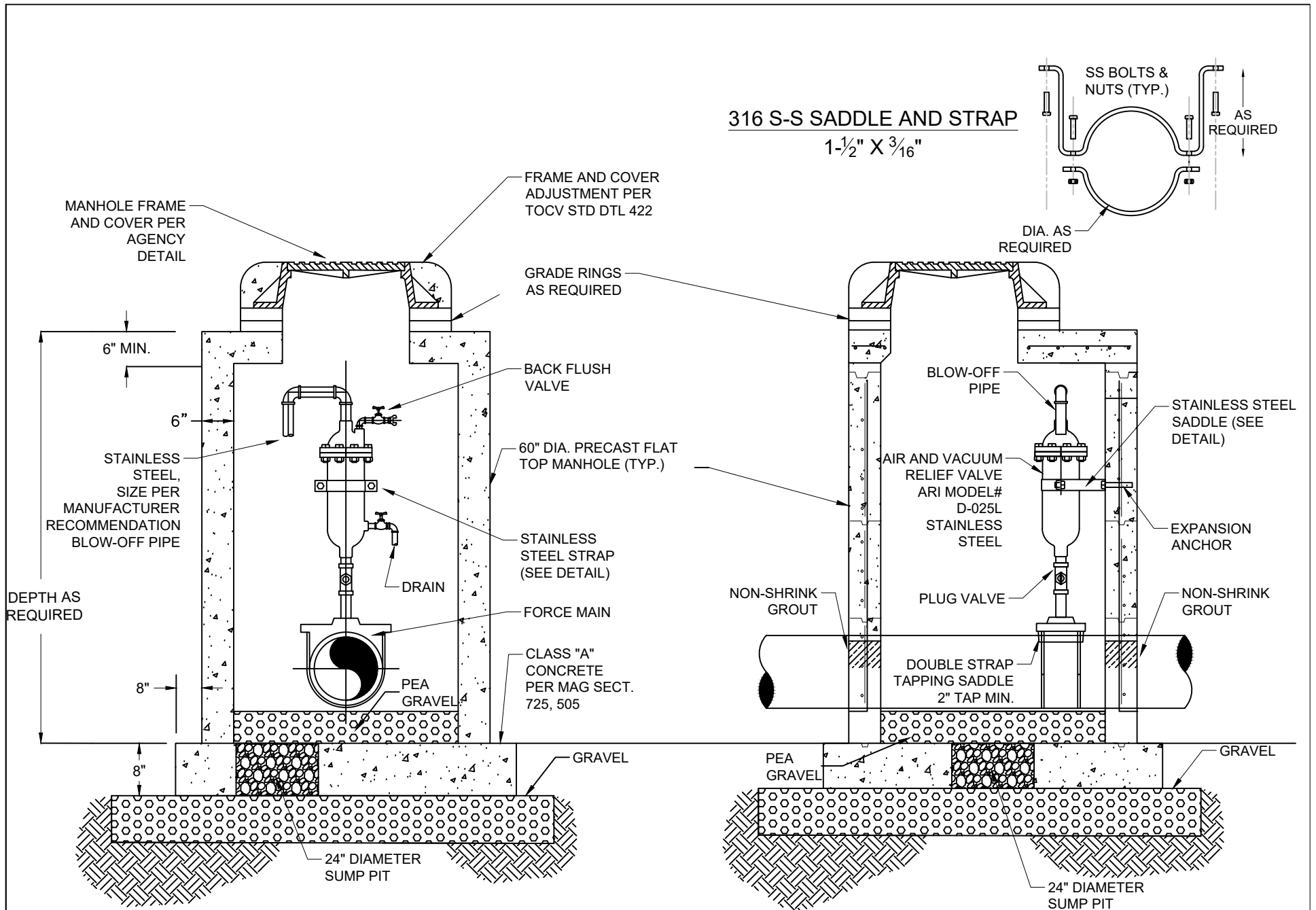
**NOTES:**

1. CONTRACTOR MUST EXPOSE MAIN TO THESE MINIMUM DIMENSIONS.
2. CONTRACTOR TO PROVIDE SAFE EXCAVATION CONFORMING TO O.S.H.A. REGULATIONS.
3. CONTRACTOR RESPONSIBLE FOR TAP.
4. CONTRACTOR RESPONSIBLE FOR NEW SEWER TAP UNDER TOWN SUPERVISION.

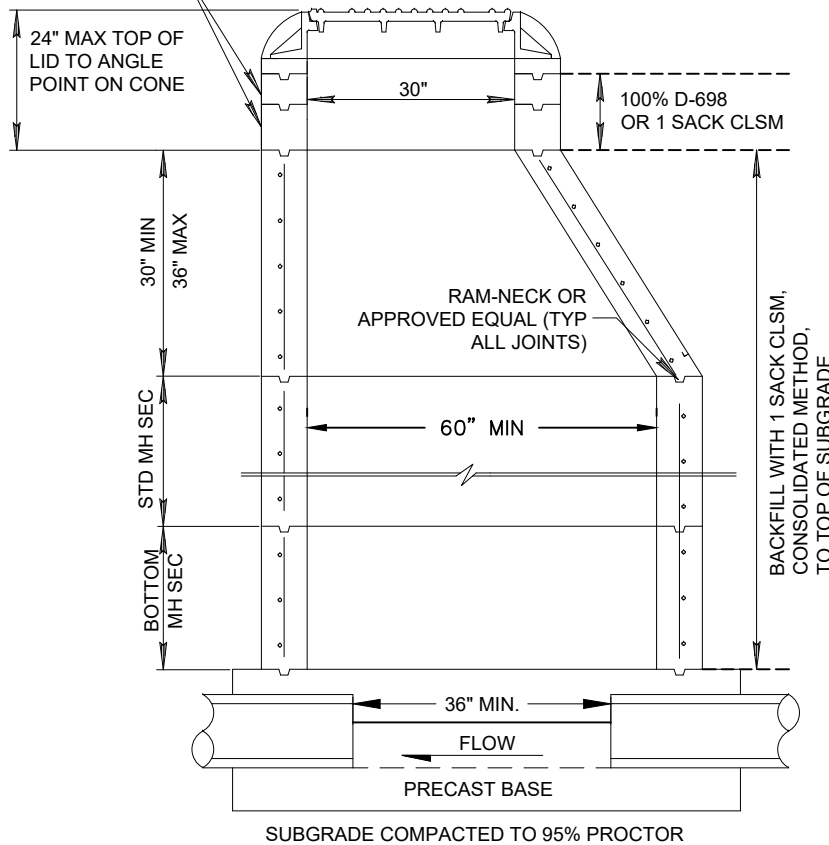


#### NOTES:

1. EXISTING SEWER MAINS SHALL BE CORE DRILLED UTILIZING A DRILL GUIDE FOR A WYE SADDLE AND A CORE DRILL WITH A LENGTH EXCEEDING THE LATERAL DIAMETER, INSERT-A-DRILL IDY75 & EXTRA LONG HOLE SAW OR APPROVED EQUAL. DIAMOND CORE BITS SHALL BE USED ON NON-PVC MAINS.
2. SERVICE TAP SADDLES SHALL BE PVC SEWER WYE SADDLES. A ROMAC STYLE "CB" SEWER SADDLE OR APPROVED EQUAL MAY BE USED ON EXISTING SEWER MAINS ONLY WHEN MAIN IS NOT PVC.
3. SADDLES SHALL BE INSTALLED AT 45 DEGREES TO MAIN AS SHOWN IN SECTION A-A. IN NO CASE SHALL A LATERAL CONNECTING TO THE EXISTING SEWER MAIN BE LOCATED DIRECTLY ON TOP OF THE PIPE, NOR SHALL IT MATCH THE FLOWLINE OF THE PIPE.
4. SERVICE TAP SHOULD BE SPACED AT A MINIMUM OF 3' AWAY FROM EXISTING SEWER TAP.

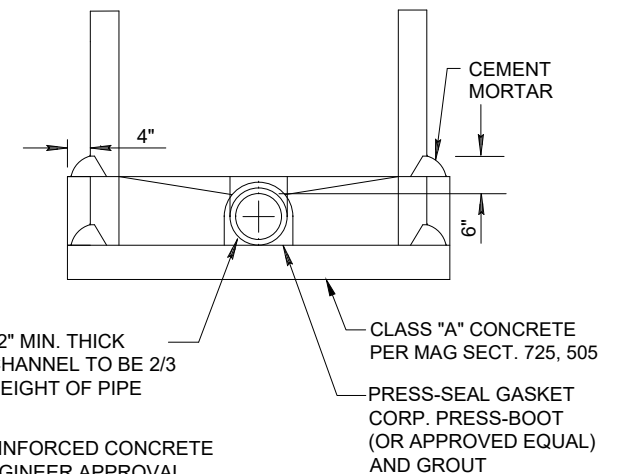


REINFORCED CONC. ADJUSTING  
RINGS OR APPROVED EQUAL

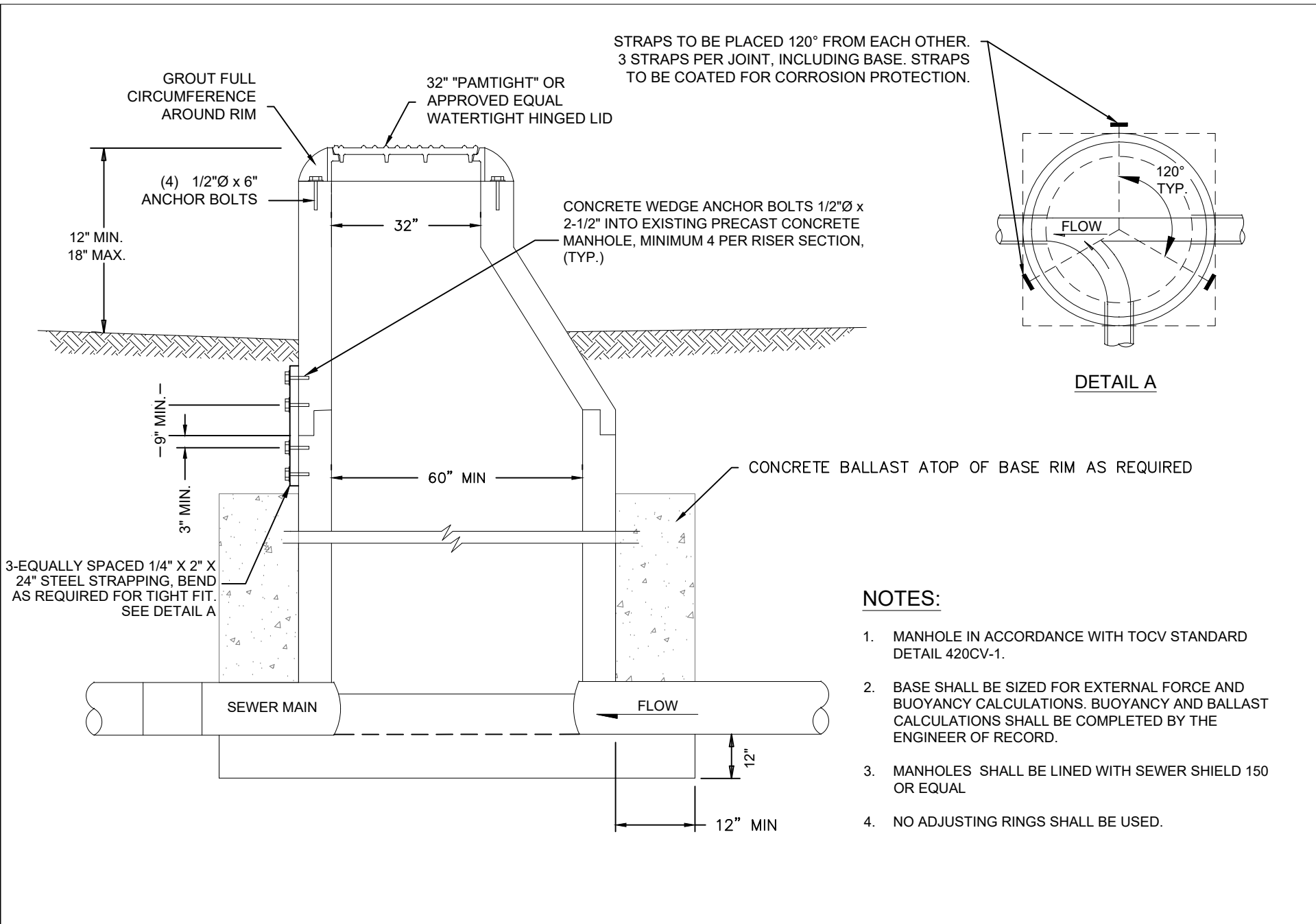


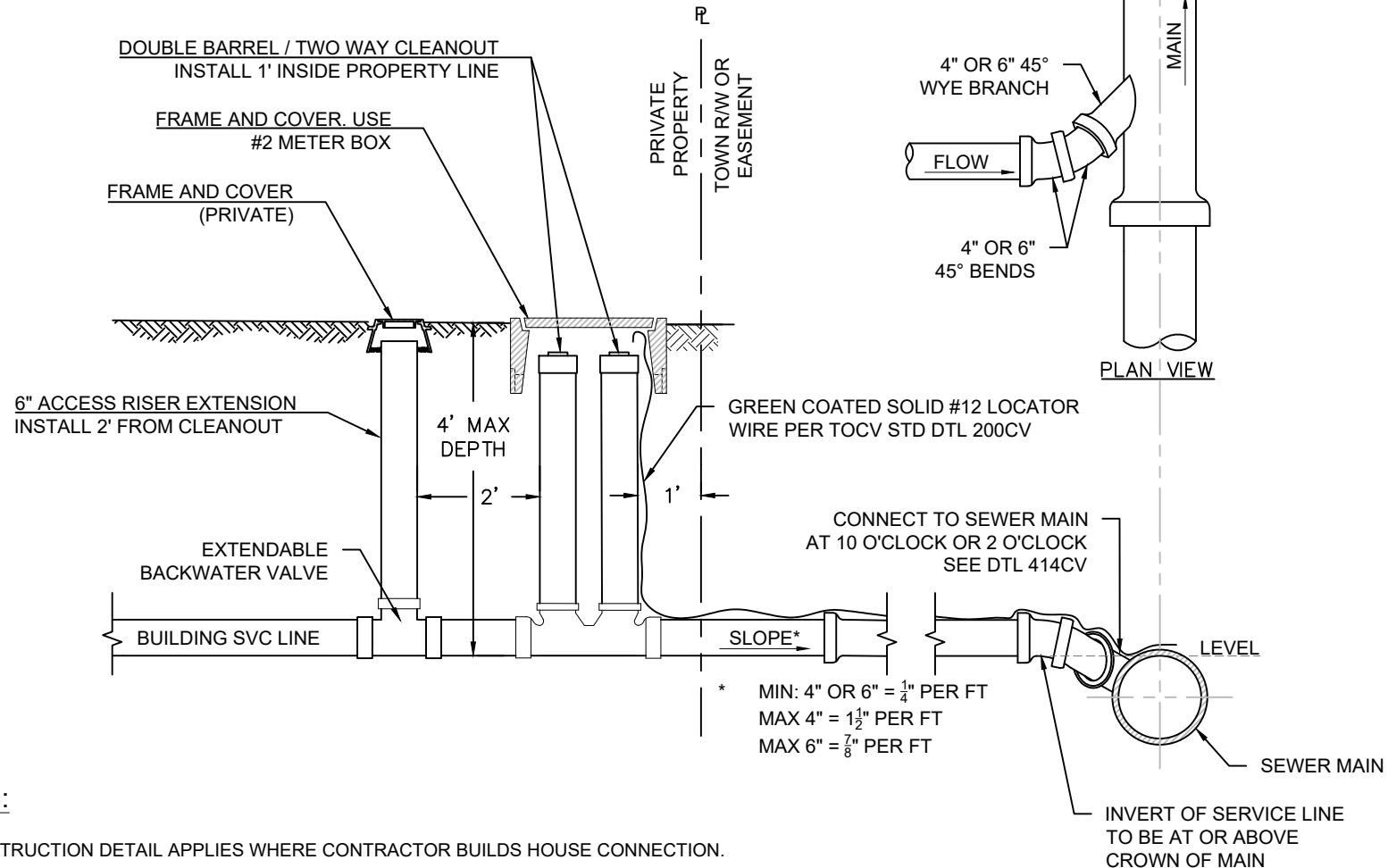
## NOTES:

1. 24" MAX. DISTANCE FROM CONE TO RIM WILL BE ATTAINED PRIOR TO SETTING CONE.
2. PRE-CAST, REINFORCED MANHOLE SECTIONS SHALL BE MANUFACTURED IN ACCORDANCE WITH A.S.T.M. C-478.
3. MANHOLE STEPS SHALL NOT BE USED.
4. ALL CONCRETE TO BE CURED AND PROTECTED.
5. GROUT ALL JOINTS TO SMOOTH SURFACE.
6. MANHOLE SHALL BE LINED WITH SEWER SHIELD 150 OR EQUAL.
7. ENGINEER OF RECORD SHALL CERTIFY INVERT AND RIM ELEVATIONS TO ENSURE 24" MAX. DISTANCE FROM CONE TO RIM WILL BE ATTAINED PRIOR TO SETTING CONE.
8. ALL MANHOLES SHALL BE MIN 5' IN DIAMETER AND 30" MINIMUM RINGS AND LIDS.
9. ALL NEW MANHOLES WITH A DEPTH OF 20' OR GREATER OR MANHOLES INSTALLED WITHIN A MAJOR ROAD INTERSECTION, SHALL BE CONSTRUCTED OF POLYMER CONCRETE BY OLDCASTLE, ARMOROCK, OR EQUIVALENT AS APPROVED BY TOWN ENGINEER.



ALTERNATE:  
CAST IN PLACE REINFORCED CONCRETE  
BASE W/ TOWN ENGINEER APPROVAL.





#### NOTES:

1. CONSTRUCTION DETAIL APPLIES WHERE CONTRACTOR BUILDS HOUSE CONNECTION.
2. RESIDENTIAL SERVICE LINE SHALL BE MINIMUM 4". SERVICE LINE FROM COMMERCIAL BUILDING TO BE MINIMUM 6".
3. SIZE OF TAP SHALL BE DESIGNATED ON PLANS.
4. CLEANOUT DEPTH TO BE NO GREATER THAN 4'. IF DEPTH REQUIRES, MINIMUM SLOPE CAN BE REDUCED TO  $\frac{1}{8}$ " PER FOOT.
5. ALL FITTINGS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM-2321. CONTRACTOR MAY VARY FROM THE DRAWING AND USE APPROPRIATE WYES, TEE-WYES, AND BENDS TO ENSURE NO MISALIGNMENT OF THE PIPE AND FITTINGS.